


# NATIONAL ENERGY TECHNOLOGY LABORATORY (NETL)

# ALBANY SITE
# GROUNDWATER MONITORING REPORT
# EVENT 47 – August 2023

**Site Operations Services**
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# List of Acronyms

| | |
|---|---|
| amsl | above mean sea level |
| bgs | below ground surface |
| cis-1,2-DCE | cis-1,2-dichloroethene |
| DEQ | Department of Environmental Quality |
| DO | dissolved oxygen |
| DOE | United States Department of Energy |
| EPA | U.S. Environmental Protection Agency |
| GWMP | Groundwater Monitoring Plan |
| ICF | ICF International |
| MCL | maximum contaminant level |
| MML | maximum measurable level |
| mS/cm | milliSiemens per centimeter |
| mV | millivolts |
| NETL | National Energy Technology Laboratory |
| NGVD | National Geodetic Vertical Datum |
| NTU | nephelometric turbidity units |
| ORP | oxidation-reduction potential |
| PCE | tetrachloroethene |
| PRG | preliminary remediation goal |
| PVC | polyvinyl chloride |
| RBC | risk-based concentration |
| RSL | regional screening level |
| TCE | trichloroethene |
| trans-1,2-DCE | trans-1,2-dichloroethene |
| URS | URS Corporation |
| VOC | volatile organic compounds |
| µg/L | micrograms per liter |
| ° C | degrees Celsius |

# Executive Summary

This report describes the August 2023 (Periodic Event 47) groundwater sampling and analysis activities performed by WE2 at the United States Department of Energy (DOE) National Energy Technology Laboratory (NETL) in Albany, Oregon (the Site). The August 2023 sampling event is the 47th round of groundwater samples collected from the NETL-Albany site since the initiation of the NETL-Albany groundwater monitoring program in 2002.

Groundwater levels were measured in thirty-four of the thirty-five monitoring wells and piezometers. MW-11 was gauged as dry and excluded from use. The gauging data was used to create groundwater elevation contour maps for the two identified aquifers on site. Wells installed in the Perched Aquifer and deeper Gravel Aquifer zones provided spatial coverage to map the potentiometric surfaces of both aquifers as separate hydrogeologic units. Groundwater elevations from wells in the Perched Aquifer measured during the August 2023 event show a flow to the west in the northern portion of the site, and to the south/southwest and to the southeast away from a potentiometric high near MW-28. In the Gravel Aquifer, groundwater elevation data shows a broad potentiometric high centered on monitoring wells MW-3, MW-14, and MW-26, from which flow is radially away in all directions.

Groundwater samples were collected from twenty-nine of the thirty-three two-inch diameter monitoring wells between August 28 and 30, 2023. Two wells (MW-1 and MW-21) were not sampled because they are not optimally screened based on the current understanding of the Conceptual Site Model (USSE2, July 2019). MW-11 was not sampled due to the well being dry during event. MW-27 was unable to be sampled due to insufficient water resulting in the well running dry during low-flow purging. Low-flow sampling protocols were followed at each well in accordance with the NETL-Albany Groundwater Monitoring Plan (GWMP, USSE2, January 2020). All groundwater samples were submitted for analysis of volatile organic compounds (VOCs) by Environmental Protection Agency (EPA) Method 8260D.

Three VOCs were detected during the August 2023 sampling event, two historical contaminates were not detected, these are discussed in Section 4.1: carbon tetrachloride, chloroform, cis-1,2-dichloroethene (cis-1,2-DCE), tetrachloroethene (PCE), trichloroethene (TCE). Three of these VOCs were detected at concentrations that exceed Oregon Groundwater Maximum Measurement Levels (MMLs), Oregon Hot Spot tables, Oregon Risk-Based Concentrations (RBCs), EPA Regional Screening Levels (RSLs), or EPA Primary Maximum Contaminant Levels (MCLs).

# 1.0 Introduction

This report describes the August 2023 (Periodic Event 47) groundwater sampling and analysis performed by WE2 at the DOE NETL site in Albany, Oregon (Figure 1). The sampling was conducted in accordance with the Groundwater Monitoring Plan Revision 14, for National Energy Technology Laboratory, Albany, Oregon (USSE2, January 2020) and the National Energy Technology Laboratory, Albany Groundwater Sampling Event 47 Work Plan Memo (July 2023).

The NETL-Albany groundwater monitoring program was initiated in 2001, as was then required by DOE Order 5400.1, *General Environmental Protection Program*. The sampling has not been mandated by any other regulatory requirement or consent order. These monitoring requirements have since been incorporated into DOE Order 436.1, *Departmental Sustainability*.

## 1.1 Project Scope and Objectives

The objective of the NETL-Albany groundwater monitoring program is to perform a site-wide and a limited off-site evaluation of groundwater conditions to determine the presence and extent of groundwater contamination. The NETL-Albany groundwater monitoring program is designed to:

- Obtain data for the purpose of determining baseline conditions of groundwater quality and quantity;
- Demonstrate compliance with and implementation of all applicable regulations and DOE Orders;
- Provide data to permit the early detection of groundwater pollution or contamination;
- Provide a reporting mechanism for detected groundwater pollution or contamination;
- Identify existing and potential groundwater contamination sources and maintain surveillance of these sources;
- Provide data upon which decisions can be made concerning facility operations (including land, buildings and equipment), management and protection of groundwater resources and future remedial activities.

The August 2023 sampling event is the forty-seventh round of groundwater sampling conducted at the Site under the general program that was developed in 2001. The following table lists previous sampling events:

| | | | |
|---|---|---|---|
| Event 1 | July 2002 | Event 23 | March 2011 |
| Event 2 | November/December 2002 | Event 24 | August/September 2011 |
| Event 3 | February/March 2003 | Event 25 | March 2012 |
| Event 4 | May 2003 | Event 26 | August 2012 |
| Event 5 | August 2003 | Event 27 | March 2013 |
| Event 6 | November 2003 | Event 28 | August 2013 |
| Event 7 | February 2004 | Event 29 | February 2014 |
| Event 8 | May 2004 | Event 30 | August 2014 |
| Event 9 | October 2004 | Event 31 | March 2015 |
| Event 10 | February 2005 | Event 32 | August 2015 |
| Event 11 | September 2005 | Event 33 | April 2016 |
| Event 12 | February 2006 | Event 34 | September 2016 |
| Event 13 | October 2006 | Event 35 | April 2017 |
| Event 14 | March 2007 | Event 36 | August 2017 |
| Event 15 | June 2007 | Event 37 | March 2018 |
| Event 16 | October 2007 | Event 38 | August 2018 |
| Event 17 | March 2008 | Event 39 | March 2019 |
| Event 18 | October 2008 | Event 40 | August 2019 |
| Event 19 | March 2009 | Event 41 | March 2020 |
| Event 20 | September 2009 | Event 42 | March 2021 |
| Event 21 | March 2010 | Event 43 | August 2021 |
| Event 22 | August 2010 | Event 44 | March 2022 |

| | | | |
|---|---|---|---|
| Event 45 | August 2022 | | |
| Event 46 | March 2023 | | |
| Event 47 | August 2023 | | |

The groundwater data generated during these previous sampling events are discussed in detail in their respective periodic groundwater monitoring reports produced by ICF International (ICF, through Event 22), URS (a legacy AECOM company, Event 23 through Event 32), and AECOM/Amentum (with USSE2/WE2, Event 33 through Event 47). Historical data are also summarized in the latest version of the GWMP (USSE2, January 2020). Historical data are incorporated into this report in the form of contaminant concentration trend graphs (Figure 6).

A detailed description of the Site, including the site location, physical structures, and site history, is provided in the GWMP.

# 2.0 Field and Analytical Procedures

This section summarizes the field and analytical procedures conducted by WE2 during the August 2023 groundwater sampling event. Activities included the sampling and analysis of groundwater and the measurement of depth to groundwater. Field and analytical procedures were conducted in accordance with the GWMP. The monitoring well locations are shown in Figure 2.

## 2.1 Water Level Measurements

Groundwater depths were recorded at thirty-four of the thirty-five monitoring wells and piezometers on site (thirty-two two-inch diameter wells and two one-inch piezometers). MW-11 was gauged as dry and was excluded. Depth to water was measured to the nearest one-hundredth of a foot from the surveyed reference point on the polyvinyl chloride (PVC) well riser using an electronic hand-held water-level meter. The water-level data was used to calculate groundwater elevations and flow gradients that are discussed in Section 3.2 and to develop the contour maps presented in Figures 3 and 4. Table 1 shows the well construction details, and Table 2 and Table 3 show the depth to groundwater and groundwater elevations from Event 47.

## 2.2 Groundwater Sampling

Groundwater samples were collected between August 28 and 30, 2023 from twenty-nine of thirty-three monitoring wells located at NETL-Albany and Liberty Elementary School. Two wells (MW-1 and MW-21) are not sampled because they are screened in the upper part of the Gravel Aquifer, where they do not monitor maximum concentrations of contaminants, and other adjacent wells (i.e., MW-22 and MW-23) are better suited to indicate concentrations at those depths and locations. MW-11 was not sampled due to the well being dry during event. MW-27 was unable to be sampled due to insufficient water resulting in the well running dry during low-flow purging.

Samples were collected using low-flow sampling methods in accordance with the GWMP. Water quality measurements including temperature, pH, specific conductivity, dissolved oxygen (DO), turbidity, and oxidation-reduction potential (ORP) were recorded every 3-5 minutes during purging of monitoring wells using a multi-parameter water quality meter with flow-through cell. Groundwater samples were collected following the stabilization of water-quality parameters. Final water quality readings were recorded and are shown in Table 2. Sampling field logs are provided in Appendix A.

## 2.3 Laboratory Analysis

The twenty-nine primary groundwater samples were analyzed for VOCs by EPA Method 8260D.

Two field duplicates samples were collected during the event, one set each from wells MW-14 and MW-19. Laboratory analysis procedures and methods were performed as described in the GWMP.

The complete laboratory analytical reports are presented in Appendix B and the analytical results for groundwater are tabulated in Appendix C. In addition, the groundwater purge water was analyzed and determined to be non-hazardous. The purge water laboratory report is also contained in Appendix B. The purge water will be disposed through the industrial wastewater system in accordance with the site's industrial wastewater permit.

## 2.4 Data Review and Validation

Data validation was performed on groundwater analytical results in accordance with the updated GWMP. The data validation included review of sample documentation, preservation and holding times, blank data, recovery data for laboratory control samples, and precision of duplicate results.

All sampled were processed inside of hold time. Three trip blanks were submitted and showed no detections, surrogates within acceptance limits. All method blanks are non-detect, surrogates within acceptance limits. All sample results are considered valid for continued characterization of the Site groundwater contamination. The data validation memorandum is included in Appendix D.

The MDLs used by the lab during this event were significantly elevated compared to normal. As such some wells that typically show contamination show as non-detect. Non-detect results in these wells should be viewed with caution.

# 3.0 Hydrogeological Assessment

The following sections summarize the hydrostratigraphy as first described by ICF and refined by AECOM. Section 3.2 describes groundwater flow directions for Event 47.

## 3.1 Geology and Hydrology

Several distinct geologic units have been identified at the site. The geologic and hydrogeologic characteristics of each unit are summarized below.

### 3.1.1 Upper Silt Unit

The Upper Silt Unit is present from the ground surface to a depth of approximately 15 feet below ground surface (bgs) and is predominantly silt and silty sand with laterally discontinuous clay lenses and thin water-bearing sands. It contacts the underlying Upper Clay Unit across most of the site. The Upper Silt Unit is subject to non-uniform surface water infiltration that can become locally perched on discontinuous clay lenses and saturate discontinuous sand lenses. These conditions contribute to a non-uniform saturation and heterogeneous groundwater elevations and groundwater flow throughout the unit referred to as the Perched Aquifer.

### 3.1.2 Upper Clay Unit

The Upper Clay Unit is a laterally discontinuous, dense, dry clay with a maximum thickness of approximately 10 feet. The Upper Clay Unit, when encountered, is located between the Upper Silt Unit and the underlying Gravel Aquifer at a depth of approximately 12 to 18 feet bgs. The current understanding of the lateral extent of the clay shows it as an inverted “T” shaped structure; however, it is important to note that the western extent of the clay has not been evaluated. In some areas, the clay grades into soft, brown, moist, silty clay for about 10 feet from the mapped edge of the dense, hard, dry clay. The soft brown clay may represent some relatively narrow transitional facies at the edge of the Upper Clay Unit.

The Upper Clay Unit is a localized aquitard and groundwater perches on it in some portions of the Site. The approximate extents of the Perched Aquifer were determined by ICF, refined by AECOM/USSE2, and are shown in Figure 3. Some borings that have penetrated the Upper Clay Unit have encountered an approximately 5-foot-thick zone of dry sediments composed of the underlying Gravel Aquifer, suggesting the Upper Clay Unit (where present) prevents vertical movement of water through the clay and into the Gravel Aquifer. Flow of the perched groundwater (where present) appears to be controlled in part by the surface topography of the clay. With water infiltration being significantly less during the dry season, there are variable flow patterns in the Perched Aquifer, with flow generally somewhat radial due to local mounding around well MW-10. Groundwater flow in the southern part of the Site appears to consistently be to the south/southwest regardless of season.

### 3.1.3 Gravel Aquifer

The Gravel Aquifer is present from a depth of approximately 15 feet bgs to approximately 35 feet bgs and consists of gravelly sands and clayey/silty gravels which are saturated in most portions of the Site. Investigations indicate a change in lithology of the Gravel Aquifer in the northeast portion of the Site. The typical lithology of the Gravel Aquifer transitions to a predominant dark gray, poorly graded sand with little or no gravel or fines in the northeast portion of the Site. This same unit was observed in several borings in the northwestern part of Liberty Elementary School near the ball fields. Groundwater elevation data and geologic data obtained during site assessments suggest that stratigraphic variations in the overlying Upper Silt Unit may cause local confining conditions in the Gravel Aquifer; therefore, the Gravel Aquifer is considered to be semi-confined. Where the Upper Clay is absent, the Upper Silt Unit

directly overlies the Gravel Aquifer and forms a continuous semi-confined aquifer. Locally, the upper portion of the Gravel Aquifer immediately below the Upper Clay has been found to be only partially saturated.

Groundwater flow in the Gravel Aquifer is variable across the Site. The gradient in the central portion of the Site is very flat, and groundwater elevations decrease to the north and south, indicating a flow direction away from the center portion of the Site with a slight east-southeast trend below Liberty Elementary School. In the southern part of the Site the groundwater gradient is generally to the southwest, and in the northern part of the Site the gradient is toward the northwest or northeast depending on the season. Water levels in wells screened across both the Upper Silt Unit and Gravel Aquifer (MW-1, MW-3, MW-5, MW-6, and MW-14) are consistent with water levels in the Gravel Aquifer. The majority of the seventeen wells installed on site since February 2005, and the four off-site wells installed in September 2006 were constructed such that the screened interval only penetrates the deep Gravel Aquifer and does not intercept the Upper Silt Unit. This was later confirmed based on contaminants of potential concerns identified in the earlier sampling events of the site's original wells.

### 3.1.4 Lower Silt/Clay Unit

The Lower Silt/Clay Unit includes two stratigraphic units (Siltstone and Blue Clay) that underlie the Gravel Aquifer. In general, the Blue Clay underlies the Siltstone Unit; however, in portions of the Site, the Siltstone Unit is not present, and the Gravel Aquifer directly overlies the Blue Clay. The Lower Silt/Clay Unit is an aquitard that restricts the vertical movement of water. The surface of the Lower Silt/Clay Unit in the southwestern portion of the Site dips steeply to the southwest. The surface of the Lower Silt/Clay Unit in the eastern portion of the Site and at Liberty Elementary School dips to the east/northeast. In the northwest part of the Site the Lower Silt Clay dips to the northwest.

## 3.2 August 2023 Groundwater Elevations and Flow Direction

Groundwater levels were measured at thirty-four of the thirty-five existing wells and piezometers in August 2023. MW-11 was gauged as dry and was excluded. Groundwater depths ranged from 6.50 feet bgs at MW-28 to 21.51 feet bgs at MW-1. Groundwater elevations ranged from 199.08 feet above mean sea level (amsl) at MW-6 to 217.02 feet amsl at MW-28. Event 47 and historical groundwater elevation data are provided in Table 3. Note that all groundwater elevations are referenced to National Geodetic Vertical Datum (NGVD), 1947.

The wet winters and dry summers result in seasonal variability in groundwater elevations at the Site. The groundwater elevations reflect the low precipitation during the dry season (between July and September) as compared to much higher amounts during the wet season (between November and May).

The average August 2023 groundwater elevation (206.27 feet) was 5.93 feet lower than the average elevation during the previous wet season (March 2023, 212.20 feet) and 1.12 feet lower than the previous dry season (August 2022, 207.39 feet).

Figures 3 and 4 show the groundwater elevation contours for the Perched Aquifer and Gravel Aquifer, respectively, for the August 2023 groundwater level measurements. Groundwater elevations from wells screened in the Gravel Aquifer were used to construct a potentiometric map of the Gravel Aquifer. Selected wells screened across both the Upper Silt and Gravel Aquifer zones are included in groundwater contouring because screens in these wells penetrate well into the Gravel Aquifer and appear to be representative of the Gravel Aquifer. These wells are generally located at the perimeter of the site.

Groundwater elevations from wells in the Perched Aquifer (Figure 3) measured during the August 2023 Groundwater event show a flow to the west in the northern portion of the site, and to the south/southwest and to the southeast away from a potentiometric high near MW-28. The steepest gradient is between wells MW-28 and MW-13 (8.81 feet) toward the southwest.

In the Gravel Aquifer, groundwater elevation data shows a potentiometric high centered on monitoring well MW-14 from which flow is radially away in all directions. The steepest flow gradient is from this high toward wells MW-19 and MW-20 to the west, and to MW-6 at the south end of the site (Figure 4). The gradient in the gravel aquifer is relatively

flat across the main part of the site and under the Liberty Elementary School property. Table 4 shows hydraulic gradient calculations.

# 4.0 Groundwater Quality Assessment

This section summarizes the results of the chemical analyses performed on groundwater samples collected during the August 2023 sampling event. Groundwater samples from twenty-nine monitoring wells were analyzed for VOCs. Table 5 summarizes the August 2023 groundwater analytical results for detected constituents including the minimum applicable screening criteria, the frequency of detection, the frequency of detections exceeding screening criteria, the minimum and maximum concentrations, and the location of the maximum concentration. Table 6 lists groundwater analytical results for any detected volatile organic chemicals. Detections found to be unusable in data validation are not listed in Table 6. Appendix B includes the Eurofins TestAmerica Laboratories Analytical Reports and Appendix C summarizes all reported groundwater lab data of volatile organics. Appendix D contains the data validation document.

Table 7 lists federal and state groundwater quality standards and criteria for VOCs. The table includes Oregon Groundwater MMLs as defined in Oregon Administrative Rule (OAR) 340-040-0020 (Groundwater Quality Protection). The MMLs are the maximum measurable concentrations of the chemicals in groundwater established by the State of Oregon. From OAR 340-040-020: “They will be used by the Department and the public to evaluate the significance of a particular contaminant concentration and will trigger necessary regulatory action. These levels should not be construed as acceptable groundwater quality goals because it is the policy of the EQC (OAR 340-041-0026(1)(a)) to maintain and preserve the highest possible water quality.” From OAR 340-040-100: “The maximum measurable levels established by these rules are not designed to be used as drinking water standards or as clean-up standards for remedial actions, but to initiate the process of designating groundwater management areas where necessary to preserve groundwater quality”.

The MCLs are the levels established by the EPA that cannot be exceeded by a public water supply system. Oregon and EPA have also established risk-based criteria for screening purposes. The Oregon Hotspot values are screening values that are a combination of promulgated criteria and guidance values used by the state to prioritize groundwater cleanups. The EPA RSL values were calculated using the latest toxicity values, default exposure assumptions, and physical and chemical properties. The EPA RSL values incorporate the EPA Region III RBC Table, Region VI human health medium-specific screening levels table, and the Region IX Preliminary Remediation Goal (PRG) Table, and was last updated in November 2017. The Oregon DEQ RBC values are similar to the EPA RSLs but use Oregon-specific parameters to calculate risk. Oregon DEQ Petroleum RBCs were updated November 2015. Minimum criteria values used in this report reflect up to date EPA RSLs and Oregon DEQ RBCs.
The August 2023 groundwater data are compared to the lowest screening criteria for each analyte and are discussed in the following sections. Any result annotated with a “U” qualifier (in either the tables or appendices) or reported “ND” in the lab report signifies that the chemical was not detected above the method detection limit. Any result annotated with a “J” qualifier is an estimate, since the value is below the method reporting limit but above the method detection limit.

Laboratory method detection limits for VOCs may be greater than the minimum applicable screening criteria. Therefore, while these compounds were not detected above the method detection limits, they may still be present above screening criteria.

## 4.1 Volatile Organic Compounds

Three VOCs were detected during the August 2023 sampling event: carbon tetrachloride, chloroform, trichloroethene (TCE). All three of these VOCs were detected at concentrations that exceed Oregon Groundwater Maximum Measurement Levels (MMLs), Oregon Hot Spot tables, Oregon Risk-Based Concentrations (RBCs), EPA Regional Screening Levels (RSLs), or EPA Primary Maximum Contaminant Levels (MCLs). Table 5 summarizes the detections and Table 6 contains all of the analytical results for the detected volatile organics.

The current and historical concentrations of five common VOCs (carbon tetrachloride, chloroform, cis-1,2-DCE, PCE, and TCE) are presented graphically in Figure 6.

*Carbon Tetrachloride.* Carbon tetrachloride was detected in three of the twenty-nine wells sampled during the August 2023 sampling event at concentrations ranging from 20 µg/L at MW-18 to 680 µg/L at MW-20. All the detections of carbon tetrachloride exceeded the minimum groundwater criteria, which is the Oregon DEQ RBC of 0.41 µg/L. In addition, all the detections exceed the EPA RSL of 0.43 µg/L. All the detections exceed the EPA Primary Drinking Water Standard, the Oregon Hot Spot Value and the Oregon Groundwater MMLs of 5 µg/L. Historically MDLs of 0.30 µg/L to 15 µg/L have been used, during this event the lab reported MDLs of 4.4 µg/L to 440 µg/L. Carbon tetrachloride is a solvent that was historically used in degreasing and other industrial applications.

*Chloroform.* Chloroform was detected in one of the twenty-nine wells sampled during the August 2023 sampling event at concentrations ranging from 3.8 (J) µg/L at DUP1 (MW-14) to 4.4 (J) µg/L at MW-14. All the detections of chloroform exceeded the minimum groundwater criteria for the site which is the Oregon DEQ RBC of 0.19 µg/L. In addition, all of the detected concentrations exceeded the EPA RSL of 0.22 µg/L, none of the detections exceeded the EPA Primary Drinking Water Standard and the Oregon Hot Spot Value of 80 µg/L and the Oregon Groundwater MMLs of 100 µg/L. Historically MDLs of 0.26 µg/L to 5.2 µg/L have been used, during this event the lab reported MDLs of 3.0 µg/L to 300 µg/L. Chloroform is formed as a byproduct when chlorine is added to the water supply system and is also a breakdown product of the anaerobic degradation of carbon tetrachloride.

*Cis-1,2-Dichloroethene (cis-1,2-DCE).* Cis-1,2-DCE was not detected in any of the twenty-nine wells sampled during the August 2023 sampling event. Historically MDLs of 0.30 µg/L to 3.5 µg/L have been used, during this event the lab reported MDLs of 3.5 µg/L to 350 µg/L. Cis-1,2-DCE is a breakdown product of the anaerobic degradation of TCE.

*Tetrachloroethene (PCE).* PCE was not detected in any of the twenty-nine wells sampled during the August 2023 sampling. Historically MDLs of 0.30 µg/L to 8.2 µg/L have been used, during this event the lab reported MDLs of 2.3 µg/L to 230 µg/L. Tetrachloroethene is used for metal cleaning.

*Trichloroethene (TCE).* TCE was detected in six of the twenty-nine wells sampled during the August 2023 sampling event at concentrations ranging from 3.5 (J) µg/L at MW-22 to 74 µg/L at MW-18. All the detections of TCE exceeded the minimum groundwater criteria, which is the EPA RSL of 0.28 µg/L. In addition, all the detections exceed the Oregon DEQ RBC of 0.43 µg/L and five of the detections exceed the Oregon MML, the Oregon Hot Spot Value and EPA Primary Drinking Water Standard of 5 µg/L. Historically MDLs of 0.26 µg/L to 13 µg/L have been used, during this event the lab reported MDLs of 3.4 µg/L to 340 µg/L. TCE is an industrial solvent used in degreasing and other industrial applications.

## 4.2 Water Quality Parameters

Table 2 summarizes field parameters recorded at each of the thirty-one wells, including pH, conductivity, turbidity, dissolved oxygen (DO), temperature, and oxidation reduction potential (ORP).

In August 2023:

- Temperatures ranged from 14.50 degrees Celsius (°C) at MW-25 to 20.00 °C at MW-28.
- DO ranged from 0.00 at MW-30 to 6.77 at MW-8.
- pH ranged from 6.56 s.u. at MW-4 to 11.14 s.u. at MW-19.
- Conductivity ranged from 0.169 milli Siemens per centimeter (mS/cm) at MW-10 to 1.288 mS/cm at MW-29.
- ORP ranged from -349.2 millivolts (mV) at MW-8 to 298.00 mV at MW-101.
- Twenty-eight of the twenty-nine wells sampled had measurable turbidity once readings stabilized. The measurable turbidity ranged from 2.4 nephelometric turbidity units (NTUs) at MW-19 to 25.8 NTUs at MW-4. MW-16 had 1000 NTUs during the entire purge. Readings of 1000 NTU on Horiba U-52 turbidity sensors indicates turbidity at or over maximum value for sensor.

## 4.3 Contaminant Trends

Several important trends in the VOC concentrations were noted at sixteen locations: MW-5, MW-14, MW-15, MW-17, MW-18, MW-20, MW-22, MW-23, MW-24, MW-27, MW-28, MW-30, MW-100, MW-101, MW-102 and MW-103. Trend plots (Figure 6) support the discussion below.

- *MW*-5. Chloroform was not detected during this event continuing the downward trend after the record high in August 2017. All other VOCs remain non-detect.
- *MW-14.* Concentrations of chloroform had been on an overall downward trend since a high of 12 µg/L in April 2016, however, the August 2021 concentration of 11 ug/l was a sharp increase. The August 2023 value of 4.4 J µg/L continues this trend and is very close to the values of the previous three events. Carbon tetrachloride remained non-detected since the 0.40 J µg/L in March 2020. Concentrations of cis-1,2-DCE, TCE, and PCE remain non-detected during the August 2023 sampling event.
- *MW-15.* Concentrations of TCE continued to decrease after an all-time high of 3,100 µg/L in March 2019. The August 2023 results showed 18 µg/L of TCE and non-detect for all other VOCs.
- *MW-17.* After a sharp decrease from 44 µg/L in August 2021 to 8.3 H µg/L in March 2022, TCE rebounded to 31 (B J+) µg/L in August 2022, then dropped to non-detect in March 2023. The August 2023 results showed a rebound of TCE to 36 µg/L and non-detect for all other VOCs. Carbon tetrachloride remains non-detect since March 2023. Chloroform remains non-detect since August 2022.
- *MW-18.* Of the four primary VOCs (carbon tetrachloride, chloroform, TCE, and PCE) only carbon tetrachloride and TCE were detected. TCE continues a gradual upward trend starting after March 2022. This trend shows seasonal fluctuation.
- *MW-20.* Concentrations of carbon tetrachloride (680 µg/L), continue a downward trend. Carbon Tetrachloride values have been over 500 µg/L since March 2009, the August 2022 non-detect is an outlier to the data trend. Chloroform values have been over 100 µg/L since March 2006, TCE values have been over 100 µg/L since October 2006. Non-detects of Chloroform, TCE, and PCE are outliers to the trend due to elevated MDLs.
- *MW-22.* All five contaminants continue long-term decreases. TCE (3.5 J µg/L) continues this downward trend, all other VOCs are non-detect.
- *MW-23.* Carbon tetrachloride and Chloroform continue a gradual decrease since March 2022 and exhibit seasonal variations with lower values in the dry season. All VOCs were reported as non-detect.
- *MW-24.* Carbon tetrachloride (110 µg/L) continues its sharp decline from its record high (250 µg/L) in August 2021. TCE (38 J µg/L) continues its sharp decline from its record high (88 µg/L) in August 2021. Cis-1,2-DCE remained at non-detected concentrations. PCE was non-detect and continues to decline after a sharp spike of 8.5 (J H) µg/L in March 2022. All four were generally increasing from 2007 and began to generally decrease after August 2021 except for PCE which started this trend after March 2022.
- *MW*-27. Historically this well contains carbon tetrachloride and chloroform. This well was unable to be sampled during this event due to insufficient water leading to well running dry during low flow purging and stabilization.
- *MW-28*. After chloroform was detected for the first time ever at 1.2 (H) µg/L in March 2022, all contaminants were non-detect.
- *MW*-30. All VOCs were non-detect in August 2023; this continues an overall downward trend since 2012. Cis-1,2-DCE being non-detect is an outlier to the trend.
- *MW-100.* TCE (12 µg/L) continues to show strong seasonality with higher concentrations in the dry season.
- *MW-101*. All VOCs were non-detect in August 2023. TCE being non-detect is an outlier in the overall upward trend since August 2017.
- *MW-102*. All VOCs were non-detect in August 2023; this continues an overall downward trend. The concentration of TCE at 26 µg/L in March 2023 is an outlier to this trend.
- *MW*-103. All results have been non-detect since 2014 with the exception of one trace detection each of Carbon Tetrachloride in 2020 and TCE in 2021.

Results from Event 47 groundwater sampling were used to evaluate the extent and stability of the primary constituents of concern. Primary constituents of concern are VOCs, including carbon tetrachloride, chloroform, TCE, cis-1,2-DCE and PCE. Concentration data are presented in isopleth maps for carbon tetrachloride, chloroform, TCE, and PCE in the Gravel Aquifer (Figure 7 through Figure 10). The concentrations of carbon tetrachloride in the Perched Aquifer are presented in Figure 11 for this sampling event. The concentrations of cis-1,2-DCE in the Gravel Aquifer is presented in Figure 12.

Contour maps of chemical concentrations were contoured by hand, scanned, and digitized into ArcGIS Pro. A discussion of the maps is presented below.

***Carbon Tetrachloride.*** Carbon tetrachloride was detected in three of the twenty-two wells sampled in the Gravel Aquifer and none of the seven wells sampled in the Perched Aquifer. MW-27 in the Perched Aquifer has historically had detections but was unable to be sampled during this event leading to no detections in the Perched Aquifer. Figure 7 shows the distribution of carbon tetrachloride in the Gravel Aquifer. The pattern of contamination depicts a carbon tetrachloride plume extending offsite to the northwest. The August 2023 highest detected carbon tetrachloride concentration (680 µg/L) was in well MW-20, located north of the suspected primary source area near MW-18. The concentrations at MW-20 have been strongly seasonal with an overall increasing trend beginning to decrease in August 2021 as shown in Figure 6. Concentrations in MW-24 at the northern property boundary had been steadily increasing since approximately 2007, but this trend was interrupted by a decline to 140 µg/L in March 2022 from the August 2021 record high value of 250 µg/L. While the concentrations rose slightly from March 2022 to March 2023, the August 2023 concentration of 110 µg/L continues the step decline from the August 2021 high. The concentrations at MW-18 fluctuate seasonally, but have been steadily decreasing since 2006, with a sharp drop in March 2021. To the southwest, MW-22 had a concentration of 7 µg/L in March 2023, which dropped to a non-detect in August 2023. This well shows an overall decreasing trend in carbon tetrachloride concentrations since monitoring started in 2007. The data indicates that the extent of contamination has possibly migrated offsite to the northwest and southwest.

***Chloroform.*** Chloroform is an early breakdown product of carbon tetrachloride in the reductive dechlorination and denitrification biological breakdown processes. Chloroform was detected in one of the twenty-two wells in the Gravel Aquifer and none of the wells in the Perched Aquifer. MW-27 in the Perched Aquifer has historically had detections but was unable to be sampled during this event leading to no detections in the Perched Aquifer. The extent of chloroform in the Gravel Aquifer (Figure 8) follows the same general trend as carbon tetrachloride, but at much lower concentrations. The highest chloroform concentration is at MW-14 (4.4 µg/L). Concentrations at MW-20 have shown a general increase in concentrations over time with relatively stable values since 2018. During the August 2023 event MW-20 was non-detect Chloroform likely due to the elevated MDL. At MW-18, which is located near the primary source area, chloroform concentrations have decreased considerably since August 2019. The August 2023 event resulted in a non-detect. Like carbon tetrachloride, this appears to indicate that the plume has moved away from the source area near MW-18 and toward the northwest. Trends in chloroform concentration (Figure 6) show that it tracks closely with carbon tetrachloride. Chloroform concentrations in the east-central part of the Site, specifically MW-14, have had large seasonal fluctuations since March 2009, and the August 2023 value of 4.4 J µg/L continues this trend. Carbon tetrachloride, the precursor to chloroform, has been rarely observed in MW-14. Concentrations of chloroform to the north of the release area, specifically MW-24, show a consistent increase over time with a peak in March 2022 of 27 µg/L followed by a decreasing trend. Concentrations to the southwest (MW-22, non-detect), have shown a decrease in concentrations over time, with stable values from 2016 to March 2023. Delineation of concentrations is not complete further to the southwest beyond MW-22.

Like carbon tetrachloride, chloroform is historically only found in well MW-27 in the Perched aquifer.

***Trichloroethene.*** Figure 9 shows contours of TCE concentrations in the Gravel Aquifer. TCE was detected in six of the twenty-two wells in the Gravel Aquifer and no wells in the Perched Aquifer. Concentrations of TCE are highest in MW-18 at 74 µg/L. Concentrations have been typically highest in MW-18 and MW-15, as both wells are located in the contaminant source areas. Concentrations in MW-15 spiked during March 2019 at 3100 µg/L, but then markedly decreased to a historic low non-detect in March 2023, then rebounding to 18 µg/L in August 2023. TCE concentrations in MW-18 dropped sharply in March 2021 and reached a new historic low of 36 µg/L in March 2022, followed by 63 µg/L in August 2022 and 47 µg/L in March 2023. This seasonal trend continues with a value of 75 µg/L in August 2023.

TCE concentrations increase in the northern part of the site at MW-24 until reaching a maximum of 88 µg/L in August 2021 followed by a sharp decline from August 2012 to 38 J µg/L in August 2023. Shifts in the highest concentrations from the source area wells MW-15 and MW-18 to wells MW-20 and MW-24 highlight the movement of the TCE plume to the northwest.

Concentrations are consistently decreasing in the southwest part of the site at MW-22 with record lows of 4.9 µg/L in March 2023 followed by a new record of non-detect in August 2023. This is indicative of further movement of the southwest plume offsite.

TCE was detected in one of the four offsite wells, MW-100, in the eastern area of contamination. The 80 µg/L TCE spike in MW-100 in August 2021 decreased to 12 µg/L in August 2023. MW-101 (2.2 µg/L in both March and August 2022) dropped to non-detect. Concentrations at MW-102 have been generally decreasing since approximately 2006 and while the March 2023 value spike to 26 µg/L the August 2023 Value was non-detect.

***Tetrachloroethene.*** PCE concentration contours are shown on Figure 10. During Event 47 in August 2023, PCE was not detected in any of the wells in the Gravel Aquifer or Perched Aquifer. During Event 46 in March 2023, PCE was detected in four wells in the Gravel Aquifer and none in the Perched Aquifer. The highest concentration (9.3 µg/L) was at MW-20, which follows a record high of 14 µg/L in March 2021. At MW-18, in the likely source area, the August 2023 results were non-detect. It appears that PCE sources near MW-18 are being transported to the northwest near MW-20 and MW-24 along with other VOCs. Concentrations along the northern site boundary at MW-24 have fluctuated greatly since 2012. PCE has remained non-detect since August 2012 at MW-23.

PCE has not been detected at the eastern perimeter of the Site, nor in the monitoring wells east of the Site on school property.

***Cis-1,2-DCE.*** Cis-1,2-DCE occurs as a breakdown product of the progressive dechlorination of TCE. Concentration contours in the Gravel Aquifer are shown on Figure 12. During Event 47 (August 2023), cis-1,2-DCE was not detected in any wells in the Gravel Aquifer. During Event 46 (March 2023), cis-1,2-DCE was detected in five wells in the Gravel Aquifer with a high value (6.0 H µg/L) at MW-30.

# 5.0 References


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# TABLES

**Table 1**
**Monitoring Well Construction**

Groundwater Sampling Event
47 Albany NETL, Albany, OR

| Well Number | Total Depth | Screen Depth | Blank Casing | Filter Pack Depth |
|---|---|---|---|---|
| **MW-1** | 30 | 15-30 | 0-15 | 12.1-30 |
| **MW-3** | 24 | 9-24 | 0-9 | 7-24 |
| **MW-4** | 20 | 10-20 | 0-10 | 8-20 |
| **MW-5** | 30 | 14.5-29.5 | 0-14.5 | 11-30 |
| **MW-6** | 30 | 14-29 | 0-14 | 12-30 |
| **MW-7** | 20 | 10-20 | 0-10 | 7-20 |
| **MW-8** | 20 | 10-20 | 0-10 | 7-20 |
| **MW-9** | 25 | 10-25 | 0-10 | 7.2-25 |
| **MW-10** | 25 | 10-25 | 0-10 | 6.5-25 |
| **MW-11** | 20 | 9.5-19.5 | 0-9.5 | 6.5-20 |
| **MW-13** | 25 | 10-25 | 0-10 | 7.3-25 |
| **MW-14** | 28 | 8-28 | 0-8 | 6.7-28 |
| **MW-15** | 35 | 25-35 | 0-25 | 23.1-36 |
| **MW-16** | 33 | 23-33 | 0-23 | 20.8-35.5 |
| **MW-17** | 30 | 20-30 | 0-20 | 18.1-38 |
| **MW-18** | 32 | 22-32 | 0-22 | 20-33 |
| **MW-19** | 31.5 | 21.5-31.5 | 0-21.5 | 19.5-32 |
| **MW-20** | 35 | 25-35 | 0-25 | 23-36 |
| **MW-21** | 31 | 20-30 | 0-20 | 18-31 |
| **MW-22** | 53 | 40-50 | 0-40 | 38-50.5 |
| **MW-23** | 41 | 27-37 | 0-27 | 25-37.5 |
| **MW-24** | 46 | 35.5-43.5 | 0-33.5 | 31.5-44 |
| **MW-25** | 36 | 19-29 | 0-19 | 17-29.5 |
| **MW-26** | 30 | 20-30 | 0-20 | 18-30 |
| **MW-27** | 15 | 10-15 | 0-10 | 8-15 |
| **MW-28** | 14 | 9-14 | 0-9 | 7-14 |
| **MW-29** | 29 | 24-29 | 0-24 | 22-29 |
| **MW-30** | 38 | 28-38 | 0-28 | 26-38 |
| **MW-31** | 38 | 28-38 | 0-28 | 26-38 |
| **MW-100** | 27 | 17-27 | 0-17 | 14.5-27.5 |
| **MW-101** | 27 | 17-27 | 0-17 | 17-30 |
| **MW-102** | 37 | 27-37 | 0-27 | 24.5-37.5 |
| **MW-103** | 45 | 35-45 | 0-35 | 34.5-47.5 |
| **PZ-1A** | 13 | 13-18 | 0-13 | 12-18.2 |
| **PZ-1B** | 26 | 21-26 | 0-21 | 20-26.2 |

Notes:

All measurements in feet below ground surface

All wells are completed with flush mount monuments

# Table 2
# Groundwater Depth, Elevation, and Water Quality Measurements

Groundwater Monitoring Event 47
NETL Albany, Albany, OR

| Well Number | Sample Date | Measuring Point Elevation | Depth to Water (ft) | Groundwater Elevation (ft AMSL) | Water Quality Measurements | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | pH | Temperature (°C) | Specific Conductivity (mS/cm) | Turbidity (NTUs) | Dissolved Oxygen (mg/L) | ORP (mV) |
| MW-1 | 8/30/23 | 228.10 | 21.51 | 206.59 | - | - | - | - | - | - |
| MW-3 | 8/29/23 | 219.61 | 12.62 | 206.99 | 7.12 | 16.80 | 0.616 | 8.9 | 6.54 | 90.4 |
| MW-4 | 8/28/23 | 218.28 | 9.01 | 209.27 | 6.56 | 18.70 | 0.956 | 25.8 | 1.41 | 155.1 |
| MW-5 | 8/30/23 | 217.08 | 17.40 | 199.68 | 8.23 | 16.30 | 0.416 | 7.1 | 0.00 | -6.0 |
| MW-6 | 8/30/23 | 219.48 | 20.40 | 199.08 | 8.39 | 15.70 | 0.188 | 15.2 | 0.25 | 213.0 |
| MW-7 | 8/30/23 | 216.85 | 10.50 | 206.35 | 7.95 | 17.20 | 0.284 | 9.2 | 1.26 | 246.0 |
| MW-8 | 8/29/23 | 220.23 | 14.12 | 206.11 | 6.79 | 15.20 | 0.451 | 10.7 | 6.77 | -349.2 |
| MW-9 | 8/29/23 | 224.00 | 15.17 | 208.83 | 8.13 | 14.60 | 0.303 | 15.7 | 2.84 | 278.0 |
| MW-10 | 8/29/23 | 225.41 | 13.72 | 211.69 | 8.40 | 14.90 | 0.169 | 15.0 | 0.00 | 286.0 |
| MW-11 | 8/30/23 | 227.73 | DRY | - | - | - | - | - | - | - |
| MW-13 | 8/28/23 | 223.31 | 15.10 | 208.21 | 7.21 | 18.60 | 0.508 | 10.2 | 2.66 | 144.4 |
| MW-14 | 8/29/23 | 224.77 | 17.65 | 207.12 | 6.86 | 18.70 | 0.372 | 9.7 | 5.98 | 56.2 |
| MW-15 | 8/28/23 | 222.96 | 16.23 | 206.73 | 7.46 | 16.10 | 0.659 | 11.2 | 6.70 | 145.8 |
| MW-16 | 8/30/23 | 217.57 | 13.40 | 204.17 | 8.28 | 17.10 | 0.376 | 1000.0 | 0.00 | 238.0 |
| MW-17 | 8/28/23 | 218.84 | 12.07 | 206.77 | 7.60 | 15.80 | 0.849 | 10.5 | 1.43 | -61.3 |
| MW-18 | 8/29/23 | 224.00 | 17.28 | 206.72 | 7.31 | 17.10 | 0.858 | 13.1 | 3.88 | 120.2 |
| MW-19 | 8/29/23 | 224.20 | 17.85 | 206.35 | 11.14 | 15.50 | 0.211 | 2.4 | 0.00 | 286.0 |
| MW-20 | 8/29/23 | 225.62 | 19.16 | 206.46 | 8.66 | 15.71 | 0.390 | 11.1 | 0.00 | 264.0 |
| MW-21 | 8/30/23 | 216.60 | 13.15 | 203.45 | - | - | - | - | - | - |
| MW-22 | 8/30/23 | 216.57 | 13.46 | 203.11 | 8.09 | 15.30 | 0.317 | 7.4 | 0.00 | 110.0 |
| MW-23 | 8/30/23 | 227.87 | 21.28 | 206.59 | 8.20 | 19.80 | 0.305 | 9.3 | 5.49 | 261.0 |
| MW-24 | 8/30/23 | 227.49 | 20.90 | 206.59 | 8.32 | 16.50 | 0.363 | 11.6 | 0.00 | 215.0 |
| MW-25 | 8/29/23 | 220.38 | 14.80 | 205.58 | 6.87 | 14.50 | 0.448 | 8.6 | 2.71 | -228.3 |
| MW-26 | 8/29/23 | 220.63 | 13.62 | 207.01 | 7.07 | 16.30 | 0.506 | 9.7 | 0.70 | 29.6 |
| MW-27 | 8/28/23 | 222.80 | 14.35 | 208.45 | - | - | - | - | - | - |
| MW-28 | 8/29/23 | 223.52 | 6.50 | 217.02 | 7.31 | 20.00 | 0.329 | 13.0 | 4.71 | -305.9 |
| MW-29 | 8/28/23 | 217.93 | 11.55 | 206.38 | 9.59 | 17.70 | 1.288 | 11.8 | 1.74 | -203.2 |
| MW-30 | 8/30/23 | 219.26 | 18.47 | 200.79 | 8.06 | 19.30 | 0.333 | 7.3 | 0.00 | 51.0 |
| MW-31 | 8/30/23 | 216.78 | 16.55 | 200.23 | 8.33 | 15.80 | 0.436 | 10.3 | 0.00 | -25.0 |
| MW-100 | 8/29/23 | 218.37 | 11.57 | 206.80 | 8.65 | 15.88 | 0.616 | 9.3 | 0.00 | 275.0 |
| MW-101 | 8/29/23 | 218.54 | 11.90 | 206.64 | 8.64 | 17.83 | 0.371 | 10.6 | 3.39 | 298.0 |
| MW-102 | 8/29/23 | 217.64 | 10.78 | 206.86 | 8.42 | 16.00 | 0.317 | 10.4 | 0.00 | 286.0 |
| MW-103 | 8/29/23 | 216.51 | 9.50 | 207.01 | 8.24 | 19.20 | 0.365 | 8.0 | 0.00 | 295.0 |
| PZ-1A | 8/28/23 | 220.10 | 13.30 | 206.80 | - | - | - | - | - | - |
| PZ-1B | 8/28/23 | 220.05 | 13.25 | 206.80 | - | - | - | - | - | - |

Notes:
ft = feet
AMSL = Above Mean Sea Level
- = Not sampled
mS/cm = MilliSiemens per centimeter
NTUs = Nephelometric Turbidity Units
mg/L = Milligrams per liter
ORP = Oxidation-Reduction Potential
°C = Degrees Celsius
mV = Millivolts
NM- Not Measured
DRY = Dry Well, water table below top of pump

# Table 3
# Current and Historical Groundwater Elevations

Groundwater Monitoring Event 47
NETL Albany, Albany, OR

| Well Number | Measuring Point Elevation | Depth to Water (ft) | Groundwater Elevation (ft AMSL) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 8/28/2023 | 8/28/2023 | 3/20/2023 | 8/23/2022 | 3/17/2022 | 8/23/2021 | 3/2/2021 | 3/2/2020 | 8/26/2019 | 3/25/2019 | 8/20/2018 | 3/19/2018 | 9/1/2017 | 4/10/2017 | 9/16/2016 | 4/3/2016 | 8/20/2015 |
| **MW-1** | 228.10 | 21.51 | 206.59 | 209.18 | 207.59 | 208.93 | 206.32 | 209.64 | 208.82 | 207.36 | 208.90 | 207.20 | 209.29 | 207.38 | 210.45 | 207.18 | 209.98 | 207.37 |
| **MW-3** | 219.61 | 12.62 | 206.99 | 211.09 | 207.25 | 210.94 | 205.77 | 211.59 | 210.50 | 207.96 | 210.44 | 207.01 | 210.51 | 206.98 | 211.56 | 207.44 | 211.03 | 207.76 |
| **MW-4** | 218.28 | 9.01 | 209.27 | 216.38 | 211.40 | 216.88 | 209.28 | 216.54 | 216.25 | 210.84 | 215.55 | 210.10 | 216.28 | 210.63 | 216.46 | 209.85 | 215.86 | 210.28 |
| **MW-5** | 217.08 | 17.40 | 199.68 | 207.23 | 200.98 | 206.83 | 199.32 | 207.62 | 206.53 | 201.28 | 206.63 | 201.26 | 206.93 | 200.71 | 207.75 | 200.41 | 206.59 | 200.08 |
| **MW-6** | 219.48 | 20.40 | 199.08 | 207.13 | 201.48 | 207.28 | 199.41 | 207.36 | 205.89 | 200.18 | 205.97 | 200.03 | 206.56 | 199.93 | 207.05 | 199.48 | 205.96 | 199.40 |
| **MW-7** | 216.85 | 10.50 | 206.35 | 215.76 | 209.05 | 215.70 | 206.37 | 215.76 | 215.40 | 208.10 | 214.85 | 207.75 | 215.53 | 208.02 | 215.68 | 206.90 | 215.61 | 206.39 |
| **MW-8** | 220.23 | 14.12 | 206.11 | 212.36 | 206.53 | 212.50 | 204.47 | 213.25 | 212.51 | 208.71 | 212.45 | 207.25 | 212.93 | 207.98 | 213.73 | 207.61 | 213.34 | 207.78 |
| **MW-9** | 224.00 | 15.17 | 208.83 | 222.40 | 213.86 | 222.95 | 209.39 | 222.32 | 221.63 | 211.98 | 221.53 | 210.78 | 221.88 | 213.00 | 222.45 | 209.63 | 221.88 | 210.39 |
| **MW-10** | 225.41 | 13.72 | 211.69 | 223.63 | 215.84 | 224.11 | 212.36 | 223.43 | 223.21 | 213.57 | 222.68 | 213.60 | 224.06 | 214.15 | 223.56 | 212.28 | 223.18 | 213.76 |
| **MW-11** | 227.73 | DRY | DRY | 221.16 | 215.96 | 221.98 | 212.29 | 221.19 | 220.19 | 213.08 | 220.63 | 212.58 | 220.95 | 213.42 | 221.30 | 212.42 | 220.57 | 212.82 |
| **MW-13** | 223.31 | 15.10 | 208.21 | 214.15 | 208.37 | 213.56 | 205.94 | 213.99 | 213.03 | 209.66 | 212.90 | 207.96 | 213.31 | 208.01 | 214.51 | 208.58 | 214.19 | 209.26 |
| **MW-14** | 224.77 | 17.65 | 207.12 | 210.65 | 208.01 | 210.47 | 210.52 | 212.06 | 210.00 | 207.92 | 209.99 | 207.44 | 210.11 | 207.52 | 211.52 | 207.54 | 211.14 | 207.90 |
| **MW-15** | 222.96 | 16.23 | 206.73 | 212.09 | 206.35 | 210.91 | 203.36 | 211.58 | 210.63 | 207.94 | 210.37 | 206.24 | 210.76 | 206.51 | 211.65 | 207.41 | 211.08 | 207.71 |
| **MW-16** | 217.57 | 13.40 | 204.17 | 211.67 | 204.84 | 211.67 | 202.74 | 211.47 | 211.07 | 205.41 | 210.81 | 205.17 | 211.07 | 205.12 | 211.82 | 204.87 | 211.37 | 204.21 |
| **MW-17** | 218.84 | 12.07 | 206.77 | 210.82 | 206.67 | 210.95 | 204.93 | 211.50 | 210.57 | 207.91 | 210.49 | 206.42 | 210.54 | 206.74 | 211.66 | 207.41 | 211.39 | 207.64 |
| **MW-18** | 224.00 | 17.28 | 206.72 | 211.10 | 206.52 | 210.87 | 203.65 | 211.58 | 210.51 | 207.88 | 210.28 | 206.42 | 210.73 | 206.51 | 211.77 | 207.25 | 211.11 | 207.70 |
| **MW-19** | 224.20 | 17.85 | 206.35 | 210.73 | 206.20 | 210.60 | 203.26 | 211.14 | 210.30 | 207.53 | 210.20 | 206.22 | 210.50 | 206.65 | 212.00 | 206.93 | 210.63 | 207.18 |
| **MW-20** | 225.62 | 19.16 | 206.46 | 209.97 | 207.11 | 209.82 | 201.87 | 210.38 | 209.54 | 207.34 | 209.57 | 206.75 | 209.97 | 207.09 | 211.21 | 206.94 | 210.52 | 207.20 |
| **MW-21** | 216.60 | 13.15 | 203.45 | 211.02 | 204.28 | 211.05 | 202.40 | 211.18 | 210.53 | 204.78 | 210.45 | 204.43 | 210.59 | 204.26 | 211.25 | 203.82 | 210.60 | 203.67 |
| **MW-22** | 216.57 | 13.46 | 203.11 | 210.86 | 204.07 | 210.87 | 202.43 | 211.19 | 210.12 | 204.50 | 210.17 | 204.25 | 210.22 | 204.02 | 210.98 | 203.50 | 210.31 | 203.31 |
| **MW-23** | 227.87 | 21.28 | 206.59 | 209.20 | 207.60 | 208.92 | 206.31 | 209.64 | 208.87 | 207.32 | 208.87 | 207.17 | 209.24 | 207.37 | 210.45 | 207.19 | 209.98 | 207.39 |
| **MW-24** | 227.49 | 20.90 | 206.59 | 209.29 | 207.52 | 209.19 | 206.18 | 209.71 | 208.94 | 207.29 | 208.89 | 207.13 | 209.49 | 207.34 | 210.70 | 207.17 | 209.87 | 207.28 |
| **MW-25** | 220.38 | 14.80 | 205.58 | 211.90 | 205.83 | 211.73 | 202.23 | 212.30 | 210.98 | 207.50 | 210.68 | 206.05 | 211.30 | 206.48 | 212.28 | 206.53 | 211.44 | 206.86 |
| **MW-26** | 220.63 | 13.62 | 207.01 | 210.43 | 208.13 | 210.33 | 206.28 | 211.72 | 209.08 | 208.09 | 209.16 | 207.58 | 209.50 | 207.51 | 210.85 | 206.88 | 210.46 | 207.73 |
| **MW-27** | 222.80 | 14.35 | 208.45 | 214.38 | 209.98 | 214.25 | 208.43 | 214.49 | 213.62 | 209.95 | 213.78 | 208.57 | 213.96 | 209.02 | 214.55 | 208.48 | 214.05 | 208.94 |
| **MW-28** | 223.52 | 6.50 | 217.02 | 218.72 | 217.58 | 220.32 | 216.90 | 219.86 | 219.47 | 218.06 | 219.45 | 217.40 | 220.41 | 217.55 | 220.32 | 216.91 | 219.92 | 217.37 |
| **MW-29** | 217.93 | 11.55 | 206.38 | 211.11 | 205.00 | 210.75 | 202.37 | 211.24 | 210.43 | 207.60 | 210.31 | 206.03 | 210.68 | 205.38 | 211.63 | 206.93 | 210.98 | 207.75 |
| **MW-30** | 219.26 | 18.47 | 200.79 | 207.94 | 202.17 | 208.06 | 201.22 | 208.19 | 206.84 | 201.48 | 206.75 | 202.16 | 206.96 | 201.68 | 207.76 | 200.55 | 206.88 | 200.34 |
| **MW-31** | 216.78 | 16.55 | 200.23 | 208.46 | 201.91 | 207.43 | 200.50 | 207.87 | 206.76 | 201.09 | 206.78 | 201.34 | 207.18 | 200.66 | 207.80 | 200.51 | 206.81 | 200.42 |
| **MW-100** | 218.37 | 11.57 | 206.80 | 211.00 | 206.69 | 211.07 | 204.34 | 211.51 | 210.62 | 207.82 | 210.49 | 206.47 | 210.85 | 207.02 | 211.69 | 207.06 | 210.95 | 207.62 |
| **MW-101** | 218.54 | 11.90 | 206.64 | 211.00 | 206.11 | 211.04 | 203.47 | 211.48 | 210.64 | 207.72 | 210.46 | 206.14 | 210.81 | 206.84 | 211.72 | 206.58 | 210.92 | 207.53 |
| **MW-102** | 217.64 | 10.78 | 206.86 | 211.02 | 207.08 | 211.24 | 205.26 | 211.58 | 210.62 | 207.79 | 210.47 | 206.76 | 210.89 | 207.16 | 211.66 | 207.29 | 210.92 | 207.56 |
| **MW-103** | 216.51 | 9.50 | 207.01 | 210.64 | 207.66 | 210.91 | 206.51 | NM | 210.36 | 207.73 | 210.16 | NM | NM | 207.33 | 211.21 | 207.28 | 210.86 | 207.51 |
| **PZ-1A** | 220.10 | 13.30 | 206.80 | 211.13 | 206.52 | 211.99 | 203.51 | 211.62 | 210.68 | 207.95 | 210.37 | 206.30 | 210.80 | 207.00 | 211.78 | 207.48 | 207.09 | 207.64 |
| **PZ-1B** | 220.05 | 13.25 | 206.80 | 211.24 | 206.55 | 211.21 | 203.55 | 211.69 | 210.78 | 207.86 | 210.40 | 206.41 | 211.02 | 207.13 | 211.87 | 207.68 | 207.13 | 207.68 |

Notes:
ft = feet
AMSL = Above Mean Sea Level
NM = Not Measured
NA = Not Applicable, before well installation
DRY = Dry Well, watertable below top of pump

# Table 3
# Current and Historical Groundwater Elevations

Groundwater Monitoring Event 47
NETL Albany, Albany, OR

| Well Number | Measuring Point Elevation | Groundwater Elevation (ft. AMSL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 3/19/2015 | 8/21/2014 | 2/15/2014 | 8/19/2013 | 3/25/2013 | 8/13/2012 | 3/26/2012 | 8/30/2011 | 3/21/2011 | 8/23/2010 | 03/22/10 | 09/01/09 | 03/16/09 | 10/10/08 | 03/10/08 | 10/15/07 | 06/25/07 | 03/05/07 |
| **MW-1** | 228.10 | 209.05 | 207.70 | 208.02 | 207.34 | 208.62 | 207.88 | 207.92 | 207.92 | 209.49 | 207.93 | 208.91 | 207.06 | 206.99 | 206.85 | 208.73 | 206.95 | 208.16 | 209.06 |
| **MW-3** | 219.61 | 210.24 | 208.27 | 209.78 | 207.77 | 210.16 | 208.38 | 211.30 | 208.58 | 211.28 | 208.51 | 213.42 | 207.57 | 209.70 | 207.21 | 210.07 | 207.84 | 209.10 | 211.06 |
| **MW-4** | 218.28 | 216.57 | 212.27 | 216.55 | 210.78 | 216.00 | 212.73 | 217.08 | 212.69 | 216.72 | 211.76 | 215.95 | 210.90 | 216.14 | 211.58 | 216.23 | 210.66 | 213.47 | 215.83 |
| **MW-5** | 217.08 | 205.95 | 200.93 | 207.27 | 200.88 | 206.53 | 202.23 | 208.66 | 202.51 | 207.62 | 201.54 | 205.87 | 200.50 | 205.47 | 200.29 | 205.18 | 201.48 | 202.73 | 206.94 |
| **MW-6** | 219.48 | 205.64 | 200.17 | 206.37 | 200.13 | 205.93 | 200.93 | 208.40 | 202.03 | 206.82 | 199.52 | 203.97 | 198.63 | 204.40 | 198.50 | 203.26 | 199.43 | 200.27 | 205.56 |
| **MW-7** | 216.85 | 215.25 | 209.84 | 215.41 | 208.50 | 215.05 | 210.95 | NM | 210.44 | 215.53 | 209.66 | 214.81 | 207.16 | 214.88 | 206.53 | 214.44 | 208.38 | 209.98 | 214.99 |
| **MW-8** | 220.23 | 213.13 | 209.28 | 213.01 | 208.25 | 212.81 | 209.75 | 213.78 | 209.87 | 213.83 | 209.27 | 212.96 | 208.51 | 213.07 | 210.40 | 213.23 | 214.17 | 210.70 | 219.18 |
| **MW-9** | 224.00 | 222.19 | 211.92 | 224.00 | 212.73 | 221.58 | 212.47 | 223.05 | 212.00 | 222.57 | 211.85 | 218.74 | 207.74 | 220.89 | 207.55 | 216.65 | 210.89 | 209.01 | 214.77 |
| **MW-10** | 225.41 | 223.71 | 215.79 | 224.91 | 214.95 | 223.09 | 217.36 | 224.16 | 217.52 | 223.86 | 216.80 | 222.96 | 214.96 | 223.76 | 214.65 | 222.40 | 222.11 | 218.80 | 223.28 |
| **MW-11** | 227.73 | 221.13 | 214.43 | 222.86 | 214.08 | 220.62 | 215.99 | 220.86 | 215.79 | 221.28 | 216.64 | 219.99 | 215.41 | 219.97 | 217.58 | 219.73 | 219.48 | 221.01 | 221.55 |
| **MW-13** | 223.31 | 213.23 | 209.65 | 210.99 | 209.44 | 213.23 | 210.19 | 213.28 | 210.14 | 214.39 | 209.94 | 210.11 | 209.00 | 212.85 | 208.16 | 209.96 | 207.44 | 210.59 | 214.00 |
| **MW-14** | 224.77 | 209.89 | 208.26 | Repeat | 207.77 | 209.61 | 208.42 | NM | 208.50 | 210.86 | 208.59 | 210.15 | 207.62 | 209.09 | 207.30 | 209.77 | 207.65 | 209.06 | 210.47 |
| **MW-15** | 222.96 | 210.53 | 208.31 | 210.01 | 207.93 | 210.41 | 208.58 | 211.41 | 208.55 | 211.41 | 208.48 | 210.49 | 207.55 | 209.83 | 207.26 | 210.15 | 207.93 | 209.09 | 211.15 |
| **MW-16** | 217.57 | 211.12 | 205.89 | 211.33 | 205.34 | 210.99 | 206.47 | 212.46 | 206.65 | 212.07 | 205.98 | 210.52 | 204.90 | 210.56 | 204.68 | 210.18 | 206.15 | 207.21 | 211.47 |
| **MW-17** | 218.84 | 213.46 | 208.28 | 210.10 | 207.76 | 210.34 | 208.48 | 211.41 | 208.53 | 211.31 | 208.40 | 210.44 | 207.46 | 209.72 | 207.07 | 210.03 | 207.76 | 209.02 | 211.10 |
| **MW-18** | 224.00 | 210.33 | 208.30 | 209.65 | 207.77 | 210.30 | 208.51 | 211.28 | 208.53 | 211.34 | 208.50 | 210.45 | 207.56 | 209.80 | 207.30 | 210.19 | 207.96 | 209.09 | 211.06 |
| **MW-19** | 224.20 | 210.30 | 208.09 | 209.96 | 207.87 | 210.00 | 208.23 | 211.06 | 208.10 | 211.34 | 208.08 | 210.45 | 207.06 | 210.79 | 207.07 | 211.14 | 208.85 | 208.75 | 212.02 |
| **MW-20** | 225.62 | 209.64 | 207.69 | 208.67 | 207.21 | 209.31 | 207.83 | 210.25 | 208.08 | 210.47 | 207.87 | 209.59 | 206.92 | 208.85 | 206.90 | 209.41 | 207.31 | 208.38 | 210.01 |
| **MW-21** | 216.60 | 210.35 | 204.69 | 210.46 | 204.41 | 210.15 | 205.51 | NM | 205.95 | 211.72 | 205.46 | 210.14 | 204.33 | 210.17 | 204.45 | 209.78 | 205.79 | 206.69 | 210.89 |
| **MW-22** | 216.57 | 210.08 | 204.65 | 210.37 | 204.09 | 209.92 | 205.15 | 211.69 | 205.64 | 211.55 | 205.16 | 209.87 | 204.04 | 209.98 | 204.19 | 209.53 | 205.52 | 206.41 | NA |
| **MW-23** | 227.87 | 209.01 | 207.71 | 208.02 | 207.34 | 208.61 | 207.90 | 209.47 | 207.92 | 209.53 | 207.96 | 208.92 | 207.09 | 207.98 | 206.85 | 208.73 | 206.96 | 208.17 | NA |
| **MW-24** | 227.49 | 209.21 | 207.54 | 208.28 | 207.22 | 208.79 | 207.83 | 214.64 | 208.04 | 209.87 | 207.87 | 209.04 | 206.99 | 208.18 | 206.88 | 208.88 | 207.11 | 208.22 | NA |
| **MW-25** | 220.38 | 211.41 | 207.86 | 211.43 | 207.16 | 211.40 | 208.40 | 212.52 | 208.45 | 212.32 | 207.93 | 211.45 | 207.03 | 214.23 | 207.80 | 211.51 | 209.10 | 209.33 | NA |
| **MW-26** | 220.63 | 209.72 | 208.36 | 208.60 | 207.63 | 209.47 | 208.26 | 210.51 | 208.48 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-27** | 222.80 | 213.75 | 210.35 | 214.17 | 208.85 | 213.67 | 211.62 | 211.29 | 209.44 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-28** | 223.52 | 220.82 | 218.06 | 222.92 | 212.92 | 220.00 | 217.72 | 220.65 | 217.77 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-29** | 217.93 | 210.91 | 208.46 | 209.95 | 207.74 | 210.35 | 208.49 | 210.80 | 206.71 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-30** | 219.26 | 206.29 | 201.19 | 206.95 | 201.07 | 206.42 | 202.22 | 208.70 | 203.23 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-31** | 216.78 | 206.38 | 201.24 | 206.97 | 201.31 | 206.83 | 202.47 | 208.89 | 202.59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-100** | 218.37 | 210.51 | 208.13 | 210.56 | 207.67 | 210.28 | 208.39 | 211.22 | 208.48 | 211.50 | 208.31 | 210.36 | 207.37 | 209.65 | 207.15 | 209.93 | 207.71 | 208.89 | 211.07 |
| **MW-101** | 218.54 | 210.54 | 208.07 | 210.67 | 207.61 | 210.35 | 208.29 | 211.29 | 208.41 | 211.50 | 208.20 | 210.35 | 207.25 | 209.48 | 207.05 | 209.93 | 207.64 | 208.82 | 211.10 |
| **MW-102** | 217.64 | 210.48 | 208.04 | 210.68 | 207.63 | 210.33 | 208.32 | 211.25 | 208.34 | 211.42 | 208.14 | 210.24 | 207.18 | 209.64 | 206.77 | 209.78 | 207.50 | 208.71 | 211.60 |
| **MW-103** | 216.51 | 210.24 | 207.96 | 210.61 | 207.50 | 210.05 | 208.09 | 210.95 | 208.06 | 210.99 | 207.92 | 209.80 | 207.01 | 209.32 | 206.61 | 209.31 | 207.15 | 208.40 | 210.77 |
| **PZ-1A** | 220.10 | 197.05 | 208.29 | 210.55 | 207.44 | 210.30 | 211.43 | 211.43 | 208.58 | 211.39 | NM | 213.86 | 208.64 | 209.90 | 208.20 | 210.29 | 208.00 | 209.17 | 211.05 |
| **PZ-1B** | 220.05 | 197.00 | 207.99 | 210.60 | 207.71 | 210.37 | 211.46 | 211.46 | 208.66 | 211.17 | NM | 210.93 | 207.40 | 209.55 | 207.81 | 210.19 | 207.95 | 209.65 | 211.10 |

Notes:
ft = feet
AMSL = Above Mean Sea Lev
NM = Not Measured
NA = Not Applicable, before we
DRY = Dry Well, watertable be

# Table 3
# Current and Historical Groundwater Elevations

Groundwater Monitoring Event 47
NETL Albany, Albany, OR

| Well Number | Measuring Point Elevation | Groundwater Elevation (ft. AMSL) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10/02/06 | 02/27/06 | 09/26/05 | 02/21/05 | 10/04/04 | 05/10/04 | 02/23/04 | 11/17/03 | 08/25/03 | 05/27/03 | 02/10/03 | 11/07/02 | 07/16/02 | 02/26/02 |
| **MW-1** | 228.10 | 207.03 | 208.92 | 207.00 | 207.72 | 206.75 | 208.10 | 208.34 | 206.21 | 206.99 | 208.75 | 207.64 | 206.17 | 207.40 | 206.55 |
| **MW-3** | 219.61 | 207.72 | 210.42 | 207.49 | 208.98 | 207.32 | 209.04 | 209.96 | 206.34 | 207.00 | 209.57 | 209.20 | 206.04 | 207.67 | 207.49 |
| **MW-4** | 218.28 | 210.18 | 215.68 | 210.78 | 215.54 | 212.63 | 214.85 | 216.04 | 211.68 | 209.86 | 214.41 | 214.52 | 209.65 | 211.38 | 213.88 |
| **MW-5** | 217.08 | 199.66 | 206.22 | 200.77 | 204.59 | 201.35 | 204.23 | 206.58 | 200.48 | 199.92 | 204.78 | 205.51 | 199.87 | 201.17 | 203.34 |
| **MW-6** | 219.48 | 197.28 | 204.17 | 197.77 | 202.38 | 198.12 | 202.07 | 205.00 | 197.44 | 197.46 | 202.79 | 204.22 | 197.44 | 199.17 | 200.96 |
| **MW-7** | 216.85 | 205.90 | 214.90 | 207.60 | 213.52 | 209.17 | 213.13 | 214.84 | 206.67 | 206.88 | 212.73 | 213.52 | 205.46 | 207.00 | 212.29 |
| **MW-8** | 220.23 | 216.35 | 218.53 | 216.38 | 218.38 | 217.42 | 218.22 | 218.99 | 218.52 | 216.93 | 218.19 | 218.82 | 217.05 | 217.26 | 219.53 |
| **MW-9** | 224.00 | 207.14 | 211.33 | 207.04 | 210.34 | 207.80 | 210.12 | 210.83 | 207.20 | 207.37 | 209.57 | 209.16 | 206.36 | 207.80 | 208.07 |
| **MW-10** | 225.41 | 211.89 | 221.36 | 212.45 | 220.93 | 214.05 | 220.39 | 222.30 | 214.16 | 214.44 | 220.34 | 220.23 | 209.61 | 215.77 | 221.83 |
| **MW-11** | 227.73 | 217.68 | 220.43 | 215.46 | 218.89 | 213.83 | 219.37 | 221.25 | 215.53 | 216.84 | 220.23 | 221.03 | 211.85 | 216.85 | 219.85 |
| **MW-13** | 223.31 | 208.71 | 212.67 | 208.61 | 211.51 | 209.34 | 211.01 | 212.22 | 205.31 | 208.43 | 211.82 | 211.30 | 207.84 | 209.08 | 210.50 |
| **MW-14** | 224.77 | 207.72 | 210.09 | 207.48 | 208.58 | 207.24 | 208.89 | 209.51 | 206.53 | 207.35 | 209.62 | 208.66 | 206.43 | 207.87 | 207.12 |
| **MW-15** | 222.96 | 207.65 | 210.50 | 207.47 | 209.08 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-16** | 217.57 | 204.42 | 210.52 | 204.90 | 209.21 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-17** | 218.84 | 207.64 | 210.49 | 207.41 | 209.07 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-18** | 224.00 | 207.64 | 210.15 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-19** | 224.20 | 207.17 | 210.45 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-20** | 225.62 | 206.99 | 209.47 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-21** | 216.60 | 203.92 | 209.86 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-22** | 216.57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-23** | 227.87 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-24** | 227.49 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-25** | 220.38 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-26** | 220.63 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-27** | 222.80 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-28** | 223.52 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-29** | 217.93 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-30** | 219.26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-31** | 216.78 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-100** | 218.37 | 208.14 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-101** | 218.54 | 207.72 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-102** | 217.64 | 206.54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MW-103** | 216.51 | 207.21 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PZ-1A** | 220.10 | 207.74 | 218.70 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PZ-1B** | 220.05 | 198.49 | 210.64 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Notes:
ft = feet
AMSL = Above Mean Sea Lev
NM = Not Measured
NA = Not Applicable, before we
DRY = Dry Well, watertable be

**Table 4**
**Hydraulic Gradient Calculations**
**Groundwater Monitoring Event 47**
**NETL Albany, Albany, OR**

| Horizontal Gradient Locations | Aquifer Zone Screened | Elevation (ft AMSL) | Elevation Difference | Horizontal Distance | Gradient |
|---|---|---|---|---|---|
| **MW-10 to MW-9** | | | | | |
| MW-10 | Perched | 211.69 | 2.86 | 338.1 | 8.46E-03 |
| MW-9 | | 208.83 | | | |
| **MW-10 to MW-8** | | | | | |
| MW-10 | Perched | 211.69 | 5.58 | 744.9 | 7.49E-03 |
| MW-8 | | 206.11 | | | |
| **MW-10 to MW-4** | | | | | |
| MW-10 | Perched | 211.69 | 2.42 | 1205.8 | 2.01E-03 |
| MW-4 | | 209.27 | | | |
| **MW-28 to MW-8** | | | | | |
| MW-28 | Perched | 217.02 | 10.91 | 289.4 | 3.77E-02 |
| MW-8 | | 206.11 | | | |
| **MW-16 to MW-6** | | | | | |
| MW-16 | Gravel | 204.17 | 5.09 | 463.6 | 1.10E-02 |
| MW-6 | | 199.08 | | | |
| **MW-16 to MW-31** | | | | | |
| MW-16 | Gravel | 204.17 | 3.94 | 661.4 | 5.96E-03 |
| MW-31 | | 200.23 | | | |
| **MW-23 to MW-24** | | | | | |
| MW-23 | Gravel | 206.59 | 0.00 | 321.5 | 0.00E+00 |
| MW-24 | | 206.59 | | | |
| **MW-25 to MW-23** | | | | | |
| MW-25 | Gravel | 205.58 | -1.01 | 1320.8 | -7.65E-04 |
| MW-23 | | 206.59 | | | |

**Table 5**
**Detection Summary**

Groundwater Monitoring Event 47
NETL Albany, Albany, OR

| Analyte | Minimum Applicable Criteria* | Detection Frequency | Minimum Criteria Exceedance Frequency | Maximum Detected Concentration | Location of Maximum Detection | Minimum Detected Concentration |
|---|---|---|---|---|---|---|
| **Volatile Organics (µg/L)** | | | | | | |
| Carbon tetrachloride | 0.45 | 3/31 | 3/31 | 680 | MW-20 | 20 |
| Chloroform | 0.22 | 2/31 | 2/31 | 4.4 J | MW-14 | 3.8 J |
| cis-1,2-Dichloroethene | 3.6 | 0/31 | 0/31 | 350 U | MW-20 | 3.5 U |
| Tetrachloroethene (PCE) | 4.1 | 0/31 | 0/31 | 230 U | MW-20 | 2.3 U |
| Trichloroethene (TCE) | 0.28 | 6/31 | 6/31 | 74 | MW-18 | 3.5 J |

Notes:

µg/L = micrograms per Liter

mg/L = milligrams per Liter

J = Analyte concentration is an estimate. Analyte was detected below Method Reporting Limit, but above the Method Detection Limit

J+ = Analyte was detected in the trip blank and/or the method blank, result may be biased high.

J- = Analyte was past holding time, result may be biased low.

H = Analyzed past 14 day holding time

B = Analyte was detected in the Method Blank

* = Minimum Applicable Criteria are the minimium criteria presented in Table 7

** = Method Detection Limits are above the minimum applicable screening criteria. Additional concentrations may exceed minimum applicable screening criteria

# Table 6
## Analytical Results for Detected Constituents - Volatile Organics

Groundwater Monitoring Event 47
NETL Albany, Albany, OR

| Sample Location | Sample ID | Sample Date | Volatile Organic Concentrations | | | | |
|---|---|---|---|---|---|---|---|
| | | | Carbon tetrachloride | Chloroform | cis-1,2-Dichloroethene | Tetrachloroethene (PCE) | Trichloroethene (TCE) |
| MW-3 | MW-3 | 08/29/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-4 | MW-4 | 08/28/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-5 | MW-5 | 08/30/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-6 | MW-6 | 08/30/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-7 | MW-7 | 08/30/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-8 | MW-8 | 08/29/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-9 | MW-9 | 08/29/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-10 | MW-10 | 08/29/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-13 | MW-13 | 08/28/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-14 | DUP1 | 08/29/2023 | 4.4 U | **3.8 J** | 3.5 U | 2.3 U | 3.4 U |
| MW-14 | MW-14 | 08/29/2023 | 4.4 U | **4.4 J** | 3.5 U | 2.3 U | 3.4 U |
| MW-15 | MW-15 | 08/28/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | **18** |
| MW-16 | MW-16 | 08/30/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-17 | MW-17 | 08/28/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | **36** |
| MW-18 | MW-18 | 08/29/2023 | **20** | 3.0 U | 3.5 U | 2.3 U | **74** |
| MW-19 | DUP2 | 08/29/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-19 | MW-19 | 08/29/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-20 | MW-20 | 08/29/2023 | **680** | 300 U | 350 U | 230 U | 340 U |
| MW-22 | MW-22 | 08/30/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | **3.5 J** |
| MW-23 | MW-23 | 08/30/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-24 | MW-24 | 08/30/2023 | **110** | 30 U | 35 U | 23 U | **38 J** |
| MW-25 | MW-25 | 08/29/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-26 | MW-26 | 08/29/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-28 | MW-28 | 08/29/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-29 | MW-29 | 08/28/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-30 | MW-30 | 08/30/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-31 | MW-31 | 08/30/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-100 | MW-100 | 08/29/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | **12** |
| MW-101 | MW-101 | 08/29/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-102 | MW-102 | 08/29/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| MW-103 | MW-103 | 08/29/2023 | 4.4 U | 3.0 U | 3.5 U | 2.3 U | 3.4 U |
| | | | | | | | |
| **Minimum Applicable Screening Criteria** | | | **0.45** | **0.22** | **3.6** | **4.1** | **0.28** |

Notes:
µg/L = Micrograms per liter
U = Analyte was not detected above indicated value
J = Analyte concentration is an estimate. Analyte was detected below Method Reporting Limit, but above the Method Detection Limit
J+ = Analyte was detected in the trip blank and/or the method blank, result may be biased high.
J- = Analyte was past holding time, result may be biased low.
H = Analyzed past 14 day holding time
B = Analyte was detected in the Method Blank
R = Unusable as determined by data validation

**Bold** indicates analyte was detected above the method detection limit
**Shading** indicates result exceeds the minimum applicable screening criteria (See Table 7).

# Table 7
# Applicable Screening Criteria

Groundwater Monitoring Event
47 NETL Albany, Albany, OR

| Analyte | Minimum Criteria | Oregon - Groundwater MMLs[1] | Oregon - Hot Spot Tables[2] | Oregon - DEQ RBCs [3] | EPA - Primary Drinking Water MCLs[4] | EPA - Secondary Drinking Water MCLs[4] | EPA - Regional Screening Levels[5] |
|---|---|---|---|---|---|---|---|
| **Volatile Organics (µg/L)** | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 0.57 | --- | --- | 8.3 | --- | --- | 0.57 |
| 1,1,1-Trichloroethane | 200 | 200 | 200 | 13,000 | 200 | --- | 800 |
| 1,1,2,2-Tetrachloroethane | 0.076 | --- | --- | 6.8 | --- | --- | 0.076 |
| 1,1,2-Trichloroethane | 0.041 | --- | 5 | 10 | 5 | --- | 0.041 |
| 1,1-Dichloroethane | 2.7 | --- | --- | 13 | --- | --- | 2.7 |
| 1,1-Dichloroethene | 7 | 7 | 7 | 300 | 7 | --- | 28 |
| 1,1-Dichloropropene | --- | --- | --- | --- | --- | --- | --- |
| 1,2,3-Trichlorobenzene | 0.70 | --- | --- | --- | --- | --- | 0.70 |
| 1,2,3-Trichloropropane | 0.00075 | --- | --- | --- | --- | --- | 0.00075 |
| 1,2,4-Trichlorobenzene | 0.40 | --- | 70 | 91 | 70 | --- | 0.40 |
| 1,2,4-Trimethylbenzene | 1.5 | --- | --- | 560 | --- | --- | 1.5 |
| 1,2-Dibromo-3-chloropropane | 0.00033 | --- | 0.2 | 0.067 | 0.2 | --- | 0.00033 |
| 1,2-Dichlorobenzene | 30 | --- | 600 | 5900 | 600 | --- | 30 |
| 1,2-Dichloroethane (EDC) | 0.17 | 5 | 5 | 4 | 5 | --- | 0.17 |
| 1,2-Dichloropropane | 0.44 | --- | 5 | 12 | 5 | --- | 0.44 |
| 1,3,5-Trimethylbenzene | 12 | --- | --- | 400 | --- | --- | 12 |
| 1,3-Dichlorobenzene | --- | --- | --- | --- | --- | --- | --- |
| 1,3-Dichloropropane | 37 | --- | --- | --- | --- | --- | 37 |
| 1,4-Dichlorobenzene | 0.48 | 75 | 75 | 5.8 | 75 | --- | 0.48 |
| 2,2-Dichloropropane | --- | --- | --- | --- | --- | --- | --- |
| 2-Chlorotoluene | 25 | --- | --- | --- | --- | --- | 25 |
| 4-Chlorotoluene | 24 | --- | --- | --- | --- | --- | 24 |
| 4-Isopropyltoluene | --- | --- | --- | --- | --- | --- | --- |
| Benzene | 0.45 | 5 | 5 | 2.8 | 5 | --- | 0.45 |
| Bromobenzene | 6.2 | --- | --- | 1500 | --- | --- | 6.2 |
| Bromoform (THM) | 9.2 | 100 (total THM) | 80 (total THM) | 250 | 80 (total THM) | --- | 9.2 |
| Bromomethane | 0.75 | --- | --- | 25 | --- | --- | 0.75 |
| Carbon Tetrachloride | 0.45 | 5 | 5 | 0.71 | 5 | --- | 0.45 |
| Chlorobenzene | 7.8 | --- | 100 | 810 | 100 | --- | 7.8 |
| Chlorobromomethane | --- | --- | --- | --- | --- | --- | --- |
| Chlorodibromomethane (THM) | 100 | 100 (total THM) | --- | --- | --- | --- | --- |
| Chloroethane | --- | --- | --- | --- | --- | --- | -- |
| Chloroform (THM) | 0.22 | 100 (total THM) | 80 (total THM) | 1.4 | 80 (total THM) | --- | 0.22 |
| Chloromethane | 19 | --- | --- | 350 | --- | --- | 19 |
| cis-1,2-Dichloroethene | 3.6 | --- | 70 | 430 | 70 | --- | 3.6 |
| cis-1,3-Dichloropropene | -- | --- | --- | --- | --- | --- | -- |
| Dibromomethane | 0.80 | --- | --- | --- | --- | --- | 0.80 |
| Dichlorobromomethane (THM) | 1.6 | 100 (total THM) | --- | 1.6 | --- | --- | --- |
| Dichlorodifluoromethane | 9.8 | --- | --- | 9.8 | --- | --- | 20 |
| Ethylbenzene | 1.5 | --- | 700 | 7.1 | 700 | --- | 1.5 |
| Ethylene Dibromide | 0.00005 | --- | 0.00005 | --- | 0.00005 | --- | --- |
| Hexachlorobutadiene | 0.30 | --- | --- | 0.74 | --- | --- | 0.30 |
| Isopropylbenzene (cumene) | 45 | --- | --- | 2200 | --- | --- | 45 |
| Methylene chloride | 5 | --- | 5 | 1200 | 5 | --- | 11 |
| m,p-Xylene | 19 | --- | --- | 730 | --- | --- | 19 |
| Methyl tert-butyl ether (MTBE) | 14 | --- | --- | 740 | --- | --- | 14 |
| Naphthalene | 0.17 | --- | --- | 11 | --- | --- | 0.17 |
| n-Butylbenzene | 100 | --- | --- | --- | --- | --- | 100 |
| n-Propylbenzene | 5300 | --- | --- | 5300 | --- | --- | -- |
| o-Xylene | 19 | --- | --- | 1000 | --- | --- | 19 |
| sec-Butylbenzene | 200 | --- | --- | --- | --- | --- | 200 |
| Styrene | 100 | --- | 100 | 20,000 | 100 | --- | 120 |
| tert-Butylbenzene | 69 | --- | --- | --- | --- | --- | 69 |
| Tetrachloroethene (PCE) | 4.1 | --- | 5 | 29 | 5 | --- | 4.1 |
| Toluene | 110 | --- | 1,000 | 36,000 | 1,000 | --- | 110 |
| trans-1,2-Dichloroethene | 36 | --- | 100 | 180 | 100 | --- | 36 |
| trans-1,3-Dichloropropene | 9.2 | --- | --- | 9.2 | --- | --- | -- |
| Trichloroethene (TCE) | 0.28 | 5 | 5 | 2.1 | 5 | --- | 0.28 |
| Trichlorofluoromethane | 110 | --- | --- | --- | --- | --- | 110 |
| Vinyl chloride | 0.019 | 2 | 2 | 0.2 | 2 | --- | 0.019 |

Notes:

--- = No criteria available

µg/L = micrograms per liter

THM = Trihalomethanes, including a group of disinfection byproducts (chloroform, bromodichloromethane, dibromochloromethane, & bromoform).

[1] The Oregon Groundwater Maximum Measurement Levels (MMLs) are provided in Oregon Administrative Rules (OAR) 340-40-020, last updated on November 14, 1997.

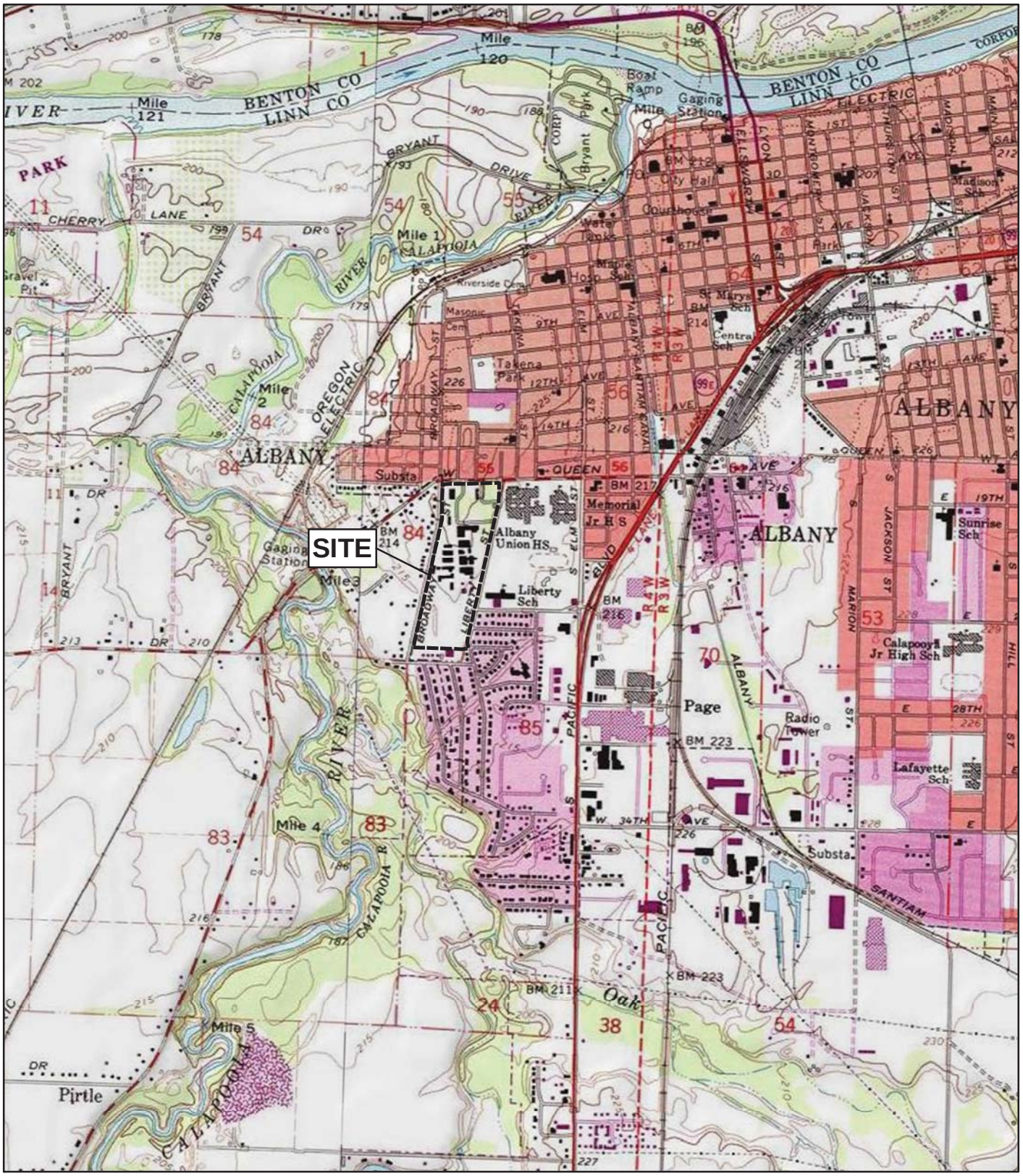
2 The Oregon Hot Spot Tables are provided by the Oregon DEQ under Environmental Cleanup Guidance, [ see http://www.deq.state.or.us/pubs/reports.htm ]. Values used are revised to reflect Oregon DEQ hierarchy (MCL/MML, RBC, then EPA Regional Screening Levels for Regions 3, 6 and 9). Hot Spot values were modified in 2015 to reflect updates to EPA Regional Screening Levels and subsequently revised Oregon RBDM values.

3 The Oregon Petroleum Risk-Based Concentrations are provided by the Oregon DEQ under Environmental Cleanup Guidance, [ see https://www.oregon.gov/deq/Hazards-and-Cleanup/Documents/ChronicAcuteRBC.pdf ]. Values used are from Chronic Residential Risk-Based Concentrations for Groundwater Volatilization to Indoor Air last updated on June, 2023.

4 The EPA Primary and Secondary Maximum Contaminant Levels (MCLs) are provided by the U.S. Environmental Protection Agency, last updated on June 2013 [ see http://www.epa.gov/safewater/contaminants/index.html ].

5 The EPA Regional Risk-Based Screening Values for Region 3, 6 and 9, provided by the U.S. Environmental Protection Agency, last updated on November 2017 [ see http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm ]. Screening levels used are via the pathway of exposure to tapwater.

# FIGURES




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1,000 0 1,000 2,000

SCALE IN FEET

**SITE VICINITY**

August 2023

NETL ALBANY
GROUNDWATER SAMPLING
ALBANY, OREGON

**FIGURE 1**

K:\25697357_NETL_Albany\MXD\2Q15\Fig 1 Site Vicinity.mxd




Sources: Albany GIS, 2023, NAIP 2020.

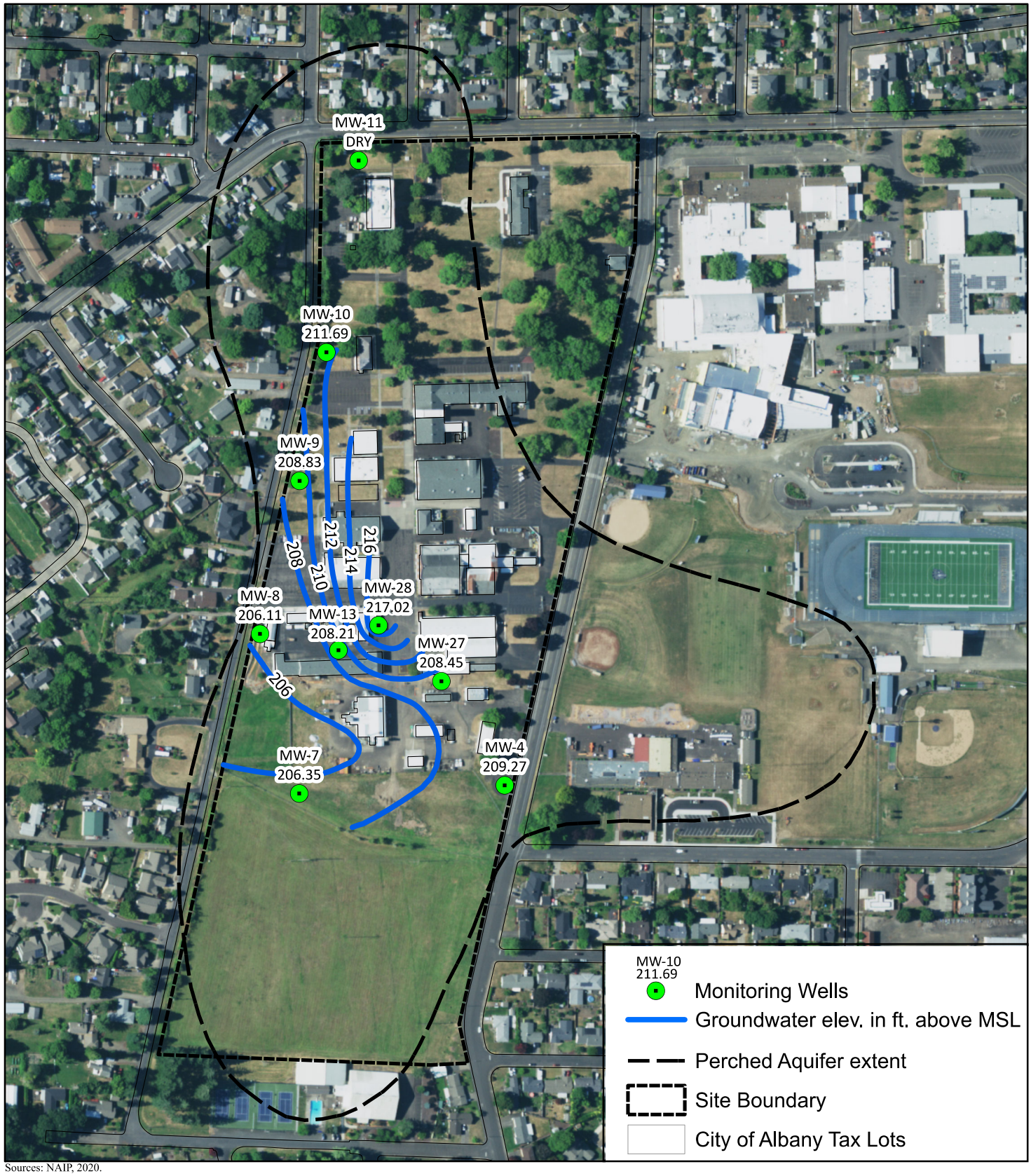
150 75 0 150 300
Feet

**SITE MAP**

NETL ALBANY
GROUNDWATER SAMPLING
ALBANY, OREGON

August 2023

**FIGURE 2**




Sources: NAIP, 2020.
Albany GIS, 2007.

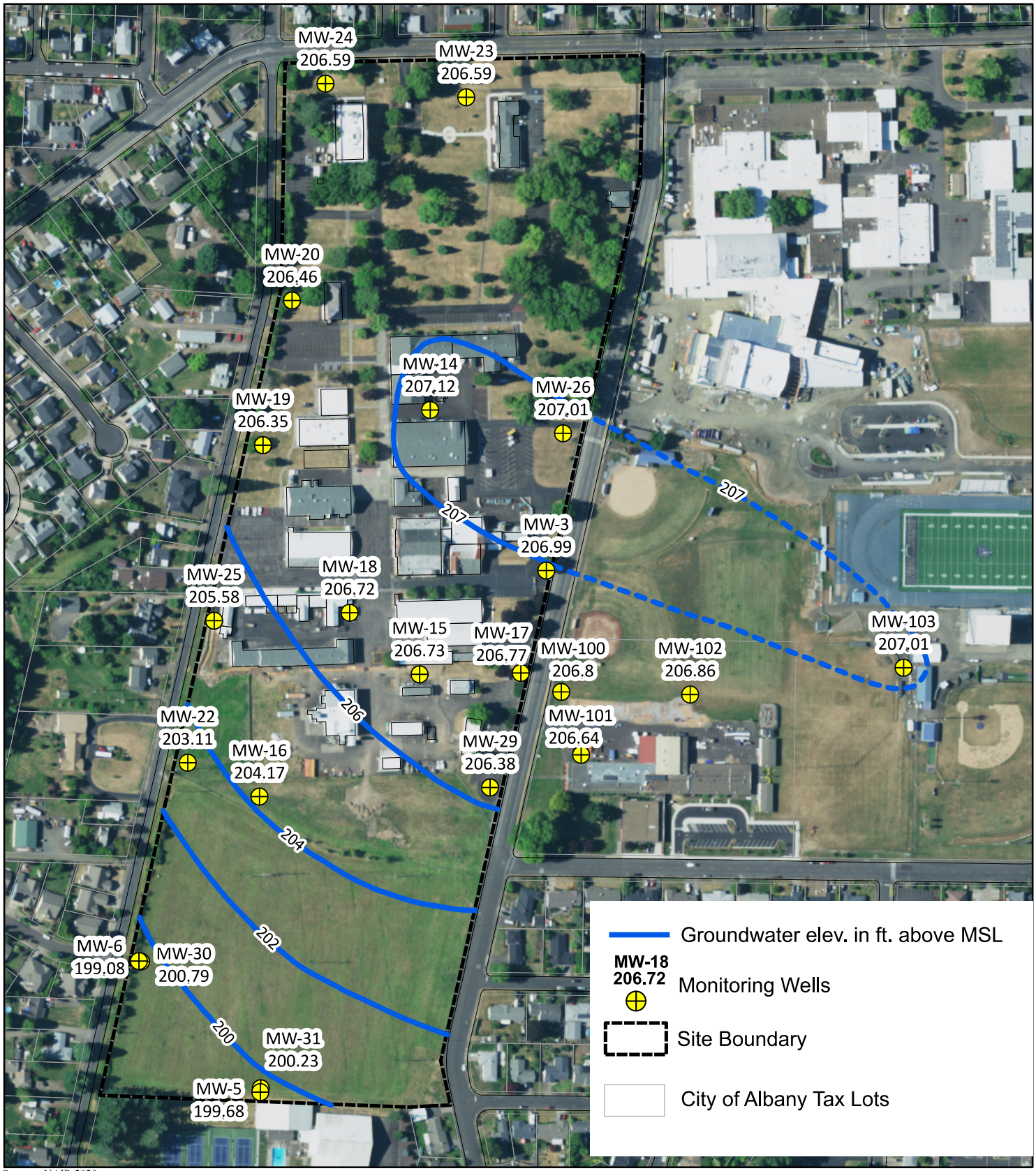
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Feet

**GROUNDWATER ELEVATION CONTOURS IN THE PERCHED AQUIFER, AUGUST 2023**

NETL ALBANY
GROUNDWATER SAMPLING
ALBANY, OREGON

August 2023

**FIGURE 3**




Sources: NAIP, 2020.
Albany GIS, 2007.

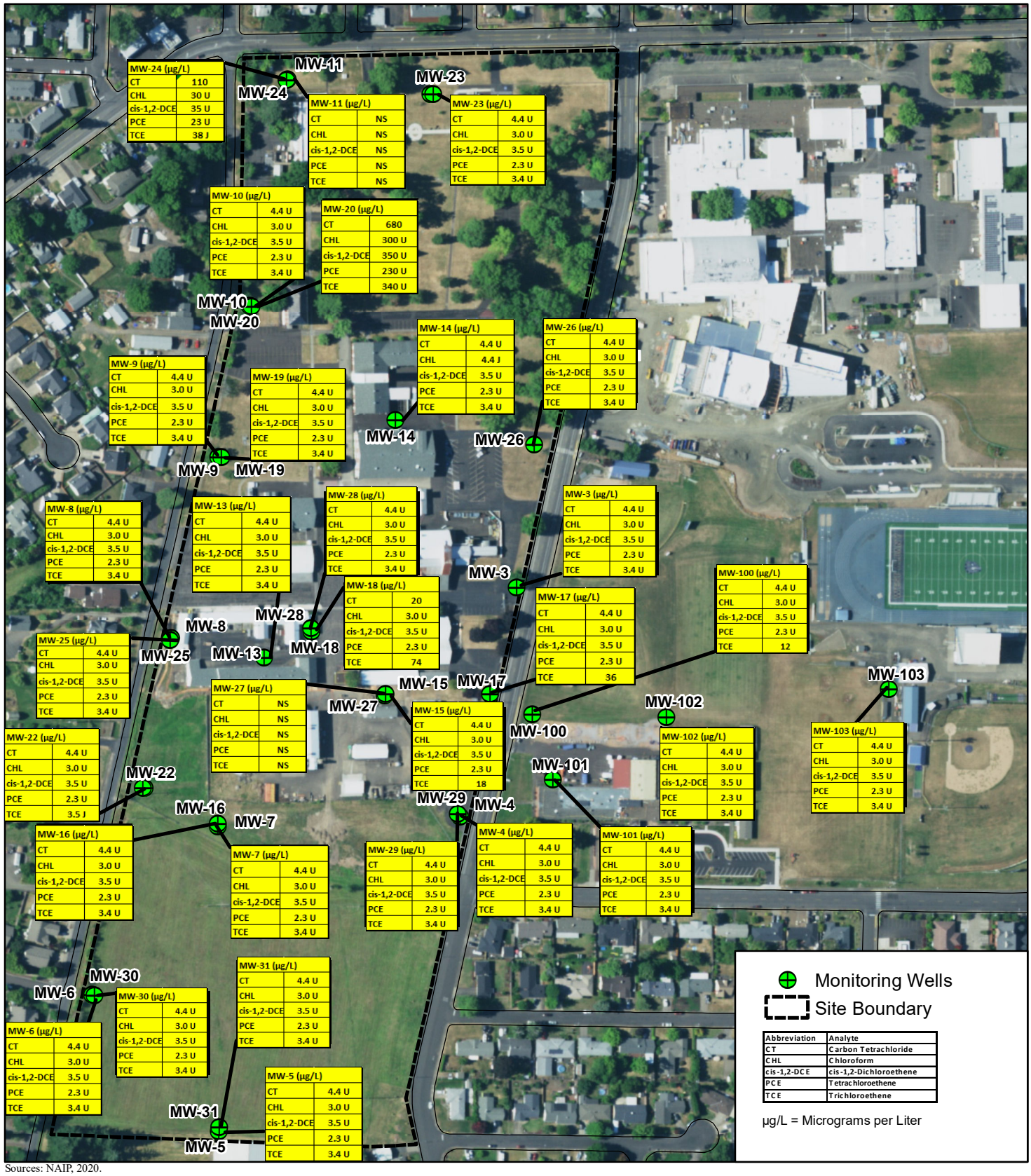
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Feet

**GROUNDWATER ELEVATION CONTOURS IN THE GRAVEL AQUIFER, AUGUST 2023**

August 2023

NETL ALBANY
GROUNDWATER SAMPLING
ALBANY, OREGON

**FIGURE 4**




Sources: NAIP, 2020.
Albany GIS, 2023.

150 75 0 150 300
Feet

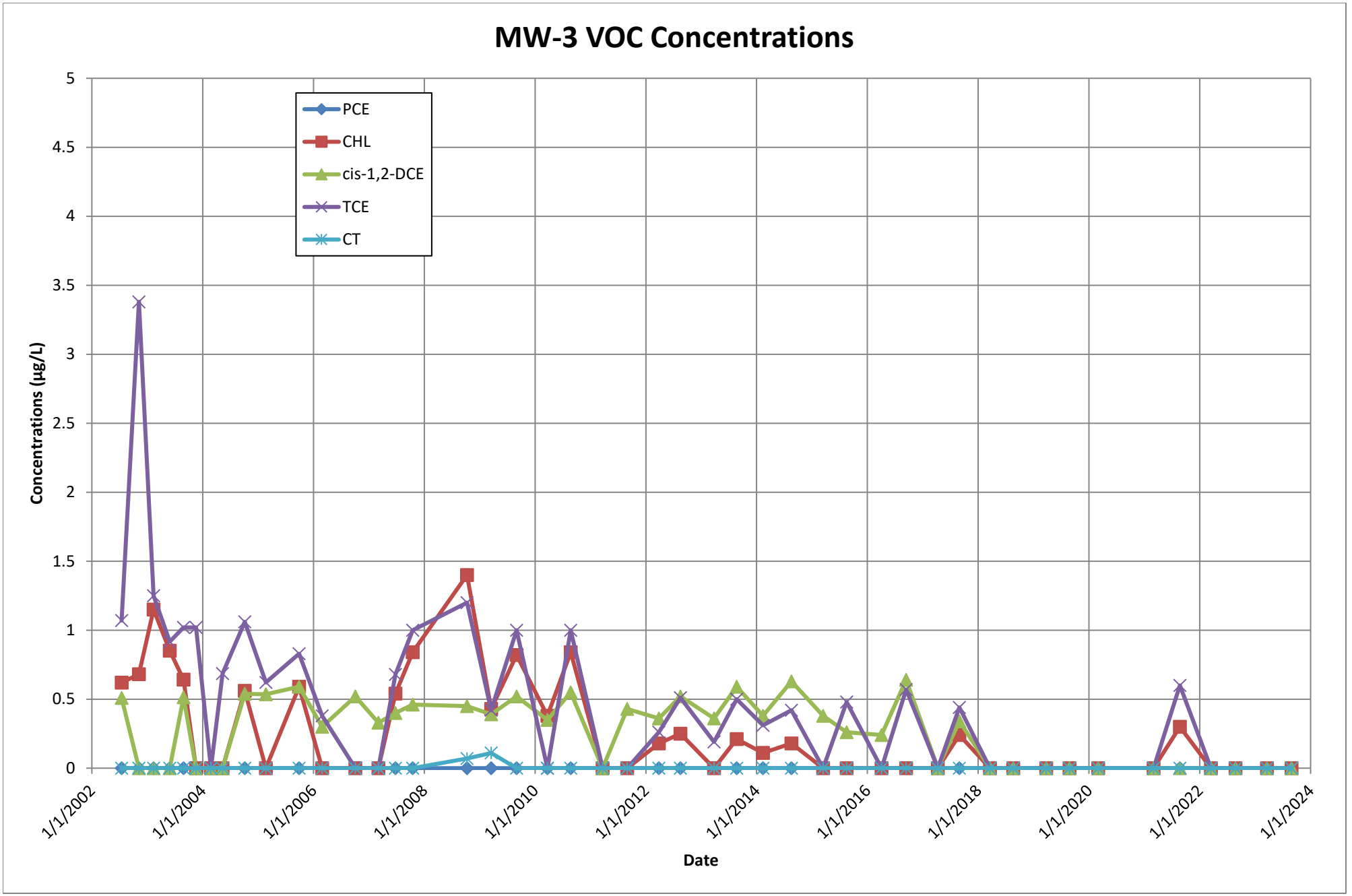
# GROUNDWATER ANALYTICAL RESULTS AUGUST 2023

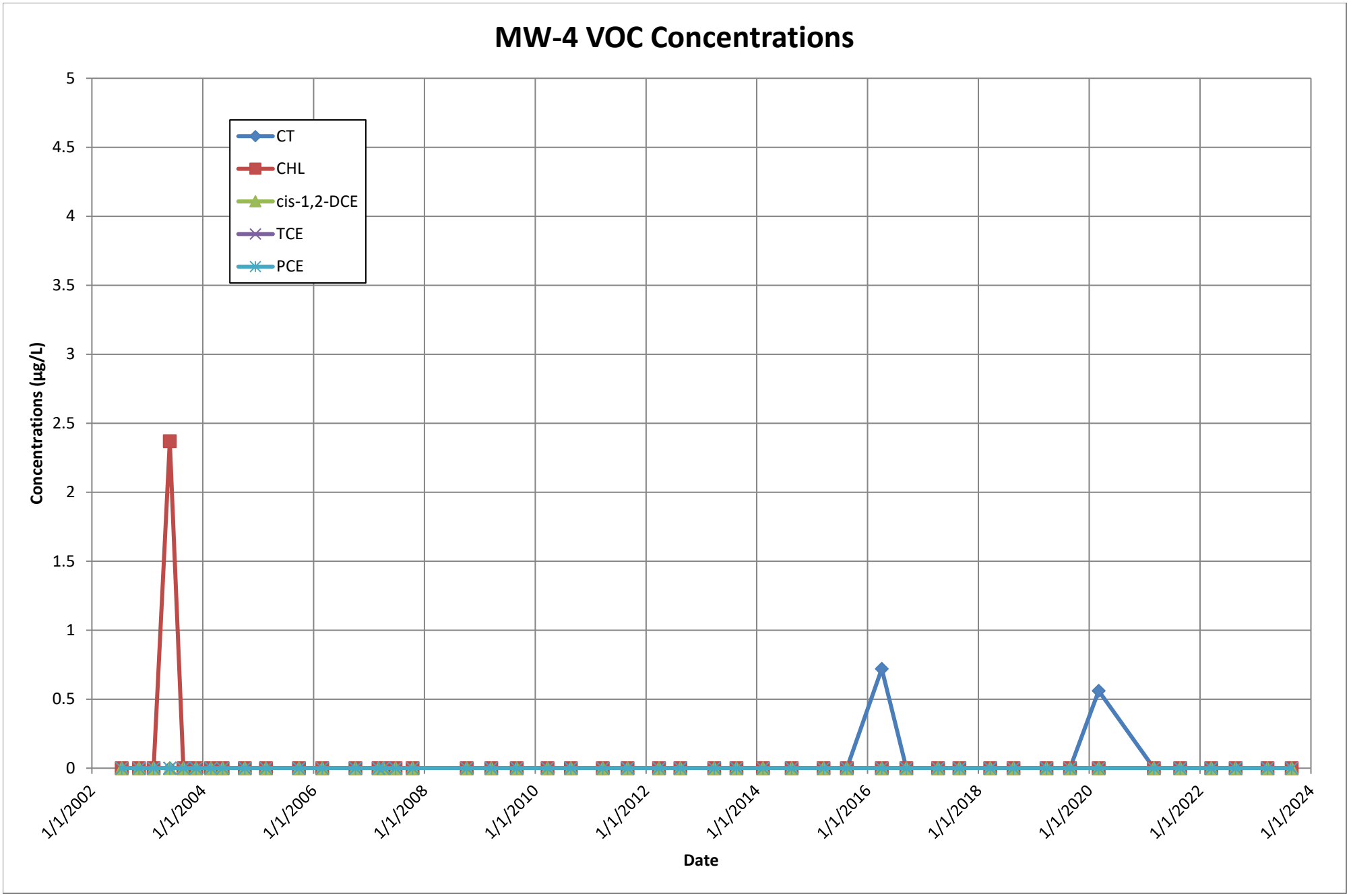
NETL ALBANY
GROUNDWATER SAMPLING
ALBANY, OREGON

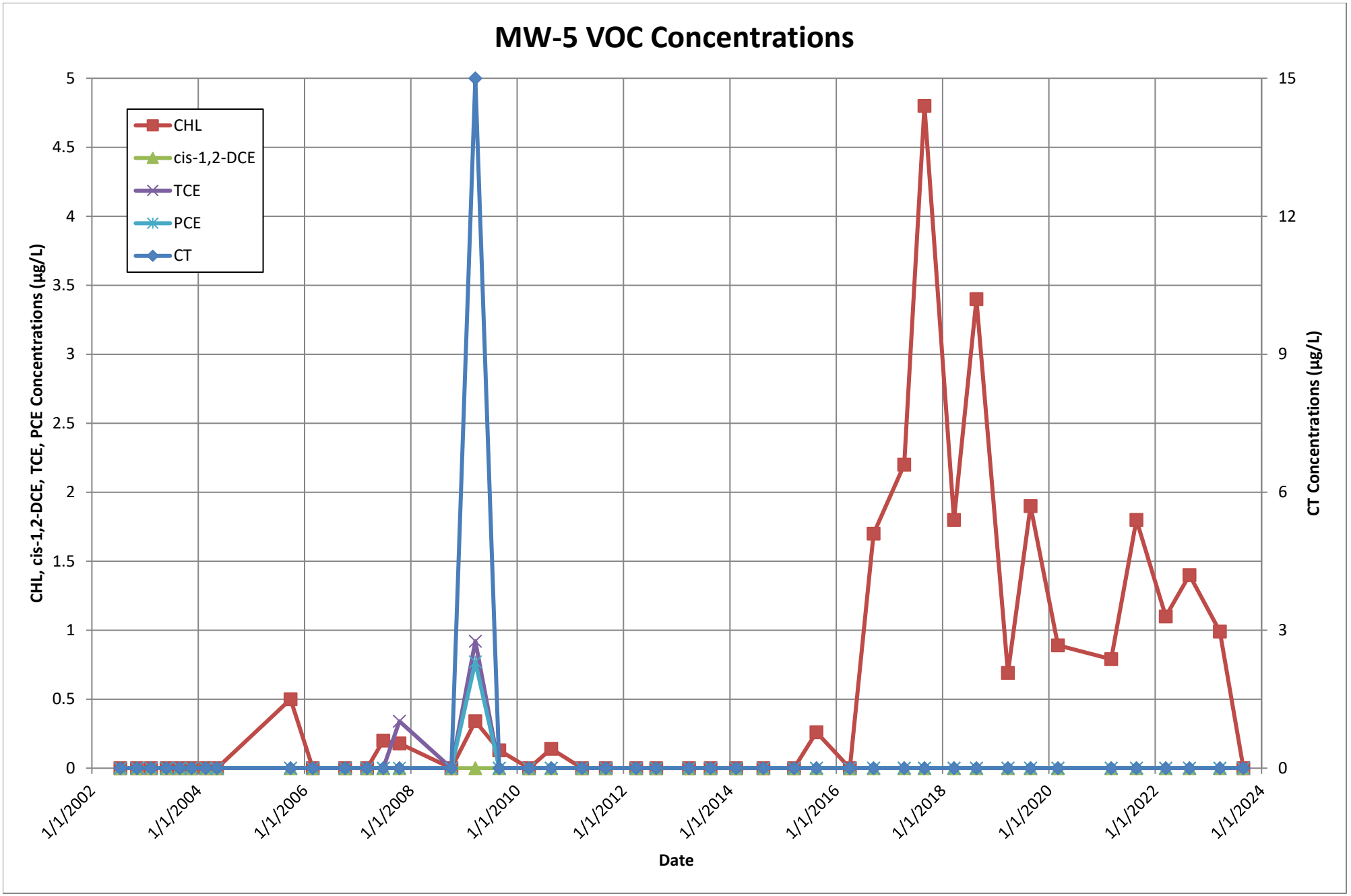
August 2023

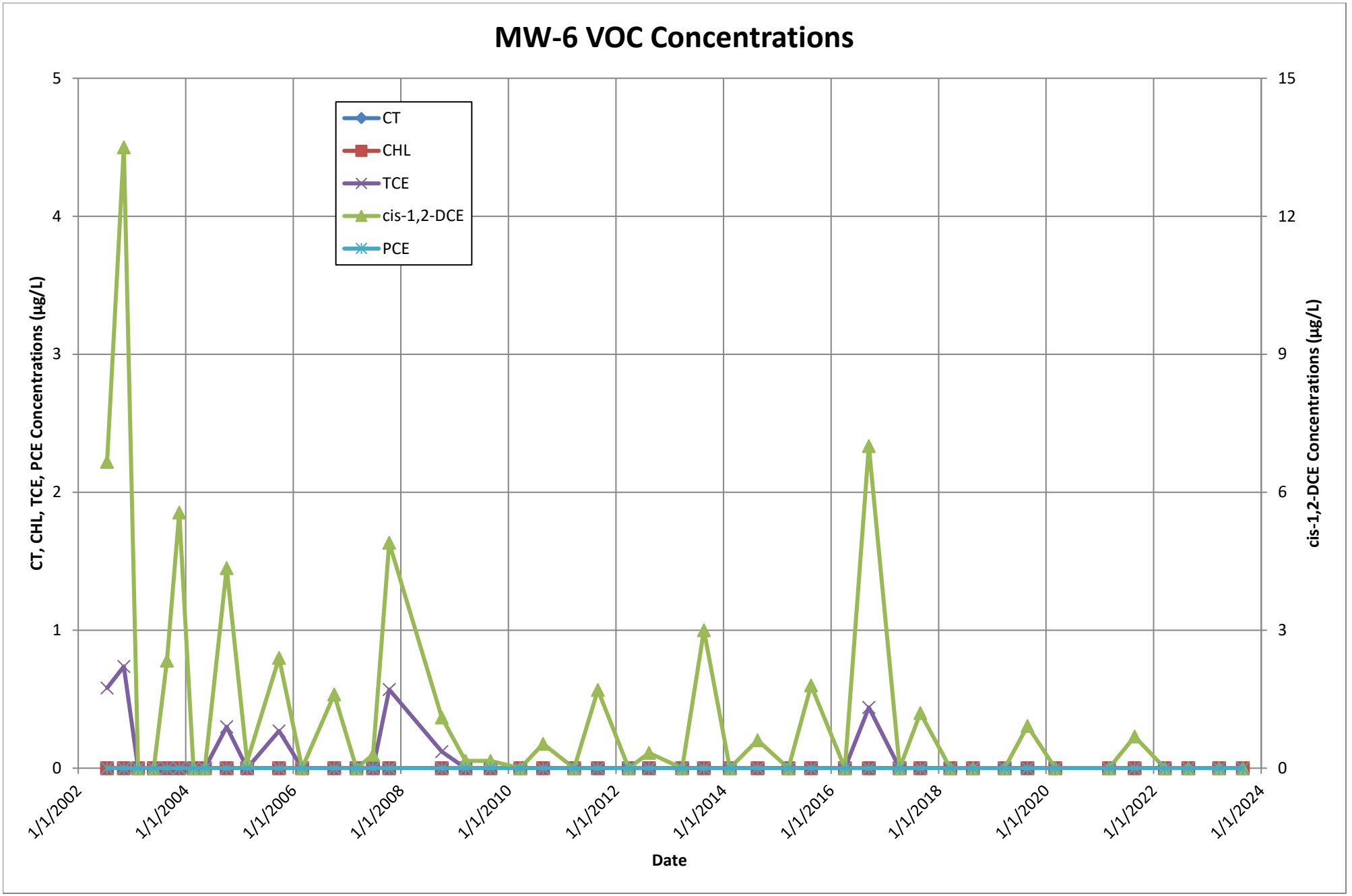
**FIGURE 5**

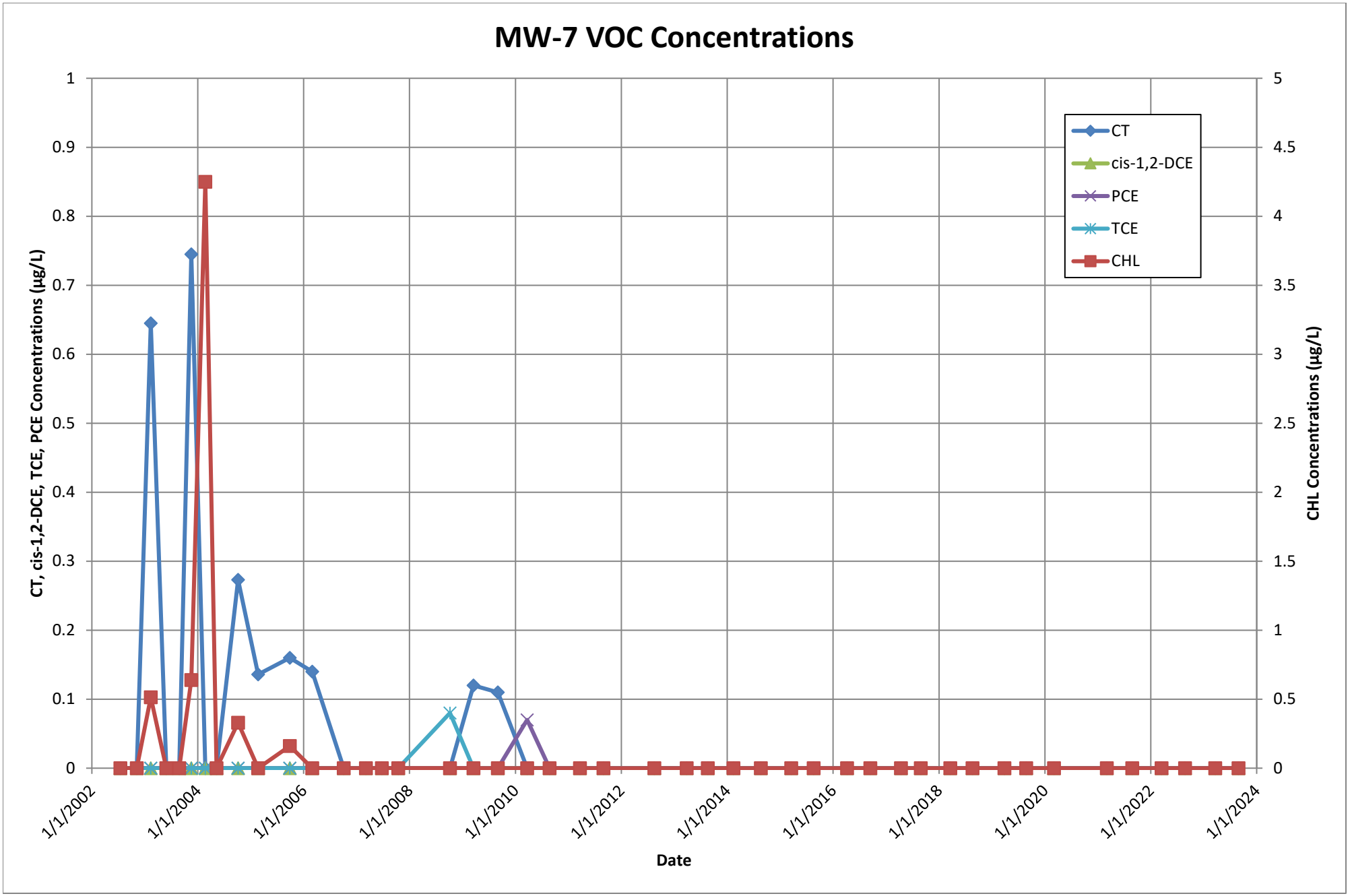
# FIGURE 6

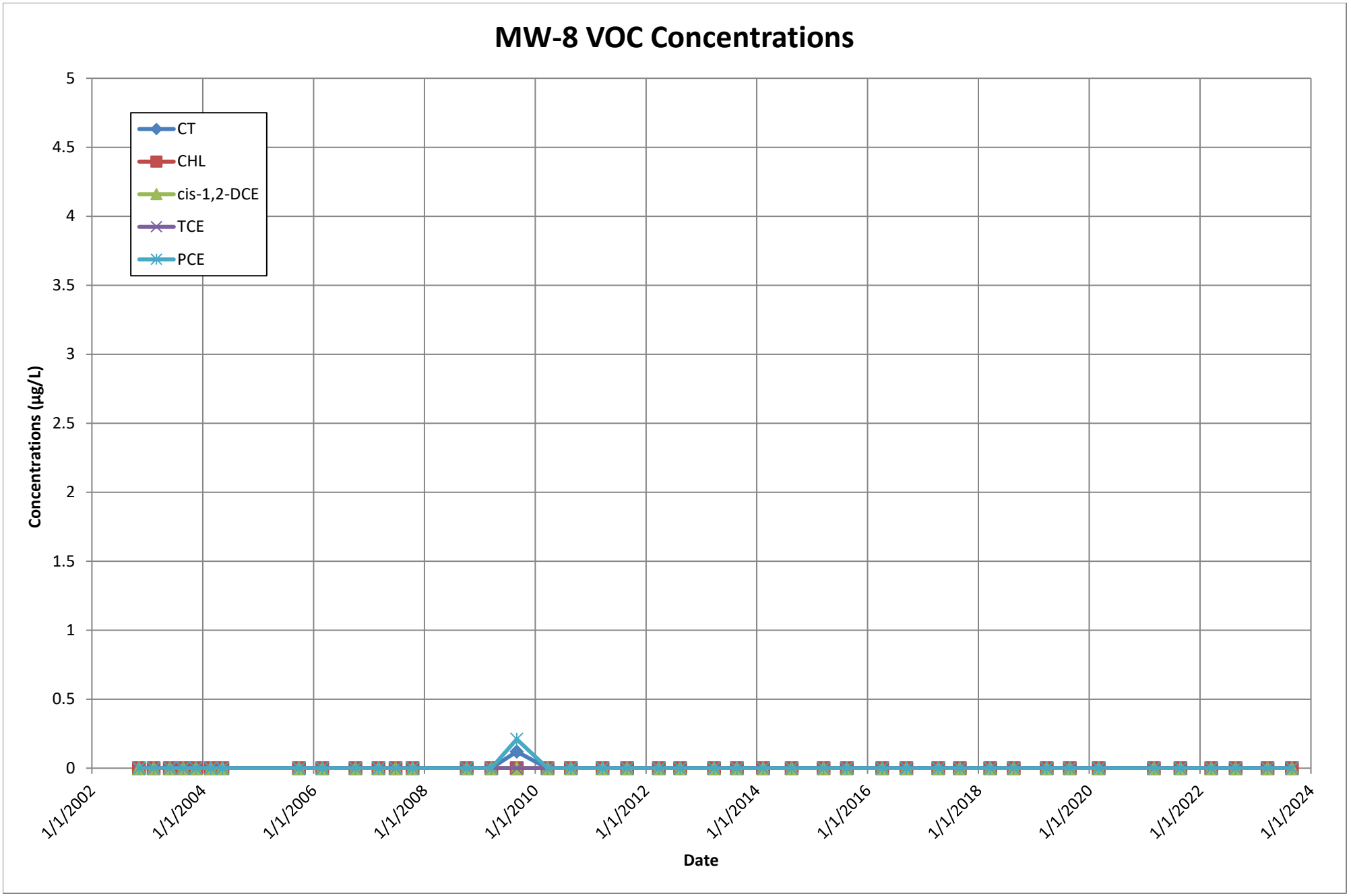

MW-3 VOC Concentrations
PCE
CHL
cis-1,2-DCE
TCE
CT
Concentrations (µg/L)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date

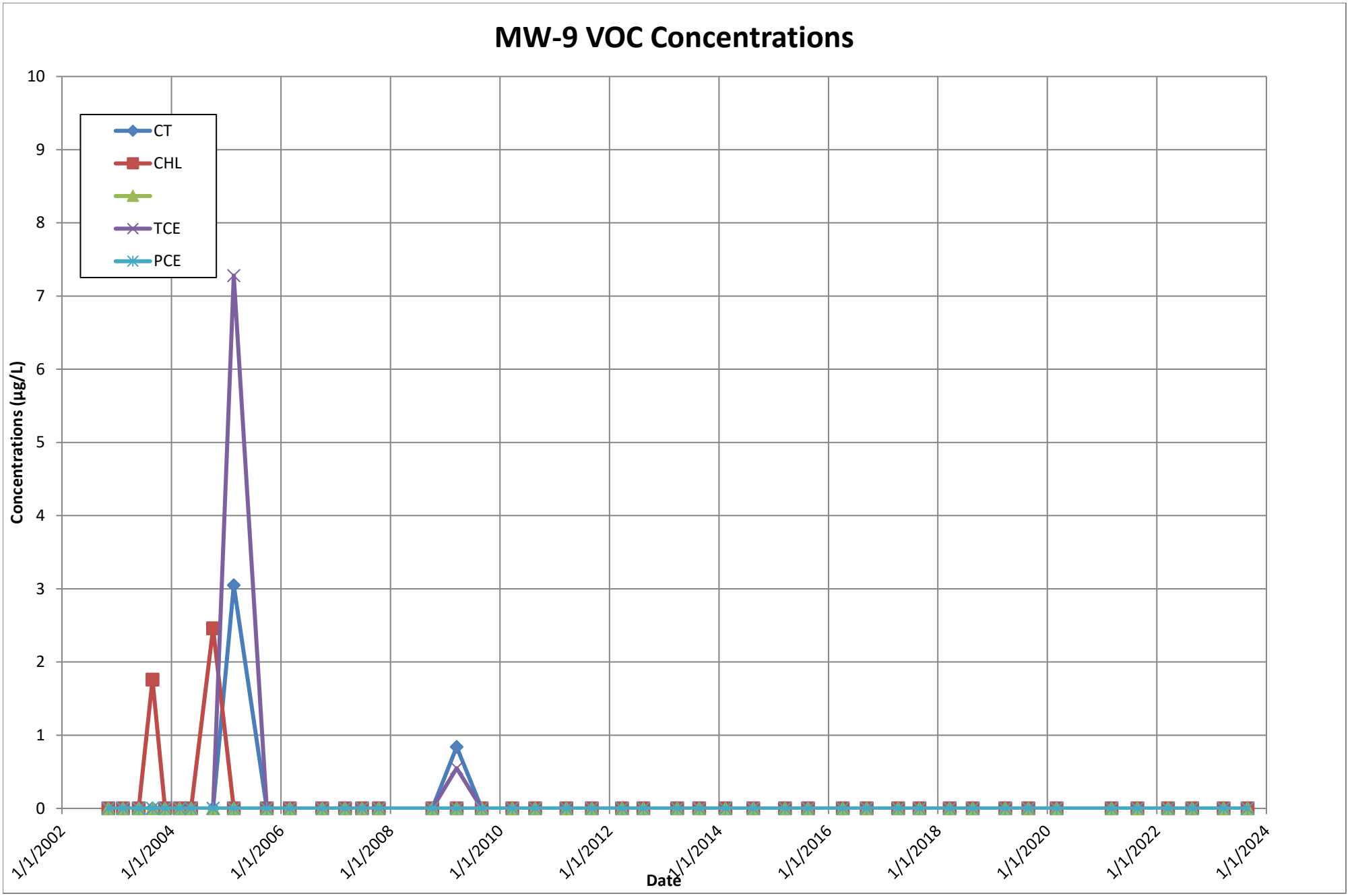

MW-4 VOC Concentrations
CT
CHL
cis-1,2-DCE
TCE
PCE
Concentrations (µg/L)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date

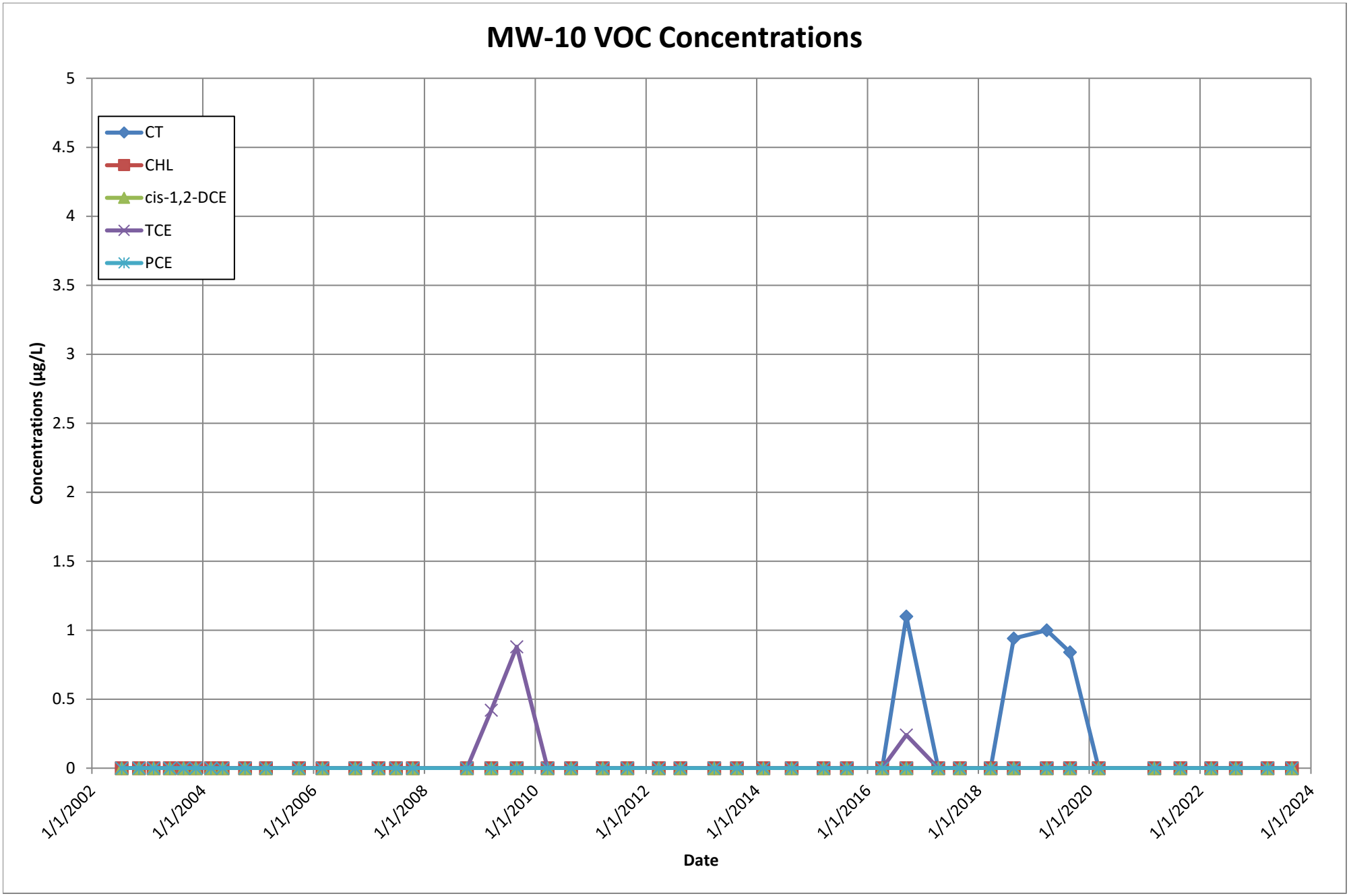

MW-5 VOC Concentrations
CHL
cis-1,2-DCE
TCE
PCE
CT
CHL, cis-1,2-DCE, TCE, PCE Concentrations (µg/L)
CT Concentrations (µg/L)
Date
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
0
3
6
9
12
15
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024

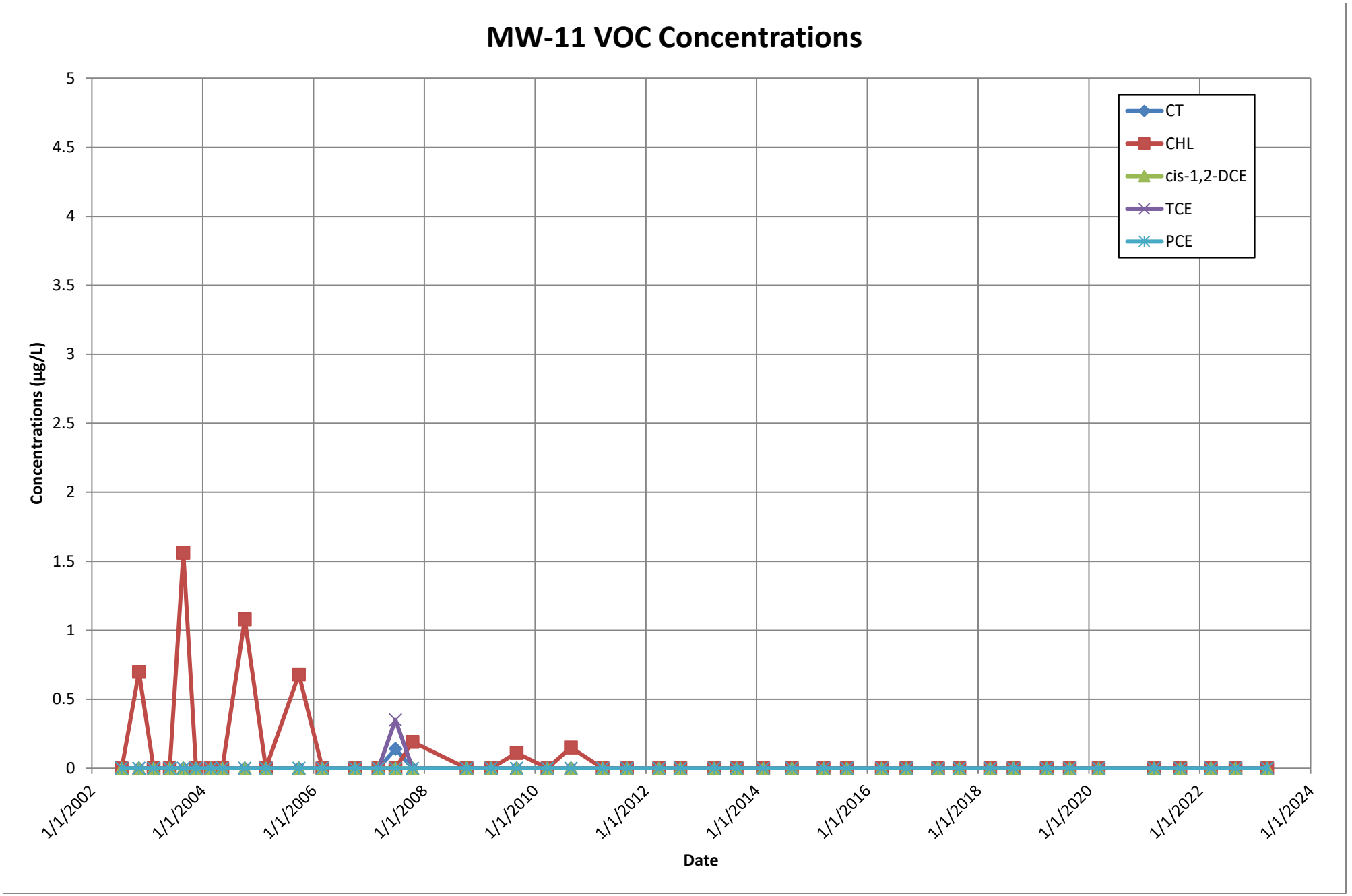

MW-6 VOC Concentrations
CT
CHL
TCE
cis-1,2-DCE
PCE
CT, CHL, TCE, PCE Concentrations (µg/L)
cis-1,2-DCE Concentrations (µg/L)
Date
0
1
2
3
4
5
0
3
6
9
12
15
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024

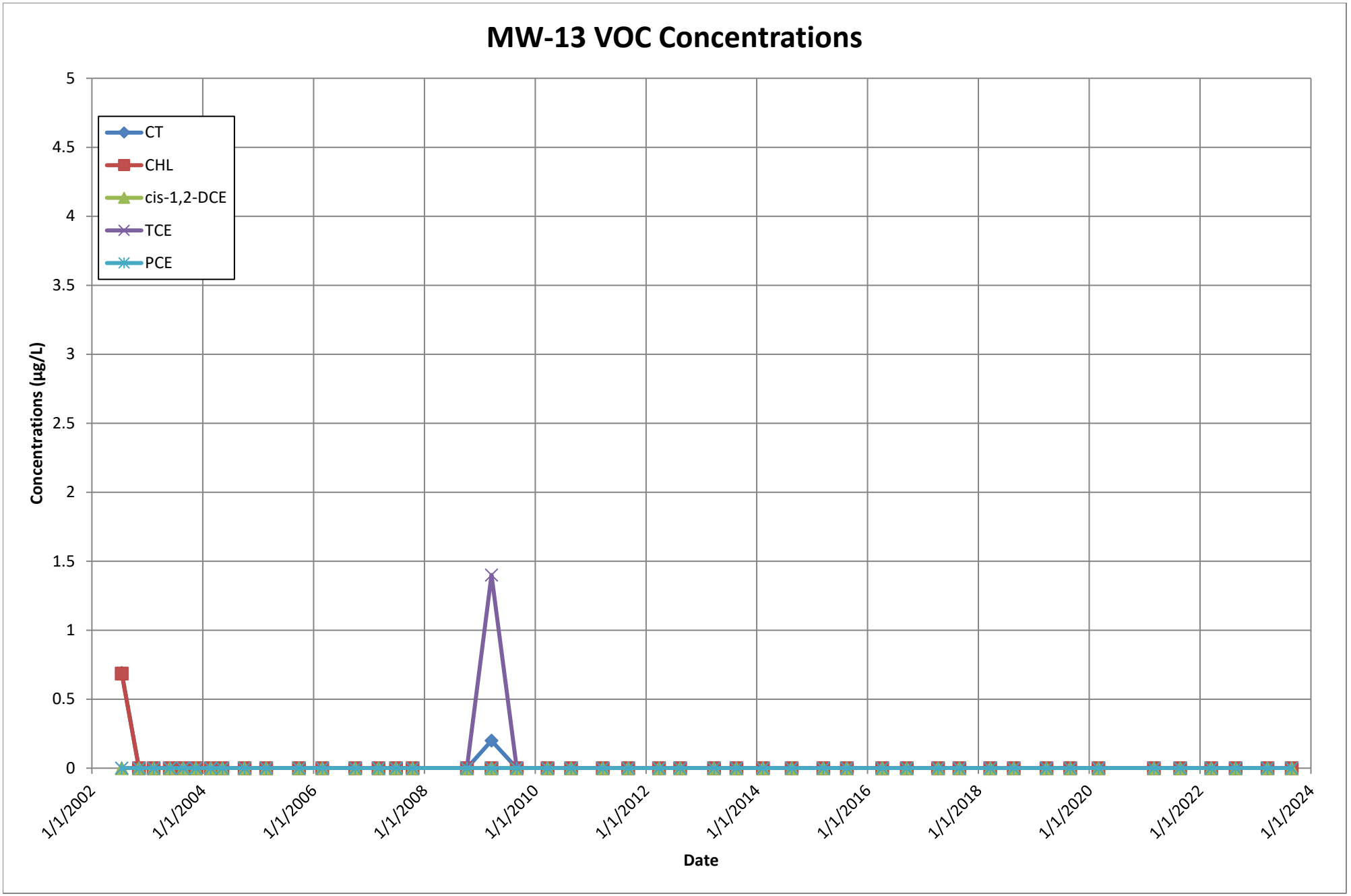

MW-7 VOC Concentrations
CT, cis-1,2-DCE, TCE, PCE Concentrations (µg/L)
CHL Concentrations (µg/L)
Date
CT
cis-1,2-DCE
PCE
TCE
CHL
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024

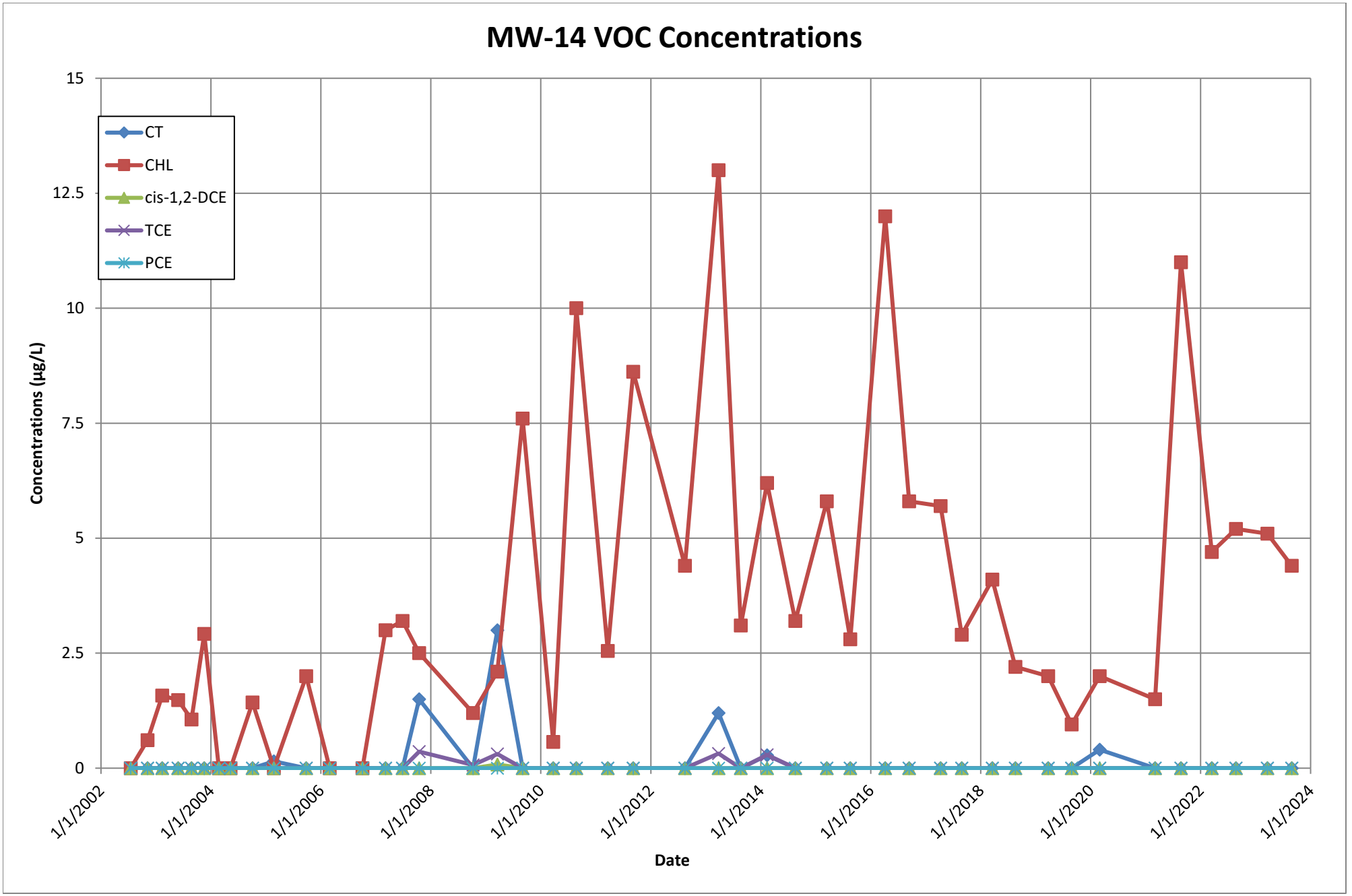

MW-8 VOC Concentrations
CT
CHL
cis-1,2-DCE
TCE
PCE
Concentrations (µg/L)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date

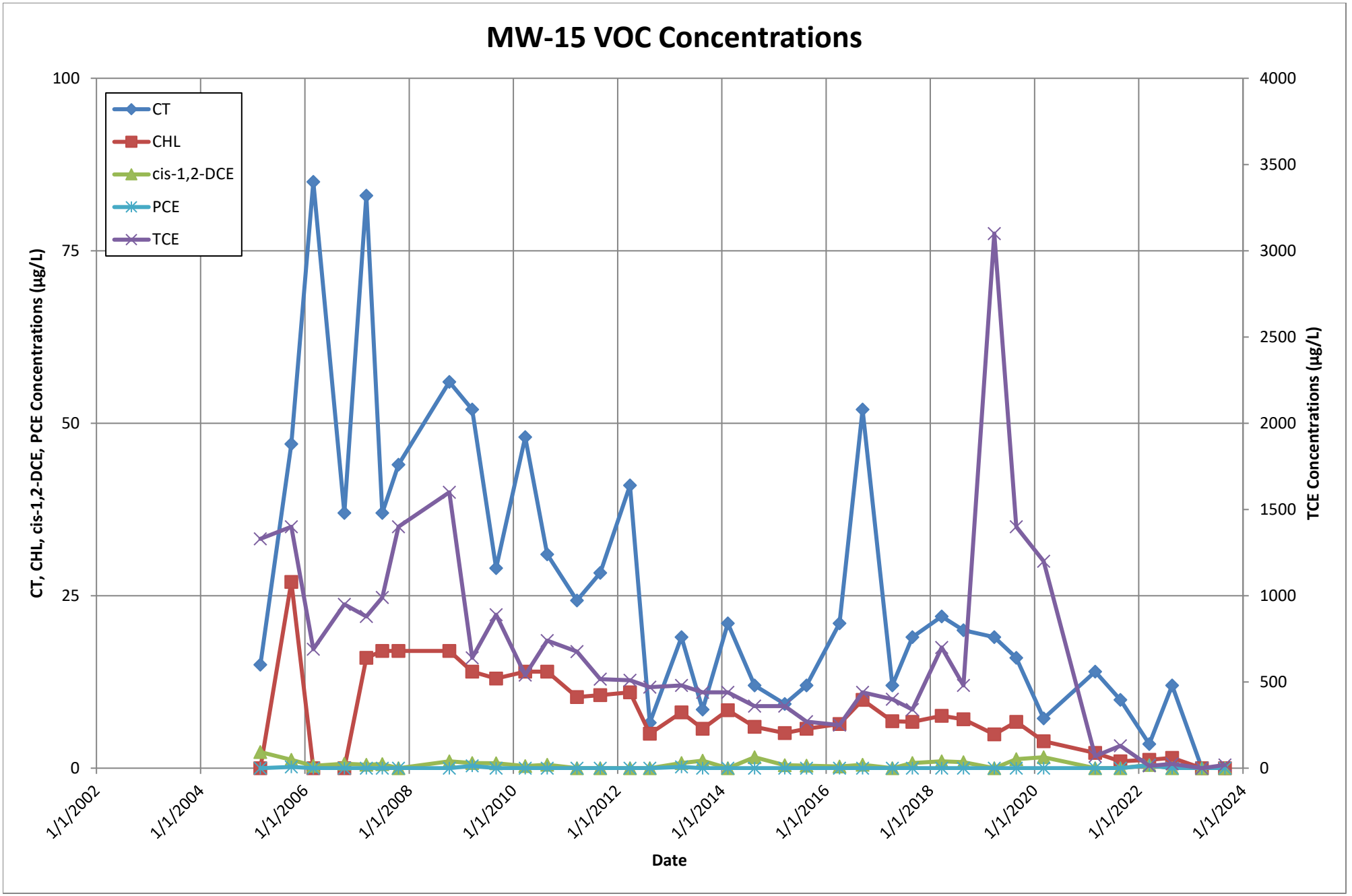

MW-9 VOC Concentrations
CT
CHL
TCE
PCE
Concentrations (µg/L)
10
9
8
7
6
5
4
3
2
1
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date

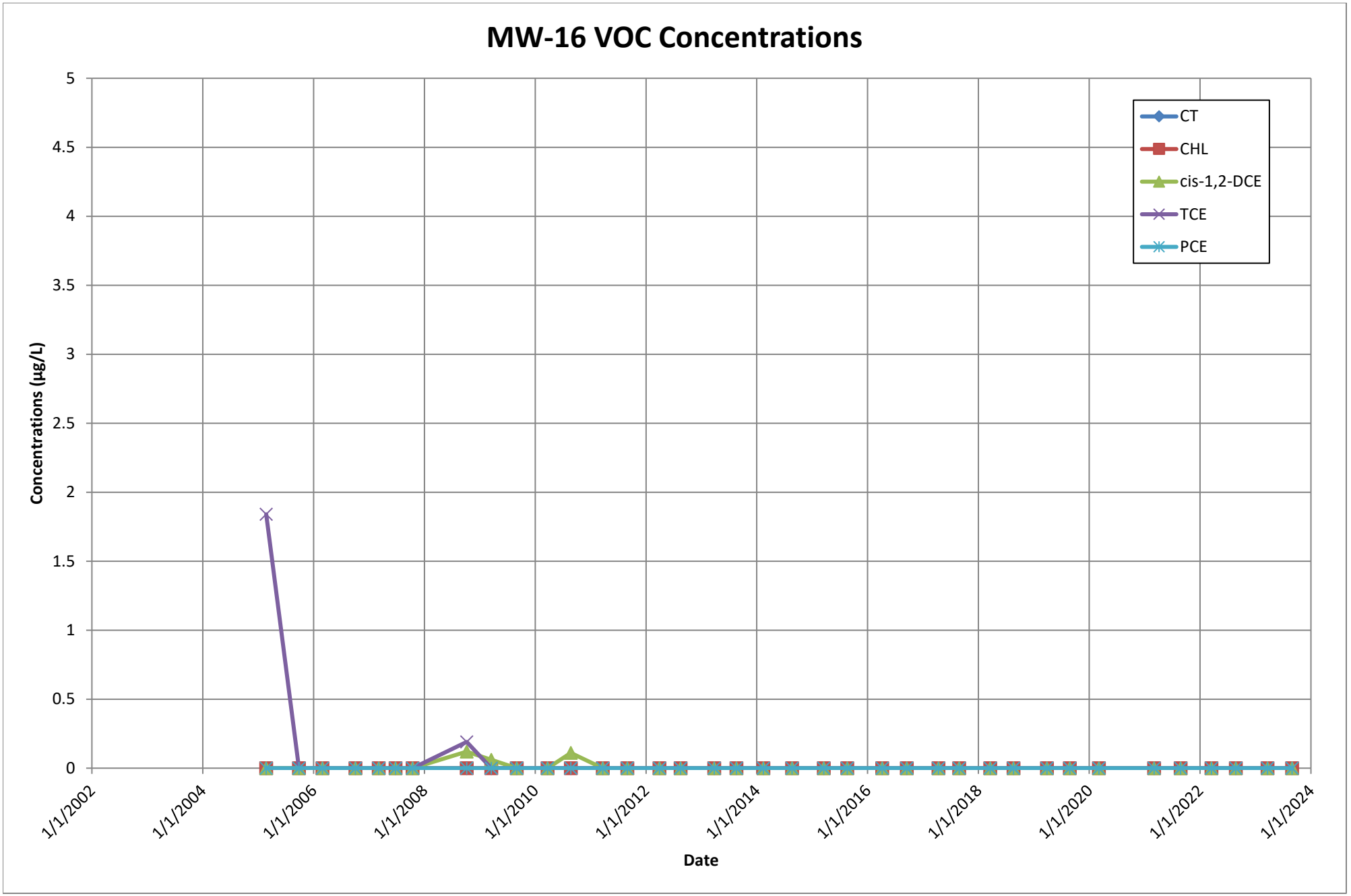

MW-10 VOC Concentrations
CT
CHL
cis-1,2-DCE
TCE
PCE
Concentrations (µg/L)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date

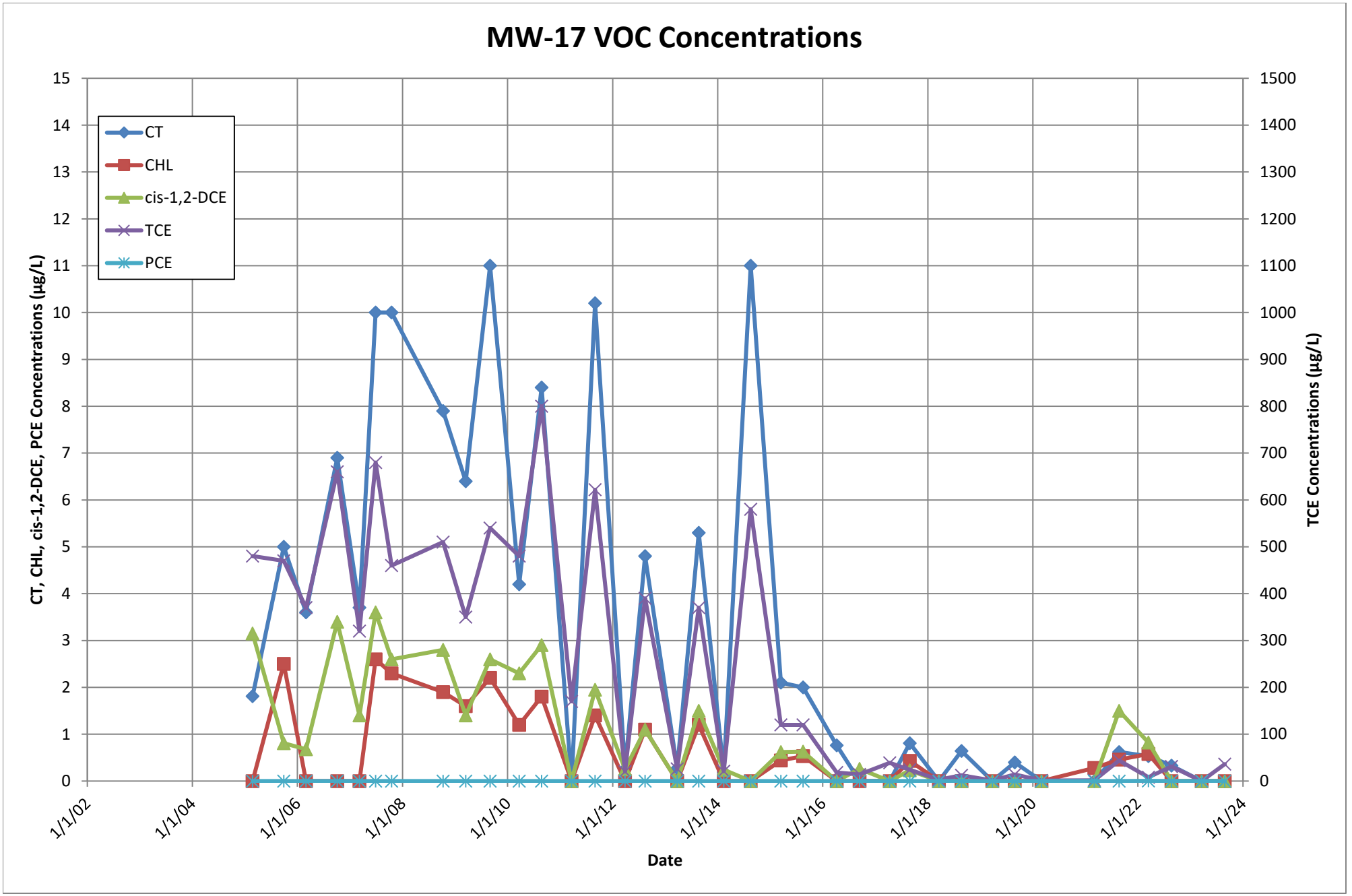

MW-11 VOC Concentrations
Concentrations (µg/L)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date
CT
CHL
cis-1,2-DCE
TCE
PCE

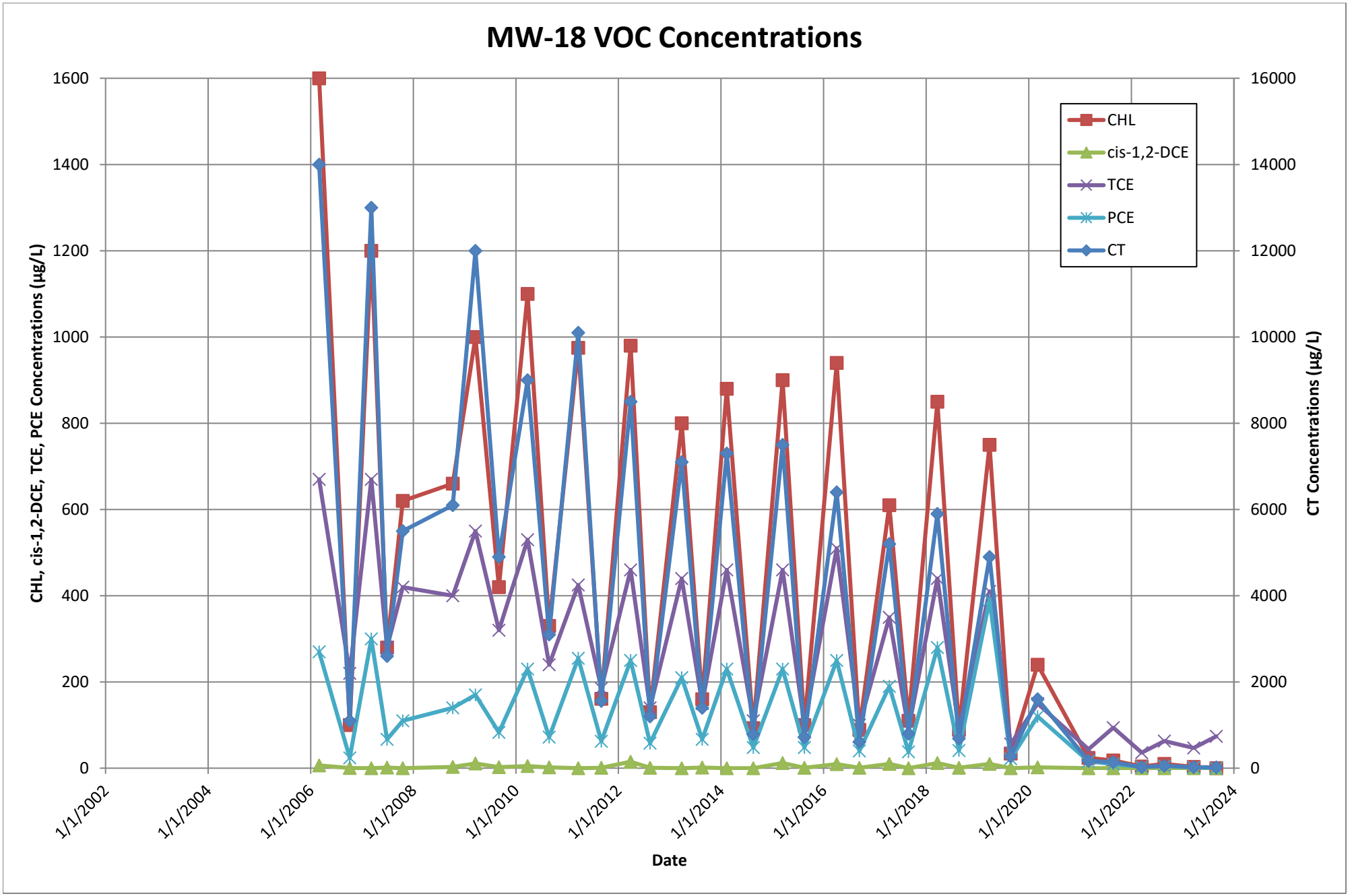

MW-13 VOC Concentrations
CT
CHL
cis-1,2-DCE
TCE
PCE
Concentrations (µg/L)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date

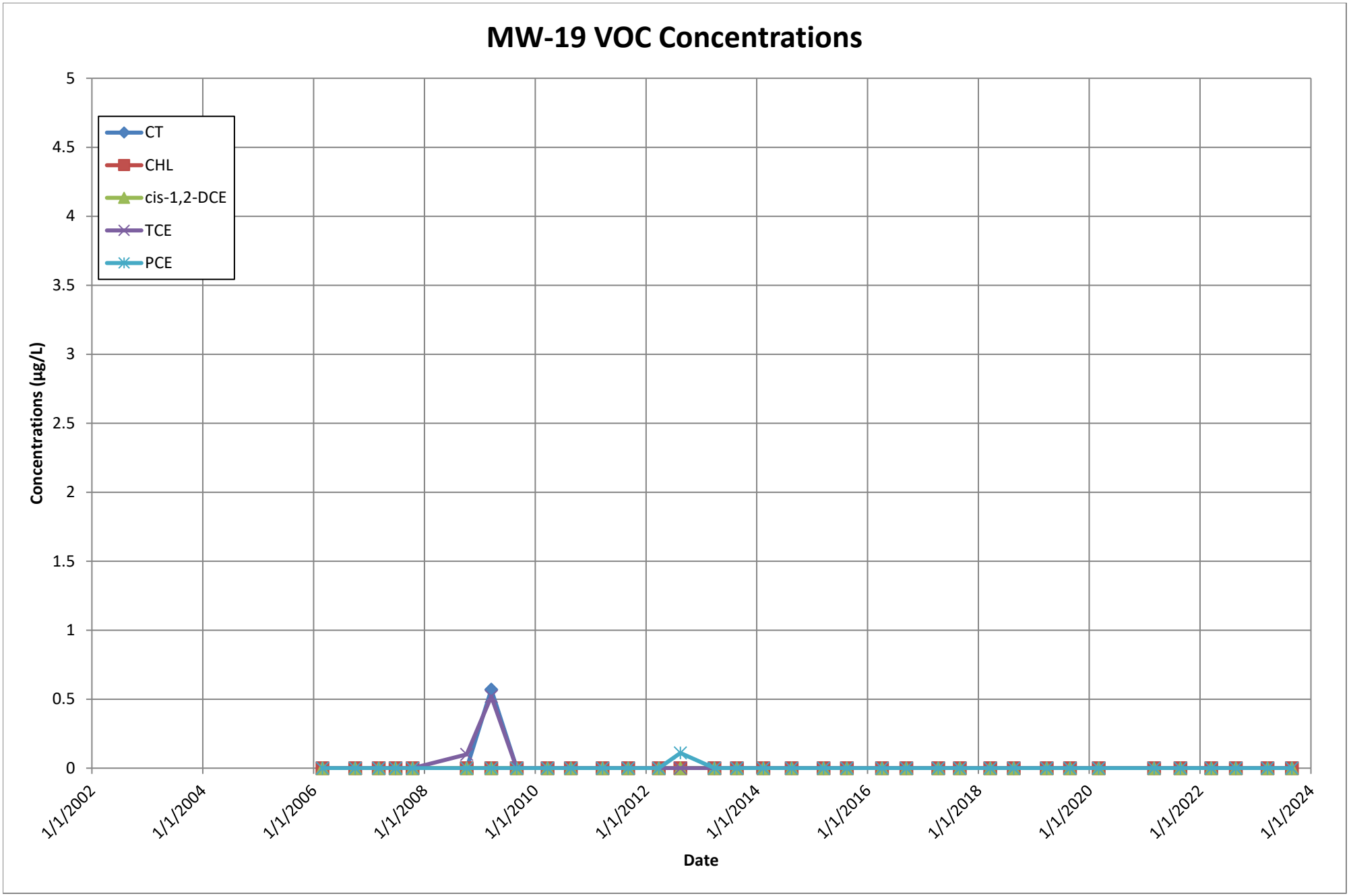

MW-14 VOC Concentrations
15
12.5
10
7.5
5
2.5
0
Concentrations (µg/L)
CT
CHL
cis-1,2-DCE
TCE
PCE
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date

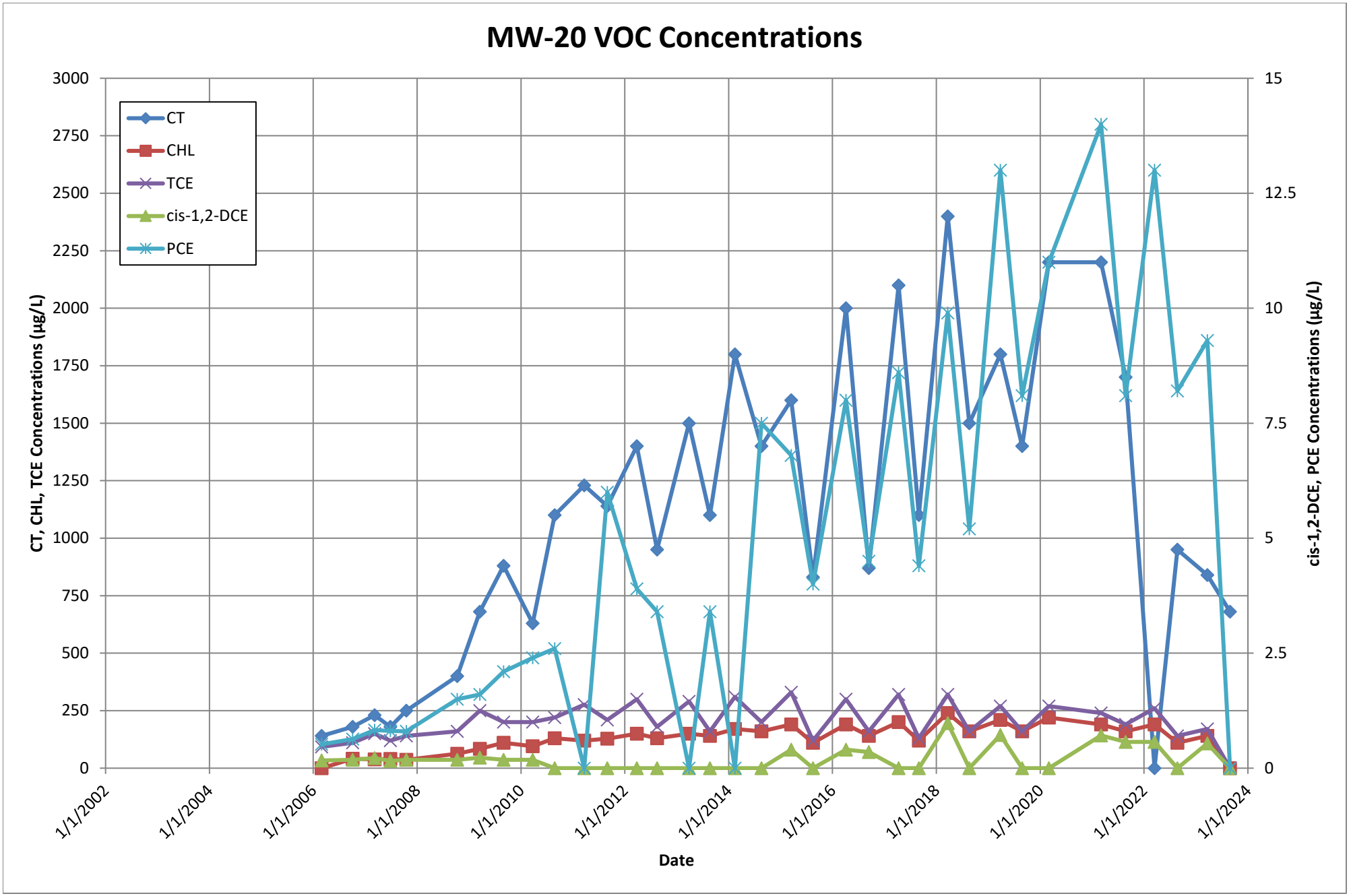

MW-15 VOC Concentrations
CT
CHL
cis-1,2-DCE
PCE
TCE
CT, CHL, cis-1,2-DCE, PCE Concentrations (µg/L)
TCE Concentrations (µg/L)
Date
100
75
50
25
0
4000
3500
3000
2500
2000
1500
1000
500
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024

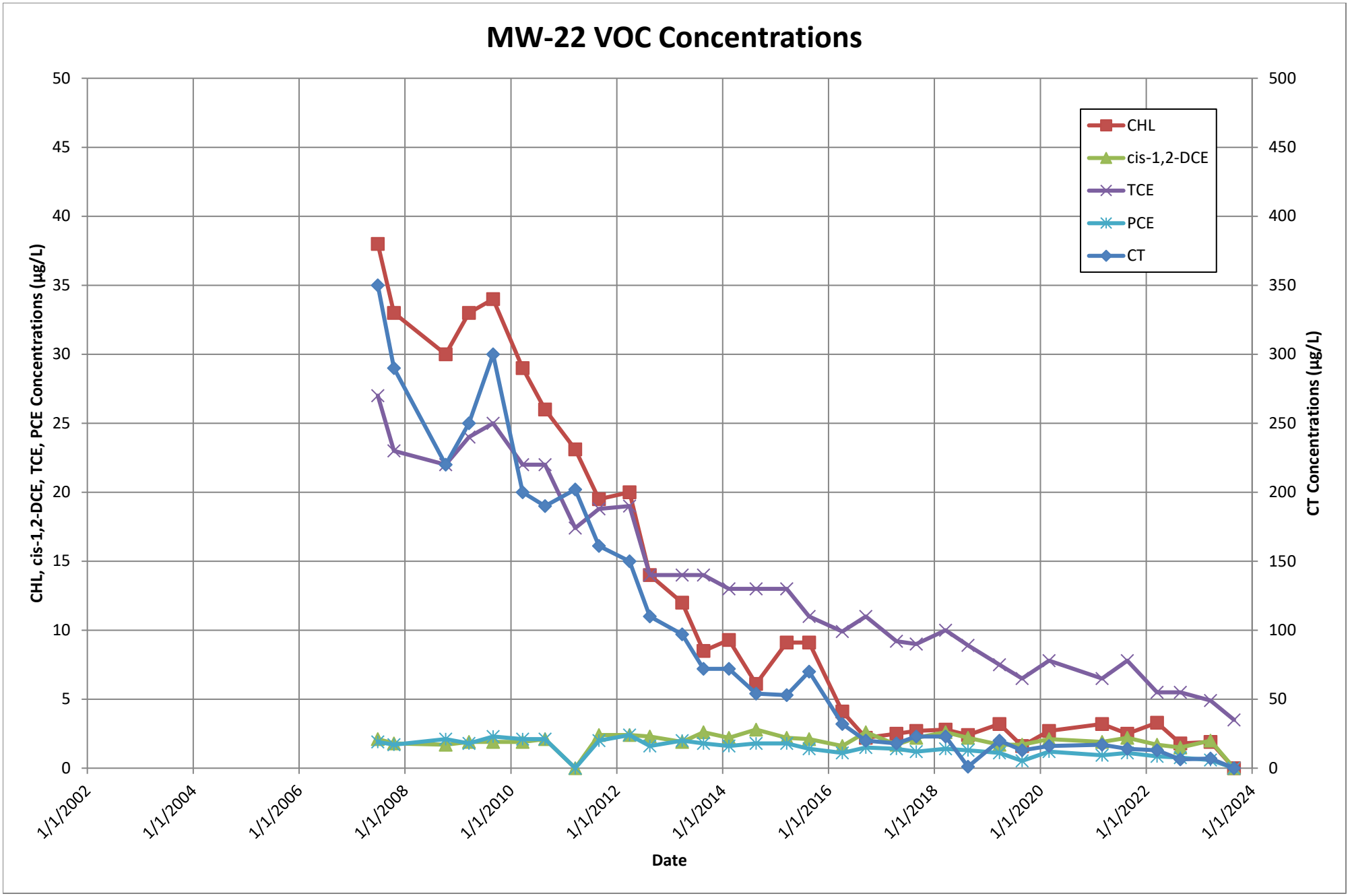

MW-16 VOC Concentrations
Concentrations (µg/L)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date
CT
CHL
cis-1,2-DCE
TCE
PCE

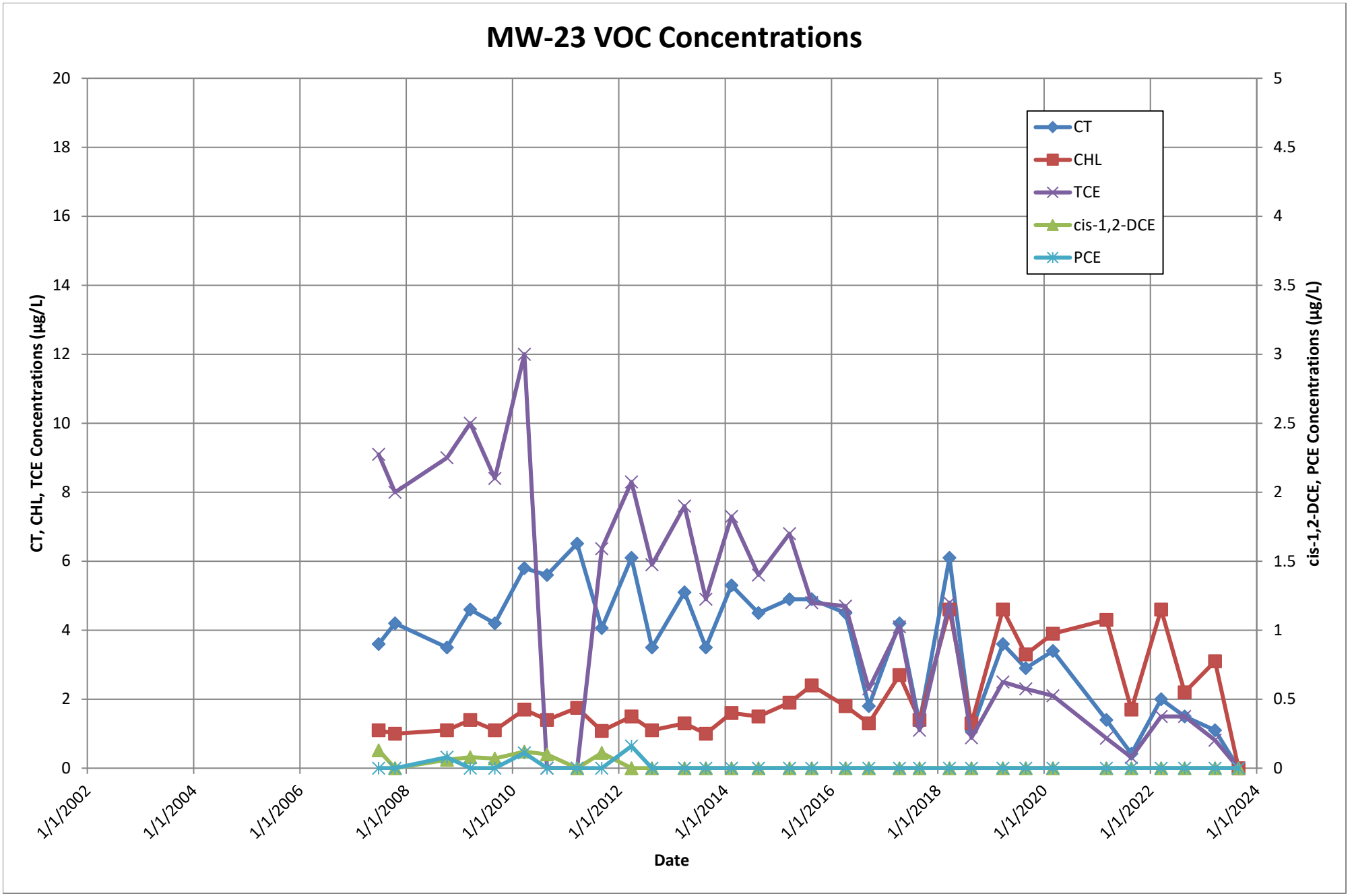

MW-17 VOC Concentrations
CT
CHL
cis-1,2-DCE
TCE
PCE
CT, CHL, cis-1,2-DCE, PCE Concentrations (µg/L)
TCE Concentrations (µg/L)
Date
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1/1/02
1/1/04
1/1/06
1/1/08
1/1/10
1/1/12
1/1/14
1/1/16
1/1/18
1/1/20
1/1/22
1/1/24

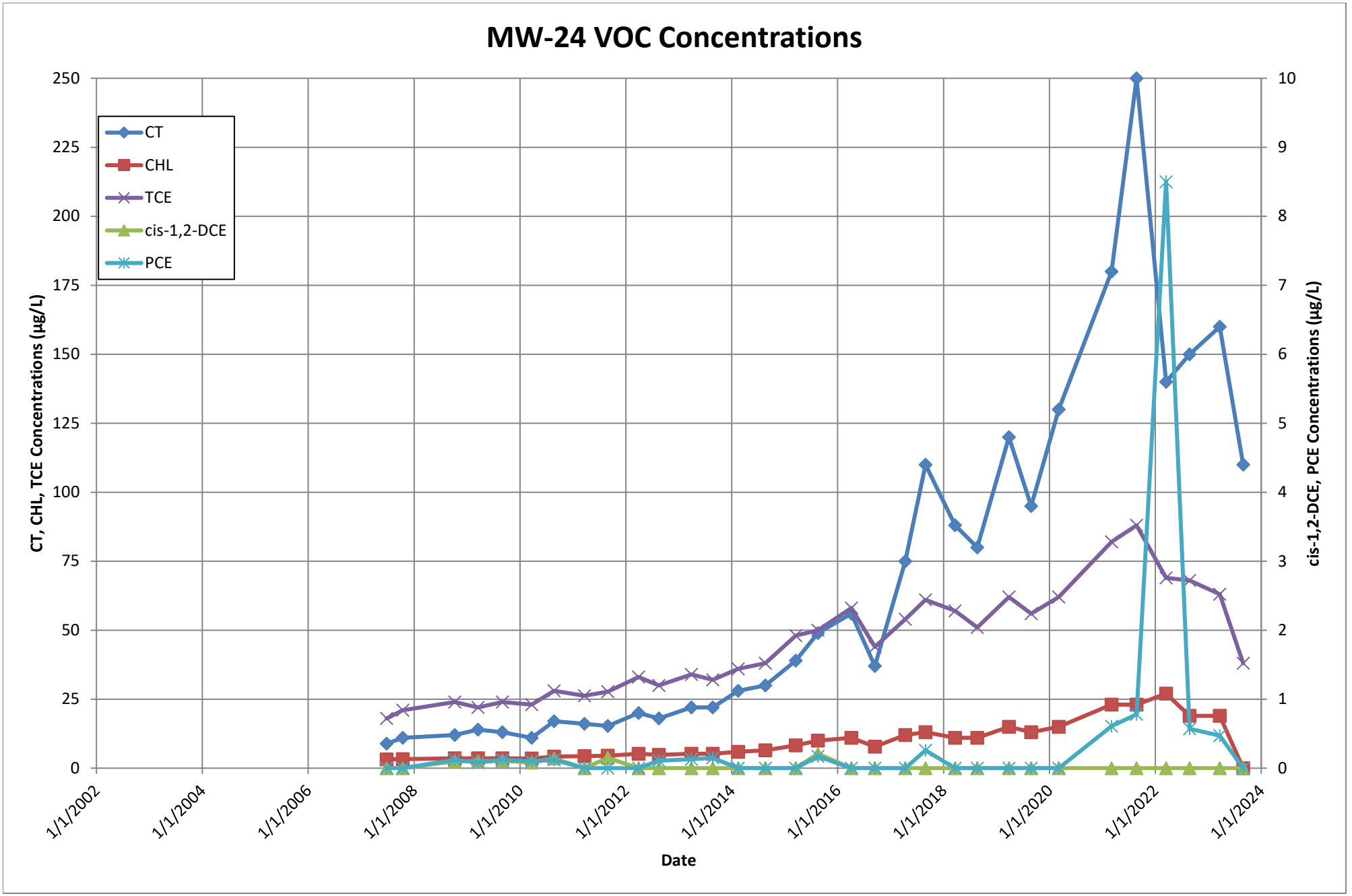

MW-18 VOC Concentrations
CHL, cis-1,2-DCE, TCE, PCE Concentrations (µg/L)
CT Concentrations (µg/L)
Date
CHL
cis-1,2-DCE
TCE
PCE
CT
0
200
400
600
800
1000
1200
1400
1600
2000
4000
6000
8000
10000
12000
14000
16000
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024

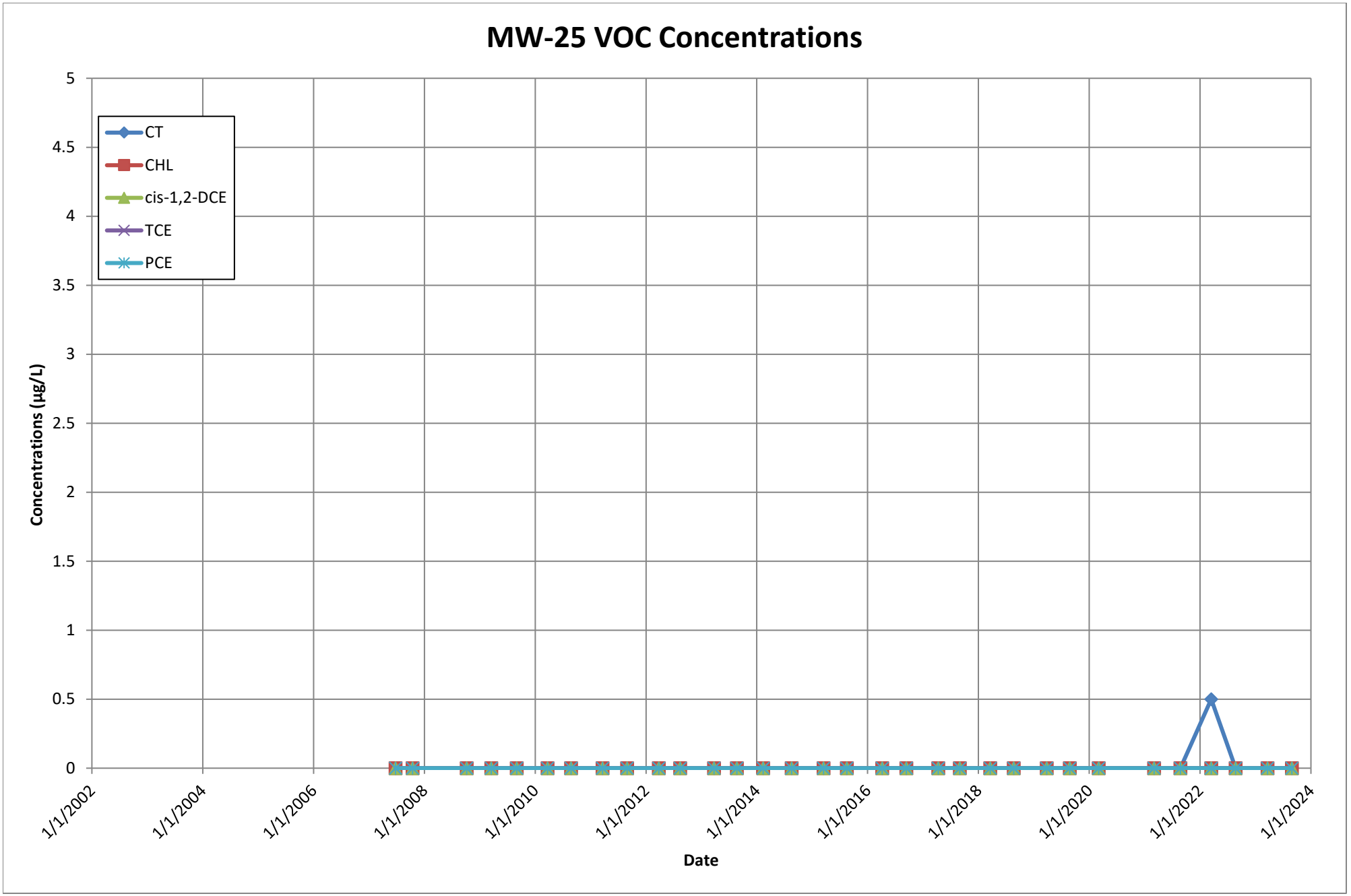

MW-19 VOC Concentrations
CT
CHL
cis-1,2-DCE
TCE
PCE
Concentrations (µg/L)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date

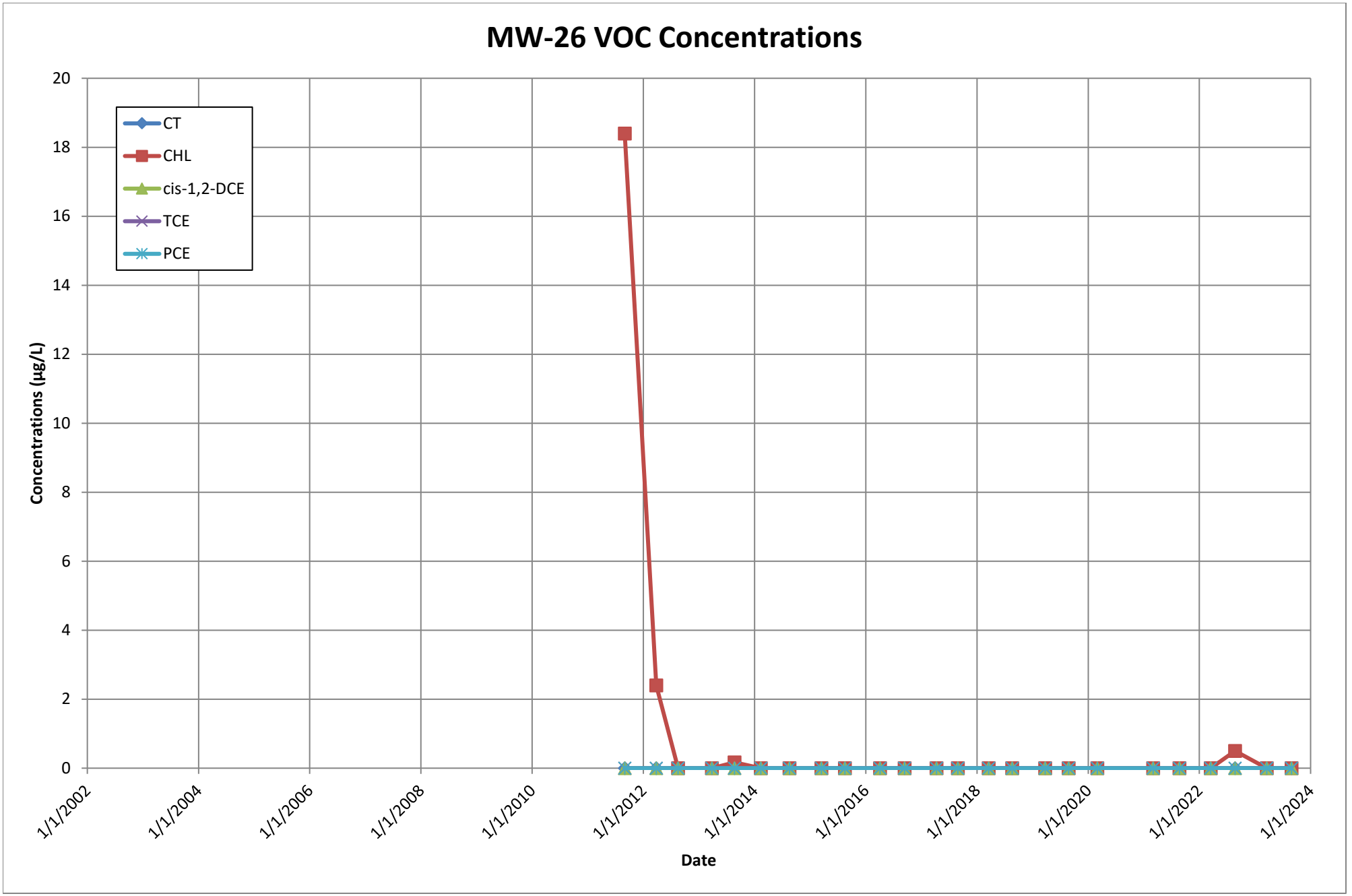

MW-20 VOC Concentrations
CT
CHL
TCE
cis-1,2-DCE
PCE
CT, CHL, TCE Concentrations (µg/L)
cis-1,2-DCE, PCE Concentrations (µg/L)
Date
3000
2750
2500
2250
2000
1750
1500
1250
1000
750
500
250
0
15
12.5
10
7.5
5
2.5
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024

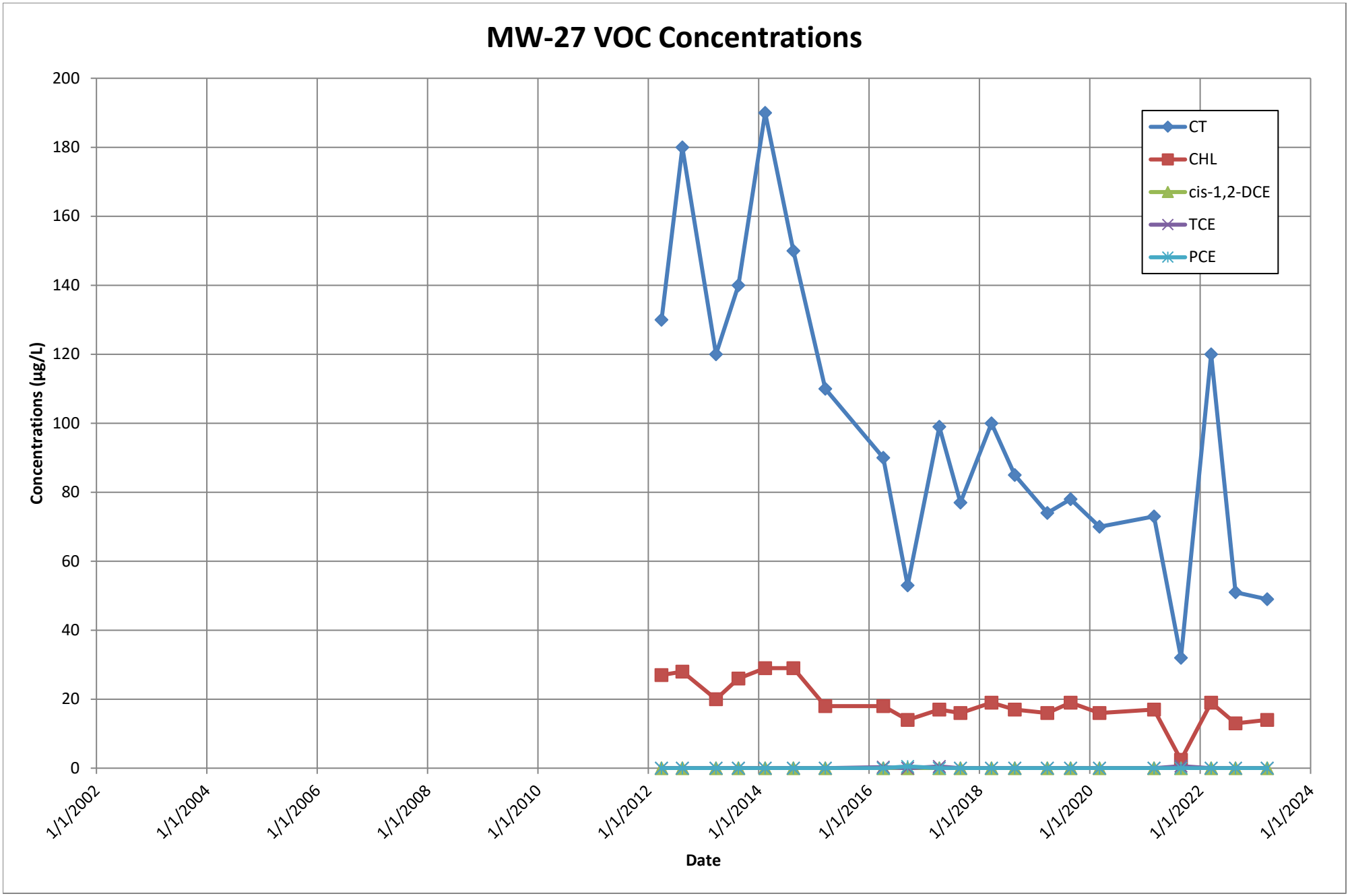

MW-22 VOC Concentrations
CHL, cis-1,2-DCE, TCE, PCE Concentrations (µg/L)
CT Concentrations (µg/L)
Date
CHL
cis-1,2-DCE
TCE
PCE
CT
0
5
10
15
20
25
30
35
40
45
50
0
50
100
150
200
250
300
350
400
450
500
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024

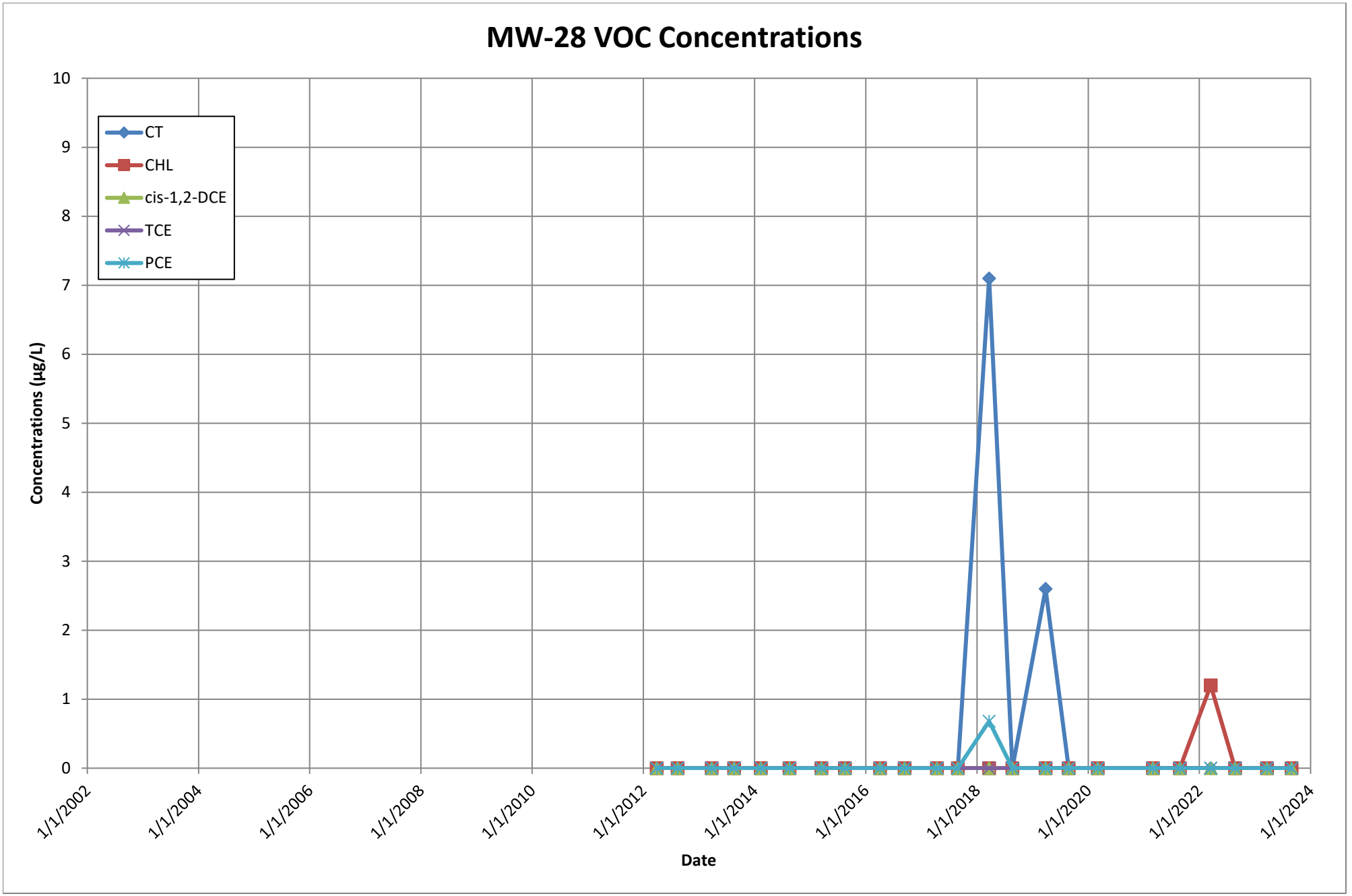

MW-23 VOC Concentrations
CT, CHL, TCE Concentrations (µg/L)
cis-1,2-DCE, PCE Concentrations (µg/L)
Date
CT
CHL
TCE
cis-1,2-DCE
PCE
0
2
4
6
8
10
12
14
16
18
20
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024

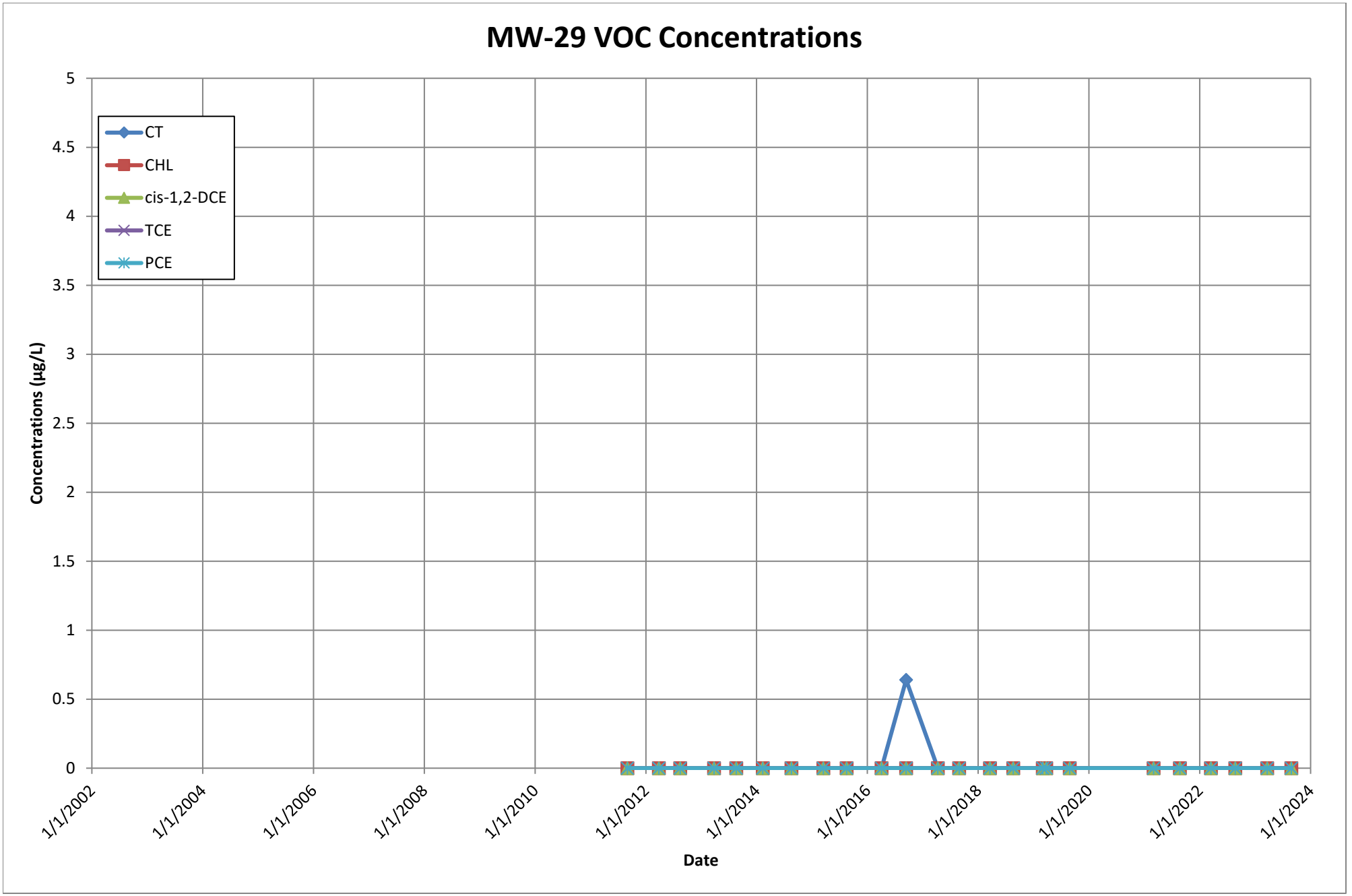

MW-24 VOC Concentrations
CT
CHL
TCE
cis-1,2-DCE
PCE
CT, CHL, TCE Concentrations (µg/L)
cis-1,2-DCE, PCE Concentrations (µg/L)
Date
250
225
200
175
150
125
100
75
50
25
0
10
9
8
7
6
5
4
3
2
1
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024

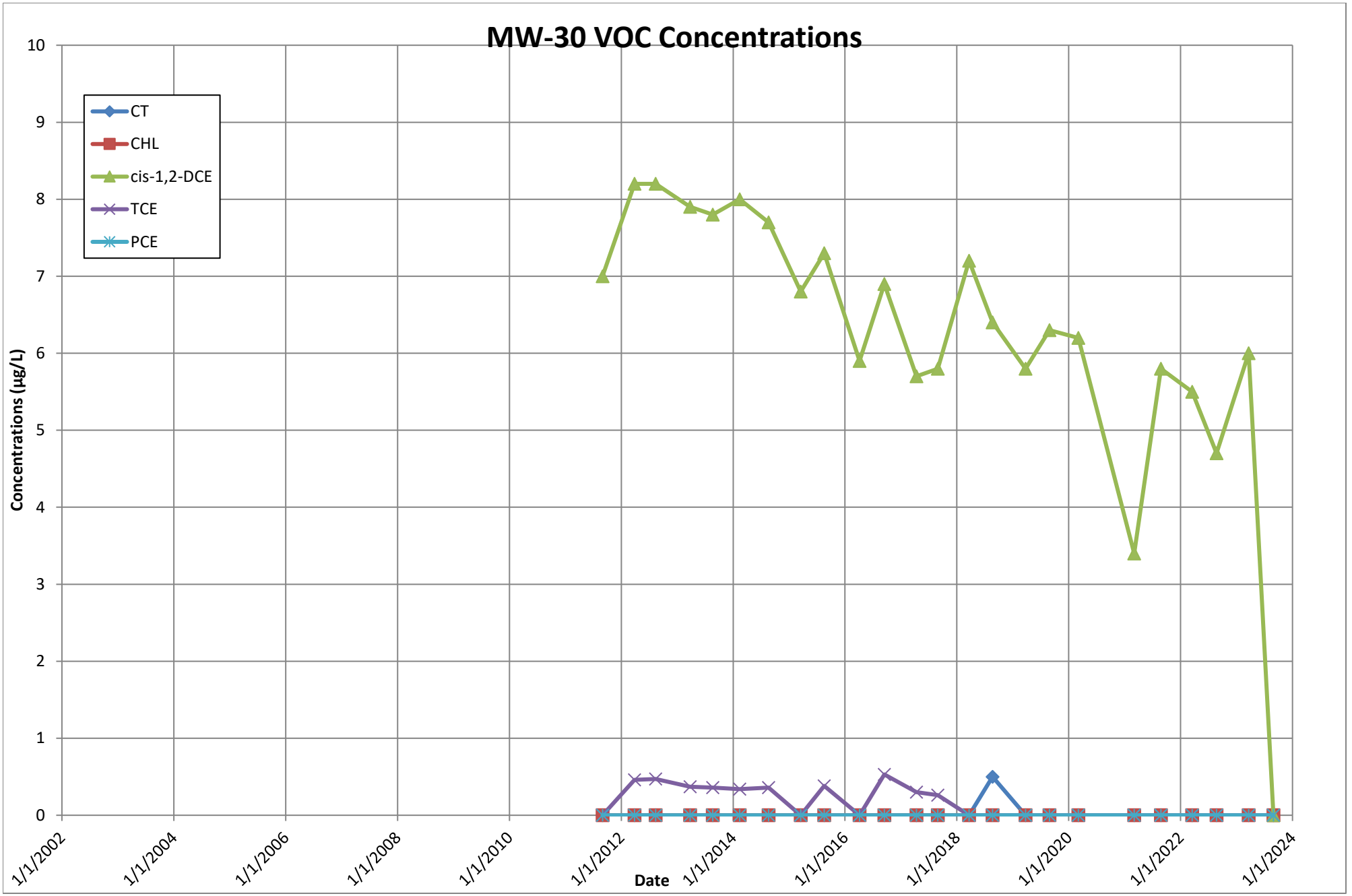

MW-25 VOC Concentrations
CT
CHL
cis-1,2-DCE
TCE
PCE
Concentrations (µg/L)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date

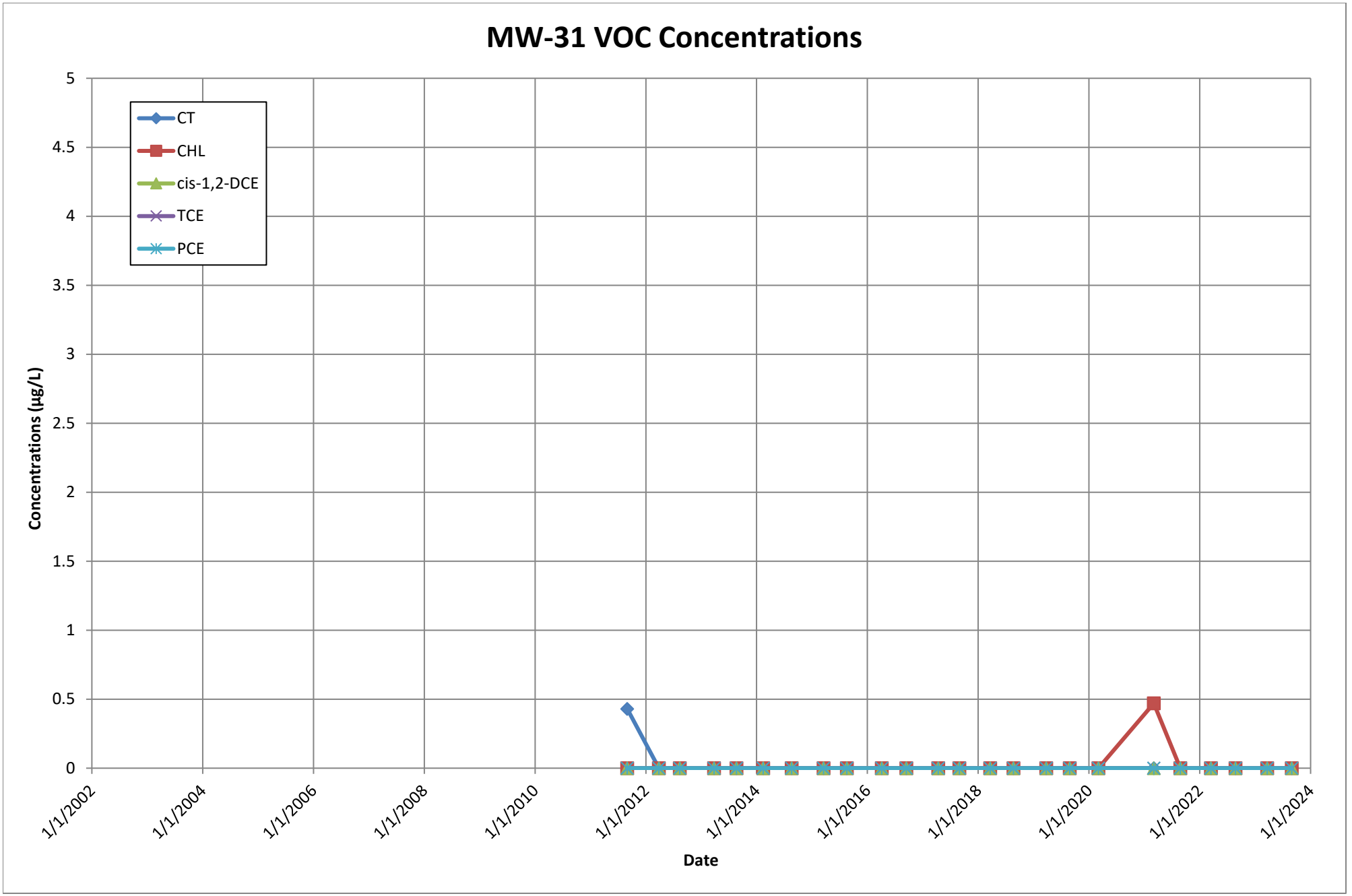

MW-26 VOC Concentrations
CT
CHL
cis-1,2-DCE
TCE
PCE
Concentrations (µg/L)
20
18
16
14
12
10
8
6
4
2
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date

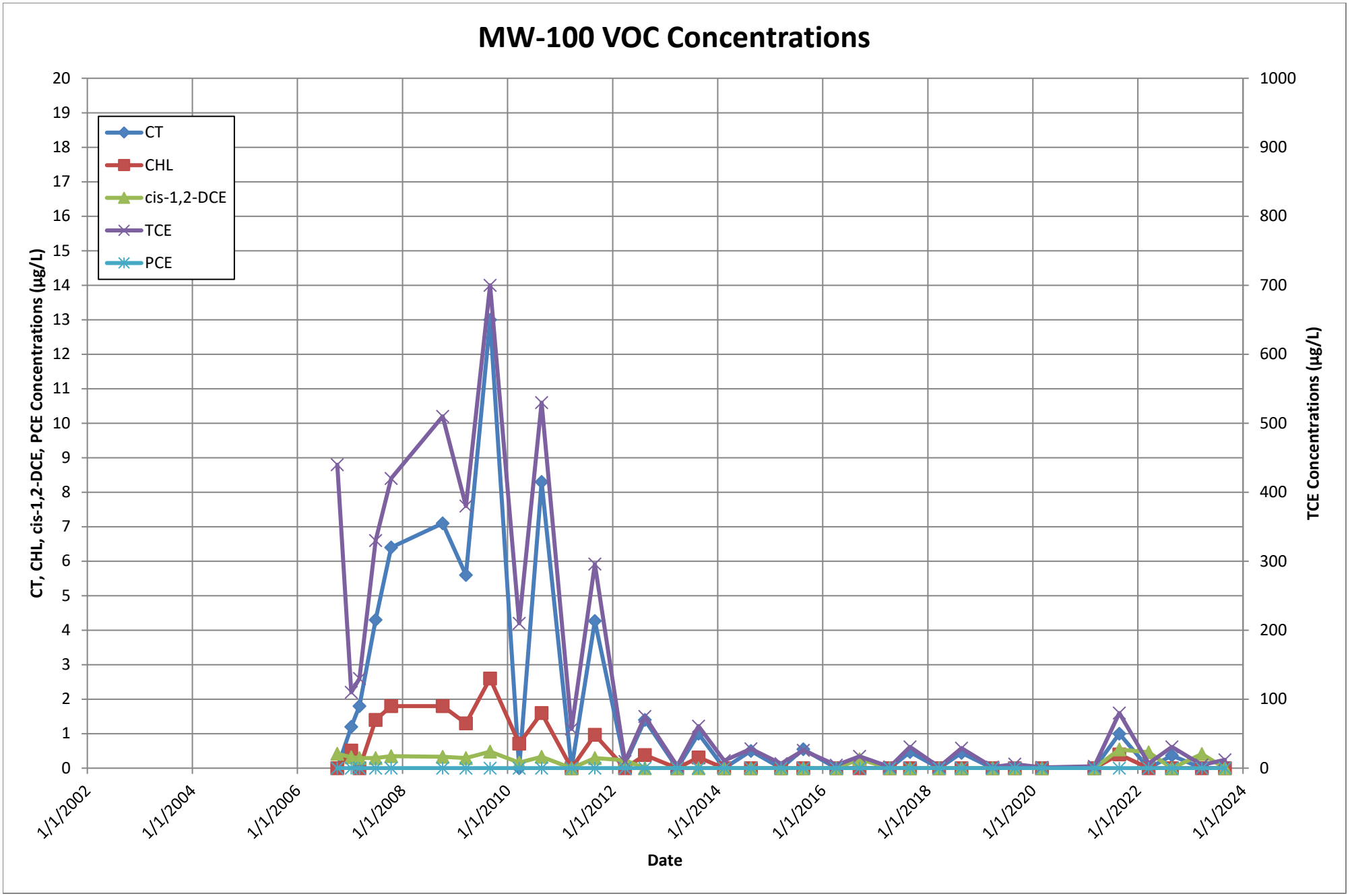

MW-27 VOC Concentrations
Concentrations (µg/L)
200
180
160
140
120
100
80
60
40
20
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date
CT
CHL
cis-1,2-DCE
TCE
PCE

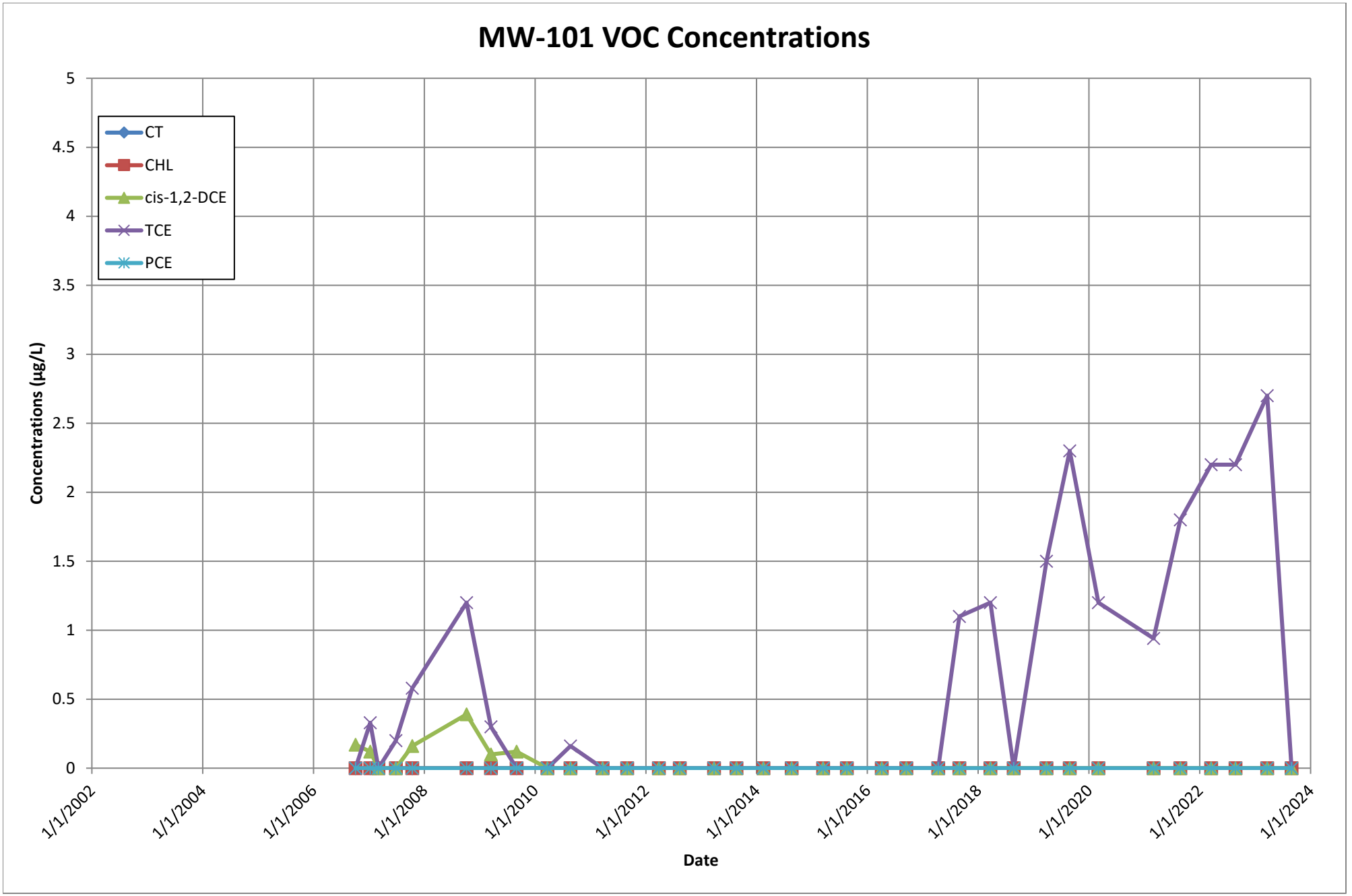

MW-28 VOC Concentrations
CT
CHL
cis-1,2-DCE
TCE
PCE
Concentrations (µg/L)
10
9
8
7
6
5
4
3
2
1
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date

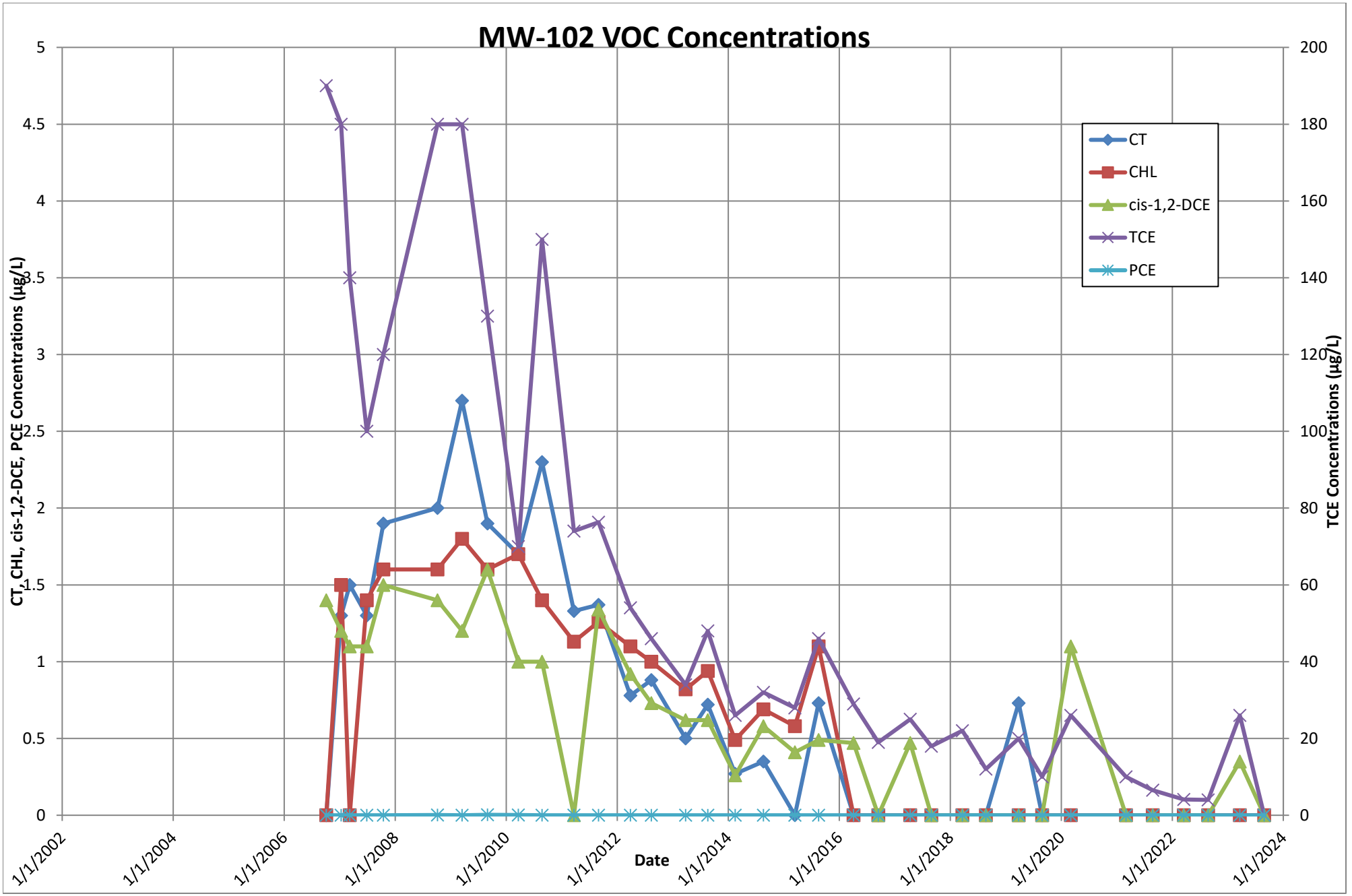

MW-29 VOC Concentrations
CT
CHL
cis-1,2-DCE
TCE
PCE
Concentrations (µg/L)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date

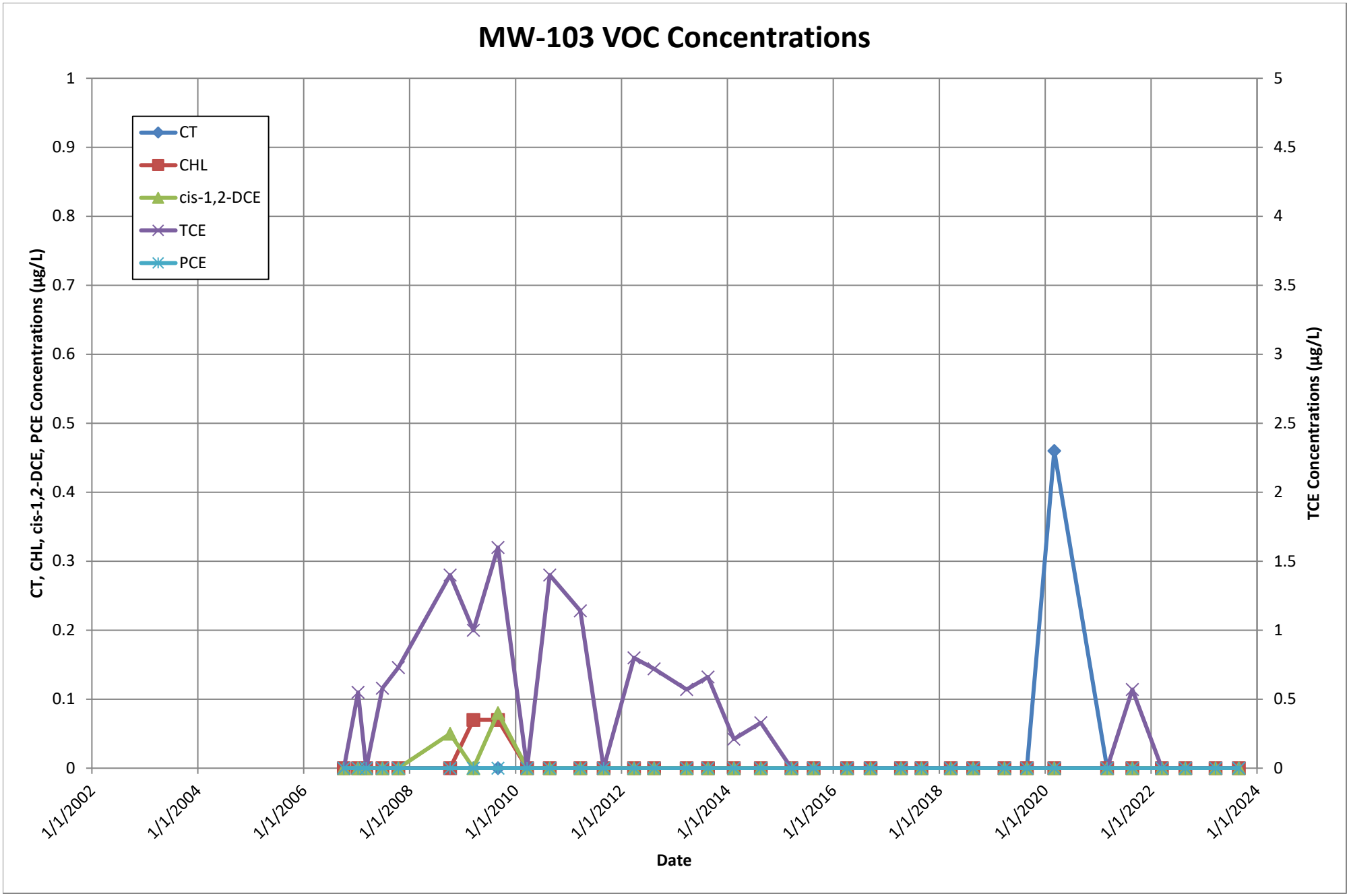

MW-30 VOC Concentrations
CT
CHL
cis-1,2-DCE
TCE
PCE
Concentrations (µg/L)
10
9
8
7
6
5
4
3
2
1
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date


MW-31 VOC Concentrations
CT
CHL
cis-1,2-DCE
TCE
PCE
Concentrations (µg/L)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date


MW-100 VOC Concentrations
CT
CHL
cis-1,2-DCE
TCE
PCE
CT, CHL, cis-1,2-DCE, PCE Concentrations (µg/L)
TCE Concentrations (µg/L)
Date
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
0
100
200
300
400
500
600
700
800
900
1000
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024


MW-101 VOC Concentrations
CT
CHL
cis-1,2-DCE
TCE
PCE
Concentrations (µg/L)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024
Date


MW-102 VOC Concentrations
CT, CHL, cis-1,2-DCE, PCE Concentrations (µg/L)
TCE Concentrations (µg/L)
Date
CT
CHL
cis-1,2-DCE
TCE
PCE
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
0
20
40
60
80
100
120
140
160
180
200
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024


MW-103 VOC Concentrations
CT
CHL
cis-1,2-DCE
TCE
PCE
CT, CHL, cis-1,2-DCE, PCE Concentrations (µg/L)
TCE Concentrations (µg/L)
Date
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2002
1/1/2004
1/1/2006
1/1/2008
1/1/2010
1/1/2012
1/1/2014
1/1/2016
1/1/2018
1/1/2020
1/1/2022
1/1/2024




Sources: NAIP, 2020.
Albany GIS, 2007.

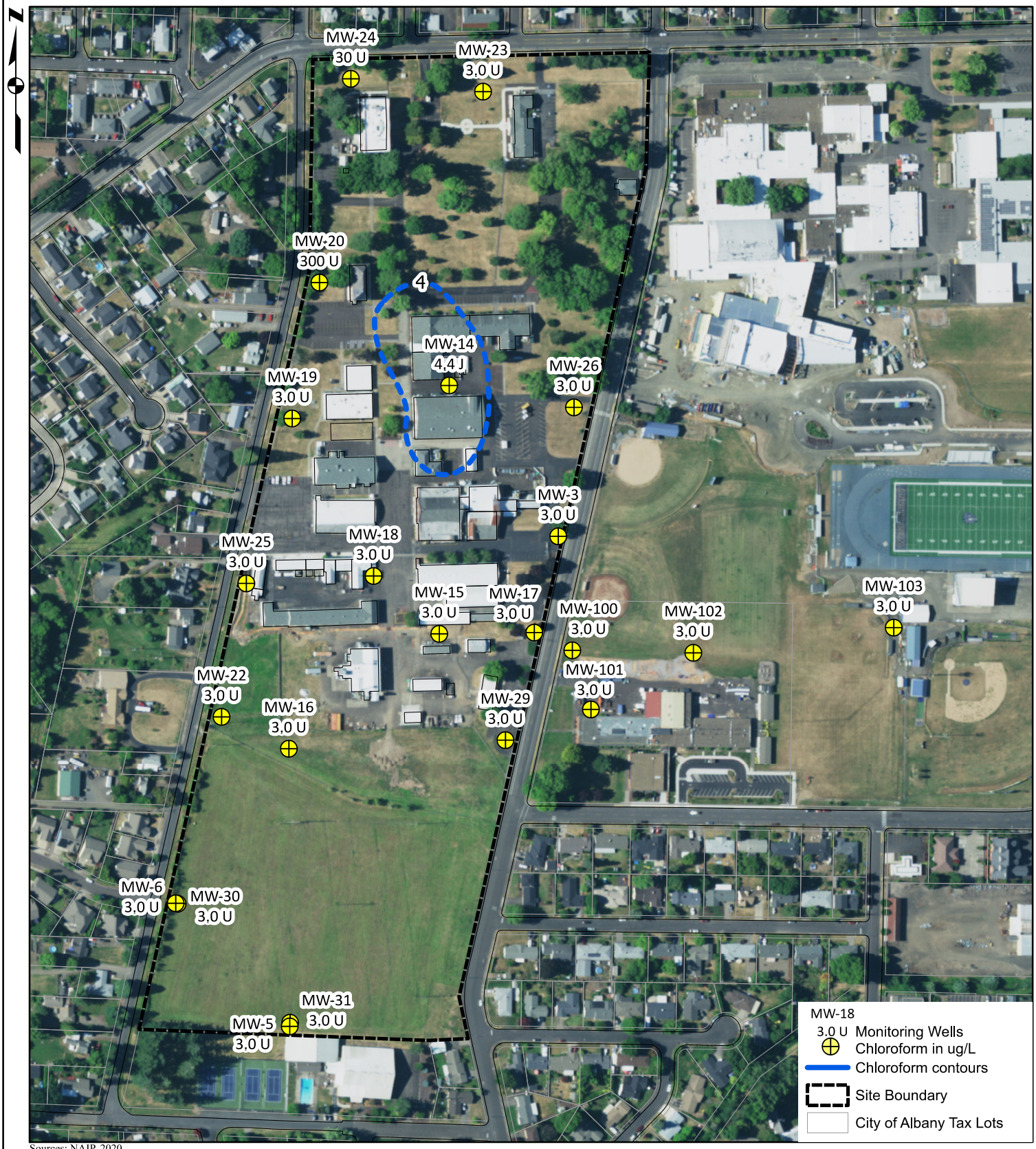
150 75 0 150 300
Feet

## CONCENTRATION OF CARBON TETRACHLORIDE IN THE GRAVEL AQUIFER, AUGUST 2023

NETL ALBANY
GROUNDWATER SAMPLING
ALBANY, OREGON

August 2023

**FIGURE 7**




Sources: NAIP, 2020.
Albany GIS, 2007.

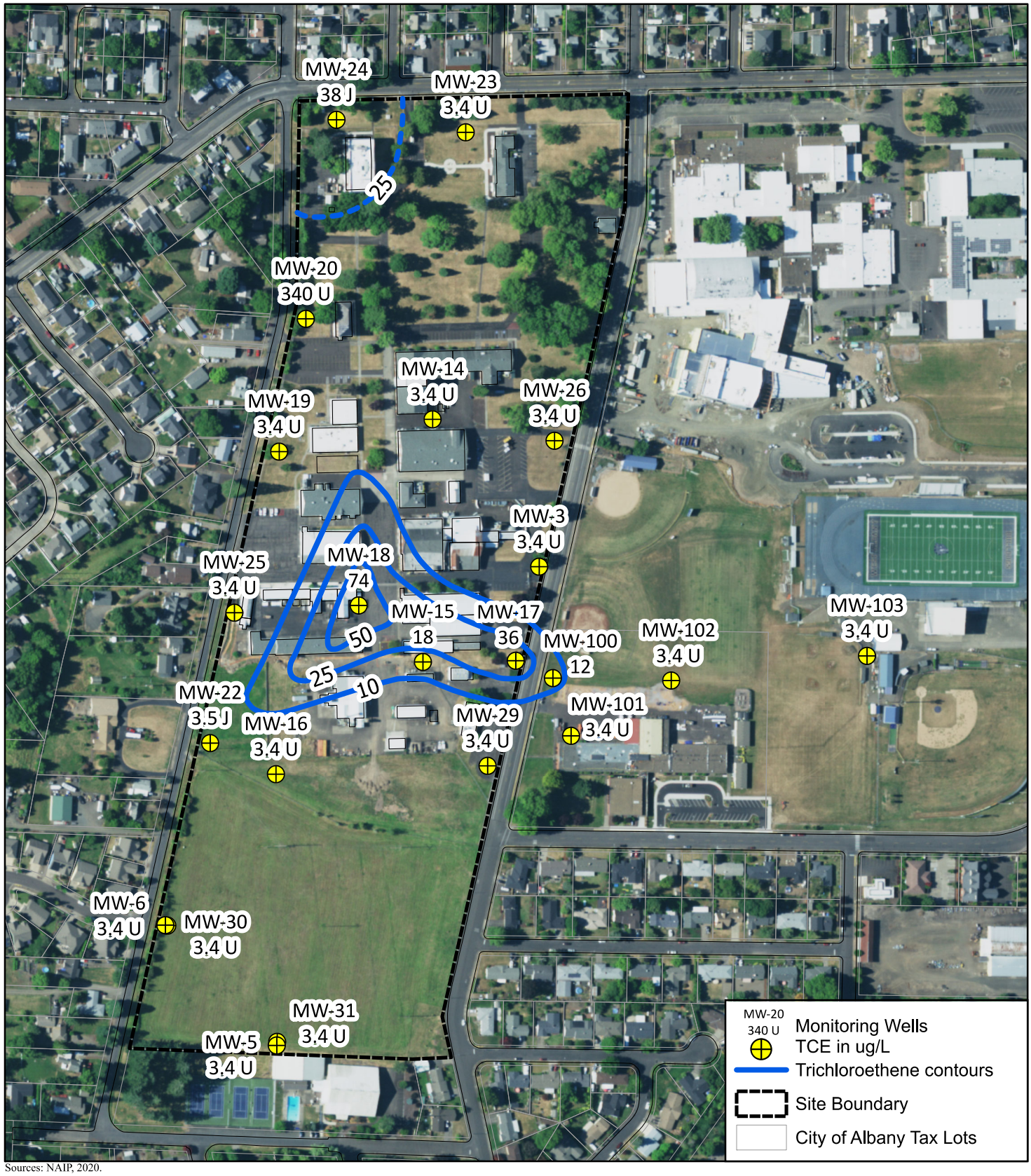
150 75 0 150 300
Feet

## CONCENTRATION OF CHLOROFORM IN THE GRAVEL AQUIFER, AUGUST 2023

NETL ALBANY
GROUNDWATER SAMPLING
ALBANY, OREGON

August 2023

**FIGURE 8**




Sources: NAIP, 2020.
Albany GIS, 2007.

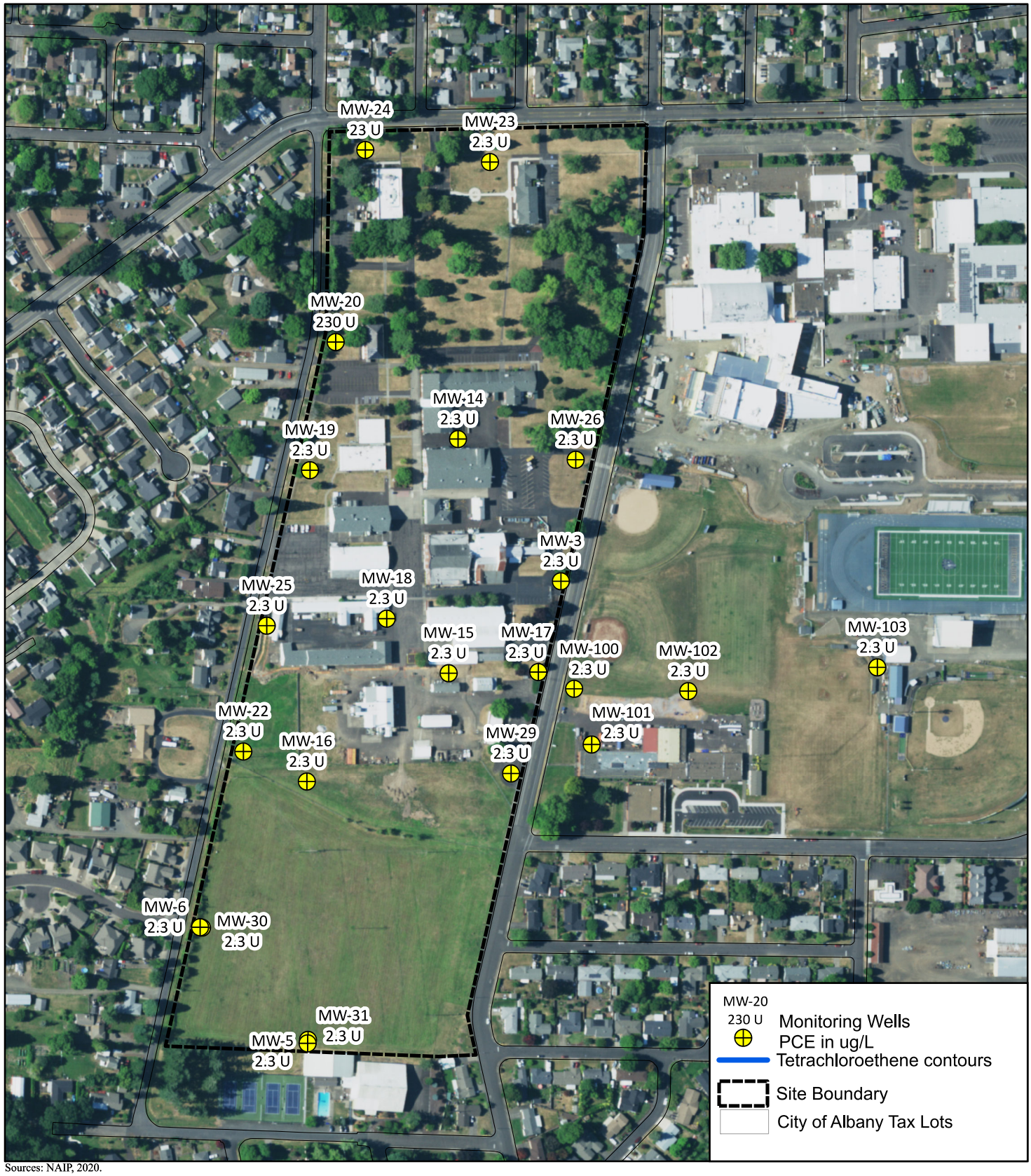
150 75 0 150 300
Feet

## CONCENTRATION OF TRICHLOROETHENE IN THE GRAVEL AQUIFER, AUGUST 2023

NETL ALBANY
GROUNDWATER SAMPLING
ALBANY, OREGON

August 2023

**FIGURE 9**




Sources: NAIP, 2020.
Albany GIS, 2007.

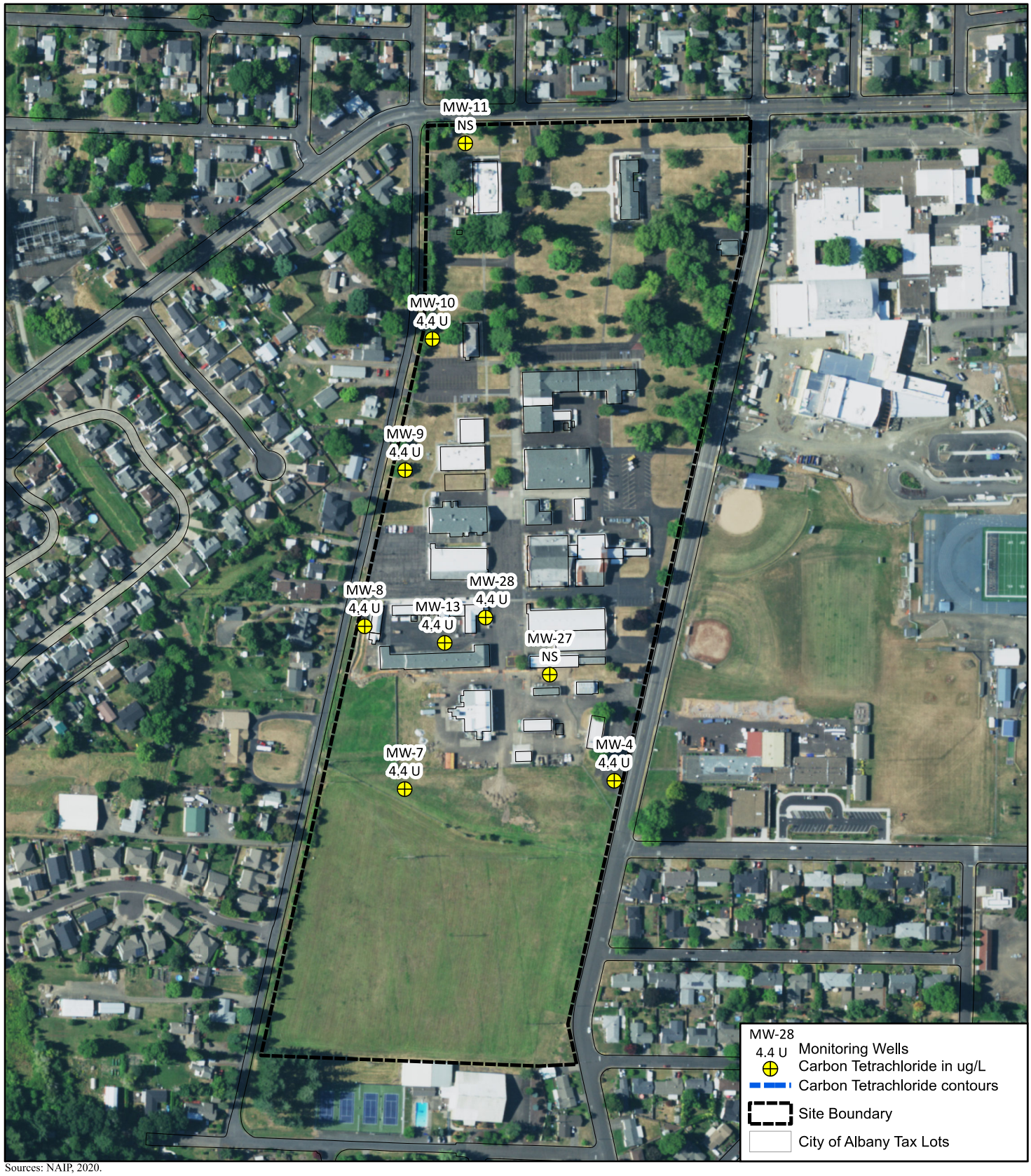
150 75 0 150 300
Feet

## CONCENTRATION OF TETRACHLOROETHENE IN THE GRAVEL AQUIFER, AUGUST 2023

NETL ALBANY
GROUNDWATER SAMPLING
ALBANY, OREGON

August 2023

**FIGURE 10**




Sources: NAIP, 2020.
Albany GIS, 2007.

150 75 0 150 300
Feet

## CONCENTRATION OF CARBON TETRACHLORIDE IN THE PERCHED AQUIFER AUGUST 2023

NETL ALBANY
GROUNDWATER SAMPLING
ALBANY, OREGON

August 2023

**FIGURE 11**




Sources: NAIP, 2020.
Albany GIS, 2007.

150 75 0 150 300
Feet

## CONCENTRATION OF CIS 1,2-DCE IN THE GRAVEL AQUIFER, AUGUST 2023

NETL ALBANY
GROUNDWATER SAMPLING
ALBANY, OREGON

August 2023

**FIGURE 12**




# NATIONAL ENERGY TECHNOLOGY LABORATORY (NETL)

# ALBANY SITE
# GROUNDWATER MONITORING REPORT
# EVENT 47 – August 2023

**Site Operations Services**
**Contract Number 89243320CFE000041.4.5.000001**

**For**
**U.S. Department of Energy**
**National Energy Technology Laboratory**

**Submitted**

**October 13, 2023**

# Appendices

# Appendix A. Monitoring Well Sampling Field Logs

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: PZ-1A

Project No.: _____ Client: NETL-Albany

Project Name: First SA Wet Season Event 2023 Project Location: Albany, OR

Weather Conditions: overcast Sampling Date: 8/28/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 13.30 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: _____

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: — End Purge Time: —

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| 2 | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
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| | | | | | | | | | | |

**SAMPLE COLLECTION DATA**

Sampled by: _____

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): _____

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: _____ End SampleTime: _____

COMMENTS: Gauge Only

PID: _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: PZ-1B

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Dry Season Event 2023 Project Location: Albany, OR

Weather Conditions: Overcast Sampling Date: 8/28/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: ~~13.25~~ (ft) 13.25

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: _____

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: _____ End Purge Time: _____

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
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**SAMPLE COLLECTION DATA**

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps Sampled by: _____

Sample I.D. (Name, Date, Time): _____

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: _____ End SampleTime: _____

COMMENTS: Gauge Only

~~PID:~~ _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW1

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Sunny Sampling Date: 8/30/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 21.57 (ft)

Total Well Depth 28.37 (ft)

Length of Water Column 6.80

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: _____

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: _____ End Purge Time: _____

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
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**SAMPLE COLLECTION DATA**

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps Sampled by:

Sample I.D. (Name, Date, Time):

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.:

Sample Start Time: End SampleTime:

COMMENTS: Gauge Only

PID: _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW3

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Overcast Sampling Date: 8/29/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 12.62 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Aquareader

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1135 End Purge Time: 1150

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | | 12.62 | 6.88 | 17.63 | 612 | 128 | 6.68 | 80.4 | |
| 1 | 5 | | 12.60 | 7.12 | 17.00 | 614 | 19.8 | 6.54 | 84.9 | |
| 2 | 10 | | 12.65 | 7.13 | 16.90 | 613 | 16.7 | 6.57 | 88.6 | |
| 3 | 15 | | 12.65 | 7.12 | 16.80 | 6116 | 8.9 | 6.54 | 90.4 | |

**SAMPLE COLLECTION DATA**

Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW3, 8/29/23, 1150

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1150 End SampleTime: 1152

COMMENTS:

~~PID:~~ _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW4

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Overcast Sampling Date: 8/28/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 9.01 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Aquareader

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 13:01 End Purge Time: 1326

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 300 | 9.01 | 6.33 | 21.75 | 976 | 76.7 | 6.61 | 209.8 | |
| 1 | 5 | 600 | 9.15 | 6.64 | 18.90 | 933 | 43.2 | 1.82 | ~~365~~ | 154.8 |
| 2 | 10 | 900 | 9.15 | 6.61 | 18.68 | 956 | 30.4 | 1.70 | ~~304~~ | 156.7 |
| 3 | 15 | 1200 | 9.15 | 6.54 | 18.70 | 954 | 28.2 | 1.58 | 155.7 | |
| 4 | 20 | 1500 | 9.15 | 6.50 | 18.70 | 956 | 25.2 | 1.46 | 156.4 | |
| 5 | 25 | ~~1800~~ 200 | 9.15 | 6.56 | 18.70 | 956 | 25.8 | 1.41 | 155.1 | |

**SAMPLE COLLECTION DATA** Sampled by: CEL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW4, 8/28/23, 1326

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1326 End SampleTime: 1328

COMMENTS: 200 mls/min throughout sampling

PID: 0.0

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW5

**Project No.:** _____ **Client:** NETL-Albany

**Project Name:** First SA ~~Wet~~ Season Event 2023 **Project Location:** Albany, OR

**Weather Conditions:** Dry Sunny **Sampling Date:** 8/30/23

**WATER LEVEL DATA (measured from top of inner well casing)**

**Depth to Water:** 17.40 (ft)

**Total Well Depth** _____ (ft)

**Length of Water Column** _____

**WELL PURGE DATA**

**Purge Method:** Dedicated Bladder Pump

**Field Testing Equipment:** Horiba

**Required Total Purge Volume (gals.):** _____

**Total Volume Purged:** _____

**Begin Purge Time:** 1524 **End Purge Time:** 1539

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 17.40 | 8.17 | 17.10 | 402 | 24.5 | 0 | 20 | |
| 1 | 5 | 200 | 17.65 | 8.18 | 16.30 | 408 | 18.8 | 0 | 7 | |
| 2 | 10 | 200 | 17.70 | 8.20 | 16.30 | 414 | 13.9 | 0 | -3 | |
| 3 | 15 | 200 | 17.80 | 8.23 | 16.30 | 416 | 7.1 | 0 | -6 | |
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**SAMPLE COLLECTION DATA** Sampled by: CEL

**Sampling Method(s) & Equip:** Low Flow using QED Bladder Pumps

**Sample I.D. (Name, Date, Time):** MW5, 8/30/23, 1540

**Sample Analytical Parameters/Method:** (VOCs)Method 8260D

**QA/QC Sample I.D.:** _____

**Sample Start Time:** 1540 **End SampleTime:** 1542

**COMMENTS:**

**PID:** _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW-6

**Project No.:** _____ **Client:** NETL-Albany

**Project Name:** First SA ~~Wet~~ Season Event 2023 **Project Location:** Albany, OR

**Weather Conditions:** Dry Sunny **Sampling Date:** 8/30/23

**WATER LEVEL DATA (measured from top of inner well casing)**

**Depth to Water:** 20.40 (ft)

**Total Well Depth** ~~30.40~~ (ft)

**Length of Water Column** _____

**WELL PURGE DATA**

**Purge Method:** Dedicated Bladder Pump

**Field Testing Equipment:** Horiba

**Required Total Purge Volume (gals.):** _____

**Total Volume Purged:** _____

**Begin Purge Time:** 1437 **End Purge Time:** 1452

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| 2 | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 20.40 | 8.16 | 16.50 | 150 | 87.5 | 1.18 | 249 | ~~249~~ |
| 1 | 5 | 200 | 20.93 | 8.36 | 15.70 | 165 | 15.5 | 0 | 232 | |
| 2 | 10 | 200 | 20.90 | 8.40 | 15.70 | 170 | 13.4 | 0 | 228 | |
| 3 | 15 | 200 | 20.90 | 8.39 | 15.70 | 188 | 15.2 | 0.25 | 213 | |
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**SAMPLE COLLECTION DATA** Sampled by: CTL

**Sampling Method(s) & Equip:** Low Flow using QED Bladder Pumps

**Sample I.D. (Name, Date, Time):** MW6, 8/30/23, 1453

**Sample Analytical Parameters/Method:** (VOCs)Method 8260D

**QA/QC Sample I.D.:** _____

**Sample Start Time:** 1453 **End SampleTime:** 1455

**COMMENTS:**

~~PID:~~ _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW7

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Dry Season Event 2023 Project Location: Albany, OR

Weather Conditions: Sunny Sampling Date: 8/30/23

WATER LEVEL DATA (measured from top of inner well casing)

Depth to Water: 10.50 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

WELL PURGE DATA

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Horiba

Required Total Purge Volume (gals.): _____

Total Volume Purged: 952

Begin Purge Time: ~~0948~~ End Purge Time: 1017

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | 3.10 | | |
| 0 | 0 | 200 | 10.50 | 8.69 | 18.77 | 276 | 80.9 | ~~80.9~~ | 211 | |
| 1 | 5 | 200 | 10.98 | 8.75 | 17.58 | 276 | 10.4 | 1.59 | 230 | |
| 2 | 10 | 200 | 11.30 | 8.32 | 17.30 | 281 | 9.8 | 1.38 | 234 | |
| 3 | 15 | 200 | 11.40 | 8.05 | 17.20 | 283 | 7.5 | 1.29 | 240 | |
| 4 | 20 | 200 | 11.60 | 7.98 | 17.20 | 282 | 6.8 | 1.26 | 244 | |
| 5 | 25 | 200 | 11.70 | 7.95 | 17.20 | 284 | 9.2 | 1.26 | 246 | |
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SAMPLE COLLECTION DATA Sampled by: CEL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW7, 8/30/23, 1020

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1020 End SampleTime: 1022

COMMENTS:

~~PID:~~ _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: ~~MW8~~ MW8

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Overcast Sampling Date: 8/29/30

WATER LEVEL DATA (measured from top of inner well casing)

Depth to Water: 14.12 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

WELL PURGE DATA

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Aquareader

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1054 End Purge Time: 1114

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 14.12 | 6.29 | 15.50 | 424 | 30.0 | 4.32 | -555.2 | |
| 1 | 5 | 200 | 14.50 | 6.70 | 15.30 | 440 | 12.4 | 4.45 | -340.9 | |
| 2 | 10 | 200 | 14.10 | 6.71 | 15.30 | 444 | 10.8 | 6.80 | -347.2 | |
| 3 | 15 | 200 | 14.95 | 6.78 | 15.30 | 457 | 8.7 | 6.84 | -342.8 | |
| 4 | 20 | 200 | 15.15 | 6.79 | 15.20 | 457 | 10.7 | 6.77 | -349.2 | |
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SAMPLE COLLECTION DATA Sampled by: CTL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW8, 8/29/23, 1115

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1115 End SampleTime: 1117

COMMENTS:

~~PID:~~ _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW9 ~~MW-9~~

**Project No.:** _____ **Client:** NETL-Albany

**Project Name:** First SA Wet Season Event 2023 **Project Location:** Albany, OR

**Weather Conditions:** _____ **Sampling Date:** 8/29/23

**WATER LEVEL DATA (measured from top of inner well casing)**

**Depth to Water:** 15.17 (ft)

**Total Well Depth** _____ (ft)

**Length of Water Column** _____

**WELL PURGE DATA**

**Purge Method:** Dedicated Bladder Pump

**Field Testing Equipment:** Horiba

**Required Total Purge Volume (gals.):** _____

**Total Volume Purged:** _____

**Begin Purge Time:** ~~1500~~ 1510 **End Purge Time:** 1530

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| 2 | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | | 15.17 | 8.01 | 15.05 | 304 | 38.1 | 2.66 | 277 | |
| 1 | 5 | | 15.62 | 8.08 | 14.70 | 300 | 25.3 | 2.95 | 277 | |
| 2 | 10 | | 15.80 | 8.09 | 14.60 | 296 | 16.9 | 2.88 | 271 | |
| 3 | 15 | | 15.98 | 8.06 | 14.60 | 298 | 11.5 | 2.87 | 270 | |
| 4 | 20 | | ~~16.20~~ | 8.13 | 14.60 | 303 | 15.7 | 2.84 | 278 | |

**SAMPLE COLLECTION DATA**

Sampled by: CZL

**Sampling Method(s) & Equip:** Low Flow using QED Bladder Pumps

**Sample I.D. (Name, Date, Time):** MW-9, 8/29/23, 1532

**Sample Analytical Parameters/Method:** (VOCs)Method 8260D

**QA/QC Sample I.D.:**

**Sample Start Time:** 1532 **End SampleTime:** 1534

**COMMENTS:** ~~Dup 2 collected @~~

**PID:** _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW10

Project No.: _____ Client: NETL-Albany

Project Name: First SA Wet Season Event 2023 Project Location: Albany, OR

Weather Conditions: Overcast Sampling Date: 8/29/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 13.72 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Horiba

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1618 End Purge Time: 1633

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 160 | 13.72 | 8.60 | 15.31 | 163 | 91.3 | 0 | 278 | |
| 1 | 5 | 160 | 13.91 | 8.45 | 15.03 | 167 | 17.3 | 0 | 284 | |
| 2 | 10 | 160 | 14.10 | 8.40 | 14.93 | 169 | 16.8 | 0 | 280 | |
| 3 | 15 | 160 | 14.10 | 8.40 | 14.90 | 169 | 15.0 | 0 | 286 | |

**SAMPLE COLLECTION DATA**

Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW10, 8/29/23, 1635

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1635 End SampleTime: 1637

COMMENTS:

~~PID:~~ _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW-11

**Project No.:** _____ **Client:** NETL-Albany

**Project Name:** First SA ~~Wet~~ Season Event 2023 **Project Location:** Albany, OR

**Weather Conditions:** Dry Sunny **Sampling Date:** 8/30/23

**WATER LEVEL DATA (measured from top of inner well casing)**

**Depth to Water:** NA (ft)

**Total Well Depth** 15.35 (ft)

**Length of Water Column** _____

**WELL PURGE DATA**

**Purge Method:** Dedicated Bladder Pump

**Field Testing Equipment:** _____

**Required Total Purge Volume (gals.):** _____

**Total Volume Purged:** _____

**Begin Purge Time:** _____ **End Purge Time:** _____

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
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**SAMPLE COLLECTION DATA** Sampled by: _____

**Sampling Method(s) & Equip:** Low Flow using QED Bladder Pumps

**Sample I.D. (Name, Date, Time):** _____

**Sample Analytical Parameters/Method:** (VOCs)Method 8260D

**QA/QC Sample I.D.:** _____

**Sample Start Time:** _____ **End SampleTime:** _____

**COMMENTS:** Dry Well Neighboring well MW24 measured groundwater @ 20.90'

**PID:** _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW13

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Overcast Sampling Date: 8/28/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 15.10 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Aquareader

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1613 End Purge Time: 1628

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 15.45 | 9.76 | 20.18 | 524 | 29.8 | 3.64 | 27.4 | |
| 1 | 5 | 200 | 15.45 | 7.16 | 18.70 | 533 | 11.7 | 2.95 | 141.4 | |
| 2 | 10 | 200 | ~~15.45~~ 15.06 | 7.20 | 18.60 | 506 | 10.6 | 2.69 | 149.8 | DTW-15.06 |
| 3 | 15 | 200 | 15.05 | 7.21 | 18.60 | 508 | 10.2 | 2.66 | 144.4 | |

**SAMPLE COLLECTION DATA**

Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW13, 8/28/23, 1630

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1630 End SampleTime: 1632

COMMENTS:

PID: _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW14

Project No.: _____ Client: NETL-Albany

Project Name: First SA Wet Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Overcast Sampling Date: 8/29/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 17.65 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Aquareader

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1250 End Purge Time: 1310

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 17.65 | 6.78 | 20.00 | 363 | 37.8 | 7.07 | 87.0 | |
| 1 | 5 | 200 | 17.70 | 6.85 | 19.20 | 372 | 19.2 | 6.18 | 54.8 | |
| 2 | 10 | 200 | 17.65 | 6.82 | 18.70 | 373 | 9.4 | 6.03 | 52.5 | |
| 3 | 15 | 200 | 17.65 | 6.89 | 18.70 | 374 | 10.6 | 5.96 | 53.8 | |
| 4 | 20 | 200 | 17.65 | 6.86 | 18.70 | 372 | 9.7 | 5.98 | 56.2 | |
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**SAMPLE COLLECTION DATA** Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW14, 8/29/23, 1312

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: Dup 1

Sample Start Time: 1312 End SampleTime: 1314

COMMENTS: Dup 1 collected @ 1315 - 1317

~~PID~~: _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW 15

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Season Event 2023 Project Location: Albany, OR

Weather Conditions: ~~Dry~~ Overcast Sampling Date: 8/28/23

WATER LEVEL DATA (measured from top of inner well casing)

Depth to Water: 16.23 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

WELL PURGE DATA

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Aquareader

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: ~~1435~~ 1502 End Purge Time: 1517

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| ~~0~~ | ~~0~~ | | | | | | | | | |
| ~~1~~ | ~~5~~ | | | ~~16.25~~ | ~~17.90~~ | ~~880~~ | ~~19.7~~ | ~~5.89~~ | ~~-174.8~~ | |
| 0 | 0 | | 16.25 | 7.28 | 22.00 | 677 | 31.8 | 6.17 | 109.5 | |
| 1 | 5 | | 16.25 | ~~7.17~~ | 16.10 | 638 | 13.8 | 6.57 | 172.2 | pH=7.17 |
| 2 | 10 | | 16.25 | 7.19 | 16.10 | 633 | 12.5 | 6.65 | 166.1 | |
| 3 | 15 | | 16.25 | 7.46 | 16.10 | 659 | 11.2 | 6.70 | 145.8 | |

SAMPLE COLLECTION DATA Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW15, 8/28/23, 1519

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1519 End SampleTime: 1521

COMMENTS:

PID: ~

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW16

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Sunny Sampling Date: 8/30/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 13.40 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Horiba

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1048 End Purge Time: ~~1113~~ 1113

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 13.40 | 7.87 | 19.44 | 367 | 1000 | 1.39 | 270 | |
| 1 | 10 | 200 | 13.40 | 8.26 | 19.41 | 367 | 1000 | 0 | 250 | |
| 2 | 15 | 200 | 13.40 | 8.24 | 17.10 | 361 | 1000 | 0 | 251 | |
| 3 | 20 | 200 | 13.40 | 8.27 | 17.10 | 368 | ~~1000~~ | 0 | 246 | |
| 4 | 25 | 200 | 13.50 | 8.28 | 17.10 | 376 | 1000 | 0 | 238 | |
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**SAMPLE COLLECTION DATA**

Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW16, 8/30/23, 1115

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1115 End SampleTime: 1117

COMMENTS:

~~PID:~~

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW17

**Project No.:** _____ **Client:** NETL-Albany

**Project Name:** First SA ~~Wet~~ Season Event 2023 **Project Location:** Albany, OR

**Weather Conditions:** Dry, overcast **Sampling Date:** 8/28/23

**WATER LEVEL DATA (measured from top of inner well casing)**

**Depth to Water:** 12.07 (ft)

**Total Well Depth** _____ (ft)

**Length of Water Column** _____

**WELL PURGE DATA**

**Purge Method:** Dedicated Bladder Pump

**Field Testing Equipment:** Aquareader

**Required Total Purge Volume (gals.):** _____

**Total Volume Purged:** _____

**Begin Purge Time:** 1532 **End Purge Time:** 1542

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 12.07 | 10.06 | 18.70 | 747 | 27.1 | 5.62 | 91.0 | |
| 1 | 5 | 200 | 12.13 | 7.57 | 15.96 | 844 | 31.1 | 1.616 | 9.8 | |
| 2 | 10 | 200 | 12.10 | 7.61 | 15.78 | 841 | 10.8 | 1.46 | -62.2 | |
| 3 | 15 | 200 | 12.10 | 7.60 | 15.80 | 838 | 14.7 | 1.40 | -60.8 | |
| 4 | 20 | 200 | 12.10 | 7.60 | 15.80 | 849 | 10.5 | 1.43 | -61.3 | |
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**SAMPLE COLLECTION DATA**

Sampled by: CZL

**Sampling Method(s) & Equip:** Low Flow using QED Bladder Pumps

**Sample I.D. (Name, Date, Time):** MW17, 8/28/23, 1554

**Sample Analytical Parameters/Method:** (VOCs)Method 8260D

**QA/QC Sample I.D.:** _____

**Sample Start Time:** 1554 **End SampleTime:** 1556

**COMMENTS:**

~~PID:~~ _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW18

Project No.: _____ Client: NETL-Albany

Project Name: First SA Wet Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Overcast Sampling Date: 8/29/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 17.28 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Aquareader

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 0913 End Purge Time: ~~0933~~ 0928

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 17.28 | 7.26 | 20.05 | 877 | 26.1 | 7.31 | 190.6 | |
| 1 | 5 | 200 | 17.30 | 7.30 | 17.10 | 840 | 19.1 | 4.04 | 115.1 | |
| 2 | 10 | 200 | 17.30 | 7.33 | 17.10 | 842 | 14.2 | 3.94 | 118.4 | |
| 3 | 15 | 200 | 17.30 | 7.31 | 17.10 | 858 | 13.1 | 3.88 | 120.2 | |
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**SAMPLE COLLECTION DATA** Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW18, 8/29/23, 0929

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 0929 End SampleTime: 0931

COMMENTS:

~~PID:~~ _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: ~~MW19~~ MW19

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry overcast Sampling Date: 8/29/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 17.85 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Horiba

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1437 End Purge Time: 1457

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 17.85 | 11.81 | 24.01 | 219 | 6.6 | 3.89 | 40 | |
| 1 | 5 | 200 | 18.10 | 11.82 | 17.37 | 236 | 7.2 | 0 | 134 | |
| 2 | 10 | 200 | 18.30 | 11.20 | 15.59 | 223 | 8.2 | 0 | 186 | |
| 3 | 15 | 200 | 18.30 | 11.18 | 15.50 | 215 | 4.8 | 0 | 189 | |
| 4 | 20 | 200 | 18.30 | 11.14 | 15.50 | 211 | 2.4 | 0 | 206 | |

**SAMPLE COLLECTION DATA**

Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW19, 8/29/23, 1458

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.:

Sample Start Time: 1458 End SampleTime: ~~1455~~ 1500

COMMENTS: Dup 2 collected 1500-1502

PID: _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW20

Project No.: _____ Client: NETL-Albany

Project Name: First SA Wet Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Overcast Sampling Date: ~~8/29~~ 8/29/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 19.16 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Horiba

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1557 End Purge Time: 1612

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2") | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 160 | 19.16 | 8.46 | 19.13 | 327 | 16.8 | 6.21 | 259 | |
| 1 | 5 | 160 | 19.20 | 8.61 | 15.98 | 398 | 17.6 | 0 | 263 | |
| 2 | 10 | 160 | 19.25 | 8.69 | 15.77 | 390 | 10.9 | 0 | 263 | |
| 3 | 15 | 160 | 19.20 | 8.66 | 15.71 | 390 | 11.1 | 0 | 264 | |

**SAMPLE COLLECTION DATA**

Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW20, 8/29/23, 1614

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1614 End SampleTime: 1616

COMMENTS:

PID: ✓

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW21

Project No.: _____ Client: NETL-Albany

Project Name: First SA Wet Season Event 2023 Project Location: Albany, OR

Weather Conditions: Sunny Sampling Date: 8/30/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 13.15 (ft)

Total Well Depth 25.90 (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: ~~_____~~

Required Total Purge Volume (gals.): ~~_____~~

Total Volume Purged: ~~_____~~

Begin Purge Time: ~~_____~~ End Purge Time: ~~_____~~

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |

**SAMPLE COLLECTION DATA**

Sampled by: ~~_____~~

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): ~~_____~~

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.:

Sample Start Time: ~~_____~~ End SampleTime: ~~_____~~

COMMENTS: Gauge Only

PID: ~~_____~~

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW22

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Sunny Sampling Date: 8/30/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 13.46 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Horiba

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1250 End Purge Time: 1310

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 13.50 | 8.25 | 16.75 | 339 | 66.3 | 0 | 173 | |
| 1 | 5 | 200 | 13.50 | 8.15 | 15.30 | 334 | 12.9 | 0 | 108 | |
| 2 | 10 | 200 | 13.50 | 8.13 | 15.30 | 326 | 7.8 | 0 | 101 | |
| 3 | 15 | 200 | 13.50 | 8.12 | 15.30 | 316 | 5.4 | 0 | 107 | |
| 4 | 20 | 200 | 13.50 | 8.09 | 15.30 | 317 | 7.4 | 0 | 110 | |

**SAMPLE COLLECTION DATA**

Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW22, 8/30/23, 1312

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1312 End SampleTime: 1314

COMMENTS:

~~PID:~~ _____

GROUNDWATER SAMPLE COLLECTION RECORD

GROUNDWATER SAMPLE COLLECTION RECORD WELL NO.: MW23

Project No.: Client: NETL-Albany

Project Name: First SA ~~Wet~~ Season Event 2023 Project Location: Albany, OR

Weather Conditions: ~~Dry~~ Sunny Sampling Date: ~~MW23~~ 8/30/23

WATER LEVEL DATA (measured from top of inner well casing)

Depth to Water: 21.28 (ft)

Total Well Depth (ft)

Length of Water Column

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

WELL PURGE DATA

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Horiba

Required Total Purge Volume (gals.):

Total Volume Purged:

Begin Purge Time: 1145 End Purge Time: 1210

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 21.28 | 8.37 | 21.30 | 288 | 54.8 | 7.59 | 252 | |
| 1 | 5 | 200 | 21.30 | 8.05 | 20.30 | 294 | 12.4 | 5.54 | 273 | |
| 2 | 10 | 200 | 21.30 | 8.10 | 19.80 | 300 | 14.3 | 5.43 | 274 | |
| 3 | 15 | 200 | 21.30 | 8.15 | 19.80 | 303 | 9.1 | 5.52 | 268 | |
| 4 | 20 | 200 | 21.30 | 8.18 | 19.80 | 304 | 9.9 | 5.50 | 258 | |
| 5 | 25 | 200 | 21.30 | 8.20 | 19.80 | 305 | 9.3 | 5.49 | 261 | |

SAMPLE COLLECTION DATA Sampled by: CLL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW23, 8/30/23, 1212

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.:

Sample Start Time: 1212 End SampleTime: 1214

COMMENTS:

PID:

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW24

Project No.: _____ Client: NETL-Albany

Project Name: First SA Wet Season Event 2023 Project Location: Albany, OR

Weather Conditions: DRY Sampling Date: 8/30/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 20.90 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Horiba

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1405 End Purge Time: 1420

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 20.90 | 8.37 | 18.13 | 354 | 38.9 | 2.64 | 221 | |
| 1 | 5 | 200 | 20.90 | 8.38 | 16.50 | 361 | 16.2 | 0 | 219 | |
| 2 | 10 | 200 | 20.90 | 8.35 | 16.50 | 362 | 17.0 | 0 | 219 | |
| 3 | 15 | 200 | 20.90 | 8.32 | 16.50 | 363 | 11.6 | 0 | 215 | |
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**SAMPLE COLLECTION DATA** Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW24, 8/30/23, 1422

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1422 End SampleTime: 1424

COMMENTS:

~~PID:~~

WE2 8(a) JV, LLC

# GROUNDWATER SAMPLE COLLECTION RECORD

**WELL NO.:** MW25

**Project No.:** _____ **Client:** NETL-Albany

**Project Name:** First SA ~~Wet~~ Season Event 2023 **Project Location:** Albany, OR

**Weather Conditions:** Dry overcast **Sampling Date:** 8/29/23

**WATER LEVEL DATA (measured from top of inner well casing)**

**Depth to Water:** 14.80 (ft)

**Total Well Depth** _____ (ft)

**Length of Water Column** _____

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

**WELL PURGE DATA**

**Purge Method:** Dedicated Bladder Pump

**Field Testing Equipment:** Aquareader

**Required Total Purge Volume (gals.):** _____

**Total Volume Purged:** _____

**Begin Purge Time:** 1027 **End Purge Time:** 1042

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 14.80 | 6.64 | 15.73 | 435 | 50.0 | 4.37 | -108.5 | |
| 1 | 5 | 200 | 15.30 | 6.74 | 14.80 | 436 | 20.2 | 2.83 | -137.4 | |
| 2 | 10 | 200 | 15.32 | 6.81 | 14.80 | 442 | 10.4 | 2.78 | -228 | |
| 3 | 15 | 200 | 15.40 | ~~6.80~~ | 14.50 | 437 | 8.9 | 2.79 | -226.4 | pH: 6.86 |
| 4 | 20 | 200 | 15.45 | 6.87 | 14.50 | 448 | 8.6 | 2.71 | -228.3 | |

**SAMPLE COLLECTION DATA**

Sampled by: CZL

**Sampling Method(s) & Equip:** Low Flow using QED Bladder Pumps

**Sample I.D. (Name, Date, Time):** MW25, 8/29/23, 1044

**Sample Analytical Parameters/Method:** (VOCs)Method 8260D

**QA/QC Sample I.D.:** _____

**Sample Start Time:** 1044 **End SampleTime:** 1046

**COMMENTS:**

~~PID:~~ _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW26

Project No.: _____ Client: NETL-Albany

Project Name: First SA Wet Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry overcast Sampling Date: 8/29/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 13.62 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| 2 | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Aqua reader

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1212 End Purge Time: 1232

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 13.62 | 6.31 | 16.80 | 489 | 234 | 1.78 | -10.8 | |
| 1 | 5 | 200 | 15.65 | 7.00 | 16.80 | 484 | 16.2 | 0.98 | 29.4 | |
| 2 | 10 | 200 | 16.40 | 7.00 | 16.30 | 486 | 13.7 | 0.72 | 26.8 | |
| 3 | 15 | 200 | 17.10 | 7.07 | 16.30 | 499 | 10.0 | 0.70 | 27.4 | |
| 4 | 20 | 200 | 17.37 | 7.07 | 16.30 | 506 | 9.7 | 0.70 | 29.6 | DTW 17.7 |

**SAMPLE COLLECTION DATA**

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps Sampled by: CJL

Sample I.D. (Name, Date, Time): MW26, 8/29/23, 1235

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1235 End SampleTime: 1237

COMMENTS:

PID: _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW27

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Overcast Sampling Date: 8/28/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 14.35 (ft)

Total Well Depth ~~14.35~~ 14.50 (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Aquaread-er

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1423 End Purge Time: _____

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | | | 9.80 | 21.60 | 0 | 44.0 | 8.36 | -45.8 | |
| 1 | | | | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |

**SAMPLE COLLECTION DATA**

Sampled by: _____

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): _____

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: _____ End SampleTime: _____

COMMENTS: Dry Well - Depth to ~~bottom~~ approx 14.50 feet ~~bgs~~ below ground surface

~~PID:~~ _____

WE2 8(a) JV, LLC

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW28

Project No.: _____ Client: NETL-Albany

Project Name: First SA Wet Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry overcast Sampling Date: 8/29/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 6.50 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| 2 | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Aquareader

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 0936 End Purge Time: 0946

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 6.50 | 7.28 | 18.90 | 283 | 26.5 | 5.75 | -142.3 | |
| 1 | 5 | 200 | 8.00 | 7.30 | 20.10 | 284 | 16.4 | 5.98 | -263.4 | |
| 2 | 10 | 200 | 8.00 | 7.30 | 20.00 | 312 | 13.3 | 4.82 | -298.4 | |
| 3 | 15 | 200 | 8.00 | 7.31 | 20.00 | 318 | 13.1 | 4.80 | -302.8 | |
| 4 | 20 | 200 | 8.77 | 7.31 | 20.00 | 329 | 13.0 | 4.71 | -305.9 | |

Sampled by: CZL

**SAMPLE COLLECTION DATA**

Sampling Method(s) & Equip: ~~Low Flow using QED Bladder Pumps~~ Low Flow using BP

Sample I.D. (Name, Date, Time): MW28, 8/29/23, 0948

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 0948 End SampleTime: 0950

COMMENTS:

PID: _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW29

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Overcast Sampling Date: 8/28/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 11.55 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Aqua reader

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1340 End Purge Time: ~~1408~~ 1405

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| 2 | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 11.60 | 7.69 | 20.65 | 1095 | 40.2 | 6.92 | 18.2 | |
| 1 | 5 | 200 | 12.36 | 7.70 | 18.60 | 1304 | 12.3 | 4.94 | -90.1 | |
| 2 | 10 | 200 | 13.00 | 8.93 | 17.90 | 1308 | 15.8 | 2.28 | -173.4 | |
| 3 | 15 | 200 | 13.10 | 9.51 | 17.80 | 1305 | 15.2 | 1.81 | -200.0 | |
| 4 | 20 | 200 | 13.20 | 9.56 | 17.70 | 1295 | 13.4 | 1.80 | -202.8 | |
| 5 | 25 | 200 | 13.25 | 9.59 | 17.70 | 1288 | 11.8 | 1.74 | -203.2 | |
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**SAMPLE COLLECTION DATA**

Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW29, 8/28/23, 1406

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1406 End SampleTime: 1408

COMMENTS:

~~PID:~~

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW30

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Sunny Sampling Date: 8/30/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 18.47 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Horiba

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1455 End Purge Time: 1510

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 18.47 | 7.97 | 18.60 | 327 | 38.6 | 0.57 | 168 | |
| 1 | 5 | 200 | 19.20 | 7.97 | 19.00 | 332 | 13.4 | 0 | 57 | |
| 2 | 10 | 200 | 19.35 | 8.05 | 19.30 | 334 | 9.1 | 0 | 49 | |
| 3 | 15 | 200 | 19.35 | 8.06 | 19.30 | 333 | 7.3 | 0 | 51 | |

**SAMPLE COLLECTION DATA**

Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW30, 8/30/23, 1511

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1511 End SampleTime: 1513

COMMENTS:

~~PID:~~ _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW31

Project No.: _____ Client: NETL-Albany

Project Name: First SA Wet Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Sunny Sampling Date: 8/30/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 16.55 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Horiba

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1545 End Purge Time: 1600

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 16.55 | 8.55 | 16.70 | 430 | 288 | 1.01 | 0 | |
| 1 | 5 | 200 | ~~16.90~~ | 8.30 | 15.80 | 436 | 18.2 | 0 | -18 | DTW 16.65 |
| 2 | 10 | 200 | 16.70 | 8.32 | 15.80 | 436 | 12.8 | 0 | -24 | |
| 3 | 15 | 200 | 16.70 | 8.33 | 15.80 | 436 | 10.3 | 0 | -25 | |

**SAMPLE COLLECTION DATA**

Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW31, 8/30/23 1602

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: ~~18~~ 1602 End SampleTime: 1604

COMMENTS:

~~PID:~~ _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW 100

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Overcast Sampling Date: 8/29/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 11.57 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Horiba

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1740 End Purge Time: 1755

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 11.57 | 8.30 | 16.90 | 600 | 498 | 4.18 | 297 | |
| 1 | 5 | 200 | 11.57 | 8.70 | 15.91 | 610 | 19.8 | 0 | 280 | |
| 2 | 10 | 200 | 11.60 | 8.67 | 15.87 | 612 | 13.4 | 0 | 277 | |
| 3 | 15 | 200 | 11.60 | 8.65 | 15.88 | 616 | 9.3 | 0 | 275 | |

**SAMPLE COLLECTION DATA** Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW100, 8/29/23, 1756

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1756 End SampleTime: 1758

COMMENTS:

~~PID:~~ _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW101

Project No.: _____ Client: NETL-Albany

Project Name: First SA Wet Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Overcast Sampling Date: 8/29/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 11.90 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Horiba

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1700 End Purge Time: 1726

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 11.90 | 8.04 | 19.38 | 373 | 332 | 5.28 | 297 | |
| 1 | 5 | 200 | 11.90 | 8.09 | 18.88 | 371 | 110 | 4.74 | 308 | |
| 2 | 10 | 200 | 11.98 | 8.16D | 17.84 | 368 | 11.8 | 3.41 | 296 | |
| 3 | 15 | 200 | 12.00 | 8.68 | 17.83 | 370 | 16.4 | 3.38 | 291 | |
| 4 | 20 | 200 | 12.00 | 8.64 | 17.83 | 371 | 10.6 | 3.39 | 298 | |

**SAMPLE COLLECTION DATA**

Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW101, 8/29/23, 1722

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1722 End SampleTime: 1724

COMMENTS:

PID: _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW102

Project No.: _____ Client: NETL-Albany

Project Name: First SA Wet Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Overcast Sampling Date: 8/29/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 10.78 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Horiba

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1808 End Purge Time: 1823

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| 2 | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

PURGING VALUES

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 200 | 10.78 | 8.76 | 17.66 | 489 | 88.2 | 2.80 | 273 | |
| 1 | 5 | 200 | 10.80 | 8.50 | 16.00 | 373 | 13.2 | 0 | 285 | |
| 2 | 10 | 200 | 10.80 | 8.47 | 16.00 | 338 | 11.8 | 0 | 280 | |
| 3 | 15 | 200 | 10.80 | 8.42 | 16.00 | 317 | 10.4 | 0 | 286 | |
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**SAMPLE COLLECTION DATA**

Sampled by: CZL

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW102, 8/29/23, 1825

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.:

Sample Start Time: 1825 End SampleTime: 1827

COMMENTS:

PID: _____

# GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MW103

Project No.: _____ Client: NETL-Albany

Project Name: First SA ~~Wet~~ Season Event 2023 Project Location: Albany, OR

Weather Conditions: Dry Overcast Sampling Date: 8/29/23

**WATER LEVEL DATA (measured from top of inner well casing)**

Depth to Water: 9.50 (ft)

Total Well Depth _____ (ft)

Length of Water Column _____

**WELL PURGE DATA**

Purge Method: Dedicated Bladder Pump

Field Testing Equipment: Horiba

Required Total Purge Volume (gals.): _____

Total Volume Purged: _____

Begin Purge Time: 1842 End Purge Time: 1902

| Conversion Factors | |
|---|---|
| Well I.D. | Conv. Fact. (cf) |
| 1 | 0.041 |
| (2) | 0.163 |
| 4 | 0.653 |
| 6 | 1.470 |

| Read No. | Lapse Time (min.) | Purge Rate (mls/min) | DTW (ft.) | pH (s.u.) (±.1S.U.) | Temp. (s.u.) (°C) | Conductivity (us/cm) (±3%) | Turbidity (NTU's) | D.O (mg/L) (± > 10%) | ORP (mV) (± 10 mV) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| PURGING VALUES | | | | | | | | | | |
| 0 | 0 | 200 | 9.50 | 8.95 | 19.04 | 370 | 23.2 | 1.36 | 258 | |
| 1 | 5 | 200 | 9.50 | 8.32 | 19.10 | 386 | 18.2 | 0 | 295 | |
| 2 | 10 | 200 | 9.50 | 8.31 | 19.20 | 388 | 9.8 | 0 | 297 | |
| 3 | 15 | 200 | 9.50 | 8.26 | 19.20 | 368 | 8.2 | 0 | 296 | |
| 4 | 20 | 200 | 9.50 | 8.24 | 19.20 | 365 | 8.0 | 0 | 295 | |
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**SAMPLE COLLECTION DATA** Sampled by: _____

Sampling Method(s) & Equip: Low Flow using QED Bladder Pumps

Sample I.D. (Name, Date, Time): MW103, 8/29/23, 1905

Sample Analytical Parameters/Method: (VOCs)Method 8260D

QA/QC Sample I.D.: _____

Sample Start Time: 1905 End SampleTime: 1907

COMMENTS:

~~PID:~~ _____

# Appendix B. EuroFins Laboratories Analytical Reports

eurofins | Environment Testing



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Mark Thomas
WE2 Support Services
1450 Queen Avenue SW
Albany, Oregon 97321

Generated 9/18/2023 10:11:50 AM

## JOB DESCRIPTION

Dept of Energy- NETL - Albany, OR

## JOB NUMBER

180-161792-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.



my EOL

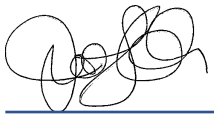
## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

## Authorization



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Authorized for release by
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## Job ID: 180-161792-1

### Laboratory: Eurofins Pittsburgh

**Narrative**

**Job Narrative**
**180-161792-1**

**Receipt**
The samples were received on 9/1/2023 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.1º C.

The laboratory received three TRIP BLANKS that were not listed on the chains of custody. These samples were logged in.

The laboratory received 5 vials for in the bubble bag for sample MW101. Two of the vials were not labeled. These vials were logged in and marked as "do not use".

**GC/MS VOA**
Due to the concentration of target compounds detected, samples MW18 (180-161792-14), MW20 (180-161792-16) and MW24 (180-161792-18) were analyzed at a dilution. Elevated reporting limits (RLs) are provided.

The continuing calibration verification (CCV) analyzed in 180-445424 was outside the method criteria for the following analyte(s): Bromoform (HIGH). As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-445424 was outside the method criteria for the following analyte(s): 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, Naphthalene, n-Butylbenzene and tert-Butylbenzene (LOW). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in 180-445743 was outside high for the method criteria for the following analyte(s): 2,2-Dichloropropane and 1,2-Dibromo-3-Chloropropane.. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-445743 was outside low for the method criteria for the following analyte(s): Dichloro-difluoromethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-445879 was outside low for the method criteria for the following analyte(s): 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,2,3-Trichlorobenzene, 1,3-Dichloropropane, Dichloro-difluoromethane and Tetrachloroethene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

# Definitions/Glossary

Client: WE2 Support Services
Job ID: 180-161792-1
Project/Site: Dept of Energy- NETL - Albany, OR

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# Accreditation/Certification Summary

Client: WE2 Support Services
Job ID: 180-161792-1
Project/Site: Dept of Energy- NETL - Albany, OR

## Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Oregon | NELAP | PA-2151 | 02-06-24 |

# Sample Summary

Client: WE2 Support Services
Job ID: 180-161792-1
Project/Site: Dept of Energy- NETL - Albany, OR

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 180-161792-1 | MW3 | Water | 08/29/23 11:50 | 09/01/23 09:30 |
| 180-161792-2 | MW4 | Water | 08/28/23 13:26 | 09/01/23 09:30 |
| 180-161792-3 | MW5 | Water | 08/30/23 15:40 | 09/01/23 09:30 |
| 180-161792-4 | MW6 | Water | 08/30/23 14:53 | 09/01/23 09:30 |
| 180-161792-5 | MW7 | Water | 08/30/23 10:20 | 09/01/23 09:30 |
| 180-161792-6 | MW8 | Water | 08/29/23 11:15 | 09/01/23 09:30 |
| 180-161792-7 | MW9 | Water | 08/29/23 15:32 | 09/01/23 09:30 |
| 180-161792-8 | MW10 | Water | 08/29/23 16:35 | 09/01/23 09:30 |
| 180-161792-9 | MW13 | Water | 08/28/23 16:30 | 09/01/23 09:30 |
| 180-161792-10 | MW14 | Water | 08/29/23 13:12 | 09/01/23 09:30 |
| 180-161792-11 | MW15 | Water | 08/28/23 15:19 | 09/01/23 09:30 |
| 180-161792-12 | MW16 | Water | 08/30/23 11:15 | 09/01/23 09:30 |
| 180-161792-13 | MW17 | Water | 08/28/23 15:54 | 09/01/23 09:30 |
| 180-161792-14 | MW18 | Water | 08/29/23 09:29 | 09/01/23 09:30 |
| 180-161792-15 | MW19 | Water | 08/29/23 14:58 | 09/01/23 09:30 |
| 180-161792-16 | MW20 | Water | 08/29/23 16:14 | 09/01/23 09:30 |
| 180-161792-17 | MW23 | Water | 08/30/23 12:12 | 09/01/23 09:30 |
| 180-161792-18 | MW24 | Water | 08/30/23 14:22 | 09/01/23 09:30 |
| 180-161792-19 | MW25 | Water | 08/29/23 10:44 | 09/01/23 09:30 |
| 180-161792-20 | MW26 | Water | 08/29/23 12:35 | 09/01/23 09:30 |
| 180-161792-21 | MW28 | Water | 08/29/23 09:48 | 09/01/23 09:30 |
| 180-161792-22 | MW29 | Water | 08/28/23 14:06 | 09/01/23 09:30 |
| 180-161792-23 | MW30 | Water | 08/30/23 15:11 | 09/01/23 09:30 |
| 180-161792-24 | MW31 | Water | 08/30/23 16:02 | 09/01/23 09:30 |
| 180-161792-25 | MW100 | Water | 08/29/23 17:56 | 09/01/23 09:30 |
| 180-161792-26 | MW101 | Water | 08/29/23 17:22 | 09/01/23 09:30 |
| 180-161792-27 | MW102 | Water | 08/29/23 18:25 | 09/01/23 09:30 |
| 180-161792-28 | MW103 | Water | 08/29/23 19:05 | 09/01/23 09:30 |
| 180-161792-29 | DUP1 | Water | 08/29/23 13:15 | 09/01/23 09:30 |
| 180-161792-30 | DUP2 | Water | 08/29/23 15:00 | 09/01/23 09:30 |
| 180-161792-31 | MW22 | Water | 08/30/23 13:12 | 09/01/23 09:30 |
| 180-161792-32 | TRIP BLANK | Water | 08/30/23 00:00 | 09/01/23 09:30 |
| 180-161792-33 | TRIP BLANK | Water | 08/30/23 00:00 | 09/01/23 09:30 |
| 180-161792-34 | TRIP BLANK | Water | 08/30/23 00:00 | 09/01/23 09:30 |

# Method Summary

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| EPA 8260D | Volatile Organic Compounds by GC/MS | SW846 | EET PIT |
| 5030C | Purge and Trap | SW846 | EET PIT |

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

# Lab Chronicle

Client: WE2 Support Services
Job ID: 180-161792-1
Project/Site: Dept of Energy- NETL - Albany, OR

## Client Sample ID: MW3
**Lab Sample ID: 180-161792-1**
**Date Collected: 08/29/23 11:50**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/02/23 20:28 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW4
**Lab Sample ID: 180-161792-2**
**Date Collected: 08/28/23 13:26**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/02/23 20:49 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW5
**Lab Sample ID: 180-161792-3**
**Date Collected: 08/30/23 15:40**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/02/23 21:10 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW6
**Lab Sample ID: 180-161792-4**
**Date Collected: 08/30/23 14:53**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/02/23 21:30 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW7
**Lab Sample ID: 180-161792-5**
**Date Collected: 08/30/23 10:20**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/02/23 21:51 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW8
**Lab Sample ID: 180-161792-6**
**Date Collected: 08/29/23 11:15**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/02/23 22:12 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

# Lab Chronicle

Client: WE2 Support Services
Job ID: 180-161792-1
Project/Site: Dept of Energy- NETL - Albany, OR

## Client Sample ID: MW9
**Lab Sample ID: 180-161792-7**
**Date Collected: 08/29/23 15:32**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/02/23 22:33 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW10
**Lab Sample ID: 180-161792-8**
**Date Collected: 08/29/23 16:35**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/02/23 22:53 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW13
**Lab Sample ID: 180-161792-9**
**Date Collected: 08/28/23 16:30**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/02/23 23:14 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW14
**Lab Sample ID: 180-161792-10**
**Date Collected: 08/29/23 13:12**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/02/23 23:35 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW15
**Lab Sample ID: 180-161792-11**
**Date Collected: 08/28/23 15:19**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/02/23 23:56 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW16
**Lab Sample ID: 180-161792-12**
**Date Collected: 08/30/23 11:15**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/03/23 00:17 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

# Lab Chronicle

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

## Client Sample ID: MW17
**Date Collected: 08/28/23 15:54**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-13
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/03/23 00:38 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW18
**Date Collected: 08/29/23 09:29**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-14
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/03/23 00:59 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |
| Total/NA | Analysis | EPA 8260D | DL | 5 | 5 mL | 5 mL | 445743 | 09/07/23 16:21 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW19
**Date Collected: 08/29/23 14:58**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-15
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/03/23 01:19 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW20
**Date Collected: 08/29/23 16:14**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-16
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 100 | 5 mL | 5 mL | 445743 | 09/07/23 15:59 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW23
**Date Collected: 08/30/23 12:12**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-17
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445743 | 09/07/23 14:56 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW24
**Date Collected: 08/30/23 14:22**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-18
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 10 | 5 mL | 5 mL | 445743 | 09/07/23 15:17 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

# Lab Chronicle

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

## Client Sample ID: MW25
**Date Collected: 08/29/23 10:44**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-19
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445743 | 09/07/23 15:38 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW26
**Date Collected: 08/29/23 12:35**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-20
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445424 | 09/02/23 18:03 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW28
**Date Collected: 08/29/23 09:48**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-21
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445743 | 09/07/23 14:34 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW29
**Date Collected: 08/28/23 14:06**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-22
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445879 | 09/08/23 14:08 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW30
**Date Collected: 08/30/23 15:11**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-23
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445879 | 09/08/23 14:30 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW31
**Date Collected: 08/30/23 16:02**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-24
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445879 | 09/08/23 19:03 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

# Lab Chronicle

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

## Client Sample ID: MW100
**Date Collected: 08/29/23 17:56**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-25
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445879 | 09/08/23 15:54 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW101
**Date Collected: 08/29/23 17:22**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-26
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445879 | 09/08/23 16:15 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW102
**Date Collected: 08/29/23 18:25**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-27
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445879 | 09/08/23 16:36 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: MW103
**Date Collected: 08/29/23 19:05**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-28
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445879 | 09/08/23 16:57 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: DUP1
**Date Collected: 08/29/23 13:15**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-29
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445879 | 09/08/23 17:19 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: DUP2
**Date Collected: 08/29/23 15:00**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-30
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445879 | 09/08/23 18:01 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

# Lab Chronicle

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

## Client Sample ID: MW22
**Date Collected: 08/30/23 13:12**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-31
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445879 | 09/08/23 17:40 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: TRIP BLANK
**Date Collected: 08/30/23 00:00**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-32
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445879 | 09/08/23 13:05 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: TRIP BLANK
**Date Collected: 08/30/23 00:00**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-33
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445879 | 09/08/23 13:26 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

## Client Sample ID: TRIP BLANK
**Date Collected: 08/30/23 00:00**
**Date Received: 09/01/23 09:30**

## Lab Sample ID: 180-161792-34
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | EPA 8260D | | 1 | 5 mL | 5 mL | 445879 | 09/08/23 13:47 | PJJ | EET PIT |
| | Instrument ID: CHHP11 | | | | | | | | | |

**Laboratory References:**

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

**Analyst References:**

Lab: EET PIT

Batch Type: Analysis

PJJ = Patrick Journet

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW3**
**Date Collected: 08/29/23 11:50**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-1**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 20:28 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 20:28 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 20:28 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 20:28 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 20:28 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/02/23 20:28 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 20:28 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 20:28 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 20:28 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 20:28 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/02/23 20:28 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 20:28 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 20:28 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 20:28 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 20:28 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 20:28 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 20:28 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/02/23 20:28 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 20:28 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 20:28 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 20:28 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 20:28 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 20:28 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 20:28 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 20:28 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 20:28 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:28 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 20:28 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:28 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/02/23 20:28 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/02/23 20:28 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/02/23 20:28 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:28 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/02/23 20:28 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:28 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:28 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/02/23 20:28 | 1 |

## Client Sample ID: MW3

**Date Collected: 08/29/23 11:50**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-1**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 20:28 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/02/23 20:28 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 20:28 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/02/23 20:28 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *84* | | *53 - 124* | | *09/02/23 20:28* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *70* | | *52 - 151* | | *09/02/23 20:28* | *1* |
| *4-Bromofluorobenzene (Surr)* | *61* | | *49 - 118* | | *09/02/23 20:28* | *1* |
| *Dibromofluoromethane (Surr)* | *102* | | *60 - 132* | | *09/02/23 20:28* | *1* |

## Client Sample ID: MW4

**Date Collected: 08/28/23 13:26**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-2**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 20:49 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 20:49 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 20:49 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 20:49 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 20:49 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/02/23 20:49 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 20:49 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 20:49 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 20:49 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 20:49 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/02/23 20:49 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 20:49 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 20:49 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 20:49 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 20:49 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 20:49 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 20:49 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/02/23 20:49 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 20:49 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 20:49 | 1 |

## Client Sample ID: MW4
**Lab Sample ID: 180-161792-2**
**Date Collected: 08/28/23 13:26**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 20:49 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 20:49 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 20:49 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 20:49 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 20:49 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 20:49 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:49 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 20:49 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:49 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/02/23 20:49 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/02/23 20:49 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/02/23 20:49 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:49 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/02/23 20:49 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:49 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:49 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/02/23 20:49 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 20:49 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/02/23 20:49 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 20:49 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/02/23 20:49 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 20:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *85* | | *53 - 124* | | *09/02/23 20:49* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *70* | | *52 - 151* | | *09/02/23 20:49* | *1* |
| *4-Bromofluorobenzene (Surr)* | *59* | | *49 - 118* | | *09/02/23 20:49* | *1* |
| *Dibromofluoromethane (Surr)* | *100* | | *60 - 132* | | *09/02/23 20:49* | *1* |

## Client Sample ID: MW5
**Lab Sample ID: 180-161792-3**
**Date Collected: 08/30/23 15:40**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 21:10 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 21:10 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 21:10 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW5**
**Date Collected: 08/30/23 15:40**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-3**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 21:10 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 21:10 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/02/23 21:10 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 21:10 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:10 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 21:10 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 21:10 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/02/23 21:10 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 21:10 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:10 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 21:10 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 21:10 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 21:10 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 21:10 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/02/23 21:10 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:10 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 21:10 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 21:10 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 21:10 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 21:10 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 21:10 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 21:10 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 21:10 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:10 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 21:10 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:10 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/02/23 21:10 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/02/23 21:10 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/02/23 21:10 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:10 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/02/23 21:10 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:10 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:10 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/02/23 21:10 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 21:10 | 1 |

## Client Sample ID: MW5
**Lab Sample ID: 180-161792-3**
**Date Collected: 08/30/23 15:40**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/02/23 21:10 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 21:10 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/02/23 21:10 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *89* | | *53 - 124* | | *09/02/23 21:10* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *73* | | *52 - 151* | | *09/02/23 21:10* | *1* |
| *4-Bromofluorobenzene (Surr)* | *64* | | *49 - 118* | | *09/02/23 21:10* | *1* |
| *Dibromofluoromethane (Surr)* | *110* | | *60 - 132* | | *09/02/23 21:10* | *1* |

## Client Sample ID: MW6
**Lab Sample ID: 180-161792-4**
**Date Collected: 08/30/23 14:53**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 21:30 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 21:30 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 21:30 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 21:30 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 21:30 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/02/23 21:30 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 21:30 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:30 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 21:30 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 21:30 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/02/23 21:30 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 21:30 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:30 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 21:30 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 21:30 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 21:30 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 21:30 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/02/23 21:30 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:30 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 21:30 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 21:30 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 21:30 | 1 |

## Client Sample ID: MW6
**Lab Sample ID: 180-161792-4**
**Date Collected: 08/30/23 14:53**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 21:30 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 21:30 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 21:30 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 21:30 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 21:30 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:30 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 21:30 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:30 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/02/23 21:30 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/02/23 21:30 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/02/23 21:30 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:30 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/02/23 21:30 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:30 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:30 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/02/23 21:30 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 21:30 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/02/23 21:30 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 21:30 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/02/23 21:30 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:30 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *80* | | *53 - 124* | | *09/02/23 21:30* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *77* | | *52 - 151* | | *09/02/23 21:30* | *1* |
| *4-Bromofluorobenzene (Surr)* | *63* | | *49 - 118* | | *09/02/23 21:30* | *1* |
| *Dibromofluoromethane (Surr)* | *102* | | *60 - 132* | | *09/02/23 21:30* | *1* |

## Client Sample ID: MW7
**Lab Sample ID: 180-161792-5**
**Date Collected: 08/30/23 10:20**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 21:51 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 21:51 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 21:51 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 21:51 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 21:51 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 21:51 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW7**
**Date Collected: 08/30/23 10:20**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-5**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/02/23 21:51 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 21:51 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:51 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 21:51 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 21:51 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/02/23 21:51 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 21:51 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:51 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 21:51 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 21:51 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 21:51 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 21:51 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/02/23 21:51 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:51 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 21:51 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 21:51 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 21:51 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 21:51 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 21:51 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 21:51 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 21:51 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:51 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 21:51 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:51 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/02/23 21:51 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/02/23 21:51 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/02/23 21:51 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:51 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/02/23 21:51 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:51 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:51 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/02/23 21:51 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 21:51 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 21:51 | 1 |

## Client Sample ID: MW7
**Lab Sample ID: 180-161792-5**

**Date Collected: 08/30/23 10:20**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/02/23 21:51 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 21:51 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/02/23 21:51 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 21:51 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *82* | | *53 - 124* | | *09/02/23 21:51* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *86* | | *52 - 151* | | *09/02/23 21:51* | *1* |
| *4-Bromofluorobenzene (Surr)* | *67* | | *49 - 118* | | *09/02/23 21:51* | *1* |
| *Dibromofluoromethane (Surr)* | *107* | | *60 - 132* | | *09/02/23 21:51* | *1* |

## Client Sample ID: MW8
**Lab Sample ID: 180-161792-6**

**Date Collected: 08/29/23 11:15**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 22:12 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 22:12 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 22:12 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 22:12 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 22:12 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/02/23 22:12 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 22:12 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:12 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 22:12 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 22:12 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/02/23 22:12 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 22:12 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:12 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 22:12 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 22:12 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 22:12 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 22:12 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/02/23 22:12 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:12 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 22:12 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 22:12 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 22:12 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 22:12 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 22:12 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

## Client Sample ID: MW8

**Date Collected: 08/29/23 11:15**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-6**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 22:12 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 22:12 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:12 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 22:12 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:12 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/02/23 22:12 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/02/23 22:12 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/02/23 22:12 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:12 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/02/23 22:12 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:12 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:12 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/02/23 22:12 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 22:12 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/02/23 22:12 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 22:12 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/02/23 22:12 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *83* | | *53 - 124* | | *09/02/23 22:12* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *81* | | *52 - 151* | | *09/02/23 22:12* | *1* |
| *4-Bromofluorobenzene (Surr)* | *64* | | *49 - 118* | | *09/02/23 22:12* | *1* |
| *Dibromofluoromethane (Surr)* | *106* | | *60 - 132* | | *09/02/23 22:12* | *1* |

## Client Sample ID: MW9

**Date Collected: 08/29/23 15:32**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-7**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 22:33 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 22:33 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 22:33 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 22:33 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 22:33 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/02/23 22:33 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 22:33 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:33 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW9**
**Date Collected: 08/29/23 15:32**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-7**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 22:33 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 22:33 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/02/23 22:33 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 22:33 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:33 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 22:33 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 22:33 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 22:33 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 22:33 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/02/23 22:33 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:33 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 22:33 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 22:33 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 22:33 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 22:33 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 22:33 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 22:33 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 22:33 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:33 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 22:33 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:33 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/02/23 22:33 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/02/23 22:33 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/02/23 22:33 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:33 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/02/23 22:33 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:33 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:33 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/02/23 22:33 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 22:33 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/02/23 22:33 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 22:33 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 22:33 | 1 |

## Client Sample ID: MW9
**Lab Sample ID: 180-161792-7**

**Date Collected: 08/29/23 15:32**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/02/23 22:33 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:33 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *84* | | *53 - 124* | | *09/02/23 22:33* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *91* | | *52 - 151* | | *09/02/23 22:33* | *1* |
| *4-Bromofluorobenzene (Surr)* | *70* | | *49 - 118* | | *09/02/23 22:33* | *1* |
| *Dibromofluoromethane (Surr)* | *112* | | *60 - 132* | | *09/02/23 22:33* | *1* |

## Client Sample ID: MW10
**Lab Sample ID: 180-161792-8**

**Date Collected: 08/29/23 16:35**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 22:53 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 22:53 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 22:53 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 22:53 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 22:53 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/02/23 22:53 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 22:53 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:53 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 22:53 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 22:53 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/02/23 22:53 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 22:53 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:53 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 22:53 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 22:53 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 22:53 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 22:53 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/02/23 22:53 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:53 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 22:53 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 22:53 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 22:53 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 22:53 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 22:53 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 22:53 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 22:53 | 1 |

## Client Sample ID: MW10
**Lab Sample ID: 180-161792-8**

**Date Collected: 08/29/23 16:35**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:53 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 22:53 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:53 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/02/23 22:53 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/02/23 22:53 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/02/23 22:53 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:53 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/02/23 22:53 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:53 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:53 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/02/23 22:53 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 22:53 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/02/23 22:53 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 22:53 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/02/23 22:53 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 22:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *79* | | *53 - 124* | | *09/02/23 22:53* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *90* | | *52 - 151* | | *09/02/23 22:53* | *1* |
| *4-Bromofluorobenzene (Surr)* | *67* | | *49 - 118* | | *09/02/23 22:53* | *1* |
| *Dibromofluoromethane (Surr)* | *114* | | *60 - 132* | | *09/02/23 22:53* | *1* |

## Client Sample ID: MW13
**Lab Sample ID: 180-161792-9**

**Date Collected: 08/28/23 16:30**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 23:14 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 23:14 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 23:14 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 23:14 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 23:14 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/02/23 23:14 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 23:14 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:14 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 23:14 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 23:14 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW13**
**Date Collected: 08/28/23 16:30**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-9**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/02/23 23:14 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 23:14 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:14 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 23:14 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 23:14 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 23:14 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 23:14 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/02/23 23:14 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:14 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 23:14 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 23:14 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 23:14 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 23:14 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 23:14 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 23:14 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 23:14 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:14 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 23:14 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:14 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/02/23 23:14 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/02/23 23:14 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/02/23 23:14 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:14 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/02/23 23:14 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:14 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:14 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/02/23 23:14 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 23:14 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/02/23 23:14 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 23:14 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/02/23 23:14 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:14 | 1 |

## Client Sample ID: MW13
**Lab Sample ID: 180-161792-9**

**Date Collected: 08/28/23 16:30**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *84* | | *53 - 124* | | *09/02/23 23:14* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *90* | | *52 - 151* | | *09/02/23 23:14* | *1* |
| *4-Bromofluorobenzene (Surr)* | *69* | | *49 - 118* | | *09/02/23 23:14* | *1* |
| *Dibromofluoromethane (Surr)* | *113* | | *60 - 132* | | *09/02/23 23:14* | *1* |

## Client Sample ID: MW14
**Lab Sample ID: 180-161792-10**

**Date Collected: 08/29/23 13:12**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 23:35 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 23:35 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 23:35 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 23:35 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 23:35 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/02/23 23:35 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 23:35 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:35 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 23:35 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 23:35 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/02/23 23:35 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 23:35 | 1 |
| **Chloroform** | **4.4** | **J** | 5.0 | 3.0 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:35 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 23:35 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 23:35 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 23:35 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 23:35 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/02/23 23:35 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:35 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 23:35 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 23:35 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 23:35 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 23:35 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 23:35 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 23:35 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 23:35 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:35 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 23:35 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:35 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/02/23 23:35 | 1 |

## Client Sample ID: MW14
**Lab Sample ID: 180-161792-10**
**Date Collected: 08/29/23 13:12**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/02/23 23:35 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/02/23 23:35 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:35 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/02/23 23:35 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:35 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:35 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/02/23 23:35 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 23:35 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/02/23 23:35 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 23:35 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/02/23 23:35 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:35 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *78* | | *53 - 124* | | *09/02/23 23:35* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *84* | | *52 - 151* | | *09/02/23 23:35* | *1* |
| *4-Bromofluorobenzene (Surr)* | *65* | | *49 - 118* | | *09/02/23 23:35* | *1* |
| *Dibromofluoromethane (Surr)* | *106* | | *60 - 132* | | *09/02/23 23:35* | *1* |

## Client Sample ID: MW15
**Lab Sample ID: 180-161792-11**
**Date Collected: 08/28/23 15:19**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 23:56 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 23:56 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 23:56 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 23:56 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 23:56 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/02/23 23:56 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 23:56 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:56 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 23:56 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 23:56 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/02/23 23:56 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 23:56 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:56 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW15**
**Date Collected: 08/28/23 15:19**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-11**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 23:56 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 23:56 | 1 |
| **Trichloroethene** | **18** | | 5.0 | 3.4 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 23:56 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 23:56 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/02/23 23:56 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:56 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 23:56 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 23:56 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 23:56 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 23:56 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 23:56 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 23:56 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 23:56 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:56 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 23:56 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:56 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/02/23 23:56 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/02/23 23:56 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/02/23 23:56 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:56 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/02/23 23:56 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:56 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:56 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/02/23 23:56 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 23:56 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/02/23 23:56 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 23:56 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/02/23 23:56 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 23:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *78* | | *53 - 124* | | *09/02/23 23:56* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *79* | | *52 - 151* | | *09/02/23 23:56* | *1* |
| *4-Bromofluorobenzene (Surr)* | *59* | | *49 - 118* | | *09/02/23 23:56* | *1* |
| *Dibromofluoromethane (Surr)* | *103* | | *60 - 132* | | *09/02/23 23:56* | *1* |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW16**
**Date Collected: 08/30/23 11:15**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-12**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/03/23 00:17 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/03/23 00:17 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/03/23 00:17 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 00:17 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/03/23 00:17 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/03/23 00:17 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 00:17 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:17 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/03/23 00:17 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/03/23 00:17 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/03/23 00:17 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/03/23 00:17 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:17 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/03/23 00:17 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/03/23 00:17 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/03/23 00:17 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/03/23 00:17 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/03/23 00:17 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:17 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/03/23 00:17 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/03/23 00:17 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 00:17 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/03/23 00:17 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 00:17 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/03/23 00:17 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 00:17 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:17 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/03/23 00:17 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:17 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/03/23 00:17 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/03/23 00:17 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/03/23 00:17 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:17 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/03/23 00:17 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:17 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:17 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/03/23 00:17 | 1 |

## Client Sample ID: MW16
**Lab Sample ID: 180-161792-12**
**Date Collected: 08/30/23 11:15**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/03/23 00:17 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/03/23 00:17 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/03/23 00:17 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/03/23 00:17 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:17 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *69* | | *53 - 124* | | *09/03/23 00:17* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *70* | | *52 - 151* | | *09/03/23 00:17* | *1* |
| *4-Bromofluorobenzene (Surr)* | *55* | | *49 - 118* | | *09/03/23 00:17* | *1* |
| *Dibromofluoromethane (Surr)* | *92* | | *60 - 132* | | *09/03/23 00:17* | *1* |

## Client Sample ID: MW17
**Lab Sample ID: 180-161792-13**
**Date Collected: 08/28/23 15:54**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/03/23 00:38 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/03/23 00:38 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/03/23 00:38 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 00:38 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/03/23 00:38 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/03/23 00:38 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 00:38 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:38 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/03/23 00:38 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/03/23 00:38 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/03/23 00:38 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/03/23 00:38 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:38 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/03/23 00:38 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/03/23 00:38 | 1 |
| **Trichloroethene** | **36** | | 5.0 | 3.4 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/03/23 00:38 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/03/23 00:38 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/03/23 00:38 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:38 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/03/23 00:38 | 1 |

## Client Sample ID: MW17

**Date Collected: 08/28/23 15:54**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-13**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/03/23 00:38 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 00:38 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/03/23 00:38 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 00:38 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/03/23 00:38 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 00:38 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:38 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/03/23 00:38 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:38 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/03/23 00:38 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/03/23 00:38 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/03/23 00:38 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:38 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/03/23 00:38 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:38 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:38 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/03/23 00:38 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/03/23 00:38 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/03/23 00:38 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/03/23 00:38 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/03/23 00:38 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *86* | | *53 - 124* | | *09/03/23 00:38* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *80* | | *52 - 151* | | *09/03/23 00:38* | *1* |
| *4-Bromofluorobenzene (Surr)* | *63* | | *49 - 118* | | *09/03/23 00:38* | *1* |
| *Dibromofluoromethane (Surr)* | *108* | | *60 - 132* | | *09/03/23 00:38* | *1* |

## Client Sample ID: MW18

**Date Collected: 08/29/23 09:29**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-14**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/03/23 00:59 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/03/23 00:59 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/03/23 00:59 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW18**
**Date Collected: 08/29/23 09:29**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-14**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 00:59 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/03/23 00:59 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/03/23 00:59 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 00:59 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:59 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/03/23 00:59 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/03/23 00:59 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/03/23 00:59 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/03/23 00:59 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:59 | 1 |
| **Carbon tetrachloride** | **20** | | 5.0 | 4.4 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/03/23 00:59 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/03/23 00:59 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/03/23 00:59 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/03/23 00:59 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:59 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/03/23 00:59 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/03/23 00:59 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 00:59 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/03/23 00:59 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 00:59 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/03/23 00:59 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 00:59 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:59 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/03/23 00:59 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:59 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/03/23 00:59 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/03/23 00:59 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/03/23 00:59 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:59 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/03/23 00:59 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:59 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:59 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/03/23 00:59 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/03/23 00:59 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 00:59 | 1 |

## Client Sample ID: MW18

**Date Collected: 08/29/23 09:29**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-14**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/03/23 00:59 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/03/23 00:59 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/03/23 00:59 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 00:59 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *91* | | *53 - 124* | | *09/03/23 00:59* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *78* | | *52 - 151* | | *09/03/23 00:59* | *1* |
| *4-Bromofluorobenzene (Surr)* | *64* | | *49 - 118* | | *09/03/23 00:59* | *1* |
| *Dibromofluoromethane (Surr)* | *111* | | *60 - 132* | | *09/03/23 00:59* | *1* |

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS - DL

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Trichloroethene** | **74** | | 25 | 17 | ug/L | | | 09/07/23 16:21 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *88* | | *53 - 124* | | *09/07/23 16:21* | *5* |
| *1,2-Dichloroethane-d4 (Surr)* | *71* | | *52 - 151* | | *09/07/23 16:21* | *5* |
| *4-Bromofluorobenzene (Surr)* | *86* | | *49 - 118* | | *09/07/23 16:21* | *5* |
| *Dibromofluoromethane (Surr)* | *79* | | *60 - 132* | | *09/07/23 16:21* | *5* |

## Client Sample ID: MW19

**Date Collected: 08/29/23 14:58**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-15**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/03/23 01:19 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/03/23 01:19 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/03/23 01:19 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 01:19 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/03/23 01:19 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/03/23 01:19 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 01:19 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 01:19 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/03/23 01:19 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/03/23 01:19 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/03/23 01:19 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/03/23 01:19 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 01:19 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/03/23 01:19 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/03/23 01:19 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/03/23 01:19 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW19**
**Date Collected: 08/29/23 14:58**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-15**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/03/23 01:19 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/03/23 01:19 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/03/23 01:19 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 01:19 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/03/23 01:19 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/03/23 01:19 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 01:19 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/03/23 01:19 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 01:19 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/03/23 01:19 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 01:19 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 01:19 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/03/23 01:19 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 01:19 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/03/23 01:19 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/03/23 01:19 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/03/23 01:19 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 01:19 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/03/23 01:19 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 01:19 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 01:19 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/03/23 01:19 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/03/23 01:19 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/03/23 01:19 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/03/23 01:19 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/03/23 01:19 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/03/23 01:19 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *83* | | *53 - 124* | | *09/03/23 01:19* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *72* | | *52 - 151* | | *09/03/23 01:19* | *1* |
| *4-Bromofluorobenzene (Surr)* | *60* | | *49 - 118* | | *09/03/23 01:19* | *1* |
| *Dibromofluoromethane (Surr)* | *106* | | *60 - 132* | | *09/03/23 01:19* | *1* |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW20**
**Date Collected: 08/29/23 16:14**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-16**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 500 | 420 | ug/L | | | 09/07/23 15:59 | 100 |
| Chloromethane | ND | | 500 | 450 | ug/L | | | 09/07/23 15:59 | 100 |
| Vinyl chloride | ND | | 500 | 200 | ug/L | | | 09/07/23 15:59 | 100 |
| Bromomethane | ND | | 500 | 440 | ug/L | | | 09/07/23 15:59 | 100 |
| Chloroethane | ND | | 500 | 450 | ug/L | | | 09/07/23 15:59 | 100 |
| Trichlorofluoromethane | ND | | 500 | 440 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,1-Dichloroethene | ND | | 500 | 280 | ug/L | | | 09/07/23 15:59 | 100 |
| Methylene Chloride | ND | | 500 | 440 | ug/L | | | 09/07/23 15:59 | 100 |
| Methyl tert-butyl ether | ND | | 500 | 300 | ug/L | | | 09/07/23 15:59 | 100 |
| trans-1,2-Dichloroethene | ND | | 500 | 340 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,1-Dichloroethane | ND | | 500 | 310 | ug/L | | | 09/07/23 15:59 | 100 |
| 2,2-Dichloropropane | ND | | 500 | 310 | ug/L | | | 09/07/23 15:59 | 100 |
| cis-1,2-Dichloroethene | ND | | 500 | 350 | ug/L | | | 09/07/23 15:59 | 100 |
| Bromochloromethane | ND | | 500 | 310 | ug/L | | | 09/07/23 15:59 | 100 |
| Chloroform | ND | | 500 | 300 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,1,1-Trichloroethane | ND | | 500 | 300 | ug/L | | | 09/07/23 15:59 | 100 |
| **Carbon tetrachloride** | **680** | | 500 | 440 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,1-Dichloropropene | ND | | 500 | 340 | ug/L | | | 09/07/23 15:59 | 100 |
| Benzene | ND | | 500 | 300 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,2-Dichloroethane | ND | | 500 | 290 | ug/L | | | 09/07/23 15:59 | 100 |
| Trichloroethene | ND | | 500 | 340 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,2-Dichloropropane | ND | | 500 | 330 | ug/L | | | 09/07/23 15:59 | 100 |
| Dibromomethane | ND | | 500 | 330 | ug/L | | | 09/07/23 15:59 | 100 |
| Dichlorobromomethane | ND | | 500 | 320 | ug/L | | | 09/07/23 15:59 | 100 |
| cis-1,3-Dichloropropene | ND | | 500 | 300 | ug/L | | | 09/07/23 15:59 | 100 |
| Toluene | ND | | 500 | 230 | ug/L | | | 09/07/23 15:59 | 100 |
| trans-1,3-Dichloropropene | ND | | 500 | 290 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,1,2-Trichloroethane | ND | | 500 | 230 | ug/L | | | 09/07/23 15:59 | 100 |
| Tetrachloroethene | ND | | 500 | 230 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,3-Dichloropropane | ND | | 500 | 250 | ug/L | | | 09/07/23 15:59 | 100 |
| Chlorodibromomethane | ND | | 500 | 420 | ug/L | | | 09/07/23 15:59 | 100 |
| Ethylene Dibromide | ND | | 500 | 250 | ug/L | | | 09/07/23 15:59 | 100 |
| Chlorobenzene | ND | | 500 | 250 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,1,1,2-Tetrachloroethane | ND | | 500 | 290 | ug/L | | | 09/07/23 15:59 | 100 |
| Ethylbenzene | ND | | 500 | 250 | ug/L | | | 09/07/23 15:59 | 100 |
| m-Xylene & p-Xylene | ND | | 500 | 240 | ug/L | | | 09/07/23 15:59 | 100 |
| o-Xylene | ND | | 500 | 200 | ug/L | | | 09/07/23 15:59 | 100 |
| Styrene | ND | | 500 | 240 | ug/L | | | 09/07/23 15:59 | 100 |
| Bromoform | ND | | 500 | 490 | ug/L | | | 09/07/23 15:59 | 100 |
| Isopropylbenzene | ND | | 500 | 170 | ug/L | | | 09/07/23 15:59 | 100 |
| Bromobenzene | ND | | 500 | 240 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,1,2,2-Tetrachloroethane | ND | | 500 | 300 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,2,3-Trichloropropane | ND | | 500 | 400 | ug/L | | | 09/07/23 15:59 | 100 |
| N-Propylbenzene | ND | | 500 | 240 | ug/L | | | 09/07/23 15:59 | 100 |
| 2-Chlorotoluene | ND | | 500 | 220 | ug/L | | | 09/07/23 15:59 | 100 |
| 4-Chlorotoluene | ND | | 500 | 240 | ug/L | | | 09/07/23 15:59 | 100 |
| tert-Butylbenzene | ND | | 500 | 240 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,2,4-Trimethylbenzene | ND | | 500 | 240 | ug/L | | | 09/07/23 15:59 | 100 |
| sec-Butylbenzene | ND | | 500 | 260 | ug/L | | | 09/07/23 15:59 | 100 |

## Client Sample ID: MW20
**Lab Sample ID: 180-161792-16**

**Date Collected: 08/29/23 16:14**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4-Isopropyltoluene | ND | | 500 | 270 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,3-Dichlorobenzene | ND | | 500 | 250 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,4-Dichlorobenzene | ND | | 500 | 270 | ug/L | | | 09/07/23 15:59 | 100 |
| n-Butylbenzene | ND | | 500 | 300 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,2-Dichlorobenzene | ND | | 500 | 180 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,2-Dibromo-3-Chloropropane | ND | | 500 | 440 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,2,4-Trichlorobenzene | ND | | 500 | 390 | ug/L | | | 09/07/23 15:59 | 100 |
| Hexachlorobutadiene | ND | | 500 | 450 | ug/L | | | 09/07/23 15:59 | 100 |
| Naphthalene | ND | | 500 | 420 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,2,3-Trichlorobenzene | ND | | 1000 | 530 | ug/L | | | 09/07/23 15:59 | 100 |
| 1,3,5-Trimethylbenzene | ND | | 500 | 240 | ug/L | | | 09/07/23 15:59 | 100 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *79* | | *53 - 124* | | *09/07/23 15:59* | *100* |
| *1,2-Dichloroethane-d4 (Surr)* | *70* | | *52 - 151* | | *09/07/23 15:59* | *100* |
| *4-Bromofluorobenzene (Surr)* | *78* | | *49 - 118* | | *09/07/23 15:59* | *100* |
| *Dibromofluoromethane (Surr)* | *74* | | *60 - 132* | | *09/07/23 15:59* | *100* |

## Client Sample ID: MW23
**Lab Sample ID: 180-161792-17**

**Date Collected: 08/30/23 12:12**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/07/23 14:56 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/07/23 14:56 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/07/23 14:56 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 14:56 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/07/23 14:56 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/07/23 14:56 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 14:56 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 14:56 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/07/23 14:56 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/07/23 14:56 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/07/23 14:56 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/07/23 14:56 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 14:56 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/07/23 14:56 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/07/23 14:56 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/07/23 14:56 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/07/23 14:56 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/07/23 14:56 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 14:56 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/07/23 14:56 | 1 |

## Client Sample ID: MW23

**Date Collected: 08/30/23 12:12**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-17**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/07/23 14:56 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 14:56 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/07/23 14:56 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 14:56 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/07/23 14:56 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 14:56 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:56 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/07/23 14:56 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:56 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/07/23 14:56 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/07/23 14:56 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/07/23 14:56 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:56 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/07/23 14:56 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:56 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:56 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/07/23 14:56 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/07/23 14:56 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/07/23 14:56 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/07/23 14:56 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/07/23 14:56 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *84* | | *53 - 124* | | *09/07/23 14:56* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *71* | | *52 - 151* | | *09/07/23 14:56* | *1* |
| *4-Bromofluorobenzene (Surr)* | *83* | | *49 - 118* | | *09/07/23 14:56* | *1* |
| *Dibromofluoromethane (Surr)* | *77* | | *60 - 132* | | *09/07/23 14:56* | *1* |

## Client Sample ID: MW24

**Date Collected: 08/30/23 14:22**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-18**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 50 | 42 | ug/L | | | 09/07/23 15:17 | 10 |
| Chloromethane | ND | | 50 | 45 | ug/L | | | 09/07/23 15:17 | 10 |
| Vinyl chloride | ND | | 50 | 20 | ug/L | | | 09/07/23 15:17 | 10 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW24**
**Date Collected: 08/30/23 14:22**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-18**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromomethane | ND | | 50 | 44 | ug/L | | | 09/07/23 15:17 | 10 |
| Chloroethane | ND | | 50 | 45 | ug/L | | | 09/07/23 15:17 | 10 |
| Trichlorofluoromethane | ND | | 50 | 44 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,1-Dichloroethene | ND | | 50 | 28 | ug/L | | | 09/07/23 15:17 | 10 |
| Methylene Chloride | ND | | 50 | 44 | ug/L | | | 09/07/23 15:17 | 10 |
| Methyl tert-butyl ether | ND | | 50 | 30 | ug/L | | | 09/07/23 15:17 | 10 |
| trans-1,2-Dichloroethene | ND | | 50 | 34 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,1-Dichloroethane | ND | | 50 | 31 | ug/L | | | 09/07/23 15:17 | 10 |
| 2,2-Dichloropropane | ND | | 50 | 31 | ug/L | | | 09/07/23 15:17 | 10 |
| cis-1,2-Dichloroethene | ND | | 50 | 35 | ug/L | | | 09/07/23 15:17 | 10 |
| Bromochloromethane | ND | | 50 | 31 | ug/L | | | 09/07/23 15:17 | 10 |
| Chloroform | ND | | 50 | 30 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,1,1-Trichloroethane | ND | | 50 | 30 | ug/L | | | 09/07/23 15:17 | 10 |
| **Carbon tetrachloride** | **110** | | 50 | 44 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,1-Dichloropropene | ND | | 50 | 34 | ug/L | | | 09/07/23 15:17 | 10 |
| Benzene | ND | | 50 | 30 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,2-Dichloroethane | ND | | 50 | 29 | ug/L | | | 09/07/23 15:17 | 10 |
| **Trichloroethene** | **38** | **J** | 50 | 34 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,2-Dichloropropane | ND | | 50 | 33 | ug/L | | | 09/07/23 15:17 | 10 |
| Dibromomethane | ND | | 50 | 33 | ug/L | | | 09/07/23 15:17 | 10 |
| Dichlorobromomethane | ND | | 50 | 32 | ug/L | | | 09/07/23 15:17 | 10 |
| cis-1,3-Dichloropropene | ND | | 50 | 30 | ug/L | | | 09/07/23 15:17 | 10 |
| Toluene | ND | | 50 | 23 | ug/L | | | 09/07/23 15:17 | 10 |
| trans-1,3-Dichloropropene | ND | | 50 | 29 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,1,2-Trichloroethane | ND | | 50 | 23 | ug/L | | | 09/07/23 15:17 | 10 |
| Tetrachloroethene | ND | | 50 | 23 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,3-Dichloropropane | ND | | 50 | 25 | ug/L | | | 09/07/23 15:17 | 10 |
| Chlorodibromomethane | ND | | 50 | 42 | ug/L | | | 09/07/23 15:17 | 10 |
| Ethylene Dibromide | ND | | 50 | 25 | ug/L | | | 09/07/23 15:17 | 10 |
| Chlorobenzene | ND | | 50 | 25 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,1,1,2-Tetrachloroethane | ND | | 50 | 29 | ug/L | | | 09/07/23 15:17 | 10 |
| Ethylbenzene | ND | | 50 | 25 | ug/L | | | 09/07/23 15:17 | 10 |
| m-Xylene & p-Xylene | ND | | 50 | 24 | ug/L | | | 09/07/23 15:17 | 10 |
| o-Xylene | ND | | 50 | 20 | ug/L | | | 09/07/23 15:17 | 10 |
| Styrene | ND | | 50 | 24 | ug/L | | | 09/07/23 15:17 | 10 |
| Bromoform | ND | | 50 | 49 | ug/L | | | 09/07/23 15:17 | 10 |
| Isopropylbenzene | ND | | 50 | 17 | ug/L | | | 09/07/23 15:17 | 10 |
| Bromobenzene | ND | | 50 | 24 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,1,2,2-Tetrachloroethane | ND | | 50 | 30 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,2,3-Trichloropropane | ND | | 50 | 40 | ug/L | | | 09/07/23 15:17 | 10 |
| N-Propylbenzene | ND | | 50 | 24 | ug/L | | | 09/07/23 15:17 | 10 |
| 2-Chlorotoluene | ND | | 50 | 22 | ug/L | | | 09/07/23 15:17 | 10 |
| 4-Chlorotoluene | ND | | 50 | 24 | ug/L | | | 09/07/23 15:17 | 10 |
| tert-Butylbenzene | ND | | 50 | 24 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,2,4-Trimethylbenzene | ND | | 50 | 24 | ug/L | | | 09/07/23 15:17 | 10 |
| sec-Butylbenzene | ND | | 50 | 26 | ug/L | | | 09/07/23 15:17 | 10 |
| 4-Isopropyltoluene | ND | | 50 | 27 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,3-Dichlorobenzene | ND | | 50 | 25 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,4-Dichlorobenzene | ND | | 50 | 27 | ug/L | | | 09/07/23 15:17 | 10 |

## Client Sample ID: MW24
**Lab Sample ID: 180-161792-18**

**Date Collected: 08/30/23 14:22**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| n-Butylbenzene | ND | | 50 | 30 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,2-Dichlorobenzene | ND | | 50 | 18 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,2-Dibromo-3-Chloropropane | ND | | 50 | 44 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,2,4-Trichlorobenzene | ND | | 50 | 39 | ug/L | | | 09/07/23 15:17 | 10 |
| Hexachlorobutadiene | ND | | 50 | 45 | ug/L | | | 09/07/23 15:17 | 10 |
| Naphthalene | ND | | 50 | 42 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,2,3-Trichlorobenzene | ND | | 100 | 53 | ug/L | | | 09/07/23 15:17 | 10 |
| 1,3,5-Trimethylbenzene | ND | | 50 | 24 | ug/L | | | 09/07/23 15:17 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *77* | | *53 - 124* | | *09/07/23 15:17* | *10* |
| *1,2-Dichloroethane-d4 (Surr)* | *67* | | *52 - 151* | | *09/07/23 15:17* | *10* |
| *4-Bromofluorobenzene (Surr)* | *78* | | *49 - 118* | | *09/07/23 15:17* | *10* |
| *Dibromofluoromethane (Surr)* | *73* | | *60 - 132* | | *09/07/23 15:17* | *10* |

## Client Sample ID: MW25
**Lab Sample ID: 180-161792-19**

**Date Collected: 08/29/23 10:44**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/07/23 15:38 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/07/23 15:38 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/07/23 15:38 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 15:38 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/07/23 15:38 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/07/23 15:38 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 15:38 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 15:38 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/07/23 15:38 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/07/23 15:38 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/07/23 15:38 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/07/23 15:38 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 15:38 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/07/23 15:38 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/07/23 15:38 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/07/23 15:38 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/07/23 15:38 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/07/23 15:38 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 15:38 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/07/23 15:38 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/07/23 15:38 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/07/23 15:38 | 1 |

## Client Sample ID: MW25

**Date Collected: 08/29/23 10:44**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-19**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 15:38 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/07/23 15:38 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 15:38 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/07/23 15:38 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 15:38 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 15:38 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/07/23 15:38 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 15:38 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/07/23 15:38 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/07/23 15:38 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/07/23 15:38 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 15:38 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/07/23 15:38 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 15:38 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 15:38 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/07/23 15:38 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/07/23 15:38 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/07/23 15:38 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/07/23 15:38 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/07/23 15:38 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 15:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *69* | | *53 - 124* | | *09/07/23 15:38* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *61* | | *52 - 151* | | *09/07/23 15:38* | *1* |
| *4-Bromofluorobenzene (Surr)* | *68* | | *49 - 118* | | *09/07/23 15:38* | *1* |
| *Dibromofluoromethane (Surr)* | *64* | | *60 - 132* | | *09/07/23 15:38* | *1* |

## Client Sample ID: MW26

**Date Collected: 08/29/23 12:35**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-20**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 18:03 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 18:03 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 18:03 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 18:03 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 18:03 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 18:03 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW26**
**Date Collected: 08/29/23 12:35**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-20**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/02/23 18:03 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 18:03 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 18:03 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 18:03 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 18:03 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/02/23 18:03 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 18:03 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 18:03 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 18:03 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 18:03 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 18:03 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 18:03 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/02/23 18:03 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 18:03 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 18:03 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 18:03 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 18:03 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 18:03 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 18:03 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 18:03 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 18:03 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 18:03 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 18:03 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 18:03 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/02/23 18:03 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/02/23 18:03 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/02/23 18:03 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 18:03 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/02/23 18:03 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 18:03 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 18:03 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/02/23 18:03 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 18:03 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 18:03 | 1 |

## Client Sample ID: MW26

**Date Collected: 08/29/23 12:35**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-20**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/02/23 18:03 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 18:03 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/02/23 18:03 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 18:03 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *87* | | *53 - 124* | | *09/02/23 18:03* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *84* | | *52 - 151* | | *09/02/23 18:03* | *1* |
| *4-Bromofluorobenzene (Surr)* | *71* | | *49 - 118* | | *09/02/23 18:03* | *1* |
| *Dibromofluoromethane (Surr)* | *107* | | *60 - 132* | | *09/02/23 18:03* | *1* |

## Client Sample ID: MW28

**Date Collected: 08/29/23 09:48**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-21**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/07/23 14:34 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/07/23 14:34 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/07/23 14:34 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 14:34 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/07/23 14:34 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/07/23 14:34 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 14:34 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 14:34 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/07/23 14:34 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/07/23 14:34 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/07/23 14:34 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/07/23 14:34 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 14:34 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/07/23 14:34 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/07/23 14:34 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/07/23 14:34 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/07/23 14:34 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/07/23 14:34 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 14:34 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/07/23 14:34 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/07/23 14:34 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 14:34 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/07/23 14:34 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 14:34 | 1 |

## Client Sample ID: MW28
**Lab Sample ID: 180-161792-21**

**Date Collected: 08/29/23 09:48**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/07/23 14:34 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 14:34 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:34 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/07/23 14:34 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:34 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/07/23 14:34 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/07/23 14:34 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/07/23 14:34 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:34 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/07/23 14:34 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:34 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:34 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/07/23 14:34 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/07/23 14:34 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/07/23 14:34 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/07/23 14:34 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/07/23 14:34 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 14:34 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *92* | | *53 - 124* | | *09/07/23 14:34* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *76* | | *52 - 151* | | *09/07/23 14:34* | *1* |
| *4-Bromofluorobenzene (Surr)* | *90* | | *49 - 118* | | *09/07/23 14:34* | *1* |
| *Dibromofluoromethane (Surr)* | *84* | | *60 - 132* | | *09/07/23 14:34* | *1* |

## Client Sample ID: MW29
**Lab Sample ID: 180-161792-22**

**Date Collected: 08/28/23 14:06**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 14:08 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 14:08 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 14:08 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 14:08 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 14:08 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/08/23 14:08 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 14:08 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 14:08 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW29**
**Date Collected: 08/28/23 14:06**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-22**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 14:08 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 14:08 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/08/23 14:08 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 14:08 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 14:08 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 14:08 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 14:08 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 14:08 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 14:08 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/08/23 14:08 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 14:08 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 14:08 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 14:08 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 14:08 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 14:08 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 14:08 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 14:08 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 14:08 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:08 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 14:08 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:08 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/08/23 14:08 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/08/23 14:08 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/08/23 14:08 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:08 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/08/23 14:08 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:08 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:08 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/08/23 14:08 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 14:08 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/08/23 14:08 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 14:08 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 14:08 | 1 |

## Client Sample ID: MW29

**Date Collected: 08/28/23 14:06**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-22**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/08/23 14:08 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:08 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *78* | | *53 - 124* | | *09/08/23 14:08* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *72* | | *52 - 151* | | *09/08/23 14:08* | *1* |
| *4-Bromofluorobenzene (Surr)* | *78* | | *49 - 118* | | *09/08/23 14:08* | *1* |
| *Dibromofluoromethane (Surr)* | *82* | | *60 - 132* | | *09/08/23 14:08* | *1* |

## Client Sample ID: MW30

**Date Collected: 08/30/23 15:11**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-23**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 14:30 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 14:30 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 14:30 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 14:30 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 14:30 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/08/23 14:30 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 14:30 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 14:30 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 14:30 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 14:30 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/08/23 14:30 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 14:30 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 14:30 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 14:30 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 14:30 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 14:30 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 14:30 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/08/23 14:30 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 14:30 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 14:30 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 14:30 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 14:30 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 14:30 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 14:30 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 14:30 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 14:30 | 1 |

## Client Sample ID: MW30

**Date Collected: 08/30/23 15:11**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-23**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:30 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 14:30 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:30 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/08/23 14:30 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/08/23 14:30 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/08/23 14:30 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:30 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/08/23 14:30 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:30 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:30 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/08/23 14:30 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 14:30 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/08/23 14:30 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 14:30 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/08/23 14:30 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 14:30 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *75* | | *53 - 124* | | *09/08/23 14:30* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *69* | | *52 - 151* | | *09/08/23 14:30* | *1* |
| *4-Bromofluorobenzene (Surr)* | *75* | | *49 - 118* | | *09/08/23 14:30* | *1* |
| *Dibromofluoromethane (Surr)* | *80* | | *60 - 132* | | *09/08/23 14:30* | *1* |

## Client Sample ID: MW31

**Date Collected: 08/30/23 16:02**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-24**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 19:03 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 19:03 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 19:03 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 19:03 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 19:03 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/08/23 19:03 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 19:03 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 19:03 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 19:03 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 19:03 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW31**
**Date Collected: 08/30/23 16:02**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-24**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/08/23 19:03 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 19:03 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 19:03 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 19:03 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 19:03 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 19:03 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 19:03 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/08/23 19:03 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 19:03 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 19:03 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 19:03 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 19:03 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 19:03 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 19:03 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 19:03 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 19:03 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 19:03 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 19:03 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 19:03 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/08/23 19:03 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/08/23 19:03 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/08/23 19:03 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 19:03 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/08/23 19:03 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 19:03 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 19:03 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/08/23 19:03 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 19:03 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/08/23 19:03 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 19:03 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/08/23 19:03 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 19:03 | 1 |

## Client Sample ID: MW31
**Lab Sample ID: 180-161792-24**

**Date Collected: 08/30/23 16:02**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *70* | | *53 - 124* | | *09/08/23 19:03* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *61* | | *52 - 151* | | *09/08/23 19:03* | *1* |
| *4-Bromofluorobenzene (Surr)* | *67* | | *49 - 118* | | *09/08/23 19:03* | *1* |
| *Dibromofluoromethane (Surr)* | *74* | | *60 - 132* | | *09/08/23 19:03* | *1* |

## Client Sample ID: MW100
**Lab Sample ID: 180-161792-25**

**Date Collected: 08/29/23 17:56**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 15:54 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 15:54 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 15:54 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 15:54 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 15:54 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/08/23 15:54 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 15:54 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 15:54 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 15:54 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 15:54 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/08/23 15:54 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 15:54 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 15:54 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 15:54 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 15:54 | 1 |
| **Trichloroethene** | **12** | | 5.0 | 3.4 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 15:54 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 15:54 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/08/23 15:54 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 15:54 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 15:54 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 15:54 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 15:54 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 15:54 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 15:54 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 15:54 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 15:54 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 15:54 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 15:54 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 15:54 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/08/23 15:54 | 1 |

## Client Sample ID: MW100
**Lab Sample ID: 180-161792-25**
**Date Collected: 08/29/23 17:56**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/08/23 15:54 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/08/23 15:54 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 15:54 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/08/23 15:54 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 15:54 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 15:54 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/08/23 15:54 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 15:54 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/08/23 15:54 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 15:54 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/08/23 15:54 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 15:54 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *79* | | *53 - 124* | | *09/08/23 15:54* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *73* | | *52 - 151* | | *09/08/23 15:54* | *1* |
| *4-Bromofluorobenzene (Surr)* | *80* | | *49 - 118* | | *09/08/23 15:54* | *1* |
| *Dibromofluoromethane (Surr)* | *84* | | *60 - 132* | | *09/08/23 15:54* | *1* |

## Client Sample ID: MW101
**Lab Sample ID: 180-161792-26**
**Date Collected: 08/29/23 17:22**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 16:15 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 16:15 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 16:15 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 16:15 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 16:15 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/08/23 16:15 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 16:15 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:15 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 16:15 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 16:15 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/08/23 16:15 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 16:15 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:15 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW101**
**Date Collected: 08/29/23 17:22**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-26**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 16:15 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 16:15 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 16:15 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 16:15 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/08/23 16:15 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:15 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 16:15 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 16:15 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 16:15 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 16:15 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 16:15 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 16:15 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 16:15 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:15 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 16:15 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:15 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/08/23 16:15 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/08/23 16:15 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/08/23 16:15 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:15 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/08/23 16:15 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:15 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:15 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/08/23 16:15 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 16:15 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/08/23 16:15 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 16:15 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/08/23 16:15 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *82* | | *53 - 124* | | *09/08/23 16:15* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *75* | | *52 - 151* | | *09/08/23 16:15* | *1* |
| *4-Bromofluorobenzene (Surr)* | *82* | | *49 - 118* | | *09/08/23 16:15* | *1* |
| *Dibromofluoromethane (Surr)* | *85* | | *60 - 132* | | *09/08/23 16:15* | *1* |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW102**
**Date Collected: 08/29/23 18:25**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-27**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 16:36 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 16:36 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 16:36 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 16:36 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 16:36 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/08/23 16:36 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 16:36 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:36 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 16:36 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 16:36 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/08/23 16:36 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 16:36 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:36 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 16:36 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 16:36 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 16:36 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 16:36 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/08/23 16:36 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:36 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 16:36 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 16:36 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 16:36 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 16:36 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 16:36 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 16:36 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 16:36 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:36 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 16:36 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:36 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/08/23 16:36 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/08/23 16:36 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/08/23 16:36 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:36 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/08/23 16:36 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:36 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:36 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/08/23 16:36 | 1 |

## Client Sample ID: MW102
**Lab Sample ID: 180-161792-27**
**Date Collected: 08/29/23 18:25**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 16:36 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/08/23 16:36 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 16:36 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/08/23 16:36 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:36 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *88* | | *53 - 124* | | *09/08/23 16:36* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *85* | | *52 - 151* | | *09/08/23 16:36* | *1* |
| *4-Bromofluorobenzene (Surr)* | *95* | | *49 - 118* | | *09/08/23 16:36* | *1* |
| *Dibromofluoromethane (Surr)* | *97* | | *60 - 132* | | *09/08/23 16:36* | *1* |

## Client Sample ID: MW103
**Lab Sample ID: 180-161792-28**
**Date Collected: 08/29/23 19:05**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 16:57 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 16:57 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 16:57 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 16:57 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 16:57 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/08/23 16:57 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 16:57 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:57 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 16:57 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 16:57 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/08/23 16:57 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 16:57 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:57 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 16:57 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 16:57 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 16:57 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 16:57 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/08/23 16:57 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:57 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 16:57 | 1 |

## Client Sample ID: MW103

**Date Collected: 08/29/23 19:05**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-28**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 16:57 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 16:57 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 16:57 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 16:57 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 16:57 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 16:57 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:57 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 16:57 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:57 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/08/23 16:57 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/08/23 16:57 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/08/23 16:57 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:57 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/08/23 16:57 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:57 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:57 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/08/23 16:57 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 16:57 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/08/23 16:57 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 16:57 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/08/23 16:57 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 16:57 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *87* | | *53 - 124* | | *09/08/23 16:57* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *73* | | *52 - 151* | | *09/08/23 16:57* | *1* |
| *4-Bromofluorobenzene (Surr)* | *86* | | *49 - 118* | | *09/08/23 16:57* | *1* |
| *Dibromofluoromethane (Surr)* | *87* | | *60 - 132* | | *09/08/23 16:57* | *1* |

## Client Sample ID: DUP1

**Date Collected: 08/29/23 13:15**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-29**
**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 17:19 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 17:19 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 17:19 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: DUP1**
**Date Collected: 08/29/23 13:15**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-29**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 17:19 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 17:19 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/08/23 17:19 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 17:19 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 17:19 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 17:19 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 17:19 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/08/23 17:19 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 17:19 | 1 |
| **Chloroform** | **3.8** | **J** | 5.0 | 3.0 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 17:19 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 17:19 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 17:19 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 17:19 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 17:19 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/08/23 17:19 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 17:19 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 17:19 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 17:19 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 17:19 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 17:19 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 17:19 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 17:19 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 17:19 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:19 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 17:19 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:19 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/08/23 17:19 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/08/23 17:19 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/08/23 17:19 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:19 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/08/23 17:19 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:19 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:19 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/08/23 17:19 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 17:19 | 1 |

## Client Sample ID: DUP1
**Lab Sample ID: 180-161792-29**

**Date Collected: 08/29/23 13:15**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/08/23 17:19 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 17:19 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/08/23 17:19 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:19 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *81* | | *53 - 124* | | *09/08/23 17:19* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *70* | | *52 - 151* | | *09/08/23 17:19* | *1* |
| *4-Bromofluorobenzene (Surr)* | *79* | | *49 - 118* | | *09/08/23 17:19* | *1* |
| *Dibromofluoromethane (Surr)* | *85* | | *60 - 132* | | *09/08/23 17:19* | *1* |

## Client Sample ID: DUP2
**Lab Sample ID: 180-161792-30**

**Date Collected: 08/29/23 15:00**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 18:01 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 18:01 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 18:01 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 18:01 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 18:01 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/08/23 18:01 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 18:01 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 18:01 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 18:01 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 18:01 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/08/23 18:01 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 18:01 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 18:01 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 18:01 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 18:01 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 18:01 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 18:01 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/08/23 18:01 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 18:01 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 18:01 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 18:01 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 18:01 | 1 |

## Client Sample ID: DUP2
**Lab Sample ID: 180-161792-30**

**Date Collected: 08/29/23 15:00**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 18:01 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 18:01 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 18:01 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 18:01 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 18:01 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 18:01 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 18:01 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 18:01 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/08/23 18:01 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/08/23 18:01 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/08/23 18:01 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 18:01 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/08/23 18:01 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 18:01 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 18:01 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/08/23 18:01 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 18:01 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/08/23 18:01 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 18:01 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/08/23 18:01 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 18:01 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *85* | | *53 - 124* | | *09/08/23 18:01* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *71* | | *52 - 151* | | *09/08/23 18:01* | *1* |
| *4-Bromofluorobenzene (Surr)* | *83* | | *49 - 118* | | *09/08/23 18:01* | *1* |
| *Dibromofluoromethane (Surr)* | *84* | | *60 - 132* | | *09/08/23 18:01* | *1* |

## Client Sample ID: MW22
**Lab Sample ID: 180-161792-31**

**Date Collected: 08/30/23 13:12**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 17:40 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 17:40 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 17:40 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 17:40 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 17:40 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 17:40 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: MW22**
**Date Collected: 08/30/23 13:12**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-31**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/08/23 17:40 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 17:40 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 17:40 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 17:40 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 17:40 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/08/23 17:40 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 17:40 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 17:40 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 17:40 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 17:40 | 1 |
| **Trichloroethene** | **3.5** | **J** | 5.0 | 3.4 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 17:40 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 17:40 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/08/23 17:40 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 17:40 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 17:40 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 17:40 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 17:40 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 17:40 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 17:40 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 17:40 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 17:40 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:40 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 17:40 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:40 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/08/23 17:40 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/08/23 17:40 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/08/23 17:40 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:40 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/08/23 17:40 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:40 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:40 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/08/23 17:40 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 17:40 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 17:40 | 1 |

## Client Sample ID: MW22

**Lab Sample ID: 180-161792-31**

**Date Collected: 08/30/23 13:12**

**Matrix: Water**

**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/08/23 17:40 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 17:40 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/08/23 17:40 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 17:40 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *92* | | *53 - 124* | | *09/08/23 17:40* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *74* | | *52 - 151* | | *09/08/23 17:40* | *1* |
| *4-Bromofluorobenzene (Surr)* | *88* | | *49 - 118* | | *09/08/23 17:40* | *1* |
| *Dibromofluoromethane (Surr)* | *90* | | *60 - 132* | | *09/08/23 17:40* | *1* |

## Client Sample ID: TRIP BLANK

**Lab Sample ID: 180-161792-32**

**Date Collected: 08/30/23 00:00**

**Matrix: Water**

**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 13:05 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 13:05 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 13:05 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 13:05 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 13:05 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/08/23 13:05 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 13:05 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:05 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 13:05 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 13:05 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/08/23 13:05 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 13:05 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:05 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 13:05 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 13:05 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 13:05 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 13:05 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/08/23 13:05 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:05 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 13:05 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 13:05 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 13:05 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 13:05 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 13:05 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

## Client Sample ID: TRIP BLANK

**Lab Sample ID: 180-161792-32**

**Date Collected: 08/30/23 00:00**
**Date Received: 09/01/23 09:30**

**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 13:05 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 13:05 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:05 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 13:05 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:05 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/08/23 13:05 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/08/23 13:05 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/08/23 13:05 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:05 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/08/23 13:05 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:05 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:05 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/08/23 13:05 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 13:05 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/08/23 13:05 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 13:05 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/08/23 13:05 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *84* | | *53 - 124* | | *09/08/23 13:05* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *78* | | *52 - 151* | | *09/08/23 13:05* | *1* |
| *4-Bromofluorobenzene (Surr)* | *84* | | *49 - 118* | | *09/08/23 13:05* | *1* |
| *Dibromofluoromethane (Surr)* | *88* | | *60 - 132* | | *09/08/23 13:05* | *1* |

## Client Sample ID: TRIP BLANK

**Lab Sample ID: 180-161792-33**

**Date Collected: 08/30/23 00:00**
**Date Received: 09/01/23 09:30**

**Matrix: Water**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 13:26 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 13:26 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 13:26 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 13:26 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 13:26 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/08/23 13:26 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 13:26 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:26 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: TRIP BLANK**
**Date Collected: 08/30/23 00:00**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-33**
**Matrix: Water**

**Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 13:26 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 13:26 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/08/23 13:26 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 13:26 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:26 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 13:26 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 13:26 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 13:26 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 13:26 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/08/23 13:26 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:26 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 13:26 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 13:26 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 13:26 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 13:26 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 13:26 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 13:26 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 13:26 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:26 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 13:26 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:26 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/08/23 13:26 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/08/23 13:26 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/08/23 13:26 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:26 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/08/23 13:26 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:26 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:26 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/08/23 13:26 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 13:26 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/08/23 13:26 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 13:26 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 13:26 | 1 |

## Client Sample ID: TRIP BLANK
**Lab Sample ID: 180-161792-33**
**Date Collected: 08/30/23 00:00**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/08/23 13:26 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *83* | | *53 - 124* | | *09/08/23 13:26* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *75* | | *52 - 151* | | *09/08/23 13:26* | *1* |
| *4-Bromofluorobenzene (Surr)* | *81* | | *49 - 118* | | *09/08/23 13:26* | *1* |
| *Dibromofluoromethane (Surr)* | *85* | | *60 - 132* | | *09/08/23 13:26* | *1* |

## Client Sample ID: TRIP BLANK
**Lab Sample ID: 180-161792-34**
**Date Collected: 08/30/23 00:00**
**Matrix: Water**
**Date Received: 09/01/23 09:30**

### Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 13:47 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 13:47 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 13:47 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 13:47 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 13:47 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/08/23 13:47 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 13:47 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:47 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 13:47 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 13:47 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/08/23 13:47 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 13:47 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:47 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 13:47 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 13:47 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 13:47 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 13:47 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/08/23 13:47 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:47 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 13:47 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 13:47 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 13:47 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 13:47 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 13:47 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 13:47 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 13:47 | 1 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

**Client Sample ID: TRIP BLANK**
**Date Collected: 08/30/23 00:00**
**Date Received: 09/01/23 09:30**

**Lab Sample ID: 180-161792-34**
**Matrix: Water**

## Method: SW846 EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:47 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 13:47 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:47 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/08/23 13:47 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/08/23 13:47 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/08/23 13:47 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:47 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/08/23 13:47 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:47 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:47 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/08/23 13:47 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 13:47 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/08/23 13:47 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 13:47 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/08/23 13:47 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 13:47 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *78* | | *53 - 124* | | *09/08/23 13:47* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *70* | | *52 - 151* | | *09/08/23 13:47* | *1* |
| *4-Bromofluorobenzene (Surr)* | *79* | | *49 - 118* | | *09/08/23 13:47* | *1* |
| *Dibromofluoromethane (Surr)* | *83* | | *60 - 132* | | *09/08/23 13:47* | *1* |

## Method: EPA 8260D - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 180-445424/6**
**Matrix: Water**
**Analysis Batch: 445424**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 17:42 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 17:42 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 17:42 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 17:42 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 17:42 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/02/23 17:42 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 17:42 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 17:42 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 17:42 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 17:42 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/02/23 17:42 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/02/23 17:42 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 17:42 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 17:42 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 17:42 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 17:42 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/02/23 17:42 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/02/23 17:42 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 17:42 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 17:42 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 17:42 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 17:42 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 17:42 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 17:42 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/02/23 17:42 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 17:42 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 17:42 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/02/23 17:42 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 17:42 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/02/23 17:42 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/02/23 17:42 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/02/23 17:42 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 17:42 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/02/23 17:42 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 17:42 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 17:42 | 1 |

## Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 180-445424/6**
**Matrix: Water**
**Analysis Batch: 445424**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/02/23 17:42 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/02/23 17:42 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/02/23 17:42 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/02/23 17:42 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/02/23 17:42 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/02/23 17:42 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *88* | | *53 - 124* | | *09/02/23 17:42* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *89* | | *52 - 151* | | *09/02/23 17:42* | *1* |
| *4-Bromofluorobenzene (Surr)* | *70* | | *49 - 118* | | *09/02/23 17:42* | *1* |
| *Dibromofluoromethane (Surr)* | *114* | | *60 - 132* | | *09/02/23 17:42* | *1* |

**Lab Sample ID: LCS 180-445424/3**
**Matrix: Water**
**Analysis Batch: 445424**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 10.0 | 7.35 | | ug/L | | 74 | 21 - 165 |
| Chloromethane | 10.0 | 8.17 | | ug/L | | 82 | 37 - 170 |
| Vinyl chloride | 10.0 | 8.28 | | ug/L | | 83 | 47 - 147 |
| Bromomethane | 10.0 | 9.15 | | ug/L | | 91 | 20 - 170 |
| Chloroethane | 10.0 | 9.01 | | ug/L | | 90 | 10 - 170 |
| Trichlorofluoromethane | 10.0 | 8.63 | | ug/L | | 86 | 32 - 157 |
| 1,1-Dichloroethene | 10.0 | 8.85 | | ug/L | | 89 | 49 - 132 |
| Methylene Chloride | 10.0 | 9.46 | | ug/L | | 95 | 51 - 137 |
| Methyl tert-butyl ether | 10.0 | 9.39 | | ug/L | | 94 | 36 - 141 |
| trans-1,2-Dichloroethene | 10.0 | 9.13 | | ug/L | | 91 | 62 - 126 |
| 1,1-Dichloroethane | 10.0 | 9.13 | | ug/L | | 91 | 59 - 125 |
| 2,2-Dichloropropane | 10.0 | 10.3 | | ug/L | | 103 | 51 - 143 |
| cis-1,2-Dichloroethene | 10.0 | 9.11 | | ug/L | | 91 | 64 - 122 |
| Bromochloromethane | 10.0 | 9.64 | | ug/L | | 96 | 59 - 133 |
| Chloroform | 10.0 | 9.10 | | ug/L | | 91 | 62 - 121 |
| 1,1,1-Trichloroethane | 10.0 | 8.63 | | ug/L | | 86 | 64 - 133 |
| Carbon tetrachloride | 10.0 | 8.97 | | ug/L | | 90 | 60 - 135 |
| 1,1-Dichloropropene | 10.0 | 8.21 | | ug/L | | 82 | 48 - 133 |
| Benzene | 10.0 | 8.97 | | ug/L | | 90 | 68 - 122 |
| 1,2-Dichloroethane | 10.0 | 8.42 | | ug/L | | 84 | 57 - 149 |
| Trichloroethene | 10.0 | 8.55 | | ug/L | | 86 | 67 - 121 |
| 1,2-Dichloropropane | 10.0 | 8.91 | | ug/L | | 89 | 65 - 129 |
| Dibromomethane | 10.0 | 9.23 | | ug/L | | 92 | 55 - 148 |
| Dichlorobromomethane | 10.0 | 9.46 | | ug/L | | 95 | 63 - 132 |

## Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 180-445424/3**
**Matrix: Water**
**Analysis Batch: 445424**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | 10.0 | 8.74 | | ug/L | | 87 | 53 - 140 |
| Toluene | 10.0 | 8.72 | | ug/L | | 87 | 67 - 128 |
| trans-1,3-Dichloropropene | 10.0 | 9.58 | | ug/L | | 96 | 57 - 137 |
| 1,1,2-Trichloroethane | 10.0 | 9.15 | | ug/L | | 91 | 59 - 137 |
| Tetrachloroethene | 10.0 | 8.67 | | ug/L | | 87 | 60 - 129 |
| 1,3-Dichloropropane | 10.0 | 8.97 | | ug/L | | 90 | 63 - 131 |
| Chlorodibromomethane | 10.0 | 10.2 | | ug/L | | 102 | 51 - 144 |
| Ethylene Dibromide | 10.0 | 8.89 | | ug/L | | 89 | 55 - 146 |
| Chlorobenzene | 10.0 | 8.90 | | ug/L | | 89 | 72 - 123 |
| 1,1,1,2-Tetrachloroethane | 10.0 | 9.82 | | ug/L | | 98 | 67 - 126 |
| Ethylbenzene | 10.0 | 8.08 | | ug/L | | 81 | 66 - 122 |
| m-Xylene & p-Xylene | 10.0 | 8.16 | | ug/L | | 82 | 61 - 128 |
| o-Xylene | 10.0 | 8.23 | | ug/L | | 82 | 64 - 120 |
| Styrene | 10.0 | 8.67 | | ug/L | | 87 | 68 - 127 |
| Bromoform | 10.0 | 11.2 | | ug/L | | 112 | 31 - 164 |
| Isopropylbenzene | 10.0 | 7.98 | | ug/L | | 80 | 54 - 130 |
| Bromobenzene | 10.0 | 8.31 | | ug/L | | 83 | 68 - 132 |
| 1,1,2,2-Tetrachloroethane | 10.0 | 8.97 | | ug/L | | 90 | 47 - 147 |
| 1,2,3-Trichloropropane | 10.0 | 7.72 | | ug/L | | 77 | 39 - 163 |
| N-Propylbenzene | 10.0 | 7.66 | | ug/L | | 77 | 58 - 130 |
| 2-Chlorotoluene | 10.0 | 8.02 | | ug/L | | 80 | 64 - 128 |
| 4-Chlorotoluene | 10.0 | 8.60 | | ug/L | | 86 | 65 - 130 |
| tert-Butylbenzene | 10.0 | 7.24 | | ug/L | | 72 | 58 - 129 |
| 1,2,4-Trimethylbenzene | 10.0 | 7.77 | | ug/L | | 78 | 65 - 127 |
| sec-Butylbenzene | 10.0 | 7.38 | | ug/L | | 74 | 53 - 126 |
| 4-Isopropyltoluene | 10.0 | 7.53 | | ug/L | | 75 | 57 - 126 |
| 1,3-Dichlorobenzene | 10.0 | 8.49 | | ug/L | | 85 | 70 - 119 |
| 1,4-Dichlorobenzene | 10.0 | 8.47 | | ug/L | | 85 | 74 - 117 |
| n-Butylbenzene | 10.0 | 6.87 | | ug/L | | 69 | 50 - 130 |
| 1,2-Dichlorobenzene | 10.0 | 8.79 | | ug/L | | 88 | 68 - 116 |
| 1,2-Dibromo-3-Chloropropane | 10.0 | 6.84 | | ug/L | | 68 | 10 - 170 |
| 1,2,4-Trichlorobenzene | 10.0 | 5.72 | | ug/L | | 57 | 15 - 169 |
| Hexachlorobutadiene | 10.0 | 7.83 | | ug/L | | 78 | 28 - 153 |
| Naphthalene | 10.0 | ND | | ug/L | | 37 | 10 - 170 |
| 1,2,3-Trichlorobenzene | 10.0 | ND | | ug/L | | 52 | 10 - 170 |
| 1,3,5-Trimethylbenzene | 10.0 | 7.70 | | ug/L | | 77 | 59 - 127 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *110* | | *53 - 124* |
| *1,2-Dichloroethane-d4 (Surr)* | *107* | | *52 - 151* |
| *4-Bromofluorobenzene (Surr)* | *105* | | *49 - 118* |
| *Dibromofluoromethane (Surr)* | *119* | | *60 - 132* |

## Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 180-445743/9**
**Matrix: Water**
**Analysis Batch: 445743**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/07/23 11:57 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/07/23 11:57 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/07/23 11:57 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 11:57 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/07/23 11:57 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/07/23 11:57 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 11:57 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 11:57 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/07/23 11:57 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/07/23 11:57 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/07/23 11:57 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/07/23 11:57 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 11:57 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/07/23 11:57 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/07/23 11:57 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/07/23 11:57 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/07/23 11:57 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/07/23 11:57 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 11:57 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/07/23 11:57 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/07/23 11:57 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 11:57 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/07/23 11:57 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 11:57 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/07/23 11:57 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 11:57 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 11:57 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/07/23 11:57 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 11:57 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/07/23 11:57 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/07/23 11:57 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/07/23 11:57 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 11:57 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/07/23 11:57 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 11:57 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 11:57 | 1 |

## Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 180-445743/9**
**Matrix: Water**
**Analysis Batch: 445743**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/07/23 11:57 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/07/23 11:57 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/07/23 11:57 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/07/23 11:57 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/07/23 11:57 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/07/23 11:57 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *89* | | *53 - 124* | | *09/07/23 11:57* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *79* | | *52 - 151* | | *09/07/23 11:57* | *1* |
| *4-Bromofluorobenzene (Surr)* | *87* | | *49 - 118* | | *09/07/23 11:57* | *1* |
| *Dibromofluoromethane (Surr)* | *81* | | *60 - 132* | | *09/07/23 11:57* | *1* |

**Lab Sample ID: LCS 180-445743/3**
**Matrix: Water**
**Analysis Batch: 445743**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 10.0 | 5.77 | | ug/L | | 58 | 21 - 165 |
| Chloromethane | 10.0 | 7.77 | | ug/L | | 78 | 37 - 170 |
| Vinyl chloride | 10.0 | 8.38 | | ug/L | | 84 | 47 - 147 |
| Bromomethane | 10.0 | 10.3 | | ug/L | | 103 | 20 - 170 |
| Chloroethane | 10.0 | 9.18 | | ug/L | | 92 | 10 - 170 |
| Trichlorofluoromethane | 10.0 | 8.23 | | ug/L | | 82 | 32 - 157 |
| 1,1-Dichloroethene | 10.0 | 9.18 | | ug/L | | 92 | 49 - 132 |
| Methylene Chloride | 10.0 | 8.97 | | ug/L | | 90 | 51 - 137 |
| Methyl tert-butyl ether | 10.0 | 10.7 | | ug/L | | 107 | 36 - 141 |
| trans-1,2-Dichloroethene | 10.0 | 8.71 | | ug/L | | 87 | 62 - 126 |
| 1,1-Dichloroethane | 10.0 | 9.20 | | ug/L | | 92 | 59 - 125 |
| 2,2-Dichloropropane | 10.0 | 11.2 | | ug/L | | 112 | 51 - 143 |
| cis-1,2-Dichloroethene | 10.0 | 8.98 | | ug/L | | 90 | 64 - 122 |
| Bromochloromethane | 10.0 | 8.79 | | ug/L | | 88 | 59 - 133 |
| Chloroform | 10.0 | 8.74 | | ug/L | | 87 | 62 - 121 |
| 1,1,1-Trichloroethane | 10.0 | 9.60 | | ug/L | | 96 | 64 - 133 |
| Carbon tetrachloride | 10.0 | 9.29 | | ug/L | | 93 | 60 - 135 |
| 1,1-Dichloropropene | 10.0 | 9.35 | | ug/L | | 93 | 48 - 133 |
| Benzene | 10.0 | 9.04 | | ug/L | | 90 | 68 - 122 |
| 1,2-Dichloroethane | 10.0 | 9.00 | | ug/L | | 90 | 57 - 149 |
| Trichloroethene | 10.0 | 9.34 | | ug/L | | 93 | 67 - 121 |
| 1,2-Dichloropropane | 10.0 | 9.24 | | ug/L | | 92 | 65 - 129 |
| Dibromomethane | 10.0 | 9.13 | | ug/L | | 91 | 55 - 148 |
| Dichlorobromomethane | 10.0 | 9.87 | | ug/L | | 99 | 63 - 132 |

## Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 180-445743/3**
**Matrix: Water**
**Analysis Batch: 445743**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | 10.0 | 11.6 | | ug/L | | 116 | 53 - 140 |
| Toluene | 10.0 | 8.85 | | ug/L | | 89 | 67 - 128 |
| trans-1,3-Dichloropropene | 10.0 | 11.1 | | ug/L | | 111 | 57 - 137 |
| 1,1,2-Trichloroethane | 10.0 | 8.84 | | ug/L | | 88 | 59 - 137 |
| Tetrachloroethene | 10.0 | 8.43 | | ug/L | | 84 | 60 - 129 |
| 1,3-Dichloropropane | 10.0 | 8.89 | | ug/L | | 89 | 63 - 131 |
| Chlorodibromomethane | 10.0 | 10.0 | | ug/L | | 100 | 51 - 144 |
| Ethylene Dibromide | 10.0 | 9.18 | | ug/L | | 92 | 55 - 146 |
| Chlorobenzene | 10.0 | 8.98 | | ug/L | | 90 | 72 - 123 |
| 1,1,1,2-Tetrachloroethane | 10.0 | 9.13 | | ug/L | | 91 | 67 - 126 |
| Ethylbenzene | 10.0 | 9.73 | | ug/L | | 97 | 66 - 122 |
| m-Xylene & p-Xylene | 10.0 | 9.50 | | ug/L | | 95 | 61 - 128 |
| o-Xylene | 10.0 | 9.39 | | ug/L | | 94 | 64 - 120 |
| Styrene | 10.0 | 9.64 | | ug/L | | 96 | 68 - 127 |
| Bromoform | 10.0 | 11.3 | | ug/L | | 113 | 31 - 164 |
| Isopropylbenzene | 10.0 | 9.57 | | ug/L | | 96 | 54 - 130 |
| Bromobenzene | 10.0 | 9.50 | | ug/L | | 95 | 68 - 132 |
| 1,1,2,2-Tetrachloroethane | 10.0 | 8.78 | | ug/L | | 88 | 47 - 147 |
| 1,2,3-Trichloropropane | 10.0 | 9.40 | | ug/L | | 94 | 39 - 163 |
| N-Propylbenzene | 10.0 | 9.94 | | ug/L | | 99 | 58 - 130 |
| 2-Chlorotoluene | 10.0 | 9.62 | | ug/L | | 96 | 64 - 128 |
| 4-Chlorotoluene | 10.0 | 9.56 | | ug/L | | 96 | 65 - 130 |
| tert-Butylbenzene | 10.0 | 10.1 | | ug/L | | 101 | 58 - 129 |
| 1,2,4-Trimethylbenzene | 10.0 | 9.84 | | ug/L | | 98 | 65 - 127 |
| sec-Butylbenzene | 10.0 | 9.69 | | ug/L | | 97 | 53 - 126 |
| 4-Isopropyltoluene | 10.0 | 9.82 | | ug/L | | 98 | 57 - 126 |
| 1,3-Dichlorobenzene | 10.0 | 9.22 | | ug/L | | 92 | 70 - 119 |
| 1,4-Dichlorobenzene | 10.0 | 9.00 | | ug/L | | 90 | 74 - 117 |
| n-Butylbenzene | 10.0 | 9.91 | | ug/L | | 99 | 50 - 130 |
| 1,2-Dichlorobenzene | 10.0 | 8.96 | | ug/L | | 90 | 68 - 116 |
| 1,2-Dibromo-3-Chloropropane | 10.0 | 10.7 | | ug/L | | 107 | 10 - 170 |
| 1,2,4-Trichlorobenzene | 10.0 | 8.56 | | ug/L | | 86 | 15 - 169 |
| Hexachlorobutadiene | 10.0 | 8.86 | | ug/L | | 89 | 28 - 153 |
| Naphthalene | 10.0 | 8.09 | | ug/L | | 81 | 10 - 170 |
| 1,2,3-Trichlorobenzene | 10.0 | 6.96 | J | ug/L | | 70 | 10 - 170 |
| 1,3,5-Trimethylbenzene | 10.0 | 9.92 | | ug/L | | 99 | 59 - 127 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *87* | | *53 - 124* |
| *1,2-Dichloroethane-d4 (Surr)* | *83* | | *52 - 151* |
| *4-Bromofluorobenzene (Surr)* | *89* | | *49 - 118* |
| *Dibromofluoromethane (Surr)* | *85* | | *60 - 132* |

## Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCSD 180-445743/4**
**Matrix: Water**
**Analysis Batch: 445743**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | | | 10.0 | 6.22 | | ug/L | | 62 | 21 - 165 | 7 | 26 |
| Chloromethane | | | 10.0 | 8.87 | | ug/L | | 89 | 37 - 170 | 13 | 28 |
| Vinyl chloride | | | 10.0 | 9.30 | | ug/L | | 93 | 47 - 147 | 10 | 25 |
| Bromomethane | | | 10.0 | 10.5 | | ug/L | | 105 | 20 - 170 | 2 | 30 |
| Chloroethane | | | 10.0 | 11.8 | | ug/L | | 118 | 10 - 170 | 25 | 29 |
| Trichlorofluoromethane | | | 10.0 | 9.16 | | ug/L | | 92 | 32 - 157 | 11 | 35 |
| 1,1-Dichloroethene | | | 10.0 | 9.69 | | ug/L | | 97 | 49 - 132 | 5 | 23 |
| Methylene Chloride | | | 10.0 | 10.5 | | ug/L | | 105 | 51 - 137 | 15 | 35 |
| Methyl tert-butyl ether | | | 10.0 | 12.5 | | ug/L | | 125 | 36 - 141 | 15 | 35 |
| trans-1,2-Dichloroethene | | | 10.0 | 9.31 | | ug/L | | 93 | 62 - 126 | 7 | 23 |
| 1,1-Dichloroethane | | | 10.0 | 9.87 | | ug/L | | 99 | 59 - 125 | 7 | 20 |
| 2,2-Dichloropropane | | | 10.0 | 12.8 | | ug/L | | 128 | 51 - 143 | 13 | 26 |
| cis-1,2-Dichloroethene | | | 10.0 | 9.70 | | ug/L | | 97 | 64 - 122 | 8 | 22 |
| Bromochloromethane | | | 10.0 | 9.99 | | ug/L | | 100 | 59 - 133 | 13 | 26 |
| Chloroform | | | 10.0 | 9.63 | | ug/L | | 96 | 62 - 121 | 10 | 22 |
| 1,1,1-Trichloroethane | | | 10.0 | 10.3 | | ug/L | | 103 | 64 - 133 | 7 | 22 |
| Carbon tetrachloride | | | 10.0 | 9.86 | | ug/L | | 99 | 60 - 135 | 6 | 25 |
| 1,1-Dichloropropene | | | 10.0 | 9.51 | | ug/L | | 95 | 48 - 133 | 2 | 24 |
| Benzene | | | 10.0 | 9.32 | | ug/L | | 93 | 68 - 122 | 3 | 21 |
| 1,2-Dichloroethane | | | 10.0 | 9.91 | | ug/L | | 99 | 57 - 149 | 10 | 27 |
| Trichloroethene | | | 10.0 | 9.64 | | ug/L | | 96 | 67 - 121 | 3 | 23 |
| 1,2-Dichloropropane | | | 10.0 | 10.0 | | ug/L | | 100 | 65 - 129 | 8 | 23 |
| Dibromomethane | | | 10.0 | 9.98 | | ug/L | | 100 | 55 - 148 | 9 | 31 |
| Dichlorobromomethane | | | 10.0 | 10.6 | | ug/L | | 106 | 63 - 132 | 7 | 24 |
| cis-1,3-Dichloropropene | | | 10.0 | 12.3 | | ug/L | | 123 | 53 - 140 | 6 | 26 |
| Toluene | | | 10.0 | 8.78 | | ug/L | | 88 | 67 - 128 | 1 | 22 |
| trans-1,3-Dichloropropene | | | 10.0 | 11.2 | | ug/L | | 112 | 57 - 137 | 1 | 25 |
| 1,1,2-Trichloroethane | | | 10.0 | 8.99 | | ug/L | | 90 | 59 - 137 | 2 | 29 |
| Tetrachloroethene | | | 10.0 | 8.37 | | ug/L | | 84 | 60 - 129 | 1 | 22 |
| 1,3-Dichloropropane | | | 10.0 | 9.00 | | ug/L | | 90 | 63 - 131 | 1 | 27 |
| Chlorodibromomethane | | | 10.0 | 10.4 | | ug/L | | 104 | 51 - 144 | 4 | 25 |
| Ethylene Dibromide | | | 10.0 | 9.68 | | ug/L | | 97 | 55 - 146 | 5 | 30 |
| Chlorobenzene | | | 10.0 | 8.93 | | ug/L | | 89 | 72 - 123 | 0 | 19 |
| 1,1,1,2-Tetrachloroethane | | | 10.0 | 9.64 | | ug/L | | 96 | 67 - 126 | 5 | 21 |
| Ethylbenzene | | | 10.0 | 9.33 | | ug/L | | 93 | 66 - 122 | 4 | 22 |
| m-Xylene & p-Xylene | | | 10.0 | 9.45 | | ug/L | | 95 | 61 - 128 | 1 | 21 |
| o-Xylene | | | 10.0 | 9.75 | | ug/L | | 98 | 64 - 120 | 4 | 23 |
| Styrene | | | 10.0 | 9.75 | | ug/L | | 97 | 68 - 127 | 1 | 22 |
| Bromoform | | | 10.0 | 11.4 | | ug/L | | 114 | 31 - 164 | 1 | 35 |
| Isopropylbenzene | | | 10.0 | 9.54 | | ug/L | | 95 | 54 - 130 | 0 | 22 |
| Bromobenzene | | | 10.0 | 9.62 | | ug/L | | 96 | 68 - 132 | 1 | 20 |
| 1,1,2,2-Tetrachloroethane | | | 10.0 | 9.28 | | ug/L | | 93 | 47 - 147 | 6 | 35 |
| 1,2,3-Trichloropropane | | | 10.0 | 9.89 | | ug/L | | 99 | 39 - 163 | 5 | 31 |
| N-Propylbenzene | | | 10.0 | 9.67 | | ug/L | | 97 | 58 - 130 | 3 | 22 |
| 2-Chlorotoluene | | | 10.0 | 9.60 | | ug/L | | 96 | 64 - 128 | 0 | 20 |
| 4-Chlorotoluene | | | 10.0 | 9.75 | | ug/L | | 98 | 65 - 130 | 2 | 19 |
| tert-Butylbenzene | | | 10.0 | 10.0 | | ug/L | | 100 | 58 - 129 | 0 | 22 |
| 1,2,4-Trimethylbenzene | | | 10.0 | 9.78 | | ug/L | | 98 | 65 - 127 | 1 | 18 |

## Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCSD 180-445743/4**
**Matrix: Water**
**Analysis Batch: 445743**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| sec-Butylbenzene | | | 10.0 | 9.81 | | ug/L | | 98 | 53 - 126 | 1 | 21 |
| 4-Isopropyltoluene | | | 10.0 | 9.84 | | ug/L | | 98 | 57 - 126 | 0 | 21 |
| 1,3-Dichlorobenzene | | | 10.0 | 9.31 | | ug/L | | 93 | 70 - 119 | 1 | 18 |
| 1,4-Dichlorobenzene | | | 10.0 | 9.28 | | ug/L | | 93 | 74 - 117 | 3 | 17 |
| n-Butylbenzene | | | 10.0 | 10.0 | | ug/L | | 100 | 50 - 130 | 1 | 23 |
| 1,2-Dichlorobenzene | | | 10.0 | 9.46 | | ug/L | | 95 | 68 - 116 | 5 | 20 |
| 1,2-Dibromo-3-Chloropropane | | | 10.0 | 12.1 | | ug/L | | 121 | 10 - 170 | 12 | 35 |
| 1,2,4-Trichlorobenzene | | | 10.0 | 9.90 | | ug/L | | 99 | 15 - 169 | 15 | 35 |
| Hexachlorobutadiene | | | 10.0 | 9.74 | | ug/L | | 97 | 28 - 153 | 9 | 35 |
| Naphthalene | | | 10.0 | 9.86 | | ug/L | | 99 | 10 - 170 | 20 | 35 |
| 1,2,3-Trichlorobenzene | | | 10.0 | 8.43 | J | ug/L | | 84 | 10 - 170 | 19 | 35 |
| 1,3,5-Trimethylbenzene | | | 10.0 | 9.95 | | ug/L | | 100 | 59 - 127 | 0 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *96* | | *53 - 124* |
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *52 - 151* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *49 - 118* |
| *Dibromofluoromethane (Surr)* | *102* | | *60 - 132* |

**Lab Sample ID: MB 180-445879/8**
**Matrix: Water**
**Analysis Batch: 445879**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 10:19 | 1 |
| Chloromethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 10:19 | 1 |
| Vinyl chloride | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 10:19 | 1 |
| Bromomethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 10:19 | 1 |
| Chloroethane | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 10:19 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 2.8 | ug/L | | | 09/08/23 10:19 | 1 |
| Methylene Chloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 10:19 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 10:19 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 10:19 | 1 |
| 2,2-Dichloropropane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 10:19 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 3.5 | ug/L | | | 09/08/23 10:19 | 1 |
| Bromochloromethane | ND | | 5.0 | 3.1 | ug/L | | | 09/08/23 10:19 | 1 |
| Chloroform | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,1,1-Trichloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 10:19 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,1-Dichloropropene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 10:19 | 1 |
| Benzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 10:19 | 1 |
| Trichloroethene | ND | | 5.0 | 3.4 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 10:19 | 1 |
| Dibromomethane | ND | | 5.0 | 3.3 | ug/L | | | 09/08/23 10:19 | 1 |
| Dichlorobromomethane | ND | | 5.0 | 3.2 | ug/L | | | 09/08/23 10:19 | 1 |

## Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 180-445879/8**
**Matrix: Water**
**Analysis Batch: 445879**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 10:19 | 1 |
| Toluene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 10:19 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 10:19 | 1 |
| Tetrachloroethene | ND | | 5.0 | 2.3 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,3-Dichloropropane | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 10:19 | 1 |
| Chlorodibromomethane | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 10:19 | 1 |
| Ethylene Dibromide | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 10:19 | 1 |
| Chlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | 5.0 | 2.9 | ug/L | | | 09/08/23 10:19 | 1 |
| Ethylbenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 10:19 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 10:19 | 1 |
| o-Xylene | ND | | 5.0 | 2.0 | ug/L | | | 09/08/23 10:19 | 1 |
| Styrene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 10:19 | 1 |
| Bromoform | ND | | 5.0 | 4.9 | ug/L | | | 09/08/23 10:19 | 1 |
| Isopropylbenzene | ND | | 5.0 | 1.7 | ug/L | | | 09/08/23 10:19 | 1 |
| Bromobenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,2,3-Trichloropropane | ND | | 5.0 | 4.0 | ug/L | | | 09/08/23 10:19 | 1 |
| N-Propylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 10:19 | 1 |
| 2-Chlorotoluene | ND | | 5.0 | 2.2 | ug/L | | | 09/08/23 10:19 | 1 |
| 4-Chlorotoluene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 10:19 | 1 |
| tert-Butylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 10:19 | 1 |
| sec-Butylbenzene | ND | | 5.0 | 2.6 | ug/L | | | 09/08/23 10:19 | 1 |
| 4-Isopropyltoluene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 2.5 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 2.7 | ug/L | | | 09/08/23 10:19 | 1 |
| n-Butylbenzene | ND | | 5.0 | 3.0 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 1.8 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 4.4 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 3.9 | ug/L | | | 09/08/23 10:19 | 1 |
| Hexachlorobutadiene | ND | | 5.0 | 4.5 | ug/L | | | 09/08/23 10:19 | 1 |
| Naphthalene | ND | | 5.0 | 4.2 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 10 | 5.3 | ug/L | | | 09/08/23 10:19 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 5.0 | 2.4 | ug/L | | | 09/08/23 10:19 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *82* | | *53 - 124* | | *09/08/23 10:19* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *75* | | *52 - 151* | | *09/08/23 10:19* | *1* |
| *4-Bromofluorobenzene (Surr)* | *82* | | *49 - 118* | | *09/08/23 10:19* | *1* |
| *Dibromofluoromethane (Surr)* | *83* | | *60 - 132* | | *09/08/23 10:19* | *1* |

## Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 180-445879/3**
**Matrix: Water**
**Analysis Batch: 445879**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 10.0 | 5.82 | | ug/L | | 58 | 21 - 165 |
| Chloromethane | 10.0 | 7.92 | | ug/L | | 79 | 37 - 170 |
| Vinyl chloride | 10.0 | 8.75 | | ug/L | | 88 | 47 - 147 |
| Bromomethane | 10.0 | 10.0 | | ug/L | | 100 | 20 - 170 |
| Chloroethane | 10.0 | 10.3 | | ug/L | | 103 | 10 - 170 |
| Trichlorofluoromethane | 10.0 | 8.47 | | ug/L | | 85 | 32 - 157 |
| 1,1-Dichloroethene | 10.0 | 9.42 | | ug/L | | 94 | 49 - 132 |
| Methylene Chloride | 10.0 | 8.66 | | ug/L | | 87 | 51 - 137 |
| Methyl tert-butyl ether | 10.0 | 11.2 | | ug/L | | 112 | 36 - 141 |
| trans-1,2-Dichloroethene | 10.0 | 9.04 | | ug/L | | 90 | 62 - 126 |
| 1,1-Dichloroethane | 10.0 | 9.30 | | ug/L | | 93 | 59 - 125 |
| 2,2-Dichloropropane | 10.0 | 11.6 | | ug/L | | 116 | 51 - 143 |
| cis-1,2-Dichloroethene | 10.0 | 9.38 | | ug/L | | 94 | 64 - 122 |
| Bromochloromethane | 10.0 | 9.19 | | ug/L | | 92 | 59 - 133 |
| Chloroform | 10.0 | 9.12 | | ug/L | | 91 | 62 - 121 |
| 1,1,1-Trichloroethane | 10.0 | 9.66 | | ug/L | | 97 | 64 - 133 |
| Carbon tetrachloride | 10.0 | 8.97 | | ug/L | | 90 | 60 - 135 |
| 1,1-Dichloropropene | 10.0 | 9.29 | | ug/L | | 93 | 48 - 133 |
| Benzene | 10.0 | 9.03 | | ug/L | | 90 | 68 - 122 |
| 1,2-Dichloroethane | 10.0 | 9.34 | | ug/L | | 93 | 57 - 149 |
| Trichloroethene | 10.0 | 9.40 | | ug/L | | 94 | 67 - 121 |
| 1,2-Dichloropropane | 10.0 | 9.23 | | ug/L | | 92 | 65 - 129 |
| Dibromomethane | 10.0 | 9.30 | | ug/L | | 93 | 55 - 148 |
| Dichlorobromomethane | 10.0 | 9.74 | | ug/L | | 97 | 63 - 132 |
| cis-1,3-Dichloropropene | 10.0 | 11.5 | | ug/L | | 115 | 53 - 140 |
| Toluene | 10.0 | 8.69 | | ug/L | | 87 | 67 - 128 |
| trans-1,3-Dichloropropene | 10.0 | 10.6 | | ug/L | | 106 | 57 - 137 |
| 1,1,2-Trichloroethane | 10.0 | 8.52 | | ug/L | | 85 | 59 - 137 |
| Tetrachloroethene | 10.0 | 8.25 | | ug/L | | 82 | 60 - 129 |
| 1,3-Dichloropropane | 10.0 | 8.58 | | ug/L | | 86 | 63 - 131 |
| Chlorodibromomethane | 10.0 | 10.9 | | ug/L | | 109 | 51 - 144 |
| Ethylene Dibromide | 10.0 | 8.94 | | ug/L | | 89 | 55 - 146 |
| Chlorobenzene | 10.0 | 8.83 | | ug/L | | 88 | 72 - 123 |
| 1,1,1,2-Tetrachloroethane | 10.0 | 9.50 | | ug/L | | 95 | 67 - 126 |
| Ethylbenzene | 10.0 | 9.01 | | ug/L | | 90 | 66 - 122 |
| m-Xylene & p-Xylene | 10.0 | 8.99 | | ug/L | | 90 | 61 - 128 |
| o-Xylene | 10.0 | 9.26 | | ug/L | | 93 | 64 - 120 |
| Styrene | 10.0 | 9.16 | | ug/L | | 92 | 68 - 127 |
| Bromoform | 10.0 | 10.7 | | ug/L | | 107 | 31 - 164 |
| Isopropylbenzene | 10.0 | 9.06 | | ug/L | | 91 | 54 - 130 |
| Bromobenzene | 10.0 | 11.7 | | ug/L | | 117 | 68 - 132 |
| 1,1,2,2-Tetrachloroethane | 10.0 | 8.47 | | ug/L | | 85 | 47 - 147 |
| 1,2,3-Trichloropropane | 10.0 | 8.77 | | ug/L | | 88 | 39 - 163 |
| N-Propylbenzene | 10.0 | 9.32 | | ug/L | | 93 | 58 - 130 |
| 2-Chlorotoluene | 10.0 | 9.42 | | ug/L | | 94 | 64 - 128 |
| 4-Chlorotoluene | 10.0 | 9.11 | | ug/L | | 91 | 65 - 130 |
| tert-Butylbenzene | 10.0 | 9.64 | | ug/L | | 96 | 58 - 129 |
| 1,2,4-Trimethylbenzene | 10.0 | 9.61 | | ug/L | | 96 | 65 - 127 |

## Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 180-445879/3**
**Matrix: Water**
**Analysis Batch: 445879**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| sec-Butylbenzene | 10.0 | 9.37 | | ug/L | | 94 | 53 - 126 |
| 4-Isopropyltoluene | 10.0 | 9.33 | | ug/L | | 93 | 57 - 126 |
| 1,3-Dichlorobenzene | 10.0 | 9.12 | | ug/L | | 91 | 70 - 119 |
| 1,4-Dichlorobenzene | 10.0 | 9.04 | | ug/L | | 90 | 74 - 117 |
| n-Butylbenzene | 10.0 | 9.56 | | ug/L | | 96 | 50 - 130 |
| 1,2-Dichlorobenzene | 10.0 | 9.30 | | ug/L | | 93 | 68 - 116 |
| 1,2-Dibromo-3-Chloropropane | 10.0 | 10.7 | | ug/L | | 107 | 10 - 170 |
| 1,2,4-Trichlorobenzene | 10.0 | 8.83 | | ug/L | | 88 | 15 - 169 |
| Hexachlorobutadiene | 10.0 | 8.70 | | ug/L | | 87 | 28 - 153 |
| Naphthalene | 10.0 | 8.29 | | ug/L | | 83 | 10 - 170 |
| 1,2,3-Trichlorobenzene | 10.0 | 7.07 | J | ug/L | | 71 | 10 - 170 |
| 1,3,5-Trimethylbenzene | 10.0 | 9.49 | | ug/L | | 95 | 59 - 127 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *86* | | *53 - 124* |
| *1,2-Dichloroethane-d4 (Surr)* | *89* | | *52 - 151* |
| *4-Bromofluorobenzene (Surr)* | *87* | | *49 - 118* |
| *Dibromofluoromethane (Surr)* | *91* | | *60 - 132* |

**Lab Sample ID: LCSD 180-445879/4**
**Matrix: Water**
**Analysis Batch: 445879**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 10.0 | 5.37 | | ug/L | | 54 | 21 - 165 | 8 | 26 |
| Chloromethane | 10.0 | 8.06 | | ug/L | | 81 | 37 - 170 | 2 | 28 |
| Vinyl chloride | 10.0 | 8.32 | | ug/L | | 83 | 47 - 147 | 5 | 25 |
| Bromomethane | 10.0 | 10.3 | | ug/L | | 103 | 20 - 170 | 2 | 30 |
| Chloroethane | 10.0 | 9.45 | | ug/L | | 94 | 10 - 170 | 9 | 29 |
| Trichlorofluoromethane | 10.0 | 8.25 | | ug/L | | 83 | 32 - 157 | 3 | 35 |
| 1,1-Dichloroethene | 10.0 | 8.94 | | ug/L | | 89 | 49 - 132 | 5 | 23 |
| Methylene Chloride | 10.0 | 8.56 | | ug/L | | 86 | 51 - 137 | 1 | 35 |
| Methyl tert-butyl ether | 10.0 | 11.0 | | ug/L | | 110 | 36 - 141 | 1 | 35 |
| trans-1,2-Dichloroethene | 10.0 | 8.30 | | ug/L | | 83 | 62 - 126 | 9 | 23 |
| 1,1-Dichloroethane | 10.0 | 8.77 | | ug/L | | 88 | 59 - 125 | 6 | 20 |
| 2,2-Dichloropropane | 10.0 | 11.5 | | ug/L | | 115 | 51 - 143 | 1 | 26 |
| cis-1,2-Dichloroethene | 10.0 | 8.96 | | ug/L | | 90 | 64 - 122 | 5 | 22 |
| Bromochloromethane | 10.0 | 8.98 | | ug/L | | 90 | 59 - 133 | 2 | 26 |
| Chloroform | 10.0 | 8.67 | | ug/L | | 87 | 62 - 121 | 5 | 22 |
| 1,1,1-Trichloroethane | 10.0 | 9.14 | | ug/L | | 91 | 64 - 133 | 6 | 22 |
| Carbon tetrachloride | 10.0 | 8.74 | | ug/L | | 87 | 60 - 135 | 3 | 25 |
| 1,1-Dichloropropene | 10.0 | 8.81 | | ug/L | | 88 | 48 - 133 | 5 | 24 |
| Benzene | 10.0 | 8.77 | | ug/L | | 88 | 68 - 122 | 3 | 21 |
| 1,2-Dichloroethane | 10.0 | 9.07 | | ug/L | | 91 | 57 - 149 | 3 | 27 |
| Trichloroethene | 10.0 | 9.11 | | ug/L | | 91 | 67 - 121 | 3 | 23 |
| 1,2-Dichloropropane | 10.0 | 9.23 | | ug/L | | 92 | 65 - 129 | 0 | 23 |
| Dibromomethane | 10.0 | 9.13 | | ug/L | | 91 | 55 - 148 | 2 | 31 |
| Dichlorobromomethane | 10.0 | 9.56 | | ug/L | | 96 | 63 - 132 | 2 | 24 |

Client: WE2 Support Services
Project/Site: Dept of Energy- NETL - Albany, OR

Job ID: 180-161792-1

## Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCSD 180-445879/4**
**Matrix: Water**
**Analysis Batch: 445879**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | | | 10.0 | 11.3 | | ug/L | | 113 | 53 - 140 | 2 | 26 |
| Toluene | | | 10.0 | 8.47 | | ug/L | | 85 | 67 - 128 | 3 | 22 |
| trans-1,3-Dichloropropene | | | 10.0 | 10.4 | | ug/L | | 104 | 57 - 137 | 2 | 25 |
| 1,1,2-Trichloroethane | | | 10.0 | 8.23 | | ug/L | | 82 | 59 - 137 | 3 | 29 |
| Tetrachloroethene | | | 10.0 | 8.10 | | ug/L | | 81 | 60 - 129 | 2 | 22 |
| 1,3-Dichloropropane | | | 10.0 | 8.45 | | ug/L | | 85 | 63 - 131 | 1 | 27 |
| Chlorodibromomethane | | | 10.0 | 9.86 | | ug/L | | 99 | 51 - 144 | 10 | 25 |
| Ethylene Dibromide | | | 10.0 | 8.84 | | ug/L | | 88 | 55 - 146 | 1 | 30 |
| Chlorobenzene | | | 10.0 | 8.56 | | ug/L | | 86 | 72 - 123 | 3 | 19 |
| 1,1,1,2-Tetrachloroethane | | | 10.0 | 9.02 | | ug/L | | 90 | 67 - 126 | 5 | 21 |
| Ethylbenzene | | | 10.0 | 8.85 | | ug/L | | 89 | 66 - 122 | 2 | 22 |
| m-Xylene & p-Xylene | | | 10.0 | 8.75 | | ug/L | | 87 | 61 - 128 | 3 | 21 |
| o-Xylene | | | 10.0 | 9.02 | | ug/L | | 90 | 64 - 120 | 3 | 23 |
| Styrene | | | 10.0 | 9.03 | | ug/L | | 90 | 68 - 127 | 1 | 22 |
| Bromoform | | | 10.0 | 10.4 | | ug/L | | 104 | 31 - 164 | 3 | 35 |
| Isopropylbenzene | | | 10.0 | 8.85 | | ug/L | | 89 | 54 - 130 | 2 | 22 |
| Bromobenzene | | | 10.0 | 10.1 | | ug/L | | 101 | 68 - 132 | 15 | 20 |
| 1,1,2,2-Tetrachloroethane | | | 10.0 | 8.21 | | ug/L | | 82 | 47 - 147 | 3 | 35 |
| 1,2,3-Trichloropropane | | | 10.0 | 8.39 | | ug/L | | 84 | 39 - 163 | 4 | 31 |
| N-Propylbenzene | | | 10.0 | 8.94 | | ug/L | | 89 | 58 - 130 | 4 | 22 |
| 2-Chlorotoluene | | | 10.0 | 8.91 | | ug/L | | 89 | 64 - 128 | 6 | 20 |
| 4-Chlorotoluene | | | 10.0 | 8.75 | | ug/L | | 88 | 65 - 130 | 4 | 19 |
| tert-Butylbenzene | | | 10.0 | 9.17 | | ug/L | | 92 | 58 - 129 | 5 | 22 |
| 1,2,4-Trimethylbenzene | | | 10.0 | 9.04 | | ug/L | | 90 | 65 - 127 | 6 | 18 |
| sec-Butylbenzene | | | 10.0 | 8.95 | | ug/L | | 89 | 53 - 126 | 5 | 21 |
| 4-Isopropyltoluene | | | 10.0 | 9.01 | | ug/L | | 90 | 57 - 126 | 4 | 21 |
| 1,3-Dichlorobenzene | | | 10.0 | 8.80 | | ug/L | | 88 | 70 - 119 | 4 | 18 |
| 1,4-Dichlorobenzene | | | 10.0 | 8.74 | | ug/L | | 87 | 74 - 117 | 3 | 17 |
| n-Butylbenzene | | | 10.0 | 9.03 | | ug/L | | 90 | 50 - 130 | 6 | 23 |
| 1,2-Dichlorobenzene | | | 10.0 | 8.90 | | ug/L | | 89 | 68 - 116 | 4 | 20 |
| 1,2-Dibromo-3-Chloropropane | | | 10.0 | 10.5 | | ug/L | | 105 | 10 - 170 | 1 | 35 |
| 1,2,4-Trichlorobenzene | | | 10.0 | 8.58 | | ug/L | | 86 | 15 - 169 | 3 | 35 |
| Hexachlorobutadiene | | | 10.0 | 8.44 | | ug/L | | 84 | 28 - 153 | 3 | 35 |
| Naphthalene | | | 10.0 | 7.81 | | ug/L | | 78 | 10 - 170 | 6 | 35 |
| 1,2,3-Trichlorobenzene | | | 10.0 | 6.80 | J | ug/L | | 68 | 10 - 170 | 4 | 35 |
| 1,3,5-Trimethylbenzene | | | 10.0 | 9.03 | | ug/L | | 90 | 59 - 127 | 5 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *93* | | *53 - 124* |
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *52 - 151* |
| *4-Bromofluorobenzene (Surr)* | *95* | | *49 - 118* |
| *Dibromofluoromethane (Surr)* | *96* | | *60 - 132* |

## GC/MS VOA

### Analysis Batch: 445424

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 180-161792-1 | MW3 | Total/NA | Water | EPA 8260D | |
| 180-161792-2 | MW4 | Total/NA | Water | EPA 8260D | |
| 180-161792-3 | MW5 | Total/NA | Water | EPA 8260D | |
| 180-161792-4 | MW6 | Total/NA | Water | EPA 8260D | |
| 180-161792-5 | MW7 | Total/NA | Water | EPA 8260D | |
| 180-161792-6 | MW8 | Total/NA | Water | EPA 8260D | |
| 180-161792-7 | MW9 | Total/NA | Water | EPA 8260D | |
| 180-161792-8 | MW10 | Total/NA | Water | EPA 8260D | |
| 180-161792-9 | MW13 | Total/NA | Water | EPA 8260D | |
| 180-161792-10 | MW14 | Total/NA | Water | EPA 8260D | |
| 180-161792-11 | MW15 | Total/NA | Water | EPA 8260D | |
| 180-161792-12 | MW16 | Total/NA | Water | EPA 8260D | |
| 180-161792-13 | MW17 | Total/NA | Water | EPA 8260D | |
| 180-161792-14 | MW18 | Total/NA | Water | EPA 8260D | |
| 180-161792-15 | MW19 | Total/NA | Water | EPA 8260D | |
| 180-161792-20 | MW26 | Total/NA | Water | EPA 8260D | |
| MB 180-445424/6 | Method Blank | Total/NA | Water | EPA 8260D | |
| LCS 180-445424/3 | Lab Control Sample | Total/NA | Water | EPA 8260D | |

### Analysis Batch: 445743

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 180-161792-14 - DL | MW18 | Total/NA | Water | EPA 8260D | |
| 180-161792-16 | MW20 | Total/NA | Water | EPA 8260D | |
| 180-161792-17 | MW23 | Total/NA | Water | EPA 8260D | |
| 180-161792-18 | MW24 | Total/NA | Water | EPA 8260D | |
| 180-161792-19 | MW25 | Total/NA | Water | EPA 8260D | |
| 180-161792-21 | MW28 | Total/NA | Water | EPA 8260D | |
| MB 180-445743/9 | Method Blank | Total/NA | Water | EPA 8260D | |
| LCS 180-445743/3 | Lab Control Sample | Total/NA | Water | EPA 8260D | |
| LCSD 180-445743/4 | Lab Control Sample Dup | Total/NA | Water | EPA 8260D | |

### Analysis Batch: 445879

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 180-161792-22 | MW29 | Total/NA | Water | EPA 8260D | |
| 180-161792-23 | MW30 | Total/NA | Water | EPA 8260D | |
| 180-161792-24 | MW31 | Total/NA | Water | EPA 8260D | |
| 180-161792-25 | MW100 | Total/NA | Water | EPA 8260D | |
| 180-161792-26 | MW101 | Total/NA | Water | EPA 8260D | |
| 180-161792-27 | MW102 | Total/NA | Water | EPA 8260D | |
| 180-161792-28 | MW103 | Total/NA | Water | EPA 8260D | |
| 180-161792-29 | DUP1 | Total/NA | Water | EPA 8260D | |
| 180-161792-30 | DUP2 | Total/NA | Water | EPA 8260D | |
| 180-161792-31 | MW22 | Total/NA | Water | EPA 8260D | |
| 180-161792-32 | TRIP BLANK | Total/NA | Water | EPA 8260D | |
| 180-161792-33 | TRIP BLANK | Total/NA | Water | EPA 8260D | |
| 180-161792-34 | TRIP BLANK | Total/NA | Water | EPA 8260D | |
| MB 180-445879/8 | Method Blank | Total/NA | Water | EPA 8260D | |
| LCS 180-445879/3 | Lab Control Sample | Total/NA | Water | EPA 8260D | |
| LCSD 180-445879/4 | Lab Control Sample Dup | Total/NA | Water | EPA 8260D | |

**Eurofins Pittsburgh**
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone 412-963-7058 Fax 412-963-2468

# Chain of Custody Record

eurofins

| Client Information | Sampler: Chanel Long | Lab PM: Colussy, Jill L | Carrier Tracking No(s): | COC No: 180-94305-15040 1 |
|---|---|---|---|---|
| Client Contact: Jason Somes | Phone: | E-Mail: Jill Colussy@et eurofinsus com | State of Origin: | Page: Page 1 of 4 |
| Company: WE2 Support Services | PWSID: | | | Job #: |

| | | |
|---|---|---|
| Address: 1450 Queen Avenue SW | Due Date Requested: | |
| City: Albany | TAT Requested (days): | |
| State, Zip: OR, 97321 | Compliance Project: Δ Yes Δ No | |
| Phone: | PO #: SOS30042 | |
| Email: Jason Somes@NETL.DOE GOV | WO #: | |
| Project Name: Dept of Energy- NETL - Albany, OR | Project #: 18025223 | |
| Site: | SSOW#: | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260D - Standard List Volatile Organics | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | A | | |
| MW3 | 8/29/23 | 1150 | G | W | | | X | | |
| MW4 | 8/28/23 | 1326 | | | | | | | |
| MW5 | 8/30/23 | 1540 | | | | | | | |
| MW6 | 8/30/23 | 1453 | | | | | | | |
| MW7 | 8/30/23 | 1020 | | | | | | | |
| MW8 | 8/29/23 | 1115 | | | | | | | |
| MW9 | 8/29/23 | 1532 | | | | | | | |
| MW10 | 8/29/23 | 1635 | | | | | | | |
| ~~MW11~~ | | | | | | | | | |
| ~~MW12~~ MW13 | 8/28/23 | 1630 | | | | | | | |
| MW14 | 8/29/23 | 1312 | | | | | | | |

180-161792 Chain of Custody

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)***
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

| Empty Kit Relinquished by | Date: | Time | Method of Shipment: |
|---|---|---|---|
| | | | |

| | Date/Time | Company | | Date/Time | Company |
|---|---|---|---|---|---|
| Relinquished by: | 9/1/23 1202 | Acana | Received by: | 8/31/23 1202 | |
| Relinquished by: | 8/31/23 1510 | CETW | Received by: | 9/1/23 0930 | EPITANE |
| Relinquished by: | Date/Time | Company | Received by: | Date/Time | Company |

| Custody Seals Intact. Δ Yes Δ No | Custody Seal No | Cooler Temperature(s) °C and Other Remarks |
|---|---|---|
| | | |

Ver: 06/08/2021

**Eurofins Pittsburgh**
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone 412-963-7058 Fax: 412-963-2468

# Chain of Custody Record

eurofins

| Client Information | Sampler: Chanel Long | Lab PM: Colussy, Jill L | Carrier Tracking No(s): | COC No: 180-94305-15040 2 |
|---|---|---|---|---|
| Client Contact: Jason Somes | Phone: | E-Mail: Jill Colussy@et eurofinsus com | State of Origin: | Page: Page 2 of 4 |
| Company: WE2 Support Services | PWSID: | Analysis Requested | | Job #: |
| Address: 1450 Queen Avenue SW | Due Date Requested: | | | Preservation Codes: A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Y - Trizma; Z - other (specify); Other: |
| City: Albany | TAT Requested (days): | | | |
| State, Zip: OR, 97321 | Compliance Project: Δ Yes Δ No | | | |
| Phone: | PO #: SOS30042 | | | |
| Email: Jason Somes@NETL DOE GOV | WO #: | | | |
| Project Name: Dept of Energy- NETL - Albany, OR | Project #: 18025223 | | | |
| Site: | SSOW#: | | | |

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260D - Standard List Volatile Organics | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | A | | |
| MW15 | 8/28/23 | 1519 | G | W | | | X | | |
| MW16 | 8/30/23 | 1115 | | | | | | | |
| MW17 | 8/28/23 | 1554 | | | | | | | |
| MW18 | 8/29/23 | 0929 | | | | | | | |
| MW19 | 8/29/23 | 1458 | | | | | | | |
| MW20 | 8/29/23 | 1614 | | | | | | | |
| ~~MW21~~ | | | | | | | | | |
| ~~MW22~~ | | | | | | | | | |
| MW23 | 8/30/23 | 1212 | | | | | X | | |
| MW24 | 8/30/23 | 1422 | | | | | X | | |
| MW25 | 8/29/23 | 1044 | X | | | | X | | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements.

| Empty Kit Relinquished by: | Date | Time | Method of Shipment: |
|---|---|---|---|
| | | | |

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | | 9/1/23 1202 | | | 8/31/23 1202 | |
| 2 | | 8/31/23 1510 | | | 9/1/23 0930 | EPTINE |
| 3 | | | | | | |

Custody Seals Intact: Δ Yes Δ No | Custody Seal No | Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

**Eurofins Pittsburgh**
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone 412-963-7058 Fax. 412-963-2468

# Chain of Custody Record

eurofins

| Client Information | Sampler: Chanel Long | Lab PM: Colussy, Jill L | Carrier Tracking No(s): | COC No: 180-94305-15040 3 |
|---|---|---|---|---|
| Client Contact: Jason Somes | Phone: | E-Mail: Jill Colussy@et eurofinsus com | State of Origin: | Page: Page 3 of 4 |
| Company: WE2 Support Services | PWSID: | | | Job #: |
| Address: 1450 Queen Avenue SW | Due Date Requested: | | | |
| City: Albany | TAT Requested (days): | | | |
| State, Zip: OR, 97321 | Compliance Project: Δ Yes Δ No | | | |
| Phone: | PO #: SOS30042 | | | |
| Email: Jason Somes@NETL.DOE GOV | WO #: | | | |
| Project Name: Dept of Energy- NETL - Albany, OR | Project #: 18025223 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260D - Standard List Volatile Organics | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | A | | |
| MW26 | 8/29/23 | 1235 | G | W | | | X | | |
| ~~MW27~~ | | | | | | | | | |
| MW28 | 8/29/23 | 0948 | G | W | | | X | | |
| MW29 | 8/28/23 | 1406 | | | | | | | |
| MW30 | 8/30/23 | 1511 | | | | | | | |
| MW31 | 8/30/23 | 1602 | | | | | | | |
| MW100 | 8/29/23 | 1756 | | | | | | | |
| MW101 | 8/29/23 | 1722 | | | | | | | |
| MW102 | 8/29/23 | 1825 | | | | | | | |
| MW103 | 8/29/23 | 1905 | | | | | | | |
| Dup 1 | 8/29/23 | 1315 | | | | | | | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date | Time | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | | 8/31/23 1202 | | | 8/31/23 1202 | |
| 2 | | 8/31/23 1510 | | | 9/1/23 0930 | EPITANE |
| 3 | | | | | | |

| Custody Seals Intact. Δ Yes Δ No | Custody Seal No | Cooler Temperature(s) °C and Other Remarks |
|---|---|---|

Ver: 06/08/2021

**Eurofins Pittsburgh**
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone 412-963-7058 Fax 412-963-2468

# Chain of Custody Record

eurofins

| Client Information | Sampler | Lab PM | Carrier Tracking No(s) | COC No |
|---|---|---|---|---|
| | | Colussy, Jill L | | 180-94305-15040 4 |
| Client Contact: Jason Somes | Phone | E-Mail: Jill Colussy@et.eurofinsus com | State of Origin | Page: Page 4 of 4 |
| Company: WE2 Support Services | PWSID | | | Job #: |

| | | |
|---|---|---|
| Address: 1450 Queen Avenue SW | Due Date Requested: | |
| City: Albany | TAT Requested (days): | |
| State, Zip: OR, 97321 | Compliance Project: Δ Yes Δ No | |
| Phone | PO #: SOS30042 | |
| Email: Jason Somes@NETL DOE GOV | WO #: | |
| Project Name: Dept of Energy- NETL - Albany, OR | Project #: 18025223 | |
| Site | SSOW#: | |

**Analysis Requested**

**Preservation Codes:**

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260D - Standard List Volatile Organics | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | A | | |
| Dup2 | 8/29/23 | 1500 | G | W | | | X | | |
| ~~Purge Water~~ | ~~8/29/23~~ | | G | W | | | | | |
| MW22 | 8/30/23 | 1312 | G | W | | | X | | |

***Possible Hazard Identification***
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)***
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

| Empty Kit Relinquished by | Date | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | | 9/1/23 1202 | | | 9/31/23 1202 | EFIN |
| 2 | | 8/31/23 1510 | EFIN | | 9/1/23 0930 | EFITNE |
| 3 | | | | | | |

| Custody Seals Intact. Δ Yes Δ No | Custody Seal No. | Cooler Temperature(s) °C and Other Remarks |
|---|---|---|

Ver 06/08/2021

# Login Sample Receipt Checklist

Client: WE2 Support Services

Job Number: 180-161792-1

**Login Number: 161792**
**List Number: 1**
**Creator: Abernathy, Eric L**

**List Source: Eurofins Pittsburgh**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | False | |
| There are no discrepancies between the containers received and the COC. | False | Received Trip Blank(s) not listed on COC. |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Appendix C. Groundwater Analytical Results

# Appendix C
# Groundwater Analytical Results - Volatile Organics

Groundwater Monitoring Event 47
NETL Albany, Albany, OR

| Sample Location | Sample ID | Sample Date | 1,1,1,2-Tetrachloroethane | 1,1,1-Trichloroethane | 1,1,2,2-Tetrachloroethane | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,1-Dichloropropene | 1,2,3-Trichlorobenzene | 1,2,3-Trichloropropane | 1,2,4-Trichlorobenzene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-3** | MW-3 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-4** | MW-4 | 8/28/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-5** | MW-5 | 8/30/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-6** | MW-6 | 8/30/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-7** | MW-7 | 8/30/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-8** | MW-8 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-9** | MW-9 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-10** | MW-10 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-13** | MW-13 | 8/28/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-14** | DUP1 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-14** | MW-14 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-15** | MW-15 | 8/28/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-16** | MW-16 | 8/30/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-17** | MW-17 | 8/28/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-18** | MW-18 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-19** | DUP2 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-19** | MW-19 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-20** | MW-20 | 8/29/23 | 290 U | 300 U | 300 U | 230 U | 310 U | 280 U | 340 U | 530 U | 400 U | 390 U |
| **MW-22** | MW-22 | 8/30/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-23** | MW-23 | 8/30/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-24** | MW-24 | 8/30/23 | 29 U | 30 U | 30 U | 23 U | 31 U | 28 U | 34 U | 53 U | 40 U | 39 U |
| **MW-25** | MW-25 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-26** | MW-26 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-28** | MW-28 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-29** | MW-29 | 8/28/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-30** | MW-30 | 8/30/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-31** | MW-31 | 8/30/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-100** | MW-100 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-101** | MW-101 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-102** | MW-102 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |
| **MW-103** | MW-103 | 8/29/23 | 2.9 U | 3.0 U | 3.0 U | 2.3 U | 3.1 U | 2.8 U | 3.4 U | 5.3 U | 4.0 U | 3.9 U |

Notes:
Results reported in micrograms per liter (µg/L)
U = Analyte was not detected above indicated value.
J = Result is less than the RL but greater than or equal to the MDL and the
H= Sample was prepped or analyzed beyond the specific holding time.
B= Compound was found in the blank and sample.
*1= LCS/LCSD RPD exceeds control limits.
*+= LCS and /or LCSD is outside acceptance limits, high biased.

**Bold** indicates analyte was detected above the Method Detection Limit

# Appendix C
# Groundwater Analytical Results - Volatile Organics

Groundwater Monitoring Event 47
NETL Albany, Albany, OR

| Sample Location | Sample ID | Sample Date | 1,2,4-Trimethylbenzene | 1,2-Dibromo-3-Chloropropane | 1,2-Dichlorobenzene | 1,2-Dichloroethane | 1,2-Dichloropropane | 1,3,5-Trimethylbenzene | 1,3-Dichlorobenzene | 1,3-Dichloropropane | 1,4-Dichlorobenzene | 2,2-Dichloropropane | 2-Chlorotoluene | 4-Chlorotoluene | 4-Isopropyltoluene | Benzene | Bromobenzene | Bromoform | Bromomethane | Carbon tetrachloride | Chlorobenzene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-3** | MW-3 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-4** | MW-4 | 8/28/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-5** | MW-5 | 8/30/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-6** | MW-6 | 8/30/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-7** | MW-7 | 8/30/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-8** | MW-8 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-9** | MW-9 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-10** | MW-10 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-13** | MW-13 | 8/28/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-14** | DUP1 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-14** | MW-14 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-15** | MW-15 | 8/28/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-16** | MW-16 | 8/30/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-17** | MW-17 | 8/28/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-18** | MW-18 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | **20** | 2.5 U |
| **MW-19** | DUP2 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-19** | MW-19 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-20** | MW-20 | 8/29/23 | 240 U | 440 U | 180 U | 290 U | 330 U | 240 U | 250 U | 250 U | 270 U | 310 U | 220 U | 240 U | 270 U | 300 U | 240 U | 490 U | 440 U | **680** | 250 U |
| **MW-22** | MW-22 | 8/30/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-23** | MW-23 | 8/30/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-24** | MW-24 | 8/30/23 | 24 U | 44 U | 18 U | 29 U | 33 U | 24 U | 25 U | 25 U | 27 U | 31 U | 22 U | 24 U | 27 U | 30 U | 24 U | 49 U | 44 U | **110** | 25 U |
| **MW-25** | MW-25 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-26** | MW-26 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-28** | MW-28 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-29** | MW-29 | 8/28/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-30** | MW-30 | 8/30/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-31** | MW-31 | 8/30/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-100** | MW-100 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-101** | MW-101 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-102** | MW-102 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |
| **MW-103** | MW-103 | 8/29/23 | 2.4 U | 4.4 U | 1.8 U | 2.9 U | 3.3 U | 2.4 U | 2.5 U | 2.5 U | 2.7 U | 3.1 U | 2.2 U | 2.4 U | 2.7 U | 3.0 U | 2.4 U | 4.9 U | 4.4 U | 4.4 U | 2.5 U |

Notes:
Results reported in micrograms per liter (µg/L)
U = Analyte was not detected above indicated value.
J = Result is less than the RL but greater than or equal to the MDL and the
H= Sample was prepped or analyzed beyond the specific holding time.
B= Compound was found in the blank and sample.
*1= LCS/LCSD RPD exceeds control limits.
*+= LCS and /or LCSD is outside acceptance limits, high biased.

**Bold** indicates analyte was detected above the Method Detection Limit

# Appendix C
# Groundwater Analytical Results - Volatile Organics

Groundwater Monitoring Event 47
NETL Albany, Albany, OR

| Sample Location | Sample ID | Sample Date | Chlorobromomethane | Chlorodibromomethane | Chloroethane | Chloroform | Chloromethane | cis-1,2-Dichloroethene | cis-1,3-Dichloropropene |
|---|---|---|---|---|---|---|---|---|---|
| **MW-3** | MW-3 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-4** | MW-4 | 8/28/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-5** | MW-5 | 8/30/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-6** | MW-6 | 8/30/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-7** | MW-7 | 8/30/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-8** | MW-8 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-9** | MW-9 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-10** | MW-10 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-13** | MW-13 | 8/28/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-14** | DUP1 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | **3.8 J** | 4.5 U | 3.5 U | 3.0 U |
| **MW-14** | MW-14 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | **4.4 J** | 4.5 U | 3.5 U | 3.0 U |
| **MW-15** | MW-15 | 8/28/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-16** | MW-16 | 8/30/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-17** | MW-17 | 8/28/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-18** | MW-18 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-19** | DUP2 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-19** | MW-19 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-20** | MW-20 | 8/29/23 | 310 U | 420 U | 450 U | 300 U | 450 U | 350 U | 300 U |
| **MW-22** | MW-22 | 8/30/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-23** | MW-23 | 8/30/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-24** | MW-24 | 8/30/23 | 31 U | 42 U | 45 U | 30 U | 45 U | 35 U | 30 U |
| **MW-25** | MW-25 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-26** | MW-26 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-28** | MW-28 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-29** | MW-29 | 8/28/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-30** | MW-30 | 8/30/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-31** | MW-31 | 8/30/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-100** | MW-100 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-101** | MW-101 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-102** | MW-102 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |
| **MW-103** | MW-103 | 8/29/23 | 3.1 U | 4.2 U | 4.5 U | 3.0 U | 4.5 U | 3.5 U | 3.0 U |

Notes:
Results reported in micrograms per liter (µg/L)
U = Analyte was not detected above indicated value.
J = Result is less than the RL but greater than or equal to the MDL and the
H= Sample was prepped or analyzed beyond the specific holding time.
B= Compound was found in the blank and sample.
*1= LCS/LCSD RPD exceeds control limits.
*+= LCS and /or LCSD is outside acceptance limits, high biased.

**Bold** indicates analyte was detected above the Method Detection Limit

# Appendix C
# Groundwater Analytical Results - Volatile Organics

Groundwater Monitoring Event 47
NETL Albany, Albany, OR

| Sample Location | Sample ID | Sample Date | Dibromomethane | Dichlorobromomethane | Dichlorodifluoromethane | Ethylbenzene | Ethylene Dibromide | Hexachlorobutadiene | Isopropylbenzene | m,p-Xylene | Methyl tert-butyl ether | Methylene Chloride | Naphthalene | n-Butylbenzene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-3** | MW-3 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-4** | MW-4 | 8/28/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-5** | MW-5 | 8/30/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-6** | MW-6 | 8/30/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-7** | MW-7 | 8/30/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-8** | MW-8 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-9** | MW-9 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-10** | MW-10 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-13** | MW-13 | 8/28/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-14** | DUP1 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-14** | MW-14 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-15** | MW-15 | 8/28/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-16** | MW-16 | 8/30/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-17** | MW-17 | 8/28/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-18** | MW-18 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-19** | DUP2 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-19** | MW-19 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-20** | MW-20 | 8/29/23 | 330 U | 320 U | 420 U | 250 U | 250 U | 450 U | 170 U | 240 U | 300 U | 440 U | 420 U | 300 U |
| **MW-22** | MW-22 | 8/30/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-23** | MW-23 | 8/30/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-24** | MW-24 | 8/30/23 | 33 U | 32 U | 42 U | 25 U | 25 U | 45 U | 17 U | 24 U | 30 U | 44 U | 42 U | 30 U |
| **MW-25** | MW-25 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-26** | MW-26 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-28** | MW-28 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-29** | MW-29 | 8/28/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-30** | MW-30 | 8/30/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-31** | MW-31 | 8/30/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-100** | MW-100 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-101** | MW-101 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-102** | MW-102 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |
| **MW-103** | MW-103 | 8/29/23 | 3.3 U | 3.2 U | 4.2 U | 2.5 U | 2.5 U | 4.5 U | 1.7 U | 2.4 U | 3.0 U | 4.4 U | 4.2 U | 3.0 U |

Notes:
Results reported in micrograms per liter (µg/L)
U = Analyte was not detected above indicated value.
J = Result is less than the RL but greater than or equal to the MDL and the
H= Sample was prepped or analyzed beyond the specific holding time.
B= Compound was found in the blank and sample.
*1= LCS/LCSD RPD exceeds control limits.
*+= LCS and /or LCSD is outside acceptance limits, high biased.

**Bold** indicates analyte was detected above the Method Detection Limit

# Appendix C
# Groundwater Analytical Results - Volatile Organics

Groundwater Monitoring Event 47
NETL Albany, Albany, OR

| Sample Location | Sample ID | Sample Date | n-Propylbenzene | o-Xylene | sec-Butylbenzene | Styrene | tert-Butylbenzene | Tetrachloroethene (PCE) | Toluene | trans-1,2-Dichloroethene | trans-1,3-Dichloropropene | Trichloroethene (TCE) | Trichlorofluoromethane | Vinyl chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-3** | MW-3 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-4** | MW-4 | 8/28/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-5** | MW-5 | 8/30/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-6** | MW-6 | 8/30/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-7** | MW-7 | 8/30/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-8** | MW-8 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-9** | MW-9 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-10** | MW-10 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-13** | MW-13 | 8/28/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-14** | DUP1 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-14** | MW-14 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-15** | MW-15 | 8/28/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | **18** | 4.4 U | 2.0 U |
| **MW-16** | MW-16 | 8/30/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-17** | MW-17 | 8/28/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | **36** | 4.4 U | 2.0 U |
| **MW-18** | MW-18 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | **74** | 4.4 U | 2.0 U |
| **MW-19** | DUP2 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-19** | MW-19 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-20** | MW-20 | 8/29/23 | 240 U | 200 U | 260 U | 240 U | 240 U | 230 U | 230 U | 340 U | 290 U | 340 U | 440 U | 200 U |
| **MW-22** | MW-22 | 8/30/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | **3.5 J** | 4.4 U | 2.0 U |
| **MW-23** | MW-23 | 8/30/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-24** | MW-24 | 8/30/23 | 24 U | 20 U | 26 U | 24 U | 24 U | 23 U | 23 U | 34 U | 29 U | **38 J** | 44 U | 20 U |
| **MW-25** | MW-25 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-26** | MW-26 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-28** | MW-28 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-29** | MW-29 | 8/28/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-30** | MW-30 | 8/30/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-31** | MW-31 | 8/30/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-100** | MW-100 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | **12** | 4.4 U | 2.0 U |
| **MW-101** | MW-101 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-102** | MW-102 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |
| **MW-103** | MW-103 | 8/29/23 | 2.4 U | 2.0 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U | 2.3 U | 3.4 U | 2.9 U | 3.4 U | 4.4 U | 2.0 U |

Notes:
Results reported in micrograms per liter (µg/L)
U = Analyte was not detected above indicated value.
J = Result is less than the RL but greater than or equal to the MDL and the
H= Sample was prepped or analyzed beyond the specific holding time.
B= Compound was found in the blank and sample.
*1= LCS/LCSD RPD exceeds control limits.
*+= LCS and /or LCSD is outside acceptance limits, high biased.

**Bold** indicates analyte was detected above the Method Detection Limit

# Appendix D. Data Validation Memo

## Data Review

The data quality review of the twenty-nine primary groundwater samples and two field duplicate groundwater samples collected between August 28 and 30, 2023 at the U.S. Department of Energy (DOE) National Technology Laboratory (NETL) in Albany, Oregon has been completed.

All volatile organic samples were submitted to Eurofins TestAmerica (ETA) Laboratories, Inc. in Pittsburgh, Pennsylvania. ETA Pittsburgh analyzed twenty-nine primary samples and two duplicate samples for volatile organic compounds (VOCs) by EPA Method 8260D.

The review included the analytical data presented in ETA report 180-161792-1. The data was reviewed based on *National Functional Guidelines for Superfund Organic Methods Data Review*, November 2020; *National Functional Guidelines for Superfund Inorganic Methods Data Review*, September 2016; and Laboratory quality control criteria.

The following criteria were evaluated during the review:

- Chain of Custody Records – Acceptable, Trip Blanks were not listed on the COC.
- Custody Seals – Acceptable, present on coolers, intact when samples delivered to lab.
- Container Integrity – Acceptable, all sample containers were received intact by the lab.
- Sample Temperature – Acceptable, received at 1.1º C on ice.
- Trip Blank – Three trip blank analyses were reported.
- Method Blanks – All method blanks are non-detect.
- Surrogate Recoveries – All surrogate recoveries were within acceptance criteria.
- Matrix Spikes – No matrix spikes were analyzed.
- Field Duplicate – Results from samples MW-14 and DUP1 were non-detect for all Method 8260D volatile organics except chloroform. VOC analyses were within standards, % RPD was less than 20 %.
- Field Duplicate – Results from samples MW-19 and DUP2 were non-detect for all Method 8260D volatile organics.

| MW-14 | Result ug/L | Flag | MDL ug/L | DUP1 | Result ug/L | Flag | MDL ug/L | Difference ug/L | % RPD |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 2.9 | U | 2.9 | 1,1,1,2-Tetrachloroethane | 2.9 | U | 2.9 | 0 | |
| 1,1,1-Trichloroethane | 3.0 | U | 3.0 | 1,1,1-Trichloroethane | 3.0 | U | 3.0 | 0 | |
| 1,1,2,2-Tetrachloroethane | 3.0 | U | 3.0 | 1,1,2,2-Tetrachloroethane | 3.0 | U | 3.0 | 0 | |
| 1,1,2-Trichloroethane | 2.3 | U | 2.3 | 1,1,2-Trichloroethane | 2.3 | U | 2.3 | 0 | |
| 1,1-Dichloroethane | 3.1 | U | 3.1 | 1,1-Dichloroethane | 3.1 | U | 3.1 | 0 | |
| 1,1-Dichloroethene | 2.8 | U | 2.8 | 1,1-Dichloroethene | 2.8 | U | 2.8 | 0 | |
| 1,1-Dichloropropene | 3.4 | U | 3.4 | 1,1-Dichloropropene | 3.4 | U | 3.4 | 0 | |
| 1,2,3-Trichlorobenzene | 5.3 | U | 5.3 | 1,2,3-Trichlorobenzene | 5.3 | U | 5.3 | 0 | |
| 1,2,3-Trichloropropane | 4.0 | U | 4.0 | 1,2,3-Trichloropropane | 4.0 | U | 4.0 | 0 | |
| 1,2,4-Trichlorobenzene | 3.9 | U | 3.9 | 1,2,4-Trichlorobenzene | 3.9 | U | 3.9 | 0 | |
| 1,2,4-Trimethylbenzene | 2.4 | U | 2.4 | 1,2,4-Trimethylbenzene | 2.4 | U | 2.4 | 0 | |
| 1,2-Dibromo-3-Chloropropane | 4.4 | U | 4.4 | 1,2-Dibromo-3-Chloropropane | 4.4 | U | 4.4 | 0 | |
| 1,2-Dichlorobenzene | 1.8 | U | 1.8 | 1,2-Dichlorobenzene | 1.8 | U | 1.8 | 0 | |
| 1,2-Dichloroethane | 2.9 | U | 2.9 | 1,2-Dichloroethane | 2.9 | U | 2.9 | 0 | |
| 1,2-Dichloropropane | 3.3 | U | 3.3 | 1,2-Dichloropropane | 3.3 | U | 3.3 | 0 | |
| 1,3,5-Trimethylbenzene | 2.4 | U | 2.4 | 1,3,5-Trimethylbenzene | 2.4 | U | 2.4 | 0 | |
| 1,3-Dichlorobenzene | 2.5 | U | 2.5 | 1,3-Dichlorobenzene | 2.5 | U | 2.5 | 0 | |
| 1,3-Dichloropropane | 2.5 | U | 2.5 | 1,3-Dichloropropane | 2.5 | U | 2.5 | 0 | |
| 1,4-Dichlorobenzene | 2.7 | U | 2.7 | 1,4-Dichlorobenzene | 2.7 | U | 2.7 | 0 | |
| 2,2-Dichloropropane | 3.1 | U | 3.1 | 2,2-Dichloropropane | 3.1 | U | 3.1 | 0 | |
| 2-Chlorotoluene | 2.2 | U | 2.2 | 2-Chlorotoluene | 2.2 | U | 2.2 | 0 | |
| 4-Chlorotoluene | 2.4 | U | 2.4 | 4-Chlorotoluene | 2.4 | U | 2.4 | 0 | |
| 4-Isopropyltoluene | 2.7 | U | 2.7 | 4-Isopropyltoluene | 2.7 | U | 2.7 | 0 | |
| Benzene | 3.0 | U | 3.0 | Benzene | 3.0 | U | 3.0 | 0 | |
| Bromobenzene | 2.4 | U | 2.4 | Bromobenzene | 2.4 | U | 2.4 | 0 | |
| Bromochloromethane | 3.1 | U | 3.1 | Bromochloromethane | 3.1 | U | 3.1 | 0 | |
| Bromoform | 4.9 | U | 4.9 | Bromoform | 4.9 | U | 4.9 | 0 | |
| Bromomethane | 4.4 | U | 4.4 | Bromomethane | 4.4 | U | 4.4 | 0 | |
| Carbon tetrachloride | 4.4 | U | 4.4 | Carbon tetrachloride | 4.4 | U | 4.4 | 0 | |
| Chlorobenzene | 2.5 | U | 2.5 | Chlorobenzene | 2.5 | U | 2.5 | 0 | |
| Chlorodibromomethane | 4.2 | U | 4.2 | Chlorodibromomethane | 4.2 | U | 4.2 | 0 | |
| Chloroethane | 4.5 | U | 4.5 | Chloroethane | 4.5 | U | 4.5 | 0 | |
| Chloroform | 4.4 | J | 3.0 | Chloroform | 3.8 | J | 3.0 | 0.6 | 9.52 % |
| Chloromethane | 4.5 | U | 4.5 | Chloromethane | 4.5 | U | 4.5 | 0 | |
| cis-1,2-Dichloroethene | 3.5 | U | 3.5 | cis-1,2-Dichloroethene | 3.5 | U | 3.5 | 0 | |
| cis-1,3-Dichloropropene | 3.0 | U | 3.0 | cis-1,3-Dichloropropene | 3.0 | U | 3.0 | 0 | |
| Dibromomethane | 3.3 | U | 3.3 | Dibromomethane | 3.3 | U | 3.3 | 0 | |
| Dichlorobromomethane | 3.2 | U | 3.2 | Dichlorobromomethane | 3.2 | U | 3.2 | 0 | |
| Dichlorodifluoromethane | 4.2 | U | 4.2 | Dichlorodifluoromethane | 4.2 | U | 4.2 | 0 | |
| Ethylbenzene | 2.5 | U | 2.5 | Ethylbenzene | 2.5 | U | 2.5 | 0 | |
| Ethylene Dibromide | 2.5 | U | 2.5 | Ethylene Dibromide | 2.5 | U | 2.5 | 0 | |
| Hexachlorobutadiene | 4.5 | U | 4.5 | Hexachlorobutadiene | 4.5 | U | 4.5 | 0 | |
| Isopropylbenzene | 1.7 | U | 1.7 | Isopropylbenzene | 1.7 | U | 1.7 | 0 | |
| Methyl tert-butyl ether | 3.0 | U | 3.0 | Methyl tert-butyl ether | 3.0 | U | 3.0 | 0 | |
| Methylene Chloride | 4.4 | U | 4.4 | Methylene Chloride | 4.4 | U | 4.4 | 0 | |
| m-Xylene & p-Xylene | 2.4 | U | 2.4 | m-Xylene & p-Xylene | 2.4 | U | 2.4 | 0 | |
| Naphthalene | 4.2 | U | 4.2 | Naphthalene | 4.2 | U | 4.2 | 0 | |
| n-Butylbenzene | 3.0 | U | 3.0 | n-Butylbenzene | 3.0 | U | 3.0 | 0 | |

| MW-14 | Result ug/L | Flag | MDL ug/L | DUP1 | Result ug/L | Flag | MDL ug/L | Difference ug/L | % RPD |
|---|---|---|---|---|---|---|---|---|---|
| N-Propylbenzene | 2.4 | U | 2.4 | N-Propylbenzene | 2.4 | U | 2.4 | 0 | |
| o-Xylene | 2.0 | U | 2.0 | o-Xylene | 2.0 | U | 2.0 | 0 | |
| sec-Butylbenzene | 2.6 | U | 2.6 | sec-Butylbenzene | 2.6 | U | 2.6 | 0 | |
| Styrene | 2.4 | U | 2.4 | Styrene | 2.4 | U | 2.4 | 0 | |
| tert-Butylbenzene | 2.4 | U | 2.4 | tert-Butylbenzene | 2.4 | U | 2.4 | 0 | |
| Tetrachloroethene | 2.3 | U | 2.3 | Tetrachloroethene | 2.3 | U | 2.3 | 0 | |
| Toluene | 2.3 | U | 2.3 | Toluene | 2.3 | U | 2.3 | 0 | |
| trans-1,2-Dichloroethene | 3.4 | U | 3.4 | trans-1,2-Dichloroethene | 3.4 | U | 3.4 | 0 | |
| trans-1,3-Dichloropropene | 2.9 | U | 2.9 | trans-1,3-Dichloropropene | 2.9 | U | 2.9 | 0 | |
| Trichloroethene | 3.4 | U | 3.4 | Trichloroethene | 3.4 | U | 3.4 | 0 | |
| Trichlorofluoromethane | 4.4 | U | 4.4 | Trichlorofluoromethane | 4.4 | U | 4.4 | 0 | |
| Vinyl chloride | 2.0 | U | 2.0 | Vinyl chloride | 2.0 | U | 2.0 | 0 | |

| MW-19 | Result ug/L | Flag | MDL ug/L | DUP2 | Result ug/L | Flag | MDL ug/L | Difference ug/L | % RPD |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 2.9 | U | 2.9 | 1,1,1,2-Tetrachloroethane | 2.9 | U | 2.9 | 0 | |
| 1,1,1-Trichloroethane | 3.0 | U | 3.0 | 1,1,1-Trichloroethane | 3.0 | U | 3.0 | 0 | |
| 1,1,2,2-Tetrachloroethane | 3.0 | U | 3.0 | 1,1,2,2-Tetrachloroethane | 3.0 | U | 3.0 | 0 | |
| 1,1,2-Trichloroethane | 2.3 | U | 2.3 | 1,1,2-Trichloroethane | 2.3 | U | 2.3 | 0 | |
| 1,1-Dichloroethane | 3.1 | U | 3.1 | 1,1-Dichloroethane | 3.1 | U | 3.1 | 0 | |
| 1,1-Dichloroethene | 2.8 | U | 2.8 | 1,1-Dichloroethene | 2.8 | U | 2.8 | 0 | |
| 1,1-Dichloropropene | 3.4 | U | 3.4 | 1,1-Dichloropropene | 3.4 | U | 3.4 | 0 | |
| 1,2,3-Trichlorobenzene | 5.3 | U | 5.3 | 1,2,3-Trichlorobenzene | 5.3 | U | 5.3 | 0 | |
| 1,2,3-Trichloropropane | 4.0 | U | 4.0 | 1,2,3-Trichloropropane | 4.0 | U | 4.0 | 0 | |
| 1,2,4-Trichlorobenzene | 3.9 | U | 3.9 | 1,2,4-Trichlorobenzene | 3.9 | U | 3.9 | 0 | |
| 1,2,4-Trimethylbenzene | 2.4 | U | 2.4 | 1,2,4-Trimethylbenzene | 2.4 | U | 2.4 | 0 | |
| 1,2-Dibromo-3-Chloropropane | 4.4 | U | 4.4 | 1,2-Dibromo-3-Chloropropane | 4.4 | U | 4.4 | 0 | |
| 1,2-Dichlorobenzene | 1.8 | U | 1.8 | 1,2-Dichlorobenzene | 1.8 | U | 1.8 | 0 | |
| 1,2-Dichloroethane | 2.9 | U | 2.9 | 1,2-Dichloroethane | 2.9 | U | 2.9 | 0 | |
| 1,2-Dichloropropane | 3.3 | U | 3.3 | 1,2-Dichloropropane | 3.3 | U | 3.3 | 0 | |
| 1,3,5-Trimethylbenzene | 2.4 | U | 2.4 | 1,3,5-Trimethylbenzene | 2.4 | U | 2.4 | 0 | |
| 1,3-Dichlorobenzene | 2.5 | U | 2.5 | 1,3-Dichlorobenzene | 2.5 | U | 2.5 | 0 | |
| 1,3-Dichloropropane | 2.5 | U | 2.5 | 1,3-Dichloropropane | 2.5 | U | 2.5 | 0 | |
| 1,4-Dichlorobenzene | 2.7 | U | 2.7 | 1,4-Dichlorobenzene | 2.7 | U | 2.7 | 0 | |
| 2,2-Dichloropropane | 3.1 | U | 3.1 | 2,2-Dichloropropane | 3.1 | U | 3.1 | 0 | |
| 2-Chlorotoluene | 2.2 | U | 2.2 | 2-Chlorotoluene | 2.2 | U | 2.2 | 0 | |
| 4-Chlorotoluene | 2.4 | U | 2.4 | 4-Chlorotoluene | 2.4 | U | 2.4 | 0 | |
| 4-Isopropyltoluene | 2.7 | U | 2.7 | 4-Isopropyltoluene | 2.7 | U | 2.7 | 0 | |
| Benzene | 3.0 | U | 3.0 | Benzene | 3.0 | U | 3.0 | 0 | |
| Bromobenzene | 2.4 | U | 2.4 | Bromobenzene | 2.4 | U | 2.4 | 0 | |
| Bromochloromethane | 3.1 | U | 3.1 | Bromochloromethane | 3.1 | U | 3.1 | 0 | |
| Bromoform | 4.9 | U | 4.9 | Bromoform | 4.9 | U | 4.9 | 0 | |
| Bromomethane | 4.4 | U | 4.4 | Bromomethane | 4.4 | U | 4.4 | 0 | |
| Carbon tetrachloride | 4.4 | U | 4.4 | Carbon tetrachloride | 4.4 | U | 4.4 | 0 | |
| Chlorobenzene | 2.5 | U | 2.5 | Chlorobenzene | 2.5 | U | 2.5 | 0 | |
| Chlorodibromomethane | 4.2 | U | 4.2 | Chlorodibromomethane | 4.2 | U | 4.2 | 0 | |
| Chloroethane | 4.5 | U | 4.5 | Chloroethane | 4.5 | U | 4.5 | 0 | |
| Chloroform | 3.0 | U | 3.0 | Chloroform | 3.0 | U | 3.0 | 0 | |

| MW-19 | Result ug/L | Flag | MDL ug/L | DUP2 | Result ug/L | Flag | MDL ug/L | Difference ug/L | % RPD |
|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | 4.5 | U | 4.5 | Chloromethane | 4.5 | U | 4.5 | 0 | |
| cis-1,2-Dichloroethene | 3.5 | U | 3.5 | cis-1,2-Dichloroethene | 3.5 | U | 3.5 | 0 | |
| cis-1,3-Dichloropropene | 3.0 | U | 3.0 | cis-1,3-Dichloropropene | 3.0 | U | 3.0 | 0 | |
| Dibromomethane | 3.3 | U | 3.3 | Dibromomethane | 3.3 | U | 3.3 | 0 | |
| Dichlorobromomethane | 3.2 | U | 3.2 | Dichlorobromomethane | 3.2 | U | 3.2 | 0 | |
| Dichlorodifluoromethane | 4.2 | U | 4.2 | Dichlorodifluoromethane | 4.2 | U | 4.2 | 0 | |
| Ethylbenzene | 2.5 | U | 2.5 | Ethylbenzene | 2.5 | U | 2.5 | 0 | |
| Ethylene Dibromide | 2.5 | U | 2.5 | Ethylene Dibromide | 2.5 | U | 2.5 | 0 | |
| Hexachlorobutadiene | 4.5 | U | 4.5 | Hexachlorobutadiene | 4.5 | U | 4.5 | 0 | |
| Isopropylbenzene | 1.7 | U | 1.7 | Isopropylbenzene | 1.7 | U | 1.7 | 0 | |
| Methyl tert-butyl ether | 3.0 | U | 3.0 | Methyl tert-butyl ether | 3.0 | U | 3.0 | 0 | |
| Methylene Chloride | 4.4 | U | 4.4 | Methylene Chloride | 4.4 | U | 4.4 | 0 | |
| m-Xylene & p-Xylene | 2.4 | U | 2.4 | m-Xylene & p-Xylene | 2.4 | U | 2.4 | 0 | |
| Naphthalene | 4.2 | U | 4.2 | Naphthalene | 4.2 | U | 4.2 | 0 | |
| n-Butylbenzene | 3.0 | U | 3.0 | n-Butylbenzene | 3.0 | U | 3.0 | 0 | |
| N-Propylbenzene | 2.4 | U | 2.4 | N-Propylbenzene | 2.4 | U | 2.4 | 0 | |
| o-Xylene | 2.0 | U | 2.0 | o-Xylene | 2.0 | U | 2.0 | 0 | |
| sec-Butylbenzene | 2.6 | U | 2.6 | sec-Butylbenzene | 2.6 | U | 2.6 | 0 | |
| Styrene | 2.4 | U | 2.4 | Styrene | 2.4 | U | 2.4 | 0 | |
| tert-Butylbenzene | 2.4 | U | 2.4 | tert-Butylbenzene | 2.4 | U | 2.4 | 0 | |
| Tetrachloroethene | 2.3 | U | 2.3 | Tetrachloroethene | 2.3 | U | 2.3 | 0 | |
| Toluene | 2.3 | U | 2.3 | Toluene | 2.3 | U | 2.3 | 0 | |
| trans-1,2-Dichloroethene | 3.4 | U | 3.4 | trans-1,2-Dichloroethene | 3.4 | U | 3.4 | 0 | |
| trans-1,3-Dichloropropene | 2.9 | U | 2.9 | trans-1,3-Dichloropropene | 2.9 | U | 2.9 | 0 | |
| Trichloroethene | 3.4 | U | 3.4 | Trichloroethene | 3.4 | U | 3.4 | 0 | |
| Trichlorofluoromethane | 4.4 | U | 4.4 | Trichlorofluoromethane | 4.4 | U | 4.4 | 0 | |
| Vinyl chloride | 2.0 | U | 2.0 | Vinyl chloride | 2.0 | U | 2.0 | 0 | |

- Holding Times – All samples were analyzed within hold times.

## Overall Assessment of Data

All results are valid as reported.

## References

EPA 2016. National Functional Guidelines for Superfund Inorganic Methods Data Review, September.

EPA 2020. National Functional Guidelines for Superfund Organic Methods Data Review, November.