2023 Annual Monitoring Report

Olympic View Sanitary Landfill

Olympic View Sanitary Landfill, Inc.
10015 SW Barney White Road
Bremerton, Washington 98366
818-252-3202

WASTE MANAGEMENT

SCS ENGINEERS

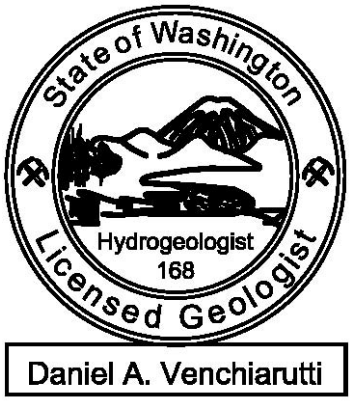
04204027.27 | March 29, 2024

2405 140th Avenue NE, Suite 107
Bellevue, WA 98005
425-746-4600

This 2023 Annual Monitoring Report for the Olympic View Sanitary Landfill Facility located at 10015 SW Barney White Road in Bremerton, Washington, was prepared by Jovany Estrada and Daniel Venchiarutti, LHG, and was reviewed by Greg Helland, LHG, of SCS Engineers.

Jovany Estrada
Associate Staff Scientist
SCS ENGINEERS

Daniel A. Venchiarutti, LG, LHG
Project Director
SCS ENGINEERS



Gregory D. Helland, LG, LHG
Vice President
SCS ENGINEERS

Table of Contents

Section Page

1.0 INTRODUCTION 1
1.1 Report Contents 1
2.0 SITE DESCRIPTION 3
2.1 Location 3
2.2 Background 3
2.3 Topography and Climate 3
2.4 Local and Regional Hydrogeology 4
3.0 2023 MONITORING ACTIVITIES 5
3.1 Groundwater 5
3.1.1 Groundwater Monitoring Network 5
3.1.2 Monitoring Schedule 6
3.1.3 Parameters and Analytical Methods 6
3.1.4 Field Monitoring And Sampling Procedures 7
3.2 Leachate 8
3.2.1 Leachate Monitoring Locations 8
3.2.2 Monitoring Schedule 8
3.2.3 Parameters and Analytical Methods 8
3.2.4 Leachate Monitoring Field Procedures 9
3.3 Landfill Gas 9
3.3.1 Landfill Gas Monitoring Network 10
3.3.2 Monitoring Schedule 10
3.3.3 Landfill Gas Monitoring Field Procedures and Instrumentation 10
3.3.4 Field Conditions 10
4.0 2023 MONITORING RESULTS 11
4.1 Groundwater 11
4.1.1 Groundwater Elevation and Flow 11
4.1.2 Groundwater Quality 12
4.1.2.1 Chemical Analysis 12
4.1.2.2 Data QA/QC 12
4.1.3 Spatial Distribution and Temporal Trends 12
4.1.3.1 Parameter Distribution 12
4.1.3.2 Temporal Trends 14
4.1.4 Groundwater Geochemistry 15
4.1.5 Statistical Predication Limit Evaluation 16
4.1.6 Point of Compliance and Cleanup Level Exceedances 16
4.1.6.1 Point of Compliance (POC) 16
4.1.6.2 Cleanup Level Exceedances 17
Site Specific MTCA Cleanup Level 17
Other Criteria Comparison (Federal MCLs, WAC 173-200, and MTCA) 18
4.2 Leachate Monitoring Results 18

4.2.1 Leachate Quality 18
4.2.2 Leachate Generation Rates 19
4.3 Landfill Gas Monitoring Results 19
4.3.1 Perimeter Gas Probes 19
4.3.2 Structure Monitoring 20
4.3.3 Barometric Pressure Conditions 20
5.0 SUMMARY AND CONCLUSIONS 21
5.1 Groundwater 21
5.1.1 Groundwater Quality 21
5.1.2 Evidence of Natural Attenuation 22
5.2 Leachate 23
5.3 Landfill Gas 23
6.0 REFERENCES 24

Exhibits

Exhibit 1. 2023 OVSL Groundwater Monitoring Well Network (by Type) 5
Exhibit 2. 2023 OVSL Groundwater Analytical Parameters 6
Exhibit 3. 2023 OVSL Leachate Analytical Parameters 8
Exhibit 4. Calculated 2023 Hydraulic Gradient and Flow Velocities 11
Exhibit 5. Spatial Distribution of Key OVSL Groundwater Parameters 12
Exhibit 6. Significant Temporal Trends in Compliance Wells (2005-2023) 14
Exhibit 7. Cation-Anion Ranges for Groundwater (November 2023) 16
Exhibit 8. 2023 MTCA Exceedances for Chemicals of Concern 17

Figures

Figure 1 Site Location Map
Figure 2 Groundwater Monitoring Network and Leachate Monitoring Locations
Figure 3 Subsurface LFG Monitoring Probes and Building Monitoring Locations
Figure 4A Water Level Contour Map – May 2023
Figure 4B Water Level Contour Map – November 2023
Figure 5 Historical Groundwater Elevations
Figure 6A Total Arsenic Concentration Map – November 2023
Figure 6B Total Iron Concentration Map – November 2023
Figure 6C Total Manganese Concentration Map – November 2023
Figure 6D Vinyl Chloride Concentration Map – November 2023
Figure 7 Leachate Generation Volumes (2007 – 2023)
Figure 8A Barometric Pressure Trend – September 2023
Figure 8B Barometric Pressure Trend – November 2023

Tables

Table 1 Groundwater Well Construction Details
Table 2 Summary of Analytical Parameters
Table 3 Groundwater Elevations
Table 4A Detections and Field Measurements – Compliance Monitoring Wells
Table 4B Detections and Field Measurements – Performance Monitoring Wells
Table 4C Detections and Field Measurements – Downgradient Monitoring Wells
Table 4D Detections and Field Measurements – Upgradient Monitoring Wells
Table 4E Detections and Field Measurements – Leachate and Leak Detection Locations
Table 5 2023 Groundwater and Leachate VOC Detections
Table 6A Summary of 2023 Significant Parameters Trends by Well Type
Table 6B Summary of 2023 Trends in Groundwater Monitoring Wells (2005 – 2023)
Table 7 November 2023 Prediction Limit Exceedances
Table 8 2023 Annual Groundwater Cleanup Level Statistical Evaluation Summary
Table 9 Groundwater Quality Criteria and Site-Specific Cleanup Level Exceedances
Table 10 2023 Leak Detection System Volumes
Table 11A October 2023 Landfill Gas Measurement Results
Table 11B Fourth Quarter 2023 Landfill Gas Measurement Results
Table 12 LFG Monitoring Results - 2023

Appendices

Appendix A November 2023 Field Documentation
Appendix B November 2023 Data Validation and Analytical Data Reports
Appendix C 2023 Annual Time Series, Trend Test, and Prediction Limit Evaluation
Appendix D November 2023 Groundwater Geochemical Evaluation
Appendix E Landfill Gas Monitoring Results

1.0 INTRODUCTION

This report provides a summary of the 2023 semi-annual, post-closure environmental monitoring results for the Olympic View Sanitary Landfill (OVSL), located in Bremerton, Washington. Monitoring events for the current compliance period were performed during May and November of 2023. Environmental monitoring at the OVSL includes sampling and analysis of groundwater and leachate pond leak-detection liquid, and monitoring landfill gas (LFG). Leachate influent monitoring is also conducted on an annual basis.

Groundwater and LFG monitoring was performed at the facility in accordance with the OVSL *Environmental Monitoring Plan* (EMP, Engineering Management Support, Inc., 2010) and the current site-specific *Sampling and Analysis Plan* (SAP, revision 1.4, SCS Engineers, 2021). The plans were developed in consultation with Ecology and reflect a refined understanding of the site conditions based on the results of a Remedial Investigation/Feasibility Study (RI/FS) per Washington Administrative Code (WAC) 173-340 (Model Toxics Control Act, MTCA). The OVSL monitoring program is also intended to meet requirements of the Criteria for Municipal Solid Waste Landfills (WAC 173-351-430) which is administered by the Kitsap County Public Health District (KPHD).

SCS Engineers (SCS) and Aspect Consulting (for landfill gas) performed environmental monitoring at the OVSL throughout 2023. The following information summarizes the routine monitoring activities described in this report:

- Semiannual collection and analysis of groundwater samples at select monitoring wells within the monitoring network.
- Semiannual measurement of depth-to-water in groundwater monitoring wells sampled for water quality.
- Measurement of depth-to-water in water table-only groundwater monitoring wells.
- Semi-annual collection and analysis of a leachate pond/leak detection system sample.
- Collection and analysis of leachate influent samples (during the November semi-annual monitoring event).
- Quarterly measurement of LFG concentrations at perimeter soil gas monitoring probes and building monitoring locations.

1.1 REPORT CONTENTS

The 2023 Annual Monitoring Report includes:

- A site location description and background section.
- A discussion of monitoring activities including a summary of sampling techniques and locations within the groundwater and LFG monitoring network.
- Construction details for groundwater monitoring wells.
- A discussion of the groundwater conditions including groundwater elevations, flow direction, and flow velocity for the reporting year.
- A summary of the monitoring analytical program and presentation of the analytical results and findings for the reporting year.

- A summary of the LFG monitoring results for the reporting year.
- A geochemical evaluation of the water quality samples collected during the November 2023 semi-annual monitoring event.
- A statistical trend analysis and concentration time series plots of groundwater monitoring results.
- A statistical evaluation and comparison of groundwater results to calculated prediction limits.
- A comparison of groundwater monitoring results to site-specific cleanup levels and other applicable criteria.
- Field documentation from the 2023 monitoring events.
- A data validation report and associated analytical laboratory reports for the November 2023 semi-annual monitoring event.
- A summary of historical LFG monitoring measurements.

Previously issued analytical laboratory data reports for the first 2023 semi-annual monitoring event can be found in the May 2023 semi-annual monitoring report. Similarly, LFG monitoring results for the first two quarters of 2023 have been previously documented in the May 2023 monitoring report.

In order to conserve paper resources, the complete 2023 annual report is presented on an enclosed data CD attached to the rear cover of the document. However, for the convenience of the reviewer, hard copies of select materials are included in this report.

2.0 SITE DESCRIPTION

2.1 LOCATION

The closed OVSL facility is located on approximately 436 acres in Sections 3 and 10, Township 23N, Range 1W of the Willamette Meridian, in Kitsap County, Washington. The landfill is situated on an upland area approximately 10 miles southwest of the city of Bremerton. The facility address is 10015 SW Barney White Road, Bremerton, Washington. A site location map is shown on Figure 1. The closed refuse fill area covers approximately 65 acres of the property. A site plan is presented on Figure 2.

2.2 BACKGROUND

The OVSL facility accepted municipal solid waste between 1967 and 2003. Landfill closure was completed in 2004, in accordance with WAC 173-351. Closure activities included construction of an LFG monitoring system, an active LFG collection and treatment system, a leachate collection and treatment system, a stormwater drainage control system, and a final landfill cover.

The final landfill cover consists of (top to bottom):

- 12-inches of vegetative topsoil and cover soil.
- Geotextile fabric.
- 12-inch drainage layer.
- Geonet composite 60-mil flexible membrane liner.
- 6-inch thick, low permeability soil.

The active LFG collection system includes a total of 81 well heads (69 vertical wells, 4 horizontal wells, and 8 interconnections to the leachate collection system) connected to a gas treatment flare station. The leachate collection system consists of subgrade collection piping and a leachate collection lagoon. A stormwater drainage system controls stormwater erosion and minimizes off-site migration of sediment-laden water (WMW, 2008). Drainage and erosion protection improvements include vegetation, a landfill toe under-drain, down chutes, culverts, and drainage ditches.

2.3 TOPOGRAPHY AND CLIMATE

The facility is situated in the Southern Upland of the Kitsap Peninsula adjacent to the Union River-Gorst Creek trough. Site topography ranges from approximately 150 to 360 feet above mean sea level (MSL). The land surface generally slopes to the west-southwest towards the Union River, which is situated approximately one-half mile west of the site.

Kitsap County's climate is characterized as maritime, with long, mild, wet winters and short, cool, dry summers. Climatically, and due to the local relief, there can be significant variations in total annual precipitation and average temperatures over short distances.

2.4 LOCAL AND REGIONAL HYDROGEOLOGY

The regional near-surface geology in the vicinity of the OVSL is dominated by glacio-fluvial and glacio-lacustrine deposits associated with the Vashon glaciation. A Remedial Investigation Report completed for the OVSL (Parametrix, 2007) identified the following main stratigraphic units in the vicinity of the site:

- Organic Soils and Peat (Qw).
- Alluvium (Qal).
- Vashon Recessional Outwash (Qvr).
- Vashon Lacustrine Recessional Outwash (Qvrl).
- Vashon Till (Qvt).
- Vashon Advance Outwash (Qva).
- Vashon Advance Lacustrine Deposits (Qval).
- Pre-Vashon Deposits (Qpvu).

With the exception of the Vashon Till (which has not been confirmed to be present at the site), each of these stratigraphic units appears to be present beneath the OVSL.

Information provided in the site conceptual model indicates that organic soils/peat, alluvium (including flood plain deposits), outwash, glacio-fluvial, and glacio-lacustrine deposits outcrop along the west-central portions of the OVSL facility. Groundwater is present beneath the site at elevations ranging between approximately 140 and 240 feet above MSL (depths-to-water ranging between near-surface and approximately 80 feet below ground surface). The groundwater flow direction beneath the landfill is generally toward the west.

3.0 2023 MONITORING ACTIVITIES

3.1 GROUNDWATER

3.1.1 Groundwater Monitoring Network

Groundwater monitoring is conducted at the OVSL in accordance with the January 2001 Agreed Order, the EMP as modified through subsequent technical discussions with Ecology, and the current site-specific SAP (SCS, 2021, revision 1.4). The monitoring program is designed to meet the post-closure landfill monitoring requirements under WAC 173-351-430.

The groundwater monitoring network at the OVSL includes four categories of monitoring wells that are sampled semi-annually, plus monitoring wells that are only used for water level measurements. The four well categories designated at the site include the following:

- Upgradient (background) monitoring wells are used to assess the quality of groundwater upgradient of the landfill. *[Note: Water quality monitoring at Upgradient wells is limited to Appendix II field parameters for one of the semi-annual events (May event) as long as no new water quality exceedances or increasing trends are observed.]*
- Performance monitoring wells are used to assess groundwater quality at the edge of the waste management unit.
- Compliance monitoring wells are used to assess groundwater quality at the MTCA Point-of-Compliance (POC).
- Downgradient monitoring wells are used to assess groundwater quality leaving the site.

A monitoring well identifier and type summary is provided in the exhibit below. The locations of these groundwater monitoring wells are illustrated on Figure 2.

Exhibit 1. 2023 OVSL Groundwater Monitoring Well Network (by Type)

Upgradient *	Performance	Compliance	Downgradient
MW-13A	MW-19C	MW-15R	MW-29A
MW-13B		MW-34A	MW-32
MW-16		MW-34C	MW-33A
MW-35		MW-39	MW-33C
		MW-42	MW-36A
		MW-43	

A indicates a shallower well completion
B indicates an intermediate well completion
C indicates a deeper well completion
* Water quality monitoring at Upgradient wells limited to Appendix II field parameters for one of the semi-annual events (May event) as long as no new water quality exceedances or increasing trends are observed.

Completion depths for the water quality monitoring wells range from approximately 20 to 260 feet below ground surface (bgs). Screen lengths vary from 5 to 20 feet, with a 10-foot average well screen length. Construction details for both the water quality monitoring wells and the water level measurement only wells are summarized on Table 1.

Each of the groundwater monitoring wells designated for routine water quality sampling is outfitted with a dedicated sampling pump (QED Well Wizard) suitable for low-flow purging and sampling. Low-flow sampling with dedicated pumps minimizes pump-introduced artifacts and eliminates cross contamination between wells. The dedicated bladder pumps are positioned with their inlets located within the screened interval of the well. Well construction, development, and pump installation are reported in detail in the *Report of 2005 Gas Probe and Monitoring Well Installations at OVSL* (SCS Engineers 2006), the *Remedial Investigation Report, OVSL, Kitsap County* (Parametrix, 2007) and the *Groundwater Monitoring Well Installation Report*, *OVSL* (SCS Engineers. 2009).

3.1.2 Monitoring Schedule

Groundwater monitoring was conducted on a semi-annual basis during 2023, with sampling events completed during May and November. Consistent with the current SAP, during the May event Upgradient sampling locations (MW-13A, MW-13B, MW-16 and MW-35) were only monitored for Appendix II field parameters.

3.1.3 Parameters and Analytical Methods

The analytical program for groundwater quality monitoring during the 2023 reporting period included the Appendix I and II parameters summarized in Exhibit 2.

Exhibit 2. 2023 OVSL Groundwater Analytical Parameters

Analytical Program	Parameter
Field Measurements	temperature, specific conductivity, pH, dissolved oxygen, turbidity, and static water level
Geochemical Indicator and General Parameters	chloride, sulfate, nitrate, calcium, sodium, bicarbonate, alkalinity, magnesium, potassium, iron, manganese and total suspended solids
Total Metals*	antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, silver, thallium, vanadium, and zinc
Volatile Organic Compounds	as listed in WAC 173-351 Appendix I
Leachate Indicator Parameters	ammonia, total organic carbon (TOC), and total dissolved solids (TDS)

* Consistent with the 2013 revisions to WAC 173-351, both dissolved and total Appendix I metals data were reported for a minimum period of eight quarters between September 2013 and December 2015. Beginning in 2016, Appendix I metals data have only been reported as a total fraction.

Laboratory methods are derived from several industry-standard publications. Methods for Chemical Analysis of Water and Wastes (MCAWW, EPA 1983) describe procedures used for nitrate, nitrite, chloride, sulfate, and ammonia analyses. Standard Methods for the Examination of Water and Wastewater (APHA 1999, revised 2014) describe the methods used for analysis of alkalinity (total and bicarbonate), TDS, total suspended solids (TSS), and TOC. Metals and VOC analyses are described in EPA publication number SW-846, Test Methods for Evaluating Solid Wastes, Physical

and Chemical Methods (EPA revised 2007). The method for measuring arsenic is described in Method 200.8, Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma-Mass Spectrometry (EPA 1994).

All laboratory analyses were completed by Eurofins in Denver, Colorado and Buffalo, New York, and by Analytical Resources Incorporated in Tukwila, Washington. These laboratories are accredited in accordance with WAC 173-50, Accreditation of Environmental Laboratories.

3.1.4 Field Monitoring And Sampling Procedures

Groundwater monitoring activities performed during 2023 consisted of surveying well conditions, obtaining field measurements (depth-to-water, pH, specific conductivity, turbidity, temperature, and dissolved oxygen), collecting groundwater samples for laboratory analysis, and packaging and shipping the samples to the relevant laboratories. These activities were conducted as described in the 2021 site-specific SAP (revision 1.4).

During routine groundwater monitoring, static water levels were initially measured and recorded in all of the water quality wells being sampled prior to initializing any well purging or groundwater collection procedures. Static water levels also were measured at 14 additional site wells that are only used for the semi-annual determination of the potentiometric groundwater surface. Depth-to-water measurements (measured to the nearest 0.01 ft.) were obtained using an electronic water level indicator. Static water level measurements were recorded and documented on field sampling and measurement forms included in Appendix A (for November 2023).

Prior to sample collection, groundwater monitoring wells were purged in order to ensure representative groundwater conditions at each location. Both purging and sampling of the monitoring wells were conducted using low-flow/low-volume well sampling techniques. Once the pumping was initiated, flow rates were confirmed by volumetric discharge measurements (by measuring the total volume discharged per cycle using a graduated cylinder and verifying the number of pump cycles per minute specified by the controller). Field measurements for pH, temperature, specific conductivity, dissolved oxygen, and turbidity were conducted using a closed, in-line flow-through cell and a portable turbidity meter. When water quality parameters stabilized and there had been no change in the pumping water level, sample collection would begin. Field parameters were measured as described in Standard Methods for the Examination of Water and Wastewater (APAH 2014).

Before initiating the purge process, the field meters were calibrated in accordance with manufacturer's guidelines. Field data obtained during the well purging procedure was recorded on field sampling and measurement forms included in Appendix A (for November 2023).

Non-disposable sampling equipment that was exposed to well water (e.g., electronic water level tape) was decontaminated between wells as outlined in the SAP. Decontamination of equipment was completed before leaving each well, thereby minimizing potential cross contamination. Disposable sampling equipment and disposable personal protective equipment (PPE) were removed and disposed of after each use and prior to leaving each well. Excess purge and sampling water was discharged into the leachate collection pond.

3.2 LEACHATE

Leachate generated from three separate closed municipal waste storage cells is collected and pumped to an arterial force main that discharges to a one-acre leachate pond situated near the western end of the landfill (refer to Figure 2). The force main outfall is located on the north end of the leachate lagoon. Accumulated leachate is treated by aeration. When the leachate elevation in the pond approaches the elevation of the former pond outlet, leachate is removed via pumping and is hauled to nearby wastewater treatment plants.

3.2.1 Leachate Monitoring Locations

Per the EMP and SAP, leachate monitoring is performed at three locations at the facility. Influent leachate sampling station L-INF is situated immediately downstream of the force main outfall on the north end of the leachate collection pond. The OBWL-TD sampling station is located at the Old Barney White Landfill Toe Drain collection sump, which subsequently connects to the leachate pond. Sampling station LP-LCD is located at the pump discharge outlet which periodically returns any accumulated liquids that collect beneath the leachate pond liner system back into the main lagoon.

The locations of the leachate monitoring stations are illustrated on Figure 2.

3.2.2 Monitoring Schedule

The current SAP provides for annual monitoring of the L-INF and OBWL-TD stations and semi-annual monitoring of the LP-LCD station. Leachate samples were collected from L-INF and OBWL-TD during November 2023. The LP-LCD was sampled during each of the May and November 2023 monitoring events.

3.2.3 Parameters and Analytical Methods

A summary of the analyzed parameters for the leachate samples collected at the OVSL is presented in Exhibit 3.

Exhibit 3. 2023 OVSL Leachate Analytical Parameters

Semi-Annual LP-LCD Analytical Program	**Parameter**
Field Measurements	temperature, specific conductivity, pH, dissolved oxygen, and turbidity
Geochemical Indicator Parameters	chloride, sulfate, nitrate/nitrite, calcium, sodium, bicarbonate, alkalinity, magnesium, potassium, iron, and manganese
Leachate Indicator Parameters	ammonia, TOC, and TDS

Annual L-INF and OBWL-TD Analytical Program	Parameter
Field Measurements	temperature, specific conductivity, pH, dissolved oxygen, and turbidity
Geochemical Indicator Parameters	chloride, sulfate, nitrate/nitrite, calcium, sodium, bicarbonate, alkalinity, magnesium, potassium, iron, and manganese
Total Metals	antimony, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, silver, thallium, vanadium, and zinc
Volatile Organic Compounds	as listed in WAC 173-351 Appendix I
Leachate Indicator Parameters	ammonia, total organic carbon (TOC), and total dissolved solids (TDS)

Laboratory methods are the same methods used for groundwater samples. All laboratory analyses for the leachate samples were completed by Eurofins laboratories in Denver, Colorado and Buffalo, New York.

3.2.4 Leachate Monitoring Field Procedures

Field activities consisted of obtaining field parameter measurements, collecting leachate samples for laboratory analysis, and packaging and shipping the samples to the laboratory. The L-INF and OBWL-TD samples consisted of individual grab samples that were collected directly from their respective sampling stations using a peristatic pump. New disposable plastic tubing was used during the collection of each sample, and was subsequently discarded between sampling locations. The LP-LCD sample was obtained from an inline sampling port attached to the liquid return line that drains back into the leachate pond. All the leachate samples were collected directly into pre-labeled laboratory containers suitable for the chemical parameters being analyzed. Field instruments were calibrated in accordance with manufacturer's guidelines.

Field-measured parameters including temperature, specific conductivity, pH, and dissolved oxygen were measured as described in Standard Methods for the Examination of Water and Wastewater (APAH 2014). Field information obtained during leachate sampling was recorded on Field Information Forms included in Appendix A (for November 2023).

3.3 LANDFILL GAS

Landfill gas monitoring activities at the OVSL consist of obtaining field measurements of primary gas composition (methane, carbon dioxide, and oxygen) at 10 subsurface soil gas detection probes (several with multiple screened intervals) and six locations inside four onsite structures on or immediately adjacent to the landfill. Throughout 2023, all LFG monitoring at the OVSL was conducted by Aspect Consulting, with the data being communicated to SCS for inclusion in the semi-annual and annual monitoring reports.

LFG monitoring is conducted to provide an assessment of the subsurface soil gas conditions at the OVSL and monitor compliance with regulatory criteria for subsurface methane concentrations. At the subsurface gas detection probes (LFG probes) relative soil gas pressure was also measured in the field. LFG monitoring procedures are detailed in the 2021 SAP.

3.3.1 Landfill Gas Monitoring Network

Monitoring is conducted at 10 perimeter LFG probes (GP-7 through GP-16) and four onsite structures (Scale House, South Slope Well House, Electrical Shed and Office) as illustrated on Figure 3. Five of the LFG probes (GP-9 through GP-13) consist of multiple, vertically-discrete, monitoring zones. Probes with dual monitoring zones are designated with an "S" for the shallow zone, and a "D" for the deep zone. Probes with three monitoring zones are designated with an "S" for the shallow zone, "M" for the middle zone, and "D" for the deep zone. Details of all the LFG probes and boring logs can be found in *Report of 2005 Gas Probe and Monitoring Well Installations at OVSL* (SCS Engineers 2006).

3.3.2 Monitoring Schedule

Monitoring at the LFG probes and facility structures was conducted quarterly during February, May, September, and November 2023. LFG monitoring results are reported in Section 4.

3.3.3 Landfill Gas Monitoring Field Procedures and Instrumentation

Field monitoring was conducted in accordance with the 2021 SAP. The LFG probes and building locations were monitored in the field (for all parameters) using a Lantec GEM2000, or equivalent, portable multi-gas analyzer. This portable gas analyzer measures methane and carbon dioxide with a dual wavelength infrared cell with a reference channel. Oxygen is measured with an electro-chemical cell. Pressure was measured with a transducer. The gas analyzer was calibrated prior to each monitoring event.

3.3.4 Field Conditions

General weather conditions were noted for each quarterly LFG monitoring event. Atmospheric pressure fluctuations can influence gas concentrations and pressure in LFG probes. To assist in interpreting the monitoring data, barometric conditions were recorded during and prior to monitoring. The barometric trends for September and November 2023 are included in this report.

4.0 2023 MONITORING RESULTS

4.1 GROUNDWATER

4.1.1 Groundwater Elevation and Flow

All of the monitoring wells in the current compliance program were accessible for the collection of water table elevation information during 2023. Recorded depth-to-water levels are summarized in field documentation included in Appendix A.

Depth-to-water measurements collected during 2023 were used to calculate groundwater elevations in feet relative to MSL. The 2023 records have been compiled and are presented on Table 3. Groundwater elevation surface maps derived from static depth-to-water measurements collected at the OVSL monitoring wells for each of the semi-annual events are presented in Figures 4A and 4B. A hydrograph showing the past 10 years of recorded groundwater elevations is presented on Figure 5.

Groundwater elevations calculated for the OVSL ranged from 139.89 (MW-33A in May) to 240.21 (MW-13A in November) ft. MSL over the 2023 reporting period. Groundwater elevations remained relatively stable throughout the year, with the exception for MW-24 which reported significantly higher than historic water table results (however, these data are suspected to represent inaccurate water level field measurements). Historically, the potentiometric groundwater surface across the OVSL has not shown significant seasonal fluctuations.

The groundwater flow direction over the 2023 reporting period remained consistent with that previously reported at the site. Locally, the groundwater flow direction is to the west/northwest. As summarized below in Exhibit 4, the average hydraulic gradient across the site remained fairly consistent between the wet and dry seasons.

Exhibit 4. Calculated 2023 Hydraulic Gradient and Flow Velocities

East Side of OVSL Facility		
	May 2023	**November 2023**
Well Pair	MW-35/MW-24	
Hydraulic Gradient (ft/ft)	0.0220	0.0203
Flow Velocity (ft/day)	1.91	1.76
West Side of OVSL Facility		
	May 2023	**November 2023**
Well Pair	MW-20/MW-33A	
Hydraulic Gradient (ft/ft)	0.0161	0.0271
Flow Velocity (ft/day)	8.28	5.79

Eastern Hydraulic Conductivity = 26 ft/day (Parametrix 2007)
Western Hydraulic Conductivity = 154 ft/day (Parametrix 2007)
Porosity = 30% (Parametrix 2007)

4.1.2 Groundwater Quality

4.1.2.1 Chemical Analysis

Water quality data for the OVSL are summarized in Tables 4A through 4D. These tables present the data results, segregated by well type, for detected analytes and measured field parameters for the 2023 semi-annual monitoring events. Each table presents the data for a monitoring well category (Compliance, Performance, Downgradient, and Upgradient). A table (4E) summarizing the detected analytes and field parameters for the annual L-INF and OBWL-TD leachate and the semi-annual LP-LCD leak detection monitoring stations is also provided. In addition, a summary table of VOC detections in groundwater and leachate is presented as Table 5.

4.1.2.2 Data QA/QC

Analytical data from the Eurofins and ARI laboratories were subjected to a quality assurance/quality control (QA/QC) review. The review included field and in-house components. The field portion consisted of the collection and analysis of trip blanks, field replicates, and matrix spike/matrix spike duplicates. The in-house evaluation provided a detailed examination of laboratory data which included sample handling, analysis hold times, and laboratory performance analyses (duplicates, blanks, matrix spikes, matrix spike duplicates and surrogate recoveries). The 2023 data set was determined to be acceptable for the intended purposes. Appendix B contains the data validation report and the analytical laboratory data reports for the November 2023 monitoring event.

4.1.3 Spatial Distribution and Temporal Trends

4.1.3.1 Parameter Distribution

As noted for previous monitoring years, the influence of past waste disposal activities on groundwater quality at the OVSL continues to be observed through groundwater VOC detections, general chemistry, and inorganics and field parameter results. The elevated concentrations of parameters adjacent to the landfill are typically characteristic of influence from either landfill leaching, transport from LFG, or increased mobilization of naturally occurring constituents as a result of the landfill's presence.

Several key parameters (arsenic, iron, manganese, and vinyl chloride) are routinely monitored for their spatial distribution by plotting concentrations on the landfill base map. Exhibit 5 summarizes the spatial distribution of these key OVSL parameters in each of the monitoring well categories.

Exhibit 5. Spatial Distribution of Key OVSL Groundwater Parameters

Total Arsenic (ug/L) - November 2023 (Figure 6A)				
Concentration	Upgradient	Performance	Compliance	Downgradient
Low	0.103	2.38	0.0548	0.571
Locations	*MW-35*		*MW-43*	*MW-36A*
High	0.395	*MW-19C*	7.49	9.28
Locations	*MW-16*		*MW-34C*	*MW-32*

Total Iron (mg/L) – November 2023 (Figure 6B)

Concentration	Upgradient	Performance	Compliance	Downgradient
Low	<0.06	0.15 *MW-19C*	<0.06	0.096
Locations	*MW-13A, MW-13B MW-34A MW-36A*		*MW-15R, MW-34A, MW-43*	*MW-36A*
High	NA		30	3.7
Location			*MW-39*	*MW-29A*

Total Manganese (mg/L) – November 2023 (Figure 6C)				
Concentration	Upgradient	Performance	Compliance	Downgradient
Low	<0.001	1.1 *MW-19C*	0.0012	0.0047
Locations	*MW-13A, MW-13B, MW-35*		*MW-34A*	*MW-36A*
High	0.0036		3.6	2.1
Locations	*MW-16*		*MW-42*	*MW-32*

Vinyl Chloride (µg/L) – November 2023 (Figure 6D)				
Concentration	Upgradient	Performance	Compliance	Downgradient
Low	<0.02	0.038 *MW-19C*	<0.02	<0.02
Locations	*MW-13A MW-13B, MW-16, MW-35*		*MW-15R, MW-34A, MW-39, MW-43*	*MW-29A, MW-33A, MW-33C, MW-36A*
High	*NA*		0.065	0.23
Locations			*MW-42*	*MW-32*

As noted for previous monitoring years, groundwater impacts are observed in each category of monitoring wells at the site.

The most elevated arsenic and total manganese concentrations (0.395 µg/L and 0.0036 mg/L) reported in the Upgradient (background) monitoring wells during the November 2023 monitoring event occurred at MW-16. Total iron was not detected in any of the Upgradient wells during the November event. Vinyl chloride was not reported in any of the Upgradient wells throughout the 2023 reporting period.

Detectable levels of arsenic, total iron and total manganese (2.38 µg/L, 0.15 mg/L and 1.1 mg/L, respectively) were reported during November 2023 in Performance monitoring well MW-19C. In addition, 0.038 µg/L of vinyl chloride was reported in this well during the event.

The highest primary parameter concentrations reported in the Compliance monitoring wells during November 2023 were observed in MW-34C (7.49 µg/L arsenic), MW-39 (30 mg/L iron), and MW-42 (3.6 mg/L manganese and 0.065 µg/L vinyl chloride). These same parameters were highest in the Downgradient monitoring wells MW-32 (9.28 µg/L arsenic, 2.1 mg/L manganese and 0.23 µg/L vinyl chloride) and MW-29A (3.7 mg/L iron).

4.1.3.2 Temporal Trends

Time series graphs and statistical trend analyses were completed for all Upgradient, Performance, Compliance, and Downgradient monitoring wells using the DUMPStat software package. The statistical data set includes analytical results obtained between 2005 through the present reporting year (2023). This evaluation was conducted for parameters listed in Appendices I and II of WAC 173-351-990 which are organized into two groups: "Trend Test A" and "Trend Test B". The "Trend Test A" time series includes all organic parameters in Appendices I and II that have been detected above the practical quantification limit (PQL) during at least one sampling event in any of the wells since 2005 (currently 25 VOCs). The "Trend Test B" time series includes Appendix I and II inorganic and groundwater quality parameters (currently 32 parameters). To facilitate review of the statistically significant trends, time series sets were developed to show those well/parameter combinations exhibiting either increasing or decreasing trends. These time series graphs are presented in Appendix C along with the other statistical evaluation results. A summary of those parameters showing significant increasing or decreasing concentration trends grouped by well type is provided on Table 6A, and a more detailed summary of parameter trends in specific wells can be found in Table 6B.

Similar to recent compliance years, the dominant data trend observed for the majority of water quality parameters monitored at the OVSL is that of stable or gradually decreasing concentrations. This is particularly apparent in the Compliance and Downgradient monitoring wells. However, significant decreases continue to be noted in all well groups for as many as 14 inorganic parameters and two VOCs (as summarized on Tables 6A/6B). Significant increasing trends were also noted for a few field monitored or inorganic parameters in several of the Upgradient, Compliance and Downgradient wells, although the overall number of parameters with increasing trends at the OVSL continues to remain low.

Significant parameter trends calculated for the Compliance monitoring wells are summarized in the following exhibit.

Exhibit 6. Significant Temporal Trends in Compliance Wells (2005-2023)

Increasing		Decreasing	
Parameter	**Wells**	**Parameter**	**Wells**
Chloride	MW-39	Alkalinity, Total	MW-15R, MW-34A, MW-34C, MW-42
Magnesium	MW-39	Ammonia	MW-42, MW-43
pH	MW-34C, MW-42	Barium	MW-15R, MW-42
Potassium, Dissolved	MW-42	Bicarbonate Alkalinity	MW-15R, MW-34A, MW-34C, MW-42
Specific Conductivity	MW-39	Calcium	MW-15R, MW-34A, MW-34C
Temperature	MW-34A, MW-34C	Chloride	MW-15R, MW-34A, MW-34C, MW-42
		Magnesium	MW-15R, MW-34A, MW-34C, MW-42
		Manganese	MW-42, MW-43
		Sodium	MW-15R, MW-34A, MW-34C, MW-42, MW-43

		Specific Conductivity	MW-15R, MW-34A, MW-34C
		Sulfate	MW-42
		Total Dissolved Solids	MW-15R, MW-34A, MW-34C
		Total Organic Carbon	MW-34C
		Vinyl Chloride	MW-34C

4.1.4 Groundwater Geochemistry

The geochemical character of the groundwater, LP-LCD, OBWL-TD and L-INF samples was evaluated by plotting and comparing geochemical parameters using a Piper diagram for the November 2023 analytical results. Water quality samples collected during November 2023 were of similar geochemical water type with clear differences seen between the groundwater and leachate derived samples.

As noted in previous monitoring reports, the positions of the sampled wells on the diagram indicate that the dominant anion in site groundwater is bicarbonate, with cations being dominated by calcium and magnesium. The leachate derived samples continue to report significantly higher sodium, calcium and potassium concentrations than groundwater, as well as higher chloride and bicarbonate levels. The November 2023 OBWL-TD sample reported relatively low alkalinity, ammonia, chloride, sulfate, BOD, COD and TOC levels compared to the primary (L-INF) leachate sample. A Piper diagram plotting the November 2023 groundwater and leachate results is presented in Appendix D. The Piper diagram for the May 2023 event of the current compliance year can be found in the corresponding semi-annual monitoring report.

In addition to the Piper diagram, groundwater cation/anion balance calculations were also used to assess geochemical character. Ideally, after the major anions and cations present in a sample are determined, the sum of the positive cations (in milliequivalents per liter [meq/L]) should approximately equal the sum of the negative anions (Hem 1986). All natural waters should be electroneutral. However, differences can arise between dissolved cations and anions in groundwater as measured by an analytical laboratory due to a number of factors including: presence of colloidal fractions, systematic error in preparation and analysis of samples, malfunction of/poorly calibrated equipment, major species omitted from analysis, the presence of unusually high concentrations of cations/anions, and not all ions present in water are included in the balance calculation. Due to these potential issues, differences in the ion balance can be difficult to assess for imbalances due to groundwater impacts.

The range of the sum of ions and balance of ions observed at the site for the November 2023 monitoring event are summarized in the exhibit below. Positive balance values indicate that the sum of the cations is greater than the sum of the anions. As stated in WAC 173-351-430-5(a), a relative percent difference (RPD) in the charge-balance (ion balance) of greater than ten percent (depending on the concentrations of ions in solution) could potentially indicate impacted groundwater conditions.

Exhibit 7. Cation-Anion Ranges for Groundwater (November 2023)

Well Group	Upgradient	Performance	Compliance	Downgradient
Sum of Cations (meq/L)	1.27 – 1.79	1.60	0.58 – 4.04	0.78 – 3.13
Sum of Anions (meq/L)	1.22 – 1.61	1.48	0.59 – 3.59	0.81 – 2.85
Balance (%)	1.88 – 5.57	3.71	-1.24 – 8.08	-2.12 – 9.12

Ion balances reported during the November 2023 event were in a similar range as historically observed at the OVSL. None of these samples reported cation-anion balances outside of +/- ten percent.

4.1.5 Statistical Predication Limit Evaluation

Statistical prediction limits using data from the upgradient monitoring wells are calculated at the end of each monitoring year to provide updated background concentrations for all Appendix I and II inorganic detection monitoring and groundwater quality parameters (a total of 32 parameters). These updated background prediction limit concentrations are used for comparison purposes for compliance and downgradient monitoring wells.

Prediction limits calculated for inorganic parameters through November 2023 were exceeded at least once in six Compliance monitoring wells (MW-15R, MW-34A, MW-34C, MW-39, MW-42 and MW-43), and at five Downgradient monitoring wells (MW-29A, MW-32, MW-33A, MW-33C and MW-36A). Compliance well MW-42 (15 exceedances) and Downgradient well MW-32 (12 exceedances) reported the largest number of prediction limit exceedances for the November event. A summary of the latest prediction limit exceedances for the November 2023 Compliance and Downgradient data sets is presented on Table 7. Prediction limit calculations through 2023 are presented in Appendix C.

As summarized on Tables 6A and 6B, the following Upgradient monitoring wells exhibited statistically significant (increasing or decreasing) trends over the period for which background prediction limits are calculated: MW-13B (bicarbonate/total alkalinity and specific conductance), and MW-35 (bicarbonate/total alkalinity, nitrate, specific conductance and temperature). Parameter trends in Upgradient monitoring wells are noted because they can impart a bias on the calculated prediction limit for the affected monitoring parameters which, in turn, can affect the number of exceedances identified for those monitoring parameters in Compliance and Downgradient wells. However, visual examination of the time series graphs presented in Appendix C suggests that the increasing trends noted for these parameters are generally minor. Therefore, any bias to the prediction limit would be expected to be nominal and not significantly change the number of exceedances within this parameter subset.

4.1.6 Point of Compliance and Cleanup Level Exceedances

4.1.6.1 Point of Compliance (POC)

The solid waste regulations (WAC 173-351-300[6]), specify that groundwater quality compliance must be established at a POC located on the landfill property no more than one hundred fifty meters (four hundred ninety two feet) from the waste management unit boundary. At the OVSL, the POC is established as a line of wells located within 150 meters of the landfill waste management unit boundary. As illustrated on Figure 2, the Compliance monitoring wells are colored red and lie west/northwest of the downslope boundary of the landfill.

4.1.6.2 Cleanup Level Exceedances

Site Specific MTCA Cleanup Level

Ten organic and inorganic parameters are regulated under the OVSL Cleanup Action Plan (CAP, Ecology 2010) and have site-specific MTCA cleanup levels. Analytical results are used to calculate an upper confidence limit (95% UCL) of the mean concentration for each parameter for each Compliance and Downgradient monitoring well to assess compliance with their respective cleanup level.

The UCLs are calculated using a three-year moving data window for the ten site-specific chemicals of concern (COC). The UCLs are calculated using MTCAStat; calculation details are presented in Appendix C. The following exhibit and Table 8 summarize the COCs and their 2023 UCL exceedances in the Compliance and Downgradient monitoring wells.

Exhibit 8. 2023 MTCA Exceedances for Chemicals of Concern

Chemicals of Concern	Units	Site-specific MTCA Cleanup Level	Exceedances in 2023 (95% UCL)
1,1-Dichloroethane	µg/L	50	No
1,4-Dichlorobenzene	µg/L	2	No
Ammonia	mg/L	0.19	Yes
Arsenic	µg/L	0.427	Yes
Cis-1,2-Dichloroethene	µg/L	35	No
Ethyl ether	µg/L	50	No
Iron	mg/L	1.9	Yes
Manganese	mg/L	0.73	Yes
Trichloroethene	µg/L	1	No
Vinyl Chloride	µg/L	0.2	Yes

Blue indicates this COC reported a 95% UCL exceedance of its site-specific MTCA Cleanup Levels in at least one Compliance or Downgradient well during 2023.

As observed in past annual monitoring reports, the OVSL continues to report generally stable to improving groundwater quality. The 95% UCL for vinyl chloride remains below the cleanup level in all Compliance wells and all Downgradient wells except MW-32. It is important to note that minor variations in parameter concentrations observed from year to year can cause exceedances to arise or vanish between reporting periods. This is largely a result of the UCLs hovering very near their site cleanup levels and not an indication of meaningful changes to overall groundwater conditions.

Statistically significant COC trends are also noted on Table 8 in order to provide additional information regarding the status of the UCL relative to the cleanup standard. Trend information may be particularly useful if the calculated UCL value is very close to the cleanup standard (e.g., within 10%). In such cases, trend information may be useful in predicting a change in status of the UCL versus the cleanup level in the relative near term.

Exceedances of the site-specific MTCA cleanup levels were reported in four of the six Compliance well locations during 2023 (refer to Table 8) including MW-34C (arsenic, iron and manganese), MW-39 (ammonia and iron), MW-42 (ammonia, iron and manganese), and MW-43 (iron). Statistically significant decreasing trends were also noted in several Compliance wells for vinyl chloride (in MW-34C), manganese (in MW-42 and MW-43); and ammonia (in MW-42 and MW-43. No other

statistically significant increasing trends were calculated for the site-specific COCs in the remaining Compliance wells. Similar exceedances and trends were reported for these wells during the previous (2022) compliance period. In addition, the 95% UCLs for the VOC COCs remained below the site-specific MTCA cleanup levels in all of the Compliance monitoring wells during 2023.

Exceedances of at least one of the site-specific MTCA cleanup levels were reported in four of the five Downgradient well locations (refer to Table 8) including MW-29A (iron and manganese), MW-32 (arsenic, manganese and vinyl chloride), MW-33A (iron and ammonia), and MW-33C (manganese). Downgradient wells MW-33A and MW-33C reported statistically significant increasing trends for arsenic. However, significant decreasing trends continued to be reported at MW-29A (for ammonia) and MW-32 (for vinyl chloride). With the exception of vinyl chloride in MW-32, the 95% UCLs for the tracked VOCs remained below their site-specific MTCA cleanup levels in all of the Downgradient monitoring wells.

Other Criteria Comparison (Federal MCLs, WAC 173-200, and MTCA)

In addition to the site-specific MTCA cleanup levels, groundwater at the OVSL is also compared to WAC 173-200 Groundwater Quality Protection Standards and State/Federal Primary and Secondary Maximum Contaminant Levels (MCLs). For comparison purposes, site-specific MTCA cleanup levels are also included.

The WAC 173-200 and MCL exceedances for the 2023 reporting period by parameter and well are summarized on Table 9. Criteria for the following six analytes were exceeded:

- pH
- ammonia
- arsenic
- iron
- manganese
- vinyl chloride

These parameters are noted to have routinely exceeded their respective regulatory standards over the previous five (2019 through 2023) compliance years. The magnitude of the 2023 exceedance remains generally consistent with previous results.

4.2 LEACHATE MONITORING RESULTS

4.2.1 Leachate Quality

November 2023 leachate influent (L-INF) and Old Barney White Landfill Toe Drain (OBWL-TD) sample results are presented on Table 4E. Samples were also obtained from the LP-LCD monitoring station and submitted for selected Appendix II parameter and total metals analysis during each of the 2023 semi-annual events (refer to Table 4E).

As noted in previous years, the annual L-INF sample reported relatively elevated concentrations of the typical leachate parameters, including total/bicarbonate alkalinity, ammonia, calcium, chloride, iron, manganese, magnesium, sodium, COD and TOC. In addition, low, but detectable, levels of tetrahydrofuran were reported in the November 2023 sample. The annual OBWL-TD sample continued to report generally lower leachate indicator results than the leachate influent.

The 2023 semi-annual LP-LCD samples also continued to report lower alkalinity, ammonia, chloride, sulfate, COD and TOC concentrations than routinely observed in the L-INF leachate sample. Detectable levels of VOCs were not reported in either of 2023 LP-LCD samples.

4.2.2 Leachate Generation Rates

Leachate volumes generated at the OVSL have been recorded on a weekly basis since 2008. During the course of the 2023 reporting period, an estimated 929,225 gallons of leachate were pumped into the leachate collection pond. A total of 47.41 inches of rainfall was recorded at the OVSL weather station during 2023.

Leachate generation at the OVSL has significantly declined over the past decade. Prior to 2013, the facility typically produced over 2 million gallons annually. Between 2013 and 2022, annual leachate generation ranged from a high of 1,106,803 gallons (in 2014) to a low of 681,901 gallons (in 2016). The leachate volume calculated for 2023 remains in this reduced range, and continues to indicate that ongoing improvements to site maintenance and existing infrastructure are reducing leachate generation rates at the OVSL. Annualized rainfall totals at the OVSL and the volumes of leachate produced on a quarterly and annual basis over the last 17 years are presented on Figure 7.

In addition, the liner leak collection/detection system is checked regularly for the presence of any accumulated liquids beneath the OVSL leachate pond. If liquids are present, they are pumped out of the collection system, pass through the LP-LCD monitoring station, and are returned to the leachate pond. The volumes of liquid pumped out of the liner leakage collection system during 2023 are presented on Table 10. A total of 2,375 gallons of liquid were removed from the collection system during 2023. This is a slightly lower LP-LCD volume than was pumped (2,445 gallons) from this system during the preceding year (2022).

4.3 LANDFILL GAS MONITORING RESULTS

LFG monitoring results for the OVSL are discussed in terms of detected methane and/or carbon dioxide (at concentrations of both gases at levels greater than 0.3 percent by volume) and depressed oxygen (less than 20.3 percent by volume). The detection of these gases, as well as elevated gas pressures within the perimeter probes, are indicative of the potential presence of LFG. The reported values represent measurements under stabilized conditions (after purging at least one probe volume from each sampling zone).

Perimeter LFG probes and surface structure locations were monitored quarterly for the presence of LFG. The third and fourth quarter 2023 LFG monitoring results are summarized in Tables 11A and 11B, respectively. A summary of the LFG probe results over the entire 2023 compliance period is also provided on Table 12. In addition, LFG extraction rates and major gas component results for the 2023 operational period are summarized in Appendix E (on Table E-4). An estimated 37.1 million cubic feet of LFG were collected at the OVSL flare inlet over 2023, with an annualized average concentration of 23.55 percent methane (by volume).

4.3.1 Perimeter Gas Probes

None of the perimeter probes at the OVSL reported a detectable methane measurement during 2023. It should be noted that methane concentrations of less than five percent by volume have a reading accuracy of ±0.3 percent by volume.

Carbon dioxide was reported at the majority of LFG probe locations with detected concentration readings during September 2023 ranging from 0.6 (GP-10D) to 10.3 percent by volume (GP-7). LFG probes reported carbon dioxide concentrations ranging between 0.7 (GP-10D) and 10.8 percent by volume (GP-7) during November 2023. Concentrations of carbon dioxide less than five percent by volume also have a reading accuracy of ±0.3 percent by volume.

During the September event depressed oxygen levels (less than 20.3 percent by volume) were measured at the majority of the LFG probes ranging from 7.4 (GP-15) to 19.9 (GP-12M) percent by volume. Two probes (GP-10S and GP-13S) reported oxygen levels at or above 20.3 percent by volume. Depressed oxygen levels for the November event ranged from 1.7 (GP-15) to 20.2 (GP-12M) percent by volume. During the latter event, GP-10S reported an oxygen level above 20.3 percent by volume. The reading accuracy for oxygen with the GEM2000 at concentrations less than 25 percent by volume is ±1 percent by volume.

As noted for past compliance years, overall LFG production at the closed OVSL has and will continue to decline over time. The observed declines in methane and carbon dioxide levels in the OVSL gas monitoring probes (as well as the increases in oxygen levels) likely also reflect past improvements to the LFG extraction system components (e.g., replacement of gas flares and blower station and the 2011 installation of six additional LFG wells in the Barney White area) and more recent changes to LFG extraction system operations implemented by Waste Management.

Appendix E includes tables and time-series plots of the historical concentrations of methane, carbon dioxide, and oxygen in the currently monitored gas probes, from March 2008 through the end of the 2023 monitoring year.

4.3.2 Structure Monitoring

Methane was not detected above instrument detection levels in the four monitored OVSL structures (Scale House, South Slope Well House, Electrical Shed and Office) during either the September or November LFG monitoring events. The regulatory standard for methane in structures on or near the landfill is 25% of the lower explosive limit (LEL). Similarly, carbon dioxide was not measured in excess of the instrument's 0.3 percent by volume detection level in any of these structures. Oxygen levels reported in these structures were all ambient, ranging between 20.8 and 21.5 percent by volume over the second half of 2023.

4.3.3 Barometric Pressure Conditions

LFG concentrations and pressures are influenced by fluctuating barometric pressure. Relative to time, the highest LFG concentrations and depressed oxygen concentrations tend to occur shortly after a significantly falling barometric trend. This is due to the effects of the landfill pressures trying to stabilize with the fluctuation in atmospheric (barometric) pressure and the associated lag time for stabilization.

To assist in interpreting data, barometric conditions were recorded prior to and during LFG monitoring. Atmospheric trends recorded during the September and November 2023 LFG monitoring events are presented on Figures 8A and 8B, respectively. LFG probe measurements recorded during both monitoring events were obtained over periods of steady to slightly falling barometric pressure conditions.

5.0 SUMMARY AND CONCLUSIONS

Overall groundwater quality results, LFG concentrations and leachate production rates reported for the OVSL during the 2023 compliance period are consistent with recent past results and continue to indicate the ongoing stabilization of the closed landfill and an overall improvement of environmental site conditions. Groundwater quality data collected over the past decade indicate that historically detected contaminants in groundwater are generally declining, with fewer exceedances of site-specific MTCA cleanup levels reported at POC monitoring wells and downgradient of the site.

Leachate generation volumes for 2023 at the facility were slightly higher than those reported during the preceding year, but continue to remain significantly lower than pre-2015 levels, demonstrating the ongoing effectiveness of the improved engineering controls being implemented at the facility. The OVSL continued to explore opportunities to minimize any remaining above ground contribution to leachate volumes to maintain the long-term trend of diminishing leachate generation.

LFG production at the OVSL continues to gradually decline, with flow rates decreasing to several orders of magnitude below their modeled production high as the natural depletion of methane and other landfill gases continues at the site. It is anticipated that on-going operations and maintenance (O&M) efforts at the OVSL will continue to show improving environmental conditions and increased landfill stability.

5.1 GROUNDWATER

5.1.1 Groundwater Quality

Consistent with past monitoring results, a single VOC (vinyl chloride) and several general chemistry parameters, inorganic analytes, and field parameters continued to be reported at elevated concentrations in select monitoring wells adjacent to the OVSL. During 2023, site specific MTCA cleanup levels, groundwater protection standards and/or federal MCLs were exceeded for six analytes: pH, total arsenic, total iron, total manganese, ammonia and vinyl chloride. These results are consistent with those reported over the past several years, with overall trends showing that the majority of analyte concentrations are stable or decreasing. In addition, the primary federal MCL (2 µg/L) for vinyl chloride, the principal contaminant of concern (COC) at the OVSL, has not been exceeded at the facility since 2006.

During 2023, 95% UCL MTCA cleanup goal exceedances were reported at least once in six OVSL Compliance wells and in five Downgradient monitoring wells. With the exception of vinyl chloride in MW-32, parameters that exceeded the site specific MTCA cleanup goals in these wells were limited to ammonia, arsenic, iron, and manganese.

The majority of parameter exceedances continue to be reported in Compliance wells MW-42 and Downgradient well MW-32. However, an analysis of the 95% UCL for the ten site COCs relative to their respective cleanup levels supports the ongoing overall improvement in groundwater quality. With the exception of arsenic in MW-33A and MW-33C, no statistically significant increasing trends were calculated for the OVSL COCs over the current reporting year.

Prediction limits for inorganic parameters were exceeded at least once in eleven Compliance and Downgradient wells during 2023. Significantly increasing concentrations trends (using Sen's Non-Parametric Test for Trend) were reported for at least one inorganic parameter at 10 well locations, while significantly decreasing trends occurred at 14 well locations. Significantly decreasing

concentration trends continue to be reported for trichloroethene (MW-19C) and vinyl chloride in wells MW-19C, MW-32 and MW-34C.

The groundwater analytical data, statistical and graphical analyses, and comparison to water quality standards though 2023 continue to indicate similar, but improving conditions to those previously documented at the OVSL, with on-going evidence that natural attenuation continues to be improving the groundwater quality at the site.

5.1.2 Evidence of Natural Attenuation

Natural attention includes a variety of physical, chemical and biological processes that act without human intervention to reduce mass, toxicity, mobility, volume, or concentration of contaminants. Examples of these processes can include biodegradation, dispersion, dilution, sorption, volatilization, chemical transformation, and contaminant destruction. At solid waste landfills, natural attenuation processes are largely controlled by and associated with changes in groundwater chemistry. Typically, for landfills, pathways for aerating subsurface soils and groundwater are impeded, resulting in increasingly anaerobic and reducing conditions. In turn, these conditions promote microbial communities that can degrade organic compounds resulting in the dechlorination of solvents and their daughter products.

Gradual, yet consistent, improvements to water quality continue to be observed at the OVSL. This is illustrated by the overall stability and/or decreasing trends observed in the calculated 95% UCLs for site COCs and through their improving comparison with their respective site-specific MTCA cleanup levels. Overall, these observations continue to support the conclusion that natural attention is occurring as expected at the OVSL. As has been previously noted, significant areas across and immediately downgradient of the OVSL waste cells exhibit a pronounced anaerobic and/or reducing geochemistry. As a result, dissolved oxygen (DO) levels are significantly reduced in the groundwater immediately beneath and downgradient of the unlined Barney White waste cell. The presence of organic rich wetlands northwest of this waste cell is also suspected be contributing to the locally anoxic groundwater conditions.

These geochemical conditions remain prevalent at well locations showing the most elevated contaminant concentrations (e.g., MW-19C, MW-34C and MW-42 with elevated total manganese, vinyl chloride and other redox sensitive parameters). The lingering presence of vinyl chloride beneath the west-central portions of the site is consistent with the ongoing reductive dechlorination of parent compounds (PCE, TCE and DCE isomers). However, further downgradient, along the far western margins of the site (MW-33A and MW-36A) groundwater geochemistry becomes less reductive and more oxidative, which in turn is increasingly supportive of the degradation of vinyl chloride. This has been repeatedly demonstrated by the absence of VOCs, including vinyl chloride, in downgradient OVSL wells MW-29A, MW-33A, MW-33C and MW-36A.

The number of decreasing parameter trends reported for the OVSL provides additional evidence supporting this ongoing and expected natural attenuation. Given the current data and historical trends, natural attenuation at the OVSL can be anticipated to continue throughout the post-closure period and beyond.

5.2 LEACHATE

Comparisons between the 2023 groundwater and L-INF field and water quality results continue to demonstrate that parameters measured and analyzed in the L-INF leachate are elevated relative to the local groundwater. These parameters include total/bicarbonate alkalinity, ammonia, calcium, chloride, iron, manganese, magnesium, sodium, COD and TOC. Low but detectable levels of tetrahydrofuran were also reported in the November 2023 sample.

The OBWL-TD sample continues to report generally lower leachate indicator results than the landfill influent. The LP-LCD monitoring station was sampled during both semi-annual events. These samples continued to report elevated specific conductivity, alkalinity, calcium, chloride, sodium, sulfate, TDS and TOC compared to the groundwater results.

A total of 929,225 gallons of leachate were generated from the OVSL over the course of the 2023 reporting year. This volume is slightly higher than that observed in the preceding year (849,488 gallons). However, the 2023 leachate generation volume remains appreciably less than earlier annualized totals (ranging to over 2 million gallons) reported prior to the implementation of site maintenance and infrastructure improvements initiated in 2013. Liquid volumes recorded at the LP-LCD monitoring station for the leachate pond leakage collection system indicate that approximately 2,375 gallons of liquid were captured and returned to the pond during 2023. The LP-LCD generation volume remains relatively low, and continues to suggest that leakage through the leachate pond liner system is well controlled.

5.3 LANDFILL GAS

Methane was not detected above state regulatory standards in any of the LFG monitoring probes or in any of the landfill structures during 2023. Perimeter LFG probe monitoring results continue to demonstrate that the facility is in compliance with respect to subsurface landfill soil gas migration criteria (less than 5% by volume of methane in soil at the property boundary). Methane was not detected in any of the onsite structures that were monitored over the reporting period.

LFG extraction rates and major gas component results over the 2023 operational period are summarized in Appendix E. An estimated 37.1 million cubic feet of LFG were collected at the OVSL flare inlet over 2023, with an annualized average concentration of 23.55 percent methane (by volume). Improvements (discussed above and in previous reports) to the OVSL LFG extraction system and associated infrastructure have reduced and/or stabilized LFG levels at both perimeter soil gas probe and structural monitoring locations. The LFG collection system will continue to be monitored and optimized to enhance its performance.

6.0 REFERENCES

American Public Health Association (APHA), American Water Works Association, Water Environment Federation, revised 2014. *Standard Methods for the Examination of Water and Wastewater*.

Engineering Management Support, December 2010, Environmental Monitoring Plan, Olympic View Sanitary Landfill, Port Orchard, WA.

Gibbons, Robert D., and Discerning Systems, Inc. Copyright 1994-2005. *DUMPStat Version 2.1.8.*

Parametrix, Inc. 2007 *Draft Final Remedial Investigation Report, Olympic View Sanitary Landfill.*

SCS Engineers. June 2006. *Report of the 2005 Gas Probe and Groundwater Monitoring Well Installation at the Olympic View Sanitary Landfill*.

SCS Engineers. April 2009. G*roundwater Monitoring Well Installation Report, Olympic View Sanitary Landfill*.

SCS Engineers. March 2023. *2022 Annual Monitoring Report, Olympic View Sanitary Landfill*.

SCS Engineers. September 2021. *Sampling and Analysis Plan, Olympic View Sanitary Landfill, (OVSL)* (Revision 1.4).

SCS Engineers. August 2023. *Semi-Annual (May) 2023 Monitoring Report, Olympic View Sanitary Landfill*.

USEPA 1994. *Method 200.8, Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma-Mass Spectrometry*, Revision 5.4 EMMC Version. Environmental Monitoring Systems Laboratory, Office of Research and Development.

USEPA revised 2007. *Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods,* Third Ed., Environmental Monitoring Systems Laboratory, Office of Research and Development.

Washington, Attorney General. January 31, 2001. *Agreed Order No. DE 00SWFAPNR-1729*.

Washington Department of Ecology. October 2010. *Cleanup Action Plan, Olympic View Sanitary Landfill, Kitsap County, Washington.*

Washington Department of Ecology. January 2017. *Periodic Review, Olympic View Sanitary Facility Site ID# 79649975,10015 SW Barney White Road, Port Orchard, Washington.*

Washington Department of Ecology. February 14, 2019. *Comments on the Application to Modify Permit (Monitoring Program Reduction) - Olympic View Sanitary Landfill, Kitsap County Washington, February 5, 2019.*

Washington Department of Ecology. March 18, 2019. *Comments on the Application to Modify Permit (Monitoring Program Reduction) - Olympic View Sanitary Landfill, Kitsap County Washington, February 5, 2019 and Email form Phil Perley (OVSL SAP Questions) dated February 27, 2019.*

Tables

Table 1. Groundwater Well Construction Details
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Well ID	Northing	Easting	Measuring Point Elevation (ft. MSL)	Well Depth (ft. bgs)	Top of Screen Elevation (ft. MSL)	Bottom of Screen Elevation (ft. MSL)	Screen Length (ft.)
Water Quality Monitoring Wells							
MW-13A	188233.33	1159346.53	288.74	155	141	131	10
MW-13B	188223.33	1159346.53	288.66	260	36	26	10
MW-15R	189905.03	1157711.29	180.66	33	157	147	10
MW-16	190804.53	1159350.37	240.01	70	178	168	10
MW-19C	188520.03	1157025.96	196.96	90	111	106	5
MW-29A	188570.27	1156121.60	160.21	25	140	135	5
MW-32	188908.88	1156388.52	152.36	21	135	130	5
MW-33A	189304.18	1155636.34	147.68	20	140	125	15
MW-33C	189284.18	1155636.34	147.59	65	89	79	10
MW-34A	189391.16	1156929.63	197.95	48	168	148	20
MW-34C	189391.16	1156943.77	199.89	98	114	99	15
MW-35	188917.42	1159762.03	302.69	149	161	151	10
MW-36A	189754.10	1156935.20	192.68	50	147	142	5
MW-39	190362.60	1158325.32	189.92	25	174	164	10
MW-42	188690.50	1156617.90	187.43	33	159	154	5
MW-43	188407.60	1156636.60	186.42	30	161	156	5
Water Level Measurement Only Wells							
MW-2B1	189232.23	1157544.63	172.94	18	163	153	10
MW-2A1	189242.23	1157544.63	174.22	38	143	133	10
MW-4	188298.52	1156887.57	175.78	34	149	139	10
MW-10	188737.81	1156265.18	155.12	17.5	142	137	5
MW-20	188850.01	1157062.68	198.41	49	165	150	15
MW-21	188737.81	1156245.18	156.03	15	150	140	10
MW-23A	189485.84	1158085.12	182.28	23	172	157	15
MW-24	189795.14	1158383.22	208.24	42	176	161	15
MW-29C	188479.36	1156072.97	156.92	50	111	106	5
MW-30A	188623.50	1155612.45	166.74	35	136	131	5
MW-36	189751.87	1156955.77	189.39	100	99	89	10
MW-41A	188106.83	1157522.05	199.43	35.7	168	163	5
MW-41B	188104.34	1157530.68	200.64	79	126	121	5
MW-41C	188101.13	1157541.93	199.67	117	87	82	5

Table 2. Summary of Analytical Parameters
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Well	Volatile Organic Compounds		Geochemical Indicator Parameters**	Leachate Indicator Parameters			Field Parameters	Metals* and Nitrate	
	WAC 173-351 Appendix I	Vinyl Chloride (SIM)	Cl, Fe, Mn, SO_4, Ca, Mg, Na, K, Alkalinity, Bicarbonate Alkalinity	Ammonia	TOC, TDS	BOD, COD	Dissolved Oxygen, ORP, pH, Specific Conductivity, Temperature, Turbidity	As, Sb, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn, NO_3	TSS
Compliance Monitoring Locations									
MW-15R	✓	✓	✓	✓	✓		✓	✓	✓
MW-34A									
MW-34C									
MW-39									
MW-42									
MW-43									
Performance Monitoring Locations									
MW-19C	✓	✓	✓	✓	✓		✓	✓	✓
Downgradient Monitoring Locations									
MW-29A	✓	✓	✓	✓	✓		✓	✓	✓
MW-32									
MW-33A									
MW-33C									
MW-36A									
Upgradient Monitoring Locations									
MW-13A[a]	✓	✓	✓	✓	✓		✓	✓	✓
MW-13B[a]									
MW-35[a]									
MW-16[a]									
Leachate Monitoring Locations									
L-INF [b]	✓	✓	✓	✓	✓	✓	✓	✓	✓
LP-LCD	✓	✓	✓	✓	✓	✓	✓	✓	
OBWL-TD [b]	✓	✓	✓	✓	✓	✓	✓	✓	✓

Notes

✓ Indicates wells were sampled for selected parameters.

* The Appendix I metals in the groundwater samples were analyzed for only total metals fractions.

** Only Iron and Manganese were analyzed for both total and dissolved fractions.

[a] Water quality monitoring at the Upgradient wells was limited to Appendix II field parameters during the Semi-annual # 1 event (in May).

[b] Sampled annually (November 2023).

Table 3. Groundwater Elevations
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Location ID	Measuring Point Elevation (ft. MSL)	Semi-Annual #1 May 2023		Semi-Annual #2 November 2023	
		DTW	WLE	DTW	WLE
Water Quality Monitoring Wells					
MW-13A	288.74	56.61	232.13	48.53	240.21
MW-13B	288.66	59.98	228.68	62.41	226.25
MW-15R	180.66	19.29	161.37	19.55	161.11
MW-16	240.01	57.80	182.21	61.65	178.36
MW-19C	196.96	33.82	163.14	34.68	162.28
MW-29A	160.21	13.80	146.41	13.27	146.94
MW-32	152.36	1.51	150.85	1.43	150.93
MW-33A	147.68	7.79	139.89	4.53	143.15
MW-33C	147.59	2.15	145.44	1.99	145.60
MW-34A	197.95	39.98	157.97	40.45	157.50
MW-34C	199.89	41.56	158.33	42.27	157.62
MW-35	302.69	72.01	230.68	73.38	229.31
MW-36A	192.68	31.38	161.30	31.87	160.81
MW-39	189.92	20.18	169.74	20.87	169.05
MW-42	187.43	27.98	159.45	27.64	159.79
MW-43	186.42	24.95	161.47	22.74	163.68
Water Level Measurement Only Wells					
MW-2A1	174.22	8.09	166.13	8.91	165.31
MW-2B1	172.94	3.95	168.99	7.69	165.25
MW-4	175.78	14.79	160.99	4.88	170.90
MW-10	155.12	4.32	150.80	3.83	151.29
MW-20	198.41	Dry	--	34.78	163.63
MW-21	156.03	5.53	150.50	4.99	151.04
MW-23A	182.28	Dry	--	13.92	168.36
MW-24	208.25	13.91	194.34	12.39	195.86
MW-29C[1]	156.92	12.15	144.77	Dry	--
MW-30A	166.74	Dry	--	24.83	141.91
MW-36	189.39	31.38	158.01	32.01	157.38
MW-41A[2]	199.43	24.42	175.01	27.35	172.08
MW-41B	200.64	24.74	175.90	26.71	173.93
MW-41C	199.67	26.25	173.42	28.70	170.97

Notes:

Elevations, ft. MSL

WLE = Water level elevation

DTW = Depth to Water (ft)

Table 4A. Detections and Field Measurements - Compliance Monitoring Wells
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Parameter	Units	MW-15R 5/23/2023	MW-15R 11/9/2023	MW-34A 5/23/2023	MW-34A 11/8/2023	MW-34C 5/23/2023	MW-34C 11/8/2023	MW-39 5/23/2023	MW-39 11/9/2023	MW-42 5/23/2023	MW-42 11/8/2023	MW-43 5/23/2023	MW-43 11/8/2023
Field Parameter													
Dissolved Oxygen	mg/L	1.1	0.9	5.1	2.1	0.9	0.2	0.7	0.9	-0.2	0.6	20.5	3.4
Oxidation Reduction Potential	mV	163.3	85.4	250.7	117.4	1.1	-21.3	-58.3	-31.9	-51.9	-68.9	333.1	244.5
pH	SU	6.46	6.43	5.89	5.91	6.55	6.56	6.02	5.94	6.38	6.34	5.84	5.62
Specific Conductivity	umhos/cm	154	147	134	169	188	191	303	252	450	471	47	6.2
Temperature	deg C	10.4	9.9	12.1	11.8	12.6	12.6	10.1	11.6	11.8	12.6	8.2	11.1
Turbidity	NTU	2.8	3.8	2.7	3.7	61	80.9	6.1	2.9	3.2	3.6	5.1	2.9
General Chemistry													
Alkalinity, Bicarbonate (As CaCO3)	mg/L	74	73	66	75	92	87	110	100	190	190	21	23
Alkalinity, Total (As CaCO3)	mg/L	74	73	66	75	92	87	110	100	190	190	21	23
Ammonia (as N)	mg/L	--	0.045	0.062	0.075	0.036	--	0.46	0.42	3.5	3.3		0.037
Calcium, Dissolved	mg/L	15 B	13 B	14 B	15 B	19 B	17 B	16 B	14 B	41 B	38 B	4.2 B	5.2 B
Chloride	mg/L	--	--	--	--	3.2	3.9	7.3	5.9	13	12		--
Iron, Dissolved	mg/L	0.029 J B	--	0.012 J B	--	0.44 B	1 B	42 B	35	24 B	25 B	0.017 J B	--
Iron, Total	mg/L	0.034 J B	--	0.0094 J B	--	19 B	26 B	41 B	30	25 B	24 B	0.17 B	--
Magnesium, Dissolved	mg/L	9.2 B	8.9	6 B	7	8.2 B	7.2	9.6 B	8.9	13 B	13	1.7 B	2.1
Manganese, Dissolved	mg/L	0.0022 B	0.0021 B	--	--	0.44 B	0.45	0.52 B	0.5 B	3.9 B	3.7	0.0067 B	0.0043
Manganese, Total	mg/L	0.0025 B	0.0051	--	0.0012	3.1 B	1.6	0.52 B	0.48	4 B	3.6	0.012 B	0.0061
Nitrate (As N)	mg/L	0.13	--	--	--	--	--	--	--	--	--	0.48	--
Potassium, Dissolved	mg/L	1 B	--	0.79 J B	--	1.1 B	--	0.48 J B	--	8.4 B	7.9	0.67 J B	--
Sodium, Dissolved	mg/L	5.8 B	5.2	8.1 B	7.9	11 B	8.7	10 B	9.7	19 B	17	2.1 B	2.7
Sulfate	mg/L	--	--	--	--	--	--	--	--	--	6.8		--
Total Dissolved Solids (TDS)	mg/L	98	90	110	120	140	140	140	130	230	230	31	46
Total Organic Carbon (TOC)	mg/L	--	--	--	--	--	--	2.6	--	6.4	--	1.2	--
Total Suspended Solids (TSS)	mg/L	--	--	--	--	43	--	40	--	21	--	--	--
Metals													
Antimony, Total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic, Total	ug/L	0.24	0.191	0.43	0.412	8.03	7.49	1.98	1.08	1.56	1.67	0.054 J	0.0548
Barium, Total	ug/L	3.8	4.9	3.1	3.9	100	130	15	14	94	87	3.40	4.7
Cadmium, Total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--
Chromium, Total	ug/L	--	--	4	--	--	--	--	--	--	--	--	--
Cobalt, Total	ug/L	--	--	--	--	--	--	7.9	7.2	--	--	--	--
Copper, Total	ug/L	--	--	--	--	2.1	3	--	--	--	--	--	--
Lead, Total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--
Nickel, Total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--
Selenium, Total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium, Total	ug/L	3.2	3.2	3.9	3.9	--	2.2	--	--	--	--	--	--
Zinc, Total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--
Volatile Organic Compounds													
Vinyl chloride	ug/L	--	--	--	--	0.017 J	--	--	--	0.025	0.065		--

Notes:
Parameters not listed above were not detected at any of the above listed sample locations during the reporting year

$CaCO_3$ = Calcium carbonate
deg-C = Degrees Celcius
J = Concentration is estimated
µmhos/cm = Microhms per centimeter
µg/L = Micrograms per liter
mg/L = Miligrams per liter
mV = Milivolts
N = Nitrogen
NTU = Nephelometric turbidity units
SU = Standard units
B = Analyte detected in sample blank
H = parameter analyzed outside of specified holding time due to lab error
D = The reported value is from a dilution
-- = Parameter not detected above the project-specific reporting limit

Table 4B. Detections and Field Measurements - Performance Monitoring Wells
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Parameter	Units	MW-19C 5/23/2023	MW-19C 11/8/2023
Field Parameter			
Dissolved Oxygen	mg/L	0.2	0.7
Oxidative Reduction Potential	mV	204.2	68.1
pH	SU	6.71	6.61
Specific Conductivity	umhos/cm	162	160
Temperature	deg C	10.1	10.7
Turbidity	NTU	3.2	3.1
General Chemistry			
Alkalinity, Bicarbonate (As CaCO3)	mg/L	77	79
Alkalinity, Total (As CaCO3)	mg/L	77	79
Ammonia (as N)	mg/L	0.42	0.5
Calcium, Dissolved	mg/L	16 B	14 B
Chloride	mg/L	--	--
Iron, Dissolved	mg/L	0.16 B	0.11 B
Iron, Total	mg/L	0.23 B	0.15 B
Magnesium, Dissolved	mg/L	8 B	7.2
Manganese, Dissolved	mg/L	1.1 B	0.96
Manganese, Total	mg/L	1.1 B	1.1
Nitrate (As N)	mg/L	--	--
Potassium, Dissolved	mg/L	1.5 B	1.3
Sodium, Dissolved	mg/L	6.5 B	5.5 B
Sulfate	mg/L	--	--
Total Dissolved Solids (TDS)	mg/L	110	95
Total Organic Carbon (TOC)	mg/L	--	--
Total Suspended Solids (TSS)	mg/L	--	--
Metals			
Arsenic, Total	ug/L	2.47	2.38
Barium, Total	ug/L	4.20	3.9
Beryllium, Total	ug/L	--	--
Chromium, Total	ug/L	--	--
Cobalt, Total	ug/L	--	--
Copper, Total	ug/L	--	--
Lead, Total	ug/L	--	--
Nickel, Total	ug/L	--	--
Selenium, Total	ug/L	--	--
Silver, Total	ug/L	--	--
Thallium, Total	ug/L	--	--
Vanadium, Total	ug/L	--	--
Zinc, Total	ug/L	--	--
Volatile Organic Compounds			
Trichloroethene	ug/L	0.88 J	1
Vinyl chloride	ug/L	0.012 J	0.038

Notes:

Parameters not listed above were not detected at any of the above listed sample locations during the reporting year

$CaCO_3$ = Calcium carbonate

deg-C = Degrees Celcius

B = Analyte detected in sample blank

J = Concentration is estimated

µmhos/cm = Microhms per centimeter

µg/L = Micrograms per liter

mV = Milivolts

N = Nitrogen

NTU = Nephelometric turbidity units

SU = Standard units

mg/L = Miligrams per liter

H = parameter analyzed outside of specified holding time due to lab error

-- = Parameter not detected above the project-specific reporting limit

Table 4C. Detections and Field Measurements - Downgradient Monitoring Wells
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Parameter	Units	MW-29A 5/23/2023	MW-29A 11/8/2023	MW-32 5/23/2023	MW-32 11/8/2023	MW-33A 5/24/2023	MW-33A 11/9/2023	MW-33C 5/24/2023	MW-33C 11/9/2023	MW-36A 5/23/2023	MW-36A 11/8/2023
Field Parameter											
Dissolved Oxygen	mg/L	0.4	0.7	0.3	0.9	0.8	0.1	0.8	0	1.6	3.3
Oxidative Reduction Potential	mV	98.9	175	77.3	-70	-44.5	3.8	-93.2	-77.8	224.4	144.5
pH	SU	5.72	6.01	6.35	6.64	6.64	6.33	7.81	7.85	5.99	5.95
Specific Conductivity	umhos/cm	103	87	4.8	310	134	115	162	152	136	125
Temperature	deg C	8.9	11.4	10.9	12.1	9.2	9.8	10.1	9.3	10	9.7
Turbidity	NTU	1.2	3.3	4.9	3.2	11.3	7.3	24.8	9.2	3.5	4.9
General Chemistry											
Alkalinity, Bicarbonate (As CaCO3)	mg/L	46	36	110	140	65	62	73	70	68	58
Alkalinity, Total (As CaCO3)	mg/L	46	36	110	140	65	62	73	70	68	58
Ammonia (as N)	mg/L	0.088	0.075	0.041	0.11	0.071	0.051	--	0.059	--	0.053
Calcium, Dissolved	mg/L	7.6 B	6.1 B	26 B	28 B	14 B	13 B	19 B	18 B	12 B	8.8 B
Chloride	mg/L	--	--	6.3	10	--	--	--	3.1	--	--
Iron, Dissolved	mg/L	4.6 B	3.4 B	0.57 B	0.64 B	1	0.33	0.055 J	--	0.022 J B	--
Iron, Total	mg/L	5 B	3.7 B	0.61 B	0.64 B	8.9	0.83	1.7	0.56	0.076 B	0.096 B
Magnesium, Dissolved	mg/L	4.3 B	3.6	13 B	14	6.5	5.9	7.3	7.2	7.4 B	6.1
Manganese, Dissolved	mg/L	1.4 B	1.1	1.7 B	2	0.034 B	0.038 B	0.13 B	0.13 B	0.00083 J B	--
Manganese, Total	mg/L	1.4 B	1.2	1.9 B	2.1	0.037 B	0.035	0.53 B	0.34	0.0025 B	0.0047
Nitrate (As N)	mg/L	--	--	--	--	--	--	--	--	0.61	--
Potassium, Dissolved	mg/L	0.51 J B	--	1.1 B	1.1	0.95 J	--	1.6	1.4	1.1 B	--
Sodium, Dissolved	mg/L	3.7 B	3.4 B	11 B	11	4.1 B	3.3	4.4 B	3.9	8.2 B	5.8
Sulfate	mg/L	--	--	8.6	13	--	--	8.3	8.7	--	--
Total Dissolved Solids (TDS)	mg/L	60	51	200	200	80	75	100	94	110	93
Total Organic Carbon (TOC)	mg/L	1.6	--	--	--	3.5	--	--	--	--	--
Total Suspended Solids (TSS)	mg/L	7.2	--	--	--	25	--	20	--	--	--
Metals											
Arsenic, Total	ug/L	2.25	1.78	9.06	9.28	1.27	2.27	3.99	2.65	0.628	0.571
Barium, Total	ug/L	0.0057	0.0056	0.0044	0.0044	0.0035	0.0021	0.013	0.0068	0.003	0.0024
Beryllium, Total	ug/L	--	--	--	--	--	--	--	--	--	--
Chromium, Total	ug/L	--	--	--	--	0.00053 J	--	--	--	0.01	0.0098 B
Cobalt, Total	ug/L	0.0027 J	--	--	--	--	--	--	--	--	--
Copper, Total	ug/L	0.00095 J	--	--	--	0.0017 J	--	0.0023	--	--	--
Lead, Total	ug/L	--	--	--	--	0.00031 J	--	0.00031 J	--	--	--
Nickel, Total	ug/L	0.002 J	--	0.00087 J	--	--	--	--	--	0.002 J	--
Selenium, Total	ug/L	--	--	--	--	--	--	--	--	0.0013	--
Silver, Total	ug/L	--	--	--	--	--	--	--	--	--	--
Thallium, Total	ug/L	--	--	--	--	--	--	--	--	--	--
Vanadium, Total	ug/L	--	--	--	--	0.008	0.0023	0.0013 J	--	0.0024	0.0023
Zinc, Total	ug/L	--	--	0.0028 J	--	0.002 J	--	0.0075	--	--	--
Volatile Organic Compounds											
Trichloroethene	ug/L	--	--	0.51 J	--	--	--	--	--	--	--
Vinyl chloride	ug/L	--	--	0.2	0.23	--	--	--	--	--	--

Notes:
Parameters not listed above were not detected at any of the above listed sample locations during the reporting year
$CaCO_3$ = Calcium carbonate
deg-C = Degrees Celcius
J = Concentration is estimated
µmhos/cm = Microhms per centimeter
µg/L = Micrograms per liter
mg/L = Miligrams per liter
mV = Milivolts
N = Nitrogen
NTU = Nephelometric turbidity units
SU = Standard units
-- = Parameter not detected above the project-specific reporting limit
B = Analyte detected in sample blank
H = parameter analyzed outside of specified holding time due to lab error

Table 4D. Detections and Field Measurements - Upgradient Monitoring Wells
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Parameter	Units	MW-13A 5/23/2023	MW-13A 11/8/2023	MW-13B 5/23/2023	MW-13B 11/8/2023	MW-16 5/23/2023	MW-16 11/8/2023	MW-35 5/23/2023	MW-35 11/8/2023
Field Parameter									
Dissolved Oxygen	mg/L	7	6.7	7.7	7.3	71.2	7.7	66	7
Oxidative Reduction Potential	mV	159.9	129.8	164.1	130.3	431.3	263.6	380.3	260
pH	SU	6.94	6.8	7.52	7.38	6.21	6.21	7.2	7.19
Specific Conductivity	umhos/cm	175	175	173	173	123	124	186	160
Temperature	deg C	9.8	9.3	9.9	9.4	9.4	9.9	10.5	10.7
Turbidity	NTU	2.9	3.1	3.2	3.4	2.7	3.3	2.8	4.5
General Chemistry									
Alkalinity, Bicarbonate (As CaCO3)	mg/L	*	86	*	85	*	63	*	83
Alkalinity, Total (As CaCO3)	mg/L	*	86	*	85	*	63	*	83
Ammonia (as N)	mg/L	*	--	*	--	*	0.12	*	0.037
Calcium, Dissolved	mg/L	*	16 B	*	16 B	*	11 B	*	14 B
Chloride	mg/L	*	--	*	--	*	--	*	--
Iron, Dissolved	mg/L	*	--	*	--	*	--	*	--
Iron, Total	mg/L	*	--	*	--	*	--	*	--
Magnesium, Dissolved	mg/L	*	9.1	*	8	*	5.9	*	8.9
Manganese, Dissolved	mg/L	*	--	*	--	*	--	*	--
Manganese, Total	mg/L	*	--	*	--	*	0.0036	*	--
Nitrate (As N)	mg/L	*	--	*	--	*	--	*	--
Potassium, Dissolved	mg/L	*	--	*	--	*	--	*	--
Sodium, Dissolved	mg/L	*	5.1	*	4.7	*	4.8 B	*	5.1 B
Sulfate	mg/L	*	--	*	--	*	--	*	--
Total Dissolved Solids (TDS)	mg/L	*	98	*	99	*	81	*	90
Total Organic Carbon (TOC)	mg/L	*	--	*	--	*	--	*	--
Total Suspended Solids (TSS)	mg/L	*	--	*	--	*	--	*	--
Metals									
Arsenic, Total	ug/L	*	0.18	*	0.326	*	0.395	*	0.103
Barium, Total	ug/L	*	0.0027	*	0.0032	*	0.0038	*	0.003
Beryllium, Total	ug/L	*	--	*	--	*	--	*	--
Chromium, Total	ug/L	*	--	*	0.0034 B	*	0.0081 B	*	--
Cobalt, Total	ug/L	*	--	*	--	*	--	*	--
Copper, Total	ug/L	*	--	*	--	*	--	*	--
Lead, Total	ug/L	*	--	*	--	*	--	*	--
Nickel, Total	ug/L	*	--	*	--	*	--	*	--
Selenium, Total	ug/L	*	--	*	--	*	--	*	--
Silver, Total	ug/L	*	--	*	--	*	--	*	--
Thallium, Total	ug/L	*	--	*	--	*	--	*	--
Vanadium, Total	ug/L	*	0.0037	*	0.0051	*	0.0035	*	0.0043
Zinc, Total	ug/L	*	--	*	--	*	--	*	--
Volatile Organic Compounds									
No detections	ug/L	*	--	*	--	*	--	*	--

Notes:

Parameters not listed above were not detected at any of the above listed sample locations during the reporting year

* = Only field parameters analyzed at upgradient wells during Semi-annual #1 event

$CaCO_3$ = Calcium carbonate

deg-C = Degrees Celcius

J = Conentration is estimated

µmhos/cm = Microhms per centimeter

µg/L = Micrograms per liter

mg/L = Miligrams per liter

mV = Milivolts

N = Nitrogen

NTU = Nephelometric turbidity units

SU = Standard units

-- = Parameter not detected above the project-specific reporting limit

B = Analyte detected in sample blank

H = parameter analyzed outside of specified holding time due to lab error

Table 4E. Detections and Field Measurements - Leachate and Leak Detection Locations
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Parameter	Units	L-INF 11/27/2023	OBWL-TD 11/27/2023	LP-LCD 11/9/2023	LP-LCD 5/24/2023
Field Parameter					
Dissolved Oxygen	mg/L	8.29	7.65	9.9	7.9
Oxidative Reduction Potential	mV	165.7	121.4	266.9	178.5
pH	SU	7.12	7.47	6.37	7.36
Specific Conductivity	umhos/cm	5,825	239	218.8	3390
Temperature	Deg C	14.7	8.4	7.9	17.7
Turbidity	NTU	14.6	8	5	1.9
General Chemistry					
Alkalinity, Bicarbonate (As CaCO3)	mg/L	1500	25	--	840
Alkalinity, Total (As CaCO3)	mg/L	1500	25	--	840
Ammonia (as N)	mg/L	220	0.11	6.3	3.1
Biochemical Oxygen Demand	mg/L	44 B	--	--	9.9 b
Calcium, Dissolved	mg/L	110 B	31	91	75
Chemical Oxygen Demand	mg/L	430	15	--	120
Chloride	mg/L	1200	--	620	550
Iron, Dissolved	mg/L	0.64 B	0.042	0.14	0.51
Iron, Total	mg/L	2.2	0.68	0.18	0.32
Magnesium, Dissolved	mg/L	78 B	5.6	56	46
Manganese, Dissolved	mg/L	1.7	0.034	0.65 B	0.5 B
Manganese, Total	mg/L	1.6	0.037	0.77	0.5 B
Nitrate (As N)	mg/L	0.2	0.87	--	6.2
Nitrate/Nitrite, Total	mg/L	2.20	0.87	--	6.2
Potassium, Dissolved	mg/L	130	2.2	81	77
Sodium, Dissolved	mg/L	900 B	5.1	650	650
Sulfate	mg/L	270	90	180	190
Total Dissolved Solids (TDS)	mg/L	3100	150	2400	2000
Total Organic Carbon (TOC)	mg/L	160	2.3	--	44
Total Suspended Solids (TSS)	mg/L	15	4.4	--	--
Metals					
Antimony, Total	ug/L	1.4	4.8	0.0028	0.0016
Arsenic, Total	ug/L	6.9	1.6 J	0.0153 D	0.016
Barium, Total	ug/L	160	13	0.14	0.099
Beryllium, Total	ug/L	--	--	--	--
Chromium, Total	ug/L	7.7	1.1 J	--	0.0018 J
Cobalt, Total	ug/L	23	1 J	0.014	0.0099
Copper, Total	ug/L	26	11	0.015	0.037
Lead, Total	ug/L	0.39 J	--	0.0032	0.0027
Nickel, Total	ug/L	110	4.5	0.1	0.086
Selenium, Total	ug/L	--	--	--	--
Silver, Total	ug/L	0.41 J	0.045 J	--	--
Thallium, Total	ug/L	--	--	--	--
Vanadium, Total	ug/L	9.5	1.7 J	0.0076	0.0056
Zinc, Total	ug/L	110	180	0.028	0.088
Volatile Organic Compounds					
Butyl alcohol, tert-		--	24		
Tetrahydrofuran	ug/L	75 J	5.8	--	--
Vinly chloride	ug/L	--	--	--	--

Notes:

Parameters not listed above were not detected at any of the above listed sample locations during the reporting year.

* = Not analyzed

$CaCO_3$ = Calcium carbonate

deg-C = Degrees Celcius

H = Analyzed beyond hold time

J = Concentration is estimated

mg/L = Miligrams per liter

µg/L = Micrograms per liter

µmhos/cm = Microhms per centimeter

mV = Milivolts

N = Nitrogen

NTU = Nephelometric turbidity units

SU = Standard units

-- = Parameter not detected above the project-specific reporting limit

B = Analyte detected in sample blank

H = parameter analyzed outside of specified holding time due to lab error

Table 5. 2023 Groundwater and Leachate VOC Detections
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Parameter	Event	Well Type	Well	Result
Butyl alcohol, tert-	Q423	System	OBWL-TD	24
Tetrahydrofuran	Q423	System	L-INF	75 J
			OBWL-TD	5.8
Trichloroethene	Q223	Performance	MW-19C	0.88 J
		Downgradient	MW-32	0.51 J
	Q423	Performance	MW-19C	1
		Downgradient	MW-32	0.48 J
Vinyl chloride	Q223	Performance	MW-19C	0.012 J
		Downgradient	MW-32	0.20
		Compliance	MW-34C	0.015 J
			MW-42	0.025
	Q423	Performance	MW-19C	0.038
		Downgradient	MW-32	0.23
		Compliance	MW-34C	0.017 J
			MW-42	0.07

Notes:
All VOCs measured in micrograms per liter (ug/L)
J = Indicates that concentration is estimated due to low concentration in sample

Table 6A. Summary of Significant Parameter Trends by Well Type
2023 Annual Monitoring Report
Olympic View Sanitary Lanfill, Kitsap County, Washington

Significant VOC Trends		Significant Inorganic Parameter Trends	
Increasing	**Decreasing**	**Increasing**	**Decreasing**
Upgradient Wells			
None	None	Alkalinity, Bicarbonate Alkalinity, Total Nitrate (MW-35 only) Specific Conductivity Temperature	Magnesium, Dissolved Nitrate Sulfate
Performance Wells			
None	Trichloroethene Vinyl Chloride	None	Arsenic, Total Ammonia (as N) Chloride Sodium, Dissolved Sulfate
Compliance Wells			
None	Vinyl Chloride	Chloride (MW-39 only) Magnesium, Dissolved (MW-39 only) pH Potassium, Dissolved (MW-42 only) Specific Conductivity Temperature	Alkalinity, Bicarbonate Alkalinity, Total Ammonia (as N) Barium, Total Calcium, Dissolved Chloride Magnesium, Dissolved Manganese, Total Sodium, Dissolved Specific Conductivity Sulfate Total Dissolved Solids Total Organic Carbon (MW-34C only)
Downgradient Wells			
None	Vinyl Chloride	Arsenic, Total pH Specific Conductivity Sulfate (MW-33A only)	Alkalinity, Bicarbonate Alkalinity, Total Ammonia (as N) Barium, Total Calcium, Dissolved Magnesium, Dissolved Sodium, Dissolved Specific Conductivity Sulfate Total Dissolved Solids

Table 6B. Summary of Trends in Groundwater (2005 - 2023)
2023 Annual Monitoring Report
Olympic View Sanitary Lanfill, Kitsap County, Washington

Results of Sen's Non-Parametric Test for Trend

Trend Test Period: January 2005 through December 2023

Trend Test Wells:

- Compliance Wells: MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43
- Performance Wells: MW-19C
- Downgradient Wells: MW-29A, MW-32, MW-33A, MW-33C, MW-36A
- Upgradient Wells* MW-13A, MW-13B, MW-16, MW-35

*trend status shown is based on most recent event with reported data, as shown

Trend Test A *= all organic parameters listed in Appendix I and Appendix II of WAC 173-351-990 that have been detected at least once in at least one of 16 wells comprising the network of 1) compliance, 2) performance, 3) downgradient, and 4) upgradient site monitoring wells, during the trend test period. This includes the following constituents:*

	Significant Increasing Trends	Significant Decreasing Trends
1,2-Dichloroethene (total)	None	None
1,2-Dichlorobenzene	None	None
1,4-Dichlorobenzene	None	None
2-Butanone (MEK)	None	None
Acetone	None	None
Carbon Disulfide	None	None
Chlorobenzene	None	None
Chlorodifluoromethane	None	None
Chloroform	None	None
Chloromethane	None	None
cis-1,2-dichloroethene	None	None
Dichlorodifluoromethane	None	None
Dichlorofluoromethane	None	None
Ethyl Ether	None	None
Methylene Chloride	None	None
Naphthalene	None	None
n-Butyl Alcohol	None	None
tert-Butyl Alcohol	None	None
Tetrahydrofuran	None	None
trans-1,2-Dichloroethene	None	None
Trichloroethene	None	MW-19C (graph 325)
Vinyl Chloride	None	MW-19C (graph 341) MW-32 (graph 343) MW-34C (graph 347)

Table 6B. Summary of Trends in Groundwater (2005 - 2023)
2023 Annual Monitoring Report
Olympic View Sanitary Lanfill, Kitsap County, Washington

Trend Test B *= all metals and groundwater quality parameters listed in Appendix I and Appendix II of WAC (173-351-990)*		
	Significant Increasing Trends	Significant Decreasing Trends
Alkalinity, bicarbonate (as CaCO3)	MW-13B (graph 2) MW-35 (graph 12)	MW-15R (graph 3) MW-34A (graph 10) MW-34C (graph 11) MW-36A (graph 13) MW-42 (graph 15)
Alkalinity, total (as CaCO3)	MW-13B (graph 18) MW-35 (graph 28)	MW-15R (graph 19) MW-34A (graph 26) MW-34C (graph 27) MW-36A (graph 29) MW-42 (graph 31)
Ammonia (as N)	None	MW-19C (graph 37) MW-29A (graph 38) MW-42 (graph 47) MW-43 (graph 48)
Antimony, total	None	None
Arsenic, total	MW-33A (graph 72) MW-33C (graph 73)	MW-19C (graph 69)
Barium, total	None	MW-15R (graph 83) MW-29A (graph 86) MW-42 (graph 95)
Beryllium, total	None	None
Cadmium, total	None	None
Calcium, dissolved	None	MW-15R (graph 131) MW-29A (graph 134) MW-32 (graph 135) MW-34A (graph 138) MW-34C (graph 139) MW-36A (graph 141)

Table 6B. Summary of Trends in Groundwater (2005 - 2023)
2023 Annual Monitoring Report
Olympic View Sanitary Lanfill, Kitsap County, Washington

Trend Test B *= all metals and groundwater quality parameters listed in Appendix I and Appendix II of WAC (173-351-990)*		
	Significant Increasing Trends	Significant Decreasing Trends
Chloride	MW-39 (graph 158)	MW-15R (graph 147) MW-19C (graph 149) MW-34A (graph 154) MW-34C (graph 155) MW-42)graph 159)
Chromium, total	None	None
Cobalt, total	None	None
Copper, total	None	None
Iron, total	None	None
Lead, total	None	None
Magnesium, dissolved	MW-39 (graph 254)	MW-15R (graph 243) MW-16 (graph 244) MW-33A (graph 248) MW-34A (graph 250) MW-34C (graph 251) MW-42 (graph 255)
Manganese, total	None	MW-42 (graph 271) MW-43 (graph 272)
Nickel, total	None	None
Nitrate (as N)	MW-35 (graph 300)	MW-13B (graph 290) MW-16 (graph 292)
pH	MW-32 (graph 311) MW-34C (graph 315) MW-42 (graph 319)	None
Potassium, dissolved	MW-42 (graph 335)	None
Selenium, total	None	None
Silver, total	None	None

Table 6B. Summary of Trends in Groundwater (2005 - 2023)
2023 Annual Monitoring Report
Olympic View Sanitary Lanfill, Kitsap County, Washington

Trend Test B *= all metals and groundwater quality parameters listed in Appendix I and Appendix II of WAC (173-351-990)*		
	Significant Increasing Trends	Significant Decreasing Trends
Sodium, dissolved	None	MW-15R (graph 371) MW-19C (graph 373) MW-32 (graph 375) MW-34A (graph 378) MW-34C (graph 379) MW-36A (graph 381) MW-42 (graph 383) MW-43 (graph 384)
Specific Conductivity	MW-13B (graph 386) MW-33C (graph 393) MW-35 (graph 396) MW-39 (graph 398)	MW-15R (graph 387) MW-33A (graph 392) MW-34A (graph 394) MW-34C (graph 395)
Sulfate	MW-33A (graph 408)	MW-13B (graph 402) MW-19C (graph 405) MW-32 (graph 407) MW-42 (graph 415)
Temperature	MW-34A (graph 426) MW-34C (graph 427) MW-35 (graph 428)	None
Thallium, total	None	None
Total Dissolved Solids	None	MW-15R (graph 451) MW-32 (graph 455) MW-33A (graph 456) MW-34A (graph 458) MW-34C (graph 459)
Total Organic Carbon	None	MW-34C (graph 475)
Vanadium, total	None	None
Zinc, total	None	None

Table 7. November 2023 Prediction Limit Exceedances
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Well Type	Well Location	Date Sampled	Parameter	Units	Result	Prediction Limit
Compliance	MW-15R	11/09/2023	Barium, total	mg/L	0.0049	0.0045
	MW-34A	11/08/2023	Nitrate (as n)	mg/L	2	1.6
	MW-34A	11/08/2023	Sodium, dissolved	mg/L	7.9	7.7
	MW-34C	11/08/2023	Arsenic, total	ug/L	7.49	0.4797
	MW-34C	11/08/2023	Barium, total	mg/L	0.13	0.0045
	MW-34C	11/08/2023	Copper, total	mg/L	0.003	0.0021
	MW-34C	11/08/2023	Iron, total	mg/L	26	0.31
	MW-34C	11/08/2023	Manganese, total	mg/L	1.6	0.11
	MW-34C	11/08/2023	Sodium, dissolved	mg/L	8.7	7.7
	MW-34C	11/08/2023	Specific conductivity	mS/cm	0.191	0.18
	MW-39	11/09/2023	Alkalinity, bicarbonate (as caco3)	mg/L	100	96
	MW-39	11/09/2023	Alkalinity, total (as caco3)	mg/L	100	96
	MW-39	11/09/2023	Ammonia (as n)	mg/L	0.42	0.28
	MW-39	11/09/2023	Arsenic, total	ug/L	1.08	0.4797
	MW-39	11/09/2023	Barium, total	mg/L	0.014	0.0045
	MW-39	11/09/2023	Chloride	mg/L	5.9	4.4
	MW-39	11/09/2023	Cobalt, total	mg/L	0.0072	0.003
	MW-39	11/09/2023	Iron, total	mg/L	30	0.31
	MW-39	11/09/2023	Manganese, total	mg/L	0.48	0.11
	MW-39	11/09/2023	Sodium, dissolved	mg/L	9.7	7.7
	MW-39	11/09/2023	Specific conductivity	mS/cm	0.252	0.18
	MW-42	11/08/2023	Alkalinity, bicarbonate (as caco3)	mg/L	190	96
	MW-42	11/08/2023	Alkalinity, total (as caco3)	mg/L	190	96
	MW-42	11/08/2023	Ammonia (as n)	mg/L	3.3	0.28
	MW-42	11/08/2023	Arsenic, total	ug/L	1.67	0.4797
	MW-42	11/08/2023	Barium, total	mg/L	0.087	0.0045
	MW-42	11/08/2023	Calcium, dissolved	mg/L	38	18
	MW-42	11/08/2023	Chloride	mg/L	12	4.4
	MW-42	11/08/2023	Iron, total	mg/L	24	0.31
	MW-42	11/08/2023	Magnesium, dissolved	mg/L	13	11.1735
	MW-42	11/08/2023	Manganese, total	mg/L	3.6	0.11
	MW-42	11/08/2023	Potassium, dissolved	mg/L	7.9	1.4
	MW-42	11/08/2023	Sodium, dissolved	mg/L	17	7.7
	MW-42	11/08/2023	Specific conductivity	mS/cm	0.471	0.18
	MW-42	11/08/2023	Total dissolved solids (tds)	mg/L	230	175
	MW-42	11/08/2023	Total organic carbon (toc)	mg/L	6.2	6
	MW-43	11/08/2023	Barium, total	mg/L	0.0047	0.0045
	MW-43	11/08/2023	pH	pH Units	5.62	5.82 - 8.20

Table 7. November 2023 Prediction Limit Exceedances
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Well Type	Well Location	Date Sampled	Parameter	Units	Result	Prediction Limit
Downgradient	MW-29A	11/08/2023	Arsenic, total	ug/L	1.78	0.4797
	MW-29A	11/08/2023	Barium, total	mg/L	0.005	0.0045
	MW-29A	11/08/2023	Iron, total	mg/L	3.5	0.31
	MW-29A	11/08/2023	Manganese, total	mg/L	1.1	0.11
	MW-32	11/08/2023	Alkalinity, bicarbonate (as caco3)	mg/L	140	96
	MW-32	11/08/2023	Alkalinity, total (as caco3)	mg/L	140	96
	MW-32	11/08/2023	Arsenic, total	ug/L	9.28	0.4797
	MW-32	11/08/2023	Calcium, dissolved	mg/L	28	18
	MW-32	11/08/2023	Chloride	mg/L	10	4.4
	MW-32	11/08/2023	Iron, total	mg/L	0.64	0.31
	MW-32	11/08/2023	Magnesium, dissolved	mg/L	14	11.1735
	MW-32	11/08/2023	Manganese, total	mg/L	2.1	0.11
	MW-32	11/08/2023	Sodium, dissolved	mg/L	11	7.7
	MW-32	11/08/2023	Specific conductivity	mS/cm	0.31	0.18
	MW-32	11/08/2023	Sulfate	mg/L	13	9.9
	MW-32	11/08/2023	Total dissolved solids (tds)	mg/L	200	175
	MW-33A	11/09/2023	Iron, total	mg/L	0.83	0.31
	MW-33C	11/09/2023	Arsenic, total	ug/L	2.65	0.4797
	MW-33C	11/09/2023	Barium, total	mg/L	0.0068	0.0045
	MW-33C	11/09/2023	Iron, total	mg/L	0.56	0.31
	MW-33C	11/09/2023	Manganese, total	mg/L	0.34	0.11
	MW-36A	11/08/2023	Arsenic, total	ug/L	0.571	0.4797

Notes:

Contents prepared by GeoChem Applications

deg C = degrees Celcius

CaCO3 = calcium carbonate

N = nitrogen

µg/L = micrograms per liter

mg/L = milligrams per liter

mS/cm = milliSiemens per centimeter

Table 8. 2023 Annual Groundwater Cleanup Level Statistical Evaluation Summary
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Statistical Methodology: calculation of 95% UCL of mean per MTCAStat
Data Input (general): 3-year "moving window", updated annually
Data Input (specific): January 1, 2021 through December 31, 2023
Wells Evaluated: (1) Compliance -- MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43; (2) Downgradient -- MW-29A, MW-32, MW-33A, MW-33C, MW-36A

Monitoring Well Type	Monitoring Well	Corrective Action Monitoring Parameter	N[1]	% Detect	Max[2]	95% UCL of Mean[3]	Units[4]	Note	Groundwater Cleanup Level[5]	Units[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend?[6]
Compliance	MW-15R	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
	MW-15R	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
	MW-15R	Arsenic, total	6	100%	0.257	0.248	ug/L	Z	4.27	ug/L	No	No
	MW-15R	Iron, total	6	0%	0.06 (ND)	0.06	mg/L	B	1.90	mg/L	No	No
	MW-15R	Manganese, total	6	100%	0.0051	0.004	mg/L	LN	0.73	mg/L	No	No
	MW-15R	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
	MW-15R	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
	MW-15R	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
	MW-15R	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
	MW-15R	Ammonia as N	6	17%	0.045	0.05	mg/L	A	0.19	mg/L	No	No
	MW-34A	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
	MW-34A	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
	MW-34A	Arsenic, total	6	100%	0.522	0.489	ug/L	Z	4.27	ug/L	No	No
	MW-34A	Iron, total	6	17%	0.11	0.11	mg/L	A	1.90	mg/L	No	No
	MW-34A	Manganese, total	6	33.3%	0.0028	0.003	mg/L	A	0.73	mg/L	No	No
	MW-34A	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
	MW-34A	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
	MW-34A	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
	MW-34A	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
	MW-34A	Ammonia as N	6	33.3%	0.075	0.075	mg/L	A	0.19	mg/L	No	No
	MW-34C	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
	MW-34C	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
	MW-34C	Arsenic, total	6	100%	21.9	12.6	ug/L	Z	4.27	ug/L	**Yes**	No
	MW-34C	Iron, total	6	100%	44	44.0	mg/L	A**	1.90	mg/L	**Yes**	No
	MW-34C	Manganese, total	6	100%	3.4	3.0	mg/L	N	0.73	mg/L	**Yes**	No
	MW-34C	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
	MW-34C	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
	MW-34C	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
	MW-34C	Vinyl Chloride	6	33%	0.033	0.03	ug/L	A	0.20	ug/L	No	**Yes (▼)**
	MW-34C	Ammonia as N	6	33.3%	0.036	0.036	mg/L	A	0.19	mg/L	No	No

Table 8. 2023 Annual Groundwater Cleanup Level Statistical Evaluation Summary
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Monitoring Well Type	Monitoring Well	Corrective Action Monitoring Parameter	N[1]	% Detect	Max[2]	95% UCL of Mean[3]	Units[4]	Note	Groundwater Cleanup Level[5]	Units[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend?[6]
Compliance	MW-39	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
	MW-39	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
	MW-39	Arsenic, total	6	100%	2.68	2.34	ug/L	Z	4.27	ug/L	No	No
	MW-39	Iron, total	6	100%	41	39.8	mg/L	Z	1.90	mg/L	**Yes**	No
	MW-39	Manganese, total	6	100%	0.52	0.52	mg/L	Z	0.73	mg/L	No	No
	MW-39	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
	MW-39	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
	MW-39	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
	MW-39	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
	MW-39	Ammonia as N	6	83%	0.94	0.94	mg/L	A***	0.19	mg/L	**Yes**	No
	MW-42	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
	MW-42	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
	MW-42	Arsenic, total	6	100%	2.18	1.91	ug/L	Z	4.27	ug/L	No	No
	MW-42	Iron, total	6	100%	29	27.5	mg/L	LN	1.90	mg/L	**Yes**	No
	MW-42	Manganese, total	6	100%	4.0	4.0	mg/L	Z	0.73	mg/L	**Yes**	**Yes (▼)**
	MW-42	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
	MW-42	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
	MW-42	Trichloroethene	6	0.0%	0.46 (ND)	0.47	ug/L	A	1.0	ug/L	No	No
	MW-42	Vinyl Chloride	6	83.3%	0.1	0.15	ug/L	LN	0.20	ug/L	No	No
	MW-42	Ammonia as N	6	100%	7.3	5.2	mg/L	Z	0.19	mg/L	**Yes**	**Yes (▼)**
	MW-43	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
	MW-43	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
	MW-43	Arsenic, total	6	83.3%	0.157	0.293	ug/L	LN	4.27	ug/L	No	No
	MW-43	Iron, total	6	83%	6.6	6.6	mg/L	A**	1.90	mg/L	**Yes**	No
	MW-43	Manganese, total	6	100%	0.14	0.55	mg/L	LN	0.73	mg/L	No	**Yes (▼)**
	MW-43	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
	MW-43	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
	MW-43	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
	MW-43	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
	MW-43	Ammonia as N	6	16.6%	0.037	0.037	mg/L	A	0.19	mg/L	No	**Yes (▼)**

Table 8. 2023 Annual Groundwater Cleanup Level Statistical Evaluation Summary
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Monitoring Well Type	Monitoring Well	Corrective Action Monitoring Parameter	N[1]	% Detect	Max[2]	95% UCL of Mean[3]	Units[4]	Note	Groundwater Cleanup Level[5]	Units[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend?[6]
Downgradient	MW-29A	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
	MW-29A	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
	MW-29A	Arsenic, total	6	100%	2.25	2.02	ug/L	Z	4.27	ug/L	No	No
	MW-29A	Iron, total	6	100%	5.0	4.73	mg/L	LN	1.90	mg/L	Yes	No
	MW-29A	Manganese, total	6	100%	1.5	1.42	mg/L	LN	0.73	mg/L	Yes	No
	MW-29A	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
	MW-29A	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
	MW-29A	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
	MW-29A	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
	MW-29A	Ammonia as N	6	100%	0.15	0.14	mg/L	LN	0.19	mg/L	No	Yes (▼)
	MW-32	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
	MW-32	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
	MW-32	Arsenic, total	6	100%	11.4	11.1	ug/L	LN	4.27	ug/L	Yes	No
	MW-32	Iron, total	6	100%	1.10	0.83	mg/L	Z	1.90	mg/L	No	No
	MW-32	Manganese, total	6	100%	2.1	2.0	mg/L	LN	0.73	mg/L	Yes	No
	MW-32	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
	MW-32	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
	MW-32	Trichloroethene	6	66.7%	0.54	0.52	ug/L	LN	1.0	ug/L	No	No
	MW-32	Vinyl Chloride	6	100%	0.32	0.29	ug/L	LN	0.20	ug/L	Yes	Yes (▼)
	MW-32	Ammonia as N	6	100.0%	0.11	0.10	mg/L	LN	0.19	mg/L	No	No
	MW-33A	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
	MW-33A	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
	MW-33A	Arsenic, total	6	100%	1.570	2.451	ug/L	LN	4.27	ug/L	No	Yes (▲)
	MW-33A	Iron, total	6	100%	8.9	8.9	mg/L	A**	1.90	mg/L	Yes	No
	MW-33A	Manganese, total	6	100%	0.086	0.348	mg/L	LN	0.73	mg/L	No	No
	MW-33A	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
	MW-33A	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
	MW-33A	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
	MW-33A	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
	MW-33A	Ammonia as N	6	67%	0.38	1.25	mg/L	LN	0.19	mg/L	Yes	No

Table 8. 2023 Annual Groundwater Cleanup Level Statistical Evaluation Summary
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Monitoring Well Type	Monitoring Well	Corrective Action Monitoring Parameter	N[1]	% Detect	Max[2]	95% UCL of Mean[3]	Units[4]	Note	Groundwater Cleanup Level[5]	Units[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend?[6]
Downgradient	MW-33C	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
	MW-33C	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
	MW-33C	Arsenic, total	6	100%	4.31	3.73	ug/L	Z	4.27	ug/L	No	Yes (▲)
	MW-33C	Iron, total	6	100%	1.7	1.04	mg/L	Z	1.9	mg/L	No	No
	MW-33C	Manganese, total	6	100%	0.96	1.05	mg/L	LN	0.73	mg/L	Yes	No
	MW-33C	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
	MW-33C	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
	MW-33C	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
	MW-33C	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
	MW-33C	Ammonia as N	6	17%	0.059	0.059	mg/L	A	0.19	mg/L	No	No
	MW-36A	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
	MW-36A	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
	MW-36A	Arsenic, total	6	100%	0.667	0.632	ug/L	LN	4.27	ug/L	No	No
	MW-36A	Iron, total	6	50%	0.096	0.10	mg/L	A	1.9	mg/L	No	No
	MW-36A	Manganese, total	6	67%	0.0047	0.008	mg/L	LN	0.73	mg/L	No	No
	MW-36A	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
	MW-36A	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
	MW-36A	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
	MW-36A	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
	MW-36A	Ammonia as N	6	17%	0.053	0.053	mg/L	A	0.19	mg/L	No	No

NOTES:

[1] N = number of data points used for UCL calculation of the mean; only SIM results used for Vinyl Chloride (e.g., duplicate results with higher RLs by non-SIM were omitted).

[2] MAX = maximum detected result in the data set; if no detected results, then = maximum reporting limit for non-detect results (indicated with ND).

[3] A 3-year moving data set is used for calculation of the UCL.

[4] ug/L - micrograms per liter; mg/L = milligrams per liter.

[5] Groundwater Cleanup Levels for VOCs are from Table 3 of the Oct 2010 Draft Cleanup Action Plan; and for As, Fe, Mn and Ammonia-N from the July 15, 2021 Ecology letter approving Groundwater Quality

[6] Trend analysis results are based on data for the period January 2005 through December 2023; arrows indicated increasing (▲) or decreasing (▼) trends.

A = Detection frequency of data set too low and/or N too few to calculate 95% UCL of mean; therefore, the highest detected result in the data set used to represent 95% UCL of mean.

A* = Same as note "A" except that the highest value in the data set is below the reporting limit of one or more non-detected results; therefore, the highest reporting limit is used to represent the 95% UCL of the r

A** = MTCAStat suggests use of lognormal formula but calculation of 95% UCL of mean by Land's formula provides unrealistic result; therefore, the highest detected result is used to represent the 95% UCL of the

A*** = MTCAStat suggests use of the Z-score method but then cites inability to calculate due to presence of censored values; therefore, the highest detected result is used to represent the 95% UCL of the mean

B = Detection frequency = 0; therefore, the highest reporting limit in the data set is used to represent the 95% UCL of mean.

LN = The 95% UCL of the mean is calculated using Land's formula since lognormal distribution is indicated.

N = The 95% UCL of the mean is calculated using a normal-based t-statistic since a normal distribution is indicated.

Z = the 95% UCL of the mean is calculated using the Z-score method in MTCAStat since neither normal nor lognormal distribution can be determined.

Table 9. Groundwater Quality Criteria and Site-Specific Cleanup Level Exceedances
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Comparison Criteria			Field Parameters		General Chemistry				VOCs
			pH (SU)	Specific Conductivity	Ammonia (mg N/L)	Arsenic, Total (µg/L)	Iron, Total (mg/L)	Manganese, Total (mg/L)	Vinyl Chloride (µg/L)
		WAC 173-200	6.5< >8.5	--	0.19*	4.27*	1.9*	0.73*	0.02
		Primary Federal MCL	--	--	--	10	--	--	2
		Secondary Federal MCL	6.5< >8.5	700	--	--	0.3	0.05	--
		Site-specific MTCA Cleanup Levels	--	--	0.19	0.462	--	--	0.2
Well, Location, and Sample Events									
Upgradient	MW-13A	SA #1	--	--	NA	NA	NA	NA	NA
		SA #2	--	--	--	--	--	--	--
	MW-13B	SA #1	--	--	NA	NA	NA	NA	NA
		SA #2	--	--	--	--	--	--	--
	MW-16	SA #1	6.21	--	NA	NA	NA	NA	NA
		SA #2	6.21	--	--	--	--	--	--
	MW-35	SA #1	--	--	NA	NA	NA	NA	NA
		SA #2	--	--	--	--	--	--	--
	MW-19C	SA #1	--	--	0.42	2.47	--	1.1	--
		SA #2	--	--	0.50	2.38	--	1.1	0.04
Compliance Monitoring	MW-15R	SA #1	6.46	--	--	--	--	--	--
		SA #2	6.43	--	--	--	--	--	--
	MW-34A	SA #1	5.89	--	--	--	--	--	--
		SA #2	5.91	--	--	--	--	--	--
	MW-34C	SA #1	--	--	--	8.03	19	3.1	--
		SA #2	--	--	--	7.49	26	1.6	--
	MW-39	SA #1	6.02	--	0.46	2.26	41	0.52	--
		SA #2	5.94	--	0.42	1.08	30	0.48	--
	MW-42	SA #1	6.38	--	3.5	1.56	25	4.0	0.025
		SA #2	6.34	--	3.3	1.67	24	3.6	0.065
	MW-43	SA #1	5.84	--	--	--	--	--	--
		SA #2	5.62	--	--	--	--	--	--
Downgradient	MW-29A	SA #1	5.72	--	--	2.25	5.0	1.4	--
		SA #2	6.01	--	--	1.78	3.5	1.1	--
	MW-32	SA #1	6.35	--	--	9.06	0.61	1.9	0.20
		SA #2	--	--	--	9.28	0.64	2.1	0.23
	MW-33A	SA #1	--	--	--	1.27	8.9	--	--
		SA #2	6.33	--	--	--	0.83	--	--
	MW-33C	SA #1	--	--	--	3.99	1.70	0.53	--
		SA #2	--	--	--	2.65	0.56	0.34	--
	MW-36A	SA #1	5.99	--	--	0.628	--	--	--
		SA #2	5.95	--	--	0.571	--	--	--

Notes:

SA #1 = Semi-annual Event No. 1
SA #2 = Semi-annual Event No. 2
mg N/L = miligrams of Nitrogen per liter
mg/L = milligrams per liter
SU = standard units
µg/L = micrograms per liter
B = estimated value due to potential blank contribution
* = Updated site specific groundwater protection standards based on Ecology's recommendations (7/15/21)
NA = upgradient monitoring wells were only sampled for Appendix II field parameters during Semi-annual No. 1 Event

0.00141 = exceeds Site-specific MTCA Cleanup Levels
0.035 = exceeds WAC 173-200 Groundwater Quality Criteria
0.51 = exceeds Federal MCL criteria
0.49 = exceeds Site-specific MTCA Cleanup Levels and WAC 173-200 Criteria
6.44 = exceeds Federal MCL and WAC 173-200 Groundwater Quality Criteria
0.0014 = exceeds Federal MCLs, Site-specific MTCA Cleanup Levels, and WAC 173-200 Criteria

Table 10. Cumulative 2023 Leak Detection System Volumes
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Date	Total Volume (Gals)	Comments
1/31/2023	325	Pumped dry.
2/28/2023	365	Pumped dry.
3/31/2023	275	Pumped dry.
4/30/2023	190	Pumped dry.
5/31/2023	110	LP-LCD sample collected on May 24, 2023.
6/30/2023	0	Pumped dry.
7/31/2023	150	Pumped dry.
8/31/2023	200	Pumped dry.
9/30/2023	180	Pumped dry.
10/31/2023	190	Pumped dry.
11/30/2023	110	LP-LCD sample collected on November 9, 2023.
12/31/2023	280	Pumped dry.
TOTAL	**2,375**	**Volume for period between 1/1/23 through 12/31/2023.**

Notes:

Table 11A. Landfill Gas Measurement Results - September 2023
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County Washington

Waste Management Incorporated

Location Reference Designation	Date	Time	Instrument Readings: Pressure (in H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: CH_4 Spike *Note 1* (% vol.)	CO_2 Spike *Note 1* (% vol.)	Depth to Water TOP (ft)	Exposed Portion of Perforations (*Note 2*) (ft)	Exposed Portion of Perforations (*Note 2*) (%)	Other
Subsurface Landfill Gas Detection Wells (Gas Probes):												
GP-7	9/7/23	14:36	-0.04	0.00	10.30	9.00			15.22	4.62	92.4%	
GP-8	9/7/23	9:56	-0.03	0.00	5.40	11.30			17.49	4.69	93.8%	
GP-9S	9/11/23	11:00	-0.01	0.00	1.80	19.40						
GP-9D	9/11/23	11:16	0.02	0.00	1.40	19.20			29.98	3.68	73.6%	
GP-10S	9/11/23	11:23	0.03	0.00	0.70	20.30						
GP-10D	9/11/23	11:32	0.01	0.00	0.60	19.50			0.00	5.00	100.0%	
GP-11S	9/11/23	11:44	-0.01	0.00	2.40	19.20						
GP-11D	9/11/23	12:02	0.00	0.00	1.90	18.80			0.00	0.00	0.0%	
GP-12S	9/7/23	13:40	0.01	0.00	1.30	17.80						
GP-12M	9/7/23	13:48	-0.02	0.00	1.00	19.90						
GP-12D	9/7/23	14:03	0.05	0.00	1.30	15.90			49.96	4.56	91.2%	
GP-13S	9/7/23	12:00	0.03	0.00	0.00	20.70						
GP-13M	9/7/23	12:52	0.14	0.00	3.60	16.40						
GP-13D	9/7/23	13:30	0.12	0.00	3.60	16.30			51.07	5.87	58.7%	
GP-14	9/7/23	11:48	0.00	0.00	7.10	8.60			0.00	0.00	0.0%	
GP-15	9/7/23	11:35	0.03	0.00	8.20	7.40			0.00	0.00	0.0%	
GP-16	9/7/23	11:20	-0.03	0.00	2.40	18.90			14.80	4.60	92.0%	
Onsite Building Interiors:												
SH-SS	9/7/23	12:31	--	0.00	0.00	20.90						
SH-NS	9/7/23	12:35	--	0.00	0.00	20.90						
SH-IN	9/7/23	12:38	--	0.00	0.00	21.00						
SS-WH	9/7/23	14:14	--	0.00	0.00	20.80						
EL-SH	9/7/23	10:22	--	0.00	0.10	20.80						
TL-OF	9/7/23	10:17	--	0.00	0.10	20.80						

Weather Conditions

Monitoring Date:	9/8/2023	Sky Cover:	Mostly Cloudy
Monitored By:	P. Bannister (Aspect)	Wind/Rain/Snow:	0
Instrument:	GEM 2NAV	Temperature (°F):	61
Calibration Date:	9/8/2023	Preceding 24-hr Barometric Trend:	Steady

Notes:
1. Measurement for spike concentrations of CH4 and CO2 are recorded if observed during sampling.
2. Exposed perforations = perforated pipe section not submerged by water.
3. Readings not reported: Screened interval completely submerged.

CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen
GP = Gas Probe
S = Shallow Monitoring Zone
M = Middle Monitoring Zone
D = Deep Monitoring Zone
TOP = From Top of Pipe

SH-SS = Scale House - South Side Exterior
SH-NS = Scale House - North Side Exterior
SH-IN = Scale House - Office Interior
SS-WH = South Slope Well House
EL-SH = Electrical Shed
TL-OF = Office
-- = Measurements not taken
NA = Not Applicable

Depressed O2 < 20.3% vol.
Detected CO2 > 0.3 % vol.
Detected CH4 > 0.3 % vol.

Table 11B. Landfill Gas Measurement Results - November 2023
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County Washington

Waste Management Incorporated

			Instrument Readings				Comments					
Location Reference Designation	Date	Time	Pressure (in H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	CH_4 Spike *Note 1* (% vol.)	CO_2 Spike *Note 1* (% vol.)	Depth to Water TOP (ft)	Exposed Portion of Perforations (*Note 2*) (ft)	(%)	Other
Subsurface Landfill Gas Detection Wells (Gas Probes):												
GP-7	11/8/23	14:06	0.00	0.00	10.80	5.80			0.00	0.00	0.0%	
GP-8	11/8/23	13:45	0.06	0.00	3.30	13.80			0.00	0.00	0.0%	
GP-9S	11/8/23	18:54	-0.03	0.00	1.90	19.50						
GP-9D	11/8/23	19:04	0.02	0.00	1.40	20.10			31.02	4.72	94.4%	
GP-10S	11/8/23	18:26	-0.03	0.00	0.80	20.50						
GP-10D	11/8/23	18:32	0.01	0.00	0.70	20.20			0.00	0.00	0.0%	
GP-11S	11/8/23	17:52	0.02	0.00	2.40	18.00						
GP-11D	11/8/23	18:02	0.02	0.00	2.00	18.90			0.00	0.00	0.0%	
GP-12S	11/8/23	16:41	0.08	0.00	0.90	19.30						
GP-12M	11/8/23	16:48	0.03	0.00	0.80	20.20						
GP-12D	11/8/23	17:00	0.08	0.00	0.90	19.30			50.04	4.64	92.8%	
GP-13S	11/8/23	15:32	0.03	0.00	5.10	16.00						
GP-13M	11/8/23	15:41	0.12	0.00	4.20	16.20						
GP-13D	11/8/23	16:03	0.15	0.00	3.90	16.10			52.33	7.13	71.3%	
GP-14	11/8/23	15:18	0.04	0.00	8.00	6.40			0.00	0.00	0.0%	
GP-15	11/8/23	15:05	0.83	0.00	7.60	1.70			12.84	2.44	48.8%	
GP-16	11/8/23	14:32	-0.02	0.00	3.50	17.10			0.00	0.00	0.0%	
Onsite Building Interiors:												
SH-SS	11/8/23	16:10	--	0.00	0.10	20.80						
SH-NS	11/8/23	16:14	--	0.00	0.10	20.90						
SH-IN	11/8/23	16:18	--	0.00	0.10	21.00						
SS-WH	11/8/23	18:42	--	0.00	0.10	21.50						
EL-SH	11/8/23	13:52	--	0.00	0.10	20.80						
TL-OF	11/8/23	13:09	--	0.00	0.10	20.90						

Weather Conditions

Monitoring Date:	11/8/23	Sky Cover:	Cloudy
Monitored By:	P. Bannister (Aspect)	Wind/Rain/Snow:	0
Instrument:	GEM 2NAV	Temperature (°F):	41
Calibration Date:	11/8/23	Preceding 24-hr Barometric Trend:	Decreasing

Notes:
1. Measurement for spike concentrations of CH4 and CO2 are recorded if observed during sampling.
2. Exposed perforations = perforated pipe section not submerged by water.
3. Readings not reported: Screened interval completely submerged.

CH_4 = Methane	SH-SS = Scale House - South Side Exterior	Depressed O2 < 20.3% vol.
CO_2 = Carbon Dioxide	SH-NS = Scale House - North Side Exterior	Detected CO2 > 0.3 % vol.
O_2 = Oxygen	SH-IN = Scale House - Office Interior	Detected CH4 > 0.3 % vol.
GP = Gas Probe	SS-WH = South Slope Well House	
S = Shallow Monitoring Zone	EL-SH = Electrical Shed	
M = Middle Monitoring Zone	TL-OF = Office	
D = Deep Monitoring Zone	-- = Measurements not taken	
TOP = From Top of Pipe	NA = Not Applicable	

Table 12. Landfill Gas Monitoring Results - 2023
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Location	Date	Pressure (in. H_2O)	CH4 (% vol.)	CO2 (% vol.)	O2 (% vol.)
GP-7	2/2/2023	0.04	0.0	6.2	6.5
	5/16/2023	0.01	0.0	6.6	6.1
	9/7/2023	-0.04	0.0	10.3	9.0
	11/8/2023	0.00	0.0	10.8	5.8
GP-8	2/2/2023	-0.01	0.0	3.5	11.0
	5/16/2023	-0.02	0.0	3.2	10.5
	9/7/2023	-0.03	0.0	5.4	11.3
	11/8/2023	0.06	0.0	3.3	13.8
GP-9S	2/2/2023	0.00	0.0	1.6	19.5
	5/16/2023	-0.04	0.0	1.4	18.9
	9/11/2023	-0.01	0.0	1.8	19.4
	11/8/2023	-0.03	0.0	1.9	19.5
GP-9D	2/2/2023	0.01	0.0	1.5	19.8
	5/16/2023	0.03	0.0	1.1	19.1
	9/11/2023	0.02	0.0	1.4	19.2
	11/8/2023	0.02	0.0	1.4	20.1
GP-10S	2/2/2023	0.02	0.0	0.6	20.5
	5/16/2023	0.0	0.0	0.5	19.2
	9/11/2023	0.03	0.0	0.7	20.3
	11/8/2023	-0.03	0.0	0.8	20.5
GP-10D	2/2/2023	0.05	0.0	0.7	19.0
	5/16/2023	0.04	0.0	0.4	18.1
	9/11/2023	0.01	0.0	0.6	19.5
	11/8/2023	0.01	0.0	0.7	20.2
GP-11S	2/2/2023	0.00	0.0	2.1	19.0
	5/16/2023	-0.01	0.0	2.2	16.9
	9/11/2023	-0.01	0.0	2.4	19.2
	11/8/2023	0.02	0.0	2.4	18.0
GP-11D	2/2/2023	-0.35	0.0	1.4	19.4
	5/16/2023	-0.02	0.0	0.4	18.4
	9/11/2023	0.00	0.0	1.9	18.8
	11/8/2023	0.02	0.0	2.0	18.9
GP-12S	2/2/2023	0.04	0.0	1.6	18.3
	5/16/2023	0.02	0.0	0.9	19.3
	9/7/2023	0.01	0.0	1.3	17.8
	11/8/2023	0.08	0.0	0.9	19.3
GP-12M	2/2/2023	0.01	0.0	1.5	18.6
	5/16/2023	0.01	0.0	1.3	18.9
	9/7/2023	-0.02	0.0	1.0	19.9
	11/8/2023	0.03	0.0	0.8	20.2
GP-12D	2/2/2023	-0.02	0.0	0.3	21.0
	5/16/2023	0.26	0.0	0.0	19.4
	9/7/2023	0.05	0.0	1.3	15.9
	11/8/2023	0.22	0.0	1.5	16.5

Table 12. Landfill Gas Monitoring Results - 2023
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Location	Date	Pressure (in. H_2O)	CH4 (% vol.)	CO2 (% vol.)	O2 (% vol.)
GP-13S	2/2/2023	0.03	0.0	4.6	15.9
	5/16/2023	0.02	0.0	4.4	15.4
	9/7/2023	0.03	0.0	4.2	20.7
	11/8/2023	0.03	0.0	5.1	16.0
GP-13M	2/2/2023	0.27	0.0	4.2	16.1
	5/16/2023	0.07	0.0	3.4	16.3
	9/7/2023	0.14	0.0	3.6	20.9
	11/8/2023	0.12	0.0	4.2	16.2
GP-13D	2/2/2023	0.27	0.0	3.9	16.3
	5/16/2023	0.06	0.0	3.4	16.5
	9/7/2023	0.12	0.0	3.6	20.9
	11/8/2023	0.15	0.0	3.9	16.1
GP-14	2/2/2023	0.02	0.0	4.7	8.4
	5/16/2023	0.03	0.0	3.8	7.9
	9/7/2023	0.00	0.0	7.1	8.6
	11/8/2023	0.04	0.0	8.0	6.4
GP-15	2/2/2023	-0.28	0.0	4.1	0.0
	5/16/2023	-0.86	0.0	4.5	2.8
	9/7/2023	0.03	0.0	8.2	7.4
	11/8/2023	0.83	0.0	7.6	1.7
GP-16	2/2/2023	0.02	0.0	2.0	19.6
	5/16/2023	0.02	0.0	2.7	17.2
	9/7/2023	-0.03	0.0	2.4	18.9
	11/8/2023	-0.02	0.0	3.5	17.1

Notes:

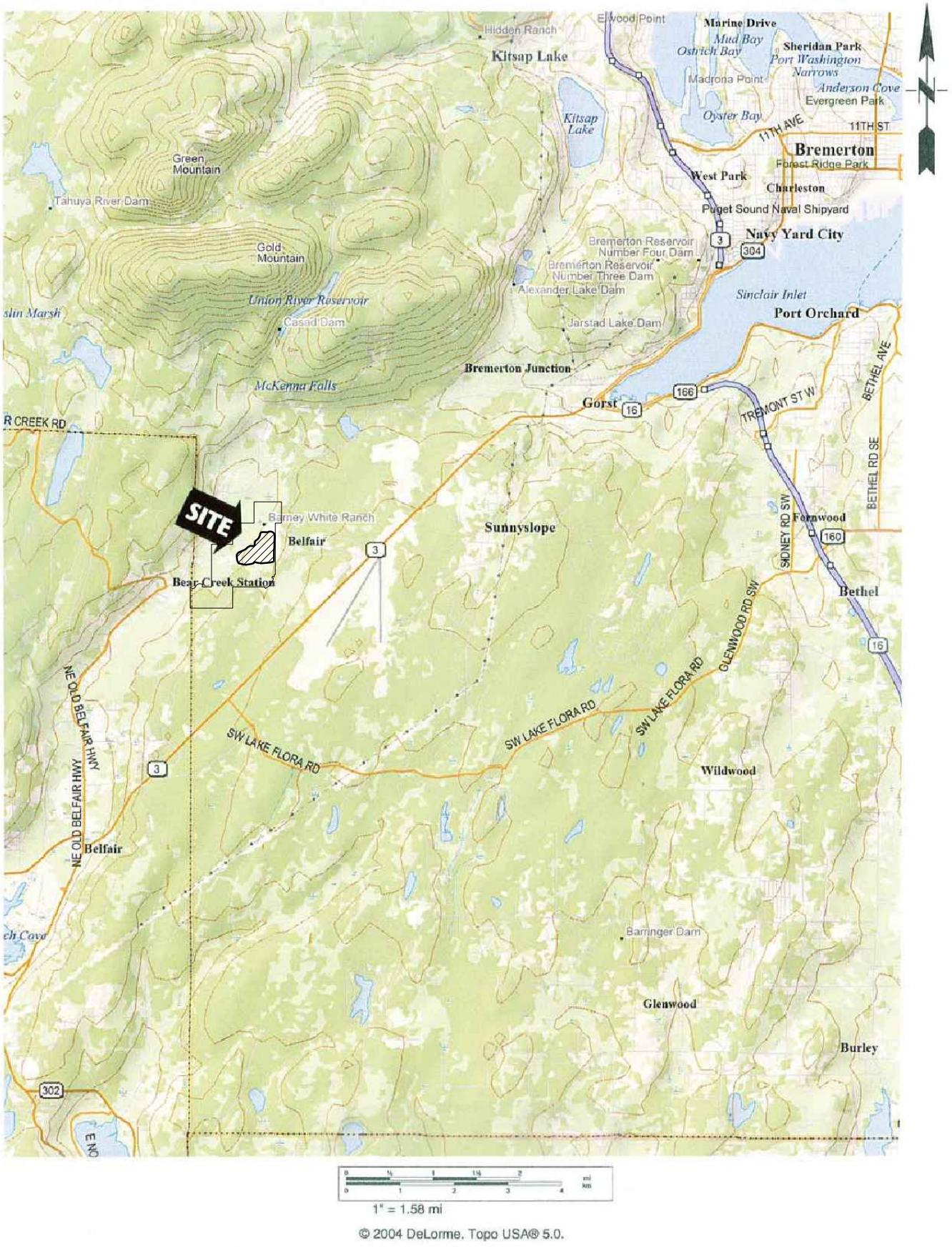
CH4 = Methane

CO2 = Carbon dioxide

O2 = Oxygen

-- = Screened portion of well completely submerged in water. Readings not valid.

Figures



1" = 1.58 mi

SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

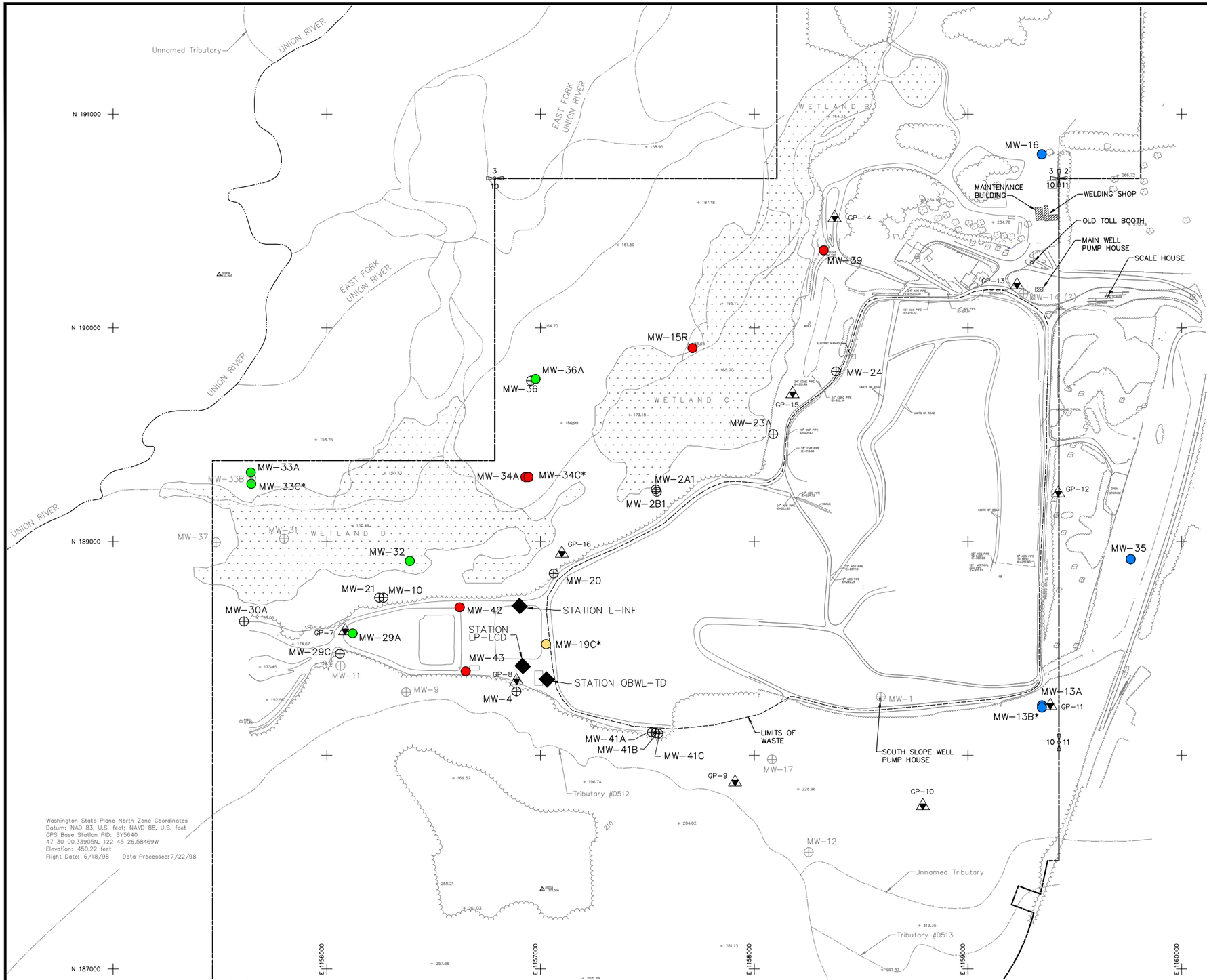
PROJECT NO. 04204027.27	DES BY J.E.
SCALE 1:100,000	CHK BY D.V.
CAD FILE FIGURE 1	APP BY G.H.

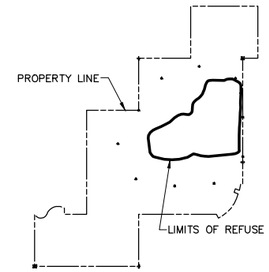
SITE LOCATION MAP

OLYMPIC VIEW SANITARY LANDFILL
KITSAP COUNTY, WASHINGTON

DATE MARCH 2024

FIGURE 1

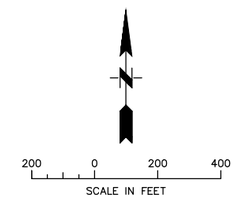




KEY MAP

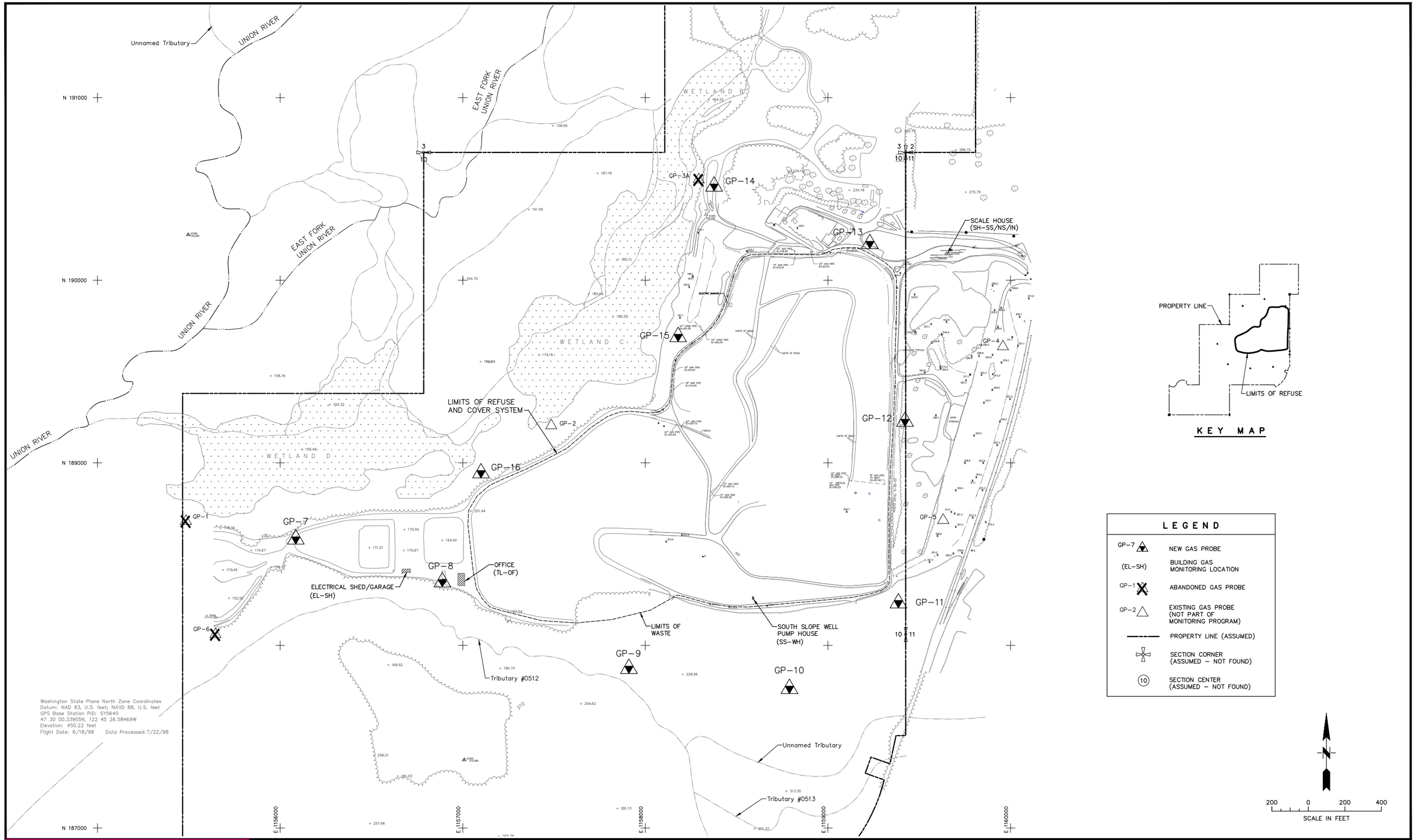
LEGEND

- MW-35 — UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL
- MW-32 — DOWNGRADIENT GROUNDWATER MONITORING WELL
- MW-19C — PERFORMANCE GROUNDWATER MONITORING WELL
- MW-43 — COMPLIANCE GROUNDWATER MONITORING WELL
- MW-10 — GROUNDWATER MONITORING WELL (WATER LEVEL ONLY)
- MW-32 — SHALLOW MONITORING WELL
- * — DEEP MONITORING WELL
- MW-1 — INACTIVE GROUNDWATER WELL
- GP-10 — LANDFILL GAS PROBE
- L-INF — LEACHATE MONITORING STATION
- PROPERTY LINE (ASSUMED)



SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

PROJECT NO. 04204027.27	DES BY J.E.	GROUNDWATER MONITORING WELL NETWORK AND LEACHATE MONITORING LOCATIONS OLYMPIC VIEW SANITARY LANDFILL KITSAP COUNTY, WASHINGTON	DATE MARCH 2024
SCALE AS SHOWN	CHK BY D.V.		FIGURE 2
CAD FILE FIGURE 2	APP BY G.H.		



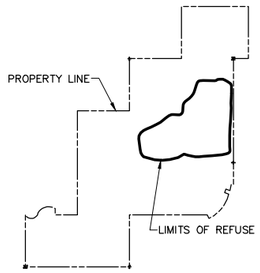
SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

PROJECT NO. 04204027.27	DES BY J.E.	SUBSURFACE GAS MIGRATION MONITORING PROBES AND BUILDING MONITORING LOCATIONS	DATE MARCH 2024
SCALE AS SHOWN	CHK BY D.V.	OLYMPIC VIEW SANITARY LANDFILL PORT ORCHARD, WASHINGTON	FIGURE 3
CAD FILE FIGURE 3	APP BY G.H.		

Note:

Water level contours were generated using depth to water and reference elevation data from wells screened between 89 and 200 ft-msl. The water level elevations for the following locations have not been used for contouring.

- Wells MW-13B, MW-33C, and MW-41C have screen elevations outside the 89 to 200 ft-msl range.



KEY MAP

LEGEND

MW-35	UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL
MW-32	DOWNGRADIENT GROUNDWATER MONITORING WELL
MW-19C	PERFORMANCE GROUNDWATER MONITORING WELL
MW-43	COMPLIANCE GROUNDWATER MONITORING WELL
MW-36	GROUNDWATER MONITORING WELL (WATER LEVEL ONLY)
MW-35 / 230.68	MONITORING WELL — WATER LEVEL ELEVATION, FT-MSL
180	ESTIMATED GROUNDWATER ELEVATION CONTOUR IN FEET-MSL CONTOUR INTERVAL = 10 FT
	GROUNDWATER FLOW DIRECTION
*	WATER LEVEL ELEVATION NOT NOT USED IN CONTOURING
	PROPERTY LINE (ASSUMED)

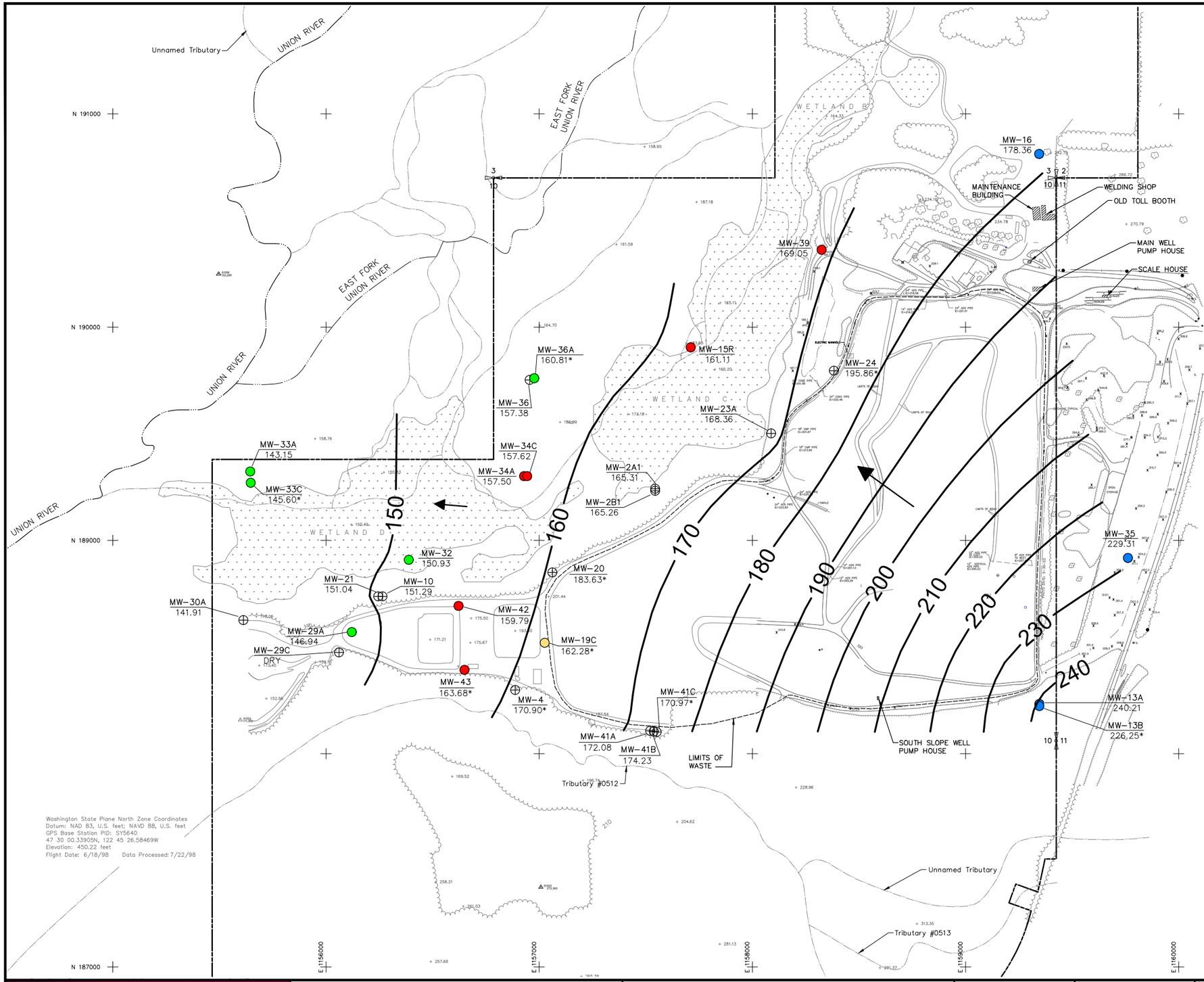
Washington State Plane North Zone Coordinates
Datum: NAD 83, U.S. feet; NAVD 88, U.S. feet
GPS Base Station PID: SY5640
47 30 00.33905N, 122 45 26.58469W
Elevation: 450.22 feet
Flight Date: 6/18/98 Data Processed: 7/22/98

200 0 200 400
SCALE IN FEET

SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

PROJECT NO. 04204027.27	DES BY J.E.	WATER LEVEL CONTOUR MAP MAY 2023	DATE MARCH 2024
SCALE AS SHOWN	CHK BY D.V.	OLYMPIC VIEW SANITARY LANDFILL KITSAP COUNTY, WASHINGTON	FIGURE 4A
CAD FILE FIGURE 4A	APP BY G.H.		

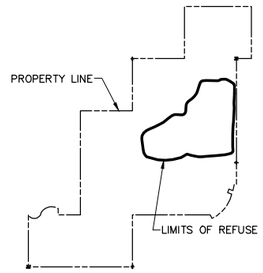
G:\04204027.27\Deliverables\Figures\2023 Annual Figures\Dwg\Figure 4A.DWG, GW - SAG 2023 Contour Mapping, Layout1, 3/1/2024 11:13:52 AM, DWG To PDF.pc3



Note:

Water level contours were generated using depth to water and reference elevation data from wells screened between 89 and 200 ft-msl. The water level elevations for the following locations have not been used for contouring.

- Wells MW-13B, MW-33C, and MW-41C have screen elevations outside the 89 to 200 ft-msl range.



KEY MAP

LEGEND

MW-35	UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL
MW-32	DOWNGRADIENT GROUNDWATER MONITORING WELL
MW-19C	PERFORMANCE GROUNDWATER MONITORING WELL
MW-43	COMPLIANCE GROUNDWATER MONITORING WELL
MW-36	GROUNDWATER MONITORING WELL (WATER LEVEL ONLY)
MW-35 / 229.31	MONITORING WELL — WATER LEVEL ELEVATION, FT-MSL
180	ESTIMATED GROUNDWATER ELEVATION CONTOUR IN FEET-MSL CONTOUR INTERVAL = 10 FT
	GROUNDWATER FLOW DIRECTION
*	WATER LEVEL ELEVATION NOT NOT USED IN CONTOURING
	PROPERTY LINE (ASSUMED)

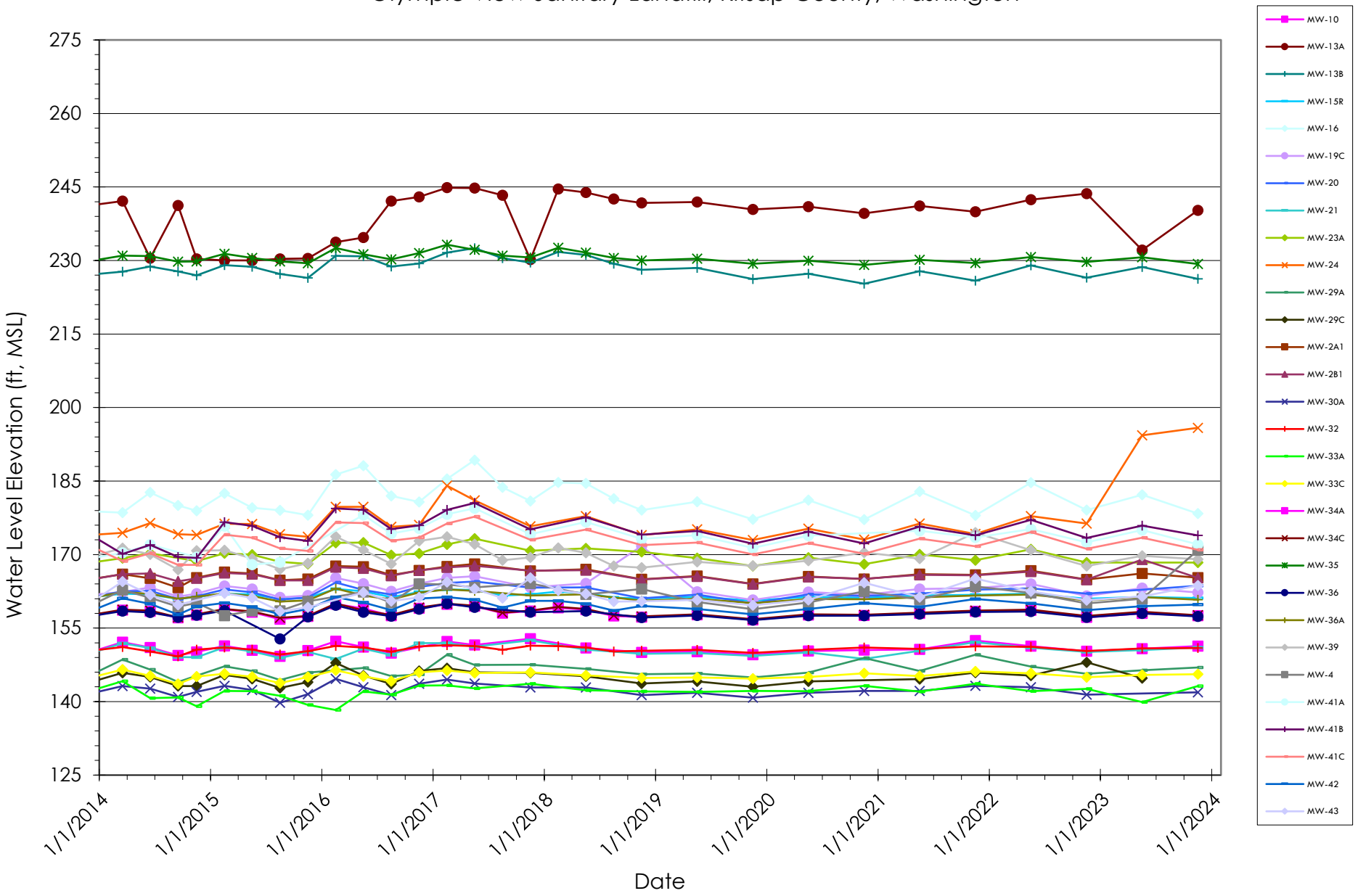
200 0 200 400
SCALE IN FEET

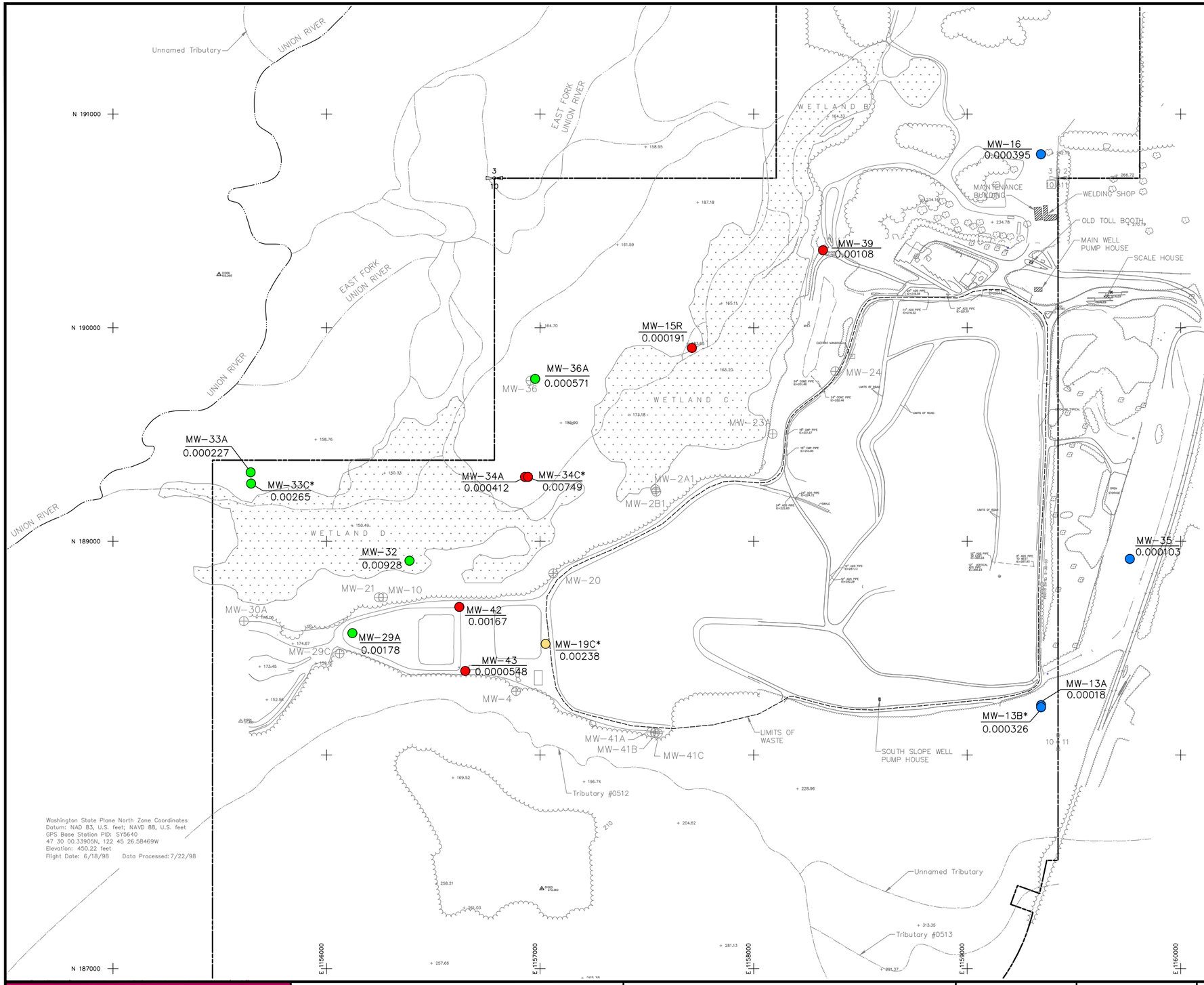
SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

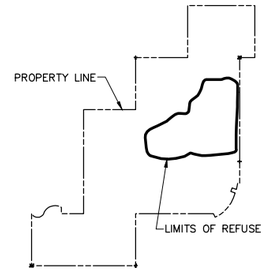
PROJECT NO. 04204027.26	DES BY J.E.	WATER LEVEL CONTOUR MAP NOVEMBER 2023	DATE MARCH 2024
SCALE AS SHOWN	CHK BY D.V.	OLYMPIC VIEW SANITARY LANDFILL KITSAP COUNTY, WASHINGTON	FIGURE 4B
CAD FILE FIGURE 4B	APP BY G.H.		

G:\04204027.26\Deliverables\Figures\2023 Annual Figures\Dwg\Figure 4B CWL GM 04.2023 Contour Map.dwg, Layout1, 1/1/2024 11:38:55 AM, DWG To PDF.pc3

Figure 5. Historical Groundwater Elevations
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington



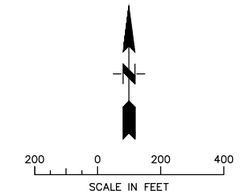




KEY MAP

LEGEND

MW-35	UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL
MW-32	DOWNGRADIENT GROUNDWATER MONITORING WELL
MW-19C	PERFORMANCE GROUNDWATER MONITORING WELL
MW-43	COMPLIANCE GROUNDWATER MONITORING WELL
MW-10	GROUNDWATER MONITORING WELL (WATER LEVEL ONLY)
MW-32 / 0.00928	SHALLOW MONITORING WELL ARSENIC, TOTAL (mg/L)
*	DEEP MONITORING WELL
———	PROPERTY LINE (ASSUMED)



SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

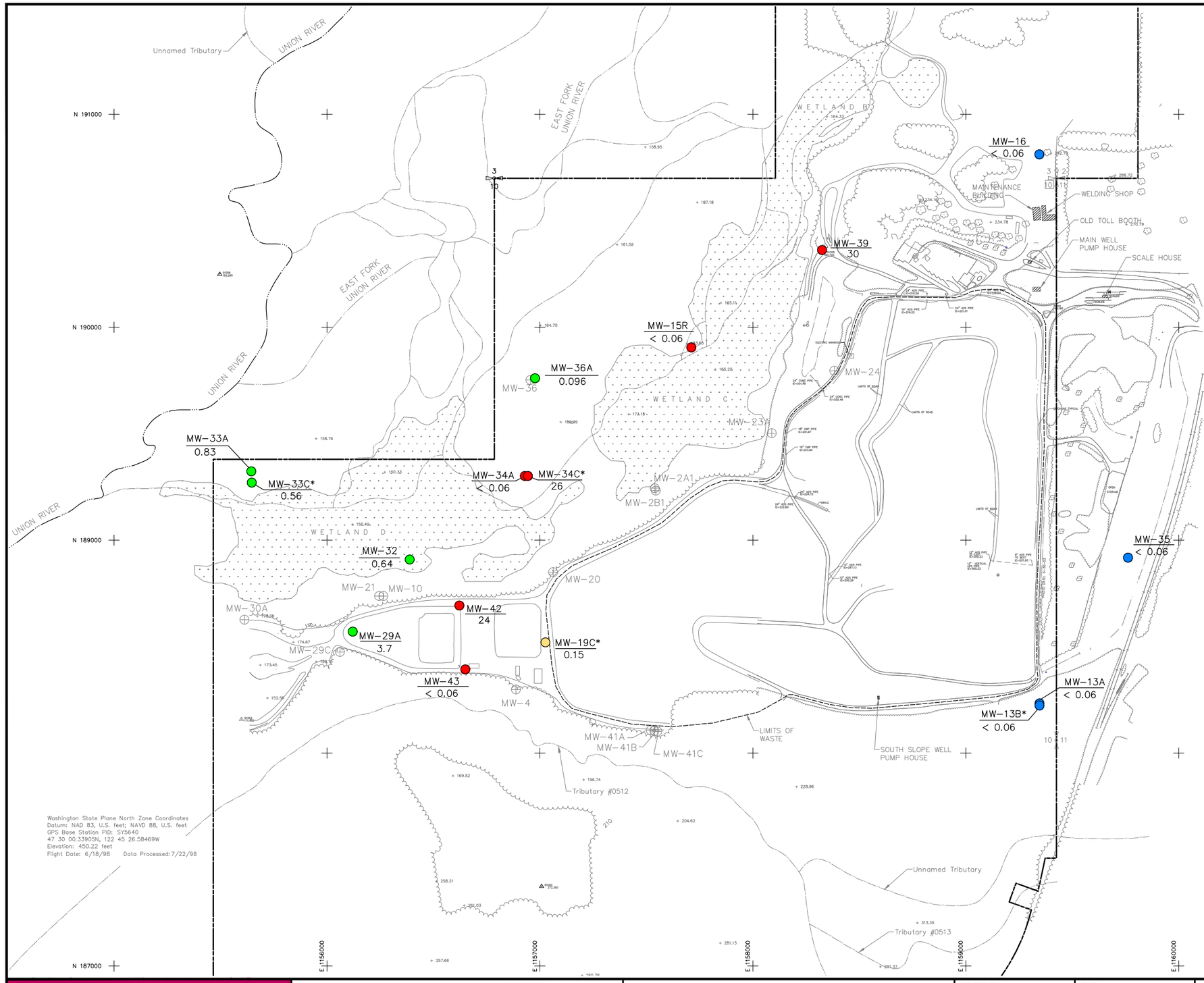
PROJECT NO.	04204027.27
SCALE	AS SHOWN
CAD FILE	FIGURE 6A
DES BY	J.E.
CHK BY	D.V.
APP BY	G.H.

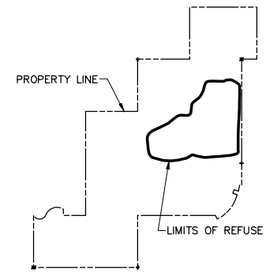
TOTAL ARSENIC CONCENTRATION MAP
NOVEMBER 2023

OLYMPIC VIEW SANITARY LANDFILL
KITSAP COUNTY, WASHINGTON

DATE: MARCH 2024

FIGURE: 6A





KEY MAP

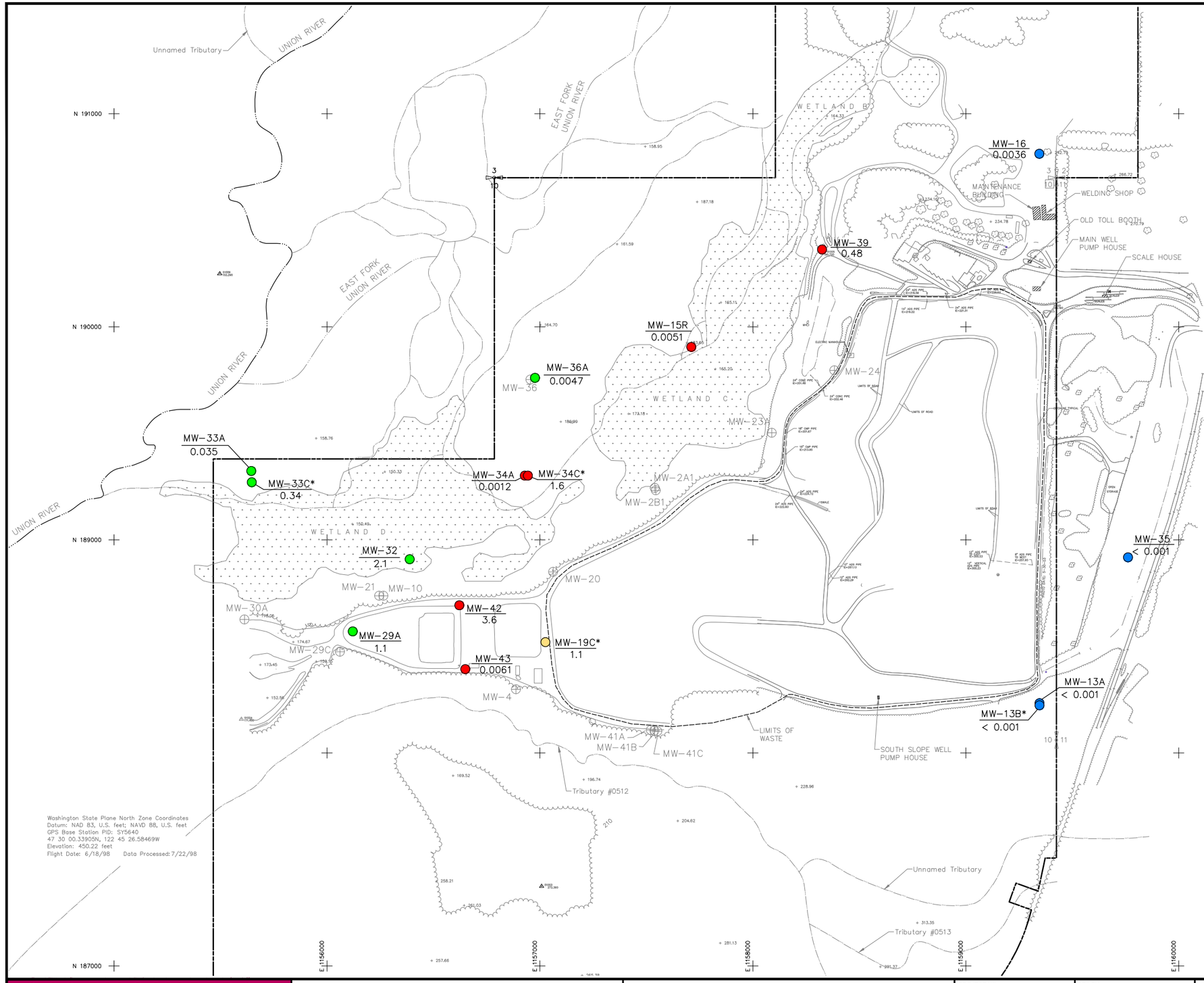
LEGEND

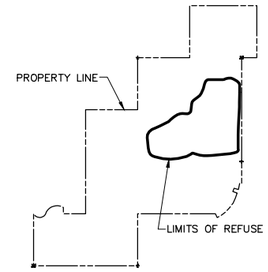
MW-35	UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL
MW-32	DOWNGRADIENT GROUNDWATER MONITORING WELL
MW-19C	PERFORMANCE GROUNDWATER MONITORING WELL
MW-43	COMPLIANCE GROUNDWATER MONITORING WELL
MW-10	GROUNDWATER MONITORING WELL (WATER LEVEL ONLY)
MW-32 / 0.64	SHALLOW MONITORING WELL IRON, TOTAL (mg/L)
*	DEEP MONITORING WELL
———	PROPERTY LINE (ASSUMED)

SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

PROJECT NO. 04204027.27	DES BY J.E.	TOTAL IRON CONCENTRATION MAP NOVEMBER 2023	DATE MARCH 2024
SCALE AS SHOWN	CHK BY D.V.	OLYMPIC VIEW SANITARY LANDFILL KITSAP COUNTY, WASHINGTON	FIGURE 6B
CAD FILE FIGURE 6B	APP BY G.H.		

G:\04204027.27\Drawings\Figures\2023 Annual Figures\Design\Figure 6B GW3 GM 4-2023 Iron Map.dwg Layout:1 3/21/2024 10:10:10 AM
DWG TO PDF.pc3





KEY MAP

LEGEND

MW-35	UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL
MW-32	DOWNGRADIENT GROUNDWATER MONITORING WELL
MW-19C	PERFORMANCE GROUNDWATER MONITORING WELL
MW-43	COMPLIANCE GROUNDWATER MONITORING WELL
MW-10	GROUNDWATER MONITORING WELL (WATER LEVEL ONLY)
MW-32 / 2.1	SHALLOW MONITORING WELL MANGANESE, TOTAL (mg/L)
*	DEEP MONITORING WELL
———	PROPERTY LINE (ASSUMED)

200 0 200 400
SCALE IN FEET

SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

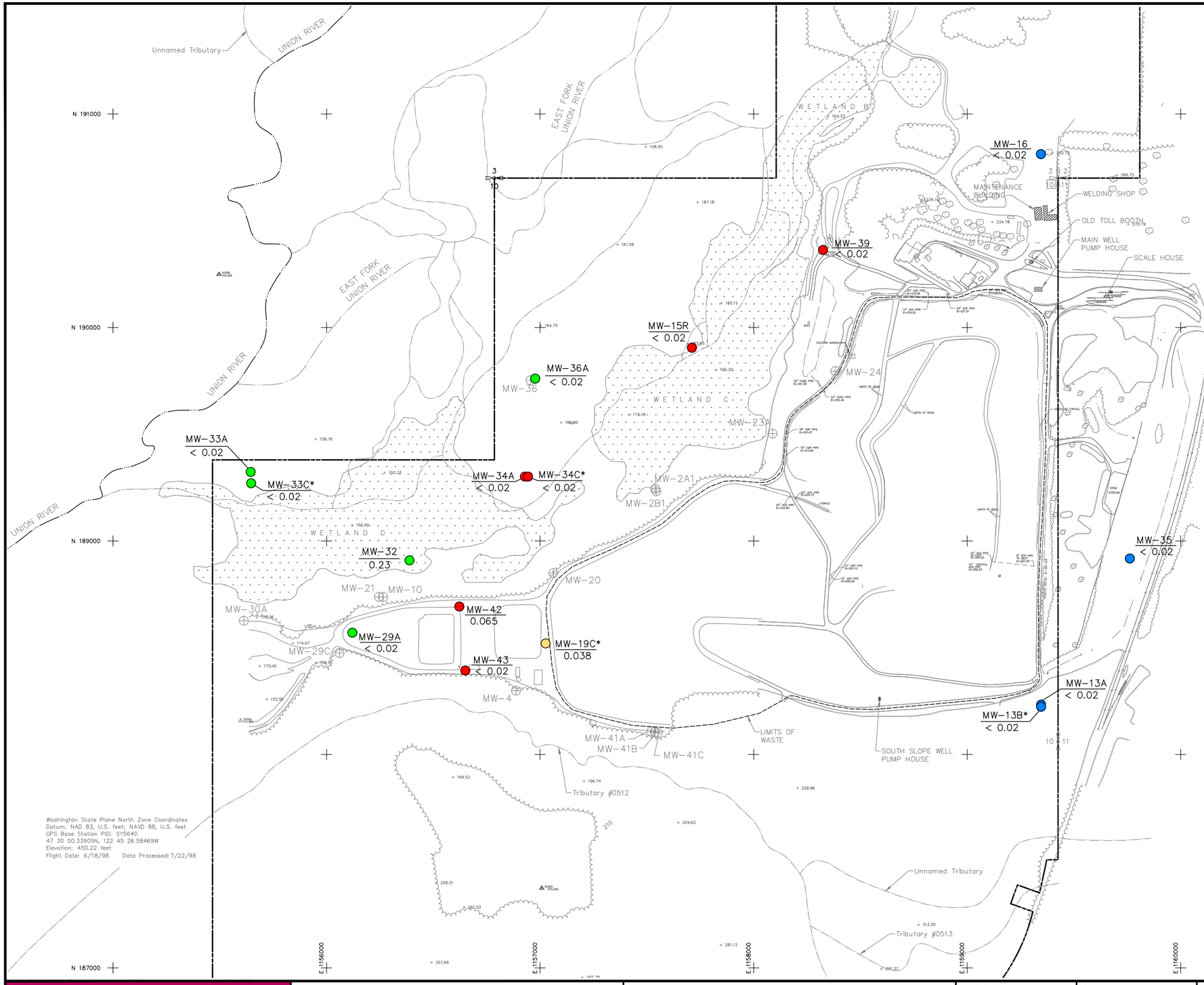
PROJECT NO. 04204027.27	DES BY A.D.
SCALE AS SHOWN	CHK BY J.E.
CAD FILE FIGURE 6C	APP BY D.V.

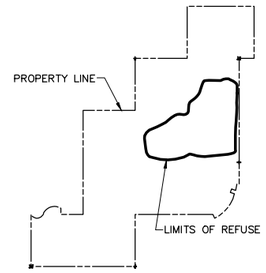
TOTAL MANGANESE CONCENTRATION MAP
NOVEMBER 2023

OLYMPIC VIEW SANITARY LANDFILL
KITSAP COUNTY, WASHINGTON

DATE MARCH 2024

FIGURE 6C





KEY MAP

LEGEND

MW-35	UPGRADIENT (BACKGROUND) GROUNDWATER MONITORING WELL
MW-32	DOWNGRADIENT GROUNDWATER MONITORING WELL
MW-19C	PERFORMANCE GROUNDWATER MONITORING WELL
MW-43	COMPLIANCE GROUNDWATER MONITORING WELL
MW-10	GROUNDWATER MONITORING WELL (WATER LEVEL ONLY)
MW-32 / 0.23	SHALLOW MONITORING WELL VINYL CHLORIDE, TOTAL (ug/L)
*	DEEP MONITORING WELL
	PROPERTY LINE (ASSUMED)

200 0 200 400
SCALE IN FEET

SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

PROJECT NO. 04204027.27	DES BY J.E.	VINYL CHLORIDE CONCENTRATION MAP NOVEMBER 2023	DATE MARCH 2024
SCALE AS SHOWN	CHK BY D.V.	OLYMPIC VIEW SANITARY LANDFILL KITSAP COUNTY, WASHINGTON	FIGURE 6D
CAD FILE FIGURE 6D	APP BY G.H.		

Figure 7. Leachate Generation (2007 - 2023)
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

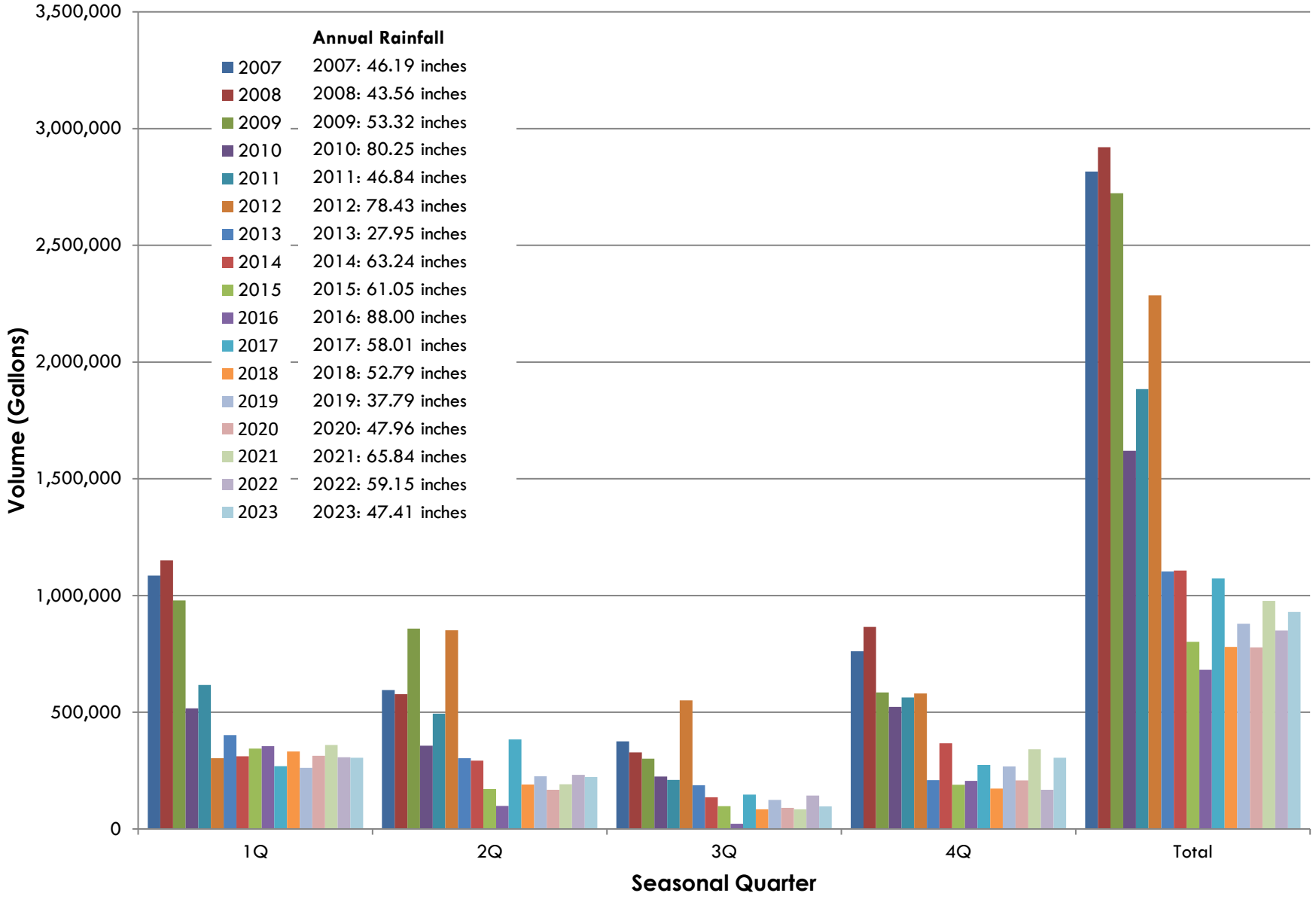
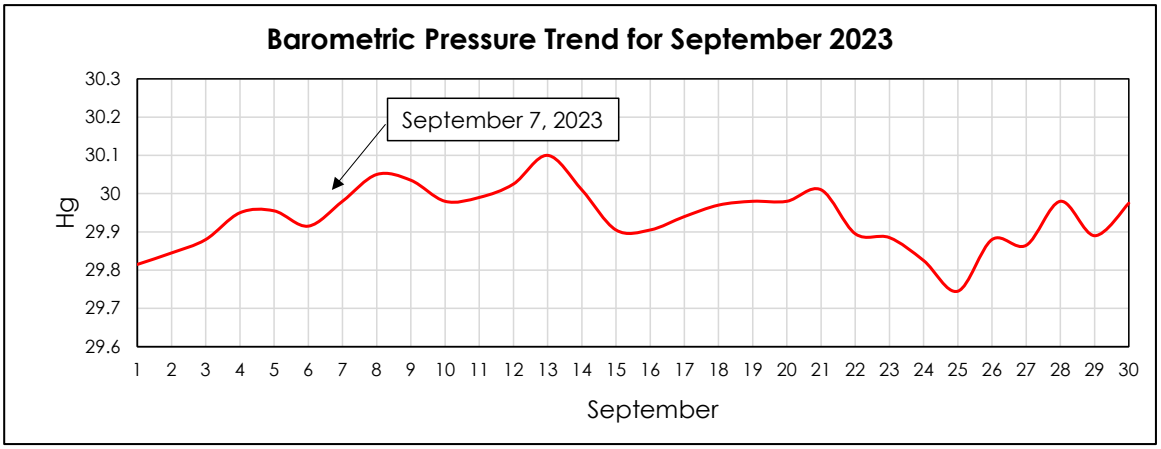
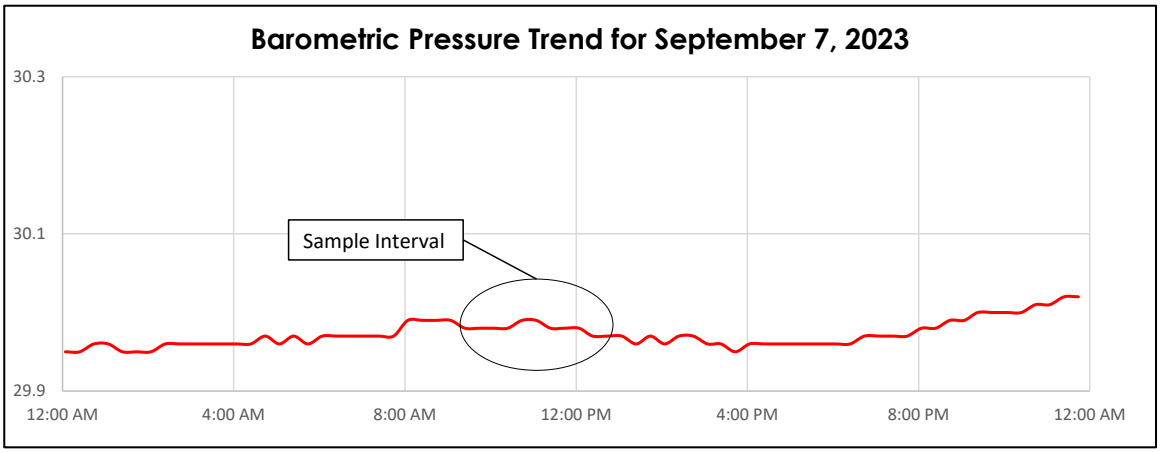


Figure 8A. Barometric Pressure Trend - September 2023
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

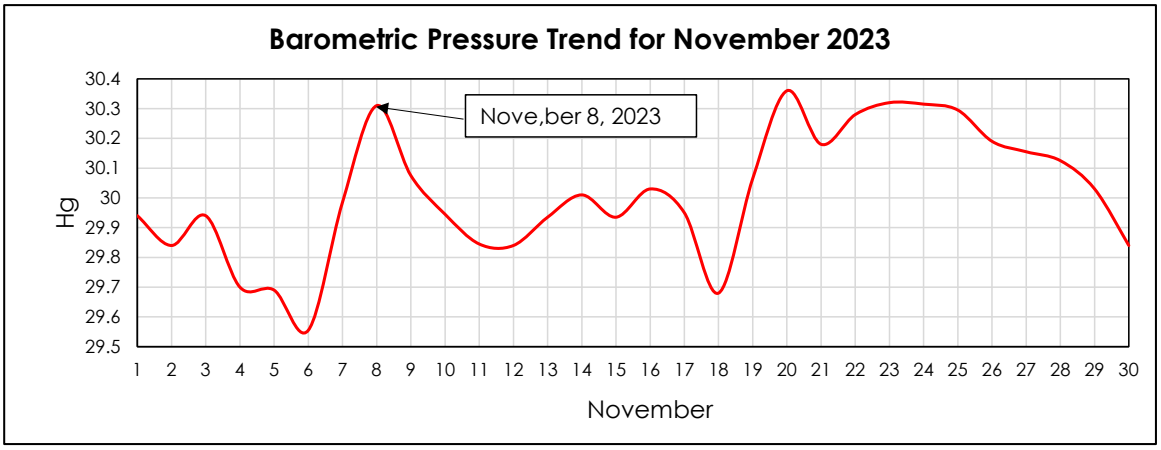


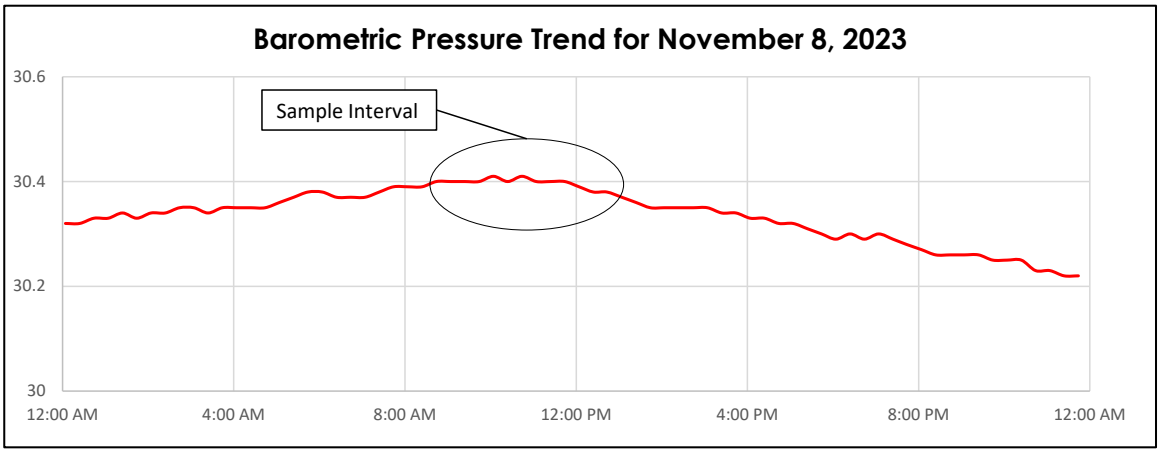


Monthly Data Source: Wunderground.com (Bremerton, WA)
Lat: 47.52 Long: 122.78 Elev: 226 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWABREME169/table/2023-09-7/2023-09-7/monthly

Daily Data Source: Wunderground.com (Bremerton, WA)
Lat: 47.52 Long: 122.78 Elev: 226 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWABREME169/table/2023-09-7/2023-09-7/daily

Figure 8B. Barometric Pressure Trend - November 2023
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington





Monthly Data Source: Wunderground.com (Bremerton, WA)
Lat: 47.52 Long: 122.78 Elev: 226 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWABREME169/table/2023-11-7/2023-11-7/monthly

Daily Data Source: Wunderground.com (Bremerton, WA)
Lat: 47.52 Long: 122.78 Elev: 226 ft-AMSL
Data Source:
https://www.wunderground.com/dashboard/pws/KWABREME169/table/2023-11-8/2023-11-8/daily

Appendix A

November 2023 Field Documentation

November 10, 2023
File No. 04204027.26

Subject: **2023 Semi-Annual Compliance Monitoring Event**
Olympic View Sanitary Landfill, Kitsap County, Washington

NOTES/SAMPLE DECODING:

Event Dates: November 8-9, 2023
Field Staff: Alex Deszo & Jovany Estrada

- The gate code to access the site is: 72369
- This event served as the semi-annual monitoring event.
- Duplicate samples were collected at MW-29A (Dup-1) and MW-36A (Dup-2).
- A Solinst water level meter was used to record all water level elevations.
- The samples were sent to TestAmerica Denver for analysis at the close of each sampling day, except samples for low level arsenic which were retained until the end of the sampling event and provided to Analytical Resources, Inc. in Tukwila, Washington.

Sample Date	Well ID
11/8/23	MW-13A
11/8/23	MW-36A
11/8/23	MW-13B
11/8/23	MW-29A (Dup-1)
11/9/23	MW-15R
11/8/23	MW-34A
11/8/23	MW-19C
11/8/23	MW-34C
11/8/23	MW-35
11/8/23	MW-43
11/8/23	MW-16
11/8/23	MW-29A
11/9/23	MW-39
11/8/23	MW-42
11/9/23	MW-33A
11/9/23	MW-33C
11/8/23	MW-36A (Dup-2)
11/8/23	MW-32
11/9/23	LP-LCD

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OVSL

Site No.:

Sample Point: MW-13A (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
11 08 23	:20	:			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: Y or N

Purging Device: C

Sampling Device: C

X-Other:

A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Filter Device: Y or N; 0.45 µ or _____ µ (circle or fill in)

Filter Type: A (A-In-line Disposable, B-Pressure, C-Vacuum, X-Other)

Sample Tube Type: C (A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other:)

WELL DATA

Well Elevation (at TOC): (ft/msl)

Depth to Water (DTW) (from TOC): 48.53 (ft)

Groundwater Elevation (site datum, from TOC): (ft/msl)

Total Well Depth (from TOC): (ft)

Stick Up (from ground elevation): (ft)

Casing ID: (in)

Casing Material:

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
11:16	1st	6.81	176	9.5	40	7.3	1439	
11:21	2nd	6.86	177	9.3	31	6.8	1269	
11:24	3rd	6.84	177	9.3	31	6.8	1274	
11:27	4th	6.83	176	9.3	31	6.8	1279	
11:30		6.81	176	9.3	31	6.8	1287	
11:33		6.86	176	9.3	31	6.8	1292	
11:36		6.80	175	9.3	31	6.7	1298	
:								
:								
:								
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site.* ***If more fields above are needed, use separate sheet or form.***

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: _____ Units _____
11 08 23	6.80	175	9.3	31	6.7	1298	

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: clear Odor: - Color: - Other: -

Weather Conditions (required daily, or as conditions change): Direction/Speed: - Outlook: - Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

10|5|45 psi

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11/8/23	Jovany Estrada	JE	SLS

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OVSL

Site No.:

Sample Point: MW-13B

Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
11 08 23	1032	:20			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: (Y) or N

Purging Device: C

Sampling Device:

X-Other:

A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Filter Device: (Y) or N — (0.45 µ) or _____ µ (circle or fill in)

Filter Type: A (A-In-line Disposable, B-Pressure, C-Vacuum, X-Other)

Sample Tube Type: C (A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other:)

WELL DATA

Well Elevation (at TOC): _____ (ft/msl)

Depth to Water (DTW) (from TOC): 6241 (ft)

Groundwater Elevation (site datum, from TOC): _____ (ft/msl)

Total Well Depth (from TOC): _____ (ft)

Stick Up (from ground elevation): _____ (ft)

Casing ID: 02 (in)

Casing Material: PVC

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit		pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1032	350 ml/min	1st	6.22	1.78	9.7	7.9	7.4	181.0	
1037		2nd	6.58	1.73	9.4	3.5	6.4	160.2	
1040		3rd	7.10	1.73	9.4	3.4	7.1	148.9	
1043		4th	7.29	1.73	9.4	3.2	7.3	141.6	
1046			7.36	1.73	9.4	3.3	7.3	135.8	
1049			7.37	1.73	9.4	3.4	7.3	132.6	
1052			7.38	1.73	9.4	3.4	7.3	130.3	
:									
:									
:									
Suggested range for 3 consec. readings or note Permit/State requirements:			+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: _____ Units _____
11 08 23	7.38	1.73	9.4	3.4	7.3	130.3	

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.

FIELD COMMENTS

Sample Appearance: clear Odor: — Color: — Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: — Outlook: — Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

10 | 5 | 45 psi

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11, 8, 23	Jovany Estrada	JE	SCS

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: DVSL

Site No.:

Sample Point: MW-15R (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
11 09 23	1126	:			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: (Y) or N

Purging Device: C

Sampling Device: C

A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

X-Other:

Filter Device: (Y) or N — (0.45 µ) or _____ µ (circle or fill in)

Filter Type: A — A-In-line Disposable, B-Pressure, C-Vacuum, X-Other _____

Sample Tube Type: C — A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other: _____

WELL DATA

Well Elevation (at TOC): _____ (ft/msl)

Depth to Water (DTW) (from TOC): 1955 (ft)

Groundwater Elevation (site datum, from TOC): _____ (ft/msl)

Total Well Depth (from TOC): _____ (ft)

Stick Up (from ground elevation): _____ (ft)

Casing ID: _____ (in)

Casing Material: _____

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1028	350	1st 5.81	1st 143	9.6	80	5.6	1932	
1033		2nd 6.35	2nd 147	9.9	47	0.7	1150	
1036		3rd 6.38	3rd 147	9.9	47	0.8	1065	
1039		4th 6.41	4th 147	9.9	41	0.9	954	
1042		6.42	147	9.9	39	0.9	903	
1045		6.42	147	9.9	39	0.9	898	
1048		6.43	147	9.9	38	0.9	884	
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site.* ***If more fields above are needed, use separate sheet or form.***

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: _____ Units _____
11 09 23	6.43	147	9.9	38	0.9	884	

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: clear — Odor: — Color: — Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: — Outlook: — Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

9/6/20 psi.

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11/8/23	Jovany Estrada	JE	SCS
__/__/__			

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OSL

Site No.:

Sample Point: MW-16

Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
11/08/23	1417	:20			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: (Y) or N

Purging Device: C

Sampling Device: C

A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

X-Other:

Filter Device: (Y) or N (0.45 µ) or ____ µ (circle or fill in)

Filter Type: A (A-In-line Disposable, B-Pressure, C-Vacuum, X-Other)

Sample Tube Type: D (A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other:)

WELL DATA

Well Elevation (at TOC): (ft/msl)

Depth to Water (DTW) (from TOC): 61.65 (ft)

Groundwater Elevation (site datum, from TOC): (ft/msl)

Total Well Depth (from TOC): (ft)

Stick Up (from ground elevation): (ft)

Casing ID: (in)

Casing Material:

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1417	550 mL/min 1st	6.58 1st	1.02 1st	10.5	52	8.9	156.4	
1422	2nd	6.24 2nd	1.26 2nd	9.9	46	7.7	204.5	
1425	3rd	6.23 3rd	1.29 3rd	9.9	31	7.7	221.1	
1428	4th	6.21 4th	1.24 4th	9.9	30	7.7	239.8	
1431		6.21	1.23	9.9	29	7.7	248.0	
1434		6.21	1.23	9.9	29	7.7	259.0	
1437		6.21	1.24	9.9	33	7.7	263.6	
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site.* ***If more fields above are needed, use separate sheet or form.***

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: ____ Units ____
11/08/23							

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: clear Odor: — Color: — Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: — Outlook: — Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

9/6/50

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11/8/23	Alex Degen	AD	SCS
___/___/___			

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: ONSL

Site No.:

Sample Point: MW19C

Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
11 08 23	1337	120			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: (Y) or N

Purging Device: C — A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Sampling Device: C

X-Other:

Filter Device: (Y) or N — (0.45) µ or ____ µ (circle or fill in)

Filter Type: A — A-In-line Disposable, B-Pressure, C-Vacuum, X-Other

Sample Tube Type: D — A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other:

WELL DATA

Well Elevation (at TOC) (ft/msl)	Depth to Water (DTW) (from TOC) (ft)	Groundwater Elevation (site datum, from TOC) (ft/msl)
	34.68	

Total Well Depth (from TOC) (ft)

Stick Up (from ground elevation) (ft)

Casing ID (in)

Casing Material

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1337		1st 5.82	1st 156	111	159	3.2	2713	
1342		2nd 6.53	2nd 161	109	45	0.9	1877	
1345		3rd 6.58	3rd 161	108	34	0.8	1454	
1348		4th 6.60	161	107	34	0.8	1200	
1351		6.61	161	167	32	0.7	945	
1354		6.61	161	107	32	0.7	781	
1357		6.61	160	107	31	0.7	681	
:								
:								
:								
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site.* ***If more fields above are needed, use separate sheet or form.***

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: ____ Units ____
11 08 23							

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: Clear — **Odor:** — — **Color:** — — **Other:** —

Weather Conditions (required daily, or as conditions change): **Direction/Speed:** — **Outlook:** — **Precipitation:** Y or (N)

Specific Comments (including purge/well volume calculations if required):

9/6/60

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11/8/23	Alex Dezso	AD	SCS
/ /			

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client. PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OU2

Site No.:

Sample Point: MW-29A (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
110823	1017	:20			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: (Y) or N

Purging Device: C
Sampling Device: C
X-Other:

A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Filter Device: (Y) or N — 0.45 µ or ____ µ (circle or fill in)

Filter Type: A (A-In-line Disposable, B-Pressure, C-Vacuum, X-Other)

Sample Tube Type: D (A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other)

WELL DATA

Well Elevation (at TOC): ____ (ft/msl)
Depth to Water (DTW) (from TOC): 13.27 (ft)
Groundwater Elevation (site datum, from TOC): ____ (ft/msl)
Total Well Depth (from TOC): ____ (ft)
Stick Up (from ground elevation): ____ (ft)
Casing ID: ____ (in)
Casing Material: ____

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1017	450	1st 5.60	1st 82	1.15	30.5	1.9	133.9	
1022		2nd 5.95	2nd 87	1.14	4.5	0.8	34.0	
1025		3rd 5.96	3rd 87	1.14	4.7	0.8	31.0	
1028		4th 5.98	4th 87	1.14	3.8	0.8	25.4	
1031		5.99	88	1.14	3.9	0.7	21.6	
1034		6.00	87	1.14	3.4	0.7	19.1	
1037	✓	6.01	87	1.14	3.3	0.7	17.5	
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. **If more fields above are needed, use separate sheet or form.**

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: ____ Units ____
110823	6.01	87	1.14	3.3	0.7	17.5	

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.

FIELD COMMENTS

Sample Appearance: Clear Odor: — Color: — Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: — Outlook: — Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

9/6/20 Dup-1 taken @ 10:48

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11/8/23	Alex Degne	AD	SLC
___/___/___			

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: CUSL

Site No.:

Sample Point: MW-32

Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
110823	1120	:20			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: (Y) or N

Purging Device: C

Sampling Device: C

A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

X-Other:

Filter Device: (Y) or N — (0.45 µ) or _____ µ (circle or fill in)

Filter Type: A — A-In-line Disposable, B-Pressure, C-Vacuum, X-Other

Sample Tube Type: D — A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other:

WELL DATA

Well Elevation (at TOC): (ft/msl)

Depth to Water (DTW) (from TOC): 143 (ft)

Groundwater Elevation (site datum, from TOC): (ft/msl)

Total Well Depth (from TOC): (ft)

Stick Up (from ground elevation): (ft)

Casing ID: 02 (in)

Casing Material: PVC

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1120	1st	6.11	278	12.0	39	2.1	158	
1125	2nd	6.56	309	12.1	45	0.9	55.3	
1128	3rd	6.61	310	12.1	37	0.9	20.8	
1131	4th	6.63	310	12.1	33	0.9	5.3	
1134		6.63	310	12.1	34	0.8	-0.7	
1137		6.64	310	12.1	33	0.9	-4.4	
1140		6.64	310	12.1	32	0.9	-7.0	
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site.* ***If more fields above are needed, use separate sheet or form.***

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: / Units
110823	6.64	310	12.1	32	0.9	-7.0	

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: Clear — Odor: — Color: — Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: — Outlook: — Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

9/6/15

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11/8/23	Alex Deszo	AM	SCS
/ /			

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client. PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OVSL

Site No.:

Sample Point: MW-33A (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
11/8/23	1220				

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: (Y) or N

Purging Device: C
Sampling Device: C
X-Other:

A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Filter Device: (Y) or N — (0.45 µ) or ____ µ (circle or fill in)

Filter Type: A (A-In-line Disposable, B-Pressure, C-Vacuum, X-Other)

Sample Tube Type: C (A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other:)

WELL DATA

Well Elevation (at TOC): ____ (ft/msl)

Depth to Water (DTW) (from TOC): 45.3 (ft)

Groundwater Elevation (site datum, from TOC): ____ (ft/msl)

Total Well Depth (from TOC): ____ (ft)

Stick Up (from ground elevation): ____ (ft)

Casing ID: ____ (in)

Casing Material: ____

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1209		1st 6.23	1st 104	10.5	3702	2.7	685	
1214		2nd 6.13	2nd 95	10.3	543	1.7	659	
1217		3rd 6.20	3rd 86	10.2	346	0.8	413	
1210		4th 6.25	4th 113	10.0	192	0.3	187	
1223		6.26	113	9.9	99	0.1	126	
1216		6.30	115	9.8	77	0.0	46	
1229		6.33	115	9.8	73	0.1	38	
:								
:								
:								
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: ____ Units ____
11/8/23	6.33	115	9.8	73	0.1	38	

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: clear — Odor: — Color: — Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: — Outlook: — Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

9/6/15 psi orange at beginning of purge

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11/8/23	Tovany Estrada	JE	SCS

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OVSL

Site No.: ____ Sample Point: MW-33C (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: ____

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
11/08/23	:20	:			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: Y or N

Purging Device: C — A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Sampling Device: C

X-Other:

Filter Device: (Y) or N — 0.45 µ or ____ µ (circle or fill in)

Filter Type: A — A-In-line Disposable, B-Pressure, C-Vacuum, X-Other

Sample Tube Type: C — A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other:

WELL DATA

Well Elevation (at TOC): ____ (ft/msl)

Depth to Water (DTW) (from TOC): 19.9 (ft)

Groundwater Elevation (site datum, from TOC): ____ (ft/msl)

Total Well Depth (from TOC): ____ (ft)

Stick Up (from ground elevation): ____ (ft)

Casing ID: 02 (in)

Casing Material: ____

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
12:43		1st 6.46	1st 153	9.4	473	1.2	597	
12:48		2nd 7.29	2nd 152	9.3	580	0.9	-267	
12:51		3rd 7.60	3rd 152	9.3	411.21	0.1	-615	
12:54		4th 7.75	4th 152	9.3	203	0.0	-846	
12:57		7.81	152	9.3	145	0.0	-996	
13:00		7.83	152	9.2	95	0.0 -	1089	
13:03		7.85	152	9.3	92	0.0 -	778	
:								
:								
:								
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site.* ***If more fields above are needed, use separate sheet or form.***

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: ____ Units ____
11/08/23	7.85	152	9.3	9.2	0.0	-778	

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: clear — Odor: — Color: — Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: — Outlook: — Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

9/6/20 PSI

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11/8/23	Jovany Estrada	JE	SCS

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OVSL

Site No.: | | | |

Sample Point: MW-34A (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: _____

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
11/08/23	1320	:			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: (Y) or N

Purging Device: C — A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Sampling Device: C

X-Other:

Filter Device: (Y) or N — (0.45 µ) or _____ µ (circle or fill in)

Filter Type: A — A-In-line Disposable, B-Pressure, C-Vacuum, X-Other _____

Sample Tube Type: C — A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other: _____

WELL DATA

Well Elevation (at TOC): _____ (ft/msl)

Depth to Water (DTW) (from TOC): 40.45 (ft)

Groundwater Elevation (site datum, from TOC): _____ (ft/msl)

Total Well Depth (from TOC): _____ (ft)

Stick Up (from ground elevation): _____ (ft)

Casing ID: 05 (in)

Casing Material: PVC

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
13:49	380	1st 5.95	1st 174	117	42	3.4	1145	
13:54	1	2nd 5.90	2nd 181	118	39	1.1	951	
13:57		3rd 5.90	3rd 180	117	38	1.2	994	
14:00		4th 5.90	4th 172	118	38	1.7	1088	
14:03		5.91	170	118	38	1.9	1129	
14:06		5.91	170	118	37	1.9	1151	
14:09	↓	5.91	169	118	37	2.1	1174	
:								
:								
:								
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site.* ***If more fields above are needed, use separate sheet or form.***

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: _____ Units _____

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: Clear — Odor: — — Color: — — Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: — Outlook: — Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

4|6|30 PSI

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11/8/23	Jovany Estrada	JE	SCS
/ /			

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OVSC

Site No.:

Sample Point: MW-34C

Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
11/08/23	1120				

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: (Y) or N

Purging Device: C — A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Sampling Device: C

X-Other:

Filter Device: (Y) or N — (0.45) µ or _____ µ (circle or fill in)

Filter Type: A — A-In-line Disposable, B-Pressure, C-Vacuum, X-Other

Sample Tube Type: C — A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other:

WELL DATA

Well Elevation (at TOC)	Depth to Water (DTW) (from TOC)	Groundwater Elevation (site datum, from TOC)
(ft/msl)	42.27 (ft)	(ft/msl)

Total Well Depth (from TOC): (ft)

Stick Up (from ground elevation): (ft)

Casing ID: 05 (in)

Casing Material:

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1428	1st	6.93	1.82	10.8	607	.86	105.3	
1433	2nd	6.53	1.90	12.6	1116	.07	32	
1436	3rd	6.55	1.91	12.6	673	.04	-8.6	
1439	4th	6.55	1.91	12.6	3501	.03	-15.2	
1442		6.56	1.91	12.6	2473	.02	-19.9	
1445		6.56	1.90	12.6	2641	.02	-12.9	
1448		6.56	1.91	12.6	809	.02	-21.3	
:								
:								
:								
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site.* ***If more fields above are needed, use separate sheet or form.***

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: _____ Units _____
11/08/23	6.56	1.91	12.6	809	.02	-21.3	

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: clear — Odor: — Color: — Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: — Outlook: — Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

8/7/50 psi

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11/8/23	Jovany Estrada	JE	SLS

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OVSL

Site No.: ____ Sample Point: MW-35 (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: ____

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
11 08 23	15:02	:20			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: (Y) or N

Purging Device: C — A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Sampling Device: C

X-Other: ____

Filter Device: (Y) or N (0.45 µ) or ____ µ (circle or fill in)

Filter Type: A — A-In-line Disposable, B-Pressure, C-Vacuum, X-Other ____

Sample Tube Type: D — A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other: ____

WELL DATA

Well Elevation (at TOC): ____ (ft/msl)

Depth to Water (DTW) (from TOC): 73.98 (ft)

Groundwater Elevation (site datum, from TOC): ____ (ft/msl)

Total Well Depth (from TOC): ____ (ft)

Stick Up (from ground elevation): ____ (ft)

Casing ID: 02 (in)

Casing Material: PVC

Note: Total Well Depth, Stick Up, Casing Id. etc, are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
15:02	350 mL/min	5.82 (1st)	1.63 (1st)	12.6	30	7.6	278.7	
15:07		6.95 (2nd)	1.66 (2nd)	11.0	30	7.1	259.8	
15:10		7.09 (3rd)	1.60 (3rd)	10.9	31	7.1	258.3	
15:13		7.14 (4th)	1.60 (4th)	10.8	31	7.0	258.5	
15:16		7.17	1.60	10.8	31	7.1	259.4	
15:19		7.18	1.60	10.8	53	7.0	260.0	
15:22		7.19	1.60	10.7	45	7.0	260.0	
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site.* ***If more fields above are needed, use separate sheet or form.***

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: ____ Units ____
11 08 23							

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: Clear Odor: — Color: — Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: — Outlook: — Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

10/5/50

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11/8/23	Alex Oeszo	AD	SES

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OVSL

Site No.:

Sample Point: MW-36A

Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
110823	1210	:			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: [ ] Y or [ ] N

Purging Device: C
Sampling Device: C
X-Other:

A-Submersible Pump; B-Peristaltic Pump; C-QED Bladder Pump; D-Bailer; E-Piston Pump; F-Dipper/Bottle

Filter Device: [Y] or [ ] N — [0.45 µ] or [ ] µ (circle or fill in)

Filter Type: A
A-In-line Disposable; B-Pressure; C-Vacuum; X-Other:

Sample Tube Type: C
A-Teflon; B-Stainless Steel; C-PVC; D-Polypropylene; X-Other:

WELL DATA

Well Elevation (at TOC): (ft/msl)

Depth to Water (DTW) (from TOC): 3187 (ft)

Groundwater Elevation (site datum, from TOC): (ft/msl)

Total Well Depth (from TOC): (ft)

Stick Up (from ground elevation): (ft)

Casing ID: (in)

Casing Material:

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit (ml/min)	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1231	350	1st 7.21	1st 139	10.3	60	9.0	1038	
1236		2nd 5.98	2nd 126	9.7	6.6	3.4	1395	
1239		3rd 5.97	3rd 126	9.7	6.0	3.2	1393	
1242		4th 5.97	4th 126	9.8	5.8	3.2	1389	
1245		5.96	126	9.8	5.5	3.2	1402	
1248		5.95	125	9.7	5.0	3.2	1439	
1251	↓	5.95	125	9.7	4.9	3.3	1445	
:								
:								
:								
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site.* ***If more fields above are needed, use separate sheet or form.***

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
110823	5.95	125	9.7	4.9	3.3	1445	

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: clear — Odor: — Color: — Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: — Outlook: — Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

9/6/25 psi Dup 2 taken @ 1305

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
___/___/___			
___/___/___			

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OVSL

Site No.: ____ Sample Point: MW-39 (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: ____

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
110923	1010	:28			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: (Y) or N

Purging Device: C
Sampling Device: C

A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

X-Other: ____

Filter Device: (Y) or N — 0.45 µ or ____ µ (circle or fill in)

Filter Type: A — A-In-line Disposable, B-Pressure, C-Vacuum, X-Other ____

Sample Tube Type: D — A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other: ____

WELL DATA

Well Elevation (at TOC): ____ (ft/msl)
Depth to Water (DTW) (from TOC): 208.7 (ft)
Groundwater Elevation (site datum, from TOC): ____ (ft/msl)
Total Well Depth (from TOC): ____ (ft)
Stick Up (from ground elevation): ____ (ft)
Casing ID: 02 (in)
Casing Material: PVC

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1010		1st 6.34	1st 316	11.0	120	1.4	-893	
1015		2nd 6.08	2nd 288	11.6	91	0.8	-590	
1018		3rd 6.06	3rd 285	11.7	82	0.8	-552	
1021		4th 6.01	265	11.7	42	1.0	-450	
1024		5.96	253	11.7	32	1.0	-365	
1027		5.95	251	11.7	29	1.0	-339	
1030		5.94	252	11.6	29	0.9	-319	
:								
:								
:								
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site.* ***If more fields above are needed, use separate sheet or form.***

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: ____ Units ____
110923	5.94	252	11.6	29	0.9	-319	

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: Clear — Odor: — — Color: — — Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: — — Outlook: — — Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

11/4/35

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11/9/23	Alex Jones	AJ	SG
___/___/___			

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client. PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OUSL

Site No.: ____ Sample Point: MW-42 (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: ____

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
11 08 23	12:07	:20			

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: (Y) or N

Purging Device: C

Sampling Device: C

A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

X-Other: ____

Filter Device: (Y) or N — 0.45 µ or ____ µ (circle or fill in)

Filter Type: A (A-In-line Disposable, B-Pressure, C-Vacuum, X-Other ____)

Sample Tube Type: D (A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other: ____)

WELL DATA

Well Elevation (at TOC): ____ (ft/msl)

Depth to Water (DTW) (from TOC): 27.64 (ft)

Groundwater Elevation (site datum, from TOC): ____ (ft/msl)

Total Well Depth (from TOC): ____ (ft)

Stick Up (from ground elevation): ____ (ft)

Casing ID: 02 (in)

Casing Material: PVC

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit		pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1207	5 cc/min	1st	6.41	489	12.7	75.5	1.2	-447	
1212		2nd	6.34	475	12.6	52	0.7	-607	
1215		3rd	6.34	473	12.6	48	0.7	-637	
1218		4th	6.34	472	12.6	39	0.7	-658	
1221			6.34	472	12.6	37	0.6	-671	
1224			6.34	472	12.6	37	0.6	-678	
1227			6.34	471	12.6	36	0.6	-689	
Suggested range for 3 consec. readings or note Permit/State requirements:			+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site.* ***If more fields above are needed, use separate sheet or form.***

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: ____ Units ____
11 08 23	6.34	471	12.6	36	0.6	-689	

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: Clear Odor: — Color: — Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: — Outlook: — Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

9/6/40

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11/8/23	Alex Desco	AD	SCS
___/___/___			

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OUSL

Site No.:

Sample Point: MW-43 (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
110823	1253	:20			

*Note: For Passive **Sampling, replace** "Water Vol in Casing" and "Well Vols **Purged**" w/ Water Vol in Tubing/Flow Cell and **Tubing/Flow** Cell Vols Purged. Mark **changes**, record field data, below.*

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: (Y) or N

Purging Device: C
Sampling Device: C
X-Other:

A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Filter Device: F or N — 0.45 µ or ____ µ (circle or fill in)

Filter Type: A
A-In-line Disposable, B-Pressure, C-Vacuum, X-Other

Sample Tube Type: D
A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other:

WELL DATA

Well Elevation (at TOC) (ft/msl)	Depth to Water (DTW) (from TOC) (ft)	Groundwater Elevation (site datum, from TOC) (ft/msl)
	227.4	

Total Well Depth (from TOC) (ft)	Stick Up (from ground elevation) (ft)	Casing ID (in)	Casing Material
		02	PVC

*Note: Total Well Depth, **Stick Up, Casing Id**, etc. are **optional** and **can** be from historical data, unless **required** by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.*

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1253	500 ml/min	5.94 (1st)	67	11.3	14.8	4.7	105.1	
1258		5.66 (2nd)	64	11.1	4.1	3.9	172.2	
1310		5.64 (3rd)	64	11.1	3.2	3.7	193.0	
1307		5.63 (4th)	63	11.1	3.1	3.6	207.2	
1307		5.63	63	11.1	3.0	3.5	223.4	
1310		5.62	63	11.1	3.1	3.5	235.9	
1313		5.62	62	11.1	2.9	3.4	244.5	
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site.* ***If more fields above are needed, use separate sheet or form.***

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: ____ Units ____
110823							

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: Clear — **Odor:** — **Color:** — **Other:** —

Weather Conditions (required daily, or as conditions change): **Direction/Speed:** — **Outlook:** — **Precipitation:** Y or (N)

Specific Comments (including purge/well volume calculations if required):

9/6/30

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11/8/23	Alex Dezso	AD	SCS
/ /			

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OUSL

Site No.:

Sample Point: LP-LCD (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e, with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID:

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
11 09 23	8:45				

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment . . . Dedicated: Y or (N)

Purging Device: B

Sampling Device: B

A-Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

X-Other:

Filter Device: (Y) or N — 0.45 µ or ____ µ (circle or fill in)

Filter Type: A (A-In-line Disposable, B-Pressure, C-Vacuum, X-Other)

Sample Tube Type: D (A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other:)

WELL DATA

Well Elevation (at TOC) (ft/msl)

Depth to Water (DTW) (from TOC) (ft)

Groundwater Elevation (site datum, from TOC) (ft/msl)

Total Well Depth (from TOC) (ft)

Stick Up (from ground elevation) (ft)

Casing ID (in)

Casing Material

Note: Total Well Depth, Stick Up, Casing Id. etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm@25°C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
08:45	1st	6.37	1st ~~26~~	7.9	50	9.9	269	
	2nd		2nd 2189					
	3rd		3rd					
	4th		4th					
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	--	--	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e, complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
11 09 23	6.37	2188	7.9	50	9.9	269	

Final Field Readings are required *(i.e, record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

Sample Appearance: Yellowish — Odor: — Color: — Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: — Outlook: — Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
11/9/23	Alex Dezso	AD	SCS
___/___/___			

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

SCS ENGINEERS

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

Date	11/8/23					
Time	0935					
Weather (sky or precip, temp)	Cloudy					
Parameter	Conductivity	pH 4	pH 7	D.O.	Turbidity	Comments/Exceptions
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.00	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1312	4.14	7.09	10.45		
Post Cal Reading	1413	4.00	7.00	8.50		
Descrepancy	No					
Calib. Successful?	Yes					
Calibration by	Jovany Estrada					
Instrument Type, ID	YSI Pro DDS / YSI 556 / Rental				YSI Pro DDS / HACH2000	
Calibration Location	OVSL office / Leachate					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

SCS ENGINEERS

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

Date	11/8/23					
Time	0930					
Weather (sky or precip, temp)	Mostly Cloudy, Mist 44° F					
Parameter	Conductivity	pH 4	pH 7	D.O.	Turbidity	Comments/Exceptions
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.00	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1324	3.87	6.91	8.67	—	
Post Cal Reading	1413	4.00	7.00	8.5	—	
Descrepancy	NO					
Calib. Successful?	Yes					
Calibration by	AMD					
Instrument Type, ID	(YSI Pro DDS) / YSI 556 / Rental				(YSI Pro DDS) / HACH2000	
Calibration Location	OUSL Leachate pond					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

SCS ENGINEERS

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

Date	11/9/23					
Time	0824					
Weather (sky or precip, temp)	Foggy					
Parameter	Conductivity	pH 4	pH 7	D.O.	Turbidity	Comments/Exceptions
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.00	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1503	4.19	7.03	9.41		
Post Cal Reading	1413	4.00	7.00	8.50		
Descrepancy	No					
Calib. Successful?	YES					
Calibration by	J. Estrada					
Instrument Type, ID	YSI Pro DDS / YSI 556 / Rental				YSI Pro DDS / HACH2000	
Calibration Location	Office/Leachate					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

SCS ENGINEERS

GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM

Date	11/9/23					
Time	838					
Weather (sky or precip, temp)	Cloudy, Misty 40°F					
Parameter	Conductivity	pH 4	pH 7	D.O.	Turbidity	Comments/Exceptions
Type of Calibration	Standard	Standard	Standard	Standard	Standard	
Standard Value	1413	4.00	7.00	100% or ~8.5	1000, 10, 0.2 800, 100, 20, <0.1	
Pre-Cal Reading	1419	4.04	7.02	8.5	—	
Post Cal Reading	1413	4.00	7.00	8.5	—	
Descrepancy	NO					
Calib. Successful?	Yes					
Calibration by	AMD					
Instrument Type, ID	(YSI Pro DDS) / YSI 556 / Rental				(YSI Pro DDS) / HACH2000	
Calibration Location	OUSL Leachate pond					

* If Direct Reading is Unavailable, Assume pressure = 760 mm - 2.5 (altitude in ft/100)

Appendix B

November 2023 Data Validation & Analytical Data Reports

DATA VALIDATION REPORT – OLYMPIC VIEW SANITARY LANDFILL 2023 – SEMI-ANNUAL EVENT NO. 2

Project Details

Project No.	04204027.27	**Site Name**	Olympic View Sanitary Landfill
Data Validator	Jovany Estrada	**Data Level**	Level II
Date	2/6/2024	**DV Tier**	Tier I
QA Document	Olympic View Sanitary Landfill Sampling Analysis Plan-rev 1.1, August 2, 2017		

Sample Login Summary

Sample Group	Sample Login Comments	Analytical Lab (Primary)
280-184261-1	No comments.	TestAmerica, Denver CO
280-184337-1	No comments.	TestAmerica, Denver CO
280-184342-1	No comments.	TestAmerica, Denver CO

Analytical Summary

Sample Group	Analyses					
	Qtrly General Chemistry[1]	Qtrly Metals	Qtrly VOCs	TSS	BOD/COD	L Pond Analytes[2]
280-184261-1	X	X	X	X	--	--
280-184337-1	X	X	X	--	X	--
280-184342-1	X	X	X	X	--	--

[1] General Chemistry (NO_3, Cl, SO_4, NH_3, Alkalinity, Bicarbonate, TDS, TOC)

[2] L Pond analytes (pH, Total metals, TSS, BOD, COD) - not collected by SCS

Laboratory Quality Assurance Samples

Lab QA Samples	Notes	Comments
Surrogates/Organics	See case narrative.	All data acceptable and/or within established control limits.
MB	See case narrative.	All data acceptable and/or within established control limits.
DUP	See case narrative.	All data acceptable and/or within established control limits.
LCS/LCSD	See case narrative.	The laboratory control sample (LCS) and / or Laboratory Control Sample Duplicate (LCSD) recovered outside control limits for the following analyses: Carbon tetrachloride, Chlorodibromomethane, and Bromoform. (280-184261-1, 280-184337-1)
MS/MSD	See case narrative.	All data acceptable and/or within established control limits.
General Chemistry	See case narrative.	All data acceptable and/or within established control limits.
Metals	See case narrative.	All data acceptable and/or within established control limits.

Field Quality Assurance Samples

Field QA Samples	Sample Group	Analytes	Notes
Trip Blank	280-184261-1	Tetrahydrofuran	1.6 J

Detailed Field Replicate Evaluation

Analyte	Units	MW-29A	MW-29A (DUP-1)	RPD (%)	MW-36A	MW-36A (DUP-2)	RPD (%)
Alkalinity, Bicarbonate (As CaCO3)	mg/L	36	38	1.35	57	58	0.43
Alkalinity, Total (As CaCO3)	mg/L	36	38	1.35	57	58	0.43
Ammonia (As N)	mg/L	0.075	0.1	7.14	0.073	0.053	7.94
Barium, Total	mg/L	0.0056	0.005	2.83	0.002	0.0024	4.55
Calcium, Dissolved	mg/L	6.1	5.8	1.26	8.9	8.8	0.28
Chromium, Total	mg/L	0.00096	0.00085	3.04	0.011	0.0098	2.88
Cobalt, Total	mg/L	0.0019	0.0019	0.00	0.003 U	0.003 U	0.00
Iron, Dissolved	mg/L	3.4	3.5	0.72	0.0091	0.06 U	36.83
Iron, Total	mg/L	3.7	3.5	1.39	0.068	0.096	8.54
Magnesium, Dissolved	mg/L	3.6	3.5	0.70	6.1	6.1	0.00
Manganese, Dissolved	mg/L	1.1	1	2.38	0.001 U	0.001 U	0.00
Manganese, Total	mg/L	1.2	1.1	2.17	0.0034	0.0047	8.02
Nickel, Total	mg/L	0.0017	0.0016	1.52	0.0012	0.0014	3.85
Nitrate (As N)	mg/L	0.05 U	0.05 U	0.00	0.41	0.38	1.90
Potassium, Dissolved	mg/L	0.41	0.31	6.94	0.84	0.81	0.91
Sodium, Dissolved	mg/L	3.4	3.2	1.52	5.8	5.8	0.00
Total Dissolved Solids (TDS)	mg/L	51	61	4.46	89	93	1.10
Total Organic Carbon (TOC)	mg/L	1.6	1.6	0.00	1 U	1 U	0.00
Vanadium, Total	mg/L	4 U	4 U	0.00	0.0025	0.0023	2.08
Zinc, Total	mg/L	0.005 U	0.005 U	0.00	0.0021	0.0023	2.27

* RPD based on result as compared to the Reporting Limit (RL) for a non-detection in the compared sample

U = Result was not detected at or above a concentration greater than the RL. Value provided is the RL for the given sample.

NA = Not applicable. Compared samples were below the RL for a given parameter.

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

B = Compound was found in the blank and sample.

Lab Qualifier Definitions

Lab Qualifiers	Description	Lab Group
*+	LCS and/or LCSD is outside acceptance limits, high biased.	280-184261-1, 280-184337-1, 280-184342-1
*1	LCS/LCSD RPD exceeds control limits.	280-184342-1
*-	LCS and/or LCSD is outside acceptance limits, low biased.	280-184337-1, 280-184342-1
F1	MS and/or MSD recovery exceeds control limits.	280-184261-1, 280-184337-1, 280-184342-1
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	280-184261-1, 280-184337-1, 280-184342-1
^+	Continuing Calibration Verification (CCV is outside acceptance limits, high biased.	280-184261-1, 280-184337-1, 280-184342-1
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.	280-184261-1, 280-184337-1
B	Compound was found in the blank and sample.	280-184261-1, 280-184337-1, 280-184342-1
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.	280-184261-1,

Lab Qualifiers	Description	Lab Group
F2	MS/MSRPD exceeds control limits	280-184261-1, 280-184337-1
E	Result exceeded calibration range.	280-184342-1
H	Sample was prepped or analyzed beyond the specified holding tome. This does not meet regulatory requirements.	280-184261-1

Additional Qualifier Definitions

Qualifiers	Description	Lab Group
U	Analyte was not detected above the applicable RL or MDL.	

Additional Items of Note

The analytes Acrolein, Acrylonitrile, and 2-Chloroethyl Vinyl Ether cannot be reliably quantitated in acid preserved samples, therefore, the reporting limits for the analytes is not reliable or defensible.

Qualified Data and Usability

Lab qualifiers are noted. All data, as qualified, are acceptable for use.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Patrick Madej
Waste Management
2615 Davis Street
San Leandro, California 94577

Generated 12/4/2023 2:18:07 PM

JOB DESCRIPTION

WA02|Olympic View Sanitary LF
Annual GW AppI/II - May

JOB NUMBER

280-184261-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

Eurofins Denver

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.

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 TestAmerica Project Manager.

Authorization

Generated
12/4/2023 2:18:07 PM

Authorized for release by
Megan McElheny, Project Manager I
Megan.Mcelheny@et.eurofinsus.com
Designee for
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

Table of Contents

Cover Page 1
Table of Contents 3
Definitions 4
Case Narrative 6
Detection Summary 8
Method Summary 15
Sample Summary 16
Client Sample Results 17
Surrogate Summary 68
QC Sample Results 70
QC Association 93
Chronicle 102
Subcontract Data 110
Chain of Custody 146
Receipt Checklists 153

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

Job ID: 280-184261-1

Laboratory: Eurofins Denver

Narrative

Job Narrative
280-184261-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/9/2023 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.0°C, 2.0°C, 2.9°C and 3.7°C

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): DUP1 (280-184261-15). The sample was logged per the volume received.

One of six VOA vials for the following samples were received broken: MW-32 (280-184261-8), MW-43 (280-184261-10) and MW-35 (280-184261-13). Sufficient volume remains for analysis.

The 500mL Sulfuric Acid preserved amber glass container submitted for sample MW-35 (280-184261-13) was received with a cracked lid. No volume was observed to have leaked from the container; therefore, the lid was replaced and the lab will proceed with analysis.

Subcontract Work
Method Total Arsenic (ARI): This method was subcontracted to Analytical Resources, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-691875 recovered above the upper control limit for Carbon tetrachloride, 2-Methyl-2-propanol, Chlorodibromomethane, tert-Butylbenzene, Tetrachloroethene, Bromobenzene and Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-36A (280-184261-1), MW-13A (280-184261-2), DUP2 (280-184261-3), MW-13B (280-184261-4), MW-34A (280-184261-5), MW-34C (280-184261-6), MW-29A (280-184261-7), MW-32 (280-184261-8), MW-42 (280-184261-9), MW-43 (280-184261-10), MW-19C (280-184261-11), MW-16 (280-184261-12), MW-35 (280-184261-13), TRIP BLANK (280-184261-14) and DUP1 (280-184261-15).

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-691875 recovered outside control limits for the following analytes: Carbon tetrachloride, Chlorodibromomethane, and Bromoform. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-634851 and analytical batch 280-635252 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 6020B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-634879 and analytical batch 280-635253 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or

Job ID: 280-184261-1 (Continued)

Laboratory: Eurofins Denver (Continued)

non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 6020B: The method blank associated with preparation batch 280-634879 and analytical batch 280-635253 contained Zn greater than one-half the reporting limit (RL). The samples will not be re-analyzed because Zn is considered a common lab contaminant and controlled to the full RL. The sample results have been qualified and reported.

Method 6020B: The results reported for the following sample do not concur with results previously reported for this site: MW-36A (280-184261-1). Reanalysis was performed for Mn, and the result(s) confirmed.

Method 6020B: The continuing calibration verification (CCV) associated with batch 280-635419 recovered 111% above the upper control limit (110%) for Mn. The samples (Batch QC) associated with this CCV were non-detects and within control limit for the affected analytes; therefore, the data have been reported. The associated samples are impacted: (CCV 280-635419/49), (280-184665-E-2-D), (280-184665-E-2-E MS), (280-184665-E-2-F MSD), (280-184665-E-2-D PDS) and (280-184665-E-2-D SD ^5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 2320B: The results reported for the following sample do not concur with results previously reported for this site: DUP1 (280-184261-15). Reanalysis was performed, and the result confirmed.

Method 2540D: Reanalysis of the following sample was performed outside of the analytical holding time due to failure of historical data parameters: MW-43 (280-184261-10).

Method 350.1: The results reported for the following samples do not concur with results previously reported for this site: MW-36A (280-184261-1) and MW-43 (280-184261-10). The clients custom reporting limit turns this result from a standard non-detect (ND), to a detection. The result is considered to fall within the clients limits using the standard reporting limit and is therefore reported as qualified data.

Method 350.1: The results reported for the following samples do not concur with results previously reported for this site: MW-34A (280-184261-5) and MW-32 (280-184261-8). The results are within 0.008mg/L of the clients limits and are therefore reported as qualified data.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184261-1

Client Sample ID: MW-36A — Lab Sample ID: 280-184261-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Total	0.096	B	0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	8.8	B	0.20	0.024	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	6.1		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	0.81	J	1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	5.8		1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.0024		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Chromium, Total	0.0098	B	0.0030	0.00050	mg/L	1		6020B	Total Recoverable
Manganese, Total	0.0047		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Nickel, Total	0.0014	J	0.0040	0.00083	mg/L	1		6020B	Total Recoverable
Vanadium, Total	0.0023		0.0020	0.0011	mg/L	1		6020B	Total Recoverable
Zinc, Total	0.0023	J B	0.0050	0.0020	mg/L	1		6020B	Total Recoverable
Ammonia (as N)	0.053		0.030	0.030	mg/L	1		350.1	Total/NA
Nitrate as N	0.38		0.050	0.050	mg/L	1		353.2	Total/NA
Alkalinity, Total (As CaCO3)	58		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	58		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	93		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-13A — Lab Sample ID: 280-184261-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium, Dissolved	16	B	0.20	0.024	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	9.1		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	0.59	J	1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	5.1		1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.0027		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Chromium, Total	0.0024	J B	0.0030	0.00050	mg/L	1		6020B	Total Recoverable
Vanadium, Total	0.0037		0.0020	0.0011	mg/L	1		6020B	Total Recoverable
Nitrate as N	0.44		0.050	0.050	mg/L	1		353.2	Total/NA
Alkalinity, Total (As CaCO3)	86		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	86		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	98		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP2 — Lab Sample ID: 280-184261-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Total	0.068	B	0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	8.9	B	0.20	0.024	mg/L	1		6010D	Dissolved
Iron, Dissolved	0.0091	J B	0.060	0.0091	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	6.1		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	0.84	J	1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	5.8		1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.0020		0.0010	0.00038	mg/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP2 (Continued) — Lab Sample ID: 280-184261-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium, Total	0.011	B	0.0030	0.00050	mg/L	1		6020B	Total Recoverable
Manganese, Total	0.0034		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Nickel, Total	0.0012	J	0.0040	0.00083	mg/L	1		6020B	Total Recoverable
Vanadium, Total	0.0025		0.0020	0.0011	mg/L	1		6020B	Total Recoverable
Zinc, Total	0.0021	J B	0.0050	0.0020	mg/L	1		6020B	Total Recoverable
Ammonia (as N)	0.073		0.030	0.030	mg/L	1		350.1	Total/NA
Nitrate as N	0.41		0.050	0.050	mg/L	1		353.2	Total/NA
Alkalinity, Total (As CaCO3)	57		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	57		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	89		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-13B — Lab Sample ID: 280-184261-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Total	0.0098	J B	0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	16	B	0.20	0.024	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	8.0		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	0.58	J	1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	4.7		1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.0032		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Chromium, Total	0.0034	B	0.0030	0.00050	mg/L	1		6020B	Total Recoverable
Vanadium, Total	0.0051		0.0020	0.0011	mg/L	1		6020B	Total Recoverable
Nitrate as N	0.36		0.050	0.050	mg/L	1		353.2	Total/NA
Alkalinity, Total (As CaCO3)	85		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	85		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	99		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-34A — Lab Sample ID: 280-184261-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Total	0.027	J B	0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	15	B	0.20	0.024	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	7.0		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	0.58	J	1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	7.9		1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.0039		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Chromium, Total	0.0038	B	0.0030	0.00050	mg/L	1		6020B	Total Recoverable
Manganese, Total	0.0012		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Nickel, Total	0.0024	J	0.0040	0.00083	mg/L	1		6020B	Total Recoverable
Vanadium, Total	0.0039		0.0020	0.0011	mg/L	1		6020B	Total Recoverable
Ammonia (as N)	0.075		0.030	0.030	mg/L	1		350.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-34A (Continued) — Lab Sample ID: 280-184261-5

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	2.0		0.050	0.050	mg/L	1		353.2	Total/NA
Alkalinity, Total (As CaCO3)	75		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	75		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	120		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-34C — Lab Sample ID: 280-184261-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.017	J	0.020	0.0040	ug/L	1		8260C SIM	Total/NA
Cobalt, Total	0.0012	J	0.0030	0.00056	mg/L	1		6010D	Total Recoverable
Iron, Total	26	B	0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	17	B	0.20	0.024	mg/L	1		6010D	Dissolved
Iron, Dissolved	1.0	B	0.060	0.0091	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	7.2		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	0.78	J	1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	8.7		1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.13		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Chromium, Total	0.0010	J B	0.0030	0.00050	mg/L	1		6020B	Total Recoverable
Copper, Total	0.0030		0.0020	0.00071	mg/L	1		6020B	Total Recoverable
Manganese, Total	1.6		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Vanadium, Total	0.0022		0.0020	0.0011	mg/L	1		6020B	Total Recoverable
Zinc, Total	0.0031	J B	0.0050	0.0020	mg/L	1		6020B	Total Recoverable
Manganese, Dissolved	0.45		0.0010	0.00051	mg/L	1		6020B	Dissolved
Chloride	3.9		3.0	3.0	mg/L	1		300.0	Total/NA
Alkalinity, Total (As CaCO3)	87		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	87		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	140		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	50		4.0	4.0	mg/L	1		SM 2540D	Total/NA
Total Organic Carbon - Average	1.2		1.0	1.0	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-29A — Lab Sample ID: 280-184261-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt, Total	0.0019	J	0.0030	0.00056	mg/L	1		6010D	Total Recoverable
Iron, Total	3.5	B	0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	5.8	B	0.20	0.024	mg/L	1		6010D	Dissolved
Iron, Dissolved	3.5	B	0.060	0.0091	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	3.5		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	0.31	J	1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	3.2		1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.0050		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Chromium, Total	0.00085	J B	0.0030	0.00050	mg/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-29A (Continued) — Lab Sample ID: 280-184261-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese, Total	1.1		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Nickel, Total	0.0016	J	0.0040	0.00083	mg/L	1		6020B	Total Recoverable
Manganese, Dissolved	1.0		0.0010	0.00051	mg/L	1		6020B	Dissolved
Ammonia (as N)	0.10		0.030	0.030	mg/L	1		350.1	Total/NA
Alkalinity, Total (As CaCO3)	38		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	38		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	61		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Total Organic Carbon - Average	1.6		1.0	1.0	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-32 — Lab Sample ID: 280-184261-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.23		0.020	0.0040	ug/L	1		8260C SIM	Total/NA
Trichloroethene	0.48	J	1.0	0.46	ug/L	1		8260C	Total/NA
Iron, Total	0.64	B	0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	28	B	0.20	0.024	mg/L	1		6010D	Dissolved
Iron, Dissolved	0.64	B	0.060	0.0091	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	14		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	1.1		1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	11		1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.0044		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Chromium, Total	0.00065	J B	0.0030	0.00050	mg/L	1		6020B	Total Recoverable
Manganese, Total	2.1		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Nickel, Total	0.00086	J	0.0040	0.00083	mg/L	1		6020B	Total Recoverable
Manganese, Dissolved	2.0		0.0010	0.00051	mg/L	1		6020B	Dissolved
Chloride	10		3.0	3.0	mg/L	1		300.0	Total/NA
Sulfate	13		5.0	5.0	mg/L	1		300.0	Total/NA
Ammonia (as N)	0.11		0.030	0.030	mg/L	1		350.1	Total/NA
Alkalinity, Total (As CaCO3)	140		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	140		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	200		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Total Organic Carbon - Average	1.1		1.0	1.0	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-42 — Lab Sample ID: 280-184261-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.065		0.020	0.0040	ug/L	1		8260C SIM	Total/NA
Cobalt, Total	0.0011	J	0.0030	0.00056	mg/L	1		6010D	Total Recoverable
Iron, Total	24	B	0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	38	B	0.20	0.024	mg/L	1		6010D	Dissolved
Iron, Dissolved	25	B	0.060	0.0091	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	13		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	7.9		1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	17		1.0	0.097	mg/L	1		6010D	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-42 (Continued) — Lab Sample ID: 280-184261-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium, Total	0.087		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Chromium, Total	0.0010	J B	0.0030	0.00050	mg/L	1		6020B	Total Recoverable
Manganese, Total	3.6		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Nickel, Total	0.00087	J	0.0040	0.00083	mg/L	1		6020B	Total Recoverable
Manganese, Dissolved	3.7		0.0010	0.00051	mg/L	1		6020B	Dissolved
Chloride	12		3.0	3.0	mg/L	1		300.0	Total/NA
Sulfate	6.8		5.0	5.0	mg/L	1		300.0	Total/NA
Ammonia (as N)	3.3		0.030	0.030	mg/L	1		350.1	Total/NA
Alkalinity, Total (As CaCO3)	190		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	190		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	230		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	34		4.0	4.0	mg/L	1		SM 2540D	Total/NA
Total Organic Carbon - Average	6.2		1.0	1.0	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-43 — Lab Sample ID: 280-184261-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Total	0.044	J B	0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	5.2	B	0.20	0.024	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	2.1		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	0.57	J	1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	2.7		1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.0047		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Chromium, Total	0.00065	J B	0.0030	0.00050	mg/L	1		6020B	Total Recoverable
Manganese, Total	0.0061		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Manganese, Dissolved	0.0043		0.0010	0.00051	mg/L	1		6020B	Dissolved
Ammonia (as N)	0.037		0.030	0.030	mg/L	1		350.1	Total/NA
Nitrate as N	1.5		0.050	0.050	mg/L	1		353.2	Total/NA
Alkalinity, Total (As CaCO3)	23		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	23		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	46		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Total Organic Carbon - Average	1.3		1.0	1.0	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-19C — Lab Sample ID: 280-184261-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.038		0.020	0.0040	ug/L	1		8260C SIM	Total/NA
Trichloroethene	1.0		1.0	0.46	ug/L	1		8260C	Total/NA
Iron, Total	0.15	B	0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	14	B	0.20	0.024	mg/L	1		6010D	Dissolved
Iron, Dissolved	0.11	B	0.060	0.0091	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	7.2		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	1.3		1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	5.5	B	1.0	0.097	mg/L	1		6010D	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-19C (Continued) — Lab Sample ID: 280-184261-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium, Total	0.0039		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Chromium, Total	0.00066	J B	0.0030	0.00050	mg/L	1		6020B	Total Recoverable
Manganese, Total	1.1		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Zinc, Total	0.0046	J	0.0050	0.0020	mg/L	1		6020B	Total Recoverable
Manganese, Dissolved	0.96		0.0010	0.00051	mg/L	1		6020B	Dissolved
Ammonia (as N)	0.50		0.030	0.030	mg/L	1		350.1	Total/NA
Alkalinity, Total (As CaCO3)	79		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	79		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	95		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-16 — Lab Sample ID: 280-184261-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Total	0.036	J B	0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	11	B	0.20	0.024	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	5.9		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	0.79	J	1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	4.8	B	1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.0038		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Chromium, Total	0.0081	B	0.0030	0.00050	mg/L	1		6020B	Total Recoverable
Manganese, Total	0.0036		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Nickel, Total	0.0017	J	0.0040	0.00083	mg/L	1		6020B	Total Recoverable
Vanadium, Total	0.0035		0.0020	0.0011	mg/L	1		6020B	Total Recoverable
Ammonia (as N)	0.12		0.030	0.030	mg/L	1		350.1	Total/NA
Alkalinity, Total (As CaCO3)	63		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	63		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	81		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-35 — Lab Sample ID: 280-184261-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium, Dissolved	14	B	0.20	0.024	mg/L	1		6010D	Dissolved
Iron, Dissolved	0.032	J B	0.060	0.0091	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	8.9		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	0.57	J	1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	5.1	B	1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.0030		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Chromium, Total	0.0028	J B	0.0030	0.00050	mg/L	1		6020B	Total Recoverable
Vanadium, Total	0.0043		0.0020	0.0011	mg/L	1		6020B	Total Recoverable
Manganese, Dissolved	0.00063	J	0.0010	0.00051	mg/L	1		6020B	Dissolved
Ammonia (as N)	0.037		0.030	0.030	mg/L	1		350.1	Total/NA
Nitrate as N	0.36		0.050	0.050	mg/L	1		353.2	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-35 (Continued) — Lab Sample ID: 280-184261-13

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity, Total (As CaCO3)	83		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	83		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	90		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-184261-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrahydrofuran	1.5	J	5.0	1.3	ug/L	1		8260C	Total/NA

Client Sample ID: DUP1 — Lab Sample ID: 280-184261-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt, Total	0.0019	J	0.0030	0.00056	mg/L	1		6010D	Total Recoverable
Iron, Total	3.7	B	0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	6.1	B	0.20	0.024	mg/L	1		6010D	Dissolved
Iron, Dissolved	3.4	B	0.060	0.0091	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	3.6		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	0.41	J	1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	3.4	B	1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.0056		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Chromium, Total	0.00096	J B	0.0030	0.00050	mg/L	1		6020B	Total Recoverable
Manganese, Total	1.2		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Nickel, Total	0.0017	J	0.0040	0.00083	mg/L	1		6020B	Total Recoverable
Manganese, Dissolved	1.1		0.0010	0.00051	mg/L	1		6020B	Dissolved
Ammonia (as N)	0.075		0.030	0.030	mg/L	1		350.1	Total/NA
Alkalinity, Total (As CaCO3)	36		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	36		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	51		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Total Organic Carbon - Average	1.6		1.0	1.0	mg/L	1		SM 5310B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184261-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	EET BUF
6010D	Metals (ICP)	SW846	EET DEN
6020B	Metals (ICP/MS)	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrate	EPA	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
SM 5310B	Organic Carbon, Total (TOC)	SM	EET DEN
Subcontract	Total Arsenic (ARI)	None	SC0056
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
SC0056 = Analytical Resources, Inc, 4611 South 134th Place, Suite 100, Tukwila, WA 98168, TEL (206)695-6200

Sample Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184261-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-184261-1	MW-36A	Water	11/08/23 12:51	11/09/23 09:40
280-184261-2	MW-13A	Water	11/08/23 11:36	11/09/23 09:40
280-184261-3	DUP2	Water	11/08/23 13:05	11/09/23 09:40
280-184261-4	MW-13B	Water	11/08/23 10:52	11/09/23 09:40
280-184261-5	MW-34A	Water	11/08/23 14:09	11/09/23 09:40
280-184261-6	MW-34C	Water	11/08/23 14:48	11/09/23 09:40
280-184261-7	MW-29A	Water	11/08/23 10:37	11/09/23 09:40
280-184261-8	MW-32	Water	11/08/23 11:40	11/09/23 09:40
280-184261-9	MW-42	Water	11/08/23 12:27	11/09/23 09:40
280-184261-10	MW-43	Water	11/08/23 13:13	11/09/23 09:40
280-184261-11	MW-19C	Water	11/08/23 13:57	11/09/23 09:40
280-184261-12	MW-16	Water	11/08/23 14:37	11/09/23 09:40
280-184261-13	MW-35	Water	11/08/23 15:02	11/09/23 09:40
280-184261-14	TRIP BLANK	Water	11/08/23 15:51	11/09/23 09:40
280-184261-15	DUP1	Water	11/08/23 10:48	11/09/23 09:40

Method: SW846 8260C SIM - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-36A
Date Collected: 11/08/23 12:51
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/14/23 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*115*		*50 - 150*		*11/14/23 21:00*	*1*
TBA-d9 (Surr)	*108*		*50 - 150*		*11/14/23 21:00*	*1*

Client Sample ID: MW-13A
Date Collected: 11/08/23 11:36
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/14/23 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*117*		*50 - 150*		*11/14/23 21:24*	*1*
TBA-d9 (Surr)	*104*		*50 - 150*		*11/14/23 21:24*	*1*

Client Sample ID: DUP2
Date Collected: 11/08/23 13:05
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/14/23 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*118*		*50 - 150*		*11/14/23 21:48*	*1*
TBA-d9 (Surr)	*122*		*50 - 150*		*11/14/23 21:48*	*1*

Client Sample ID: MW-13B
Date Collected: 11/08/23 10:52
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/14/23 22:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*120*		*50 - 150*		*11/14/23 22:12*	*1*
TBA-d9 (Surr)	*114*		*50 - 150*		*11/14/23 22:12*	*1*

Client Sample ID: MW-34A
Date Collected: 11/08/23 14:09
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/14/23 22:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*119*		*50 - 150*		*11/14/23 22:35*	*1*
TBA-d9 (Surr)	*97*		*50 - 150*		*11/14/23 22:35*	*1*

Client Sample ID: MW-34C
Date Collected: 11/08/23 14:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	**0.017**	**J**	0.020	0.0040	ug/L			11/14/23 23:00	1

Method: SW846 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	119		50 - 150		11/14/23 23:00	1
TBA-d9 (Surr)	97		50 - 150		11/14/23 23:00	1

Client Sample ID: MW-29A
Date Collected: 11/08/23 10:37
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/14/23 23:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	117		50 - 150		11/14/23 23:24	1
TBA-d9 (Surr)	95		50 - 150		11/14/23 23:24	1

Client Sample ID: MW-32
Date Collected: 11/08/23 11:40
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	**0.23**		0.020	0.0040	ug/L			11/14/23 23:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	116		50 - 150		11/14/23 23:47	1
TBA-d9 (Surr)	98		50 - 150		11/14/23 23:47	1

Client Sample ID: MW-42
Date Collected: 11/08/23 12:27
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	**0.065**		0.020	0.0040	ug/L			11/15/23 00:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	117		50 - 150		11/15/23 00:12	1
TBA-d9 (Surr)	102		50 - 150		11/15/23 00:12	1

Client Sample ID: MW-43
Date Collected: 11/08/23 13:13
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/15/23 00:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	116		50 - 150		11/15/23 00:35	1
TBA-d9 (Surr)	94		50 - 150		11/15/23 00:35	1

Client Sample ID: MW-19C
Date Collected: 11/08/23 13:57
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	**0.038**		0.020	0.0040	ug/L			11/15/23 00:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	118		50 - 150		11/15/23 00:59	1
TBA-d9 (Surr)	103		50 - 150		11/15/23 00:59	1

Method: SW846 8260C SIM - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-16
Date Collected: 11/08/23 14:37
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/15/23 01:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*122*		*50 - 150*		*11/15/23 01:23*	*1*
TBA-d9 (Surr)	*129*		*50 - 150*		*11/15/23 01:23*	*1*

Client Sample ID: MW-35
Date Collected: 11/08/23 15:02
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/15/23 01:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*120*		*50 - 150*		*11/15/23 01:47*	*1*
TBA-d9 (Surr)	*122*		*50 - 150*		*11/15/23 01:47*	*1*

Client Sample ID: TRIP BLANK
Date Collected: 11/08/23 15:51
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/15/23 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*122*		*50 - 150*		*11/15/23 02:11*	*1*
TBA-d9 (Surr)	*117*		*50 - 150*		*11/15/23 02:11*	*1*

Client Sample ID: DUP1
Date Collected: 11/08/23 10:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/15/23 02:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*122*		*50 - 150*		*11/15/23 02:34*	*1*
TBA-d9 (Surr)	*110*		*50 - 150*		*11/15/23 02:34*	*1*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: MW-36A
Date Collected: 11/08/23 12:51
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 00:43	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 00:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 00:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 00:43	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 00:43	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 00:43	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 00:43	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 00:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 00:43	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 00:43	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-36A
Date Collected: 11/08/23 12:51
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 00:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 00:43	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 00:43	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 00:43	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 00:43	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 00:43	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 00:43	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 00:43	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 00:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 00:43	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 00:43	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 00:43	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 00:43	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 00:43	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 00:43	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 00:43	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 00:43	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 00:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 00:43	1
Acetone	ND		10	3.0	ug/L			11/15/23 00:43	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 00:43	1
Acrolein	ND		20	0.91	ug/L			11/15/23 00:43	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 00:43	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 00:43	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 00:43	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 00:43	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 00:43	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 00:43	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 00:43	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 00:43	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 00:43	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 00:43	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 00:43	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 00:43	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 00:43	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 00:43	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 00:43	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 00:43	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 00:43	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 00:43	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 00:43	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 00:43	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 00:43	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 00:43	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 00:43	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 00:43	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 00:43	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 00:43	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 00:43	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-36A
Date Collected: 11/08/23 12:51
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 00:43	1
Hexane	ND		10	0.40	ug/L			11/15/23 00:43	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 00:43	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 00:43	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 00:43	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 00:43	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 00:43	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 00:43	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 00:43	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 00:43	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 00:43	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 00:43	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 00:43	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 00:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 00:43	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 00:43	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 00:43	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 00:43	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 00:43	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 00:43	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 00:43	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 00:43	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 00:43	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 00:43	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 00:43	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 00:43	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 00:43	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 00:43	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 00:43	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 00:43	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 00:43	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 00:43	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 00:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 00:43*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*77 - 120*		*11/15/23 00:43*	*1*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*		*11/15/23 00:43*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/15/23 00:43*	*1*

Client Sample ID: MW-13A
Date Collected: 11/08/23 11:36
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 01:06	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 01:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 01:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 01:06	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-13A
Date Collected: 11/08/23 11:36
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 01:06	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 01:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 01:06	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 01:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 01:06	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 01:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 01:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 01:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 01:06	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 01:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 01:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 01:06	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 01:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 01:06	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 01:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 01:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 01:06	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 01:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 01:06	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 01:06	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 01:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 01:06	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 01:06	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 01:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 01:06	1
Acetone	ND		10	3.0	ug/L			11/15/23 01:06	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 01:06	1
Acrolein	ND		20	0.91	ug/L			11/15/23 01:06	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 01:06	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 01:06	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 01:06	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 01:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 01:06	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 01:06	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 01:06	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 01:06	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 01:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 01:06	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 01:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 01:06	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 01:06	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 01:06	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 01:06	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 01:06	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 01:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 01:06	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 01:06	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 01:06	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 01:06	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-13A
Date Collected: 11/08/23 11:36
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 01:06	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 01:06	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 01:06	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 01:06	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 01:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 01:06	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 01:06	1
Hexane	ND		10	0.40	ug/L			11/15/23 01:06	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 01:06	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 01:06	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 01:06	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 01:06	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 01:06	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 01:06	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 01:06	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 01:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 01:06	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 01:06	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 01:06	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 01:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 01:06	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 01:06	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 01:06	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 01:06	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 01:06	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 01:06	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 01:06	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 01:06	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 01:06	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 01:06	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 01:06	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 01:06	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 01:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 01:06	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 01:06	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 01:06	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 01:06	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 01:06	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 01:06	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 01:06*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*11/15/23 01:06*	*1*
4-Bromofluorobenzene (Surr)	*110*		*73 - 120*		*11/15/23 01:06*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/15/23 01:06*	*1*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: DUP2
Date Collected: 11/08/23 13:05
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 01:29	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 01:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 01:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 01:29	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 01:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 01:29	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 01:29	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 01:29	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 01:29	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 01:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 01:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 01:29	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 01:29	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 01:29	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 01:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 01:29	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 01:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 01:29	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 01:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 01:29	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 01:29	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 01:29	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 01:29	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 01:29	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 01:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 01:29	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 01:29	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 01:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 01:29	1
Acetone	ND		10	3.0	ug/L			11/15/23 01:29	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 01:29	1
Acrolein	ND		20	0.91	ug/L			11/15/23 01:29	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 01:29	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 01:29	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 01:29	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 01:29	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 01:29	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 01:29	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 01:29	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 01:29	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 01:29	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 01:29	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 01:29	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 01:29	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 01:29	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 01:29	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 01:29	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 01:29	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 01:29	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: DUP2
Date Collected: 11/08/23 13:05
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 01:29	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 01:29	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 01:29	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 01:29	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 01:29	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 01:29	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 01:29	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 01:29	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 01:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 01:29	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 01:29	1
Hexane	ND		10	0.40	ug/L			11/15/23 01:29	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 01:29	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 01:29	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 01:29	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 01:29	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 01:29	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 01:29	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 01:29	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 01:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 01:29	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 01:29	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 01:29	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 01:29	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 01:29	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 01:29	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 01:29	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 01:29	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 01:29	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 01:29	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 01:29	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 01:29	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 01:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 01:29	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 01:29	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 01:29	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 01:29	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 01:29	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 01:29	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 01:29	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 01:29	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 01:29	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 01:29	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 01:29*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*11/15/23 01:29*	*1*
4-Bromofluorobenzene (Surr)	*113*		*73 - 120*		*11/15/23 01:29*	*1*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: DUP2
Date Collected: 11/08/23 13:05
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-3
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*80 - 120*		*11/15/23 01:29*	*1*

Client Sample ID: MW-13B
Date Collected: 11/08/23 10:52
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 01:51	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 01:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 01:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 01:51	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 01:51	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 01:51	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 01:51	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 01:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 01:51	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 01:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 01:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 01:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 01:51	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 01:51	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 01:51	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 01:51	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 01:51	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 01:51	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 01:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 01:51	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 01:51	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 01:51	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 01:51	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 01:51	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 01:51	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 01:51	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 01:51	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 01:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 01:51	1
Acetone	ND		10	3.0	ug/L			11/15/23 01:51	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 01:51	1
Acrolein	ND		20	0.91	ug/L			11/15/23 01:51	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 01:51	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 01:51	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 01:51	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 01:51	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 01:51	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 01:51	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 01:51	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 01:51	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 01:51	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 01:51	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 01:51	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-13B
Date Collected: 11/08/23 10:52
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 01:51	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 01:51	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 01:51	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 01:51	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 01:51	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 01:51	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 01:51	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 01:51	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 01:51	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 01:51	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 01:51	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 01:51	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 01:51	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 01:51	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 01:51	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 01:51	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 01:51	1
Hexane	ND		10	0.40	ug/L			11/15/23 01:51	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 01:51	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 01:51	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 01:51	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 01:51	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 01:51	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 01:51	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 01:51	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 01:51	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 01:51	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 01:51	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 01:51	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 01:51	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 01:51	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 01:51	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 01:51	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 01:51	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 01:51	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 01:51	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 01:51	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 01:51	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 01:51	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 01:51	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 01:51	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 01:51	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 01:51	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 01:51	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 01:51	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 01:51	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 01:51	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 01:51	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 01:51	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Hexachloroethane TIC	ND		ug/L			67-72-1		11/15/23 01:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		11/15/23 01:51	1
4-Bromofluorobenzene (Surr)	111		73 - 120		11/15/23 01:51	1
Toluene-d8 (Surr)	106		80 - 120		11/15/23 01:51	1

Client Sample ID: MW-34A
Date Collected: 11/08/23 14:09
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 02:14	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 02:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 02:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 02:14	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 02:14	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 02:14	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 02:14	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 02:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 02:14	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 02:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 02:14	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 02:14	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 02:14	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 02:14	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 02:14	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 02:14	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 02:14	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 02:14	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 02:14	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 02:14	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 02:14	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 02:14	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 02:14	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 02:14	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 02:14	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 02:14	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 02:14	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 02:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 02:14	1
Acetone	ND		10	3.0	ug/L			11/15/23 02:14	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 02:14	1
Acrolein	ND		20	0.91	ug/L			11/15/23 02:14	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 02:14	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 02:14	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 02:14	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 02:14	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 02:14	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 02:14	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 02:14	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 02:14	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 02:14	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-34A
Date Collected: 11/08/23 14:09
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 02:14	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 02:14	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 02:14	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 02:14	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 02:14	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 02:14	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 02:14	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 02:14	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 02:14	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 02:14	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 02:14	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 02:14	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 02:14	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 02:14	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 02:14	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 02:14	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 02:14	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 02:14	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 02:14	1
Hexane	ND		10	0.40	ug/L			11/15/23 02:14	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 02:14	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 02:14	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 02:14	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 02:14	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 02:14	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 02:14	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 02:14	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 02:14	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 02:14	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 02:14	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 02:14	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 02:14	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 02:14	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 02:14	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 02:14	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 02:14	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 02:14	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 02:14	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 02:14	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 02:14	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 02:14	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 02:14	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 02:14	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 02:14	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 02:14	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 02:14	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 02:14	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 02:14	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 02:14	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-34A
Date Collected: 11/08/23 14:09
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 02:14	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 02:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 02:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*11/15/23 02:14*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*11/15/23 02:14*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/15/23 02:14*	*1*

Client Sample ID: MW-34C
Date Collected: 11/08/23 14:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 02:36	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 02:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 02:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 02:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 02:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 02:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 02:36	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 02:36	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 02:36	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 02:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 02:36	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 02:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 02:36	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 02:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 02:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 02:36	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 02:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 02:36	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 02:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 02:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 02:36	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 02:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 02:36	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 02:36	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 02:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 02:36	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 02:36	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 02:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 02:36	1
Acetone	ND		10	3.0	ug/L			11/15/23 02:36	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 02:36	1
Acrolein	ND		20	0.91	ug/L			11/15/23 02:36	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 02:36	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 02:36	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 02:36	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-34C
Date Collected: 11/08/23 14:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 02:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 02:36	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 02:36	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 02:36	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 02:36	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 02:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 02:36	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 02:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 02:36	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 02:36	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 02:36	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 02:36	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 02:36	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 02:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 02:36	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 02:36	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 02:36	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 02:36	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 02:36	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 02:36	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 02:36	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 02:36	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 02:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 02:36	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 02:36	1
Hexane	ND		10	0.40	ug/L			11/15/23 02:36	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 02:36	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 02:36	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 02:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 02:36	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 02:36	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 02:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 02:36	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 02:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 02:36	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 02:36	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 02:36	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 02:36	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 02:36	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 02:36	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 02:36	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 02:36	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 02:36	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 02:36	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 02:36	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 02:36	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 02:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 02:36	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 02:36	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-34C
Date Collected: 11/08/23 14:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0	0.51	ug/L			11/15/23 02:36	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 02:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 02:36	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 02:36	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 02:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 02:36	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 02:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 02:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 02:36*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*11/15/23 02:36*	*1*
4-Bromofluorobenzene (Surr)	*111*		*73 - 120*		*11/15/23 02:36*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*11/15/23 02:36*	*1*

Client Sample ID: MW-29A
Date Collected: 11/08/23 10:37
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 02:59	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 02:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 02:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 02:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 02:59	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 02:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 02:59	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 02:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 02:59	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 02:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 02:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 02:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 02:59	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 02:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 02:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 02:59	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 02:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 02:59	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 02:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 02:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 02:59	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 02:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 02:59	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 02:59	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 02:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 02:59	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 02:59	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 02:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 02:59	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-29A
Date Collected: 11/08/23 10:37
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	3.0	ug/L			11/15/23 02:59	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 02:59	1
Acrolein	ND		20	0.91	ug/L			11/15/23 02:59	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 02:59	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 02:59	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 02:59	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 02:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 02:59	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 02:59	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 02:59	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 02:59	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 02:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 02:59	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 02:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 02:59	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 02:59	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 02:59	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 02:59	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 02:59	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 02:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 02:59	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 02:59	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 02:59	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 02:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 02:59	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 02:59	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 02:59	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 02:59	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 02:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 02:59	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 02:59	1
Hexane	ND		10	0.40	ug/L			11/15/23 02:59	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 02:59	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 02:59	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 02:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 02:59	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 02:59	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 02:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 02:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 02:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 02:59	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 02:59	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 02:59	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 02:59	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 02:59	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 02:59	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 02:59	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 02:59	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 02:59	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-29A
Date Collected: 11/08/23 10:37
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 02:59	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 02:59	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 02:59	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 02:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 02:59	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 02:59	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 02:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 02:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 02:59	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 02:59	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 02:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 02:59	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 02:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 02:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 02:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*11/15/23 02:59*	*1*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*11/15/23 02:59*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*11/15/23 02:59*	*1*

Client Sample ID: MW-32
Date Collected: 11/08/23 11:40
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 03:22	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 03:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 03:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 03:22	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 03:22	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 03:22	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 03:22	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 03:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 03:22	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 03:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 03:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 03:22	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 03:22	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 03:22	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 03:22	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 03:22	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 03:22	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 03:22	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 03:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 03:22	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 03:22	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 03:22	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 03:22	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-32
Date Collected: 11/08/23 11:40
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 03:22	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 03:22	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 03:22	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 03:22	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 03:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 03:22	1
Acetone	ND		10	3.0	ug/L			11/15/23 03:22	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 03:22	1
Acrolein	ND		20	0.91	ug/L			11/15/23 03:22	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 03:22	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 03:22	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 03:22	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 03:22	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 03:22	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 03:22	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 03:22	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 03:22	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 03:22	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 03:22	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 03:22	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 03:22	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 03:22	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 03:22	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 03:22	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 03:22	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 03:22	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 03:22	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 03:22	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 03:22	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 03:22	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 03:22	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 03:22	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 03:22	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 03:22	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 03:22	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 03:22	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 03:22	1
Hexane	ND		10	0.40	ug/L			11/15/23 03:22	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 03:22	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 03:22	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 03:22	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 03:22	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 03:22	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 03:22	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 03:22	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 03:22	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 03:22	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 03:22	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 03:22	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-32
Date Collected: 11/08/23 11:40
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 03:22	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 03:22	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 03:22	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 03:22	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 03:22	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 03:22	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 03:22	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 03:22	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 03:22	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 03:22	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 03:22	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 03:22	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 03:22	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 03:22	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 03:22	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 03:22	1
Trichloroethene	**0.48**	**J**	1.0	0.46	ug/L			11/15/23 03:22	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 03:22	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 03:22	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 03:22	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 03:22*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*11/15/23 03:22*	*1*
4-Bromofluorobenzene (Surr)	*110*		*73 - 120*		*11/15/23 03:22*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*11/15/23 03:22*	*1*

Client Sample ID: MW-42
Date Collected: 11/08/23 12:27
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 03:44	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 03:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 03:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 03:44	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 03:44	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 03:44	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 03:44	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 03:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 03:44	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 03:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 03:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 03:44	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 03:44	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 03:44	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 03:44	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 03:44	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 03:44	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-42
Date Collected: 11/08/23 12:27
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 03:44	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 03:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 03:44	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 03:44	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 03:44	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 03:44	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 03:44	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 03:44	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 03:44	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 03:44	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 03:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 03:44	1
Acetone	ND		10	3.0	ug/L			11/15/23 03:44	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 03:44	1
Acrolein	ND		20	0.91	ug/L			11/15/23 03:44	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 03:44	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 03:44	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 03:44	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 03:44	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 03:44	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 03:44	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 03:44	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 03:44	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 03:44	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 03:44	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 03:44	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 03:44	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 03:44	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 03:44	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 03:44	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 03:44	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 03:44	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 03:44	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 03:44	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 03:44	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 03:44	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 03:44	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 03:44	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 03:44	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 03:44	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 03:44	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 03:44	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 03:44	1
Hexane	ND		10	0.40	ug/L			11/15/23 03:44	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 03:44	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 03:44	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 03:44	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 03:44	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 03:44	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-42
Date Collected: 11/08/23 12:27
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 03:44	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 03:44	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 03:44	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 03:44	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 03:44	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 03:44	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 03:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 03:44	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 03:44	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 03:44	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 03:44	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 03:44	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 03:44	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 03:44	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 03:44	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 03:44	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 03:44	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 03:44	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 03:44	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 03:44	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 03:44	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 03:44	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 03:44	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 03:44	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 03:44	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 03:44	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 03:44*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*11/15/23 03:44*	*1*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*11/15/23 03:44*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*11/15/23 03:44*	*1*

Client Sample ID: MW-43
Date Collected: 11/08/23 13:13
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 04:06	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 04:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 04:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 04:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 04:06	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 04:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 04:06	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 04:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 04:06	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 04:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 04:06	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-43
Date Collected: 11/08/23 13:13
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 04:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 04:06	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 04:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 04:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 04:06	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 04:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 04:06	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 04:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 04:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 04:06	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 04:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 04:06	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 04:06	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 04:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 04:06	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 04:06	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 04:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 04:06	1
Acetone	ND		10	3.0	ug/L			11/15/23 04:06	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 04:06	1
Acrolein	ND		20	0.91	ug/L			11/15/23 04:06	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 04:06	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 04:06	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 04:06	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 04:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 04:06	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 04:06	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 04:06	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 04:06	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 04:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 04:06	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 04:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 04:06	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 04:06	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 04:06	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 04:06	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 04:06	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 04:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 04:06	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 04:06	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 04:06	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 04:06	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 04:06	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 04:06	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 04:06	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 04:06	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 04:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 04:06	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 04:06	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-43
Date Collected: 11/08/23 13:13
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexane	ND		10	0.40	ug/L			11/15/23 04:06	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 04:06	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 04:06	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 04:06	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 04:06	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 04:06	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 04:06	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 04:06	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 04:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 04:06	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 04:06	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 04:06	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 04:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 04:06	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 04:06	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 04:06	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 04:06	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 04:06	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 04:06	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 04:06	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 04:06	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 04:06	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 04:06	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 04:06	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 04:06	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 04:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 04:06	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 04:06	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 04:06	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 04:06	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 04:06	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 04:06	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 04:06*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*11/15/23 04:06*	*1*
4-Bromofluorobenzene (Surr)	*110*		*73 - 120*		*11/15/23 04:06*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*11/15/23 04:06*	*1*

Client Sample ID: MW-19C
Date Collected: 11/08/23 13:57
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 04:28	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 04:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 04:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 04:28	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 04:28	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-19C
Date Collected: 11/08/23 13:57
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 04:28	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 04:28	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 04:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 04:28	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 04:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 04:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 04:28	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 04:28	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 04:28	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 04:28	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 04:28	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 04:28	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 04:28	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 04:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 04:28	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 04:28	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 04:28	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 04:28	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 04:28	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 04:28	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 04:28	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 04:28	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 04:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 04:28	1
Acetone	ND		10	3.0	ug/L			11/15/23 04:28	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 04:28	1
Acrolein	ND		20	0.91	ug/L			11/15/23 04:28	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 04:28	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 04:28	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 04:28	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 04:28	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 04:28	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 04:28	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 04:28	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 04:28	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 04:28	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 04:28	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 04:28	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 04:28	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 04:28	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 04:28	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 04:28	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 04:28	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 04:28	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 04:28	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 04:28	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 04:28	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 04:28	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 04:28	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-19C
Date Collected: 11/08/23 13:57
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 04:28	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 04:28	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 04:28	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 04:28	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 04:28	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 04:28	1
Hexane	ND		10	0.40	ug/L			11/15/23 04:28	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 04:28	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 04:28	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 04:28	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 04:28	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 04:28	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 04:28	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 04:28	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 04:28	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 04:28	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 04:28	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 04:28	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 04:28	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 04:28	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 04:28	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 04:28	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 04:28	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 04:28	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 04:28	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 04:28	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 04:28	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 04:28	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 04:28	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 04:28	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 04:28	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 04:28	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 04:28	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 04:28	1
Trichloroethene	**1.0**		1.0	0.46	ug/L			11/15/23 04:28	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 04:28	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 04:28	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 04:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 04:28*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*11/15/23 04:28*	*1*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*11/15/23 04:28*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*11/15/23 04:28*	*1*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: MW-16
Date Collected: 11/08/23 14:37
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 04:51	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 04:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 04:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 04:51	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 04:51	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 04:51	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 04:51	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 04:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 04:51	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 04:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 04:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 04:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 04:51	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 04:51	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 04:51	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 04:51	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 04:51	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 04:51	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 04:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 04:51	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 04:51	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 04:51	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 04:51	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 04:51	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 04:51	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 04:51	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 04:51	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 04:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 04:51	1
Acetone	ND		10	3.0	ug/L			11/15/23 04:51	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 04:51	1
Acrolein	ND		20	0.91	ug/L			11/15/23 04:51	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 04:51	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 04:51	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 04:51	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 04:51	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 04:51	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 04:51	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 04:51	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 04:51	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 04:51	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 04:51	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 04:51	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 04:51	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 04:51	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 04:51	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 04:51	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 04:51	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 04:51	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-16
Date Collected: 11/08/23 14:37
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 04:51	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 04:51	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 04:51	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 04:51	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 04:51	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 04:51	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 04:51	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 04:51	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 04:51	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 04:51	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 04:51	1
Hexane	ND		10	0.40	ug/L			11/15/23 04:51	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 04:51	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 04:51	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 04:51	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 04:51	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 04:51	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 04:51	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 04:51	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 04:51	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 04:51	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 04:51	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 04:51	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 04:51	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 04:51	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 04:51	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 04:51	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 04:51	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 04:51	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 04:51	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 04:51	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 04:51	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 04:51	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 04:51	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 04:51	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 04:51	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 04:51	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 04:51	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 04:51	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 04:51	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 04:51	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 04:51	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 04:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 04:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*11/15/23 04:51*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*11/15/23 04:51*	*1*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-16
Date Collected: 11/08/23 14:37
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-12
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/15/23 04:51*	*1*

Client Sample ID: MW-35
Date Collected: 11/08/23 15:02
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 05:14	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 05:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 05:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 05:14	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 05:14	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 05:14	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 05:14	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 05:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 05:14	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 05:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 05:14	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 05:14	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 05:14	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 05:14	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 05:14	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 05:14	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 05:14	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 05:14	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 05:14	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 05:14	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 05:14	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 05:14	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 05:14	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 05:14	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 05:14	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 05:14	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 05:14	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 05:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 05:14	1
Acetone	ND		10	3.0	ug/L			11/15/23 05:14	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 05:14	1
Acrolein	ND		20	0.91	ug/L			11/15/23 05:14	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 05:14	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 05:14	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 05:14	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 05:14	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 05:14	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 05:14	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 05:14	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 05:14	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 05:14	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 05:14	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 05:14	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-35
Date Collected: 11/08/23 15:02
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 05:14	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 05:14	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 05:14	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 05:14	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 05:14	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 05:14	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 05:14	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 05:14	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 05:14	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 05:14	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 05:14	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 05:14	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 05:14	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 05:14	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 05:14	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 05:14	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 05:14	1
Hexane	ND		10	0.40	ug/L			11/15/23 05:14	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 05:14	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 05:14	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 05:14	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 05:14	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 05:14	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 05:14	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 05:14	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 05:14	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 05:14	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 05:14	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 05:14	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 05:14	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 05:14	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 05:14	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 05:14	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 05:14	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 05:14	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 05:14	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 05:14	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 05:14	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 05:14	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 05:14	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 05:14	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 05:14	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 05:14	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 05:14	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 05:14	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 05:14	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 05:14	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 05:14	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 05:14	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Hexachloroethane TIC	ND		ug/L			67-72-1		11/15/23 05:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		77 - 120		11/15/23 05:14	1
4-Bromofluorobenzene (Surr)	107		73 - 120		11/15/23 05:14	1
Toluene-d8 (Surr)	108		80 - 120		11/15/23 05:14	1

Client Sample ID: TRIP BLANK
Date Collected: 11/08/23 15:51
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 05:37	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 05:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 05:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 05:37	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 05:37	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 05:37	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 05:37	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 05:37	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 05:37	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 05:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 05:37	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 05:37	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 05:37	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 05:37	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 05:37	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 05:37	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 05:37	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 05:37	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 05:37	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 05:37	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 05:37	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 05:37	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 05:37	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 05:37	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 05:37	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 05:37	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 05:37	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 05:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 05:37	1
Acetone	ND		10	3.0	ug/L			11/15/23 05:37	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 05:37	1
Acrolein	ND		20	0.91	ug/L			11/15/23 05:37	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 05:37	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 05:37	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 05:37	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 05:37	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 05:37	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 05:37	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 05:37	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 05:37	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 05:37	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: TRIP BLANK
Date Collected: 11/08/23 15:51
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 05:37	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 05:37	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 05:37	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 05:37	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 05:37	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 05:37	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 05:37	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 05:37	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 05:37	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 05:37	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 05:37	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 05:37	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 05:37	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 05:37	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 05:37	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 05:37	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 05:37	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 05:37	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 05:37	1
Hexane	ND		10	0.40	ug/L			11/15/23 05:37	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 05:37	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 05:37	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 05:37	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 05:37	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 05:37	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 05:37	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 05:37	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 05:37	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 05:37	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 05:37	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 05:37	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 05:37	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 05:37	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 05:37	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 05:37	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 05:37	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 05:37	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 05:37	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 05:37	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 05:37	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 05:37	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 05:37	1
Tetrahydrofuran	**1.5**	**J**	5.0	1.3	ug/L			11/15/23 05:37	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 05:37	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 05:37	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 05:37	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 05:37	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 05:37	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 05:37	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: TRIP BLANK
Date Collected: 11/08/23 15:51
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 05:37	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 05:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 05:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*11/15/23 05:37*	*1*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*11/15/23 05:37*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*11/15/23 05:37*	*1*

Client Sample ID: DUP1
Date Collected: 11/08/23 10:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 05:59	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 05:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 05:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 05:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 05:59	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 05:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 05:59	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 05:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 05:59	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 05:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 05:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 05:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 05:59	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 05:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 05:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 05:59	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 05:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 05:59	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 05:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 05:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 05:59	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 05:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 05:59	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 05:59	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 05:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 05:59	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 05:59	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 05:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 05:59	1
Acetone	ND		10	3.0	ug/L			11/15/23 05:59	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 05:59	1
Acrolein	ND		20	0.91	ug/L			11/15/23 05:59	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 05:59	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 05:59	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 05:59	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: DUP1
Date Collected: 11/08/23 10:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 05:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 05:59	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 05:59	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 05:59	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 05:59	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 05:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 05:59	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 05:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 05:59	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 05:59	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 05:59	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 05:59	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 05:59	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 05:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 05:59	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 05:59	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 05:59	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 05:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 05:59	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 05:59	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 05:59	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 05:59	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 05:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 05:59	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 05:59	1
Hexane	ND		10	0.40	ug/L			11/15/23 05:59	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 05:59	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 05:59	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 05:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 05:59	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 05:59	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 05:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 05:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 05:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 05:59	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 05:59	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 05:59	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 05:59	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 05:59	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 05:59	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 05:59	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 05:59	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 05:59	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 05:59	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 05:59	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 05:59	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 05:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 05:59	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 05:59	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: DUP1
Date Collected: 11/08/23 10:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0	0.51	ug/L			11/15/23 05:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 05:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 05:59	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 05:59	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 05:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 05:59	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 05:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 05:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 05:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*11/15/23 05:59*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*11/15/23 05:59*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*11/15/23 05:59*	*1*

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Client Sample ID: MW-36A
Date Collected: 11/08/23 12:51
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 19:00	1
Iron, Total	**0.096**	**B**	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 19:00	1

Client Sample ID: MW-13A
Date Collected: 11/08/23 11:36
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 19:04	1
Iron, Total	ND		0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 19:04	1

Client Sample ID: DUP2
Date Collected: 11/08/23 13:05
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 19:09	1
Iron, Total	**0.068**	**B**	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 19:09	1

Client Sample ID: MW-13B
Date Collected: 11/08/23 10:52
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 19:13	1
Iron, Total	**0.0098**	**J B**	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 19:13	1

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Client Sample ID: MW-34A
Date Collected: 11/08/23 14:09
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 19:17	1
Iron, Total	**0.027**	**J B**	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 19:17	1

Client Sample ID: MW-34C
Date Collected: 11/08/23 14:48
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	**0.0012**	**J**	0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 19:21	1
Iron, Total	**26**	**B**	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 19:21	1

Client Sample ID: MW-29A
Date Collected: 11/08/23 10:37
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	**0.0019**	**J**	0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 19:26	1
Iron, Total	**3.5**	**B**	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 19:26	1

Client Sample ID: MW-32
Date Collected: 11/08/23 11:40
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 19:30	1
Iron, Total	**0.64**	**B**	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 19:30	1

Client Sample ID: MW-42
Date Collected: 11/08/23 12:27
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	**0.0011**	**J**	0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 22:12	1
Iron, Total	**24**	**B**	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 22:12	1

Client Sample ID: MW-43
Date Collected: 11/08/23 13:13
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 22:16	1
Iron, Total	**0.044**	**J B**	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 22:16	1

Client Sample ID: MW-19C
Date Collected: 11/08/23 13:57
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 22:20	1
Iron, Total	**0.15**	**B**	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 22:20	1

Client Sample ID: MW-16
Date Collected: 11/08/23 14:37
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 22:25	1
Iron, Total	**0.036**	**J B**	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 22:25	1

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Client Sample ID: MW-35
Date Collected: 11/08/23 15:02
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 22:29	1
Iron, Total	ND		0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 22:29	1

Client Sample ID: DUP1
Date Collected: 11/08/23 10:48
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	**0.0019**	**J**	0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 22:33	1
Iron, Total	**3.7**	**B**	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 22:33	1

Method: SW846 6010D - Metals (ICP) - Dissolved

Client Sample ID: MW-36A
Date Collected: 11/08/23 12:51
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**8.8**	**B**	0.20	0.024	mg/L		11/26/23 16:04	11/27/23 15:29	1
Iron, Dissolved	ND		0.060	0.0091	mg/L		11/26/23 16:04	11/27/23 15:29	1
Magnesium, Dissolved	**6.1**		0.050	0.0042	mg/L		11/26/23 16:04	11/27/23 15:29	1
Potassium, Dissolved	**0.81**	**J**	1.0	0.24	mg/L		11/26/23 16:04	11/27/23 15:29	1
Sodium, Dissolved	**5.8**		1.0	0.097	mg/L		11/26/23 16:04	11/27/23 15:29	1

Client Sample ID: MW-13A
Date Collected: 11/08/23 11:36
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**16**	**B**	0.20	0.024	mg/L		11/26/23 16:04	11/27/23 15:33	1
Iron, Dissolved	ND		0.060	0.0091	mg/L		11/26/23 16:04	11/27/23 15:33	1
Magnesium, Dissolved	**9.1**		0.050	0.0042	mg/L		11/26/23 16:04	11/27/23 15:33	1
Potassium, Dissolved	**0.59**	**J**	1.0	0.24	mg/L		11/26/23 16:04	11/27/23 15:33	1
Sodium, Dissolved	**5.1**		1.0	0.097	mg/L		11/26/23 16:04	11/27/23 15:33	1

Client Sample ID: DUP2
Date Collected: 11/08/23 13:05
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**8.9**	**B**	0.20	0.024	mg/L		11/26/23 16:04	11/27/23 15:37	1
Iron, Dissolved	**0.0091**	**J B**	0.060	0.0091	mg/L		11/26/23 16:04	11/27/23 15:37	1
Magnesium, Dissolved	**6.1**		0.050	0.0042	mg/L		11/26/23 16:04	11/27/23 15:37	1
Potassium, Dissolved	**0.84**	**J**	1.0	0.24	mg/L		11/26/23 16:04	11/27/23 15:37	1
Sodium, Dissolved	**5.8**		1.0	0.097	mg/L		11/26/23 16:04	11/27/23 15:37	1

Client Sample ID: MW-13B
Date Collected: 11/08/23 10:52
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**16**	**B**	0.20	0.024	mg/L		11/26/23 16:04	11/27/23 15:42	1
Iron, Dissolved	ND		0.060	0.0091	mg/L		11/26/23 16:04	11/27/23 15:42	1
Magnesium, Dissolved	**8.0**		0.050	0.0042	mg/L		11/26/23 16:04	11/27/23 15:42	1
Potassium, Dissolved	**0.58**	**J**	1.0	0.24	mg/L		11/26/23 16:04	11/27/23 15:42	1
Sodium, Dissolved	**4.7**		1.0	0.097	mg/L		11/26/23 16:04	11/27/23 15:42	1

Method: SW846 6010D - Metals (ICP) - Dissolved

Client Sample ID: MW-34A
Date Collected: 11/08/23 14:09
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	15	B	0.20	0.024	mg/L		11/26/23 16:04	11/27/23 15:46	1
Iron, Dissolved	ND		0.060	0.0091	mg/L		11/26/23 16:04	11/27/23 15:46	1
Magnesium, Dissolved	7.0		0.050	0.0042	mg/L		11/26/23 16:04	11/27/23 15:46	1
Potassium, Dissolved	0.58	J	1.0	0.24	mg/L		11/26/23 16:04	11/27/23 15:46	1
Sodium, Dissolved	7.9		1.0	0.097	mg/L		11/26/23 16:04	11/27/23 15:46	1

Client Sample ID: MW-34C
Date Collected: 11/08/23 14:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	17	B	0.20	0.024	mg/L		11/26/23 16:04	11/27/23 15:50	1
Iron, Dissolved	1.0	B	0.060	0.0091	mg/L		11/26/23 16:04	11/27/23 15:50	1
Magnesium, Dissolved	7.2		0.050	0.0042	mg/L		11/26/23 16:04	11/27/23 15:50	1
Potassium, Dissolved	0.78	J	1.0	0.24	mg/L		11/26/23 16:04	11/27/23 15:50	1
Sodium, Dissolved	8.7		1.0	0.097	mg/L		11/26/23 16:04	11/27/23 15:50	1

Client Sample ID: MW-29A
Date Collected: 11/08/23 10:37
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	5.8	B	0.20	0.024	mg/L		11/26/23 16:04	11/27/23 15:55	1
Iron, Dissolved	3.5	B	0.060	0.0091	mg/L		11/26/23 16:04	11/27/23 15:55	1
Magnesium, Dissolved	3.5		0.050	0.0042	mg/L		11/26/23 16:04	11/27/23 15:55	1
Potassium, Dissolved	0.31	J	1.0	0.24	mg/L		11/26/23 16:04	11/27/23 15:55	1
Sodium, Dissolved	3.2		1.0	0.097	mg/L		11/26/23 16:04	11/27/23 15:55	1

Client Sample ID: MW-32
Date Collected: 11/08/23 11:40
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	28	B	0.20	0.024	mg/L		11/26/23 16:04	11/27/23 15:59	1
Iron, Dissolved	0.64	B	0.060	0.0091	mg/L		11/26/23 16:04	11/27/23 15:59	1
Magnesium, Dissolved	14		0.050	0.0042	mg/L		11/26/23 16:04	11/27/23 15:59	1
Potassium, Dissolved	1.1		1.0	0.24	mg/L		11/26/23 16:04	11/27/23 15:59	1
Sodium, Dissolved	11		1.0	0.097	mg/L		11/26/23 16:04	11/27/23 15:59	1

Client Sample ID: MW-42
Date Collected: 11/08/23 12:27
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	38	B	0.20	0.024	mg/L		11/26/23 16:04	11/27/23 16:21	1
Iron, Dissolved	25	B	0.060	0.0091	mg/L		11/26/23 16:04	11/27/23 16:21	1
Magnesium, Dissolved	13		0.050	0.0042	mg/L		11/26/23 16:04	11/27/23 16:21	1
Potassium, Dissolved	7.9		1.0	0.24	mg/L		11/26/23 16:04	11/27/23 16:21	1
Sodium, Dissolved	17		1.0	0.097	mg/L		11/26/23 16:04	11/27/23 16:21	1

Client Sample ID: MW-43
Date Collected: 11/08/23 13:13
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	5.2	B	0.20	0.024	mg/L		11/26/23 16:04	11/27/23 16:25	1

Method: SW846 6010D - Metals (ICP) - Dissolved (Continued)

Client Sample ID: MW-43
Date Collected: 11/08/23 13:13
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	ND		0.060	0.0091	mg/L		11/26/23 16:04	11/27/23 16:25	1
Magnesium, Dissolved	2.1		0.050	0.0042	mg/L		11/26/23 16:04	11/27/23 16:25	1
Potassium, Dissolved	0.57	J	1.0	0.24	mg/L		11/26/23 16:04	11/27/23 16:25	1
Sodium, Dissolved	2.7		1.0	0.097	mg/L		11/26/23 16:04	11/27/23 16:25	1

Client Sample ID: MW-19C
Date Collected: 11/08/23 13:57
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	14	B	0.20	0.024	mg/L		11/22/23 08:54	11/22/23 22:19	1
Iron, Dissolved	0.11	B	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 22:19	1
Magnesium, Dissolved	7.2		0.050	0.0042	mg/L		11/22/23 08:54	11/22/23 22:19	1
Potassium, Dissolved	1.3		1.0	0.24	mg/L		11/22/23 08:54	11/22/23 22:19	1
Sodium, Dissolved	5.5	B	1.0	0.097	mg/L		11/22/23 08:54	11/22/23 22:19	1

Client Sample ID: MW-16
Date Collected: 11/08/23 14:37
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	11	B	0.20	0.024	mg/L		11/22/23 08:54	11/22/23 22:24	1
Iron, Dissolved	ND		0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 22:24	1
Magnesium, Dissolved	5.9		0.050	0.0042	mg/L		11/22/23 08:54	11/22/23 22:24	1
Potassium, Dissolved	0.79	J	1.0	0.24	mg/L		11/22/23 08:54	11/22/23 22:24	1
Sodium, Dissolved	4.8	B	1.0	0.097	mg/L		11/22/23 08:54	11/22/23 22:24	1

Client Sample ID: MW-35
Date Collected: 11/08/23 15:02
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	14	B	0.20	0.024	mg/L		11/22/23 08:54	11/22/23 22:28	1
Iron, Dissolved	0.032	J B	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 22:28	1
Magnesium, Dissolved	8.9		0.050	0.0042	mg/L		11/22/23 08:54	11/22/23 22:28	1
Potassium, Dissolved	0.57	J	1.0	0.24	mg/L		11/22/23 08:54	11/22/23 22:28	1
Sodium, Dissolved	5.1	B	1.0	0.097	mg/L		11/22/23 08:54	11/22/23 22:28	1

Client Sample ID: DUP1
Date Collected: 11/08/23 10:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	6.1	B	0.20	0.024	mg/L		11/22/23 08:54	11/22/23 22:32	1
Iron, Dissolved	3.4	B	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 22:32	1
Magnesium, Dissolved	3.6		0.050	0.0042	mg/L		11/22/23 08:54	11/22/23 22:32	1
Potassium, Dissolved	0.41	J	1.0	0.24	mg/L		11/22/23 08:54	11/22/23 22:32	1
Sodium, Dissolved	3.4	B	1.0	0.097	mg/L		11/22/23 08:54	11/22/23 22:32	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Client Sample ID: MW-36A
Date Collected: 11/08/23 12:51
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 16:51	1
Barium, Total	**0.0024**		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 16:51	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 16:51	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 16:51	1
Chromium, Total	**0.0098**	**B**	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 16:51	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 16:51	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 16:51	1
Manganese, Total	**0.0047**		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 16:51	1
Nickel, Total	**0.0014**	**J**	0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 16:51	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 16:51	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 16:51	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 16:51	1
Vanadium, Total	**0.0023**		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 16:51	1
Zinc, Total	**0.0023**	**J B**	0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 16:51	1

Client Sample ID: MW-13A
Date Collected: 11/08/23 11:36
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 16:55	1
Barium, Total	**0.0027**		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 16:55	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 16:55	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 16:55	1
Chromium, Total	**0.0024**	**J B**	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 16:55	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 16:55	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 16:55	1
Manganese, Total	ND		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 16:55	1
Nickel, Total	ND		0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 16:55	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 16:55	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 16:55	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 16:55	1
Vanadium, Total	**0.0037**		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 16:55	1
Zinc, Total	ND		0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 16:55	1

Client Sample ID: DUP2
Date Collected: 11/08/23 13:05
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 17:03	1
Barium, Total	**0.0020**		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 17:03	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 17:03	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 17:03	1
Chromium, Total	**0.011**	**B**	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 17:03	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 17:03	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 17:03	1
Manganese, Total	**0.0034**		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 17:03	1
Nickel, Total	**0.0012**	**J**	0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 17:03	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 17:03	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 17:03	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 17:03	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Client Sample ID: DUP2
Date Collected: 11/08/23 13:05
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium, Total	**0.0025**		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 17:03	1
Zinc, Total	**0.0021**	**J B**	0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 17:03	1

Client Sample ID: MW-13B
Date Collected: 11/08/23 10:52
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 17:07	1
Barium, Total	**0.0032**		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 17:07	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 17:07	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 17:07	1
Chromium, Total	**0.0034**	**B**	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 17:07	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 17:07	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 17:07	1
Manganese, Total	ND		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 17:07	1
Nickel, Total	ND		0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 17:07	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 17:07	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 17:07	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 17:07	1
Vanadium, Total	**0.0051**		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 17:07	1
Zinc, Total	ND		0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 17:07	1

Client Sample ID: MW-34A
Date Collected: 11/08/23 14:09
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 17:10	1
Barium, Total	**0.0039**		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 17:10	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 17:10	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 17:10	1
Chromium, Total	**0.0038**	**B**	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 17:10	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 17:10	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 17:10	1
Manganese, Total	**0.0012**		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 17:10	1
Nickel, Total	**0.0024**	**J**	0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 17:10	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 17:10	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 17:10	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 17:10	1
Vanadium, Total	**0.0039**		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 17:10	1
Zinc, Total	ND		0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 17:10	1

Client Sample ID: MW-34C
Date Collected: 11/08/23 14:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 17:14	1
Barium, Total	**0.13**		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 17:14	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 17:14	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 17:14	1
Chromium, Total	**0.0010**	**J B**	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 17:14	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Client Sample ID: MW-34C
Date Collected: 11/08/23 14:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper, Total	**0.0030**		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 17:14	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 17:14	1
Manganese, Total	**1.6**		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 17:14	1
Nickel, Total	ND		0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 17:14	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 17:14	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 17:14	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 17:14	1
Vanadium, Total	**0.0022**		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 17:14	1
Zinc, Total	**0.0031**	**J B**	0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 17:14	1

Client Sample ID: MW-29A
Date Collected: 11/08/23 10:37
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 17:17	1
Barium, Total	**0.0050**		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 17:17	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 17:17	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 17:17	1
Chromium, Total	**0.00085**	**J B**	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 17:17	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 17:17	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 17:17	1
Manganese, Total	**1.1**		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 17:17	1
Nickel, Total	**0.0016**	**J**	0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 17:17	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 17:17	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 17:17	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 17:17	1
Vanadium, Total	ND		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 17:17	1
Zinc, Total	ND		0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 17:17	1

Client Sample ID: MW-32
Date Collected: 11/08/23 11:40
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 17:21	1
Barium, Total	**0.0044**		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 17:21	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 17:21	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 17:21	1
Chromium, Total	**0.00065**	**J B**	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 17:21	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 17:21	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 17:21	1
Manganese, Total	**2.1**		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 17:21	1
Nickel, Total	**0.00086**	**J**	0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 17:21	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 17:21	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 17:21	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 17:21	1
Vanadium, Total	ND		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 17:21	1
Zinc, Total	ND		0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 17:21	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Client Sample ID: MW-42
Date Collected: 11/08/23 12:27
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 13:45	1
Barium, Total	**0.087**		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 13:45	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 13:45	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 13:45	1
Chromium, Total	**0.0010**	**J B**	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 13:45	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 13:45	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 13:45	1
Manganese, Total	**3.6**		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 13:45	1
Nickel, Total	**0.00087**	**J**	0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 13:45	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 13:45	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 13:45	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 13:45	1
Vanadium, Total	ND		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 13:45	1
Zinc, Total	ND		0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 13:45	1

Client Sample ID: MW-43
Date Collected: 11/08/23 13:13
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 13:49	1
Barium, Total	**0.0047**		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 13:49	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 13:49	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 13:49	1
Chromium, Total	**0.00065**	**J B**	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 13:49	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 13:49	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 13:49	1
Manganese, Total	**0.0061**		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 13:49	1
Nickel, Total	ND		0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 13:49	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 13:49	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 13:49	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 13:49	1
Vanadium, Total	ND		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 13:49	1
Zinc, Total	ND		0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 13:49	1

Client Sample ID: MW-19C
Date Collected: 11/08/23 13:57
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 14:53	1
Barium, Total	**0.0039**		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 14:53	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 14:53	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 14:53	1
Chromium, Total	**0.00066**	**J B**	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 14:53	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 14:53	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 14:53	1
Manganese, Total	**1.1**		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 14:53	1
Nickel, Total	ND		0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 14:53	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 14:53	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 14:53	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 14:53	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Client Sample ID: MW-19C
Date Collected: 11/08/23 13:57
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium, Total	ND		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 14:53	1
Zinc, Total	**0.0046**	**J**	0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 14:53	1

Client Sample ID: MW-16
Date Collected: 11/08/23 14:37
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 14:56	1
Barium, Total	**0.0038**		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 14:56	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 14:56	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 14:56	1
Chromium, Total	**0.0081**	**B**	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 14:56	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 14:56	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 14:56	1
Manganese, Total	**0.0036**		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 14:56	1
Nickel, Total	**0.0017**	**J**	0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 14:56	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 14:56	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 14:56	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 14:56	1
Vanadium, Total	**0.0035**		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 14:56	1
Zinc, Total	ND		0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 14:56	1

Client Sample ID: MW-35
Date Collected: 11/08/23 15:02
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 15:00	1
Barium, Total	**0.0030**		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 15:00	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 15:00	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 15:00	1
Chromium, Total	**0.0028**	**J B**	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 15:00	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 15:00	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 15:00	1
Manganese, Total	ND		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 15:00	1
Nickel, Total	ND		0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 15:00	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 15:00	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 15:00	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 15:00	1
Vanadium, Total	**0.0043**		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 15:00	1
Zinc, Total	ND		0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 15:00	1

Client Sample ID: DUP1
Date Collected: 11/08/23 10:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 15:03	1
Barium, Total	**0.0056**		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 15:03	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 15:03	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 15:03	1
Chromium, Total	**0.00096**	**J B**	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 15:03	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Client Sample ID: DUP1
Date Collected: 11/08/23 10:48
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper, Total	ND		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 15:03	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 15:03	1
Manganese, Total	**1.2**		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 15:03	1
Nickel, Total	**0.0017**	**J**	0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 15:03	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 15:03	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 15:03	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 15:03	1
Vanadium, Total	ND		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 15:03	1
Zinc, Total	ND		0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 15:03	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Client Sample ID: MW-36A
Date Collected: 11/08/23 12:51
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	ND		0.0010	0.00051	mg/L		11/26/23 16:04	11/28/23 01:03	1

Client Sample ID: MW-13A
Date Collected: 11/08/23 11:36
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	ND		0.0010	0.00051	mg/L		11/26/23 16:04	11/28/23 01:05	1

Client Sample ID: DUP2
Date Collected: 11/08/23 13:05
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	ND		0.0010	0.00051	mg/L		11/26/23 16:04	11/28/23 01:08	1

Client Sample ID: MW-13B
Date Collected: 11/08/23 10:52
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	ND		0.0010	0.00051	mg/L		11/26/23 16:04	11/28/23 01:10	1

Client Sample ID: MW-34A
Date Collected: 11/08/23 14:09
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	ND		0.0010	0.00051	mg/L		11/26/23 16:04	11/28/23 01:12	1

Client Sample ID: MW-34C
Date Collected: 11/08/23 14:48
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	**0.45**		0.0010	0.00051	mg/L		11/26/23 16:04	11/28/23 01:14	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Client Sample ID: MW-29A
Date Collected: 11/08/23 10:37
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	1.0		0.0010	0.00051	mg/L		11/26/23 16:04	11/28/23 01:17	1

Client Sample ID: MW-32
Date Collected: 11/08/23 11:40
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	2.0		0.0010	0.00051	mg/L		11/26/23 16:04	11/28/23 01:19	1

Client Sample ID: MW-42
Date Collected: 11/08/23 12:27
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	3.7		0.0010	0.00051	mg/L		11/26/23 16:04	11/29/23 09:09	1

Client Sample ID: MW-43
Date Collected: 11/08/23 13:13
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	0.0043		0.0010	0.00051	mg/L		11/26/23 16:04	11/29/23 09:11	1

Client Sample ID: MW-19C
Date Collected: 11/08/23 13:57
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	0.96		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 11:30	1

Client Sample ID: MW-16
Date Collected: 11/08/23 14:37
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	ND		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 11:33	1

Client Sample ID: MW-35
Date Collected: 11/08/23 15:02
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	0.00063	J	0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 11:37	1

Client Sample ID: DUP1
Date Collected: 11/08/23 10:48
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	1.1		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 11:40	1

General Chemistry

Client Sample ID: MW-36A
Date Collected: 11/08/23 12:51
Date Received: 11/09/23 09:40
Lab Sample ID: 280-184261-1
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		3.0	3.0	mg/L			11/28/23 15:11	1
Sulfate (EPA 300.0)	ND		5.0	5.0	mg/L			11/28/23 15:11	1

General Chemistry (Continued)

Client Sample ID: MW-36A
Date Collected: 11/08/23 12:51
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-1
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N) (EPA 350.1)	**0.053**		0.030	0.030	mg/L			11/28/23 15:57	1
Nitrate as N (EPA 353.2)	**0.38**		0.050	0.050	mg/L			11/09/23 17:58	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**58**		10	10	mg/L			11/16/23 19:02	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**58**		10	10	mg/L			11/16/23 19:02	1
Total Dissolved Solids (TDS) (SM 2540C)	**93**		5.0	5.0	mg/L			11/15/23 13:49	1
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			11/14/23 13:34	1
Total Organic Carbon - Average (SM 5310B)	ND		1.0	1.0	mg/L			11/29/23 09:03	1

Client Sample ID: MW-13A
Date Collected: 11/08/23 11:36
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-2
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		3.0	3.0	mg/L			11/28/23 16:19	1
Sulfate (EPA 300.0)	ND		5.0	5.0	mg/L			11/28/23 16:19	1
Ammonia (as N) (EPA 350.1)	ND		0.030	0.030	mg/L			11/28/23 16:00	1
Nitrate as N (EPA 353.2)	**0.44**		0.050	0.050	mg/L			11/09/23 17:58	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**86**		10	10	mg/L			11/16/23 19:07	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**86**		10	10	mg/L			11/16/23 19:07	1
Total Dissolved Solids (TDS) (SM 2540C)	**98**		5.0	5.0	mg/L			11/14/23 14:57	1
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			11/14/23 14:23	1
Total Organic Carbon - Average (SM 5310B)	ND		1.0	1.0	mg/L			11/29/23 12:43	1

Client Sample ID: DUP2
Date Collected: 11/08/23 13:05
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-3
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		3.0	3.0	mg/L			11/28/23 16:36	1
Sulfate (EPA 300.0)	ND		5.0	5.0	mg/L			11/28/23 16:36	1
Ammonia (as N) (EPA 350.1)	**0.073**		0.030	0.030	mg/L			11/28/23 16:03	1
Nitrate as N (EPA 353.2)	**0.41**		0.050	0.050	mg/L			11/09/23 17:58	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**57**		10	10	mg/L			11/16/23 19:12	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**57**		10	10	mg/L			11/16/23 19:12	1
Total Dissolved Solids (TDS) (SM 2540C)	**89**		5.0	5.0	mg/L			11/14/23 14:57	1
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			11/14/23 14:23	1
Total Organic Carbon - Average (SM 5310B)	ND		1.0	1.0	mg/L			11/29/23 12:59	1

Client Sample ID: MW-13B
Date Collected: 11/08/23 10:52
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-4
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		3.0	3.0	mg/L			11/28/23 16:53	1

General Chemistry (Continued)

Client Sample ID: MW-13B
Date Collected: 11/08/23 10:52
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-4
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate (EPA 300.0)	ND		5.0	5.0	mg/L			11/28/23 16:53	1
Ammonia (as N) (EPA 350.1)	ND		0.030	0.030	mg/L			11/28/23 16:05	1
Nitrate as N (EPA 353.2)	**0.36**		0.050	0.050	mg/L			11/09/23 17:58	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**85**		10	10	mg/L			11/16/23 19:18	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**85**		10	10	mg/L			11/16/23 19:18	1
Total Dissolved Solids (TDS) (SM 2540C)	**99**		5.0	5.0	mg/L			11/14/23 14:57	1
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			11/14/23 14:23	1
Total Organic Carbon - Average (SM 5310B)	ND		1.0	1.0	mg/L			11/29/23 13:51	1

Client Sample ID: MW-34A
Date Collected: 11/08/23 14:09
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-5
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		3.0	3.0	mg/L			11/28/23 17:10	1
Sulfate (EPA 300.0)	ND		5.0	5.0	mg/L			11/28/23 17:10	1
Ammonia (as N) (EPA 350.1)	**0.075**		0.030	0.030	mg/L			11/28/23 16:08	1
Nitrate as N (EPA 353.2)	**2.0**		0.050	0.050	mg/L			11/09/23 17:58	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**75**		10	10	mg/L			11/16/23 19:23	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**75**		10	10	mg/L			11/16/23 19:23	1
Total Dissolved Solids (TDS) (SM 2540C)	**120**		5.0	5.0	mg/L			11/14/23 14:54	1
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			11/15/23 16:57	1
Total Organic Carbon - Average (SM 5310B)	ND		1.0	1.0	mg/L			11/29/23 15:32	1

Client Sample ID: MW-34C
Date Collected: 11/08/23 14:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-6
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**3.9**		3.0	3.0	mg/L			11/28/23 17:27	1
Sulfate (EPA 300.0)	ND		5.0	5.0	mg/L			11/28/23 17:27	1
Ammonia (as N) (EPA 350.1)	ND		0.030	0.030	mg/L			11/28/23 16:11	1
Nitrate as N (EPA 353.2)	ND		0.050	0.050	mg/L			11/09/23 17:58	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**87**		10	10	mg/L			11/16/23 19:29	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**87**		10	10	mg/L			11/16/23 19:29	1
Total Dissolved Solids (TDS) (SM 2540C)	**140**		5.0	5.0	mg/L			11/14/23 14:54	1
Total Suspended Solids (SM 2540D)	**50**		4.0	4.0	mg/L			11/15/23 16:57	1
Total Organic Carbon - Average (SM 5310B)	**1.2**		1.0	1.0	mg/L			11/29/23 15:51	1

General Chemistry

Client Sample ID: MW-29A
Date Collected: 11/08/23 10:37
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-7
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		3.0	3.0	mg/L			11/28/23 17:44	1
Sulfate (EPA 300.0)	ND		5.0	5.0	mg/L			11/28/23 17:44	1
Ammonia (as N) (EPA 350.1)	**0.10**		0.030	0.030	mg/L			11/28/23 16:30	1
Nitrate as N (EPA 353.2)	ND		0.050	0.050	mg/L			11/09/23 17:58	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**38**		10	10	mg/L			11/16/23 19:34	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**38**		10	10	mg/L			11/16/23 19:34	1
Total Dissolved Solids (TDS) (SM 2540C)	**61**		5.0	5.0	mg/L			11/14/23 14:54	1
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			11/15/23 16:57	1
Total Organic Carbon - Average (SM 5310B)	**1.6**		1.0	1.0	mg/L			11/29/23 16:10	1

Client Sample ID: MW-32
Date Collected: 11/08/23 11:40
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-8
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**10**		3.0	3.0	mg/L			11/28/23 18:01	1
Sulfate (EPA 300.0)	**13**		5.0	5.0	mg/L			11/28/23 18:01	1
Ammonia (as N) (EPA 350.1)	**0.11**		0.030	0.030	mg/L			11/28/23 16:32	1
Nitrate as N (EPA 353.2)	ND		0.050	0.050	mg/L			11/09/23 17:58	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**140**		10	10	mg/L			11/16/23 19:40	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**140**		10	10	mg/L			11/16/23 19:40	1
Total Dissolved Solids (TDS) (SM 2540C)	**200**		5.0	5.0	mg/L			11/15/23 13:49	1
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			11/15/23 16:57	1
Total Organic Carbon - Average (SM 5310B)	**1.1**		1.0	1.0	mg/L			11/29/23 16:30	1

Client Sample ID: MW-42
Date Collected: 11/08/23 12:27
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-9
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**12**		3.0	3.0	mg/L			11/28/23 18:18	1
Sulfate (EPA 300.0)	**6.8**		5.0	5.0	mg/L			11/28/23 18:18	1
Ammonia (as N) (EPA 350.1)	**3.3**		0.030	0.030	mg/L			11/28/23 16:35	1
Nitrate as N (EPA 353.2)	ND		0.050	0.050	mg/L			11/09/23 17:58	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**190**		10	10	mg/L			11/16/23 19:46	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**190**		10	10	mg/L			11/16/23 19:46	1
Total Dissolved Solids (TDS) (SM 2540C)	**230**		5.0	5.0	mg/L			11/15/23 13:49	1
Total Suspended Solids (SM 2540D)	**34**		4.0	4.0	mg/L			11/15/23 16:57	1
Total Organic Carbon - Average (SM 5310B)	**6.2**		1.0	1.0	mg/L			11/29/23 16:50	1

General Chemistry

Client Sample ID: MW-43
Date Collected: 11/08/23 13:13
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-10
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		3.0	3.0	mg/L			11/28/23 18:35	1
Sulfate (EPA 300.0)	ND		5.0	5.0	mg/L			11/28/23 18:35	1
Ammonia (as N) (EPA 350.1)	**0.037**		0.030	0.030	mg/L			11/28/23 16:37	1
Nitrate as N (EPA 353.2)	**1.5**		0.050	0.050	mg/L			11/09/23 17:58	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**23**		10	10	mg/L			11/16/23 19:52	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**23**		10	10	mg/L			11/16/23 19:52	1
Total Dissolved Solids (TDS) (SM 2540C)	**46**		5.0	5.0	mg/L			11/15/23 13:49	1
Total Suspended Solids (SM 2540D)	ND	H	4.0	4.0	mg/L			11/21/23 14:01	1
Total Organic Carbon - Average (SM 5310B)	**1.3**		1.0	1.0	mg/L			11/29/23 17:11	1

Client Sample ID: MW-19C
Date Collected: 11/08/23 13:57
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-11
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		3.0	3.0	mg/L			11/28/23 19:27	1
Sulfate (EPA 300.0)	ND		5.0	5.0	mg/L			11/28/23 19:27	1
Ammonia (as N) (EPA 350.1)	**0.50**		0.030	0.030	mg/L			11/28/23 16:40	1
Nitrate as N (EPA 353.2)	ND		0.050	0.050	mg/L			11/09/23 17:58	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**79**		10	10	mg/L			11/16/23 20:24	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**79**		10	10	mg/L			11/16/23 20:24	1
Total Dissolved Solids (TDS) (SM 2540C)	**95**		5.0	5.0	mg/L			11/15/23 13:49	1
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			11/15/23 16:57	1
Total Organic Carbon - Average (SM 5310B)	ND		1.0	1.0	mg/L			11/29/23 17:30	1

Client Sample ID: MW-16
Date Collected: 11/08/23 14:37
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-12
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		3.0	3.0	mg/L			11/28/23 20:35	1
Sulfate (EPA 300.0)	ND		5.0	5.0	mg/L			11/28/23 20:35	1
Ammonia (as N) (EPA 350.1)	**0.12**		0.030	0.030	mg/L			11/28/23 16:43	1
Nitrate as N (EPA 353.2)	ND		0.050	0.050	mg/L			11/09/23 17:58	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**63**		10	10	mg/L			11/16/23 20:34	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**63**		10	10	mg/L			11/16/23 20:34	1
Total Dissolved Solids (TDS) (SM 2540C)	**81**		5.0	5.0	mg/L			11/15/23 13:49	1
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			11/15/23 18:12	1
Total Organic Carbon - Average (SM 5310B)	ND		1.0	1.0	mg/L			11/29/23 17:47	1

General Chemistry

Client Sample ID: MW-35
Date Collected: 11/08/23 15:02
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-13
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		3.0	3.0	mg/L			11/28/23 20:52	1
Sulfate (EPA 300.0)	ND		5.0	5.0	mg/L			11/28/23 20:52	1
Ammonia (as N) (EPA 350.1)	**0.037**		0.030	0.030	mg/L			11/28/23 16:46	1
Nitrate as N (EPA 353.2)	**0.36**		0.050	0.050	mg/L			11/09/23 17:58	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**83**		10	10	mg/L			11/16/23 20:40	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**83**		10	10	mg/L			11/16/23 20:40	1
Total Dissolved Solids (TDS) (SM 2540C)	**90**		5.0	5.0	mg/L			11/15/23 13:49	1
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			11/15/23 16:57	1
Total Organic Carbon - Average (SM 5310B)	ND		1.0	1.0	mg/L			11/29/23 18:04	1

Client Sample ID: DUP1
Date Collected: 11/08/23 10:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-15
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		3.0	3.0	mg/L			11/28/23 21:09	1
Sulfate (EPA 300.0)	ND		5.0	5.0	mg/L			11/28/23 21:09	1
Ammonia (as N) (EPA 350.1)	**0.075**		0.030	0.030	mg/L			11/28/23 16:48	1
Nitrate as N (EPA 353.2)	ND		0.050	0.050	mg/L			11/12/23 20:53	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**36**		10	10	mg/L			11/17/23 12:27	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**36**		10	10	mg/L			11/17/23 12:27	1
Total Dissolved Solids (TDS) (SM 2540C)	**51**		5.0	5.0	mg/L			11/15/23 13:49	1
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			11/15/23 16:57	1
Total Organic Carbon - Average (SM 5310B)	**1.6**		1.0	1.0	mg/L			11/29/23 18:59	1

Surrogate Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184261-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)
280-184261-1	MW-36A	109	109	97
280-184261-2	MW-13A	106	110	96
280-184261-3	DUP2	105	113	100
280-184261-4	MW-13B	107	111	106
280-184261-5	MW-34A	102	107	96
280-184261-6	MW-34C	106	111	99
280-184261-7	MW-29A	104	108	104
280-184261-8	MW-32	107	110	106
280-184261-9	MW-42	106	108	104
280-184261-10	MW-43	101	110	106
280-184261-11	MW-19C	101	108	102
280-184261-12	MW-16	107	107	96
280-184261-13	MW-35	109	107	108
280-184261-14	TRIP BLANK	102	108	106
280-184261-15	DUP1	100	105	106
480-214819-A-2 MS	Matrix Spike	108	109	110
480-214819-A-2 MSD	Matrix Spike Duplicate	107	108	106
LCS 480-691875/6	Lab Control Sample	102	108	105
MB 480-691875/8	Method Blank	106	111	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DBFM	TBA
Lab Sample ID	Client Sample ID	(50-150)	(50-150)
280-184261-1	MW-36A	115	108
280-184261-2	MW-13A	117	104
280-184261-3	DUP2	118	122
280-184261-4	MW-13B	120	114
280-184261-5	MW-34A	119	97
280-184261-6	MW-34C	119	97
280-184261-7	MW-29A	117	95
280-184261-8	MW-32	116	98
280-184261-9	MW-42	117	102
280-184261-10	MW-43	116	94
280-184261-11	MW-19C	118	103
280-184261-12	MW-16	122	129
280-184261-13	MW-35	120	122
280-184261-14	TRIP BLANK	122	117
280-184261-15	DUP1	122	110
LCS 480-691926/6	Lab Control Sample	104	94
LCSD 480-691926/7	Lab Control Sample Dup	103	95
MB 480-691926/9	Method Blank	116	116

Surrogate Legend

Surrogate Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184261-1

DBFM = Dibromofluoromethane (Surr)
TBA = TBA-d9 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-691875/8
Matrix: Water
Analysis Batch: 691875

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 00:20	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 00:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 00:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 00:20	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 00:20	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 00:20	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 00:20	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 00:20	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 00:20	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 00:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 00:20	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 00:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 00:20	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 00:20	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 00:20	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 00:20	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 00:20	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 00:20	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 00:20	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 00:20	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 00:20	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 00:20	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 00:20	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 00:20	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 00:20	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 00:20	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 00:20	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 00:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 00:20	1
Acetone	ND		10	3.0	ug/L			11/15/23 00:20	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 00:20	1
Acrolein	ND		20	0.91	ug/L			11/15/23 00:20	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 00:20	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 00:20	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 00:20	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 00:20	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 00:20	1
Bromoform	ND		1.0	0.26	ug/L			11/15/23 00:20	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 00:20	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 00:20	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 00:20	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 00:20	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/15/23 00:20	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 00:20	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 00:20	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 00:20	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 00:20	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 00:20	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-691875/8
Matrix: Water
Analysis Batch: 691875

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 00:20	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 00:20	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 00:20	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/15/23 00:20	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 00:20	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 00:20	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 00:20	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 00:20	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 00:20	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 00:20	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 00:20	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 00:20	1
Hexane	ND		10	0.40	ug/L			11/15/23 00:20	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 00:20	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 00:20	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 00:20	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 00:20	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 00:20	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 00:20	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 00:20	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 00:20	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 00:20	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 00:20	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 00:20	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 00:20	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 00:20	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 00:20	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 00:20	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 00:20	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 00:20	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 00:20	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 00:20	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 00:20	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 00:20	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 00:20	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 00:20	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 00:20	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 00:20	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 00:20	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 00:20	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 00:20	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 00:20	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 00:20	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 00:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*11/15/23 00:20*	*1*
4-Bromofluorobenzene (Surr)	*111*		*73 - 120*		*11/15/23 00:20*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-691875/8
Matrix: Water
Analysis Batch: 691875

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		11/15/23 00:20	1

Lab Sample ID: LCS 480-691875/6
Matrix: Water
Analysis Batch: 691875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	28.8		ug/L		115	80 - 120
1,1,1-Trichloroethane	25.0	30.3		ug/L		121	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.9		ug/L		100	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.2		ug/L		109	61 - 148
1,1,2-Trichloroethane	25.0	26.5		ug/L		106	76 - 122
1,1-Dichloroethane	25.0	26.9		ug/L		108	77 - 120
1,1-Dichloroethene	25.0	27.2		ug/L		109	66 - 127
1,1-Dichloropropene	25.0	27.7		ug/L		111	72 - 122
1,2,3-Trichlorobenzene	25.0	24.4		ug/L		98	75 - 123
1,2,3-Trichloropropane	25.0	25.6		ug/L		102	68 - 122
1,2,4-Trichlorobenzene	25.0	26.3		ug/L		105	79 - 122
1,2,4-Trimethylbenzene	25.0	27.3		ug/L		109	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	25.9		ug/L		103	56 - 134
1,2-Dibromoethane (EDB)	25.0	27.6		ug/L		111	77 - 120
1,2-Dichlorobenzene	25.0	25.9		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	24.8		ug/L		99	75 - 120
1,2-Dichloropropane	25.0	26.2		ug/L		105	76 - 120
1,3,5-Trimethylbenzene	25.0	27.1		ug/L		108	77 - 121
1,3-Dichlorobenzene	25.0	28.0		ug/L		112	77 - 120
1,3-Dichloropropane	25.0	25.5		ug/L		102	75 - 120
1,4-Dichlorobenzene	25.0	26.3		ug/L		105	80 - 120
1,4-Dioxane	500	388		ug/L		78	50 - 150
2,2-Dichloropropane	25.0	25.7		ug/L		103	63 - 136
2-Butanone (MEK)	125	95.8		ug/L		77	57 - 140
2-Chloroethyl vinyl ether	25.0	27.4		ug/L		110	70 - 129
2-Hexanone	125	111		ug/L		89	65 - 127
4-Methyl-2-pentanone (MIBK)	125	105		ug/L		84	71 - 125
Acetone	125	97.0		ug/L		78	56 - 142
Acrolein	125	76.6		ug/L		61	52 - 143
Acrylonitrile	250	200		ug/L		80	63 - 125
Benzene	25.0	27.2		ug/L		109	71 - 124
Bromobenzene	25.0	29.3		ug/L		117	78 - 120
Bromochloromethane	25.0	25.1		ug/L		101	72 - 130
Bromodichloromethane	25.0	28.9		ug/L		116	80 - 122
Bromoform	25.0	33.3	*+	ug/L		133	61 - 132
Bromomethane	25.0	21.7		ug/L		87	55 - 144
Butyl alcohol, tert-	250	220		ug/L		88	75 - 125
Carbon disulfide	25.0	26.9		ug/L		108	59 - 134
Carbon tetrachloride	25.0	34.9	*+	ug/L		140	72 - 134
Chlorobenzene	25.0	26.3		ug/L		105	80 - 120
Chloroethane	25.0	21.9		ug/L		88	69 - 136

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-691875/6
Matrix: Water
Analysis Batch: 691875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	25.0	25.3		ug/L		101	73 - 127
Chloromethane	25.0	24.3		ug/L		97	68 - 124
cis-1,2-Dichloroethene	25.0	26.6		ug/L		106	74 - 124
cis-1,3-Dichloropropene	25.0	28.3		ug/L		113	74 - 124
Cyclohexane	25.0	27.4		ug/L		110	59 - 135
Dibromochloromethane	25.0	31.8	*+	ug/L		127	75 - 125
Dibromomethane	25.0	26.4		ug/L		106	76 - 127
Dichlorodifluoromethane	25.0	24.4		ug/L		98	59 - 135
Dichlorofluoromethane	25.0	23.3		ug/L		93	76 - 127
Ethyl ether	25.0	25.1		ug/L		100	76 - 123
Ethylbenzene	25.0	26.8		ug/L		107	77 - 123
Hexachlorobutadiene	25.0	29.7		ug/L		119	68 - 131
Iodomethane	25.0	28.0		ug/L		112	78 - 123
Isobutanol	625	572		ug/L		92	51 - 150
Isopropylbenzene	25.0	27.4		ug/L		110	77 - 122
Methyl acetate	50.0	40.7		ug/L		81	74 - 133
Methyl tert-butyl ether	25.0	23.1		ug/L		93	77 - 120
Methylcyclohexane	25.0	26.4		ug/L		106	68 - 134
Methylene Chloride	25.0	24.4		ug/L		98	75 - 124
m-Xylene & p-Xylene	25.0	26.6		ug/L		107	76 - 122
Naphthalene	25.0	23.1		ug/L		92	66 - 125
n-Butylbenzene	25.0	26.1		ug/L		105	71 - 128
N-Propylbenzene	25.0	27.3		ug/L		109	75 - 127
o-Chlorotoluene	25.0	28.0		ug/L		112	76 - 121
o-Xylene	25.0	25.3		ug/L		101	76 - 122
p-Chlorotoluene	25.0	27.4		ug/L		110	77 - 121
p-Cymene	25.0	28.3		ug/L		113	73 - 120
sec-Butylbenzene	25.0	27.5		ug/L		110	74 - 127
Styrene	25.0	27.4		ug/L		110	80 - 120
tert-Butylbenzene	25.0	29.7		ug/L		119	75 - 123
Tetrachloroethene	25.0	30.1		ug/L		121	74 - 122
Tetrahydrofuran	50.0	42.1		ug/L		84	62 - 132
Toluene	25.0	26.8		ug/L		107	80 - 122
trans-1,2-Dichloroethene	25.0	27.8		ug/L		111	73 - 127
trans-1,3-Dichloropropene	25.0	28.1		ug/L		112	80 - 120
trans-1,4-Dichloro-2-butene	25.0	21.2		ug/L		85	41 - 131
Trichloroethene	25.0	28.0		ug/L		112	74 - 123
Trichlorofluoromethane	25.0	26.1		ug/L		104	62 - 150
Vinyl acetate	50.0	54.0		ug/L		108	50 - 144
Vinyl chloride	25.0	23.2		ug/L		93	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-214819-A-2 MS
Matrix: Water
Analysis Batch: 691875

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	ND		500	604		ug/L		121	73 - 126
1,1,2,2-Tetrachloroethane	ND		500	536		ug/L		107	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	558		ug/L		112	61 - 148
1,1,2-Trichloroethane	ND		500	566		ug/L		113	76 - 122
1,1-Dichloroethane	ND		500	571		ug/L		114	77 - 120
1,1-Dichloroethene	ND		500	549		ug/L		110	66 - 127
1,2,4-Trichlorobenzene	ND		500	560		ug/L		112	79 - 122
1,2-Dibromo-3-Chloropropane	ND		500	577		ug/L		115	56 - 134
1,2-Dibromoethane (EDB)	ND		500	585		ug/L		117	77 - 120
1,2-Dichlorobenzene	ND		500	552		ug/L		110	80 - 124
1,2-Dichloroethane	8.6	J	500	526		ug/L		103	75 - 120
1,2-Dichloropropane	ND		500	552		ug/L		110	76 - 120
1,3-Dichlorobenzene	ND		500	571		ug/L		114	77 - 120
1,4-Dichlorobenzene	ND		500	554		ug/L		111	78 - 124
2-Butanone (MEK)	ND		2500	2000		ug/L		80	57 - 140
2-Hexanone	ND		2500	2420		ug/L		97	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		2500	2370		ug/L		95	71 - 125
Acetone	ND	F2	2500	1800		ug/L		72	56 - 142
Benzene	180		500	730		ug/L		110	71 - 124
Bromodichloromethane	ND		500	595		ug/L		119	80 - 122
Bromoform	ND	*+ F1	500	709	F1	ug/L		142	61 - 132
Bromomethane	ND		500	439		ug/L		88	55 - 144
Carbon disulfide	ND		500	551		ug/L		110	59 - 134
Carbon tetrachloride	ND	*+ F1	500	686	F1	ug/L		137	72 - 134
Chlorobenzene	ND		500	573		ug/L		115	80 - 120
Chloroethane	ND		500	451		ug/L		90	69 - 136
Chloroform	19	J	500	540		ug/L		104	73 - 127
Chloromethane	ND		500	498		ug/L		100	68 - 124
cis-1,2-Dichloroethene	1400	F1	500	1780		ug/L		84	74 - 124
cis-1,3-Dichloropropene	ND		500	553		ug/L		111	74 - 124
Cyclohexane	ND		500	576		ug/L		115	59 - 135
Dibromochloromethane	ND	*+ F1	500	660	F1	ug/L		132	75 - 125
Dichlorodifluoromethane	ND		500	542		ug/L		108	59 - 135
Ethylbenzene	ND		500	585		ug/L		117	77 - 123
Isopropylbenzene	ND		500	569		ug/L		114	77 - 122
Methyl acetate	ND		1000	841		ug/L		84	74 - 133
Methyl tert-butyl ether	ND		500	476		ug/L		95	77 - 120
Methylcyclohexane	ND		500	555		ug/L		111	68 - 134
Methylene Chloride	ND		500	527		ug/L		105	75 - 124
m-Xylene & p-Xylene	44		500	612		ug/L		114	76 - 122
o-Xylene	32		500	572		ug/L		108	76 - 122
p-Cymene	ND	F1	500	607	F1	ug/L		121	73 - 120
Styrene	ND		500	574		ug/L		115	80 - 120
Tetrachloroethene	ND	F1	500	636	F1	ug/L		127	74 - 122
Toluene	73		500	646		ug/L		115	80 - 122
trans-1,2-Dichloroethene	ND		500	585		ug/L		117	73 - 127
trans-1,3-Dichloropropene	ND		500	577		ug/L		115	80 - 120
Trichloroethene	44		500	620		ug/L		115	74 - 123

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-214819-A-2 MS
Matrix: Water
Analysis Batch: 691875

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Trichlorofluoromethane	ND		500	526		ug/L		105	62 - 150
Vinyl chloride	260		500	714		ug/L		90	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*
Toluene-d8 (Surr)	*110*		*80 - 120*

Lab Sample ID: 480-214819-A-2 MSD
Matrix: Water
Analysis Batch: 691875

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		500	584		ug/L		117	73 - 126	3	15
1,1,2,2-Tetrachloroethane	ND		500	525		ug/L		105	76 - 120	2	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	529		ug/L		106	61 - 148	5	20
1,1,2-Trichloroethane	ND		500	527		ug/L		105	76 - 122	7	15
1,1-Dichloroethane	ND		500	536		ug/L		107	77 - 120	6	20
1,1-Dichloroethene	ND		500	529		ug/L		106	66 - 127	4	16
1,2,4-Trichlorobenzene	ND		500	555		ug/L		111	79 - 122	1	20
1,2-Dibromo-3-Chloropropane	ND		500	658		ug/L		132	56 - 134	13	15
1,2-Dibromoethane (EDB)	ND		500	582		ug/L		116	77 - 120	0	15
1,2-Dichlorobenzene	ND		500	546		ug/L		109	80 - 124	1	20
1,2-Dichloroethane	8.6	J	500	526		ug/L		103	75 - 120	0	20
1,2-Dichloropropane	ND		500	537		ug/L		107	76 - 120	3	20
1,3-Dichlorobenzene	ND		500	552		ug/L		110	77 - 120	3	20
1,4-Dichlorobenzene	ND		500	543		ug/L		109	78 - 124	2	20
2-Butanone (MEK)	ND		2500	2430		ug/L		97	57 - 140	20	20
2-Hexanone	ND		2500	2470		ug/L		99	65 - 127	2	15
4-Methyl-2-pentanone (MIBK)	ND		2500	2600		ug/L		104	71 - 125	9	35
Acetone	ND	F2	2500	2790	F2	ug/L		112	56 - 142	43	15
Benzene	180		500	679		ug/L		100	71 - 124	7	13
Bromodichloromethane	ND		500	575		ug/L		115	80 - 122	3	15
Bromoform	ND	*+ F1	500	695	F1	ug/L		139	61 - 132	2	15
Bromomethane	ND		500	428		ug/L		86	55 - 144	3	15
Carbon disulfide	ND		500	534		ug/L		107	59 - 134	3	15
Carbon tetrachloride	ND	*+ F1	500	665		ug/L		133	72 - 134	3	15
Chlorobenzene	ND		500	539		ug/L		108	80 - 120	6	25
Chloroethane	ND		500	443		ug/L		89	69 - 136	2	15
Chloroform	19	J	500	524		ug/L		101	73 - 127	3	20
Chloromethane	ND		500	484		ug/L		97	68 - 124	3	15
cis-1,2-Dichloroethene	1400	F1	500	1720	F1	ug/L		72	74 - 124	3	15
cis-1,3-Dichloropropene	ND		500	554		ug/L		111	74 - 124	0	15
Cyclohexane	ND		500	545		ug/L		109	59 - 135	6	20
Dibromochloromethane	ND	*+ F1	500	631	F1	ug/L		126	75 - 125	4	15
Dichlorodifluoromethane	ND		500	510		ug/L		102	59 - 135	6	20
Ethylbenzene	ND		500	556		ug/L		111	77 - 123	5	15
Isopropylbenzene	ND		500	550		ug/L		110	77 - 122	4	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-214819-A-2 MSD
Matrix: Water
Analysis Batch: 691875

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methyl acetate	ND		1000	998		ug/L		100	74 - 133	17	20
Methyl tert-butyl ether	ND		500	491		ug/L		98	77 - 120	3	37
Methylcyclohexane	ND		500	502		ug/L		100	68 - 134	10	20
Methylene Chloride	ND		500	512		ug/L		102	75 - 124	3	15
m-Xylene & p-Xylene	44		500	579		ug/L		107	76 - 122	6	16
o-Xylene	32		500	563		ug/L		106	76 - 122	2	16
p-Cymene	ND	F1	500	586		ug/L		117	73 - 120	3	20
Styrene	ND		500	547		ug/L		109	80 - 120	5	20
Tetrachloroethene	ND	F1	500	574		ug/L		115	74 - 122	10	20
Toluene	73		500	634		ug/L		112	80 - 122	2	15
trans-1,2-Dichloroethene	ND		500	550		ug/L		110	73 - 127	6	20
trans-1,3-Dichloropropene	ND		500	582		ug/L		116	80 - 120	1	15
Trichloroethene	44		500	581		ug/L		108	74 - 123	6	16
Trichlorofluoromethane	ND		500	505		ug/L		101	62 - 150	4	20
Vinyl chloride	260		500	690		ug/L		85	65 - 133	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-691926/9
Matrix: Water
Analysis Batch: 691926

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/14/23 20:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*116*		*50 - 150*		*11/14/23 20:31*	*1*
TBA-d9 (Surr)	*116*		*50 - 150*		*11/14/23 20:31*	*1*

Lab Sample ID: LCS 480-691926/6
Matrix: Water
Analysis Batch: 691926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Vinyl chloride			0.200	0.248		ug/L		124	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*104*		*50 - 150*
TBA-d9 (Surr)	*94*		*50 - 150*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-691926/7
Matrix: Water
Analysis Batch: 691926

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
Vinyl chloride			0.200	0.225		ug/L		113	50 - 150	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*103*		*50 - 150*
TBA-d9 (Surr)	*95*		*50 - 150*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 280-634851/1-A
Matrix: Water
Analysis Batch: 635121

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634851

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 21:18	1
Iron, Total	0.0134	J	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 21:18	1

Lab Sample ID: LCS 280-634851/2-A
Matrix: Water
Analysis Batch: 635121

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634851

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt, Total			1.00	0.932		mg/L		93	89 - 111		
Iron, Total			10.0	9.68		mg/L		97	89 - 115		

Lab Sample ID: 280-184249-H-1-B MS
Matrix: Water
Analysis Batch: 635121

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 634851

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cobalt, Total	0.0041		1.00	0.951		mg/L		95	82 - 119		
Iron, Total	12	B	10.0	21.4		mg/L		96	75 - 125		

Lab Sample ID: 280-184249-H-1-C MSD
Matrix: Water
Analysis Batch: 635121

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 634851

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt, Total	0.0041		1.00	0.957		mg/L		95	82 - 119	1	20
Iron, Total	12	B	10.0	21.6		mg/L		98	75 - 125	1	20

Lab Sample ID: MB 280-634872/1-A
Matrix: Water
Analysis Batch: 635127

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634872

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	0.0370	J	0.20	0.024	mg/L		11/22/23 08:54	11/22/23 22:11	1
Iron, Dissolved	0.0200	J	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 22:11	1
Magnesium, Dissolved	ND		0.050	0.0042	mg/L		11/22/23 08:54	11/22/23 22:11	1
Potassium, Dissolved	ND		1.0	0.24	mg/L		11/22/23 08:54	11/22/23 22:11	1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 280-634872/1-A
Matrix: Water
Analysis Batch: 635127

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634872

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium, Dissolved	0.110	J	1.0	0.097	mg/L		11/22/23 08:54	11/22/23 22:11	1

Lab Sample ID: LCS 280-634872/2-A
Matrix: Water
Analysis Batch: 635127

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634872

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium, Dissolved	50.0	49.4		mg/L		99	90 - 111
Iron, Dissolved	10.0	10.0		mg/L		100	89 - 115
Magnesium, Dissolved	50.0	49.6		mg/L		99	90 - 113
Potassium, Dissolved	50.0	49.6		mg/L		99	89 - 114
Sodium, Dissolved	50.0	48.7		mg/L		97	90 - 115

Lab Sample ID: MB 280-634879/1-A
Matrix: Water
Analysis Batch: 635129

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634879

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/22/23 08:54	11/22/23 18:52	1
Iron, Total	0.0283	J	0.060	0.0091	mg/L		11/22/23 08:54	11/22/23 18:52	1

Lab Sample ID: LCS 280-634879/2-A
Matrix: Water
Analysis Batch: 635129

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634879

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt, Total	1.00	0.947		mg/L		95	89 - 111
Iron, Total	10.0	9.79		mg/L		98	89 - 115

Lab Sample ID: 280-184296-C-1-B MS
Matrix: Water
Analysis Batch: 635129

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 634879

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt, Total	0.00087	J	1.00	0.909		mg/L		91	82 - 119
Iron, Total	0.33	B	10.0	9.71		mg/L		94	75 - 125

Lab Sample ID: 280-184296-C-1-C MSD
Matrix: Water
Analysis Batch: 635129

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 634879

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt, Total	0.00087	J	1.00	0.934		mg/L		93	82 - 119	3	20
Iron, Total	0.33	B	10.0	9.97		mg/L		96	75 - 125	3	20

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 280-635054/1-A
Matrix: Water
Analysis Batch: 635267

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 635054

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	0.0253	J	0.20	0.024	mg/L		11/26/23 16:04	11/27/23 15:20	1
Iron, Dissolved	0.0230	J	0.060	0.0091	mg/L		11/26/23 16:04	11/27/23 15:20	1
Magnesium, Dissolved	ND		0.050	0.0042	mg/L		11/26/23 16:04	11/27/23 15:20	1
Potassium, Dissolved	ND		1.0	0.24	mg/L		11/26/23 16:04	11/27/23 15:20	1
Sodium, Dissolved	ND		1.0	0.097	mg/L		11/26/23 16:04	11/27/23 15:20	1

Lab Sample ID: LCS 280-635054/2-A
Matrix: Water
Analysis Batch: 635267

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 635054

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium, Dissolved	50.0	48.6		mg/L		97	90 - 111
Iron, Dissolved	10.0	9.74		mg/L		97	89 - 115
Magnesium, Dissolved	50.0	48.4		mg/L		97	90 - 113
Potassium, Dissolved	50.0	48.1		mg/L		96	89 - 114
Sodium, Dissolved	50.0	46.2		mg/L		92	90 - 115

Lab Sample ID: 280-184295-F-2-B MS
Matrix: Water
Analysis Batch: 635127

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 634872

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium, Dissolved	42	B	50.0	91.5		mg/L		99	75 - 125
Iron, Dissolved	0.015	J B	10.0	9.91		mg/L		99	75 - 125
Magnesium, Dissolved	13		50.0	62.6		mg/L		100	75 - 125
Potassium, Dissolved	0.64	J	50.0	50.3		mg/L		99	76 - 125
Sodium, Dissolved	16	B	50.0	64.0		mg/L		96	75 - 125

Lab Sample ID: 280-184295-F-2-C MSD
Matrix: Water
Analysis Batch: 635127

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 634872

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium, Dissolved	42	B	50.0	91.4		mg/L		99	75 - 125	0	20
Iron, Dissolved	0.015	J B	10.0	9.90		mg/L		99	75 - 125	0	20
Magnesium, Dissolved	13		50.0	62.4		mg/L		99	75 - 125	0	20
Potassium, Dissolved	0.64	J	50.0	50.3		mg/L		99	76 - 125	0	20
Sodium, Dissolved	16	B	50.0	63.8		mg/L		96	75 - 125	0	20

Lab Sample ID: 280-184665-E-2-B MS
Matrix: Water
Analysis Batch: 635267

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 635054

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium, Dissolved	2.8	B	50.0	50.7		mg/L		96	75 - 125
Iron, Dissolved	1.1	B	10.0	10.7		mg/L		96	75 - 125
Magnesium, Dissolved	1.6		50.0	49.5		mg/L		96	75 - 125
Potassium, Dissolved	0.72	J	50.0	48.6		mg/L		96	76 - 125
Sodium, Dissolved	11		50.0	57.2		mg/L		92	75 - 125

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 280-184665-E-2-C MSD
Matrix: Water
Analysis Batch: 635267

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 635054

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium, Dissolved	2.8	B	50.0	49.5		mg/L		94	75 - 125	2	20
Iron, Dissolved	1.1	B	10.0	10.5		mg/L		94	75 - 125	2	20
Magnesium, Dissolved	1.6		50.0	48.3		mg/L		93	75 - 125	2	20
Potassium, Dissolved	0.72	J	50.0	47.1		mg/L		93	76 - 125	3	20
Sodium, Dissolved	11		50.0	55.6		mg/L		88	75 - 125	3	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 280-634851/1-A
Matrix: Water
Analysis Batch: 635252

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634851

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 13:17	1
Barium, Total	ND		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 13:17	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 13:17	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 13:17	1
Chromium, Total	0.000753	J	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 13:17	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 13:17	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 13:17	1
Manganese, Total	ND		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 13:17	1
Nickel, Total	ND		0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 13:17	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 13:17	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 13:17	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 13:17	1
Vanadium, Total	ND		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 13:17	1
Zinc, Total	ND		0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 13:17	1

Lab Sample ID: LCS 280-634851/19-A
Matrix: Water
Analysis Batch: 635252

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634851

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony, Total	0.0400	0.0357		mg/L		89	85 - 115
Barium, Total	0.0400	0.0366		mg/L		91	85 - 118
Beryllium, Total	0.0400	0.0353		mg/L		88	80 - 125
Cadmium, Total	0.0400	0.0365		mg/L		91	85 - 115
Chromium, Total	0.0400	0.0368		mg/L		92	84 - 121
Copper, Total	0.0400	0.0354		mg/L		88	85 - 119
Lead, Total	0.0400	0.0348		mg/L		87	85 - 118
Manganese, Total	0.0400	0.0355		mg/L		89	85 - 117
Nickel, Total	0.0400	0.0351		mg/L		88	85 - 119
Selenium, Total	0.0400	0.0369		mg/L		92	77 - 122
Silver, Total	0.0400	0.0401		mg/L		100	85 - 115
Thallium, Total	0.0400	0.0350		mg/L		87	85 - 118
Vanadium, Total	0.0400	0.0361		mg/L		90	85 - 120
Zinc, Total	0.0400	0.0390		mg/L		97	83 - 122

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-184249-H-1-E MS
Matrix: Water
Analysis Batch: 635252

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 634851

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony, Total	ND		0.0400	0.0342		mg/L		85	80 - 111
Barium, Total	1.5		0.0400	1.48	4	mg/L		21	92 - 117
Beryllium, Total	ND		0.0400	0.0362		mg/L		91	87 - 118
Cadmium, Total	ND	F1	0.0400	0.0338	F1	mg/L		84	91 - 114
Chromium, Total	0.0035	F1 B	0.0400	0.0356	F1	mg/L		80	91 - 114
Copper, Total	ND	F1	0.0400	0.0308	F1	mg/L		77	89 - 116
Lead, Total	ND	F1	0.0400	0.0317	F1	mg/L		79	95 - 116
Manganese, Total	0.10	F1	0.0400	0.135	F1	mg/L		78	89 - 119
Nickel, Total	0.030	F1	0.0400	0.0591	F1	mg/L		74	92 - 116
Selenium, Total	ND	F1	0.0400	0.0341	F1	mg/L		85	90 - 115
Silver, Total	ND	F1	0.0400	0.0358	F1	mg/L		89	93 - 118
Thallium, Total	ND	F1	0.0400	0.0322	F1	mg/L		80	94 - 115
Vanadium, Total	0.0053	F1	0.0400	0.0387	F1	mg/L		84	91 - 114
Zinc, Total	ND		0.0400	0.0348		mg/L		87	86 - 120

Lab Sample ID: 280-184249-H-1-F MSD
Matrix: Water
Analysis Batch: 635252

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 634851

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony, Total	ND		0.0400	0.0363		mg/L		91	80 - 111	6	20
Barium, Total	1.5		0.0400	1.55	4	mg/L		198	92 - 117	5	20
Beryllium, Total	ND		0.0400	0.0384		mg/L		96	87 - 118	6	20
Cadmium, Total	ND	F1	0.0400	0.0347	F1	mg/L		87	91 - 114	3	20
Chromium, Total	0.0035	F1 B	0.0400	0.0374	F1	mg/L		85	91 - 114	5	20
Copper, Total	ND	F1	0.0400	0.0322	F1	mg/L		80	89 - 116	4	20
Lead, Total	ND	F1	0.0400	0.0330	F1	mg/L		82	95 - 116	4	20
Manganese, Total	0.10	F1	0.0400	0.140		mg/L		92	89 - 119	4	20
Nickel, Total	0.030	F1	0.0400	0.0611	F1	mg/L		79	92 - 116	3	20
Selenium, Total	ND	F1	0.0400	0.0367		mg/L		92	90 - 115	7	20
Silver, Total	ND	F1	0.0400	0.0364	F1	mg/L		91	93 - 118	2	20
Thallium, Total	ND	F1	0.0400	0.0332	F1	mg/L		83	94 - 115	3	20
Vanadium, Total	0.0053	F1	0.0400	0.0409	F1	mg/L		89	91 - 114	6	20
Zinc, Total	ND		0.0400	0.0370		mg/L		92	86 - 120	6	20

Lab Sample ID: MB 280-634872/1-A
Matrix: Water
Analysis Batch: 635192

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634872

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	ND		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 11:23	1

Lab Sample ID: LCS 280-634872/25-A
Matrix: Water
Analysis Batch: 635192

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634872

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese, Dissolved	0.0400	0.0359		mg/L		90	85 - 117

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 280-634879/1-A
Matrix: Water
Analysis Batch: 635253

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634879

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/22/23 08:54	11/27/23 16:44	1
Barium, Total	ND		0.0010	0.00038	mg/L		11/22/23 08:54	11/27/23 16:44	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/22/23 08:54	11/27/23 16:44	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/22/23 08:54	11/27/23 16:44	1
Chromium, Total	0.000725	J	0.0030	0.00050	mg/L		11/22/23 08:54	11/27/23 16:44	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/22/23 08:54	11/27/23 16:44	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/22/23 08:54	11/27/23 16:44	1
Manganese, Total	ND		0.0010	0.00051	mg/L		11/22/23 08:54	11/27/23 16:44	1
Nickel, Total	ND		0.0040	0.00083	mg/L		11/22/23 08:54	11/27/23 16:44	1
Selenium, Total	ND		0.0010	0.0010	mg/L		11/22/23 08:54	11/27/23 16:44	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/22/23 08:54	11/27/23 16:44	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/22/23 08:54	11/27/23 16:44	1
Vanadium, Total	ND		0.0020	0.0011	mg/L		11/22/23 08:54	11/27/23 16:44	1
Zinc, Total	0.00307	J	0.0050	0.0020	mg/L		11/22/23 08:54	11/27/23 16:44	1

Lab Sample ID: LCS 280-634879/25-A
Matrix: Water
Analysis Batch: 635253

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634879

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony, Total	0.0400	0.0367		mg/L		92	85 - 115
Barium, Total	0.0400	0.0367		mg/L		92	85 - 118
Beryllium, Total	0.0400	0.0371		mg/L		93	80 - 125
Cadmium, Total	0.0400	0.0377		mg/L		94	85 - 115
Chromium, Total	0.0400	0.0380		mg/L		95	84 - 121
Copper, Total	0.0400	0.0370		mg/L		92	85 - 119
Lead, Total	0.0400	0.0365		mg/L		91	85 - 118
Manganese, Total	0.0400	0.0367		mg/L		92	85 - 117
Nickel, Total	0.0400	0.0363		mg/L		91	85 - 119
Selenium, Total	0.0400	0.0382		mg/L		96	77 - 122
Silver, Total	0.0400	0.0413		mg/L		103	85 - 115
Thallium, Total	0.0400	0.0366		mg/L		92	85 - 118
Vanadium, Total	0.0400	0.0365		mg/L		91	85 - 120
Zinc, Total	0.0400	0.0384		mg/L		96	83 - 122

Lab Sample ID: 280-184296-C-1-E MS
Matrix: Water
Analysis Batch: 635253

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 634879

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony, Total	ND		0.0400	0.0358		mg/L		89	80 - 111
Barium, Total	0.066		0.0400	0.105		mg/L		98	92 - 117
Beryllium, Total	ND		0.0400	0.0380		mg/L		95	87 - 118
Cadmium, Total	ND		0.0400	0.0371		mg/L		93	91 - 114
Chromium, Total	0.0010	J B	0.0400	0.0373		mg/L		91	91 - 114
Copper, Total	ND		0.0400	0.0360		mg/L		90	89 - 116
Lead, Total	ND	F1	0.0400	0.0352	F1	mg/L		88	95 - 116
Manganese, Total	0.011	F1	0.0400	0.0460	F1	mg/L		87	89 - 119
Nickel, Total	0.0032	J F1	0.0400	0.0386	F1	mg/L		89	92 - 116

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-184296-C-1-E MS
Matrix: Water
Analysis Batch: 635253

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 634879

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium, Total	ND		0.0400	0.0372		mg/L		93	90 - 115
Silver, Total	ND		0.0400	0.0406		mg/L		102	93 - 118
Thallium, Total	ND	F1	0.0400	0.0353	F1	mg/L		88	94 - 115
Vanadium, Total	ND	F1	0.0400	0.0358	F1	mg/L		89	91 - 114
Zinc, Total	0.0039	J B	0.0400	0.0430		mg/L		98	86 - 120

Lab Sample ID: 280-184296-C-1-F MSD
Matrix: Water
Analysis Batch: 635253

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 634879

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony, Total	ND		0.0400	0.0366		mg/L		91	80 - 111	2	20
Barium, Total	0.066		0.0400	0.104		mg/L		95	92 - 117	1	20
Beryllium, Total	ND		0.0400	0.0368		mg/L		92	87 - 118	3	20
Cadmium, Total	ND		0.0400	0.0379		mg/L		95	91 - 114	2	20
Chromium, Total	0.0010	J B	0.0400	0.0383		mg/L		93	91 - 114	3	20
Copper, Total	ND		0.0400	0.0367		mg/L		92	89 - 116	2	20
Lead, Total	ND	F1	0.0400	0.0357	F1	mg/L		89	95 - 116	2	20
Manganese, Total	0.011	F1	0.0400	0.0464	F1	mg/L		88	89 - 119	1	20
Nickel, Total	0.0032	J F1	0.0400	0.0397	F1	mg/L		91	92 - 116	3	20
Selenium, Total	ND		0.0400	0.0380		mg/L		95	90 - 115	2	20
Silver, Total	ND		0.0400	0.0407		mg/L		102	93 - 118	0	20
Thallium, Total	ND	F1	0.0400	0.0358	F1	mg/L		90	94 - 115	1	20
Vanadium, Total	ND	F1	0.0400	0.0367		mg/L		92	91 - 114	2	20
Zinc, Total	0.0039	J B	0.0400	0.0408		mg/L		92	86 - 120	5	20

Lab Sample ID: MB 280-635054/1-A
Matrix: Water
Analysis Batch: 635247

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 635054

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	ND		0.0010	0.00051	mg/L		11/26/23 16:04	11/28/23 00:59	1

Lab Sample ID: LCS 280-635054/23-A
Matrix: Water
Analysis Batch: 635247

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 635054

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese, Dissolved	0.0400	0.0345		mg/L		86	85 - 117

Lab Sample ID: 280-184295-F-2-E MS
Matrix: Water
Analysis Batch: 635192

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 634872

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese, Dissolved	0.34		0.0400	0.381	4	mg/L		112	89 - 119

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-184295-F-2-F MSD
Matrix: Water
Analysis Batch: 635192

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 634872

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese, Dissolved	0.34		0.0400	0.382	4	mg/L		116	89 - 119	0	20

Lab Sample ID: 280-184665-E-2-E MS
Matrix: Water
Analysis Batch: 635419

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 635054

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese, Dissolved	0.0076	^+	0.0400	0.0481	^+	mg/L		101	89 - 119

Lab Sample ID: 280-184665-E-2-F MSD
Matrix: Water
Analysis Batch: 635419

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 635054

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese, Dissolved	0.0076	^+	0.0400	0.0474	^+	mg/L		100	89 - 119	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-635301/6
Matrix: Water
Analysis Batch: 635301

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	3.0	mg/L			11/28/23 13:21	1
Sulfate	ND		5.0	5.0	mg/L			11/28/23 13:21	1

Lab Sample ID: LCS 280-635301/4
Matrix: Water
Analysis Batch: 635301

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	100		mg/L		100	90 - 110
Sulfate	100	97.7		mg/L		98	90 - 110

Lab Sample ID: LCSD 280-635301/5
Matrix: Water
Analysis Batch: 635301

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
Chloride	100	101		mg/L		101	90 - 110	1	10
Sulfate	100	97.7		mg/L		98	90 - 110	0	10

Lab Sample ID: MRL 280-635301/3
Matrix: Water
Analysis Batch: 635301

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	5.44		mg/L		109	50 - 150
Sulfate	5.00	ND		mg/L		100	50 - 150

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-184261-1 MS
Matrix: Water
Analysis Batch: 635301

Client Sample ID: MW-36A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND		50.0	58.8		mg/L		118	80 - 120		
Sulfate	ND		50.0	56.8		mg/L		114	80 - 120		

Lab Sample ID: 280-184261-1 MSD
Matrix: Water
Analysis Batch: 635301

Client Sample ID: MW-36A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		50.0	59.4		mg/L		119	80 - 120	1	20
Sulfate	ND		50.0	57.4		mg/L		115	80 - 120	1	20

Lab Sample ID: 280-184261-11 MS
Matrix: Water
Analysis Batch: 635301

Client Sample ID: MW-19C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND		50.0	59.1		mg/L		118	80 - 120		
Sulfate	ND		50.0	58.3		mg/L		117	80 - 120		

Lab Sample ID: 280-184261-11 MSD
Matrix: Water
Analysis Batch: 635301

Client Sample ID: MW-19C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		50.0	59.8		mg/L		120	80 - 120	1	20
Sulfate	ND		50.0	59.1		mg/L		118	80 - 120	1	20

Lab Sample ID: 280-184261-1 DU
Matrix: Water
Analysis Batch: 635301

Client Sample ID: MW-36A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	ND			ND		mg/L				NC	15
Sulfate	ND			ND		mg/L				NC	15

Lab Sample ID: 280-184261-11 DU
Matrix: Water
Analysis Batch: 635301

Client Sample ID: MW-19C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	ND			ND		mg/L				NC	15
Sulfate	ND			ND		mg/L				NC	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-635396/89
Matrix: Water
Analysis Batch: 635396

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.030	0.030	mg/L			11/28/23 15:20	1

Lab Sample ID: LCS 280-635396/90
Matrix: Water
Analysis Batch: 635396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia (as N)	2.50	2.55		mg/L		102	90 - 110

Lab Sample ID: 280-184257-B-7 MS
Matrix: Water
Analysis Batch: 635396

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia (as N)	0.36		1.00	1.42		mg/L		106	90 - 110

Lab Sample ID: 280-184257-B-7 MSD
Matrix: Water
Analysis Batch: 635396

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia (as N)	0.36		1.00	1.41		mg/L		106	90 - 110	0	10

Lab Sample ID: 280-184261-6 MS
Matrix: Water
Analysis Batch: 635396

Client Sample ID: MW-34C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia (as N)	ND		1.00	1.10		mg/L		110	90 - 110

Lab Sample ID: 280-184261-6 MSD
Matrix: Water
Analysis Batch: 635396

Client Sample ID: MW-34C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia (as N)	ND		1.00	1.08		mg/L		108	90 - 110	2	10

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-634324/31
Matrix: Water
Analysis Batch: 634324

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total (As CaCO3)	ND		10	10	mg/L			11/16/23 17:13	1
Alkalinity, Bicarbonate (As CaCO3)	ND		10	10	mg/L			11/16/23 17:13	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 280-634324/57
Matrix: Water
Analysis Batch: 634324

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total (As CaCO3)	ND		10	10	mg/L			11/16/23 20:18	1
Alkalinity, Bicarbonate (As CaCO3)	ND		10	10	mg/L			11/16/23 20:18	1

Lab Sample ID: LCS 280-634324/30
Matrix: Water
Analysis Batch: 634324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity, Total (As CaCO3)			200	202		mg/L		101	89 - 110		

Lab Sample ID: LCS 280-634324/56
Matrix: Water
Analysis Batch: 634324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity, Total (As CaCO3)			200	202		mg/L		101	89 - 110		

Lab Sample ID: 280-184261-11 DU
Matrix: Water
Analysis Batch: 634324

Client Sample ID: MW-19C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity, Total (As CaCO3)	79			77.9		mg/L				1	10
Alkalinity, Bicarbonate (As CaCO3)	79			77.9		mg/L				1	20

Lab Sample ID: MB 280-634570/5
Matrix: Water
Analysis Batch: 634570

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total (As CaCO3)	ND		10	10	mg/L			11/17/23 10:12	1
Alkalinity, Bicarbonate (As CaCO3)	ND		10	10	mg/L			11/17/23 10:12	1

Lab Sample ID: LCS 280-634570/4
Matrix: Water
Analysis Batch: 634570

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity, Total (As CaCO3)			200	197		mg/L		98	89 - 110		

Lab Sample ID: 280-184256-A-1 DU
Matrix: Water
Analysis Batch: 634570

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity, Total (As CaCO3)	240			239		mg/L				0	10
Alkalinity, Bicarbonate (As CaCO3)	240			239		mg/L				0	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-633877/1
Matrix: Water
Analysis Batch: 633877

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	5.0	mg/L			11/14/23 14:54	1

Lab Sample ID: LCS 280-633877/2
Matrix: Water
Analysis Batch: 633877

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids (TDS)	500	502		mg/L		100	88 - 114

Lab Sample ID: 280-184261-7 DU
Matrix: Water
Analysis Batch: 633877

Client Sample ID: MW-29A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	61		60.0		mg/L		2	10

Lab Sample ID: MB 280-633879/1
Matrix: Water
Analysis Batch: 633879

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	5.0	mg/L			11/14/23 14:57	1

Lab Sample ID: LCS 280-633879/2
Matrix: Water
Analysis Batch: 633879

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids (TDS)	508	505		mg/L		99	88 - 114

Lab Sample ID: 280-184431-A-4 DU
Matrix: Water
Analysis Batch: 633879

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	18		17.0		mg/L		6	10

Lab Sample ID: MB 280-634069/1
Matrix: Water
Analysis Batch: 634069

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	5.0	mg/L			11/15/23 13:49	1

Lab Sample ID: LCS 280-634069/2
Matrix: Water
Analysis Batch: 634069

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids (TDS)	508	501		mg/L		99	88 - 114

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: 280-184261-1 DU
Matrix: Water
Analysis Batch: 634069

Client Sample ID: MW-36A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids (TDS)	93			92.0		mg/L				1	10

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-633850/1
Matrix: Water
Analysis Batch: 633850

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			11/14/23 13:34	1

Lab Sample ID: LCS 280-633850/2
Matrix: Water
Analysis Batch: 633850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			505	439		mg/L		87	79 - 114		

Lab Sample ID: 160-52135-A-2 DU
Matrix: Water
Analysis Batch: 633850

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	15			15.6		mg/L				3	10

Lab Sample ID: MB 280-633868/1
Matrix: Water
Analysis Batch: 633868

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			11/14/23 14:23	1

Lab Sample ID: LCS 280-633868/2
Matrix: Water
Analysis Batch: 633868

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			505	445		mg/L		88	79 - 114		

Lab Sample ID: LCSD 280-633868/3
Matrix: Water
Analysis Batch: 633868

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
Total Suspended Solids			505	521		mg/L		103	79 - 114	16	20

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 280-184261-4 DU
Matrix: Water
Analysis Batch: 633868

Client Sample ID: MW-13B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	ND			ND		mg/L				NC	10

Lab Sample ID: MB 280-634107/1
Matrix: Water
Analysis Batch: 634107

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			11/15/23 16:57	1

Lab Sample ID: LCS 280-634107/2
Matrix: Water
Analysis Batch: 634107

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			503	426		mg/L		85	79 - 114		

Lab Sample ID: LCSD 280-634107/3
Matrix: Water
Analysis Batch: 634107

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
Total Suspended Solids			503	432		mg/L		86	79 - 114	2	20

Lab Sample ID: 280-184261-8 DU
Matrix: Water
Analysis Batch: 634107

Client Sample ID: MW-32
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	ND			ND		mg/L				NC	10

Lab Sample ID: MB 280-634120/1
Matrix: Water
Analysis Batch: 634120

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			11/15/23 18:12	1

Lab Sample ID: LCS 280-634120/2
Matrix: Water
Analysis Batch: 634120

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			503	508		mg/L		101	79 - 114		

Lab Sample ID: 280-184413-C-10 DU
Matrix: Water
Analysis Batch: 634120

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	5.2			8.40	F5	mg/L				47	10

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-634853/3
Matrix: Water
Analysis Batch: 634853

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			11/21/23 14:01	1

Lab Sample ID: LCS 280-634853/1
Matrix: Water
Analysis Batch: 634853

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Suspended Solids			500	476		mg/L		95	79 - 114		

Lab Sample ID: LCSD 280-634853/2
Matrix: Water
Analysis Batch: 634853

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
Total Suspended Solids			500	444		mg/L		89	79 - 114	7	20

Lab Sample ID: 280-184784-A-1 DU
Matrix: Water
Analysis Batch: 634853

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	ND			ND		mg/L				NC	10

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-635668/37
Matrix: Water
Analysis Batch: 635668

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0	1.0	mg/L			11/29/23 13:37	1

Lab Sample ID: MB 280-635668/6
Matrix: Water
Analysis Batch: 635668

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0	1.0	mg/L			11/29/23 03:33	1

Lab Sample ID: LCS 280-635668/36
Matrix: Water
Analysis Batch: 635668

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon - Average			25.0	24.7		mg/L		99	88 - 112		

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 280-635668/4
Matrix: Water
Analysis Batch: 635668

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Average	25.0	26.2		mg/L		105	88 - 112

Lab Sample ID: LCSD 280-635668/5
Matrix: Water
Analysis Batch: 635668

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
Total Organic Carbon - Average	25.0	26.1		mg/L		104	88 - 112	0	15

Lab Sample ID: 280-184261-1 MS
Matrix: Water
Analysis Batch: 635668

Client Sample ID: MW-36A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Average	ND		25.0	25.3		mg/L		101	88 - 112

Lab Sample ID: 280-184261-1 MSD
Matrix: Water
Analysis Batch: 635668

Client Sample ID: MW-36A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Average	ND		25.0	25.5		mg/L		102	88 - 112	1	15

Lab Sample ID: 280-184261-4 MS
Matrix: Water
Analysis Batch: 635668

Client Sample ID: MW-13B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Average	ND		25.0	25.6		mg/L		102	88 - 112

Lab Sample ID: 280-184261-4 MSD
Matrix: Water
Analysis Batch: 635668

Client Sample ID: MW-13B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Average	ND		25.0	25.2		mg/L		101	88 - 112	1	15

Lab Sample ID: 280-184261-15 MS
Matrix: Water
Analysis Batch: 635668

Client Sample ID: DUP1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Average	1.6		25.0	27.2		mg/L		102	88 - 112

Lab Sample ID: 280-184261-15 MSD
Matrix: Water
Analysis Batch: 635668

Client Sample ID: DUP1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Average	1.6		25.0	27.1		mg/L		102	88 - 112	0	15

QC Association Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184261-1

GC/MS VOA

Analysis Batch: 691875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-1	MW-36A	Total/NA	Water	8260C	
280-184261-2	MW-13A	Total/NA	Water	8260C	
280-184261-3	DUP2	Total/NA	Water	8260C	
280-184261-4	MW-13B	Total/NA	Water	8260C	
280-184261-5	MW-34A	Total/NA	Water	8260C	
280-184261-6	MW-34C	Total/NA	Water	8260C	
280-184261-7	MW-29A	Total/NA	Water	8260C	
280-184261-8	MW-32	Total/NA	Water	8260C	
280-184261-9	MW-42	Total/NA	Water	8260C	
280-184261-10	MW-43	Total/NA	Water	8260C	
280-184261-11	MW-19C	Total/NA	Water	8260C	
280-184261-12	MW-16	Total/NA	Water	8260C	
280-184261-13	MW-35	Total/NA	Water	8260C	
280-184261-14	TRIP BLANK	Total/NA	Water	8260C	
280-184261-15	DUP1	Total/NA	Water	8260C	
MB 480-691875/8	Method Blank	Total/NA	Water	8260C	
LCS 480-691875/6	Lab Control Sample	Total/NA	Water	8260C	
480-214819-A-2 MS	Matrix Spike	Total/NA	Water	8260C	
480-214819-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

Analysis Batch: 691926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-1	MW-36A	Total/NA	Water	8260C SIM	
280-184261-2	MW-13A	Total/NA	Water	8260C SIM	
280-184261-3	DUP2	Total/NA	Water	8260C SIM	
280-184261-4	MW-13B	Total/NA	Water	8260C SIM	
280-184261-5	MW-34A	Total/NA	Water	8260C SIM	
280-184261-6	MW-34C	Total/NA	Water	8260C SIM	
280-184261-7	MW-29A	Total/NA	Water	8260C SIM	
280-184261-8	MW-32	Total/NA	Water	8260C SIM	
280-184261-9	MW-42	Total/NA	Water	8260C SIM	
280-184261-10	MW-43	Total/NA	Water	8260C SIM	
280-184261-11	MW-19C	Total/NA	Water	8260C SIM	
280-184261-12	MW-16	Total/NA	Water	8260C SIM	
280-184261-13	MW-35	Total/NA	Water	8260C SIM	
280-184261-14	TRIP BLANK	Total/NA	Water	8260C SIM	
280-184261-15	DUP1	Total/NA	Water	8260C SIM	
MB 480-691926/9	Method Blank	Total/NA	Water	8260C SIM	
LCS 480-691926/6	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 480-691926/7	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

Metals

Prep Batch: 634851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-9	MW-42	Total Recoverable	Water	3005A	
280-184261-10	MW-43	Total Recoverable	Water	3005A	
280-184261-11	MW-19C	Total Recoverable	Water	3005A	
280-184261-12	MW-16	Total Recoverable	Water	3005A	
280-184261-13	MW-35	Total Recoverable	Water	3005A	
280-184261-15	DUP1	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 634851 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-634851/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-634851/19-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 280-634851/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-184249-H-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
280-184249-H-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
280-184249-H-1-E MS	Matrix Spike	Total Recoverable	Water	3005A	
280-184249-H-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 634872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-11	MW-19C	Dissolved	Water	3005A	
280-184261-12	MW-16	Dissolved	Water	3005A	
280-184261-13	MW-35	Dissolved	Water	3005A	
280-184261-15	DUP1	Dissolved	Water	3005A	
MB 280-634872/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-634872/25-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 280-634872/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-184295-F-2-B MS	Matrix Spike	Dissolved	Water	3005A	
280-184295-F-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	
280-184295-F-2-E MS	Matrix Spike	Dissolved	Water	3005A	
280-184295-F-2-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Prep Batch: 634879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-1	MW-36A	Total Recoverable	Water	3005A	
280-184261-2	MW-13A	Total Recoverable	Water	3005A	
280-184261-3	DUP2	Total Recoverable	Water	3005A	
280-184261-4	MW-13B	Total Recoverable	Water	3005A	
280-184261-5	MW-34A	Total Recoverable	Water	3005A	
280-184261-6	MW-34C	Total Recoverable	Water	3005A	
280-184261-7	MW-29A	Total Recoverable	Water	3005A	
280-184261-8	MW-32	Total Recoverable	Water	3005A	
MB 280-634879/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-634879/25-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 280-634879/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-184296-C-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
280-184296-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
280-184296-C-1-E MS	Matrix Spike	Total Recoverable	Water	3005A	
280-184296-C-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 635054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-1	MW-36A	Dissolved	Water	3005A	
280-184261-2	MW-13A	Dissolved	Water	3005A	
280-184261-3	DUP2	Dissolved	Water	3005A	
280-184261-4	MW-13B	Dissolved	Water	3005A	
280-184261-5	MW-34A	Dissolved	Water	3005A	
280-184261-6	MW-34C	Dissolved	Water	3005A	
280-184261-7	MW-29A	Dissolved	Water	3005A	
280-184261-8	MW-32	Dissolved	Water	3005A	
280-184261-9	MW-42	Dissolved	Water	3005A	

Metals (Continued)

Prep Batch: 635054 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-10	MW-43	Dissolved	Water	3005A	
MB 280-635054/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-635054/23-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 280-635054/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-184665-E-2-B MS	Matrix Spike	Dissolved	Water	3005A	
280-184665-E-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	
280-184665-E-2-E MS	Matrix Spike	Dissolved	Water	3005A	
280-184665-E-2-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 635121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-9	MW-42	Total Recoverable	Water	6010D	634851
280-184261-10	MW-43	Total Recoverable	Water	6010D	634851
280-184261-11	MW-19C	Total Recoverable	Water	6010D	634851
280-184261-12	MW-16	Total Recoverable	Water	6010D	634851
280-184261-13	MW-35	Total Recoverable	Water	6010D	634851
280-184261-15	DUP1	Total Recoverable	Water	6010D	634851
MB 280-634851/1-A	Method Blank	Total Recoverable	Water	6010D	634851
LCS 280-634851/2-A	Lab Control Sample	Total Recoverable	Water	6010D	634851
280-184249-H-1-B MS	Matrix Spike	Total Recoverable	Water	6010D	634851
280-184249-H-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010D	634851

Analysis Batch: 635127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-11	MW-19C	Dissolved	Water	6010D	634872
280-184261-12	MW-16	Dissolved	Water	6010D	634872
280-184261-13	MW-35	Dissolved	Water	6010D	634872
280-184261-15	DUP1	Dissolved	Water	6010D	634872
MB 280-634872/1-A	Method Blank	Total Recoverable	Water	6010D	634872
LCS 280-634872/2-A	Lab Control Sample	Total Recoverable	Water	6010D	634872
280-184295-F-2-B MS	Matrix Spike	Dissolved	Water	6010D	634872
280-184295-F-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010D	634872

Analysis Batch: 635129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-1	MW-36A	Total Recoverable	Water	6010D	634879
280-184261-2	MW-13A	Total Recoverable	Water	6010D	634879
280-184261-3	DUP2	Total Recoverable	Water	6010D	634879
280-184261-4	MW-13B	Total Recoverable	Water	6010D	634879
280-184261-5	MW-34A	Total Recoverable	Water	6010D	634879
280-184261-6	MW-34C	Total Recoverable	Water	6010D	634879
280-184261-7	MW-29A	Total Recoverable	Water	6010D	634879
280-184261-8	MW-32	Total Recoverable	Water	6010D	634879
MB 280-634879/1-A	Method Blank	Total Recoverable	Water	6010D	634879
LCS 280-634879/2-A	Lab Control Sample	Total Recoverable	Water	6010D	634879
280-184296-C-1-B MS	Matrix Spike	Total Recoverable	Water	6010D	634879
280-184296-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010D	634879

Analysis Batch: 635192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-11	MW-19C	Dissolved	Water	6020B	634872

Metals (Continued)

Analysis Batch: 635192 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-12	MW-16	Dissolved	Water	6020B	634872
280-184261-13	MW-35	Dissolved	Water	6020B	634872
280-184261-15	DUP1	Dissolved	Water	6020B	634872
MB 280-634872/1-A	Method Blank	Total Recoverable	Water	6020B	634872
LCS 280-634872/25-A	Lab Control Sample	Total Recoverable	Water	6020B	634872
280-184295-F-2-E MS	Matrix Spike	Dissolved	Water	6020B	634872
280-184295-F-2-F MSD	Matrix Spike Duplicate	Dissolved	Water	6020B	634872

Analysis Batch: 635247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-1	MW-36A	Dissolved	Water	6020B	635054
280-184261-2	MW-13A	Dissolved	Water	6020B	635054
280-184261-3	DUP2	Dissolved	Water	6020B	635054
280-184261-4	MW-13B	Dissolved	Water	6020B	635054
280-184261-5	MW-34A	Dissolved	Water	6020B	635054
280-184261-6	MW-34C	Dissolved	Water	6020B	635054
280-184261-7	MW-29A	Dissolved	Water	6020B	635054
280-184261-8	MW-32	Dissolved	Water	6020B	635054
MB 280-635054/1-A	Method Blank	Total Recoverable	Water	6020B	635054
LCS 280-635054/23-A	Lab Control Sample	Total Recoverable	Water	6020B	635054

Analysis Batch: 635252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-9	MW-42	Total Recoverable	Water	6020B	634851
280-184261-10	MW-43	Total Recoverable	Water	6020B	634851
280-184261-11	MW-19C	Total Recoverable	Water	6020B	634851
280-184261-12	MW-16	Total Recoverable	Water	6020B	634851
280-184261-13	MW-35	Total Recoverable	Water	6020B	634851
280-184261-15	DUP1	Total Recoverable	Water	6020B	634851
MB 280-634851/1-A	Method Blank	Total Recoverable	Water	6020B	634851
LCS 280-634851/19-A	Lab Control Sample	Total Recoverable	Water	6020B	634851
280-184249-H-1-E MS	Matrix Spike	Total Recoverable	Water	6020B	634851
280-184249-H-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	634851

Analysis Batch: 635253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-1	MW-36A	Total Recoverable	Water	6020B	634879
280-184261-2	MW-13A	Total Recoverable	Water	6020B	634879
280-184261-3	DUP2	Total Recoverable	Water	6020B	634879
280-184261-4	MW-13B	Total Recoverable	Water	6020B	634879
280-184261-5	MW-34A	Total Recoverable	Water	6020B	634879
280-184261-6	MW-34C	Total Recoverable	Water	6020B	634879
280-184261-7	MW-29A	Total Recoverable	Water	6020B	634879
280-184261-8	MW-32	Total Recoverable	Water	6020B	634879
MB 280-634879/1-A	Method Blank	Total Recoverable	Water	6020B	634879
LCS 280-634879/25-A	Lab Control Sample	Total Recoverable	Water	6020B	634879
280-184296-C-1-E MS	Matrix Spike	Total Recoverable	Water	6020B	634879
280-184296-C-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	634879

QC Association Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184261-1

Metals

Analysis Batch: 635267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-1	MW-36A	Dissolved	Water	6010D	635054
280-184261-2	MW-13A	Dissolved	Water	6010D	635054
280-184261-3	DUP2	Dissolved	Water	6010D	635054
280-184261-4	MW-13B	Dissolved	Water	6010D	635054
280-184261-5	MW-34A	Dissolved	Water	6010D	635054
280-184261-6	MW-34C	Dissolved	Water	6010D	635054
280-184261-7	MW-29A	Dissolved	Water	6010D	635054
280-184261-8	MW-32	Dissolved	Water	6010D	635054
280-184261-9	MW-42	Dissolved	Water	6010D	635054
280-184261-10	MW-43	Dissolved	Water	6010D	635054
MB 280-635054/1-A	Method Blank	Total Recoverable	Water	6010D	635054
LCS 280-635054/2-A	Lab Control Sample	Total Recoverable	Water	6010D	635054
280-184665-E-2-B MS	Matrix Spike	Dissolved	Water	6010D	635054
280-184665-E-2-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010D	635054

Analysis Batch: 635419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184665-E-2-E MS	Matrix Spike	Dissolved	Water	6020B	635054
280-184665-E-2-F MSD	Matrix Spike Duplicate	Dissolved	Water	6020B	635054

Analysis Batch: 635488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-9	MW-42	Dissolved	Water	6020B	635054
280-184261-10	MW-43	Dissolved	Water	6020B	635054

General Chemistry

Analysis Batch: 633349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-1	MW-36A	Total/NA	Water	353.2	
280-184261-2	MW-13A	Total/NA	Water	353.2	
280-184261-3	DUP2	Total/NA	Water	353.2	
280-184261-4	MW-13B	Total/NA	Water	353.2	
280-184261-5	MW-34A	Total/NA	Water	353.2	
280-184261-6	MW-34C	Total/NA	Water	353.2	
280-184261-7	MW-29A	Total/NA	Water	353.2	
280-184261-8	MW-32	Total/NA	Water	353.2	
280-184261-9	MW-42	Total/NA	Water	353.2	
280-184261-10	MW-43	Total/NA	Water	353.2	
280-184261-11	MW-19C	Total/NA	Water	353.2	
280-184261-12	MW-16	Total/NA	Water	353.2	
280-184261-13	MW-35	Total/NA	Water	353.2	
280-184261-15	DUP1	Total/NA	Water	353.2	

Analysis Batch: 633850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-1	MW-36A	Total/NA	Water	SM 2540D	
MB 280-633850/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-633850/2	Lab Control Sample	Total/NA	Water	SM 2540D	
160-52135-A-2 DU	Duplicate	Total/NA	Water	SM 2540D	

General Chemistry

Analysis Batch: 633868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-2	MW-13A	Total/NA	Water	SM 2540D	
280-184261-3	DUP2	Total/NA	Water	SM 2540D	
280-184261-4	MW-13B	Total/NA	Water	SM 2540D	
MB 280-633868/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-633868/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 280-633868/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
280-184261-4 DU	MW-13B	Total/NA	Water	SM 2540D	

Analysis Batch: 633877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-5	MW-34A	Total/NA	Water	SM 2540C	
280-184261-6	MW-34C	Total/NA	Water	SM 2540C	
280-184261-7	MW-29A	Total/NA	Water	SM 2540C	
MB 280-633877/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-633877/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-184261-7 DU	MW-29A	Total/NA	Water	SM 2540C	

Analysis Batch: 633879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-2	MW-13A	Total/NA	Water	SM 2540C	
280-184261-3	DUP2	Total/NA	Water	SM 2540C	
280-184261-4	MW-13B	Total/NA	Water	SM 2540C	
MB 280-633879/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-633879/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-184431-A-4 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 634069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-1	MW-36A	Total/NA	Water	SM 2540C	
280-184261-8	MW-32	Total/NA	Water	SM 2540C	
280-184261-9	MW-42	Total/NA	Water	SM 2540C	
280-184261-10	MW-43	Total/NA	Water	SM 2540C	
280-184261-11	MW-19C	Total/NA	Water	SM 2540C	
280-184261-12	MW-16	Total/NA	Water	SM 2540C	
280-184261-13	MW-35	Total/NA	Water	SM 2540C	
280-184261-15	DUP1	Total/NA	Water	SM 2540C	
MB 280-634069/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-634069/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-184261-1 DU	MW-36A	Total/NA	Water	SM 2540C	

Analysis Batch: 634107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-5	MW-34A	Total/NA	Water	SM 2540D	
280-184261-6	MW-34C	Total/NA	Water	SM 2540D	
280-184261-7	MW-29A	Total/NA	Water	SM 2540D	
280-184261-8	MW-32	Total/NA	Water	SM 2540D	
280-184261-9	MW-42	Total/NA	Water	SM 2540D	
280-184261-11	MW-19C	Total/NA	Water	SM 2540D	
280-184261-13	MW-35	Total/NA	Water	SM 2540D	
280-184261-15	DUP1	Total/NA	Water	SM 2540D	
MB 280-634107/1	Method Blank	Total/NA	Water	SM 2540D	

General Chemistry (Continued)

Analysis Batch: 634107 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-634107/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 280-634107/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
280-184261-8 DU	MW-32	Total/NA	Water	SM 2540D	

Analysis Batch: 634120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-12	MW-16	Total/NA	Water	SM 2540D	
MB 280-634120/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-634120/2	Lab Control Sample	Total/NA	Water	SM 2540D	
280-184413-C-10 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 634324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-1	MW-36A	Total/NA	Water	SM 2320B	
280-184261-2	MW-13A	Total/NA	Water	SM 2320B	
280-184261-3	DUP2	Total/NA	Water	SM 2320B	
280-184261-4	MW-13B	Total/NA	Water	SM 2320B	
280-184261-5	MW-34A	Total/NA	Water	SM 2320B	
280-184261-6	MW-34C	Total/NA	Water	SM 2320B	
280-184261-7	MW-29A	Total/NA	Water	SM 2320B	
280-184261-8	MW-32	Total/NA	Water	SM 2320B	
280-184261-9	MW-42	Total/NA	Water	SM 2320B	
280-184261-10	MW-43	Total/NA	Water	SM 2320B	
280-184261-11	MW-19C	Total/NA	Water	SM 2320B	
280-184261-12	MW-16	Total/NA	Water	SM 2320B	
280-184261-13	MW-35	Total/NA	Water	SM 2320B	
MB 280-634324/31	Method Blank	Total/NA	Water	SM 2320B	
MB 280-634324/57	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-634324/30	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 280-634324/56	Lab Control Sample	Total/NA	Water	SM 2320B	
280-184261-11 DU	MW-19C	Total/NA	Water	SM 2320B	

Analysis Batch: 634570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-15	DUP1	Total/NA	Water	SM 2320B	
MB 280-634570/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-634570/4	Lab Control Sample	Total/NA	Water	SM 2320B	
280-184256-A-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 634853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-10	MW-43	Total/NA	Water	SM 2540D	
MB 280-634853/3	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-634853/1	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 280-634853/2	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
280-184784-A-1 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 635301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-1	MW-36A	Total/NA	Water	300.0	
280-184261-2	MW-13A	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 635301 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-3	DUP2	Total/NA	Water	300.0	
280-184261-4	MW-13B	Total/NA	Water	300.0	
280-184261-5	MW-34A	Total/NA	Water	300.0	
280-184261-6	MW-34C	Total/NA	Water	300.0	
280-184261-7	MW-29A	Total/NA	Water	300.0	
280-184261-8	MW-32	Total/NA	Water	300.0	
280-184261-9	MW-42	Total/NA	Water	300.0	
280-184261-10	MW-43	Total/NA	Water	300.0	
280-184261-11	MW-19C	Total/NA	Water	300.0	
280-184261-12	MW-16	Total/NA	Water	300.0	
280-184261-13	MW-35	Total/NA	Water	300.0	
280-184261-15	DUP1	Total/NA	Water	300.0	
MB 280-635301/6	Method Blank	Total/NA	Water	300.0	
LCS 280-635301/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-635301/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-635301/3	Lab Control Sample	Total/NA	Water	300.0	
280-184261-1 MS	MW-36A	Total/NA	Water	300.0	
280-184261-1 MSD	MW-36A	Total/NA	Water	300.0	
280-184261-11 MS	MW-19C	Total/NA	Water	300.0	
280-184261-11 MSD	MW-19C	Total/NA	Water	300.0	
280-184261-1 DU	MW-36A	Total/NA	Water	300.0	
280-184261-11 DU	MW-19C	Total/NA	Water	300.0	

Analysis Batch: 635396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-1	MW-36A	Total/NA	Water	350.1	
280-184261-2	MW-13A	Total/NA	Water	350.1	
280-184261-3	DUP2	Total/NA	Water	350.1	
280-184261-4	MW-13B	Total/NA	Water	350.1	
280-184261-5	MW-34A	Total/NA	Water	350.1	
280-184261-6	MW-34C	Total/NA	Water	350.1	
280-184261-7	MW-29A	Total/NA	Water	350.1	
280-184261-8	MW-32	Total/NA	Water	350.1	
280-184261-9	MW-42	Total/NA	Water	350.1	
280-184261-10	MW-43	Total/NA	Water	350.1	
280-184261-11	MW-19C	Total/NA	Water	350.1	
280-184261-12	MW-16	Total/NA	Water	350.1	
280-184261-13	MW-35	Total/NA	Water	350.1	
280-184261-15	DUP1	Total/NA	Water	350.1	
MB 280-635396/89	Method Blank	Total/NA	Water	350.1	
LCS 280-635396/90	Lab Control Sample	Total/NA	Water	350.1	
280-184257-B-7 MS	Matrix Spike	Total/NA	Water	350.1	
280-184257-B-7 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	
280-184261-6 MS	MW-34C	Total/NA	Water	350.1	
280-184261-6 MSD	MW-34C	Total/NA	Water	350.1	

Analysis Batch: 635668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-1	MW-36A	Total/NA	Water	SM 5310B	
280-184261-2	MW-13A	Total/NA	Water	SM 5310B	
280-184261-3	DUP2	Total/NA	Water	SM 5310B	

General Chemistry (Continued)

Analysis Batch: 635668 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184261-4	MW-13B	Total/NA	Water	SM 5310B	
280-184261-5	MW-34A	Total/NA	Water	SM 5310B	
280-184261-6	MW-34C	Total/NA	Water	SM 5310B	
280-184261-7	MW-29A	Total/NA	Water	SM 5310B	
280-184261-8	MW-32	Total/NA	Water	SM 5310B	
280-184261-9	MW-42	Total/NA	Water	SM 5310B	
280-184261-10	MW-43	Total/NA	Water	SM 5310B	
280-184261-11	MW-19C	Total/NA	Water	SM 5310B	
280-184261-12	MW-16	Total/NA	Water	SM 5310B	
280-184261-13	MW-35	Total/NA	Water	SM 5310B	
280-184261-15	DUP1	Total/NA	Water	SM 5310B	
MB 280-635668/37	Method Blank	Total/NA	Water	SM 5310B	
MB 280-635668/6	Method Blank	Total/NA	Water	SM 5310B	
LCS 280-635668/36	Lab Control Sample	Total/NA	Water	SM 5310B	
LCS 280-635668/4	Lab Control Sample	Total/NA	Water	SM 5310B	
LCSD 280-635668/5	Lab Control Sample Dup	Total/NA	Water	SM 5310B	
280-184261-1 MS	MW-36A	Total/NA	Water	SM 5310B	
280-184261-1 MSD	MW-36A	Total/NA	Water	SM 5310B	
280-184261-4 MS	MW-13B	Total/NA	Water	SM 5310B	
280-184261-4 MSD	MW-13B	Total/NA	Water	SM 5310B	
280-184261-15 MS	DUP1	Total/NA	Water	SM 5310B	
280-184261-15 MSD	DUP1	Total/NA	Water	SM 5310B	

Lab Chronicle

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184261-1

Client Sample ID: MW-36A

Date Collected: 11/08/23 12:51
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-1

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	8260C		1	5 mL	5 mL	691875	11/15/23 00:43	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/14/23 21:00	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6010D		1			635267	11/27/23 15:29	BN	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635129	11/22/23 19:00	BN	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6020B		1			635247	11/28/23 01:03	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635253	11/27/23 16:51	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635301	11/28/23 15:11	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635396	11/28/23 15:57	MMP	EET DEN
Total/NA	Analysis	353.2		1			633349	11/09/23 17:58	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/16/23 19:02	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	634069	11/15/23 13:49	CAI	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	633850	11/14/23 13:34	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635668	11/29/23 09:03	ABW	EET DEN

Client Sample ID: MW-13A

Date Collected: 11/08/23 11:36
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-2

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	8260C		1	5 mL	5 mL	691875	11/15/23 01:06	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/14/23 21:24	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6010D		1			635267	11/27/23 15:33	BN	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635129	11/22/23 19:04	BN	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6020B		1			635247	11/28/23 01:05	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635253	11/27/23 16:55	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635301	11/28/23 16:19	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635396	11/28/23 16:00	MMP	EET DEN
Total/NA	Analysis	353.2		1			633349	11/09/23 17:58	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/16/23 19:07	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	633879	11/14/23 14:57	CAI	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	633868	11/14/23 14:23	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635668	11/29/23 12:43	ABW	EET DEN

Client Sample ID: DUP2

Lab Sample ID: 280-184261-3

Date Collected: 11/08/23 13:05

Matrix: Water

Date Received: 11/09/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	691875	11/15/23 01:29	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/14/23 21:48	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6010D		1			635267	11/27/23 15:37	BN	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635129	11/22/23 19:09	BN	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6020B		1			635247	11/28/23 01:08	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635253	11/27/23 17:03	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635301	11/28/23 16:36	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635396	11/28/23 16:03	MMP	EET DEN
Total/NA	Analysis	353.2		1			633349	11/09/23 17:58	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/16/23 19:12	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	633879	11/14/23 14:57	CAI	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	633868	11/14/23 14:23	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635668	11/29/23 12:59	ABW	EET DEN

Client Sample ID: MW-13B

Lab Sample ID: 280-184261-4

Date Collected: 11/08/23 10:52

Matrix: Water

Date Received: 11/09/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	691875	11/15/23 01:51	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/14/23 22:12	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6010D		1			635267	11/27/23 15:42	BN	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635129	11/22/23 19:13	BN	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6020B		1			635247	11/28/23 01:10	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635253	11/27/23 17:07	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635301	11/28/23 16:53	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635396	11/28/23 16:05	MMP	EET DEN
Total/NA	Analysis	353.2		1			633349	11/09/23 17:58	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/16/23 19:18	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	633879	11/14/23 14:57	CAI	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	633868	11/14/23 14:23	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635668	11/29/23 13:51	ABW	EET DEN

Client Sample ID: MW-34A

Lab Sample ID: 280-184261-5

Date Collected: 11/08/23 14:09

Matrix: Water

Date Received: 11/09/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	691875	11/15/23 02:14	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/14/23 22:35	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6010D		1			635267	11/27/23 15:46	BN	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635129	11/22/23 19:17	BN	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6020B		1			635247	11/28/23 01:12	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635253	11/27/23 17:10	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635301	11/28/23 17:10	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635396	11/28/23 16:08	MMP	EET DEN
Total/NA	Analysis	353.2		1			633349	11/09/23 17:58	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/16/23 19:23	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	633877	11/14/23 14:54	CAI	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	634107	11/15/23 16:57	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635668	11/29/23 15:32	ABW	EET DEN

Client Sample ID: MW-34C

Lab Sample ID: 280-184261-6

Date Collected: 11/08/23 14:48

Matrix: Water

Date Received: 11/09/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	691875	11/15/23 02:36	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/14/23 23:00	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6010D		1			635267	11/27/23 15:50	BN	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635129	11/22/23 19:21	BN	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6020B		1			635247	11/28/23 01:14	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635253	11/27/23 17:14	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635301	11/28/23 17:27	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635396	11/28/23 16:11	MMP	EET DEN
Total/NA	Analysis	353.2		1			633349	11/09/23 17:58	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/16/23 19:29	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	633877	11/14/23 14:54	CAI	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	634107	11/15/23 16:57	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635668	11/29/23 15:51	ABW	EET DEN

Client Sample ID: MW-29A

Lab Sample ID: 280-184261-7

Date Collected: 11/08/23 10:37

Matrix: Water

Date Received: 11/09/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	691875	11/15/23 02:59	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/14/23 23:24	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6010D		1			635267	11/27/23 15:55	BN	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635129	11/22/23 19:26	BN	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6020B		1			635247	11/28/23 01:17	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635253	11/27/23 17:17	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635301	11/28/23 17:44	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635396	11/28/23 16:30	MMP	EET DEN
Total/NA	Analysis	353.2		1			633349	11/09/23 17:58	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/16/23 19:34	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	633877	11/14/23 14:54	CAI	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	634107	11/15/23 16:57	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635668	11/29/23 16:10	ABW	EET DEN

Client Sample ID: MW-32

Lab Sample ID: 280-184261-8

Date Collected: 11/08/23 11:40

Matrix: Water

Date Received: 11/09/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	691875	11/15/23 03:22	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/14/23 23:47	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6010D		1			635267	11/27/23 15:59	BN	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635129	11/22/23 19:30	BN	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6020B		1			635247	11/28/23 01:19	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634879	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635253	11/27/23 17:21	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635301	11/28/23 18:01	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635396	11/28/23 16:32	MMP	EET DEN
Total/NA	Analysis	353.2		1			633349	11/09/23 17:58	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/16/23 19:40	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	634069	11/15/23 13:49	CAI	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	634107	11/15/23 16:57	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635668	11/29/23 16:30	ABW	EET DEN

Client Sample ID: MW-42

Date Collected: 11/08/23 12:27
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-9

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	8260C		1	5 mL	5 mL	691875	11/15/23 03:44	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/15/23 00:12	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6010D		1			635267	11/27/23 16:21	BN	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634851	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635121	11/22/23 22:12	ADL	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6020B		1			635488	11/29/23 09:09	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634851	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635252	11/27/23 13:45	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635301	11/28/23 18:18	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635396	11/28/23 16:35	MMP	EET DEN
Total/NA	Analysis	353.2		1			633349	11/09/23 17:58	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/16/23 19:46	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	634069	11/15/23 13:49	CAI	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	634107	11/15/23 16:57	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635668	11/29/23 16:50	ABW	EET DEN

Client Sample ID: MW-43

Date Collected: 11/08/23 13:13
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-10

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	8260C		1	5 mL	5 mL	691875	11/15/23 04:06	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/15/23 00:35	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6010D		1			635267	11/27/23 16:25	BN	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634851	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635121	11/22/23 22:16	ADL	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	635054	11/26/23 16:04	AMH	EET DEN
Dissolved	Analysis	6020B		1			635488	11/29/23 09:11	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634851	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635252	11/27/23 13:49	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635301	11/28/23 18:35	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635396	11/28/23 16:37	MMP	EET DEN
Total/NA	Analysis	353.2		1			633349	11/09/23 17:58	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/16/23 19:52	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	634069	11/15/23 13:49	CAI	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	634853	11/21/23 14:01	ABW	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635668	11/29/23 17:11	ABW	EET DEN

Client Sample ID: MW-19C

Date Collected: 11/08/23 13:57
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-11

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	8260C		1	5 mL	5 mL	691875	11/15/23 04:28	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/15/23 00:59	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	634872	11/22/23 08:54	MSM	EET DEN
Dissolved	Analysis	6010D		1			635127	11/22/23 22:19	ADL	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634851	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635121	11/22/23 22:20	ADL	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	634872	11/22/23 08:54	MSM	EET DEN
Dissolved	Analysis	6020B		1			635192	11/27/23 11:30	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634851	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635252	11/27/23 14:53	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635301	11/28/23 19:27	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635396	11/28/23 16:40	MMP	EET DEN
Total/NA	Analysis	353.2		1			633349	11/09/23 17:58	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/16/23 20:24	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	634069	11/15/23 13:49	CAI	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	634107	11/15/23 16:57	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635668	11/29/23 17:30	ABW	EET DEN

Client Sample ID: MW-16

Date Collected: 11/08/23 14:37
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-12

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	8260C		1	5 mL	5 mL	691875	11/15/23 04:51	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/15/23 01:23	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	634872	11/22/23 08:54	MSM	EET DEN
Dissolved	Analysis	6010D		1			635127	11/22/23 22:24	ADL	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634851	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635121	11/22/23 22:25	ADL	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	634872	11/22/23 08:54	MSM	EET DEN
Dissolved	Analysis	6020B		1			635192	11/27/23 11:33	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634851	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635252	11/27/23 14:56	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635301	11/28/23 20:35	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635396	11/28/23 16:43	MMP	EET DEN
Total/NA	Analysis	353.2		1			633349	11/09/23 17:58	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/16/23 20:34	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	634069	11/15/23 13:49	CAI	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	634120	11/15/23 18:12	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635668	11/29/23 17:47	ABW	EET DEN

Lab Chronicle

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184261-1

Client Sample ID: MW-35

Date Collected: 11/08/23 15:02
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-13

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	8260C		1	5 mL	5 mL	691875	11/15/23 05:14	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/15/23 01:47	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	634872	11/22/23 08:54	MSM	EET DEN
Dissolved	Analysis	6010D		1			635127	11/22/23 22:28	ADL	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634851	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635121	11/22/23 22:29	ADL	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	634872	11/22/23 08:54	MSM	EET DEN
Dissolved	Analysis	6020B		1			635192	11/27/23 11:37	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634851	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635252	11/27/23 15:00	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635301	11/28/23 20:52	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635396	11/28/23 16:46	MMP	EET DEN
Total/NA	Analysis	353.2		1			633349	11/09/23 17:58	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/16/23 20:40	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	634069	11/15/23 13:49	CAI	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	634107	11/15/23 16:57	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635668	11/29/23 18:04	ABW	EET DEN

Client Sample ID: TRIP BLANK

Date Collected: 11/08/23 15:51
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-14

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	8260C		1	5 mL	5 mL	691875	11/15/23 05:37	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/15/23 02:11	CDC	EET BUF

Client Sample ID: DUP1

Date Collected: 11/08/23 10:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-15

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	8260C		1	5 mL	5 mL	691875	11/15/23 05:59	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/15/23 02:34	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	634872	11/22/23 08:54	MSM	EET DEN
Dissolved	Analysis	6010D		1			635127	11/22/23 22:32	ADL	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634851	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635121	11/22/23 22:33	ADL	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	634872	11/22/23 08:54	MSM	EET DEN
Dissolved	Analysis	6020B		1			635192	11/27/23 11:40	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	634851	11/22/23 08:54	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635252	11/27/23 15:03	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635301	11/28/23 21:09	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635396	11/28/23 16:48	MMP	EET DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-184261-1
Project/Site: WA02|Olympic View Sanitary LF

Client Sample ID: DUP1
Date Collected: 11/08/23 10:48
Date Received: 11/09/23 09:40

Lab Sample ID: 280-184261-15
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	353.2		1			633349	11/12/23 20:53	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634570	11/17/23 12:27	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	634069	11/15/23 13:49	CAI	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	634107	11/15/23 16:57	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635668	11/29/23 18:59	ABW	EET DEN

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

SC0056 = Analytical Resources, Inc, 4611 South 134th Place, Suite 100, Tukwila, WA 98168, TEL (206)695-6200

Analytical Resources, LLC
Analytical Chemists and Consultants
Tukwila, WA

27 November 2023

Janice Collins
Eurofins - Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

RE: Olympic View Sanitary LF (OVSL) w/SCS Engineers (28002692 (Job # 04204027.26))

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)	Associated SDG ID(s)
23K0350	N/A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Shelly Fishel, Project Manager

ACCREDITED IN ACCORDANCE WITH nelac
Cert# 100006-012

4611 S. 134th Place, Suite 100 • Tukwila, WA 98168 • Ph: (206) 695-6200 • Fax: (206) 695-6202

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

23K0350

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: JE/AD	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-17318-3224.1
Client Contact: Mr. Patrick Madej	Phone: 425-507-6703	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: WA	Page: 1 of 2
Company: Waste Management				Job #: 04204027.26
Address: 2615 Davis Street	Due Date Requested: Standard			
City: San Leandro	TAT Requested (days):			
State, Zip: CA, 94577	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			
Email:	WO #:			
Project Name: WA02|Olympic View Sanitary LF/WA02 Event Desc: Semiannua	Project #: 28002692 - SemiAnnual GW Appl/II - May Nov			
Site: Washington	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 - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, 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)	TDS/Alks/Cl/SO4/NO3(cad)	6010D/6020B - Dissolved Metals (FF)	6010D/6020B - Total Metals	2540D - TSS	Ammonia/TOC	8260C - VOCs (Buffalo)	8260C_SIM - Vinyl chloride (Buffalo)	Total Arsenic (direct sub to ARI)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D	N	S	A	A	D		
MW-13A	11/8/23	1136	G	W	N	N								X		Short Hold: NO3(cad)
MW-13B		1052														Arsenic - Direct sub to ARI
MW-16		1437														
MW-19C		1357														
MW-29A		1037														
MW-32		1140														
MW-33A	11/9/23	1229														
MW-34A	11/8/23	1409														
MW-34C		1448														
MW-35		1522														
MW-36A		1251														

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
Jovany Estrada	11/13/23 1350	SCS		11/13/23 1350	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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:

Page 111 of 154

12/4/2023

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

23K0350

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: JE/AD	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-17318-3224.1
Client Contact: Mr. Patrick Madej	Phone: 425-507-6703	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: WA	Page: 2 of 2
Company: Waste Management				Job #: 04204027.26
Address: 2615 Davis Street	Due Date Requested: Standard			
City: San Leandro	TAT Requested (days):			
State, Zip: CA, 94577	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			
Email:	WO #:			
Project Name: WA02|Olympic View Sanitary LF/WA02 Event Desc: Semiannua	Project #: 28002692 - SemiAnnual GW Appl/II - May Nov			
Site: Washington	SSOW#:			

Analysis Requested

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)	TDS/Alks/Cl/SO4/NO3(cad)	6010D/6020B - Dissolved Metals (FF)	6010D/6020B - Total Metals	2540D - TSS	Ammonia/TOC	8260C - VOCs (Buffalo)	8260C_SIM - Vinyl chloride (Buffalo)	Total Arsenic (direct sub to ARI)						Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D	N	S	A	A	D							
MW-42	11/8/23	1227	G	W	N	N								X							Short Hold: NO3(cad)
MW-43	↓	1313	↓	↓																	Arsenic - Direct sub to ARI
MW-39	11/9/23	1030																			
MW-33C	↓	1303																			
MW-15R		1048																			
LP-LCD	↓	0845	↓	↓	↓	↓								↓							

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
Jovany Estrada	11/13/23 1347	SCS	Matthew Rice	11/13/23 1347	ARCC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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:

Page 112 of 154

12/4/2023

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

23K0350

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-681392.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Washington	Page: Page 1 of 1
Company: Analytical Resources, Inc		Accreditations Required (See note): State - Washington		Job #: 280-184337-1
Address: 4611 South 134th Place, Suite 100, ,	Due Date Requested: 11/30/2023			
City: Tukwila	TAT Requested (days):			
State, Zip: WA, 98168				
Phone: 206-695-6200(Tel)	PO #:			
Email:	WO #:			
Project Name: WA02|Olympic View Sanitary LF	Project #: 28002692			
Site: WA02|Olympic View Sanitary LF	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 - Client ID (Lab ID)	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)	SUB (Total Arsenic (ARI))/ Total Arsenic (ARI)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
LP-LCD (280-184337-1)	11/9/23	08:45 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	11/14/23 1455	ETADEN	[signature]	11/15/23 1030	ARLLC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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:

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-13A	23K0350-01	Water	08-Nov-2023 11:36	13-Nov-2023 13:50
MW-13B	23K0350-02	Water	08-Nov-2023 10:52	13-Nov-2023 13:50
MW-16	23K0350-03	Water	08-Nov-2023 14:37	13-Nov-2023 13:50
MW-19C	23K0350-04	Water	08-Nov-2023 13:57	13-Nov-2023 13:50
MW-29A	23K0350-05	Water	08-Nov-2023 10:37	13-Nov-2023 13:50
MW-32	23K0350-06	Water	08-Nov-2023 11:40	13-Nov-2023 13:50
MW-33A	23K0350-07	Water	09-Nov-2023 12:29	13-Nov-2023 13:50
MW-34A	23K0350-08	Water	08-Nov-2023 14:09	13-Nov-2023 13:50
MW-34C	23K0350-09	Water	08-Nov-2023 14:48	13-Nov-2023 13:50
MW-35	23K0350-10	Water	08-Nov-2023 15:22	13-Nov-2023 13:50
MW-36A	23K0350-11	Water	08-Nov-2023 12:51	13-Nov-2023 13:50
MW-42	23K0350-12	Water	08-Nov-2023 12:27	13-Nov-2023 13:50
MW-43	23K0350-13	Water	08-Nov-2023 13:13	13-Nov-2023 13:50
MW-39	23K0350-14	Water	09-Nov-2023 10:30	13-Nov-2023 13:50
MW-33C	23K0350-15	Water	09-Nov-2023 13:03	13-Nov-2023 13:50
MW-15R	23K0350-16	Water	09-Nov-2023 10:48	13-Nov-2023 13:50
LP-LCD	23K0350-17	Water	09-Nov-2023 08:45	13-Nov-2023 13:50
DUP1	23K0350-18	Water	08-Nov-2023 10:48	13-Nov-2023 13:50
DUP2	23K0350-19	Water	08-Nov-2023 13:05	13-Nov-2023 13:50

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

Work Order Case Narrative

Client: Eurofins - Test America - Denver
Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers
Project Number: 28002692 (Job # 04204027.26)
Work Order: 23K0350

Sample receipt

Samples as listed on the preceding page were received 13-Nov-2023 13:50 under ARI work order 23K0350. For details regarding sample receipt, please refer to the Cooler Receipt Form. Not all of the samples were received at this time. See receipt forms attached.

Total Metals - EPA Method 6020B

The sample(s) were prepared and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

The method blank(s) were clean at the reporting limits.

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries and relative percent difference (RPD) were within control limits.

WORK ORDER

23K0350

Samples will be discarded 90 days after submission of a final report unless other instructions are received

Client: Eurofins - Test America - Denver **Project Manager:** Shelly Fishel

Project: Olympic View Sanitary LF (OVSL) w/SCS Engine **Project Number:** 28002692

Preservation Confirmation

Container ID	Container Type	pH	
23K0350-01 A	HDPE NM, 250mL HNO3	<2	pair
~~23K0350-02 A~~	~~HDPE NM, 250mL HNO3~~		
23K0350-03 A	HDPE NM, 250mL HNO3	<2	
23K0350-04 A	HDPE NM, 250mL HNO3	<2	pair pair
~~23K0350-05 A~~	~~HDPE NM, 250mL HNO3~~		
23K0350-06 A	HDPE NM, 250mL HNO3	<2	pair
23K0350-07 A	HDPE NM, 250mL HNO3	<2	
23K0350-08 A	HDPE NM, 250mL HNO3	<2	
23K0350-09 A	HDPE NM, 250mL HNO3	<2	
23K0350-10 A	HDPE NM, 250mL HNO3	<2	
23K0350-11 A	HDPE NM, 250mL HNO3	<2	
23K0350-12 A	HDPE NM, 250mL HNO3	<2	
23K0350-13 A	HDPE NM, 250mL HNO3	<2	
23K0350-14 A	HDPE NM, 250mL HNO3	<2	
23K0350-15 A	HDPE NM, 250mL HNO3	<2	
23K0350-16 A	HDPE NM, 250mL HNO3	<2	
~~23K0350-17 A~~	~~HDPE NM, 250mL HNO3~~		

CB 11/13

CB for MP
Preservation Confirmed By

11/13/23
Date

Reviewed By

Date

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: SCS
COC No(s): 280-17318-3224.1 NA MD 11/13/23
Assigned ARI Job No: 23K0350
Project Name: WA023 Olympic View Sanitary
Delivered by: Fed-Ex UPS Courier Hand Delivered Other:
Tracking No: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 3.2°C
Time 1440
If cooler temperature is out of compliance fill out form 00070F
Temp Gun ID#: SCC97708

Cooler Accepted by: MD Date: 11/13/23 Time: 1350

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:			
Was sufficient ice used (if appropriate)?	NA	YES	NO
How were bottles sealed in plastic bags?	Individually	Grouped	Not (CB 11/13)
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		YES	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ...	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO
Date VOC Trip Blank was made at ARI	NA		

Were the sample(s) split by ARI? NA YES Date/Time: Equipment: Split by:

Samples Logged by: Date: 11/13/23 Time: 1451 Labels checked by: CB

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

Missing bottle MW-13B, MW-29A, and LP-2CD. Have 4 extra bottles, labeled as duplicates

By: Date: 11/13/23

RE: Extra/Missing Bottles OVLF

Janice Collins <Janice.Collins@et.eurofinsus.com>
Tue 11/14/2023 9:02 AM
To:Shelly Fishel <shelly.fishel@arilabs.com>;Sample Receiving <sample-receiving@arilabs.com>
Cc:Leia Wing <Leia.Wing@et.eurofinsus.com>

2 attachments (2 MB)
MX-6071_20231113_152913.pdf; extrabottles.JPG;

Hi Shelly,

Per the sampler - Referring to the picture going from left to right the first bottle is MW-29A, the next bottle is Dup 2, the next is Dup 1 and the last is MW-13B.

They inadvertently shipped sample LP-LCD to us. We will send it out to you.

Let me know if you have additional questions.

Thank you!

Janice Collins

Direct: 303-736-0124
E-mail: Janice.Collins@ET.EurofinsUS.com

From: Shelly Fishel <shelly.fishel@arilabs.com>
Sent: Monday, November 13, 2023 4:34 PM
To: Janice Collins <Janice.Collins@et.eurofinsus.com>
Subject: Fw: Extra/Missing Bottles OVLF
Importance: High

Hi Janice,

We have received samples for the Olympic View Landfill. There are discrepancies between the samples received and the attached COC.

- We are missing the yellow highlighted samples
- The green highlighted sample we believe is the bottle labeled DUP2 (computer printed label) as it has the same time and date. The far left bottle in the picture.
- We have three additional bottles not listed on the COC. The other bottles in the picture.
- Please note there are two bottles labeled as DUP2 -one handwritten and one printed.

Can you help us to resolve this? Please respond to me and the sample receiving group as I am only working part time. sample-receiving@arilabs.com

11/13/2023 15:13
Client:
Sample ID: MW-39
Location: WA02|Olympic View Sanitary LF
Comments: Low Level Arsenic (ARI)
Preservative: Nitric Acid
Collection Date/Time:
Collected By:
Bottle Type: Plastic 250ml - with Nitric Acid
Client: SCS
Sample ID: ~~MW-33C~~ DUP-1
Location: WA02|Olympic View Sanitary LF/WA02
Comments: Low Level Arsenic (ARI)
Preservative: Nitric Acid
Collection Date/Time: 11/8/23 1048
Collected By: AMD
Bottle Type: Plastic 250ml - with Nitric Acid
Client: SCS
Sample ID: ~~MW-13C~~ DUP 2
Location: WA02|Olympic View Sanitary LF/WA02
Comments: Low Level Arsenic (ARI)
Preservative: Nitric Acid
Collection Date/Time: 11/8/23 1300
Collected By: JE
Bottle Type: Plastic 250ml - with Nitric Acid
Client: SCS
Sample ID: DUP2
Location: WA02|Olympic View Sanitary LF/WA02
Comments: Low Level Arsenic (ARI)
Preservative: Nitric Acid
Collection Date/Time: 11/8/23 10:37
Collected By: AMD
Bottle Type: Plastic 250ml - with Nitric Acid

WORK ORDER

23K0350

Samples will be discarded 90 days after submission of a final report unless other instructions are received

Client: Eurofins - Test America - Denver **Project Manager:** Shelly Fishel

Project: Olympic View Sanitary LF (OVSL) w/SCS Engine **Project Number:** 28002692 (Job # 04204027.26)

Preservation Confirmation

Container ID	Container Type	pH
23K0350-01 A	HDPE NM, 250mL HNO3	
23K0350-02 A	HDPE NM, 250mL HNO3	
23K0350-03 A	HDPE NM, 250mL HNO3	
23K0350-04 A	HDPE NM, 250mL HNO3	
23K0350-05 A	HDPE NM, 250mL HNO3	
23K0350-06 A	HDPE NM, 250mL HNO3	
23K0350-07 A	HDPE NM, 250mL HNO3	
23K0350-08 A	HDPE NM, 250mL HNO3	
23K0350-09 A	HDPE NM, 250mL HNO3	
23K0350-10 A	HDPE NM, 250mL HNO3	
23K0350-11 A	HDPE NM, 250mL HNO3	
23K0350-12 A	HDPE NM, 250mL HNO3	
23K0350-13 A	HDPE NM, 250mL HNO3	
23K0350-14 A	HDPE NM, 250mL HNO3	
23K0350-15 A	HDPE NM, 250mL HNO3	
23K0350-16 A	HDPE NM, 250mL HNO3	
23K0350-17 A	HDPE NM, 250mL HNO3	Z2 pass
23K0350-18 A	HDPE NM, 250mL HNO3	
23K0350-19 A	HDPE NM, 250mL HNO3	

MP
Preservation Confirmed By

11/15/23
Date

All other samples were pres checked on 11/13/23

Reviewed By

Date

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Evoshins

Project Name: Water Olympic View Sanitary

COC No(s): _____ NA

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: 23K0350

Tracking No: 020170F10016932 4 NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 12.8°C

Time 1038

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 50897038

Cooler Accepted by: MP Date: 11/15/23 Time: 1030

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:			
Was sufficient ice used (if appropriate)?	NA	YES	NO
How were bottles sealed in plastic bags?	Individually	Grouped	Not
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		YES	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ...	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO
Date VOC Trip Blank was made at ARI	NA		

Were the sample(s) split by ARI? NA YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: MP Date: 11/15/23 Time: 1253 Labels checked by: MP

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Temperature Compliance Form

ARI Work Order: 23K0350

Cooler#: 1 **Temperature(°C):** 12.8cc

Sample ID	Bottle Count	Bottle Type
Samples received above 6.0cc		

Cooler#: _____ **Temperature(°C):** _____

Sample ID	Bottle Count	Bottle Type

Cooler#: _____ **Temperature(°C):** _____

Sample ID	Bottle Count	Bottle Type

Cooler#: _____ **Temperature(°C):** _____

Sample ID	Bottle Count	Bottle Type

Completed by: MD Date: 11/15/23 Time: 1030

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-13A
23K0350-01 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 11:36
Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:22

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-01 A 01
Preparation Batch: BLK0513 — Sample Size: 100 mL
Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000180	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-13B

23K0350-02 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 10:52
Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:25

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-02 A 01
Preparation Batch: BLK0513 — Sample Size: 100 mL
Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000326	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-16

23K0350-03 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 14:37

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:29

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-03 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000395	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-19C

23K0350-04 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 13:57
Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:32

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-04 A 01
Preparation Batch: BLK0513 — Sample Size: 100 mL
Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00238	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-29A

23K0350-05 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 10:37

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:35

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-05 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00178	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-32

23K0350-06 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 11:40

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:39

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-06 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00928	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-33A

23K0350-07 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/09/2023 12:29

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:42

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-07 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000227	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-34A

23K0350-08 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 14:09

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:46

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-08 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000412	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-34C

23K0350-09 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 14:48

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:51

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-09 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00749	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-35

23K0350-10 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 15:22

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:07

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-10 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000103	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-36A

23K0350-11 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 12:51

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:10

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-11 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000571	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-42

23K0350-12 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 12:27

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:13

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-12 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00167	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-43

23K0350-13 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 13:13

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:17

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-13 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.0000548	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-39

23K0350-14 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/09/2023 10:30

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:20

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-14 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00108	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-33C

23K0350-15 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/09/2023 13:03

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:23

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-15 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00265	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-15R

23K0350-16 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/09/2023 10:48

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:27

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-16 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000191	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

LP-LCD

23K0350-17 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/09/2023 08:45

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:06

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-17 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	10	0.0000746	0.000400	0.0153	mg/L	D

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

DUP1

23K0350-18 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 10:48

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:31

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-18 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00190	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

DUP2

23K0350-19 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 13:05

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:35

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-19 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000579	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BLK0513 - EPA 6020B UCT-KED

Instrument: ICPMS2 Analyst: MCB

QC Sample/Analyte	Isotope	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BLK0513-BLK1)					Prepared: 17-Nov-2023 Analyzed: 20-Nov-2023 17:04							
Arsenic	75a	ND	0.00000746	0.0000400	mg/L							U
LCS (BLK0513-BS1)					Prepared: 17-Nov-2023 Analyzed: 20-Nov-2023 17:07							
Arsenic	75a	0.00490	0.00000746	0.0000400	mg/L	0.00500		97.9	80-120			
LCS Dup (BLK0513-BSD1)					Prepared: 17-Nov-2023 Analyzed: 20-Nov-2023 17:11							
Arsenic	75a	0.00474	0.00000746	0.0000400	mg/L	0.00500		94.7	80-120	3.37	20	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BLK0548 - EPA 6020B UCT-KED

Instrument: ICPMS2 Analyst: MCB

QC Sample/Analyte	Isotope	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BLK0548-BLK1)					Prepared: 20-Nov-2023 Analyzed: 20-Nov-2023 17:53							
Arsenic	75a	0.0000120	0.00000746	0.0000400	mg/L							J
LCS (BLK0548-BS1)					Prepared: 20-Nov-2023 Analyzed: 20-Nov-2023 17:57							
Arsenic	75a	0.00484	0.00000746	0.0000400	mg/L	0.00500		96.7	80-120			
LCS Dup (BLK0548-BSD1)					Prepared: 20-Nov-2023 Analyzed: 20-Nov-2023 18:00							
Arsenic	75a	0.00470	0.00000746	0.0000400	mg/L	0.00500		93.9	80-120	2.94	20	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

Certified Analyses included in this Report

Analyte	Certifications
EPA 6020B UCT-KED in Water	
Arsenic-75a	WADOE,DoD-ELAP,ADEC,NELAP

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	03/28/2025
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program, PJLA Testing	66169	02/28/2025
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2024

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

Notes and Definitions

*	Flagged value is not within established control limits.
D	The reported value is from a dilution
J	Estimated concentration value detected below the reporting limit.
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
[2C]	Indicates this result was quantified on the second column on a dual column analysis.

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: JE/AD	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-17318-3224.1
Client Contact: Mr. Patrick Madej	Phone: 425-507-6703	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: WA	Page: 1 of 2
Company: Waste Management				Job #: 0422027.26
Address: 2615 Davis Street	Due Date Requested: Standard			
City: San Leandro	TAT Requested (days):			
State, Zip: CA, 94577	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			
Email:	WO #:			
Project Name: WA02|Olympic View Sanitary LF	Project #: 28002692 - Annual GW Appl/II - May			
Site: Washington	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	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)	TDS/Alks/Cl/SO4/NO3(cad)	6010D/6020B - Dissolved Metals (FF)	6010D/6020B - Total Metals	2540D - TSS	Ammonia/TOC	8260C - VOCs (Buffalo)	8260C_SIM - Vinyl chloride (Buffalo)	Total Arsenic (direct sub to ARI)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D	N	S	A	A	D		
MW-36A	11/8/23	1251	G	W	Y	N	X	X	X	X	X	X	X			Short Hold: NO3(cad)
MW-13A		1136														Arsenic - Direct sub to ARI
Dup 2		1305														
MW-13B		1052														
MW-34A		1409														
MW-34C		1448														
MW-29A		1037														
MW-32		1140														
MW-42		1227														
MW-43		1313														
MW-19C		1357														

280-184261 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:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Jovany Estrada	11/8/23	SCS		11-9-23 0940	EET DEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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:
		3.4°C, 1.7°C, -0.3°C, 2.6°C CF 0.3 IR Mone

12/4/2023

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing America

8150-3783 -

Client Information	Sampler: JE/AD	Lab PM: Collins, Janice S	Carrier Tracking No(s): -7123.7401,7412.1 73	COC No: 280-17318-3224.1
Client Contact: Mr. Patrick Madej	Phone: 425-507-6703	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: WA	Page: 2 of 2
Company: Waste Management				Job #: 0422027.26
Address: 2615 Davis Street	Due Date Requested: Standard			
City: San Leandro	TAT Requested (days):			
State, Zip: CA, 94577	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			
Email:	WO #:			
Project Name: WA02|Olympic View Sanitary LF	Project #: 28002692 - Annual GW Appl/II - May			
Site: Washington	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 - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, 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)	TDS/Alks/Cl/SO4/NO3(cad)	6010D/6020B - Dissolved Metals (FF)	6010D/6020B - Total Metals	2540D - TSS	Ammonia/TOC	8260C - VOCs (Buffalo)	8260C_SIM - Vinyl chloride (Buffalo)	Total Arsenic (direct sub to ARI)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	D	N	S	A	A	D	X	
MW-16	11/8/23	1437	G	W	T	N	X	X	X	X	X	X	X			Short Hold: NO3(cad)
MW-35	11/8/23	1502	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			Arsenic - Direct sub to ARI
Trip Blank	11/8/23	1551	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓			

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
Jovany Estrada	11/8/23	SCS		11-9-23 0940	EETDEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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:

Do Not Lift Using This Tag

280-184261 Waybill

RT 640 FZ

4 10:30 7423 11 09

ORIGIN ID:PWTA

SHIP DATE: 08NOV23
ACTWGT: 33.50 LB
CAD: /SSFE2460
DIMS: 23x14x14 IN

Part # 1562

TO SAMPLE RECIEVING
EUROFINS DENVER
4955 YARROW ST

ARVADA CO 80002-4517 (US)

(303) 736-0100

INV:
PO:
REF:
DEPT:

eurofins | Environment Testing TestAmerica

2290663

12/23

FedEx Express

J2340231015zpw

TRK# 0667 8180 3783 7423

THU - 09 NOV 10:30A
PRIORITY OVERNIGHT

XA LAAA

80002
CO-US DEN

ORIGIN ID:PWTA

SHIP DATE: 08NOV23
ACTWGT: 57.75 LB
CAD: /SSFE2460
DIMS: 23x14x14 IN

Part # 156

TO SAMPLE RECIEVING
EUROFINS DENVER
4955 YARROW ST

ARVADA CO 80002-4517

(303) 736-0100

INV:
PO:

REF:

DEPT:

eurofins | Environment Testing TestAmerica

2290665

12/23

(US)

FedEx Express

J234023101502AV

TRK# 0667 8180 3783 7412

THU - 09 NOV 10:30A
PRIORITY OVERNIGHT

XA LAAA

80002
CO-US DEN

Do Not Lift Using This Tag

eurofins | Environment Testing TestAmerica

2290662

ORIGIN ID:PWTA

SHIP DATE: 08NOV23
ACTWGT: 51.45 LB
CAD: /SSFE2460
DIMS: 23x14x14 IN

Part #-156297-[illegible] EXP 12/23

TO SAMPLE RECIEVING
EUROFINS DENVER
4955 YARROW ST

ARVADA CO 80002-4517 (US)

(303) 736-0100 REF:

INV: PO: DEPT:

FedEx Express

TRK# 0667 8180 3783 7401

THU - 09 NOV 10:30A
PRIORITY OVERNIGHT

XA LAAA

80002
CO-US DEN

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-680682.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Washington	Page: Page 1 of 2
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): State - Washington		Job #: 280-184261-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/4/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: WA02|Olympic View Sanitary LF	Project #: 28002692			
Site: WA02|Olympic View Sanitary LF	SSOW#:			

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:

Analysis Requested

Sample Identification - Client ID (Lab ID)	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)	8260C_SIM/5030C (MOD) Local Method	8260C/5030C (MOD) Appendix II Volatiles	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW-36A (280-184261-1)	11/8/23	12:51 Pacific		Water			X	X	6	
MW-13A (280-184261-2)	11/8/23	11:36 Pacific		Water			X	X	6	
DUP2 (280-184261-3)	11/8/23	13:05 Pacific		Water			X	X	6	
MW-13B (280-184261-4)	11/8/23	10:52 Pacific		Water			X	X	6	
MW-34A (280-184261-5)	11/8/23	14:09 Pacific		Water			X	X	6	
MW-34C (280-184261-6)	11/8/23	14:48 Pacific		Water			X	X	6	
MW-29A (280-184261-7)	11/8/23	10:37 Pacific		Water			X	X	6	
MW-32 (280-184261-8)	11/8/23	11:40 Pacific		Water			X	X	5	
MW-42 (280-184261-9)	11/8/23	12:27 Pacific		Water			X	X	6	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/10/23 1505	EETDEN			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10-11-23 1000	Company TAB
3	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: 3.1 IC

Ver: 06/08/2021

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-680682.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Washington	Page: Page 2 of 2
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): State - Washington		Job #: 280-184261-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/4/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298	PO #:			
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	WO #:			
Email:	Project #: 28002692			
Project Name: WA02|Olympic View Sanitary LF	SSOW#:			
Site: WA02|Olympic View Sanitary LF				

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:

Analysis Requested

Sample Identification - Client ID (Lab ID)	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)	8260C_SIM/5030C (MOD) Local Method	8260C/5030C (MOD) Appendix II Volatiles	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW-43 (280-184261-10)	11/8/23	13:13 Pacific		Water			X	X	5	
MW-19C (280-184261-11)	11/8/23	13:57 Pacific		Water			X	X	6	
MW-16 (280-184261-12)	11/8/23	14:37 Pacific		Water			X	X	6	
MW-35 (280-184261-13)	11/8/23	15:02 Pacific		Water			X	X	5	
TRIP BLANK (280-184261-14)	11/8/23	15:51 Pacific		Water			X	X	4	
DUP1 (280-184261-15)	11/8/23	10:48 Pacific		Water			X	X	6	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 11/10/23 1505	Company EETDEN	Received by:	Date/Time: 11-11-23 1000	Company TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-184261-1

Login Number: 184261
List Number: 1
Creator: Held, Wesley

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	False	Refer to job narrative for details
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Refer to job narrative for details
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-184261-1

Login Number: 184261
List Number: 2
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 11/13/23 11:38 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	2.1 ICE
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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
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	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Patrick Madej
Waste Management
2615 Davis Street
San Leandro, California 94577

Generated 12/5/2023 9:39:23 AM

JOB DESCRIPTION

WA02|Olympic View Sanitary LF
Semiannual Leachate AppI/II - May Nov

JOB NUMBER

280-184337-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

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.

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 TestAmerica Project Manager.

Authorization

Generated
12/5/2023 9:39:23 AM

Authorized for release by
Leia Wing, Project Mgmt. Assistant
Leia.Wing@et.eurofinsus.com
Designee for
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

Table of Contents

Cover Page 1
Table of Contents 3
Definitions 4
Case Narrative 5
Detection Summary 7
Method Summary 8
Sample Summary 9
Client Sample Results 10
Surrogate Summary 16
QC Sample Results 17
QC Association 34
Chronicle 38
Subcontract Data 39
Chain of Custody 75
Receipt Checklists 77

Definitions/Glossary

Client: Waste Management
Job ID: 280-184337-1
Project/Site: WA02|Olympic View Sanitary LF

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

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

Job ID: 280-184337-1

Laboratory: Eurofins Denver

Narrative

Job Narrative
280-184337-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/10/2023 9:50 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 time was 3.1°C

Receipt Exceptions
A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC). The sample was logged as TRIP BLANK with a collection date and time of 11/9/23 at 12:00 AM.

Subcontract Work
Method Total Arsenic (ARI): This method was subcontracted to Analytical Resources, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-691946 recovered above the upper control limit for Carbon tetrachloride, Chlorodibromomethane, trans-1,3-Dichloropropene, Tetrachloroethene, 1,1,1,2-Tetrachloroethane and Hexachlorobutadiene . The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: LP-LCD (280-184337-1) and TRIP BLANK (280-184337-2).

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-691946 recovered outside control limits for the following analytes:Carbon tetrachloride, Bromoform, 2-Methyl-2propanol, Chlorodibromomethane, trans-1,3-Dichloropropene, Tetrachloroethene, 1,1,1,2-Tetrachloroethane and Hexachlorobutadiene . These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: LP-LCD (280-184337-1). Elevated reporting limits (RLs) are provided.

Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: LP-LCD (280-184337-1) and TRIP BLANK (280-184337-2). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260C_SIM: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: LP-LCD (280-184337-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6010D: The results reported for the following sample do not concur with results previously reported for this site for Co: LP-LCD (280-184337-1). A bottle check was performed, and the result(s) confirmed.

Job ID: 280-184337-1 (Continued)

Laboratory: Eurofins Denver (Continued)

Method 6010D: The following sample was diluted to bring the concentration of target analytes within the calibration range: LP-LCD (280-184337-1). Elevated reporting limits (RLs) are provided.

Method 6020B: The continuing calibration verification (CCV) associated with batch 280-635419 recovered above the upper control limit for Se. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: LP-LCD (280-184337-1), (CCV 280-635419/162), (CCV 280-635419/172), (LCS 280-635162/25-A), (MB 280-635162/1-A), (280-184383-E-2-D), (280-184383-E-2-E MS), (280-184383-E-2-F MSD), (280-184383-E-2-D PDS) and (280-184383-E-2-D SD ^5).

Method 6020B: The results reported for the following sample do not concur with results previously reported for this site: LP-LCD (280-184337-1). Reanalysis was performed for Mn, and the result(s) confirmed.

Method 6020B: The method blank for preparation batch 280-634983 and analytical batch 280-635264 contained Mn above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 300.0_28D: The matrix spike duplicate (MSD) recoveries for analytical batch 280-635621 were outside control limits for Sulfate. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS/LCSD) recovery is within acceptance limits. (280-184290-D-4 MSD)

Method SM5210B_BODCalc: The glucose-glutamic acid standard (LCS) recovered outside the recovery limits specified in the method in batch 280-633453. The method holding time had expired, therefore the analysis was not repeated. The data was qualified and reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184337-1

Client Sample ID: LP-LCD — Lab Sample ID: 280-184337-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt, Total	0.014		0.0030	0.00056	mg/L	1		6010D	Total Recoverable
Iron, Total	0.18		0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	91		0.20	0.024	mg/L	1		6010D	Dissolved
Iron, Dissolved	0.14		0.060	0.0091	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	56		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	81		1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	650		5.0	0.49	mg/L	5		6010D	Dissolved
Antimony, Total	0.0028		0.0010	0.00040	mg/L	1		6020B	Total Recoverable
Arsenic, Total	0.016		0.0050	0.00050	mg/L	1		6020B	Total Recoverable
Barium, Total	0.14		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Cadmium, Total	0.00037		0.00030	0.00019	mg/L	1		6020B	Total Recoverable
Chromium, Total	0.0029	J	0.0030	0.00050	mg/L	1		6020B	Total Recoverable
Copper, Total	0.015		0.0020	0.00071	mg/L	1		6020B	Total Recoverable
Lead, Total	0.0032		0.0010	0.00023	mg/L	1		6020B	Total Recoverable
Manganese, Total	0.77		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Nickel, Total	0.10		0.0040	0.00083	mg/L	1		6020B	Total Recoverable
Silver, Total	0.000045	J	0.0020	0.000045	mg/L	1		6020B	Total Recoverable
Vanadium, Total	0.0076		0.0020	0.0011	mg/L	1		6020B	Total Recoverable
Zinc, Total	0.028		0.0050	0.0020	mg/L	1		6020B	Total Recoverable
Manganese, Dissolved	0.65	B	0.0010	0.00051	mg/L	1		6020B	Dissolved
Chloride	620		30	30	mg/L	10		300.0	Total/NA
Sulfate	180		50	50	mg/L	10		300.0	Total/NA
Ammonia (as N)	6.3		0.060	0.060	mg/L	2		350.1	Total/NA
Nitrate as N	3.5		0.050	0.050	mg/L	1		353.2	Total/NA
Nitrate Nitrite as N	3.5		0.10	0.10	mg/L	1		353.2	Total/NA
Chemical Oxygen Demand (COD)	160		20	20	mg/L	2		410.4	Total/NA
Alkalinity, Total	980		10	10	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	980		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	2400		10	10	mg/L	1		SM 2540C	Total/NA
Total Organic Carbon - Average	55		2.0	2.0	mg/L	2		SM 5310B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-184337-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrahydrofuran	1.5	J	5.0	1.3	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184337-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	EET BUF
6010D	Metals (ICP)	SW846	EET DEN
6020B	Metals (ICP/MS)	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrate	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
410.4	COD	EPA	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
SM 5310B	Organic Carbon, Total (TOC)	SM	EET DEN
SM5210B	BOD, 5 Day	SM	EET DEN
Subcontract	Total Arsenic (ARI)	None	SC0056
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
SC0056 = Analytical Resources, Inc, 4611 South 134th Place, Suite 100, Tukwila, WA 98168, TEL (206)695-6200

Sample Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184337-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-184337-1	LP-LCD	Water	11/09/23 08:45	11/10/23 09:50
280-184337-2	TRIP BLANK	Water	11/09/23 00:00	11/10/23 09:50

Method: SW846 8260C SIM - Volatile Organic Compounds (GC/MS)

Client Sample ID: LP-LCD
Date Collected: 11/09/23 08:45
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184337-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.20	0.040	ug/L			11/15/23 02:58	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*119*		*50 - 150*		*11/15/23 02:58*	*10*
TBA-d9 (Surr)	*100*		*50 - 150*		*11/15/23 02:58*	*10*

Client Sample ID: TRIP BLANK
Date Collected: 11/09/23 00:00
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184337-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/15/23 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*121*		*50 - 150*		*11/15/23 03:22*	*1*
TBA-d9 (Surr)	*101*		*50 - 150*		*11/15/23 03:22*	*1*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: LP-LCD
Date Collected: 11/09/23 08:45
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184337-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*+	10	3.5	ug/L			11/15/23 15:43	10
1,1,1-Trichloroethane	ND		10	8.2	ug/L			11/15/23 15:43	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			11/15/23 15:43	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			11/15/23 15:43	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			11/15/23 15:43	10
1,1-Dichloroethane	ND		10	3.8	ug/L			11/15/23 15:43	10
1,1-Dichloroethene	ND		10	2.9	ug/L			11/15/23 15:43	10
1,1-Dichloropropene	ND		10	7.2	ug/L			11/15/23 15:43	10
1,2,3-Trichlorobenzene	ND		10	4.1	ug/L			11/15/23 15:43	10
1,2,3-Trichloropropane	ND		10	8.9	ug/L			11/15/23 15:43	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			11/15/23 15:43	10
1,2,4-Trimethylbenzene	ND		10	7.5	ug/L			11/15/23 15:43	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			11/15/23 15:43	10
1,2-Dibromoethane (EDB)	ND		10	7.3	ug/L			11/15/23 15:43	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			11/15/23 15:43	10
1,2-Dichloroethane	ND		10	2.1	ug/L			11/15/23 15:43	10
1,2-Dichloroethene, Total	ND		20	8.1	ug/L			11/15/23 15:43	10
1,2-Dichloropropane	ND		10	7.2	ug/L			11/15/23 15:43	10
1,3,5-Trichlorobenzene	ND		10	2.3	ug/L			11/15/23 15:43	10
1,3,5-Trimethylbenzene	ND		10	7.7	ug/L			11/15/23 15:43	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			11/15/23 15:43	10
1,3-Dichloropropane	ND		10	7.5	ug/L			11/15/23 15:43	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			11/15/23 15:43	10
1,4-Dioxane	ND		400	93	ug/L			11/15/23 15:43	10
2,2-Dichloropropane	ND		10	4.0	ug/L			11/15/23 15:43	10
2-Butanone (MEK)	ND		100	13	ug/L			11/15/23 15:43	10
2-Chloroethyl vinyl ether	ND		50	9.6	ug/L			11/15/23 15:43	10
2-Hexanone	ND		50	12	ug/L			11/15/23 15:43	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			11/15/23 15:43	10

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: LP-LCD
Date Collected: 11/09/23 08:45
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184337-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		100	30	ug/L			11/15/23 15:43	10
Acetonitrile	ND		150	49	ug/L			11/15/23 15:43	10
Acrolein	ND		200	9.1	ug/L			11/15/23 15:43	10
Acrylonitrile	ND		50	8.3	ug/L			11/15/23 15:43	10
Benzene	ND		10	4.1	ug/L			11/15/23 15:43	10
Bromobenzene	ND		10	8.0	ug/L			11/15/23 15:43	10
Bromochloromethane	ND		10	8.7	ug/L			11/15/23 15:43	10
Bromodichloromethane	ND		10	3.9	ug/L			11/15/23 15:43	10
Bromoform	ND	*+	10	2.6	ug/L			11/15/23 15:43	10
Bromomethane	ND		10	6.9	ug/L			11/15/23 15:43	10
Butyl alcohol, n-	ND		400	89	ug/L			11/15/23 15:43	10
Butyl alcohol, tert-	ND	*+	100	33	ug/L			11/15/23 15:43	10
Carbon disulfide	ND		10	1.9	ug/L			11/15/23 15:43	10
Carbon tetrachloride	ND	*+	10	2.7	ug/L			11/15/23 15:43	10
Chlorobenzene	ND		10	7.5	ug/L			11/15/23 15:43	10
Chlorodifluoromethane	ND		10	2.6	ug/L			11/15/23 15:43	10
Chloroethane	ND		10	3.2	ug/L			11/15/23 15:43	10
Chloroform	ND		10	3.4	ug/L			11/15/23 15:43	10
Chloromethane	ND		10	3.5	ug/L			11/15/23 15:43	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			11/15/23 15:43	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			11/15/23 15:43	10
Cyclohexane	ND		10	1.8	ug/L			11/15/23 15:43	10
Dibromochloromethane	ND	*+	10	3.2	ug/L			11/15/23 15:43	10
Dibromomethane	ND		10	4.1	ug/L			11/15/23 15:43	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			11/15/23 15:43	10
Dichlorofluoromethane	ND		10	3.4	ug/L			11/15/23 15:43	10
Ethyl acetate	ND		10	6.6	ug/L			11/15/23 15:43	10
Ethyl ether	ND		10	7.2	ug/L			11/15/23 15:43	10
Ethyl tert-butyl ether	ND		10	2.9	ug/L			11/15/23 15:43	10
Ethylbenzene	ND		10	7.4	ug/L			11/15/23 15:43	10
Hexachlorobutadiene	ND	*+	20	2.8	ug/L			11/15/23 15:43	10
Hexane	ND		100	4.0	ug/L			11/15/23 15:43	10
Iodomethane	ND		10	3.0	ug/L			11/15/23 15:43	10
Isobutanol	ND		250	48	ug/L			11/15/23 15:43	10
Isopropyl ether	ND		10	5.9	ug/L			11/15/23 15:43	10
Isopropylbenzene	ND		10	7.9	ug/L			11/15/23 15:43	10
Methacrylonitrile	ND		50	6.9	ug/L			11/15/23 15:43	10
Methyl acetate	ND		25	13	ug/L			11/15/23 15:43	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			11/15/23 15:43	10
Methylcyclohexane	ND		10	1.6	ug/L			11/15/23 15:43	10
Methylene Chloride	ND		10	4.4	ug/L			11/15/23 15:43	10
m-Xylene & p-Xylene	ND		20	6.6	ug/L			11/15/23 15:43	10
Naphthalene	ND		10	4.3	ug/L			11/15/23 15:43	10
n-Butylbenzene	ND		10	6.4	ug/L			11/15/23 15:43	10
N-Propylbenzene	ND		10	6.9	ug/L			11/15/23 15:43	10
o-Chlorotoluene	ND		10	8.6	ug/L			11/15/23 15:43	10
o-Xylene	ND		10	7.6	ug/L			11/15/23 15:43	10
p-Chlorotoluene	ND		10	8.4	ug/L			11/15/23 15:43	10
p-Cymene	ND		10	3.1	ug/L			11/15/23 15:43	10

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: LP-LCD
Date Collected: 11/09/23 08:45
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184337-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10	7.5	ug/L			11/15/23 15:43	10
Styrene	ND		10	7.3	ug/L			11/15/23 15:43	10
Tert-amyl methyl ether	ND		10	2.7	ug/L			11/15/23 15:43	10
tert-Butylbenzene	ND		10	8.1	ug/L			11/15/23 15:43	10
Tetrachloroethene	ND	*+	10	3.6	ug/L			11/15/23 15:43	10
Tetrahydrofuran	ND		50	13	ug/L			11/15/23 15:43	10
Toluene	ND		10	5.1	ug/L			11/15/23 15:43	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			11/15/23 15:43	10
trans-1,3-Dichloropropene	ND	*+	10	3.7	ug/L			11/15/23 15:43	10
trans-1,4-Dichloro-2-butene	ND		10	2.2	ug/L			11/15/23 15:43	10
Trichloroethene	ND		10	4.6	ug/L			11/15/23 15:43	10
Trichlorofluoromethane	ND		10	8.8	ug/L			11/15/23 15:43	10
Vinyl acetate	ND		50	8.5	ug/L			11/15/23 15:43	10
Vinyl chloride	ND		10	9.0	ug/L			11/15/23 15:43	10

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 15:43*	*10*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*11/15/23 15:43*	*10*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*		*11/15/23 15:43*	*10*
Toluene-d8 (Surr)	*110*		*80 - 120*		*11/15/23 15:43*	*10*

Client Sample ID: TRIP BLANK
Date Collected: 11/09/23 00:00
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184337-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*+	1.0	0.35	ug/L			11/15/23 16:06	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 16:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 16:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 16:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 16:06	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 16:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 16:06	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 16:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 16:06	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 16:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 16:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 16:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 16:06	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 16:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 16:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 16:06	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 16:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 16:06	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 16:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 16:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 16:06	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 16:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 16:06	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: TRIP BLANK
Date Collected: 11/09/23 00:00
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184337-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 16:06	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 16:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 16:06	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 16:06	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 16:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 16:06	1
Acetone	ND		10	3.0	ug/L			11/15/23 16:06	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 16:06	1
Acrolein	ND		20	0.91	ug/L			11/15/23 16:06	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 16:06	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 16:06	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 16:06	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 16:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 16:06	1
Bromoform	ND	*+	1.0	0.26	ug/L			11/15/23 16:06	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 16:06	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 16:06	1
Butyl alcohol, tert-	ND	*+	10	3.3	ug/L			11/15/23 16:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 16:06	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			11/15/23 16:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 16:06	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 16:06	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 16:06	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 16:06	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 16:06	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 16:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 16:06	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 16:06	1
Dibromochloromethane	ND	*+	1.0	0.32	ug/L			11/15/23 16:06	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 16:06	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 16:06	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 16:06	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 16:06	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 16:06	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 16:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 16:06	1
Hexachlorobutadiene	ND	*+	2.0	0.28	ug/L			11/15/23 16:06	1
Hexane	ND		10	0.40	ug/L			11/15/23 16:06	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 16:06	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 16:06	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 16:06	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 16:06	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 16:06	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 16:06	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 16:06	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 16:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 16:06	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 16:06	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 16:06	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: TRIP BLANK
Date Collected: 11/09/23 00:00
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184337-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 16:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 16:06	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 16:06	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 16:06	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 16:06	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 16:06	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 16:06	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 16:06	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 16:06	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 16:06	1
Tetrachloroethene	ND	*+	1.0	0.36	ug/L			11/15/23 16:06	1
Tetrahydrofuran	**1.5**	**J**	5.0	1.3	ug/L			11/15/23 16:06	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 16:06	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 16:06	1
trans-1,3-Dichloropropene	ND	*+	1.0	0.37	ug/L			11/15/23 16:06	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 16:06	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 16:06	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 16:06	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 16:06	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 16:06	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 16:06*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*77 - 120*		*11/15/23 16:06*	*1*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*		*11/15/23 16:06*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*11/15/23 16:06*	*1*

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Client Sample ID: LP-LCD
Date Collected: 11/09/23 08:45
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184337-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	**0.014**		0.0030	0.00056	mg/L		11/27/23 15:25	11/28/23 13:00	1
Iron, Total	**0.18**		0.060	0.0091	mg/L		11/27/23 15:25	11/28/23 13:00	1

Method: SW846 6010D - Metals (ICP) - Dissolved

Client Sample ID: LP-LCD
Date Collected: 11/09/23 08:45
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184337-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**91**		0.20	0.024	mg/L		11/22/23 14:36	11/27/23 17:24	1
Iron, Dissolved	**0.14**		0.060	0.0091	mg/L		11/22/23 14:36	11/27/23 17:24	1
Magnesium, Dissolved	**56**		0.050	0.0042	mg/L		11/22/23 14:36	11/27/23 17:24	1
Potassium, Dissolved	**81**		1.0	0.24	mg/L		11/22/23 14:36	11/27/23 17:24	1
Sodium, Dissolved	**650**		5.0	0.49	mg/L		11/22/23 14:36	12/04/23 21:52	5

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Client Sample ID: LP-LCD
Date Collected: 11/09/23 08:45
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184337-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	**0.0028**		0.0010	0.00040	mg/L		11/27/23 15:25	11/28/23 22:44	1
Arsenic, Total	**0.016**		0.0050	0.00050	mg/L		11/27/23 15:25	11/28/23 22:44	1
Barium, Total	**0.14**		0.0010	0.00038	mg/L		11/27/23 15:25	11/28/23 22:44	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/27/23 15:25	11/28/23 22:44	1
Cadmium, Total	**0.00037**		0.00030	0.00019	mg/L		11/27/23 15:25	11/28/23 22:44	1
Chromium, Total	**0.0029**	**J**	0.0030	0.00050	mg/L		11/27/23 15:25	11/28/23 22:44	1
Copper, Total	**0.015**		0.0020	0.00071	mg/L		11/27/23 15:25	11/28/23 22:44	1
Lead, Total	**0.0032**		0.0010	0.00023	mg/L		11/27/23 15:25	11/28/23 22:44	1
Manganese, Total	**0.77**		0.0010	0.00051	mg/L		11/27/23 15:25	11/28/23 22:44	1
Nickel, Total	**0.10**		0.0040	0.00083	mg/L		11/27/23 15:25	11/28/23 22:44	1
Selenium, Total	ND	^+	0.0010	0.0010	mg/L		11/27/23 15:25	11/28/23 22:44	1
Silver, Total	**0.000045**	**J**	0.0020	0.000045	mg/L		11/27/23 15:25	11/28/23 22:44	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/27/23 15:25	11/28/23 22:44	1
Vanadium, Total	**0.0076**		0.0020	0.0011	mg/L		11/27/23 15:25	11/28/23 22:44	1
Zinc, Total	**0.028**		0.0050	0.0020	mg/L		11/27/23 15:25	11/28/23 22:44	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Client Sample ID: LP-LCD
Date Collected: 11/09/23 08:45
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184337-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	**0.65**	**B**	0.0010	0.00051	mg/L		11/22/23 14:36	11/27/23 19:23	1

General Chemistry

Client Sample ID: LP-LCD
Date Collected: 11/09/23 08:45
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184337-1
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**620**		30	30	mg/L			11/30/23 18:35	10
Sulfate (EPA 300.0)	**180**		50	50	mg/L			11/30/23 18:35	10
Ammonia (as N) (EPA 350.1)	**6.3**		0.060	0.060	mg/L			12/01/23 14:47	2
Nitrate as N (EPA 353.2)	**3.5**		0.050	0.050	mg/L			11/12/23 20:53	1
Nitrate Nitrite as N (EPA 353.2)	**3.5**		0.10	0.10	mg/L			11/29/23 13:49	1
Chemical Oxygen Demand (COD) (EPA 410.4)	**160**		20	20	mg/L			11/20/23 10:26	2
Alkalinity, Total (SM 2320B)	**980**		10	10	mg/L			11/17/23 01:59	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**980**		10	10	mg/L			11/17/23 01:59	1
Total Dissolved Solids (TDS) (SM 2540C)	**2400**		10	10	mg/L			11/16/23 11:34	1
Total Organic Carbon - Average (SM 5310B)	**55**		2.0	2.0	mg/L			12/01/23 00:42	2
Biochemical Oxygen Demand (SM5210B)	ND	*-	5.0	5.0	mg/L			11/10/23 11:28	1

Surrogate Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184337-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)
280-184337-1	LP-LCD	106	106	110
280-184337-2	TRIP BLANK	110	106	107
480-214805-A-2 MS	Matrix Spike	106	108	108
480-214805-A-2 MSD	Matrix Spike Duplicate	107	110	109
LCS 480-691946/6	Lab Control Sample	106	109	111
MB 480-691946/8	Method Blank	101	108	109

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DBFM	TBA
Lab Sample ID	Client Sample ID	(50-150)	(50-150)
280-184337-1	LP-LCD	119	100
280-184337-2	TRIP BLANK	121	101
LCS 480-691926/6	Lab Control Sample	104	94
LCSD 480-691926/7	Lab Control Sample Dup	103	95
MB 480-691926/9	Method Blank	116	116

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TBA = TBA-d9 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-691946/8
Matrix: Water
Analysis Batch: 691946

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 12:53	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 12:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 12:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 12:53	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 12:53	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 12:53	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 12:53	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 12:53	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 12:53	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 12:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 12:53	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 12:53	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 12:53	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 12:53	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 12:53	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 12:53	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 12:53	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 12:53	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 12:53	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 12:53	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 12:53	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 12:53	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 12:53	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 12:53	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 12:53	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 12:53	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 12:53	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 12:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 12:53	1
Acetone	ND		10	3.0	ug/L			11/15/23 12:53	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 12:53	1
Acrolein	ND		20	0.91	ug/L			11/15/23 12:53	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 12:53	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 12:53	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 12:53	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 12:53	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 12:53	1
Bromoform	ND		1.0	0.26	ug/L			11/15/23 12:53	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 12:53	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 12:53	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 12:53	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 12:53	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/15/23 12:53	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 12:53	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 12:53	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 12:53	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 12:53	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 12:53	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-691946/8
Matrix: Water
Analysis Batch: 691946

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 12:53	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 12:53	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 12:53	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/15/23 12:53	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 12:53	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 12:53	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 12:53	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 12:53	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 12:53	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 12:53	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 12:53	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 12:53	1
Hexane	ND		10	0.40	ug/L			11/15/23 12:53	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 12:53	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 12:53	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 12:53	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 12:53	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 12:53	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 12:53	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 12:53	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 12:53	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 12:53	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 12:53	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 12:53	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 12:53	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 12:53	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 12:53	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 12:53	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 12:53	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 12:53	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 12:53	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 12:53	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 12:53	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 12:53	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 12:53	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 12:53	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 12:53	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 12:53	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 12:53	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 12:53	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 12:53	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 12:53	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 12:53	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 12:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*11/15/23 12:53*	*1*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*11/15/23 12:53*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-691946/8
Matrix: Water
Analysis Batch: 691946

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	109		80 - 120		11/15/23 12:53	1

Lab Sample ID: LCS 480-691946/6
Matrix: Water
Analysis Batch: 691946

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	31.2	*+	ug/L		125	80 - 120
1,1,1-Trichloroethane	25.0	31.5		ug/L		126	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.6		ug/L		103	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.5		ug/L		114	61 - 148
1,1,2-Trichloroethane	25.0	27.6		ug/L		110	76 - 122
1,1-Dichloroethane	25.0	27.9		ug/L		112	77 - 120
1,1-Dichloroethene	25.0	28.4		ug/L		114	66 - 127
1,1-Dichloropropene	25.0	29.5		ug/L		118	72 - 122
1,2,3-Trichlorobenzene	25.0	28.2		ug/L		113	75 - 123
1,2,3-Trichloropropane	25.0	26.0		ug/L		104	68 - 122
1,2,4-Trichlorobenzene	25.0	27.6		ug/L		110	79 - 122
1,2,4-Trimethylbenzene	25.0	28.3		ug/L		113	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	31.9		ug/L		128	56 - 134
1,2-Dibromoethane (EDB)	25.0	28.8		ug/L		115	77 - 120
1,2-Dichlorobenzene	25.0	26.9		ug/L		108	80 - 124
1,2-Dichloroethane	25.0	25.7		ug/L		103	75 - 120
1,2-Dichloropropane	25.0	27.2		ug/L		109	76 - 120
1,3,5-Trimethylbenzene	25.0	28.7		ug/L		115	77 - 121
1,3-Dichlorobenzene	25.0	28.6		ug/L		114	77 - 120
1,3-Dichloropropane	25.0	27.0		ug/L		108	75 - 120
1,4-Dichlorobenzene	25.0	27.5		ug/L		110	80 - 120
1,4-Dioxane	500	447		ug/L		89	50 - 150
2,2-Dichloropropane	25.0	31.3		ug/L		125	63 - 136
2-Butanone (MEK)	125	108		ug/L		86	57 - 140
2-Chloroethyl vinyl ether	25.0	28.2		ug/L		113	70 - 129
2-Hexanone	125	115		ug/L		92	65 - 127
4-Methyl-2-pentanone (MIBK)	125	124		ug/L		100	71 - 125
Acetone	125	132		ug/L		106	56 - 142
Acrolein	125	111		ug/L		88	52 - 143
Acrylonitrile	250	236		ug/L		94	63 - 125
Benzene	25.0	27.9		ug/L		112	71 - 124
Bromobenzene	25.0	29.5		ug/L		118	78 - 120
Bromochloromethane	25.0	26.9		ug/L		108	72 - 130
Bromodichloromethane	25.0	29.5		ug/L		118	80 - 122
Bromoform	25.0	36.0	*+	ug/L		144	61 - 132
Bromomethane	25.0	25.1		ug/L		100	55 - 144
Butyl alcohol, tert-	250	326	*+	ug/L		130	75 - 125
Carbon disulfide	25.0	28.4		ug/L		113	59 - 134
Carbon tetrachloride	25.0	36.2	*+	ug/L		145	72 - 134
Chlorobenzene	25.0	28.3		ug/L		113	80 - 120
Chloroethane	25.0	24.7		ug/L		99	69 - 136

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-691946/6
Matrix: Water
Analysis Batch: 691946

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	25.0	26.2		ug/L		105	73 - 127
Chloromethane	25.0	27.8		ug/L		111	68 - 124
cis-1,2-Dichloroethene	25.0	28.7		ug/L		115	74 - 124
cis-1,3-Dichloropropene	25.0	29.8		ug/L		119	74 - 124
Cyclohexane	25.0	29.8		ug/L		119	59 - 135
Dibromochloromethane	25.0	33.7	*+	ug/L		135	75 - 125
Dibromomethane	25.0	26.5		ug/L		106	76 - 127
Dichlorodifluoromethane	25.0	30.6		ug/L		122	59 - 135
Dichlorofluoromethane	25.0	24.9		ug/L		100	76 - 127
Ethyl ether	25.0	25.0		ug/L		100	76 - 123
Ethylbenzene	25.0	28.7		ug/L		115	77 - 123
Hexachlorobutadiene	25.0	33.1	*+	ug/L		133	68 - 131
Iodomethane	25.0	29.2		ug/L		117	78 - 123
Isobutanol	625	771		ug/L		123	51 - 150
Isopropylbenzene	25.0	28.7		ug/L		115	77 - 122
Methyl acetate	50.0	46.2		ug/L		92	74 - 133
Methyl tert-butyl ether	25.0	25.4		ug/L		102	77 - 120
Methylcyclohexane	25.0	28.0		ug/L		112	68 - 134
Methylene Chloride	25.0	26.8		ug/L		107	75 - 124
m-Xylene & p-Xylene	25.0	28.3		ug/L		113	76 - 122
Naphthalene	25.0	26.6		ug/L		106	66 - 125
n-Butylbenzene	25.0	27.7		ug/L		111	71 - 128
N-Propylbenzene	25.0	28.6		ug/L		114	75 - 127
o-Chlorotoluene	25.0	29.8		ug/L		119	76 - 121
o-Xylene	25.0	27.9		ug/L		112	76 - 122
p-Chlorotoluene	25.0	27.8		ug/L		111	77 - 121
p-Cymene	25.0	29.8		ug/L		119	73 - 120
sec-Butylbenzene	25.0	28.3		ug/L		113	74 - 127
Styrene	25.0	28.2		ug/L		113	80 - 120
tert-Butylbenzene	25.0	30.5		ug/L		122	75 - 123
Tetrachloroethene	25.0	31.6	*+	ug/L		126	74 - 122
Tetrahydrofuran	50.0	50.0		ug/L		100	62 - 132
Toluene	25.0	28.6		ug/L		114	80 - 122
trans-1,2-Dichloroethene	25.0	28.9		ug/L		116	73 - 127
trans-1,3-Dichloropropene	25.0	30.2	*+	ug/L		121	80 - 120
trans-1,4-Dichloro-2-butene	25.0	24.1		ug/L		96	41 - 131
Trichloroethene	25.0	29.0		ug/L		116	74 - 123
Trichlorofluoromethane	25.0	29.5		ug/L		118	62 - 150
Vinyl acetate	50.0	57.9		ug/L		116	50 - 144
Vinyl chloride	25.0	28.4		ug/L		114	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*
Toluene-d8 (Surr)	*111*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-214805-A-2 MS
Matrix: Water
Analysis Batch: 691946

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	ND	F1	25.0	32.7	F1	ug/L		131	73 - 126
1,1,2,2-Tetrachloroethane	ND		25.0	27.9		ug/L		111	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	29.3		ug/L		117	61 - 148
1,1,2-Trichloroethane	ND		25.0	28.2		ug/L		113	76 - 122
1,1-Dichloroethane	ND		25.0	29.4		ug/L		118	77 - 120
1,1-Dichloroethene	ND		25.0	30.1		ug/L		120	66 - 127
1,2,4-Trichlorobenzene	ND	F1	25.0	31.0	F1	ug/L		124	79 - 122
1,2-Dibromo-3-Chloropropane	ND	F1	25.0	33.9	F1	ug/L		136	56 - 134
1,2-Dibromoethane (EDB)	ND	F1	25.0	29.9		ug/L		120	77 - 120
1,2-Dichlorobenzene	ND		25.0	30.0		ug/L		120	80 - 124
1,2-Dichloroethane	ND		25.0	27.1		ug/L		109	75 - 120
1,2-Dichloropropane	ND		25.0	28.9		ug/L		116	76 - 120
1,3-Dichlorobenzene	ND	F1	25.0	30.0		ug/L		120	77 - 120
1,4-Dichlorobenzene	ND		25.0	29.3		ug/L		117	78 - 124
2-Butanone (MEK)	ND		125	123		ug/L		99	57 - 140
2-Hexanone	ND		125	128		ug/L		103	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		125	135		ug/L		108	71 - 125
Acetone	ND	F2	125	139		ug/L		112	56 - 142
Benzene	ND		25.0	29.4		ug/L		118	71 - 124
Bromodichloromethane	ND	F1	25.0	30.1		ug/L		120	80 - 122
Bromoform	ND	*+	25.0	30.7		ug/L		123	61 - 132
Bromomethane	ND	F2	25.0	24.3		ug/L		97	55 - 144
Carbon disulfide	ND		25.0	27.7		ug/L		111	59 - 134
Carbon tetrachloride	ND	*+ F1	25.0	36.0	F1	ug/L		144	72 - 134
Chlorobenzene	ND		25.0	29.1		ug/L		116	80 - 120
Chloroethane	ND	F1 F2	25.0	25.3		ug/L		101	69 - 136
Chloroform	ND		25.0	27.7		ug/L		111	73 - 127
Chloromethane	ND		25.0	26.7		ug/L		107	68 - 124
cis-1,2-Dichloroethene	ND		25.0	29.2		ug/L		117	74 - 124
cis-1,3-Dichloropropene	ND		25.0	28.4		ug/L		113	74 - 124
Cyclohexane	ND		25.0	29.7		ug/L		119	59 - 135
Dibromochloromethane	ND	*+ F1	25.0	32.6	F1	ug/L		130	75 - 125
Dichlorodifluoromethane	ND		25.0	31.3		ug/L		125	59 - 135
Ethylbenzene	ND		25.0	30.2		ug/L		121	77 - 123
Isopropylbenzene	ND	F1	25.0	32.1	F1	ug/L		128	77 - 122
Methyl acetate	ND		50.0	49.8		ug/L		100	74 - 133
Methyl tert-butyl ether	ND		25.0	25.9		ug/L		104	77 - 120
Methylcyclohexane	ND		25.0	28.0		ug/L		112	68 - 134
Methylene Chloride	ND		25.0	27.0		ug/L		108	75 - 124
m-Xylene & p-Xylene	ND		25.0	29.0		ug/L		116	76 - 122
o-Xylene	ND		25.0	28.6		ug/L		115	76 - 122
Styrene	ND		25.0	29.6		ug/L		118	80 - 120
Tetrachloroethene	ND	*+ F1	25.0	34.0	F1	ug/L		136	74 - 122
Toluene	ND		25.0	30.0		ug/L		120	80 - 122
trans-1,2-Dichloroethene	ND		25.0	30.9		ug/L		124	73 - 127
trans-1,3-Dichloropropene	ND	*+	25.0	29.2		ug/L		117	80 - 120
Trichloroethene	ND	F1	25.0	29.6		ug/L		118	74 - 123
Trichlorofluoromethane	ND		25.0	28.0		ug/L		112	62 - 150

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-214805-A-2 MS
Matrix: Water
Analysis Batch: 691946

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	ND		25.0	30.5		ug/L		122	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*
Toluene-d8 (Surr)	*108*		*80 - 120*

Lab Sample ID: 480-214805-A-2 MSD
Matrix: Water
Analysis Batch: 691946

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND	F1	25.0	32.7	F1	ug/L		131	73 - 126	0	15
1,1,2,2-Tetrachloroethane	ND		25.0	27.9		ug/L		111	76 - 120	0	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	29.8		ug/L		119	61 - 148	1	20
1,1,2-Trichloroethane	ND		25.0	29.2		ug/L		117	76 - 122	4	15
1,1-Dichloroethane	ND		25.0	29.2		ug/L		117	77 - 120	0	20
1,1-Dichloroethene	ND		25.0	30.2		ug/L		121	66 - 127	0	16
1,2,4-Trichlorobenzene	ND	F1	25.0	32.3	F1	ug/L		129	79 - 122	4	20
1,2-Dibromo-3-Chloropropane	ND	F1	25.0	33.5		ug/L		134	56 - 134	1	15
1,2-Dibromoethane (EDB)	ND	F1	25.0	30.3	F1	ug/L		121	77 - 120	1	15
1,2-Dichlorobenzene	ND		25.0	30.0		ug/L		120	80 - 124	0	20
1,2-Dichloroethane	ND		25.0	27.4		ug/L		109	75 - 120	1	20
1,2-Dichloropropane	ND		25.0	29.1		ug/L		117	76 - 120	1	20
1,3-Dichlorobenzene	ND	F1	25.0	31.1	F1	ug/L		124	77 - 120	4	20
1,4-Dichlorobenzene	ND		25.0	30.1		ug/L		120	78 - 124	3	20
2-Butanone (MEK)	ND		125	128		ug/L		102	57 - 140	3	20
2-Hexanone	ND		125	127		ug/L		101	65 - 127	1	15
4-Methyl-2-pentanone (MIBK)	ND		125	136		ug/L		109	71 - 125	0	35
Acetone	ND	F2	125	164	F2	ug/L		131	56 - 142	16	15
Benzene	ND		25.0	30.2		ug/L		121	71 - 124	3	13
Bromodichloromethane	ND	F1	25.0	31.6	F1	ug/L		126	80 - 122	5	15
Bromoform	ND	*+	25.0	32.5		ug/L		130	61 - 132	6	15
Bromomethane	ND	F2	25.0	17.6	F2	ug/L		70	55 - 144	32	15
Carbon disulfide	ND		25.0	28.2		ug/L		113	59 - 134	2	15
Carbon tetrachloride	ND	*+ F1	25.0	37.1	F1	ug/L		148	72 - 134	3	15
Chlorobenzene	ND		25.0	29.2		ug/L		117	80 - 120	0	25
Chloroethane	ND	F1 F2	25.0	16.3	F1 F2	ug/L		65	69 - 136	43	15
Chloroform	ND		25.0	28.4		ug/L		114	73 - 127	3	20
Chloromethane	ND		25.0	23.1		ug/L		93	68 - 124	14	15
cis-1,2-Dichloroethene	ND		25.0	28.6		ug/L		115	74 - 124	2	15
cis-1,3-Dichloropropene	ND		25.0	28.5		ug/L		114	74 - 124	0	15
Cyclohexane	ND		25.0	29.7		ug/L		119	59 - 135	0	20
Dibromochloromethane	ND	*+ F1	25.0	32.4	F1	ug/L		130	75 - 125	0	15
Dichlorodifluoromethane	ND		25.0	26.7		ug/L		107	59 - 135	16	20
Ethylbenzene	ND		25.0	30.6		ug/L		122	77 - 123	1	15
Isopropylbenzene	ND	F1	25.0	31.7	F1	ug/L		127	77 - 122	1	20
Methyl acetate	ND		50.0	50.6		ug/L		101	74 - 133	2	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-214805-A-2 MSD
Matrix: Water
Analysis Batch: 691946

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		25.0	26.4		ug/L		106	77 - 120	2	37
Methylcyclohexane	ND		25.0	27.5		ug/L		110	68 - 134	2	20
Methylene Chloride	ND		25.0	27.7		ug/L		111	75 - 124	3	15
m-Xylene & p-Xylene	ND		25.0	29.2		ug/L		117	76 - 122	1	16
o-Xylene	ND		25.0	29.5		ug/L		118	76 - 122	3	16
Styrene	ND		25.0	30.0		ug/L		120	80 - 120	2	20
Tetrachloroethene	ND	*+ F1	25.0	34.8	F1	ug/L		139	74 - 122	2	20
Toluene	ND		25.0	30.4		ug/L		122	80 - 122	2	15
trans-1,2-Dichloroethene	ND		25.0	31.0		ug/L		124	73 - 127	0	20
trans-1,3-Dichloropropene	ND	*+	25.0	29.1		ug/L		116	80 - 120	0	15
Trichloroethene	ND	F1	25.0	31.4	F1	ug/L		125	74 - 123	6	16
Trichlorofluoromethane	ND		25.0	25.1		ug/L		100	62 - 150	11	20
Vinyl chloride	ND		25.0	26.3		ug/L		105	65 - 133	15	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*
4-Bromofluorobenzene (Surr)	*110*		*73 - 120*
Toluene-d8 (Surr)	*109*		*80 - 120*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-691926/9
Matrix: Water
Analysis Batch: 691926

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/14/23 20:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*116*		*50 - 150*		*11/14/23 20:31*	*1*
TBA-d9 (Surr)	*116*		*50 - 150*		*11/14/23 20:31*	*1*

Lab Sample ID: LCS 480-691926/6
Matrix: Water
Analysis Batch: 691926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Vinyl chloride			0.200	0.248		ug/L		124	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*104*		*50 - 150*
TBA-d9 (Surr)	*94*		*50 - 150*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-691926/7
Matrix: Water
Analysis Batch: 691926

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
Vinyl chloride			0.200	0.225		ug/L		113	50 - 150	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*103*		*50 - 150*
TBA-d9 (Surr)	*95*		*50 - 150*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 280-634983/1-A
Matrix: Water
Analysis Batch: 635270

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634983

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	ND		0.20	0.024	mg/L		11/22/23 14:36	11/27/23 16:31	1
Iron, Dissolved	ND		0.060	0.0091	mg/L		11/22/23 14:36	11/27/23 16:31	1
Magnesium, Dissolved	ND		0.050	0.0042	mg/L		11/22/23 14:36	11/27/23 16:31	1
Potassium, Dissolved	ND		1.0	0.24	mg/L		11/22/23 14:36	11/27/23 16:31	1

Lab Sample ID: MB 280-634983/1-A
Matrix: Water
Analysis Batch: 635452

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634983

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium, Dissolved	ND		1.0	0.097	mg/L		11/22/23 14:36	11/28/23 16:39	1

Lab Sample ID: LCS 280-634983/2-A
Matrix: Water
Analysis Batch: 635270

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634983

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium, Dissolved			50.0	46.6		mg/L		93	90 - 111		
Iron, Dissolved			10.0	9.43		mg/L		94	89 - 115		
Magnesium, Dissolved			50.0	47.0		mg/L		94	90 - 113		
Potassium, Dissolved			50.0	46.0		mg/L		92	89 - 114		

Lab Sample ID: LCS 280-634983/2-A
Matrix: Water
Analysis Batch: 635452

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634983

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sodium, Dissolved			50.0	52.5		mg/L		105	90 - 115		

Lab Sample ID: MB 280-635162/1-A
Matrix: Water
Analysis Batch: 635448

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/27/23 15:25	11/28/23 12:52	1
Iron, Total	ND		0.060	0.0091	mg/L		11/27/23 15:25	11/28/23 12:52	1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-635162/2-A
Matrix: Water
Analysis Batch: 635448

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt, Total	1.00	0.968		mg/L		97	89 - 111
Iron, Total	10.0	10.0		mg/L		100	89 - 115

Lab Sample ID: 280-184383-E-2-B MS
Matrix: Water
Analysis Batch: 635448

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt, Total	ND		1.00	0.981		mg/L		98	82 - 119
Iron, Total	0.021	J	10.0	10.2		mg/L		102	75 - 125

Lab Sample ID: 280-184383-E-2-C MSD
Matrix: Water
Analysis Batch: 635448

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt, Total	ND		1.00	0.982		mg/L		98	82 - 119	0	20
Iron, Total	0.021	J	10.0	10.3		mg/L		103	75 - 125	1	20

Lab Sample ID: 280-184295-F-7-B MS
Matrix: Water
Analysis Batch: 635270

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 634983

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium, Dissolved	82		50.0	137		mg/L		111	75 - 125
Iron, Dissolved	0.14		10.0	9.41		mg/L		93	75 - 125
Magnesium, Dissolved	30		50.0	80.7		mg/L		102	75 - 125
Potassium, Dissolved	0.58	J	50.0	47.0		mg/L		93	76 - 125

Lab Sample ID: 280-184295-F-7-B MS
Matrix: Water
Analysis Batch: 635452

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 634983

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sodium, Dissolved	67		50.0	118		mg/L		104	75 - 125

Lab Sample ID: 280-184295-F-7-C MSD
Matrix: Water
Analysis Batch: 635270

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 634983

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium, Dissolved	82		50.0	145		mg/L		125	75 - 125	5	20
Iron, Dissolved	0.14		10.0	9.60		mg/L		95	75 - 125	2	20
Magnesium, Dissolved	30		50.0	83.6		mg/L		108	75 - 125	3	20
Potassium, Dissolved	0.58	J	50.0	48.3		mg/L		95	76 - 125	3	20

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 280-184295-F-7-C MSD
Matrix: Water
Analysis Batch: 635452

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 634983

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium, Dissolved	67		50.0	123		mg/L		113	75 - 125	4	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 280-634983/1-A
Matrix: Water
Analysis Batch: 635264

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634983

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	0.00517		0.0010	0.00051	mg/L		11/22/23 14:36	11/27/23 19:02	1

Lab Sample ID: LCS 280-634983/25-A
Matrix: Water
Analysis Batch: 635264

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634983

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese, Dissolved	0.0400	0.0357		mg/L		89	85 - 117

Lab Sample ID: MB 280-635162/1-A
Matrix: Water
Analysis Batch: 635419

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/27/23 15:25	11/28/23 22:39	1
Arsenic, Total	ND		0.0050	0.00050	mg/L		11/27/23 15:25	11/28/23 22:39	1
Barium, Total	ND		0.0010	0.00038	mg/L		11/27/23 15:25	11/28/23 22:39	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/27/23 15:25	11/28/23 22:39	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/27/23 15:25	11/28/23 22:39	1
Chromium, Total	ND		0.0030	0.00050	mg/L		11/27/23 15:25	11/28/23 22:39	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/27/23 15:25	11/28/23 22:39	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/27/23 15:25	11/28/23 22:39	1
Manganese, Total	ND		0.0010	0.00051	mg/L		11/27/23 15:25	11/28/23 22:39	1
Nickel, Total	ND		0.0040	0.00083	mg/L		11/27/23 15:25	11/28/23 22:39	1
Selenium, Total	ND	^+	0.0010	0.0010	mg/L		11/27/23 15:25	11/28/23 22:39	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/27/23 15:25	11/28/23 22:39	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/27/23 15:25	11/28/23 22:39	1
Vanadium, Total	ND		0.0020	0.0011	mg/L		11/27/23 15:25	11/28/23 22:39	1
Zinc, Total	ND		0.0050	0.0020	mg/L		11/27/23 15:25	11/28/23 22:39	1

Lab Sample ID: LCS 280-635162/25-A
Matrix: Water
Analysis Batch: 635419

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony, Total	0.0400	0.0398		mg/L		100	85 - 115
Arsenic, Total	0.0400	0.0408		mg/L		102	85 - 117
Barium, Total	0.0400	0.0399		mg/L		100	85 - 118
Beryllium, Total	0.0400	0.0400		mg/L		100	80 - 125
Cadmium, Total	0.0400	0.0408		mg/L		102	85 - 115
Chromium, Total	0.0400	0.0401		mg/L		100	84 - 121

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 280-635162/25-A
Matrix: Water
Analysis Batch: 635419

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper, Total	0.0400	0.0398		mg/L		100	85 - 119
Lead, Total	0.0400	0.0395		mg/L		99	85 - 118
Manganese, Total	0.0400	0.0408		mg/L		102	85 - 117
Nickel, Total	0.0400	0.0401		mg/L		100	85 - 119
Selenium, Total	0.0400	0.0447	^+	mg/L		112	77 - 122
Silver, Total	0.0400	0.0369		mg/L		92	85 - 115
Thallium, Total	0.0400	0.0392		mg/L		98	85 - 118
Vanadium, Total	0.0400	0.0401		mg/L		100	85 - 120
Zinc, Total	0.0400	0.0358		mg/L		90	83 - 122

Lab Sample ID: 280-184383-E-2-E MS
Matrix: Water
Analysis Batch: 635419

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony, Total	ND		0.0400	0.0396		mg/L		99	80 - 111
Arsenic, Total	0.0012	J	0.0400	0.0418		mg/L		102	92 - 112
Barium, Total	0.045		0.0400	0.0852		mg/L		101	92 - 117
Beryllium, Total	ND		0.0400	0.0375		mg/L		94	87 - 118
Cadmium, Total	ND		0.0400	0.0391		mg/L		98	91 - 114
Chromium, Total	ND		0.0400	0.0402		mg/L		100	91 - 114
Copper, Total	ND		0.0400	0.0406		mg/L		101	89 - 116
Lead, Total	ND		0.0400	0.0396		mg/L		99	95 - 116
Nickel, Total	0.0013	J	0.0400	0.0408		mg/L		99	92 - 116
Selenium, Total	ND	^+	0.0400	0.0413	^+	mg/L		103	90 - 115
Silver, Total	ND		0.0400	0.0403		mg/L		101	93 - 118
Thallium, Total	ND		0.0400	0.0401		mg/L		100	94 - 115
Vanadium, Total	0.0071		0.0400	0.0453		mg/L		96	91 - 114
Zinc, Total	0.0025	J	0.0400	0.0394		mg/L		92	86 - 120

Lab Sample ID: 280-184383-E-2-E MS
Matrix: Water
Analysis Batch: 635488

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese, Total	0.0089		0.0400	0.0489		mg/L		100	89 - 119

Lab Sample ID: 280-184383-E-2-F MSD
Matrix: Water
Analysis Batch: 635419

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony, Total	ND		0.0400	0.0393		mg/L		98	80 - 111	1	20
Arsenic, Total	0.0012	J	0.0400	0.0410		mg/L		100	92 - 112	2	20
Barium, Total	0.045		0.0400	0.0844		mg/L		99	92 - 117	1	20
Beryllium, Total	ND		0.0400	0.0385		mg/L		96	87 - 118	3	20
Cadmium, Total	ND		0.0400	0.0386		mg/L		97	91 - 114	1	20
Chromium, Total	ND		0.0400	0.0393		mg/L		98	91 - 114	2	20
Copper, Total	ND		0.0400	0.0396		mg/L		99	89 - 116	2	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-184383-E-2-F MSD
Matrix: Water
Analysis Batch: 635419

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead, Total	ND		0.0400	0.0390		mg/L		98	95 - 116	2	20
Nickel, Total	0.0013	J	0.0400	0.0403		mg/L		98	92 - 116	1	20
Selenium, Total	ND	^+	0.0400	0.0417	^+	mg/L		104	90 - 115	1	20
Silver, Total	ND		0.0400	0.0402		mg/L		101	93 - 118	0	20
Thallium, Total	ND		0.0400	0.0397		mg/L		99	94 - 115	1	20
Vanadium, Total	0.0071		0.0400	0.0456		mg/L		96	91 - 114	1	20
Zinc, Total	0.0025	J	0.0400	0.0382		mg/L		89	86 - 120	3	20

Lab Sample ID: 280-184383-E-2-F MSD
Matrix: Water
Analysis Batch: 635488

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese, Total	0.0089		0.0400	0.0483		mg/L		99	89 - 119	1	20

Lab Sample ID: 280-184295-F-7-E MS
Matrix: Water
Analysis Batch: 635264

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 634983

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese, Dissolved	2.6	B	0.0400	2.66	4	mg/L		124	89 - 119

Lab Sample ID: 280-184295-F-7-F MSD
Matrix: Water
Analysis Batch: 635264

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 634983

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese, Dissolved	2.6	B	0.0400	2.64	4	mg/L		90	89 - 119	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-635621/6
Matrix: Water
Analysis Batch: 635621

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	3.0	mg/L			11/30/23 12:10	1
Sulfate	ND		5.0	5.0	mg/L			11/30/23 12:10	1

Lab Sample ID: LCS 280-635621/4
Matrix: Water
Analysis Batch: 635621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	95.2		mg/L		95	90 - 110
Sulfate	100	97.3		mg/L		97	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 280-635621/5
Matrix: Water
Analysis Batch: 635621

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
Chloride			100	95.9		mg/L		96	90 - 110	1	10
Sulfate			100	97.9		mg/L		98	90 - 110	1	10

Lab Sample ID: MRL 280-635621/3
Matrix: Water
Analysis Batch: 635621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			5.00	4.75		mg/L		95	50 - 150		
Sulfate			5.00	ND		mg/L		98	50 - 150		

Lab Sample ID: 280-184290-D-4 MS
Matrix: Water
Analysis Batch: 635621

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	66		50.0	119		mg/L		106	80 - 120		
Sulfate	ND	F1	50.0	59.5		mg/L		119	80 - 120		

Lab Sample ID: 280-184290-D-4 MSD
Matrix: Water
Analysis Batch: 635621

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	66		50.0	123		mg/L		114	80 - 120	4	20
Sulfate	ND	F1	50.0	62.1	F1	mg/L		124	80 - 120	4	20

Lab Sample ID: 280-184290-D-4 DU
Matrix: Water
Analysis Batch: 635621

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	66			66.1		mg/L				0	15
Sulfate	ND	F1		ND		mg/L				NC	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-635876/58
Matrix: Water
Analysis Batch: 635876

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.030	0.030	mg/L			12/01/23 13:54	1

Lab Sample ID: LCS 280-635876/59
Matrix: Water
Analysis Batch: 635876

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia (as N)			2.50	2.54		mg/L		102	90 - 110		

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 280-184365-B-1 MS
Matrix: Water
Analysis Batch: 635876

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia (as N)	ND	F1 F2	1.00	0.796	F1	mg/L		80	90 - 110

Lab Sample ID: 280-184365-B-1 MSD
Matrix: Water
Analysis Batch: 635876

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia (as N)	ND	F1 F2	1.00	1.11	F1 F2	mg/L		111	90 - 110	33	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-635572/61
Matrix: Water
Analysis Batch: 635572

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10	0.10	mg/L			11/29/23 13:41	1

Lab Sample ID: LCS 280-635572/60
Matrix: Water
Analysis Batch: 635572

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	5.00	4.99		mg/L		100	90 - 110

Lab Sample ID: 280-184383-C-14 MS
Matrix: Water
Analysis Batch: 635572

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	ND		4.00	3.70		mg/L		92	90 - 110

Lab Sample ID: 280-184383-C-14 MSD
Matrix: Water
Analysis Batch: 635572

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND		4.00	3.68		mg/L		92	90 - 110	0	10

Method: 410.4 - COD

Lab Sample ID: MB 280-634617/5
Matrix: Water
Analysis Batch: 634617

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (COD)	ND		10	10	mg/L			11/20/23 10:26	1

Method: 410.4 - COD (Continued)

Lab Sample ID: LCS 280-634617/3
Matrix: Water
Analysis Batch: 634617

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chemical Oxygen Demand (COD)			100	100		mg/L		100	90 - 110		

Lab Sample ID: LCSD 280-634617/4
Matrix: Water
Analysis Batch: 634617

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
Chemical Oxygen Demand (COD)			100	101		mg/L		101	90 - 110	1	11

Lab Sample ID: 680-242926-D-2 MS
Matrix: Water
Analysis Batch: 634617

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chemical Oxygen Demand (COD)	ND		50.0	54.4		mg/L		109	90 - 110		

Lab Sample ID: 680-242926-D-2 MSD
Matrix: Water
Analysis Batch: 634617

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand (COD)	ND		50.0	52.8		mg/L		106	90 - 110	3	11

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-634324/83
Matrix: Water
Analysis Batch: 634324

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10	10	mg/L			11/16/23 22:48	1
Bicarbonate Alkalinity as CaCO3	ND		10	10	mg/L			11/16/23 22:48	1

Lab Sample ID: LCS 280-634324/82
Matrix: Water
Analysis Batch: 634324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity, Total			200	206		mg/L		103	89 - 110		

Lab Sample ID: 280-184295-B-5 DU
Matrix: Water
Analysis Batch: 634324

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity, Total	360			357		mg/L				0.07	10
Bicarbonate Alkalinity as CaCO3	360			357		mg/L				0.07	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-634220/1
Matrix: Water
Analysis Batch: 634220

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	5.0	mg/L			11/16/23 11:34	1

Lab Sample ID: LCS 280-634220/2
Matrix: Water
Analysis Batch: 634220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids (TDS)			504	501		mg/L		99	88 - 114		

Lab Sample ID: LCSD 280-634220/3
Matrix: Water
Analysis Batch: 634220

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
Total Dissolved Solids (TDS)			504	502		mg/L		100	88 - 114	0	20

Lab Sample ID: 280-184342-B-1 DU
Matrix: Water
Analysis Batch: 634220

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids (TDS)	75			82.0		mg/L				9	10

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-635791/6
Matrix: Water
Analysis Batch: 635791

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0	1.0	mg/L			11/30/23 21:48	1

Lab Sample ID: LCS 280-635791/4
Matrix: Water
Analysis Batch: 635791

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon - Average			25.0	25.1		mg/L		101	88 - 112		

Lab Sample ID: LCSD 280-635791/5
Matrix: Water
Analysis Batch: 635791

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
Total Organic Carbon - Average			25.0	25.2		mg/L		101	88 - 112	0	15

Method: SM 5310B - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 280-184284-L-5 MS
Matrix: Water
Analysis Batch: 635791

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon - Average	ND		25.0	25.2		mg/L		101	88 - 112		

Lab Sample ID: 280-184284-L-5 MSD
Matrix: Water
Analysis Batch: 635791

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Average	ND		25.0	25.0		mg/L		100	88 - 112	1	15

Method: SM5210B - BOD, 5 Day

Lab Sample ID: MB 280-633453/4
Matrix: Water
Analysis Batch: 633453

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			11/10/23 11:28	1

Lab Sample ID: SCB 280-633453/1
Matrix: Water
Analysis Batch: 633453

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	SCB Result	SCB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			11/10/23 11:28	1

Lab Sample ID: USB 280-633453/2
Matrix: Water
Analysis Batch: 633453

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			11/10/23 11:28	1

Lab Sample ID: LCS 280-633453/3
Matrix: Water
Analysis Batch: 633453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Biochemical Oxygen Demand			198	154	*-	mg/L		78	85 - 115		

Lab Sample ID: 280-184288-B-1 DU
Matrix: Water
Analysis Batch: 633453

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	51	*- b		51.9	*-	mg/L				3	20

QC Association Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184337-1

GC/MS VOA

Analysis Batch: 691926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Total/NA	Water	8260C SIM	
280-184337-2	TRIP BLANK	Total/NA	Water	8260C SIM	
MB 480-691926/9	Method Blank	Total/NA	Water	8260C SIM	
LCS 480-691926/6	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 480-691926/7	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

Analysis Batch: 691946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Total/NA	Water	8260C	
280-184337-2	TRIP BLANK	Total/NA	Water	8260C	
MB 480-691946/8	Method Blank	Total/NA	Water	8260C	
LCS 480-691946/6	Lab Control Sample	Total/NA	Water	8260C	
480-214805-A-2 MS	Matrix Spike	Total/NA	Water	8260C	
480-214805-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

Metals

Prep Batch: 634983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Dissolved	Water	3005A	
MB 280-634983/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-634983/25-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 280-634983/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-184295-F-7-B MS	Matrix Spike	Dissolved	Water	3005A	
280-184295-F-7-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	
280-184295-F-7-E MS	Matrix Spike	Dissolved	Water	3005A	
280-184295-F-7-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Prep Batch: 635162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Total Recoverable	Water	3005A	
MB 280-635162/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-635162/25-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 280-635162/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-184383-E-2-B MS	Matrix Spike	Total Recoverable	Water	3005A	
280-184383-E-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
280-184383-E-2-E MS	Matrix Spike	Total Recoverable	Water	3005A	
280-184383-E-2-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 635264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Dissolved	Water	6020B	634983
MB 280-634983/1-A	Method Blank	Total Recoverable	Water	6020B	634983
LCS 280-634983/25-A	Lab Control Sample	Total Recoverable	Water	6020B	634983
280-184295-F-7-E MS	Matrix Spike	Dissolved	Water	6020B	634983
280-184295-F-7-F MSD	Matrix Spike Duplicate	Dissolved	Water	6020B	634983

Analysis Batch: 635270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Dissolved	Water	6010D	634983
MB 280-634983/1-A	Method Blank	Total Recoverable	Water	6010D	634983

Metals (Continued)

Analysis Batch: 635270 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-634983/2-A	Lab Control Sample	Total Recoverable	Water	6010D	634983
280-184295-F-7-B MS	Matrix Spike	Dissolved	Water	6010D	634983
280-184295-F-7-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010D	634983

Analysis Batch: 635419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Total Recoverable	Water	6020B	635162
MB 280-635162/1-A	Method Blank	Total Recoverable	Water	6020B	635162
LCS 280-635162/25-A	Lab Control Sample	Total Recoverable	Water	6020B	635162
280-184383-E-2-E MS	Matrix Spike	Total Recoverable	Water	6020B	635162
280-184383-E-2-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	635162

Analysis Batch: 635448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Total Recoverable	Water	6010D	635162
MB 280-635162/1-A	Method Blank	Total Recoverable	Water	6010D	635162
LCS 280-635162/2-A	Lab Control Sample	Total Recoverable	Water	6010D	635162
280-184383-E-2-B MS	Matrix Spike	Total Recoverable	Water	6010D	635162
280-184383-E-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010D	635162

Analysis Batch: 635452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-634983/1-A	Method Blank	Total Recoverable	Water	6010D	634983
LCS 280-634983/2-A	Lab Control Sample	Total Recoverable	Water	6010D	634983
280-184295-F-7-B MS	Matrix Spike	Dissolved	Water	6010D	634983
280-184295-F-7-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010D	634983

Analysis Batch: 635488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184383-E-2-E MS	Matrix Spike	Total Recoverable	Water	6020B	635162
280-184383-E-2-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	635162

Analysis Batch: 636069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Dissolved	Water	6010D	634983

General Chemistry

Analysis Batch: 633453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Total/NA	Water	SM5210B	
MB 280-633453/4	Method Blank	Total/NA	Water	SM5210B	
SCB 280-633453/1	Method Blank	Total/NA	Water	SM5210B	
USB 280-633453/2	Method Blank	Total/NA	Water	SM5210B	
LCS 280-633453/3	Lab Control Sample	Total/NA	Water	SM5210B	
280-184288-B-1 DU	Duplicate	Total/NA	Water	SM5210B	

Analysis Batch: 633596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Total/NA	Water	353.2	

General Chemistry

Analysis Batch: 634220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Total/NA	Water	SM 2540C	
MB 280-634220/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-634220/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-634220/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-184342-B-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 634324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Total/NA	Water	SM 2320B	
MB 280-634324/83	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-634324/82	Lab Control Sample	Total/NA	Water	SM 2320B	
280-184295-B-5 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 634617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Total/NA	Water	410.4	
MB 280-634617/5	Method Blank	Total/NA	Water	410.4	
LCS 280-634617/3	Lab Control Sample	Total/NA	Water	410.4	
LCSD 280-634617/4	Lab Control Sample Dup	Total/NA	Water	410.4	
680-242926-D-2 MS	Matrix Spike	Total/NA	Water	410.4	
680-242926-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	

Analysis Batch: 635572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Total/NA	Water	353.2	
MB 280-635572/61	Method Blank	Total/NA	Water	353.2	
LCS 280-635572/60	Lab Control Sample	Total/NA	Water	353.2	
280-184383-C-14 MS	Matrix Spike	Total/NA	Water	353.2	
280-184383-C-14 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 635621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Total/NA	Water	300.0	
MB 280-635621/6	Method Blank	Total/NA	Water	300.0	
LCS 280-635621/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-635621/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-635621/3	Lab Control Sample	Total/NA	Water	300.0	
280-184290-D-4 MS	Matrix Spike	Total/NA	Water	300.0	
280-184290-D-4 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-184290-D-4 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 635791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Total/NA	Water	SM 5310B	
MB 280-635791/6	Method Blank	Total/NA	Water	SM 5310B	
LCS 280-635791/4	Lab Control Sample	Total/NA	Water	SM 5310B	
LCSD 280-635791/5	Lab Control Sample Dup	Total/NA	Water	SM 5310B	
280-184284-L-5 MS	Matrix Spike	Total/NA	Water	SM 5310B	
280-184284-L-5 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5310B	

QC Association Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184337-1

General Chemistry

Analysis Batch: 635876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184337-1	LP-LCD	Total/NA	Water	350.1	
MB 280-635876/58	Method Blank	Total/NA	Water	350.1	
LCS 280-635876/59	Lab Control Sample	Total/NA	Water	350.1	
280-184365-B-1 MS	Matrix Spike	Total/NA	Water	350.1	
280-184365-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Lab Chronicle

Client: Waste Management
Job ID: 280-184337-1
Project/Site: WA02|Olympic View Sanitary LF

Client Sample ID: LP-LCD
Lab Sample ID: 280-184337-1
Date Collected: 11/09/23 08:45
Matrix: Water
Date Received: 11/10/23 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	5 mL	5 mL	691946	11/15/23 15:43	CR	EET BUF
Total/NA	Analysis	8260C SIM		10	25 mL	25 mL	691926	11/15/23 02:58	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	634983	11/22/23 14:36	MSM	EET DEN
Dissolved	Analysis	6010D		1			635270	11/27/23 17:24	BN	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	634983	11/22/23 14:36	MSM	EET DEN
Dissolved	Analysis	6010D		5			636069	12/04/23 21:52	ADL	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	635162	11/27/23 15:25	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635448	11/28/23 13:00	ADL	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	634983	11/22/23 14:36	MSM	EET DEN
Dissolved	Analysis	6020B		1			635264	11/27/23 19:23	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	635162	11/27/23 15:25	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635419	11/28/23 22:44	LMT	EET DEN
Total/NA	Analysis	300.0		10	10 mL	10 mL	635621	11/30/23 18:35	EJS	EET DEN
Total/NA	Analysis	350.1		2	10 mL	10 mL	635876	12/01/23 14:47	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	635572	11/29/23 13:49	BCR	EET DEN
Total/NA	Analysis	353.2		1			633596	11/12/23 20:53	P1C	EET DEN
Total/NA	Analysis	410.4		2	2 mL	2 mL	634617	11/20/23 10:26	LL	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/17/23 01:59	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	634220	11/16/23 11:34	ELB	EET DEN
Total/NA	Analysis	SM 5310B		2	20 mL	20 mL	635791	12/01/23 00:42	ABW	EET DEN
Total/NA	Analysis	SM5210B		1	120 mL	300 mL	633453	11/10/23 11:28	CLP	EET DEN

Client Sample ID: TRIP BLANK
Lab Sample ID: 280-184337-2
Date Collected: 11/09/23 00:00
Matrix: Water
Date Received: 11/10/23 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	691946	11/15/23 16:06	CR	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/15/23 03:22	CDC	EET BUF

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
SC0056 = Analytical Resources, Inc, 4611 South 134th Place, Suite 100, Tukwila, WA 98168, TEL (206)695-6200

Analytical Resources, LLC
Analytical Chemists and Consultants
Tukwila, WA

27 November 2023

Janice Collins
Eurofins - Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

RE: Olympic View Sanitary LF (OVSL) w/SCS Engineers (28002692 (Job # 04204027.26))

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)	Associated SDG ID(s)
23K0350	N/A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Shelly Fishel, Project Manager

Cert# 100006-012

4611 S. 134th Place, Suite 100 • Tukwila, WA 98168 • Ph: (206) 695-6200 • Fax: (206) 695-6202

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

23K0350

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: JE/AD	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-17318-3224.1
Client Contact: Mr. Patrick Madej	Phone: 425-507-6703	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: WA	Page: 1 of 2
Company: Waste Management				Job #: 04204027.26
Address: 2615 Davis Street	Due Date Requested: Standard			
City: San Leandro	TAT Requested (days):			
State, Zip: CA, 94577	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			
Email:	WO #:			
Project Name: WA02|Olympic View Sanitary LF/WA02 Event Desc: Semiannua	Project #: 28002692 - SemiAnnual GW Appl/II - May Nov			
Site: Washington	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 - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, 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)	TDS/Alks/Cl/SO4/NO3(cad)	6010D/6020B - Dissolved Metals (FF)	6010D/6020B - Total Metals	2540D - TSS	Ammonia/TOC	8260C - VOCs (Buffalo)	8260C_SIM - Vinyl chloride (Buffalo)	Total Arsenic (direct sub to ARI)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	D	N	S	A	A	D	X	
MW-13A	11/8/23	1136	G	W	N	N								X		Short Hold: NO3(cad)
MW-13B		1052														Arsenic - Direct sub to ARI
MW-16		1437														
MW-19C		1357														
MW-29A		1037														
MW-32		1140														
MW-33A	11/9/23	1229														
MW-34A	11/8/23	1409														
MW-34C		1448														
MW-35		1522														
MW-36A		1251														

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
Jovany Estrada	11/13/23 1350	SCS		11/13/23 1350	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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:

Page 40 of 78

12/5/2023

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

23K0350

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: JE/AD	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-17318-3224.1
Client Contact: Mr. Patrick Madej	Phone: 425-507-6703	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: WA	Page: 2 of 2
Company: Waste Management				Job #: 04204027.26
Address: 2615 Davis Street	Due Date Requested: Standard			
City: San Leandro	TAT Requested (days):			
State, Zip: CA, 94577	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			
Email:	WO #:			
Project Name: WA02|Olympic View Sanitary LF/WA02 Event Desc: Semiannua	Project #: 28002692 - SemiAnnual GW Appl/II - May Nov			
Site: Washington	SSOW#:			

Analysis Requested

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)	TDS/Alks/Cl/SO4/NO3(cad)	6010D/6020B - Dissolved Metals (FF)	6010D/6020B - Total Metals	2540D - TSS	Ammonia/TOC	8260C - VOCs (Buffalo)	8260C_SIM - Vinyl chloride (Buffalo)	Total Arsenic (direct sub to ARI)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D	N	S	A	A	D		
MW-42	11/8/23	1227	G	W	N	N								X		Short Hold: NO3(cad)
MW-43	↓	1313	↓	↓	↓	↓								↓		Arsenic - Direct sub to ARI
MW-39	11/9/23	1030														
MW-33C	↓	1303														
MW-15R		1048														
LP-LCD	↓	0845	↓	↓	↓	↓								↓		

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

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
Jovany Estrada	11/13/23 1347	SCS	Matthew Rice	11/13/23 1347	ARCC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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:

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

23K0350

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-681392.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Washington	Page: Page 1 of 1
Company: Analytical Resources, Inc		Accreditations Required (See note): State - Washington		Job #: 280-184337-1
Address: 4611 South 134th Place, Suite 100, ,	Due Date Requested: 11/30/2023			
City: Tukwila	TAT Requested (days):			
State, Zip: WA, 98168				
Phone: 206-695-6200(Tel)	PO #:			
Email:	WO #:			
Project Name: WA02|Olympic View Sanitary LF	Project #: 28002692			
Site: WA02|Olympic View Sanitary LF	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 - Client ID (Lab ID)	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)	SUB (Total Arsenic (ARI))/ Total Arsenic (ARI)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
LP-LCD (280-184337-1)	11/9/23	08:45 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	11/14/23 1455	ETADEN	[signature]	11/15/23 1030	ARLLC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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:

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-13A	23K0350-01	Water	08-Nov-2023 11:36	13-Nov-2023 13:50
MW-13B	23K0350-02	Water	08-Nov-2023 10:52	13-Nov-2023 13:50
MW-16	23K0350-03	Water	08-Nov-2023 14:37	13-Nov-2023 13:50
MW-19C	23K0350-04	Water	08-Nov-2023 13:57	13-Nov-2023 13:50
MW-29A	23K0350-05	Water	08-Nov-2023 10:37	13-Nov-2023 13:50
MW-32	23K0350-06	Water	08-Nov-2023 11:40	13-Nov-2023 13:50
MW-33A	23K0350-07	Water	09-Nov-2023 12:29	13-Nov-2023 13:50
MW-34A	23K0350-08	Water	08-Nov-2023 14:09	13-Nov-2023 13:50
MW-34C	23K0350-09	Water	08-Nov-2023 14:48	13-Nov-2023 13:50
MW-35	23K0350-10	Water	08-Nov-2023 15:22	13-Nov-2023 13:50
MW-36A	23K0350-11	Water	08-Nov-2023 12:51	13-Nov-2023 13:50
MW-42	23K0350-12	Water	08-Nov-2023 12:27	13-Nov-2023 13:50
MW-43	23K0350-13	Water	08-Nov-2023 13:13	13-Nov-2023 13:50
MW-39	23K0350-14	Water	09-Nov-2023 10:30	13-Nov-2023 13:50
MW-33C	23K0350-15	Water	09-Nov-2023 13:03	13-Nov-2023 13:50
MW-15R	23K0350-16	Water	09-Nov-2023 10:48	13-Nov-2023 13:50
LP-LCD	23K0350-17	Water	09-Nov-2023 08:45	13-Nov-2023 13:50
DUP1	23K0350-18	Water	08-Nov-2023 10:48	13-Nov-2023 13:50
DUP2	23K0350-19	Water	08-Nov-2023 13:05	13-Nov-2023 13:50

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

Work Order Case Narrative

Client: Eurofins - Test America - Denver
Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers
Project Number: 28002692 (Job # 04204027.26)
Work Order: 23K0350

Sample receipt

Samples as listed on the preceding page were received 13-Nov-2023 13:50 under ARI work order 23K0350. For details regarding sample receipt, please refer to the Cooler Receipt Form. Not all of the samples were received at this time. See receipt forms attached.

Total Metals - EPA Method 6020B

The sample(s) were prepared and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

The method blank(s) were clean at the reporting limits.

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries and relative percent difference (RPD) were within control limits.

Analytical Resources, LLC
Analytical Chemists and Consultants

Printed: 11/13/2023 3:02:53PM

WORK ORDER

23K0350

Samples will be discarded 90 days after submission of a final report unless other instructions are received

Client: Eurofins - Test America - Denver **Project Manager:** Shelly Fishel

Project: Olympic View Sanitary LF (OVSL) w/SCS Engine **Project Number:** 28002692

Preservation Confirmation

Container ID	Container Type	pH	
23K0350-01 A	HDPE NM, 250mL HNO3	<2	pair
~~23K0350-02 A~~	~~HDPE NM, 250mL HNO3~~		
23K0350-03 A	HDPE NM, 250mL HNO3	<2	
23K0350-04 A	HDPE NM, 250mL HNO3	<2	pair
~~23K0350-05 A~~	~~HDPE NM, 250mL HNO3~~		pair
23K0350-06 A	HDPE NM, 250mL HNO3	<2	pair
23K0350-07 A	HDPE NM, 250mL HNO3	<2	
CB 11/13 23K0350-08 A	HDPE NM, 250mL HNO3	<2	
23K0350-09 A	HDPE NM, 250mL HNO3	<2	
23K0350-10 A	HDPE NM, 250mL HNO3	<2	
23K0350-11 A	HDPE NM, 250mL HNO3	<2	
23K0350-12 A	HDPE NM, 250mL HNO3	<2	
23K0350-13 A	HDPE NM, 250mL HNO3	<2	
23K0350-14 A	HDPE NM, 250mL HNO3	<2	
23K0350-15 A	HDPE NM, 250mL HNO3	<2	
23K0350-16 A	HDPE NM, 250mL HNO3	<2	
~~23K0350-17 A~~	~~HDPE NM, 250mL HNO3~~		

CB for MP
Preservation Confirmed By

11/13/23
Date

Reviewed By

Date

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: SCS

COC No(s): 280-17318-3224.1 NA MD 11/13/23

Assigned ARI Job No: 23K0350

Project Name: WA023 Olympic View Sanitary

Delivered by: Fed-Ex UPS Courier Hand Delivered Other:

Tracking No: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 3.2°C

Time 1440

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: SC09708

Cooler Accepted by: MD Date: 11/13/23 Time: 1350

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used? ...	Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:		
Was sufficient ice used (if appropriate)?	NA	YES	NO
How were bottles sealed in plastic bags?	Individually	Grouped	Not (CB 11/13)
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		YES	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ...	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO
Date VOC Trip Blank was made at ARI	NA		

Were the sample(s) split by ARI? NA YES Date/Time: Equipment: Split by:

Samples Logged by: Date: 11/13/23 Time: 1451 Labels checked by: CB

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

Missing bottle MW-13B, MW-29A, and LP-2CD. Have 4 extra bottles, labeled as duplicates

By: Date: 11/13/23

RE: Extra/Missing Bottles OVLF

Janice Collins <Janice.Collins@et.eurofinsus.com>
Tue 11/14/2023 9:02 AM
To:Shelly Fishel <shelly.fishel@arilabs.com>;Sample Receiving <sample-receiving@arilabs.com>
Cc:Leia Wing <Leia.Wing@et.eurofinsus.com>

2 attachments (2 MB)
MX-6071_20231113_152913.pdf; extrabottles.JPG;

Hi Shelly,

Per the sampler - Referring to the picture going from left to right the first bottle is MW-29A, the next bottle is Dup 2, the next is Dup 1 and the last is MW-13B.

They inadvertently shipped sample LP-LCD to us. We will send it out to you.

Let me know if you have additional questions.

Thank you!

Janice Collins

Direct: 303-736-0124
E-mail: Janice.Collins@ET.EurofinsUS.com

From: Shelly Fishel <shelly.fishel@arilabs.com>
Sent: Monday, November 13, 2023 4:34 PM
To: Janice Collins <Janice.Collins@et.eurofinsus.com>
Subject: Fw: Extra/Missing Bottles OVLF
Importance: High

Hi Janice,

We have received samples for the Olympic View Landfill. There are discrepancies between the samples received and the attached COC.

- We are missing the yellow highlighted samples
- The green highlighted sample we believe is the bottle labeled DUP2 (computer printed label) as it has the same time and date. The far left bottle in the picture.
- We have three additional bottles not listed on the COC. The other bottles in the picture.
- Please note there are two bottles labeled as DUP2 -one handwritten and one printed.

Can you help us to resolve this? Please respond to me and the sample receiving group as I am only working part time. sample-receiving@arilabs.com

11/13/2023 15:13
Client:
Sample ID: MW-39
Location: WA02|Olympic View Sanitary LF
Comments: Low Level Arsenic (ARI)
Preservative: Nitric Acid
Collection Date/Time:
Collected By:
Bottle Type: Plastic 250ml - with Nitric Acid
Client: SCS
Sample ID: ~~MW-33C~~ DUP-1
Location: WA02|Olympic View Sanitary LF/WA02
Comments: Low Level Arsenic (ARI)
Preservative: Nitric Acid
Collection Date/Time: 11/8/23 1048
Collected By: AMD
Bottle Type: Plastic 250ml - with Nitric Acid
Client: SCS
Sample ID: ~~MW-13C~~ DUP 2
Location: WA02|Olympic View Sanitary LF/WA02
Comments: Low Level Arsenic (ARI)
Preservative: Nitric Acid
Collection Date/Time: 11/8/23 1300
Collected By: JE
Bottle Type: Plastic 250ml - with Nitric Acid
Client: SCS
Sample ID: DUP2
Location: WA02|Olympic View Sanitary LF/WA02
Comments: Low Level Arsenic (ARI)
Preservative: Nitric Acid
Collection Date/Time: 11/8/23 10:37
Collected By: AMD
Bottle Type: Plastic 250ml - with Nitric Acid

WORK ORDER

23K0350

Samples will be discarded 90 days after submission of a final report unless other instructions are received

Client: Eurofins - Test America - Denver **Project Manager:** Shelly Fishel

Project: Olympic View Sanitary LF (OVSL) w/SCS Engine **Project Number:** 28002692 (Job # 04204027.26)

Preservation Confirmation

Container ID	Container Type	pH
23K0350-01 A	HDPE NM, 250mL HNO3	
23K0350-02 A	HDPE NM, 250mL HNO3	
23K0350-03 A	HDPE NM, 250mL HNO3	
23K0350-04 A	HDPE NM, 250mL HNO3	
23K0350-05 A	HDPE NM, 250mL HNO3	
23K0350-06 A	HDPE NM, 250mL HNO3	
23K0350-07 A	HDPE NM, 250mL HNO3	
23K0350-08 A	HDPE NM, 250mL HNO3	
23K0350-09 A	HDPE NM, 250mL HNO3	
23K0350-10 A	HDPE NM, 250mL HNO3	
23K0350-11 A	HDPE NM, 250mL HNO3	
23K0350-12 A	HDPE NM, 250mL HNO3	
23K0350-13 A	HDPE NM, 250mL HNO3	
23K0350-14 A	HDPE NM, 250mL HNO3	
23K0350-15 A	HDPE NM, 250mL HNO3	
23K0350-16 A	HDPE NM, 250mL HNO3	
23K0350-17 A	HDPE NM, 250mL HNO3	Z2 pass
23K0350-18 A	HDPE NM, 250mL HNO3	
23K0350-19 A	HDPE NM, 250mL HNO3	

MP
Preservation Confirmed By

11/15/23
Date

All other samples were pres checked on 11/13/23

Reviewed By

Date

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Evoshins

Project Name: WA02 Olympic View Sanitary

COC No(s): _____ NA

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: 23K0350

Tracking No: 020170F0016932 4 NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 12.8°C

Time 1038

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 509708

Cooler Accepted by: MP Date: 11/15/23 Time: 1030

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:			
Was sufficient ice used (if appropriate)?	NA	YES	NO
How were bottles sealed in plastic bags?	Individually	Grouped	Not
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		YES	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ...	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO
Date VOC Trip Blank was made at ARI	NA		

Were the sample(s) split by ARI? NA YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: MP Date: 11/15/23 Time: 1253 Labels checked by: MP

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Temperature Compliance Form

ARI Work Order: 23K0350

Cooler#: 1 **Temperature(°C):** 12.8cc

Sample ID	Bottle Count	Bottle Type
Samples received above 6.0cc		

Cooler#: _____ **Temperature(°C):** _____

Sample ID	Bottle Count	Bottle Type

Cooler#: _____ **Temperature(°C):** _____

Sample ID	Bottle Count	Bottle Type

Cooler#: _____ **Temperature(°C):** _____

Sample ID	Bottle Count	Bottle Type

Completed by: MD Date: 11/15/23 Time: 1030

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-13A
23K0350-01 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 11:36
Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:22

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-01 A 01
Preparation Batch: BLK0513 — Sample Size: 100 mL
Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000180	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-13B

23K0350-02 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 10:52

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:25

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-02 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000326	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-16

23K0350-03 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 14:37

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:29

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-03 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000395	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-19C

23K0350-04 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 13:57
Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:32

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-04 A 01
Preparation Batch: BLK0513 — Sample Size: 100 mL
Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00238	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-29A

23K0350-05 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 10:37

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:35

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-05 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00178	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-32

23K0350-06 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 11:40

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:39

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-06 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00928	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-33A

23K0350-07 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/09/2023 12:29

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:42

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-07 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000227	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-34A

23K0350-08 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 14:09

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:46

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-08 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000412	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-34C

23K0350-09 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 14:48

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:51

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-09 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00749	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-35

23K0350-10 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 15:22

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:07

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-10 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000103	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-36A

23K0350-11 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 12:51

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:10

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-11 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000571	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-42

23K0350-12 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 12:27

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:13

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-12 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00167	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-43

23K0350-13 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 13:13

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:17

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-13 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.0000548	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-39

23K0350-14 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/09/2023 10:30

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:20

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-14 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00108	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-33C

23K0350-15 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/09/2023 13:03

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:23

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-15 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00265	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-15R

23K0350-16 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/09/2023 10:48

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:27

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-16 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000191	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

LP-LCD

23K0350-17 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/09/2023 08:45

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:06

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-17 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	10	0.0000746	0.000400	0.0153	mg/L	D

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

DUP1

23K0350-18 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 10:48

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:31

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-18 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00190	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

DUP2

23K0350-19 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 13:05

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:35

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-19 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000579	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BLK0513 - EPA 6020B UCT-KED

Instrument: ICPMS2 Analyst: MCB

QC Sample/Analyte	Isotope	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BLK0513-BLK1)					Prepared: 17-Nov-2023 Analyzed: 20-Nov-2023 17:04							
Arsenic	75a	ND	0.00000746	0.0000400	mg/L							U
LCS (BLK0513-BS1)					Prepared: 17-Nov-2023 Analyzed: 20-Nov-2023 17:07							
Arsenic	75a	0.00490	0.00000746	0.0000400	mg/L	0.00500		97.9	80-120			
LCS Dup (BLK0513-BSD1)					Prepared: 17-Nov-2023 Analyzed: 20-Nov-2023 17:11							
Arsenic	75a	0.00474	0.00000746	0.0000400	mg/L	0.00500		94.7	80-120	3.37	20	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BLK0548 - EPA 6020B UCT-KED

Instrument: ICPMS2 Analyst: MCB

QC Sample/Analyte	Isotope	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BLK0548-BLK1)					Prepared: 20-Nov-2023 Analyzed: 20-Nov-2023 17:53							
Arsenic	75a	0.0000120	0.00000746	0.0000400	mg/L							J
LCS (BLK0548-BS1)					Prepared: 20-Nov-2023 Analyzed: 20-Nov-2023 17:57							
Arsenic	75a	0.00484	0.00000746	0.0000400	mg/L	0.00500		96.7	80-120			
LCS Dup (BLK0548-BSD1)					Prepared: 20-Nov-2023 Analyzed: 20-Nov-2023 18:00							
Arsenic	75a	0.00470	0.00000746	0.0000400	mg/L	0.00500		93.9	80-120	2.94	20	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

Certified Analyses included in this Report

Analyte	Certifications
EPA 6020B UCT-KED in Water	
Arsenic-75a	WADOE,DoD-ELAP,ADEC,NELAP

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	03/28/2025
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program, PJLA Testing	66169	02/28/2025
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2024

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

Notes and Definitions

*	Flagged value is not within established control limits.
D	The reported value is from a dilution
J	Estimated concentration value detected below the reporting limit.
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
[2C]	Indicates this result was quantified on the second column on a dual column analysis.

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: TE/AD	Lab PM: Collins, Janice S	Carrier Tracking No(s): 618 0825 9551 2	COC No: 280-31456-972.1
Client Contact: Jovany Estrada	Phone: 425-507-6703	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: WA	Page: 1 of 1
Company: Waste Management				Job #: 0422027.26
Address: Olympic View Transfer Station 9300 Southwest Barney White Ro	Due Date Requested: standard			
City: Bremerton	TAT Requested (days):			
State, Zip: WA, 98312	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			
Email: cluckie@wm.com	WO #:			
Project Name: WA02|Olympic View Sanitary LF	Project #: 28002692-Semiannual Leachate Appl/II - May Nov			
Site: Washington	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	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)	TDS/Alks/Cl/SO4/NO3(cad)	6010D/6020B - Dissolved Metals (FF)	6010D/6020B - Total Metals	BOD	Ammonia/TOC/COD/NOXT	8260C - VOCs (Buffalo)	8260C_SIM - Vinyl chloride (Buffalo)	Total Arsenic (direct sub to ARI)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D	N	S	A	A	D		
LP-LCD	11/9/23	0845	G	Water	N	N	X	X	X	X	X	X	X	X		short holds: BOD and Nitrate (353.2-cad)
																Total LL Arsenic - direct sub from field to ARI
																please filter diss. metal

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
Jovany Estrada	11/9/23	SCS		11-10-23 0950	EEDEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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: 2.6°C Mono CFO-3

12/5/2023

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-681052.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Washington	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): State - Washington		Job #: 280-184337-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/4/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: WA02|Olympic View Sanitary LF	Project #: 28002692			
Site: WA02|Olympic View Sanitary LF	SSOW#:			

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:

Analysis Requested

Sample Identification - Client ID (Lab ID)	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)	8260C_SIM/5030C 8260C SIM (TA Buffalo)	8260C/5030C Long List 8260C (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
LP-LCD (280-184337-1)	11/9/23	08:45 Pacific		Water			X	X	6	
TRIP BLANK (280-184337-2)	11/9/23	Pacific		Water			X	X	4	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOtero	11-13-23 15:30			11-14-23 1000	TAB
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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: 2.1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-184337-1

Login Number: 184337
List Number: 1
Creator: Held, Wesley

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	False	No: 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-184337-1

Login Number: 184337
List Number: 2
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 11/14/23 02:13 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	2.1 ICE
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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
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	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Patrick Madej
Waste Management
2615 Davis Street
San Leandro, California 94577

Generated 12/5/2023 9:41:18 AM

JOB DESCRIPTION

WA02|Olympic View Sanitary LF
Semiannual GW AppI/II - May Nov

JOB NUMBER

280-184342-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

Eurofins Denver

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.

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 TestAmerica Project Manager.

Authorization

Generated
12/5/2023 9:41:18 AM

Authorized for release by
Leia Wing, Project Mgmt. Assistant
Leia.Wing@et.eurofinsus.com
Designee for
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

Table of Contents

Cover Page 1
Table of Contents 3
Definitions 4
Case Narrative 5
Detection Summary 7
Method Summary 9
Sample Summary 10
Client Sample Results 11
Surrogate Summary 25
QC Sample Results 26
QC Association 40
Chronicle 44
Subcontract Data 47
Chain of Custody 83
Receipt Checklists 86

Definitions/Glossary

Client: Waste Management
Job ID: 280-184342-1
Project/Site: WA02|Olympic View Sanitary LF

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

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

Job ID: 280-184342-1

Laboratory: Eurofins Denver

Narrative

Job Narrative
280-184342-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/10/2023 9:50 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 time was 2.7°C

Subcontract Work
Method Total Arsenic (ARI): This method was subcontracted to Analytical Resources, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 691904 recovered outside acceptance criteria, low biased, for Carbon disulfide. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported. . The associated samples are impacted: MW-33A (280-184342-1), MW-39 (280-184342-2), MW-33C (280-184342-3) and MW-15R (280-184342-4).

Method 8260C: The continuing calibration verification (CCV) associated with batch 691904 recovered above the upper control limit for Carbon tetrachloride, 2-Methyl-2-propanol, Isobutyl alcohol, 2-Butanone (MEK), 1,4-Dioxane, and n-Butanol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-33A (280-184342-1), MW-39 (280-184342-2), MW-33C (280-184342-3) and MW-15R (280-184342-4).

Method 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 480-691904 recovered outside control limits for the following analytes: trans-1,4-Dichloro-2-butene, Bromoform, 2-Methyl-2-propanol, Isobutyl alcohol, and 1,4-Dioxane. . The associated samples are impacted: MW-33A (280-184342-1), MW-39 (280-184342-2), MW-33C (280-184342-3) and MW-15R (280-184342-4).

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-691904 recovered outside control limits for the following analytes: 2-Methyl-2-propanol, Isobutyl alcohol, and 1,4-Dioxane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. . The associated samples are impacted: MW-33A (280-184342-1), MW-39 (280-184342-2), MW-33C (280-184342-3) and MW-15R (280-184342-4).

Method 8260C: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for analytical batch 480-691904 recovered outside control limits for the following analyte(s): Iodomethane. Iodomethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-analysis was not performed. . The associated samples are impacted: MW-33A (280-184342-1), MW-39 (280-184342-2), MW-33C (280-184342-3) and MW-15R (280-184342-4).

Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MW-33A (280-184342-1), MW-39 (280-184342-2), MW-33C (280-184342-3) and MW-15R (280-184342-4). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Job ID: 280-184342-1 (Continued)

Laboratory: Eurofins Denver (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

Method 6020B: The continuing calibration verification (CCV) associated with batch 280-635419 recovered above the upper control limit for Se. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW-33A (280-184342-1), MW-39 (280-184342-2), MW-33C (280-184342-3), MW-15R (280-184342-4), (CCV 280-635419/162), (CCV 280-635419/172), (LCS 280-635162/25-A), (MB 280-635162/1-A), (280-184383-E-2-D), (280-184383-E-2-E MS), (280-184383-E-2-F MSD), (280-184383-E-2-D PDS) and (280-184383-E-2-D SD ^5).

Method 6020B: The method blank for preparation batch 280-634115 and 280-634115 and analytical batch 280-634330 contained Mn (1.01 ppb) above the client's reporting limit (RL) of 1 ppb but less than 1/2 our standard RL of 3 ppb. The data have been qualified and reported. MW-33A (280-184342-1), MW-39 (280-184342-2), MW-33C (280-184342-3), MW-15R (280-184342-4), (LCS 280-634115/30-A), (MB 280-634115/1-A), (160-51899-A-4-D), (160-51899-A-4-E MS), (160-51899-A-4-F MSD), (160-51899-A-4-D PDS) and (160-51899-A-4-D SD ^5)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 300.0_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 280-635621 were outside control limits for Chloride and Sulfate. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS/LCSD) recovery is within acceptance limits. (280-184665-A-9 MS) and (280-184665-A-9 MSD)

Method 350.1: The results reported for the following samples do not concur with results previously reported for this site due to the clients custom reporting limit (RL): MW-33C (280-184342-3) and MW-15R (280-184342-4). The result reported is considered a non-detect using the standard reporting limit and therefore falls within clients limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184342-1

Client Sample ID: MW-33A — Lab Sample ID: 280-184342-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Total	0.83		0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	13	B	0.20	0.024	mg/L	1		6010D	Dissolved
Iron, Dissolved	0.33		0.060	0.0091	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	5.9		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	0.83	J	1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	3.3		1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.0021		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Copper, Total	0.00095	J	0.0020	0.00071	mg/L	1		6020B	Total Recoverable
Manganese, Total	0.035		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Vanadium, Total	0.0023		0.0020	0.0011	mg/L	1		6020B	Total Recoverable
Zinc, Total	0.0025	J	0.0050	0.0020	mg/L	1		6020B	Total Recoverable
Manganese, Dissolved	0.038	B	0.0010	0.00051	mg/L	1		6020B	Dissolved
Ammonia (as N)	0.051		0.030	0.030	mg/L	1		350.1	Total/NA
Alkalinity, Total (As CaCO3)	62		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	62		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	75		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	7.6		4.0	4.0	mg/L	1		SM 2540D	Total/NA
Total Organic Carbon - Average	1.9		1.0	1.0	mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW-39 — Lab Sample ID: 280-184342-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt, Total	0.0072		0.0030	0.00056	mg/L	1		6010D	Total Recoverable
Iron, Total	30		0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	14	B	0.20	0.024	mg/L	1		6010D	Dissolved
Iron, Dissolved	35		0.060	0.0091	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	8.9		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	0.45	J	1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	9.7		1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.014		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Chromium, Total	0.00050	J	0.0030	0.00050	mg/L	1		6020B	Total Recoverable
Manganese, Total	0.48		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Nickel, Total	0.0030	J	0.0040	0.00083	mg/L	1		6020B	Total Recoverable
Manganese, Dissolved	0.50	B	0.0010	0.00051	mg/L	1		6020B	Dissolved
Chloride	5.9		3.0	3.0	mg/L	1		300.0	Total/NA
Ammonia (as N)	0.42		0.030	0.030	mg/L	1		350.1	Total/NA
Alkalinity, Total (As CaCO3)	100		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	100		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	130		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	19		4.0	4.0	mg/L	1		SM 2540D	Total/NA
Total Organic Carbon - Average	2.2		1.0	1.0	mg/L	1		SM 5310B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184342-1

Client Sample ID: MW-33C — Lab Sample ID: 280-184342-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Total	0.56		0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	18	B	0.20	0.024	mg/L	1		6010D	Dissolved
Iron, Dissolved	0.049	J	0.060	0.0091	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	7.2		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	1.4		1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	3.9		1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.0068		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Manganese, Total	0.34		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Zinc, Total	0.0038	J	0.0050	0.0020	mg/L	1		6020B	Total Recoverable
Manganese, Dissolved	0.13	B	0.0010	0.00051	mg/L	1		6020B	Dissolved
Chloride	3.1		3.0	3.0	mg/L	1		300.0	Total/NA
Sulfate	8.7		5.0	5.0	mg/L	1		300.0	Total/NA
Ammonia (as N)	0.059		0.030	0.030	mg/L	1		350.1	Total/NA
Alkalinity, Total (As CaCO3)	70		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	70		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	94		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	6.8		4.0	4.0	mg/L	1		SM 2540D	Total/NA

Client Sample ID: MW-15R — Lab Sample ID: 280-184342-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron, Total	0.052	J	0.060	0.0091	mg/L	1		6010D	Total Recoverable
Calcium, Dissolved	13	B	0.20	0.024	mg/L	1		6010D	Dissolved
Magnesium, Dissolved	8.9		0.050	0.0042	mg/L	1		6010D	Dissolved
Potassium, Dissolved	0.86	J	1.0	0.24	mg/L	1		6010D	Dissolved
Sodium, Dissolved	5.2		1.0	0.097	mg/L	1		6010D	Dissolved
Barium, Total	0.0049		0.0010	0.00038	mg/L	1		6020B	Total Recoverable
Manganese, Total	0.0051		0.0010	0.00051	mg/L	1		6020B	Total Recoverable
Nickel, Total	0.0012	J	0.0040	0.00083	mg/L	1		6020B	Total Recoverable
Vanadium, Total	0.0032		0.0020	0.0011	mg/L	1		6020B	Total Recoverable
Zinc, Total	0.0039	J	0.0050	0.0020	mg/L	1		6020B	Total Recoverable
Manganese, Dissolved	0.0021	B	0.0010	0.00051	mg/L	1		6020B	Dissolved
Ammonia (as N)	0.045		0.030	0.030	mg/L	1		350.1	Total/NA
Nitrate as N	0.22		0.050	0.050	mg/L	1		353.2	Total/NA
Alkalinity, Total (As CaCO3)	73		10	10	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate (As CaCO3)	73		10	10	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids (TDS)	90		5.0	5.0	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184342-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	EET BUF
6010D	Metals (ICP)	SW846	EET DEN
6020B	Metals (ICP/MS)	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrate	EPA	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
SM 5310B	Organic Carbon, Total (TOC)	SM	EET DEN
Subcontract	Total Arsenic (ARI)	None	SC0056
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

SC0056 = Analytical Resources, Inc, 4611 South 134th Place, Suite 100, Tukwila, WA 98168, TEL (206)695-6200

Sample Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184342-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-184342-1	MW-33A	Water	11/09/23 12:29	11/10/23 09:50
280-184342-2	MW-39	Water	11/09/23 10:30	11/10/23 09:50
280-184342-3	MW-33C	Water	11/09/23 13:03	11/10/23 09:50
280-184342-4	MW-15R	Water	11/09/23 10:48	11/10/23 09:50

Method: SW846 8260C SIM - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW-33A
Date Collected: 11/09/23 12:29
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/15/23 03:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*121*		*50 - 150*		*11/15/23 03:46*	*1*
TBA-d9 (Surr)	*109*		*50 - 150*		*11/15/23 03:46*	*1*

Client Sample ID: MW-39
Date Collected: 11/09/23 10:30
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/15/23 04:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*121*		*50 - 150*		*11/15/23 04:10*	*1*
TBA-d9 (Surr)	*99*		*50 - 150*		*11/15/23 04:10*	*1*

Client Sample ID: MW-33C
Date Collected: 11/09/23 13:03
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/15/23 04:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*120*		*50 - 150*		*11/15/23 04:34*	*1*
TBA-d9 (Surr)	*105*		*50 - 150*		*11/15/23 04:34*	*1*

Client Sample ID: MW-15R
Date Collected: 11/09/23 10:48
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/15/23 04:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*121*		*50 - 150*		*11/15/23 04:58*	*1*
TBA-d9 (Surr)	*111*		*50 - 150*		*11/15/23 04:58*	*1*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: MW-33A
Date Collected: 11/09/23 12:29
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 07:30	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 07:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 07:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 07:30	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 07:30	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 07:30	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 07:30	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 07:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 07:30	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 07:30	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-33A
Date Collected: 11/09/23 12:29
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 07:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 07:30	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 07:30	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 07:30	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 07:30	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 07:30	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 07:30	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 07:30	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 07:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 07:30	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 07:30	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 07:30	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 07:30	1
1,4-Dioxane	ND	*+ *1	40	9.3	ug/L			11/15/23 07:30	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 07:30	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 07:30	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 07:30	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 07:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 07:30	1
Acetone	ND		10	3.0	ug/L			11/15/23 07:30	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 07:30	1
Acrolein	ND		20	0.91	ug/L			11/15/23 07:30	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 07:30	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 07:30	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 07:30	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 07:30	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 07:30	1
Bromoform	ND	*1	1.0	0.26	ug/L			11/15/23 07:30	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 07:30	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 07:30	1
Butyl alcohol, tert-	ND	*+ *1	10	3.3	ug/L			11/15/23 07:30	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 07:30	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/15/23 07:30	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 07:30	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 07:30	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 07:30	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 07:30	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 07:30	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 07:30	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 07:30	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 07:30	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/15/23 07:30	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 07:30	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 07:30	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 07:30	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 07:30	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 07:30	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 07:30	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 07:30	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-33A
Date Collected: 11/09/23 12:29
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 07:30	1
Hexane	ND		10	0.40	ug/L			11/15/23 07:30	1
Iodomethane	ND	*-	1.0	0.30	ug/L			11/15/23 07:30	1
Isobutanol	ND	*+ *1	25	4.8	ug/L			11/15/23 07:30	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 07:30	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 07:30	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 07:30	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 07:30	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 07:30	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 07:30	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 07:30	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 07:30	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 07:30	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 07:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 07:30	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 07:30	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 07:30	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 07:30	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 07:30	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 07:30	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 07:30	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 07:30	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 07:30	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 07:30	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 07:30	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 07:30	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 07:30	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 07:30	1
trans-1,4-Dichloro-2-butene	ND	*1	1.0	0.22	ug/L			11/15/23 07:30	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 07:30	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 07:30	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 07:30	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 07:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 07:30*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*11/15/23 07:30*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*11/15/23 07:30*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/15/23 07:30*	*1*

Client Sample ID: MW-39
Date Collected: 11/09/23 10:30
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 07:53	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 07:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 07:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 07:53	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-39
Date Collected: 11/09/23 10:30
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 07:53	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 07:53	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 07:53	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 07:53	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 07:53	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 07:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 07:53	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 07:53	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 07:53	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 07:53	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 07:53	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 07:53	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 07:53	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 07:53	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 07:53	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 07:53	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 07:53	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 07:53	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 07:53	1
1,4-Dioxane	ND	*+ *1	40	9.3	ug/L			11/15/23 07:53	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 07:53	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 07:53	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 07:53	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 07:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 07:53	1
Acetone	ND		10	3.0	ug/L			11/15/23 07:53	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 07:53	1
Acrolein	ND		20	0.91	ug/L			11/15/23 07:53	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 07:53	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 07:53	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 07:53	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 07:53	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 07:53	1
Bromoform	ND	*1	1.0	0.26	ug/L			11/15/23 07:53	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 07:53	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 07:53	1
Butyl alcohol, tert-	ND	*+ *1	10	3.3	ug/L			11/15/23 07:53	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 07:53	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/15/23 07:53	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 07:53	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 07:53	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 07:53	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 07:53	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 07:53	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 07:53	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 07:53	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 07:53	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/15/23 07:53	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 07:53	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-39
Date Collected: 11/09/23 10:30
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 07:53	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 07:53	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 07:53	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 07:53	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 07:53	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 07:53	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 07:53	1
Hexane	ND		10	0.40	ug/L			11/15/23 07:53	1
Iodomethane	ND	*-	1.0	0.30	ug/L			11/15/23 07:53	1
Isobutanol	ND	*+ *1	25	4.8	ug/L			11/15/23 07:53	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 07:53	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 07:53	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 07:53	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 07:53	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 07:53	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 07:53	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 07:53	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 07:53	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 07:53	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 07:53	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 07:53	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 07:53	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 07:53	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 07:53	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 07:53	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 07:53	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 07:53	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 07:53	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 07:53	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 07:53	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 07:53	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 07:53	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 07:53	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 07:53	1
trans-1,4-Dichloro-2-butene	ND	*1	1.0	0.22	ug/L			11/15/23 07:53	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 07:53	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 07:53	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 07:53	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 07:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 07:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*11/15/23 07:53*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*11/15/23 07:53*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*11/15/23 07:53*	*1*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: MW-33C
Date Collected: 11/09/23 13:03
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 08:16	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 08:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 08:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 08:16	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 08:16	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 08:16	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 08:16	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 08:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 08:16	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 08:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 08:16	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 08:16	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 08:16	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 08:16	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 08:16	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 08:16	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 08:16	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 08:16	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 08:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 08:16	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 08:16	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 08:16	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 08:16	1
1,4-Dioxane	ND	*+ *1	40	9.3	ug/L			11/15/23 08:16	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 08:16	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 08:16	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 08:16	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 08:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 08:16	1
Acetone	ND		10	3.0	ug/L			11/15/23 08:16	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 08:16	1
Acrolein	ND		20	0.91	ug/L			11/15/23 08:16	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 08:16	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 08:16	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 08:16	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 08:16	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 08:16	1
Bromoform	ND	*1	1.0	0.26	ug/L			11/15/23 08:16	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 08:16	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 08:16	1
Butyl alcohol, tert-	ND	*+ *1	10	3.3	ug/L			11/15/23 08:16	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 08:16	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/15/23 08:16	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 08:16	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 08:16	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 08:16	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 08:16	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 08:16	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 08:16	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-33C
Date Collected: 11/09/23 13:03
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 08:16	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 08:16	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/15/23 08:16	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 08:16	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 08:16	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 08:16	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 08:16	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 08:16	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 08:16	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 08:16	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 08:16	1
Hexane	ND		10	0.40	ug/L			11/15/23 08:16	1
Iodomethane	ND	*-	1.0	0.30	ug/L			11/15/23 08:16	1
Isobutanol	ND	*+ *1	25	4.8	ug/L			11/15/23 08:16	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 08:16	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 08:16	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 08:16	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 08:16	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 08:16	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 08:16	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 08:16	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 08:16	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 08:16	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 08:16	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 08:16	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 08:16	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 08:16	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 08:16	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 08:16	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 08:16	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 08:16	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 08:16	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 08:16	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 08:16	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 08:16	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 08:16	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 08:16	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 08:16	1
trans-1,4-Dichloro-2-butene	ND	*1	1.0	0.22	ug/L			11/15/23 08:16	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 08:16	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 08:16	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 08:16	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 08:16	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*11/15/23 08:16*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*11/15/23 08:16*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*11/15/23 08:16*	*1*

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-33C
Date Collected: 11/09/23 13:03
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-3
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/15/23 08:16*	*1*

Client Sample ID: MW-15R
Date Collected: 11/09/23 10:48
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 08:39	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 08:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 08:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 08:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 08:39	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 08:39	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 08:39	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 08:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 08:39	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 08:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 08:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 08:39	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 08:39	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 08:39	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 08:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 08:39	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 08:39	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 08:39	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 08:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 08:39	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 08:39	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 08:39	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 08:39	1
1,4-Dioxane	ND	*+ *1	40	9.3	ug/L			11/15/23 08:39	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 08:39	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 08:39	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 08:39	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 08:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 08:39	1
Acetone	ND		10	3.0	ug/L			11/15/23 08:39	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 08:39	1
Acrolein	ND		20	0.91	ug/L			11/15/23 08:39	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 08:39	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 08:39	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 08:39	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 08:39	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 08:39	1
Bromoform	ND	*1	1.0	0.26	ug/L			11/15/23 08:39	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 08:39	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 08:39	1
Butyl alcohol, tert-	ND	*+ *1	10	3.3	ug/L			11/15/23 08:39	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 08:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/15/23 08:39	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW-15R
Date Collected: 11/09/23 10:48
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 08:39	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 08:39	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 08:39	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 08:39	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 08:39	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 08:39	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 08:39	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 08:39	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/15/23 08:39	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 08:39	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 08:39	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 08:39	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 08:39	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 08:39	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 08:39	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 08:39	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 08:39	1
Hexane	ND		10	0.40	ug/L			11/15/23 08:39	1
Iodomethane	ND	*-	1.0	0.30	ug/L			11/15/23 08:39	1
Isobutanol	ND	*+ *1	25	4.8	ug/L			11/15/23 08:39	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 08:39	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 08:39	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 08:39	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 08:39	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 08:39	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 08:39	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 08:39	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 08:39	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 08:39	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 08:39	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 08:39	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 08:39	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 08:39	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 08:39	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 08:39	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 08:39	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 08:39	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 08:39	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 08:39	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 08:39	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 08:39	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 08:39	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 08:39	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 08:39	1
trans-1,4-Dichloro-2-butene	ND	*1	1.0	0.22	ug/L			11/15/23 08:39	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 08:39	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 08:39	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 08:39	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 08:39	1

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Hexachloroethane TIC	ND		ug/L			67-72-1		11/15/23 08:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		11/15/23 08:39	1
4-Bromofluorobenzene (Surr)	93		73 - 120		11/15/23 08:39	1
Toluene-d8 (Surr)	99		80 - 120		11/15/23 08:39	1

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Client Sample ID: MW-33A
Date Collected: 11/09/23 12:29
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/27/23 15:25	11/28/23 13:05	1
Iron, Total	**0.83**		0.060	0.0091	mg/L		11/27/23 15:25	11/28/23 13:05	1

Client Sample ID: MW-39
Date Collected: 11/09/23 10:30
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	**0.0072**		0.0030	0.00056	mg/L		11/27/23 15:25	11/28/23 13:10	1
Iron, Total	**30**		0.060	0.0091	mg/L		11/27/23 15:25	11/28/23 13:10	1

Client Sample ID: MW-33C
Date Collected: 11/09/23 13:03
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/27/23 15:25	11/28/23 13:14	1
Iron, Total	**0.56**		0.060	0.0091	mg/L		11/27/23 15:25	11/28/23 13:14	1

Client Sample ID: MW-15R
Date Collected: 11/09/23 10:48
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/27/23 15:25	11/28/23 13:19	1
Iron, Total	**0.052**	**J**	0.060	0.0091	mg/L		11/27/23 15:25	11/28/23 13:19	1

Method: SW846 6010D - Metals (ICP) - Dissolved

Client Sample ID: MW-33A
Date Collected: 11/09/23 12:29
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**13**	**B**	0.20	0.024	mg/L		11/16/23 07:26	11/16/23 22:20	1
Iron, Dissolved	**0.33**		0.060	0.0091	mg/L		11/16/23 07:26	11/16/23 22:20	1
Magnesium, Dissolved	**5.9**		0.050	0.0042	mg/L		11/16/23 07:26	11/16/23 22:20	1
Potassium, Dissolved	**0.83**	**J**	1.0	0.24	mg/L		11/16/23 07:26	11/16/23 22:20	1
Sodium, Dissolved	**3.3**		1.0	0.097	mg/L		11/16/23 07:26	11/16/23 22:20	1

Client Sample ID: MW-39
Date Collected: 11/09/23 10:30
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**14**	**B**	0.20	0.024	mg/L		11/16/23 07:26	11/16/23 22:24	1

Method: SW846 6010D - Metals (ICP) - Dissolved (Continued)

Client Sample ID: MW-39
Date Collected: 11/09/23 10:30
Date Received: 11/10/23 09:50
Lab Sample ID: 280-184342-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron, Dissolved	**35**		0.060	0.0091	mg/L		11/16/23 07:26	11/16/23 22:24	1
Magnesium, Dissolved	**8.9**		0.050	0.0042	mg/L		11/16/23 07:26	11/16/23 22:24	1
Potassium, Dissolved	**0.45**	**J**	1.0	0.24	mg/L		11/16/23 07:26	11/16/23 22:24	1
Sodium, Dissolved	**9.7**		1.0	0.097	mg/L		11/16/23 07:26	11/16/23 22:24	1

Client Sample ID: MW-33C
Date Collected: 11/09/23 13:03
Date Received: 11/10/23 09:50
Lab Sample ID: 280-184342-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**18**	**B**	0.20	0.024	mg/L		11/16/23 07:26	11/16/23 22:28	1
Iron, Dissolved	**0.049**	**J**	0.060	0.0091	mg/L		11/16/23 07:26	11/16/23 22:28	1
Magnesium, Dissolved	**7.2**		0.050	0.0042	mg/L		11/16/23 07:26	11/16/23 22:28	1
Potassium, Dissolved	**1.4**		1.0	0.24	mg/L		11/16/23 07:26	11/16/23 22:28	1
Sodium, Dissolved	**3.9**		1.0	0.097	mg/L		11/16/23 07:26	11/16/23 22:28	1

Client Sample ID: MW-15R
Date Collected: 11/09/23 10:48
Date Received: 11/10/23 09:50
Lab Sample ID: 280-184342-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	**13**	**B**	0.20	0.024	mg/L		11/16/23 07:26	11/16/23 22:32	1
Iron, Dissolved	ND		0.060	0.0091	mg/L		11/16/23 07:26	11/16/23 22:32	1
Magnesium, Dissolved	**8.9**		0.050	0.0042	mg/L		11/16/23 07:26	11/16/23 22:32	1
Potassium, Dissolved	**0.86**	**J**	1.0	0.24	mg/L		11/16/23 07:26	11/16/23 22:32	1
Sodium, Dissolved	**5.2**		1.0	0.097	mg/L		11/16/23 07:26	11/16/23 22:32	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Client Sample ID: MW-33A
Date Collected: 11/09/23 12:29
Date Received: 11/10/23 09:50
Lab Sample ID: 280-184342-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/27/23 15:25	11/28/23 22:46	1
Barium, Total	**0.0021**		0.0010	0.00038	mg/L		11/27/23 15:25	11/28/23 22:46	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/27/23 15:25	11/28/23 22:46	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/27/23 15:25	11/28/23 22:46	1
Chromium, Total	ND		0.0030	0.00050	mg/L		11/27/23 15:25	11/28/23 22:46	1
Copper, Total	**0.00095**	**J**	0.0020	0.00071	mg/L		11/27/23 15:25	11/28/23 22:46	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/27/23 15:25	11/28/23 22:46	1
Manganese, Total	**0.035**		0.0010	0.00051	mg/L		11/27/23 15:25	11/28/23 22:46	1
Nickel, Total	ND		0.0040	0.00083	mg/L		11/27/23 15:25	11/28/23 22:46	1
Selenium, Total	ND	^+	0.0010	0.0010	mg/L		11/27/23 15:25	11/28/23 22:46	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/27/23 15:25	11/28/23 22:46	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/27/23 15:25	11/28/23 22:46	1
Vanadium, Total	**0.0023**		0.0020	0.0011	mg/L		11/27/23 15:25	11/28/23 22:46	1
Zinc, Total	**0.0025**	**J**	0.0050	0.0020	mg/L		11/27/23 15:25	11/28/23 22:46	1

Client Sample ID: MW-39
Date Collected: 11/09/23 10:30
Date Received: 11/10/23 09:50
Lab Sample ID: 280-184342-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/27/23 15:25	11/28/23 22:48	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Client Sample ID: MW-39
Date Collected: 11/09/23 10:30
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium, Total	**0.014**		0.0010	0.00038	mg/L		11/27/23 15:25	11/28/23 22:48	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/27/23 15:25	11/28/23 22:48	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/27/23 15:25	11/28/23 22:48	1
Chromium, Total	**0.00050**	**J**	0.0030	0.00050	mg/L		11/27/23 15:25	11/28/23 22:48	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/27/23 15:25	11/28/23 22:48	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/27/23 15:25	11/28/23 22:48	1
Manganese, Total	**0.48**		0.0010	0.00051	mg/L		11/27/23 15:25	11/28/23 22:48	1
Nickel, Total	**0.0030**	**J**	0.0040	0.00083	mg/L		11/27/23 15:25	11/28/23 22:48	1
Selenium, Total	ND	^+	0.0010	0.0010	mg/L		11/27/23 15:25	11/28/23 22:48	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/27/23 15:25	11/28/23 22:48	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/27/23 15:25	11/28/23 22:48	1
Vanadium, Total	ND		0.0020	0.0011	mg/L		11/27/23 15:25	11/28/23 22:48	1
Zinc, Total	ND		0.0050	0.0020	mg/L		11/27/23 15:25	11/28/23 22:48	1

Client Sample ID: MW-33C
Date Collected: 11/09/23 13:03
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/27/23 15:25	11/28/23 22:51	1
Barium, Total	**0.0068**		0.0010	0.00038	mg/L		11/27/23 15:25	11/28/23 22:51	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/27/23 15:25	11/28/23 22:51	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/27/23 15:25	11/28/23 22:51	1
Chromium, Total	ND		0.0030	0.00050	mg/L		11/27/23 15:25	11/28/23 22:51	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/27/23 15:25	11/28/23 22:51	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/27/23 15:25	11/28/23 22:51	1
Manganese, Total	**0.34**		0.0010	0.00051	mg/L		11/27/23 15:25	11/28/23 22:51	1
Nickel, Total	ND		0.0040	0.00083	mg/L		11/27/23 15:25	11/28/23 22:51	1
Selenium, Total	ND	^+	0.0010	0.0010	mg/L		11/27/23 15:25	11/28/23 22:51	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/27/23 15:25	11/28/23 22:51	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/27/23 15:25	11/28/23 22:51	1
Vanadium, Total	ND		0.0020	0.0011	mg/L		11/27/23 15:25	11/28/23 22:51	1
Zinc, Total	**0.0038**	**J**	0.0050	0.0020	mg/L		11/27/23 15:25	11/28/23 22:51	1

Client Sample ID: MW-15R
Date Collected: 11/09/23 10:48
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/27/23 15:25	11/28/23 22:53	1
Barium, Total	**0.0049**		0.0010	0.00038	mg/L		11/27/23 15:25	11/28/23 22:53	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/27/23 15:25	11/28/23 22:53	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/27/23 15:25	11/28/23 22:53	1
Chromium, Total	ND		0.0030	0.00050	mg/L		11/27/23 15:25	11/28/23 22:53	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/27/23 15:25	11/28/23 22:53	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/27/23 15:25	11/28/23 22:53	1
Manganese, Total	**0.0051**		0.0010	0.00051	mg/L		11/27/23 15:25	11/28/23 22:53	1
Nickel, Total	**0.0012**	**J**	0.0040	0.00083	mg/L		11/27/23 15:25	11/28/23 22:53	1
Selenium, Total	ND	^+	0.0010	0.0010	mg/L		11/27/23 15:25	11/28/23 22:53	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/27/23 15:25	11/28/23 22:53	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/27/23 15:25	11/28/23 22:53	1
Vanadium, Total	**0.0032**		0.0020	0.0011	mg/L		11/27/23 15:25	11/28/23 22:53	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Client Sample ID: MW-15R
Date Collected: 11/09/23 10:48
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc, Total	0.0039	J	0.0050	0.0020	mg/L		11/27/23 15:25	11/28/23 22:53	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Client Sample ID: MW-33A
Date Collected: 11/09/23 12:29
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	0.038	B	0.0010	0.00051	mg/L		11/16/23 07:26	11/17/23 00:16	1

Client Sample ID: MW-39
Date Collected: 11/09/23 10:30
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	0.50	B	0.0010	0.00051	mg/L		11/16/23 07:26	11/17/23 00:18	1

Client Sample ID: MW-33C
Date Collected: 11/09/23 13:03
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	0.13	B	0.0010	0.00051	mg/L		11/16/23 07:26	11/17/23 00:20	1

Client Sample ID: MW-15R
Date Collected: 11/09/23 10:48
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	0.0021	B	0.0010	0.00051	mg/L		11/16/23 07:26	11/17/23 00:23	1

General Chemistry

Client Sample ID: MW-33A
Date Collected: 11/09/23 12:29
Date Received: 11/10/23 09:50

Lab Sample ID: 280-184342-1
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		3.0	3.0	mg/L			11/30/23 22:15	1
Sulfate (EPA 300.0)	ND		5.0	5.0	mg/L			11/30/23 22:15	1
Ammonia (as N) (EPA 350.1)	0.051		0.030	0.030	mg/L			12/01/23 14:50	1
Nitrate as N (EPA 353.2)	ND		0.050	0.050	mg/L			11/12/23 20:53	1
Alkalinity, Total (As CaCO3) (SM 2320B)	62		10	10	mg/L			11/17/23 02:05	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	62		10	10	mg/L			11/17/23 02:05	1
Total Dissolved Solids (TDS) (SM 2540C)	75		5.0	5.0	mg/L			11/16/23 11:34	1
Total Suspended Solids (SM 2540D)	7.6		4.0	4.0	mg/L			11/16/23 17:52	1
Total Organic Carbon - Average (SM 5310B)	1.9		1.0	1.0	mg/L			12/02/23 10:42	1

General Chemistry

Client Sample ID: MW-39
Date Collected: 11/09/23 10:30
Date Received: 11/10/23 09:50
Lab Sample ID: 280-184342-2
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**5.9**		3.0	3.0	mg/L			11/30/23 22:26	1
Sulfate (EPA 300.0)	ND		5.0	5.0	mg/L			11/30/23 22:26	1
Ammonia (as N) (EPA 350.1)	**0.42**		0.030	0.030	mg/L			12/01/23 14:58	1
Nitrate as N (EPA 353.2)	ND		0.050	0.050	mg/L			11/12/23 20:53	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**100**		10	10	mg/L			11/17/23 02:11	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**100**		10	10	mg/L			11/17/23 02:11	1
Total Dissolved Solids (TDS) (SM 2540C)	**130**		5.0	5.0	mg/L			11/16/23 11:34	1
Total Suspended Solids (SM 2540D)	**19**		4.0	4.0	mg/L			11/16/23 17:52	1
Total Organic Carbon - Average (SM 5310B)	**2.2**		1.0	1.0	mg/L			12/02/23 11:02	1

Client Sample ID: MW-33C
Date Collected: 11/09/23 13:03
Date Received: 11/10/23 09:50
Lab Sample ID: 280-184342-3
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**3.1**		3.0	3.0	mg/L			11/30/23 22:37	1
Sulfate (EPA 300.0)	**8.7**		5.0	5.0	mg/L			11/30/23 22:37	1
Ammonia (as N) (EPA 350.1)	**0.059**		0.030	0.030	mg/L			12/01/23 15:09	1
Nitrate as N (EPA 353.2)	ND		0.050	0.050	mg/L			11/12/23 20:53	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**70**		10	10	mg/L			11/17/23 02:16	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**70**		10	10	mg/L			11/17/23 02:16	1
Total Dissolved Solids (TDS) (SM 2540C)	**94**		5.0	5.0	mg/L			11/16/23 11:34	1
Total Suspended Solids (SM 2540D)	**6.8**		4.0	4.0	mg/L			11/16/23 17:52	1
Total Organic Carbon - Average (SM 5310B)	ND		1.0	1.0	mg/L			12/02/23 11:21	1

Client Sample ID: MW-15R
Date Collected: 11/09/23 10:48
Date Received: 11/10/23 09:50
Lab Sample ID: 280-184342-4
Matrix: Water

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		3.0	3.0	mg/L			11/30/23 22:48	1
Sulfate (EPA 300.0)	ND		5.0	5.0	mg/L			11/30/23 22:48	1
Ammonia (as N) (EPA 350.1)	**0.045**		0.030	0.030	mg/L			12/01/23 15:11	1
Nitrate as N (EPA 353.2)	**0.22**		0.050	0.050	mg/L			11/12/23 20:53	1
Alkalinity, Total (As CaCO3) (SM 2320B)	**73**		10	10	mg/L			11/17/23 02:22	1
Alkalinity, Bicarbonate (As CaCO3) (SM 2320B)	**73**		10	10	mg/L			11/17/23 02:22	1
Total Dissolved Solids (TDS) (SM 2540C)	**90**		5.0	5.0	mg/L			11/16/23 11:34	1
Total Suspended Solids (SM 2540D)	ND		4.0	4.0	mg/L			11/16/23 17:52	1
Total Organic Carbon - Average (SM 5310B)	ND		1.0	1.0	mg/L			12/02/23 11:37	1

Surrogate Summary

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184342-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)
280-184342-1	MW-33A	105	98	95
280-184342-2	MW-39	106	95	94
280-184342-3	MW-33C	100	97	95
280-184342-4	MW-15R	107	93	99
LCS 480-691904/6	Lab Control Sample	101	99	95
LCSD 480-691904/24	Lab Control Sample Dup	102	101	96
MB 480-691904/8	Method Blank	103	97	94

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DBFM	TBA
Lab Sample ID	Client Sample ID	(50-150)	(50-150)
280-184342-1	MW-33A	121	109
280-184342-2	MW-39	121	99
280-184342-3	MW-33C	120	105
280-184342-4	MW-15R	121	111
LCS 480-691926/6	Lab Control Sample	104	94
LCSD 480-691926/7	Lab Control Sample Dup	103	95
MB 480-691926/9	Method Blank	116	116

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TBA = TBA-d9 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-691904/8
Matrix: Water
Analysis Batch: 691904

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			11/15/23 02:50	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/15/23 02:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/15/23 02:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/15/23 02:50	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/15/23 02:50	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/15/23 02:50	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/15/23 02:50	1
1,1-Dichloropropene	ND		1.0	0.72	ug/L			11/15/23 02:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 02:50	1
1,2,3-Trichloropropane	ND		1.0	0.89	ug/L			11/15/23 02:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/15/23 02:50	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			11/15/23 02:50	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/15/23 02:50	1
1,2-Dibromoethane (EDB)	ND		1.0	0.73	ug/L			11/15/23 02:50	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/15/23 02:50	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/15/23 02:50	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			11/15/23 02:50	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/15/23 02:50	1
1,3,5-Trichlorobenzene	ND		1.0	0.23	ug/L			11/15/23 02:50	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			11/15/23 02:50	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/15/23 02:50	1
1,3-Dichloropropane	ND		1.0	0.75	ug/L			11/15/23 02:50	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/15/23 02:50	1
1,4-Dioxane	ND		40	9.3	ug/L			11/15/23 02:50	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			11/15/23 02:50	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/15/23 02:50	1
2-Chloroethyl vinyl ether	ND		5.0	0.96	ug/L			11/15/23 02:50	1
2-Hexanone	ND		5.0	1.2	ug/L			11/15/23 02:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/15/23 02:50	1
Acetone	ND		10	3.0	ug/L			11/15/23 02:50	1
Acetonitrile	ND		15	4.9	ug/L			11/15/23 02:50	1
Acrolein	ND		20	0.91	ug/L			11/15/23 02:50	1
Acrylonitrile	ND		5.0	0.83	ug/L			11/15/23 02:50	1
Benzene	ND		1.0	0.41	ug/L			11/15/23 02:50	1
Bromobenzene	ND		1.0	0.80	ug/L			11/15/23 02:50	1
Bromochloromethane	ND		1.0	0.87	ug/L			11/15/23 02:50	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/15/23 02:50	1
Bromoform	ND		1.0	0.26	ug/L			11/15/23 02:50	1
Bromomethane	ND		1.0	0.69	ug/L			11/15/23 02:50	1
Butyl alcohol, n-	ND		40	8.9	ug/L			11/15/23 02:50	1
Butyl alcohol, tert-	ND		10	3.3	ug/L			11/15/23 02:50	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/15/23 02:50	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/15/23 02:50	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/15/23 02:50	1
Chlorodifluoromethane	ND		1.0	0.26	ug/L			11/15/23 02:50	1
Chloroethane	ND		1.0	0.32	ug/L			11/15/23 02:50	1
Chloroform	ND		1.0	0.34	ug/L			11/15/23 02:50	1
Chloromethane	ND		1.0	0.35	ug/L			11/15/23 02:50	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-691904/8
Matrix: Water
Analysis Batch: 691904

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/15/23 02:50	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/15/23 02:50	1
Cyclohexane	ND		1.0	0.18	ug/L			11/15/23 02:50	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/15/23 02:50	1
Dibromomethane	ND		1.0	0.41	ug/L			11/15/23 02:50	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/15/23 02:50	1
Dichlorofluoromethane	ND		1.0	0.34	ug/L			11/15/23 02:50	1
Ethyl acetate	ND		1.0	0.66	ug/L			11/15/23 02:50	1
Ethyl ether	ND		1.0	0.72	ug/L			11/15/23 02:50	1
Ethyl tert-butyl ether	ND		1.0	0.29	ug/L			11/15/23 02:50	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/15/23 02:50	1
Hexachlorobutadiene	ND		2.0	0.28	ug/L			11/15/23 02:50	1
Hexane	ND		10	0.40	ug/L			11/15/23 02:50	1
Iodomethane	ND		1.0	0.30	ug/L			11/15/23 02:50	1
Isobutanol	ND		25	4.8	ug/L			11/15/23 02:50	1
Isopropyl ether	ND		1.0	0.59	ug/L			11/15/23 02:50	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/15/23 02:50	1
Methacrylonitrile	ND		5.0	0.69	ug/L			11/15/23 02:50	1
Methyl acetate	ND		2.5	1.3	ug/L			11/15/23 02:50	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/15/23 02:50	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/15/23 02:50	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/15/23 02:50	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			11/15/23 02:50	1
Naphthalene	ND		1.0	0.43	ug/L			11/15/23 02:50	1
n-Butylbenzene	ND		1.0	0.64	ug/L			11/15/23 02:50	1
N-Propylbenzene	ND		1.0	0.69	ug/L			11/15/23 02:50	1
o-Chlorotoluene	ND		1.0	0.86	ug/L			11/15/23 02:50	1
o-Xylene	ND		1.0	0.76	ug/L			11/15/23 02:50	1
p-Chlorotoluene	ND		1.0	0.84	ug/L			11/15/23 02:50	1
p-Cymene	ND		1.0	0.31	ug/L			11/15/23 02:50	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			11/15/23 02:50	1
Styrene	ND		1.0	0.73	ug/L			11/15/23 02:50	1
Tert-amyl methyl ether	ND		1.0	0.27	ug/L			11/15/23 02:50	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			11/15/23 02:50	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/15/23 02:50	1
Tetrahydrofuran	ND		5.0	1.3	ug/L			11/15/23 02:50	1
Toluene	ND		1.0	0.51	ug/L			11/15/23 02:50	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/15/23 02:50	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/15/23 02:50	1
trans-1,4-Dichloro-2-butene	ND		1.0	0.22	ug/L			11/15/23 02:50	1
Trichloroethene	ND		1.0	0.46	ug/L			11/15/23 02:50	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/15/23 02:50	1
Vinyl acetate	ND		5.0	0.85	ug/L			11/15/23 02:50	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/15/23 02:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*11/15/23 02:50*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*11/15/23 02:50*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-691904/8
Matrix: Water
Analysis Batch: 691904

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	94		80 - 120		11/15/23 02:50	1

Lab Sample ID: LCS 480-691904/6
Matrix: Water
Analysis Batch: 691904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	27.8		ug/L		111	80 - 120
1,1,1-Trichloroethane	25.0	27.2		ug/L		109	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.5		ug/L		102	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	21.6		ug/L		86	61 - 148
1,1,2-Trichloroethane	25.0	25.1		ug/L		100	76 - 122
1,1-Dichloroethane	25.0	25.6		ug/L		102	77 - 120
1,1-Dichloroethene	25.0	19.1		ug/L		76	66 - 127
1,1-Dichloropropene	25.0	25.8		ug/L		103	72 - 122
1,2,3-Trichlorobenzene	25.0	25.4		ug/L		101	75 - 123
1,2,3-Trichloropropane	25.0	26.0		ug/L		104	68 - 122
1,2,4-Trichlorobenzene	25.0	26.0		ug/L		104	79 - 122
1,2,4-Trimethylbenzene	25.0	27.4		ug/L		110	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	23.6		ug/L		94	56 - 134
1,2-Dibromoethane (EDB)	25.0	26.5		ug/L		106	77 - 120
1,2-Dichlorobenzene	25.0	25.8		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	26.1		ug/L		104	75 - 120
1,2-Dichloropropane	25.0	25.7		ug/L		103	76 - 120
1,3,5-Trimethylbenzene	25.0	27.0		ug/L		108	77 - 121
1,3-Dichlorobenzene	25.0	26.3		ug/L		105	77 - 120
1,3-Dichloropropane	25.0	25.4		ug/L		101	75 - 120
1,4-Dichlorobenzene	25.0	25.5		ug/L		102	80 - 120
1,4-Dioxane	500	901	*+	ug/L		180	50 - 150
2,2-Dichloropropane	25.0	26.1		ug/L		105	63 - 136
2-Butanone (MEK)	125	148		ug/L		119	57 - 140
2-Chloroethyl vinyl ether	25.0	28.4		ug/L		114	70 - 129
2-Hexanone	125	144		ug/L		115	65 - 127
4-Methyl-2-pentanone (MIBK)	125	130		ug/L		104	71 - 125
Acetone	125	141		ug/L		113	56 - 142
Acrolein	125	115		ug/L		92	52 - 143
Acrylonitrile	250	277		ug/L		111	63 - 125
Benzene	25.0	24.7		ug/L		99	71 - 124
Bromobenzene	25.0	25.2		ug/L		101	78 - 120
Bromochloromethane	25.0	24.4		ug/L		98	72 - 130
Bromodichloromethane	25.0	26.5		ug/L		106	80 - 122
Bromoform	25.0	28.5		ug/L		114	61 - 132
Bromomethane	25.0	20.2		ug/L		81	55 - 144
Butyl alcohol, tert-	250	468	*+	ug/L		187	75 - 125
Carbon disulfide	25.0	14.9		ug/L		59	59 - 134
Carbon tetrachloride	25.0	28.4		ug/L		113	72 - 134
Chlorobenzene	25.0	25.8		ug/L		103	80 - 120
Chloroethane	25.0	21.5		ug/L		86	69 - 136

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-691904/6
Matrix: Water
Analysis Batch: 691904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	25.0	25.0		ug/L		100	73 - 127
Chloromethane	25.0	22.4		ug/L		90	68 - 124
cis-1,2-Dichloroethene	25.0	24.4		ug/L		98	74 - 124
cis-1,3-Dichloropropene	25.0	25.9		ug/L		103	74 - 124
Cyclohexane	25.0	24.5		ug/L		98	59 - 135
Dibromochloromethane	25.0	25.9		ug/L		104	75 - 125
Dibromomethane	25.0	26.0		ug/L		104	76 - 127
Dichlorodifluoromethane	25.0	19.9		ug/L		80	59 - 135
Dichlorofluoromethane	25.0	23.4		ug/L		94	76 - 127
Ethyl ether	25.0	21.5		ug/L		86	76 - 123
Ethylbenzene	25.0	26.4		ug/L		105	77 - 123
Hexachlorobutadiene	25.0	25.4		ug/L		101	68 - 131
Iodomethane	25.0	18.6	*-	ug/L		74	78 - 123
Isobutanol	625	1430	E *+	ug/L		228	51 - 150
Isopropylbenzene	25.0	27.3		ug/L		109	77 - 122
Methyl acetate	50.0	50.7		ug/L		101	74 - 133
Methyl tert-butyl ether	25.0	25.1		ug/L		100	77 - 120
Methylcyclohexane	25.0	25.0		ug/L		100	68 - 134
Methylene Chloride	25.0	22.7		ug/L		91	75 - 124
m-Xylene & p-Xylene	25.0	25.9		ug/L		104	76 - 122
Naphthalene	25.0	26.8		ug/L		107	66 - 125
n-Butylbenzene	25.0	28.1		ug/L		112	71 - 128
N-Propylbenzene	25.0	27.4		ug/L		110	75 - 127
o-Chlorotoluene	25.0	26.4		ug/L		106	76 - 121
o-Xylene	25.0	26.2		ug/L		105	76 - 122
p-Chlorotoluene	25.0	26.0		ug/L		104	77 - 121
p-Cymene	25.0	28.2		ug/L		113	73 - 120
sec-Butylbenzene	25.0	27.8		ug/L		111	74 - 127
Styrene	25.0	27.4		ug/L		110	80 - 120
tert-Butylbenzene	25.0	27.8		ug/L		111	75 - 123
Tetrachloroethene	25.0	25.7		ug/L		103	74 - 122
Tetrahydrofuran	50.0	56.6		ug/L		113	62 - 132
Toluene	25.0	24.7		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	24.2		ug/L		97	73 - 127
trans-1,3-Dichloropropene	25.0	24.0		ug/L		96	80 - 120
trans-1,4-Dichloro-2-butene	25.0	23.8		ug/L		95	41 - 131
Trichloroethene	25.0	26.1		ug/L		105	74 - 123
Trichlorofluoromethane	25.0	23.3		ug/L		93	62 - 150
Vinyl acetate	50.0	55.6		ug/L		111	50 - 144
Vinyl chloride	25.0	24.1		ug/L		97	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*
Toluene-d8 (Surr)	*95*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-691904/24
Matrix: Water
Analysis Batch: 691904

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
1,1,1,2-Tetrachloroethane			25.0	27.6		ug/L		111	80 - 120	1	20
1,1,1-Trichloroethane			25.0	28.6		ug/L		115	73 - 126	5	15
1,1,2,2-Tetrachloroethane			25.0	25.7		ug/L		103	76 - 120	1	15
1,1,2-Trichloro-1,2,2-trifluoroethane			25.0	23.6		ug/L		94	61 - 148	9	20
1,1,2-Trichloroethane			25.0	26.3		ug/L		105	76 - 122	5	15
1,1-Dichloroethane			25.0	25.9		ug/L		104	77 - 120	1	20
1,1-Dichloroethene			25.0	20.7		ug/L		83	66 - 127	8	16
1,1-Dichloropropene			25.0	27.7		ug/L		111	72 - 122	7	20
1,2,3-Trichlorobenzene			25.0	24.9		ug/L		99	75 - 123	2	20
1,2,3-Trichloropropane			25.0	25.6		ug/L		103	68 - 122	2	14
1,2,4-Trichlorobenzene			25.0	25.3		ug/L		101	79 - 122	2	20
1,2,4-Trimethylbenzene			25.0	26.9		ug/L		108	76 - 121	2	20
1,2-Dibromo-3-Chloropropane			25.0	22.1		ug/L		89	56 - 134	6	15
1,2-Dibromoethane (EDB)			25.0	25.9		ug/L		103	77 - 120	3	15
1,2-Dichlorobenzene			25.0	25.4		ug/L		102	80 - 124	2	20
1,2-Dichloroethane			25.0	26.2		ug/L		105	75 - 120	1	20
1,2-Dichloropropane			25.0	26.8		ug/L		107	76 - 120	4	20
1,3,5-Trimethylbenzene			25.0	27.0		ug/L		108	77 - 121	0	20
1,3-Dichlorobenzene			25.0	26.3		ug/L		105	77 - 120	0	20
1,3-Dichloropropane			25.0	26.1		ug/L		104	75 - 120	3	20
1,4-Dichlorobenzene			25.0	25.5		ug/L		102	80 - 120	0	20
1,4-Dioxane			500	610	*1	ug/L		122	50 - 150	38	20
2,2-Dichloropropane			25.0	22.2		ug/L		89	63 - 136	16	20
2-Butanone (MEK)			125	135		ug/L		108	57 - 140	9	20
2-Chloroethyl vinyl ether			25.0	27.7		ug/L		111	70 - 129	2	20
2-Hexanone			125	140		ug/L		112	65 - 127	3	15
4-Methyl-2-pentanone (MIBK)			125	131		ug/L		105	71 - 125	0	35
Acetone			125	126		ug/L		101	56 - 142	11	15
Acrolein			125	104		ug/L		84	52 - 143	10	20
Acrylonitrile			250	254		ug/L		102	63 - 125	9	20
Benzene			25.0	25.6		ug/L		102	71 - 124	3	13
Bromobenzene			25.0	24.7		ug/L		99	78 - 120	2	15
Bromochloromethane			25.0	24.7		ug/L		99	72 - 130	1	15
Bromodichloromethane			25.0	26.2		ug/L		105	80 - 122	1	15
Bromoform			25.0	22.7	*1	ug/L		91	61 - 132	23	15
Bromomethane			25.0	22.0		ug/L		88	55 - 144	8	15
Butyl alcohol, tert-			250	395	*+ *1	ug/L		158	75 - 125	17	15
Carbon disulfide			25.0	15.4		ug/L		62	59 - 134	4	15
Carbon tetrachloride			25.0	28.8		ug/L		115	72 - 134	1	15
Chlorobenzene			25.0	26.0		ug/L		104	80 - 120	1	25
Chloroethane			25.0	22.8		ug/L		91	69 - 136	6	15
Chloroform			25.0	26.2		ug/L		105	73 - 127	5	20
Chloromethane			25.0	23.3		ug/L		93	68 - 124	4	15
cis-1,2-Dichloroethene			25.0	26.0		ug/L		104	74 - 124	6	15
cis-1,3-Dichloropropene			25.0	24.8		ug/L		99	74 - 124	4	15
Cyclohexane			25.0	26.0		ug/L		104	59 - 135	6	20
Dibromochloromethane			25.0	24.5		ug/L		98	75 - 125	6	15
Dibromomethane			25.0	26.1		ug/L		104	76 - 127	0	15

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-691904/24
Matrix: Water
Analysis Batch: 691904

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			25.0	21.8		ug/L		87	59 - 135	9	20
Dichlorofluoromethane			25.0	25.1		ug/L		101	76 - 127	7	20
Ethyl ether			25.0	21.1		ug/L		84	76 - 123	2	15
Ethylbenzene			25.0	26.8		ug/L		107	77 - 123	2	15
Hexachlorobutadiene			25.0	25.4		ug/L		101	68 - 131	0	20
Iodomethane			25.0	19.6		ug/L		78	78 - 123	5	20
Isobutanol			625	1070	*+ *1	ug/L		171	51 - 150	29	20
Isopropylbenzene			25.0	27.4		ug/L		110	77 - 122	1	20
Methyl acetate			50.0	49.3		ug/L		99	74 - 133	3	20
Methyl tert-butyl ether			25.0	24.4		ug/L		98	77 - 120	3	37
Methylcyclohexane			25.0	26.5		ug/L		106	68 - 134	6	20
Methylene Chloride			25.0	23.8		ug/L		95	75 - 124	4	15
m-Xylene & p-Xylene			25.0	26.5		ug/L		106	76 - 122	2	16
Naphthalene			25.0	25.9		ug/L		104	66 - 125	4	20
n-Butylbenzene			25.0	27.9		ug/L		112	71 - 128	0	15
N-Propylbenzene			25.0	27.5		ug/L		110	75 - 127	0	15
o-Chlorotoluene			25.0	26.8		ug/L		107	76 - 121	2	20
o-Xylene			25.0	26.5		ug/L		106	76 - 122	1	16
p-Chlorotoluene			25.0	25.8		ug/L		103	77 - 121	1	15
p-Cymene			25.0	27.8		ug/L		111	73 - 120	1	20
sec-Butylbenzene			25.0	27.8		ug/L		111	74 - 127	0	15
Styrene			25.0	27.9		ug/L		112	80 - 120	2	20
tert-Butylbenzene			25.0	27.5		ug/L		110	75 - 123	1	15
Tetrachloroethene			25.0	26.5		ug/L		106	74 - 122	3	20
Tetrahydrofuran			50.0	49.9		ug/L		100	62 - 132	13	20
Toluene			25.0	25.3		ug/L		101	80 - 122	2	15
trans-1,2-Dichloroethene			25.0	25.5		ug/L		102	73 - 127	5	20
trans-1,3-Dichloropropene			25.0	20.9		ug/L		83	80 - 120	14	15
trans-1,4-Dichloro-2-butene			25.0	15.3	*1	ug/L		61	41 - 131	43	20
Trichloroethene			25.0	27.2		ug/L		109	74 - 123	4	16
Trichlorofluoromethane			25.0	24.7		ug/L		99	62 - 150	6	20
Vinyl acetate			50.0	49.4		ug/L		99	50 - 144	12	23
Vinyl chloride			25.0	26.0		ug/L		104	65 - 133	7	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Toluene-d8 (Surr)	*96*		*80 - 120*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-691926/9
Matrix: Water
Analysis Batch: 691926

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.0040	ug/L			11/14/23 20:31	1

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-691926/9
Matrix: Water
Analysis Batch: 691926

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*116*		*50 - 150*		*11/14/23 20:31*	*1*
TBA-d9 (Surr)	*116*		*50 - 150*		*11/14/23 20:31*	*1*

Lab Sample ID: LCS 480-691926/6
Matrix: Water
Analysis Batch: 691926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Vinyl chloride			0.200	0.248		ug/L		124	50 - 150		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*104*		*50 - 150*
TBA-d9 (Surr)	*94*		*50 - 150*

Lab Sample ID: LCSD 480-691926/7
Matrix: Water
Analysis Batch: 691926

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
Vinyl chloride			0.200	0.225		ug/L		113	50 - 150	10	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Dibromofluoromethane (Surr)	*103*		*50 - 150*
TBA-d9 (Surr)	*95*		*50 - 150*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 280-634115/1-A
Matrix: Water
Analysis Batch: 634336

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634115

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	0.0313	J	0.20	0.024	mg/L		11/16/23 07:26	11/16/23 20:26	1
Iron, Dissolved	ND		0.060	0.0091	mg/L		11/16/23 07:26	11/16/23 20:26	1
Magnesium, Dissolved	ND		0.050	0.0042	mg/L		11/16/23 07:26	11/16/23 20:26	1
Potassium, Dissolved	ND		1.0	0.24	mg/L		11/16/23 07:26	11/16/23 20:26	1
Sodium, Dissolved	ND		1.0	0.097	mg/L		11/16/23 07:26	11/16/23 20:26	1

Lab Sample ID: LCS 280-634115/2-A
Matrix: Water
Analysis Batch: 634336

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634115

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium, Dissolved			50.0	50.4		mg/L		101	90 - 111		
Iron, Dissolved			10.0	10.1		mg/L		101	89 - 115		
Magnesium, Dissolved			50.0	51.2		mg/L		102	90 - 113		
Potassium, Dissolved			50.0	50.9		mg/L		102	89 - 114		
Sodium, Dissolved			50.0	51.5		mg/L		103	90 - 115		

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 280-635162/1-A
Matrix: Water
Analysis Batch: 635448

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt, Total	ND		0.0030	0.00056	mg/L		11/27/23 15:25	11/28/23 12:52	1
Iron, Total	ND		0.060	0.0091	mg/L		11/27/23 15:25	11/28/23 12:52	1

Lab Sample ID: LCS 280-635162/2-A
Matrix: Water
Analysis Batch: 635448

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt, Total	1.00	0.968		mg/L		97	89 - 111
Iron, Total	10.0	10.0		mg/L		100	89 - 115

Lab Sample ID: 280-184383-E-2-B MS
Matrix: Water
Analysis Batch: 635448

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt, Total	ND		1.00	0.981		mg/L		98	82 - 119
Iron, Total	0.021	J	10.0	10.2		mg/L		102	75 - 125

Lab Sample ID: 280-184383-E-2-C MSD
Matrix: Water
Analysis Batch: 635448

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt, Total	ND		1.00	0.982		mg/L		98	82 - 119	0	20
Iron, Total	0.021	J	10.0	10.3		mg/L		103	75 - 125	1	20

Lab Sample ID: 160-51899-A-4-B MS
Matrix: Water
Analysis Batch: 634336

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 634115

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium, Dissolved	0.060	J B	50.0	51.0		mg/L		102	75 - 125
Iron, Dissolved	0.016	J	10.0	10.2		mg/L		102	75 - 125
Magnesium, Dissolved	0.031	J	50.0	51.7		mg/L		103	75 - 125
Potassium, Dissolved	ND		50.0	51.3		mg/L		103	76 - 125
Sodium, Dissolved	ND		50.0	51.9		mg/L		104	75 - 125

Lab Sample ID: 160-51899-A-4-C MSD
Matrix: Water
Analysis Batch: 634336

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 634115

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium, Dissolved	0.060	J B	50.0	50.6		mg/L		101	75 - 125	1	20
Iron, Dissolved	0.016	J	10.0	10.1		mg/L		101	75 - 125	1	20
Magnesium, Dissolved	0.031	J	50.0	51.3		mg/L		103	75 - 125	1	20
Potassium, Dissolved	ND		50.0	51.0		mg/L		102	76 - 125	1	20
Sodium, Dissolved	ND		50.0	51.6		mg/L		103	75 - 125	1	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 280-634115/1-A
Matrix: Water
Analysis Batch: 634330

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 634115

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	0.00101		0.0010	0.00051	mg/L		11/16/23 07:26	11/16/23 23:21	1

Lab Sample ID: LCS 280-634115/30-A
Matrix: Water
Analysis Batch: 634330

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 634115

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese, Dissolved	0.0400	0.0398		mg/L		100	85 - 117

Lab Sample ID: MB 280-635162/1-A
Matrix: Water
Analysis Batch: 635419

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Total	ND		0.0010	0.00040	mg/L		11/27/23 15:25	11/28/23 22:39	1
Barium, Total	ND		0.0010	0.00038	mg/L		11/27/23 15:25	11/28/23 22:39	1
Beryllium, Total	ND		0.0010	0.00030	mg/L		11/27/23 15:25	11/28/23 22:39	1
Cadmium, Total	ND		0.00030	0.00019	mg/L		11/27/23 15:25	11/28/23 22:39	1
Chromium, Total	ND		0.0030	0.00050	mg/L		11/27/23 15:25	11/28/23 22:39	1
Copper, Total	ND		0.0020	0.00071	mg/L		11/27/23 15:25	11/28/23 22:39	1
Lead, Total	ND		0.0010	0.00023	mg/L		11/27/23 15:25	11/28/23 22:39	1
Manganese, Total	ND		0.0010	0.00051	mg/L		11/27/23 15:25	11/28/23 22:39	1
Nickel, Total	ND		0.0040	0.00083	mg/L		11/27/23 15:25	11/28/23 22:39	1
Selenium, Total	ND	^+	0.0010	0.0010	mg/L		11/27/23 15:25	11/28/23 22:39	1
Silver, Total	ND		0.0020	0.000045	mg/L		11/27/23 15:25	11/28/23 22:39	1
Thallium, Total	ND		0.0010	0.00021	mg/L		11/27/23 15:25	11/28/23 22:39	1
Vanadium, Total	ND		0.0020	0.0011	mg/L		11/27/23 15:25	11/28/23 22:39	1
Zinc, Total	ND		0.0050	0.0020	mg/L		11/27/23 15:25	11/28/23 22:39	1

Lab Sample ID: LCS 280-635162/25-A
Matrix: Water
Analysis Batch: 635419

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony, Total	0.0400	0.0398		mg/L		100	85 - 115
Barium, Total	0.0400	0.0399		mg/L		100	85 - 118
Beryllium, Total	0.0400	0.0400		mg/L		100	80 - 125
Cadmium, Total	0.0400	0.0408		mg/L		102	85 - 115
Chromium, Total	0.0400	0.0401		mg/L		100	84 - 121
Copper, Total	0.0400	0.0398		mg/L		100	85 - 119
Lead, Total	0.0400	0.0395		mg/L		99	85 - 118
Manganese, Total	0.0400	0.0408		mg/L		102	85 - 117
Nickel, Total	0.0400	0.0401		mg/L		100	85 - 119
Selenium, Total	0.0400	0.0447	^+	mg/L		112	77 - 122
Silver, Total	0.0400	0.0369		mg/L		92	85 - 115
Thallium, Total	0.0400	0.0392		mg/L		98	85 - 118
Vanadium, Total	0.0400	0.0401		mg/L		100	85 - 120
Zinc, Total	0.0400	0.0358		mg/L		90	83 - 122

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-184383-E-2-E MS
Matrix: Water
Analysis Batch: 635419

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony, Total	ND		0.0400	0.0396		mg/L		99	80 - 111
Barium, Total	0.045		0.0400	0.0852		mg/L		101	92 - 117
Beryllium, Total	ND		0.0400	0.0375		mg/L		94	87 - 118
Cadmium, Total	ND		0.0400	0.0391		mg/L		98	91 - 114
Chromium, Total	ND		0.0400	0.0402		mg/L		100	91 - 114
Copper, Total	ND		0.0400	0.0406		mg/L		101	89 - 116
Lead, Total	ND		0.0400	0.0396		mg/L		99	95 - 116
Nickel, Total	0.0013	J	0.0400	0.0408		mg/L		99	92 - 116
Selenium, Total	ND	^+	0.0400	0.0413	^+	mg/L		103	90 - 115
Silver, Total	ND		0.0400	0.0403		mg/L		101	93 - 118
Thallium, Total	ND		0.0400	0.0401		mg/L		100	94 - 115
Vanadium, Total	0.0071		0.0400	0.0453		mg/L		96	91 - 114
Zinc, Total	0.0025	J	0.0400	0.0394		mg/L		92	86 - 120

Lab Sample ID: 280-184383-E-2-E MS
Matrix: Water
Analysis Batch: 635488

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese, Total	0.0089		0.0400	0.0489		mg/L		100	89 - 119

Lab Sample ID: 280-184383-E-2-F MSD
Matrix: Water
Analysis Batch: 635419

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony, Total	ND		0.0400	0.0393		mg/L		98	80 - 111	1	20
Barium, Total	0.045		0.0400	0.0844		mg/L		99	92 - 117	1	20
Beryllium, Total	ND		0.0400	0.0385		mg/L		96	87 - 118	3	20
Cadmium, Total	ND		0.0400	0.0386		mg/L		97	91 - 114	1	20
Chromium, Total	ND		0.0400	0.0393		mg/L		98	91 - 114	2	20
Copper, Total	ND		0.0400	0.0396		mg/L		99	89 - 116	2	20
Lead, Total	ND		0.0400	0.0390		mg/L		98	95 - 116	2	20
Nickel, Total	0.0013	J	0.0400	0.0403		mg/L		98	92 - 116	1	20
Selenium, Total	ND	^+	0.0400	0.0417	^+	mg/L		104	90 - 115	1	20
Silver, Total	ND		0.0400	0.0402		mg/L		101	93 - 118	0	20
Thallium, Total	ND		0.0400	0.0397		mg/L		99	94 - 115	1	20
Vanadium, Total	0.0071		0.0400	0.0456		mg/L		96	91 - 114	1	20
Zinc, Total	0.0025	J	0.0400	0.0382		mg/L		89	86 - 120	3	20

Lab Sample ID: 280-184383-E-2-F MSD
Matrix: Water
Analysis Batch: 635488

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 635162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese, Total	0.0089		0.0400	0.0483		mg/L		99	89 - 119	1	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 160-51899-A-4-E MS
Matrix: Water
Analysis Batch: 634330

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 634115

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese, Dissolved	ND		0.0400	0.0400		mg/L		100	89 - 119

Lab Sample ID: 160-51899-A-4-F MSD
Matrix: Water
Analysis Batch: 634330

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 634115

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese, Dissolved	ND		0.0400	0.0399		mg/L		100	89 - 119	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-635621/53
Matrix: Water
Analysis Batch: 635621

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	3.0	mg/L			11/30/23 20:47	1
Sulfate	ND		5.0	5.0	mg/L			11/30/23 20:47	1

Lab Sample ID: LCS 280-635621/51
Matrix: Water
Analysis Batch: 635621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	102		mg/L		102	90 - 110
Sulfate	100	105		mg/L		105	90 - 110

Lab Sample ID: LCSD 280-635621/52
Matrix: Water
Analysis Batch: 635621

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
Chloride	100	101		mg/L		101	90 - 110	1	10
Sulfate	100	103		mg/L		103	90 - 110	1	10

Lab Sample ID: MRL 280-635621/3
Matrix: Water
Analysis Batch: 635621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.75		mg/L		95	50 - 150
Sulfate	5.00	ND		mg/L		98	50 - 150

Lab Sample ID: 280-184665-A-9 MS
Matrix: Water
Analysis Batch: 635621

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND	F1	50.0	62.1	F1	mg/L		124	80 - 120
Sulfate	ND	F1	50.0	65.5	F1	mg/L		131	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-184665-A-9 MSD
Matrix: Water
Analysis Batch: 635621

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND	F1	50.0	59.4		mg/L		119	80 - 120	4	20
Sulfate	ND	F1	50.0	62.3	F1	mg/L		125	80 - 120	5	20

Lab Sample ID: 280-184665-A-9 DU
Matrix: Water
Analysis Batch: 635621

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	ND	F1	ND		mg/L		NC	15
Sulfate	ND	F1	ND		mg/L		NC	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-635876/58
Matrix: Water
Analysis Batch: 635876

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.030	0.030	mg/L			12/01/23 13:54	1

Lab Sample ID: LCS 280-635876/59
Matrix: Water
Analysis Batch: 635876

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia (as N)	2.50	2.54		mg/L		102	90 - 110

Lab Sample ID: 280-184342-1 MS
Matrix: Water
Analysis Batch: 635876

Client Sample ID: MW-33A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia (as N)	0.051		1.00	1.09		mg/L		104	90 - 110

Lab Sample ID: 280-184342-1 MSD
Matrix: Water
Analysis Batch: 635876

Client Sample ID: MW-33A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia (as N)	0.051		1.00	1.06		mg/L		101	90 - 110	3	10

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-634324/83
Matrix: Water
Analysis Batch: 634324

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total (As CaCO3)	ND		10	10	mg/L			11/16/23 22:48	1
Alkalinity, Bicarbonate (As CaCO3)	ND		10	10	mg/L			11/16/23 22:48	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 280-634324/82
Matrix: Water
Analysis Batch: 634324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total (As CaCO3)	200	206		mg/L		103	89 - 110

Lab Sample ID: 280-184295-B-5 DU
Matrix: Water
Analysis Batch: 634324

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity, Total (As CaCO3)	360		357		mg/L		0.07	10
Alkalinity, Bicarbonate (As CaCO3)	360		357		mg/L		0.07	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-634220/1
Matrix: Water
Analysis Batch: 634220

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	5.0	mg/L			11/16/23 11:34	1

Lab Sample ID: LCS 280-634220/2
Matrix: Water
Analysis Batch: 634220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids (TDS)	504	501		mg/L		99	88 - 114

Lab Sample ID: LCSD 280-634220/3
Matrix: Water
Analysis Batch: 634220

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
Total Dissolved Solids (TDS)	504	502		mg/L		100	88 - 114	0	20

Lab Sample ID: 280-184342-1 DU
Matrix: Water
Analysis Batch: 634220

Client Sample ID: MW-33A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	75		82.0		mg/L		9	10

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-634299/1
Matrix: Water
Analysis Batch: 634299

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			11/16/23 17:52	1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 280-634299/2
Matrix: Water
Analysis Batch: 634299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	501	448		mg/L		89	79 - 114

Lab Sample ID: 280-184608-A-4 DU
Matrix: Water
Analysis Batch: 634299

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	4.4		ND		mg/L		NC	10

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-635927/36
Matrix: Water
Analysis Batch: 635927

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0	1.0	mg/L			12/02/23 08:06	1

Lab Sample ID: LCS 280-635927/34
Matrix: Water
Analysis Batch: 635927

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Average	25.0	25.6		mg/L		103	88 - 112

Lab Sample ID: LCSD 280-635927/35
Matrix: Water
Analysis Batch: 635927

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
Total Organic Carbon - Average	25.0	25.6		mg/L		102	88 - 112	0	15

Lab Sample ID: 280-184384-B-4 MS
Matrix: Water
Analysis Batch: 635927

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Average	4.4		25.0	29.0		mg/L		98	88 - 112

Lab Sample ID: 280-184384-B-4 MSD
Matrix: Water
Analysis Batch: 635927

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Average	4.4		25.0	29.3		mg/L		100	88 - 112	1	15

GC/MS VOA

Analysis Batch: 691904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-1	MW-33A	Total/NA	Water	8260C	
280-184342-2	MW-39	Total/NA	Water	8260C	
280-184342-3	MW-33C	Total/NA	Water	8260C	
280-184342-4	MW-15R	Total/NA	Water	8260C	
MB 480-691904/8	Method Blank	Total/NA	Water	8260C	
LCS 480-691904/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-691904/24	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 691926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-1	MW-33A	Total/NA	Water	8260C SIM	
280-184342-2	MW-39	Total/NA	Water	8260C SIM	
280-184342-3	MW-33C	Total/NA	Water	8260C SIM	
280-184342-4	MW-15R	Total/NA	Water	8260C SIM	
MB 480-691926/9	Method Blank	Total/NA	Water	8260C SIM	
LCS 480-691926/6	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 480-691926/7	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

Metals

Prep Batch: 634115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-1	MW-33A	Dissolved	Water	3005A	
280-184342-2	MW-39	Dissolved	Water	3005A	
280-184342-3	MW-33C	Dissolved	Water	3005A	
280-184342-4	MW-15R	Dissolved	Water	3005A	
MB 280-634115/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-634115/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 280-634115/30-A	Lab Control Sample	Total Recoverable	Water	3005A	
160-51899-A-4-B MS	Matrix Spike	Dissolved	Water	3005A	
160-51899-A-4-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	
160-51899-A-4-E MS	Matrix Spike	Dissolved	Water	3005A	
160-51899-A-4-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 634330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-1	MW-33A	Dissolved	Water	6020B	634115
280-184342-2	MW-39	Dissolved	Water	6020B	634115
280-184342-3	MW-33C	Dissolved	Water	6020B	634115
280-184342-4	MW-15R	Dissolved	Water	6020B	634115
MB 280-634115/1-A	Method Blank	Total Recoverable	Water	6020B	634115
LCS 280-634115/30-A	Lab Control Sample	Total Recoverable	Water	6020B	634115
160-51899-A-4-E MS	Matrix Spike	Dissolved	Water	6020B	634115
160-51899-A-4-F MSD	Matrix Spike Duplicate	Dissolved	Water	6020B	634115

Analysis Batch: 634336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-1	MW-33A	Dissolved	Water	6010D	634115
280-184342-2	MW-39	Dissolved	Water	6010D	634115
280-184342-3	MW-33C	Dissolved	Water	6010D	634115
280-184342-4	MW-15R	Dissolved	Water	6010D	634115

Metals (Continued)

Analysis Batch: 634336 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-634115/1-A	Method Blank	Total Recoverable	Water	6010D	634115
LCS 280-634115/2-A	Lab Control Sample	Total Recoverable	Water	6010D	634115
160-51899-A-4-B MS	Matrix Spike	Dissolved	Water	6010D	634115
160-51899-A-4-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010D	634115

Prep Batch: 635162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-1	MW-33A	Total Recoverable	Water	3005A	
280-184342-2	MW-39	Total Recoverable	Water	3005A	
280-184342-3	MW-33C	Total Recoverable	Water	3005A	
280-184342-4	MW-15R	Total Recoverable	Water	3005A	
MB 280-635162/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-635162/25-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 280-635162/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-184383-E-2-B MS	Matrix Spike	Total Recoverable	Water	3005A	
280-184383-E-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
280-184383-E-2-E MS	Matrix Spike	Total Recoverable	Water	3005A	
280-184383-E-2-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 635419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-1	MW-33A	Total Recoverable	Water	6020B	635162
280-184342-2	MW-39	Total Recoverable	Water	6020B	635162
280-184342-3	MW-33C	Total Recoverable	Water	6020B	635162
280-184342-4	MW-15R	Total Recoverable	Water	6020B	635162
MB 280-635162/1-A	Method Blank	Total Recoverable	Water	6020B	635162
LCS 280-635162/25-A	Lab Control Sample	Total Recoverable	Water	6020B	635162
280-184383-E-2-E MS	Matrix Spike	Total Recoverable	Water	6020B	635162
280-184383-E-2-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	635162

Analysis Batch: 635448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-1	MW-33A	Total Recoverable	Water	6010D	635162
280-184342-2	MW-39	Total Recoverable	Water	6010D	635162
280-184342-3	MW-33C	Total Recoverable	Water	6010D	635162
280-184342-4	MW-15R	Total Recoverable	Water	6010D	635162
MB 280-635162/1-A	Method Blank	Total Recoverable	Water	6010D	635162
LCS 280-635162/2-A	Lab Control Sample	Total Recoverable	Water	6010D	635162
280-184383-E-2-B MS	Matrix Spike	Total Recoverable	Water	6010D	635162
280-184383-E-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010D	635162

Analysis Batch: 635488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184383-E-2-E MS	Matrix Spike	Total Recoverable	Water	6020B	635162
280-184383-E-2-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	635162

General Chemistry

Analysis Batch: 633594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-1	MW-33A	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 633594 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-2	MW-39	Total/NA	Water	353.2	
280-184342-3	MW-33C	Total/NA	Water	353.2	
280-184342-4	MW-15R	Total/NA	Water	353.2	

Analysis Batch: 634220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-1	MW-33A	Total/NA	Water	SM 2540C	
280-184342-2	MW-39	Total/NA	Water	SM 2540C	
280-184342-3	MW-33C	Total/NA	Water	SM 2540C	
280-184342-4	MW-15R	Total/NA	Water	SM 2540C	
MB 280-634220/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-634220/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-634220/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-184342-1 DU	MW-33A	Total/NA	Water	SM 2540C	

Analysis Batch: 634299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-1	MW-33A	Total/NA	Water	SM 2540D	
280-184342-2	MW-39	Total/NA	Water	SM 2540D	
280-184342-3	MW-33C	Total/NA	Water	SM 2540D	
280-184342-4	MW-15R	Total/NA	Water	SM 2540D	
MB 280-634299/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-634299/2	Lab Control Sample	Total/NA	Water	SM 2540D	
280-184608-A-4 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 634324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-1	MW-33A	Total/NA	Water	SM 2320B	
280-184342-2	MW-39	Total/NA	Water	SM 2320B	
280-184342-3	MW-33C	Total/NA	Water	SM 2320B	
280-184342-4	MW-15R	Total/NA	Water	SM 2320B	
MB 280-634324/83	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-634324/82	Lab Control Sample	Total/NA	Water	SM 2320B	
280-184295-B-5 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 635621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-1	MW-33A	Total/NA	Water	300.0	
280-184342-2	MW-39	Total/NA	Water	300.0	
280-184342-3	MW-33C	Total/NA	Water	300.0	
280-184342-4	MW-15R	Total/NA	Water	300.0	
MB 280-635621/53	Method Blank	Total/NA	Water	300.0	
LCS 280-635621/51	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-635621/52	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-635621/3	Lab Control Sample	Total/NA	Water	300.0	
280-184665-A-9 MS	Matrix Spike	Total/NA	Water	300.0	
280-184665-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-184665-A-9 DU	Duplicate	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 635876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-1	MW-33A	Total/NA	Water	350.1	
280-184342-2	MW-39	Total/NA	Water	350.1	
280-184342-3	MW-33C	Total/NA	Water	350.1	
280-184342-4	MW-15R	Total/NA	Water	350.1	
MB 280-635876/58	Method Blank	Total/NA	Water	350.1	
LCS 280-635876/59	Lab Control Sample	Total/NA	Water	350.1	
280-184342-1 MS	MW-33A	Total/NA	Water	350.1	
280-184342-1 MSD	MW-33A	Total/NA	Water	350.1	

Analysis Batch: 635927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-184342-1	MW-33A	Total/NA	Water	SM 5310B	
280-184342-2	MW-39	Total/NA	Water	SM 5310B	
280-184342-3	MW-33C	Total/NA	Water	SM 5310B	
280-184342-4	MW-15R	Total/NA	Water	SM 5310B	
MB 280-635927/36	Method Blank	Total/NA	Water	SM 5310B	
LCS 280-635927/34	Lab Control Sample	Total/NA	Water	SM 5310B	
LCSD 280-635927/35	Lab Control Sample Dup	Total/NA	Water	SM 5310B	
280-184384-B-4 MS	Matrix Spike	Total/NA	Water	SM 5310B	
280-184384-B-4 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5310B	

Client Sample ID: MW-33A

Lab Sample ID: 280-184342-1

Date Collected: 11/09/23 12:29

Matrix: Water

Date Received: 11/10/23 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	691904	11/15/23 07:30	ATG	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/15/23 03:46	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	634115	11/16/23 07:26	MAB	EET DEN
Dissolved	Analysis	6010D		1			634336	11/16/23 22:20	ADL	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	635162	11/27/23 15:25	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635448	11/28/23 13:05	ADL	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	634115	11/16/23 07:26	MAB	EET DEN
Dissolved	Analysis	6020B		1			634330	11/17/23 00:16	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	635162	11/27/23 15:25	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635419	11/28/23 22:46	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635621	11/30/23 22:15	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635876	12/01/23 14:50	MMP	EET DEN
Total/NA	Analysis	353.2		1			633594	11/12/23 20:53	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/17/23 02:05	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	634220	11/16/23 11:34	ELB	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	634299	11/16/23 17:52	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635927	12/02/23 10:42	ABW	EET DEN

Client Sample ID: MW-39

Lab Sample ID: 280-184342-2

Date Collected: 11/09/23 10:30

Matrix: Water

Date Received: 11/10/23 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	691904	11/15/23 07:53	ATG	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/15/23 04:10	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	634115	11/16/23 07:26	MAB	EET DEN
Dissolved	Analysis	6010D		1			634336	11/16/23 22:24	ADL	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	635162	11/27/23 15:25	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635448	11/28/23 13:10	ADL	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	634115	11/16/23 07:26	MAB	EET DEN
Dissolved	Analysis	6020B		1			634330	11/17/23 00:18	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	635162	11/27/23 15:25	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635419	11/28/23 22:48	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635621	11/30/23 22:26	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635876	12/01/23 14:58	MMP	EET DEN
Total/NA	Analysis	353.2		1			633594	11/12/23 20:53	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/17/23 02:11	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	634220	11/16/23 11:34	ELB	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	634299	11/16/23 17:52	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635927	12/02/23 11:02	ABW	EET DEN

Client Sample ID: MW-33C

Lab Sample ID: 280-184342-3

Date Collected: 11/09/23 13:03

Matrix: Water

Date Received: 11/10/23 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	691904	11/15/23 08:16	ATG	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/15/23 04:34	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	634115	11/16/23 07:26	MAB	EET DEN
Dissolved	Analysis	6010D		1			634336	11/16/23 22:28	ADL	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	635162	11/27/23 15:25	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635448	11/28/23 13:14	ADL	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	634115	11/16/23 07:26	MAB	EET DEN
Dissolved	Analysis	6020B		1			634330	11/17/23 00:20	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	635162	11/27/23 15:25	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635419	11/28/23 22:51	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635621	11/30/23 22:37	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635876	12/01/23 15:09	MMP	EET DEN
Total/NA	Analysis	353.2		1			633594	11/12/23 20:53	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/17/23 02:16	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	634220	11/16/23 11:34	ELB	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	634299	11/16/23 17:52	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635927	12/02/23 11:21	ABW	EET DEN

Client Sample ID: MW-15R

Lab Sample ID: 280-184342-4

Date Collected: 11/09/23 10:48

Matrix: Water

Date Received: 11/10/23 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	691904	11/15/23 08:39	ATG	EET BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	691926	11/15/23 04:58	CDC	EET BUF
Dissolved	Prep	3005A			50 mL	50 mL	634115	11/16/23 07:26	MAB	EET DEN
Dissolved	Analysis	6010D		1			634336	11/16/23 22:32	ADL	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	635162	11/27/23 15:25	MSM	EET DEN
Total Recoverable	Analysis	6010D		1			635448	11/28/23 13:19	ADL	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	634115	11/16/23 07:26	MAB	EET DEN
Dissolved	Analysis	6020B		1			634330	11/17/23 00:23	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	635162	11/27/23 15:25	MSM	EET DEN
Total Recoverable	Analysis	6020B		1			635419	11/28/23 22:53	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	635621	11/30/23 22:48	EJS	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	635876	12/01/23 15:11	MMP	EET DEN
Total/NA	Analysis	353.2		1			633594	11/12/23 20:53	P1C	EET DEN
Total/NA	Analysis	SM 2320B		1			634324	11/17/23 02:22	LL	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	634220	11/16/23 11:34	ELB	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	634299	11/16/23 17:52	CAI	EET DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	635927	12/02/23 11:37	ABW	EET DEN

Lab Chronicle

Client: Waste Management
Project/Site: WA02|Olympic View Sanitary LF

Job ID: 280-184342-1

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

SC0056 = Analytical Resources, Inc, 4611 South 134th Place, Suite 100, Tukwila, WA 98168, TEL (206)695-6200

Analytical Resources, LLC
Analytical Chemists and Consultants
Tukwila, WA

27 November 2023

Janice Collins
Eurofins - Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

RE: Olympic View Sanitary LF (OVSL) w/SCS Engineers (28002692 (Job # 04204027.26))

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)	Associated SDG ID(s)
23K0350	N/A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Shelly Fishel, Project Manager

Cert# 100006-012

4611 S. 134th Place, Suite 100 • Tukwila, WA 98168 • Ph: (206) 695-6200 • Fax: (206) 695-6202

Eurofins Denver 23K0350
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: JE/AD	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-17318-3224.1
Client Contact: Mr. Patrick Madej	Phone: 425-507-6703	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: WA	Page: 1 of 2
Company: Waste Management				Job #: 04204027.26
Address: 2615 Davis Street	Due Date Requested: Standard			
City: San Leandro	TAT Requested (days):			
State, Zip: CA, 94577	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			
Email:	WO #:			
Project Name: WA02|Olympic View Sanitary LF/WA02 Event Desc: Semiannua	Project #: 28002692 - SemiAnnual GW Appl/II - May Nov			
Site: Washington	SSOW#:			

Analysis Requested

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)	TDS/Alks/Cl/SO4/NO3(cad)	6010D/6020B - Dissolved Metals (FF)	6010D/6020B - Total Metals	2540D - TSS	Ammonia/TOC	8260C - VOCs (Buffalo)	8260C_SIM - Vinyl chloride (Buffalo)	Total Arsenic (direct sub to ARI)						Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	D	N	S	A	A	D						X	
MW-13A	11/8/23	1136	G	W	N	N								X							Short Hold: NO3(cad)
MW-13B		1052																			Arsenic - Direct sub to ARI
MW-16		1437																			
MW-19C		1357																			
MW-29A		1037																			
MW-32		1140																			
MW-33A	11/9/23	1229																			
MW-34A	11/8/23	1409																			
MW-34C		1448																			
MW-35		1522																			
MW-36A		1251																			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

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	Jovany Estrada	11/13/23 1350	SCS		11/13/23 1350	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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:

Page 48 of 87

12/5/2023

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

23K0350

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: JE/AD	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-17318-3224.1
Client Contact: Mr. Patrick Madej	Phone: 425-507-6703	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: WA	Page: 2 of 2
Company: Waste Management				Job #: 04204027.26
Address: 2615 Davis Street	Due Date Requested: Standard			
City: San Leandro	TAT Requested (days):			
State, Zip: CA, 94577	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			
Email:	WO #:			
Project Name: WA02|Olympic View Sanitary LF/WA02 Event Desc: Semiannua	Project #: 28002692 - SemiAnnual GW Appl/II - May Nov			
Site: Washington	SSOW#:			

Analysis Requested

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)	TDS/Alks/Cl/SO4/NO3(cad)	6010D/6020B - Dissolved Metals (FF)	6010D/6020B - Total Metals	2540D - TSS	Ammonia/TOC	8260C - VOCs (Buffalo)	8260C_SIM - Vinyl chloride (Buffalo)	Total Arsenic (direct sub to ARI)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D	N	S	A	A	D		
MW-42	11/8/23	1227	G	W	N	N								X		Short Hold: NO3(cad)
MW-43	↓	1313	↓	↓	↓	↓								↓		Arsenic - Direct sub to ARI
MW-39	11/9/23	1030														
MW-33C	↓	1303														
MW-15R		1048														
LP-LCD	↓	0845	↓	↓	↓	↓								↓		

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

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
Jovany Estrada	11/13/23	1347 SCS	Matthew Rice	11/13/23 1347	ARCC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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:

Page 49 of 87

12/5/2023

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

23K0350

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-681392.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Washington	Page: Page 1 of 1
Company: Analytical Resources, Inc		Accreditations Required (See note): State - Washington		Job #: 280-184337-1
Address: 4611 South 134th Place, Suite 100, ,	Due Date Requested: 11/30/2023			
City: Tukwila	TAT Requested (days):			
State, Zip: WA, 98168				
Phone: 206-695-6200(Tel)	PO #:			
Email:	WO #:			
Project Name: WA02|Olympic View Sanitary LF	Project #: 28002692			
Site: WA02|Olympic View Sanitary LF	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 - Client ID (Lab ID)	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)	SUB (Total Arsenic (ARI))/ Total Arsenic (ARI)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
LP-LCD (280-184337-1)	11/9/23	08:45 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	11/14/23 1455	ETADEN	[signature]	11/15/23 1030	ARLLC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
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:

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-13A	23K0350-01	Water	08-Nov-2023 11:36	13-Nov-2023 13:50
MW-13B	23K0350-02	Water	08-Nov-2023 10:52	13-Nov-2023 13:50
MW-16	23K0350-03	Water	08-Nov-2023 14:37	13-Nov-2023 13:50
MW-19C	23K0350-04	Water	08-Nov-2023 13:57	13-Nov-2023 13:50
MW-29A	23K0350-05	Water	08-Nov-2023 10:37	13-Nov-2023 13:50
MW-32	23K0350-06	Water	08-Nov-2023 11:40	13-Nov-2023 13:50
MW-33A	23K0350-07	Water	09-Nov-2023 12:29	13-Nov-2023 13:50
MW-34A	23K0350-08	Water	08-Nov-2023 14:09	13-Nov-2023 13:50
MW-34C	23K0350-09	Water	08-Nov-2023 14:48	13-Nov-2023 13:50
MW-35	23K0350-10	Water	08-Nov-2023 15:22	13-Nov-2023 13:50
MW-36A	23K0350-11	Water	08-Nov-2023 12:51	13-Nov-2023 13:50
MW-42	23K0350-12	Water	08-Nov-2023 12:27	13-Nov-2023 13:50
MW-43	23K0350-13	Water	08-Nov-2023 13:13	13-Nov-2023 13:50
MW-39	23K0350-14	Water	09-Nov-2023 10:30	13-Nov-2023 13:50
MW-33C	23K0350-15	Water	09-Nov-2023 13:03	13-Nov-2023 13:50
MW-15R	23K0350-16	Water	09-Nov-2023 10:48	13-Nov-2023 13:50
LP-LCD	23K0350-17	Water	09-Nov-2023 08:45	13-Nov-2023 13:50
DUP1	23K0350-18	Water	08-Nov-2023 10:48	13-Nov-2023 13:50
DUP2	23K0350-19	Water	08-Nov-2023 13:05	13-Nov-2023 13:50

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

Work Order Case Narrative

Client: Eurofins - Test America - Denver
Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers
Project Number: 28002692 (Job # 04204027.26)
Work Order: 23K0350

Sample receipt

Samples as listed on the preceding page were received 13-Nov-2023 13:50 under ARI work order 23K0350. For details regarding sample receipt, please refer to the Cooler Receipt Form. Not all of the samples were received at this time. See receipt forms attached.

Total Metals - EPA Method 6020B

The sample(s) were prepared and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

The method blank(s) were clean at the reporting limits.

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries and relative percent difference (RPD) were within control limits.

WORK ORDER

23K0350

Samples will be discarded 90 days after submission of a final report unless other instructions are received

Client: Eurofins - Test America - Denver **Project Manager:** Shelly Fishel

Project: Olympic View Sanitary LF (OVSL) w/SCS Engine **Project Number:** 28002692

Preservation Confirmation

Container ID	Container Type	pH	
23K0350-01 A	HDPE NM, 250mL HNO3	<2	pass
~~23K0350-02 A~~	~~HDPE NM, 250mL HNO3~~		
23K0350-03 A	HDPE NM, 250mL HNO3	<2	pass
23K0350-04 A	HDPE NM, 250mL HNO3	<2	pass
~~23K0350-05 A~~	~~HDPE NM, 250mL HNO3~~		
23K0350-06 A	HDPE NM, 250mL HNO3	<2	pass
23K0350-07 A	HDPE NM, 250mL HNO3	<2	
23K0350-08 A	HDPE NM, 250mL HNO3	<2	
23K0350-09 A	HDPE NM, 250mL HNO3	<2	
23K0350-10 A	HDPE NM, 250mL HNO3	<2	
23K0350-11 A	HDPE NM, 250mL HNO3	<2	
23K0350-12 A	HDPE NM, 250mL HNO3	<2	
23K0350-13 A	HDPE NM, 250mL HNO3	<2	
23K0350-14 A	HDPE NM, 250mL HNO3	<2	
23K0350-15 A	HDPE NM, 250mL HNO3	<2	
23K0350-16 A	HDPE NM, 250mL HNO3	<2	
~~23K0350-17 A~~	~~HDPE NM, 250mL HNO3~~		

CB 11/13

CB for MP
Preservation Confirmed By

11/13/23
Date

Reviewed By

Date

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: SCS
COC No(s): 280-17318-3224.1 NA MD 11/13/23
Assigned ARI Job No: 23K0350
Project Name: WA023 Olympic View Sanitary
Delivered by: Fed-Ex UPS Courier Hand Delivered Other:
Tracking No: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 3.2°C
Time 1440
If cooler temperature is out of compliance fill out form 00070F
Temp Gun ID#: SCC97708

Cooler Accepted by: MD Date: 11/13/23 Time: 1350

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:			
Was sufficient ice used (if appropriate)?	NA	YES	NO
How were bottles sealed in plastic bags?	Individually	Grouped	Not (CB 11/13)
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		YES	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ...	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO
Date VOC Trip Blank was made at ARI	NA		

Were the sample(s) split by ARI? NA YES Date/Time: Equipment: Split by:

Samples Logged by: Date: 11/13/23 Time: 1451 Labels checked by: CB

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

Missing bottle MW-13B, MW-29A, and LP-2CD. Have 4 extra bottles, labeled as duplicates

By: Date: 11/13/23

RE: Extra/Missing Bottles OVLF

Janice Collins <Janice.Collins@et.eurofinsus.com>
Tue 11/14/2023 9:02 AM
To:Shelly Fishel <shelly.fishel@arilabs.com>;Sample Receiving <sample-receiving@arilabs.com>
Cc:Leia Wing <Leia.Wing@et.eurofinsus.com>

2 attachments (2 MB)
MX-6071_20231113_152913.pdf; extrabottles.JPG;

Hi Shelly,

Per the sampler - Referring to the picture going from left to right the first bottle is MW-29A, the next bottle is Dup 2, the next is Dup 1 and the last is MW-13B.

They inadvertently shipped sample LP-LCD to us. We will send it out to you.

Let me know if you have additional questions.

Thank you!

Janice Collins

Direct: 303-736-0124
E-mail: Janice.Collins@ET.EurofinsUS.com

From: Shelly Fishel <shelly.fishel@arilabs.com>
Sent: Monday, November 13, 2023 4:34 PM
To: Janice Collins <Janice.Collins@et.eurofinsus.com>
Subject: Fw: Extra/Missing Bottles OVLF
Importance: High

Hi Janice,

We have received samples for the Olympic View Landfill. There are discrepancies between the samples received and the attached COC.

- We are missing the yellow highlighted samples
- The green highlighted sample we believe is the bottle labeled DUP2 (computer printed label) as it has the same time and date. The far left bottle in the picture.
- We have three additional bottles not listed on the COC. The other bottles in the picture.
- Please note there are two bottles labeled as DUP2 -one handwritten and one printed.

Can you help us to resolve this? Please respond to me and the sample receiving group as I am only working part time. sample-receiving@arilabs.com

11/13/2023 15:13
Client:
Sample ID: MW-39
Location: WA02|Olympic View Sanitary LF/
Comments: Low Level Arsenic (ARI)
Preservative: Nitric Acid
Collection Date/Time:
Collected By:
Bottle Type: Plastic 250ml - with Nitric Acid
Client: SCS
Sample ID: ~~MW-33C~~ DUP-1
Location: WA02|Olympic View Sanitary LF/WA02
Comments: Low Level Arsenic (ARI)
Preservative: Nitric Acid
Collection Date/Time: 11/8/23 1048
Collected By: AMD
Bottle Type: Plastic 250ml - with Nitric Acid
Client: SCS
Sample ID: ~~MW-13C~~ DUP 2
Location: WA02|Olympic View Sanitary LF/WA02
Comments: Low Level Arsenic (ARI)
Preservative: Nitric Acid
Collection Date/Time: 11/6/23 1300
Collected By: JE
Bottle Type: Plastic 250ml - with Nitric Acid
Client: SCS
Sample ID: DUP2
Location: WA02|Olympic View Sanitary LF/WA02
Comments: Low Level Arsenic (ARI)
Preservative: Nitric Acid
Collection Date/Time: 11/8/23 10:37
Collected By: AMD
Bottle Type: Plastic 250ml - with Nitric Acid

WORK ORDER

23K0350

Samples will be discarded 90 days after submission of a final report unless other instructions are received

Client: Eurofins - Test America - Denver **Project Manager:** Shelly Fishel

Project: Olympic View Sanitary LF (OVSL) w/SCS Engine **Project Number:** 28002692 (Job # 04204027.26)

Preservation Confirmation

Container ID	Container Type	pH
23K0350-01 A	HDPE NM, 250mL HNO3	
23K0350-02 A	HDPE NM, 250mL HNO3	
23K0350-03 A	HDPE NM, 250mL HNO3	
23K0350-04 A	HDPE NM, 250mL HNO3	
23K0350-05 A	HDPE NM, 250mL HNO3	
23K0350-06 A	HDPE NM, 250mL HNO3	
23K0350-07 A	HDPE NM, 250mL HNO3	
23K0350-08 A	HDPE NM, 250mL HNO3	
23K0350-09 A	HDPE NM, 250mL HNO3	
23K0350-10 A	HDPE NM, 250mL HNO3	
23K0350-11 A	HDPE NM, 250mL HNO3	
23K0350-12 A	HDPE NM, 250mL HNO3	
23K0350-13 A	HDPE NM, 250mL HNO3	
23K0350-14 A	HDPE NM, 250mL HNO3	
23K0350-15 A	HDPE NM, 250mL HNO3	
23K0350-16 A	HDPE NM, 250mL HNO3	
23K0350-17 A	HDPE NM, 250mL HNO3	Z2 pass
23K0350-18 A	HDPE NM, 250mL HNO3	
23K0350-19 A	HDPE NM, 250mL HNO3	

MP
Preservation Confirmed By

11/15/23
Date

All other samples were pres checked on 11/13/23

Reviewed By

Date

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Evrofins

Project Name: WA02 Olympic View Sanitary

COC No(s): _____ NA

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: 23K0350

Tracking No: 020170F40016932 4 NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 12.8°C

Time 1038

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 509708

Cooler Accepted by: MP Date: 11/15/23 Time: 1030

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:			
Was sufficient ice used (if appropriate)?	NA	YES	NO
How were bottles sealed in plastic bags?	Individually	Grouped	Not
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		YES	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ...	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO
Date VOC Trip Blank was made at ARI	NA		

Were the sample(s) split by ARI? NA YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: MP Date: 11/15/23 Time: 1253 Labels checked by: MP

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Temperature Compliance Form

ARI Work Order: 23K0350

Cooler#: 1 **Temperature(°C):** 12.8cc

Sample ID	Bottle Count	Bottle Type
Samples received above 6.0cc		

Cooler#: _____ **Temperature(°C):** _____

Sample ID	Bottle Count	Bottle Type

Cooler#: _____ **Temperature(°C):** _____

Sample ID	Bottle Count	Bottle Type

Cooler#: _____ **Temperature(°C):** _____

Sample ID	Bottle Count	Bottle Type

Completed by: MD Date: 11/15/23 Time: 1030

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-13A
23K0350-01 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 11:36
Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:22

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-01 A 01
Preparation Batch: BLK0513 — Sample Size: 100 mL
Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000180	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-13B

23K0350-02 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 10:52

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:25

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-02 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000326	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-16

23K0350-03 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 14:37

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:29

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-03 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000395	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-19C

23K0350-04 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 13:57

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:32

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-04 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00238	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-29A

23K0350-05 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 10:37

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:35

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-05 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00178	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-32

23K0350-06 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 11:40

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:39

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-06 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00928	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-33A

23K0350-07 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/09/2023 12:29

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:42

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-07 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000227	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-34A

23K0350-08 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 14:09

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:46

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-08 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000412	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-34C

23K0350-09 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 14:48

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:51

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-09 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00749	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-35

23K0350-10 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 15:22

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:07

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-10 A 01

Preparation Batch: BLK0513 — Sample Size: 100 mL

Prepared: 11/17/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000103	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-36A

23K0350-11 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 12:51

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:10

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-11 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000571	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-42

23K0350-12 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 12:27

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:13

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-12 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00167	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-43

23K0350-13 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 13:13

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:17

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-13 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.0000548	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-39

23K0350-14 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/09/2023 10:30

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:20

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-14 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00108	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-33C

23K0350-15 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/09/2023 13:03

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:23

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-15 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00265	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

MW-15R

23K0350-16 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/09/2023 10:48

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:27

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-16 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000191	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

LP-LCD

23K0350-17 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/09/2023 08:45

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 00:06

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-17 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	10	0.0000746	0.000400	0.0153	mg/L	D

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

DUP1

23K0350-18 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 10:48

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:31

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-18 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.00190	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

DUP2

23K0350-19 (Water)

Metals and Metallic Compounds

Method: EPA 6020B UCT-KED — Sampled: 11/08/2023 13:05

Instrument: ICPMS2 Analyst: MCB — Analyzed: 11/21/2023 01:35

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x — Extract ID: 23K0350-19 A 01

Preparation Batch: BLK0548 — Sample Size: 100 mL

Prepared: 11/20/2023 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Arsenic	7440-38-2	1	0.00000746	0.0000400	0.000579	mg/L	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BLK0513 - EPA 6020B UCT-KED

Instrument: ICPMS2 Analyst: MCB

QC Sample/Analyte	Isotope	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BLK0513-BLK1)					Prepared: 17-Nov-2023 Analyzed: 20-Nov-2023 17:04							
Arsenic	75a	ND	0.00000746	0.0000400	mg/L							U
LCS (BLK0513-BS1)					Prepared: 17-Nov-2023 Analyzed: 20-Nov-2023 17:07							
Arsenic	75a	0.00490	0.00000746	0.0000400	mg/L	0.00500		97.9	80-120			
LCS Dup (BLK0513-BSD1)					Prepared: 17-Nov-2023 Analyzed: 20-Nov-2023 17:11							
Arsenic	75a	0.00474	0.00000746	0.0000400	mg/L	0.00500		94.7	80-120	3.37	20	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

Analysis by: Analytical Resources, LLC

Metals and Metallic Compounds - Quality Control

Batch BLK0548 - EPA 6020B UCT-KED

Instrument: ICPMS2 Analyst: MCB

QC Sample/Analyte	Isotope	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BLK0548-BLK1)					Prepared: 20-Nov-2023 Analyzed: 20-Nov-2023 17:53							
Arsenic	75a	0.0000120	0.00000746	0.0000400	mg/L							J
LCS (BLK0548-BS1)					Prepared: 20-Nov-2023 Analyzed: 20-Nov-2023 17:57							
Arsenic	75a	0.00484	0.00000746	0.0000400	mg/L	0.00500		96.7	80-120			
LCS Dup (BLK0548-BSD1)					Prepared: 20-Nov-2023 Analyzed: 20-Nov-2023 18:00							
Arsenic	75a	0.00470	0.00000746	0.0000400	mg/L	0.00500		93.9	80-120	2.94	20	

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

Certified Analyses included in this Report

Analyte	Certifications
EPA 6020B UCT-KED in Water	
Arsenic-75a	WADOE,DoD-ELAP,ADEC,NELAP

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	03/28/2025
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program, PJLA Testing	66169	02/28/2025
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2024

Eurofins - Test America - Denver	Project: Olympic View Sanitary LF (OVSL) w/SCS Engineers	
4955 Yarrow Street	Project Number: 28002692 (Job # 04204027.26)	**Reported:**
Arvada CO, 80002	Project Manager: Janice Collins	27-Nov-2023 14:31

Notes and Definitions

*	Flagged value is not within established control limits.
D	The reported value is from a dilution
J	Estimated concentration value detected below the reporting limit.
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
[2C]	Indicates this result was quantified on the second column on a dual column analysis.

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

eurofins

Client Information	Sampler: JE/AD	Lab PM: Collins, Janice S	Carrier Tracking No(s): 5180378343 32	COC No: 280-17318-3224.1
Client Contact: Mr. Patrick Madej	Phone: (925)507-6703	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: WA	Page: 1 of 1
Company: Waste Management		Analysis Requested		Job #: 0422027.26
Address: 2615 Davis Street	Due Date Requested: standard			Preservation Codes:
City: San Leandro	TAT Requested (days):			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 - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: CA, 94577	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			Other:
Email:	WO #:			
Project Name: WA02|Olympic View Sanitary LF/WA02 Event Desc: Semiannu	Project #: 28002692 - SemiAnnual GW Appl/II - May Nov			
Site: Washington	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)	TDS/Alks/Cl/SO4/NO3(cad)	6010D/6020B - Dissolved Metals (FF)	6010D/6020B - Total Metals	2540D - TSS	Ammonia/TOC	8260C - VOCs (Buffalo)	8260C_SIM - Vinyl chloride (Buffalo)	Total Arsenic (direct sub to ARI)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D	N	S	A	A	D		
MW-33A	11/9/23	1229	G	W	Y	N	X	X	X	X	X	X	X			Short Hold: NO3(cad)
MW-39		1030														Arsenic - Direct sub to ARI
MW-33C		1323														
MW-15R		1048														

280-184342 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒ Radiological	☐ 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
Jovany Estrada	11/9/23	SCS		11/10/23 0950	EETDEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		2.4°C Mom's CF0-3

Page 83 of 87

11/15/2023

280-184342 Waybill

Do Not Lift Using This Tag

ORIGIN ID:PWTA

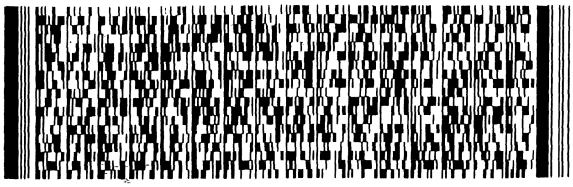
SHIP DATE: 09NOV23
ACTWGT: 57.30 LB
CAD: /SSFE2460
DIMS: 23x14x14 IN

Part # 156297-438 RRD DSC EXP 12/23

TO SAMPLE RECIEVING
EUROFINS DENVER
4955 YARROW ST

ARVADA CO 80002-4517 (US)

(303) 736-0100 REF:
INV:
PO: DEPT:



FedEx Express

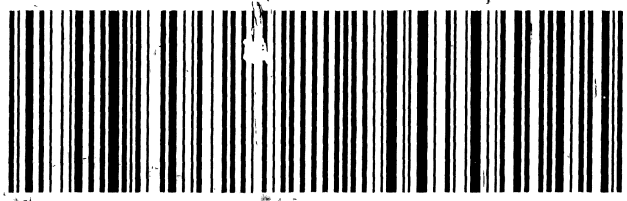
J234023101502uu

TRK# 0667 8180 3783 4332

FRI - 10 NOV 10:30A
PRIORITY OVERNIGHT

XA LAAA

80002
CO-US DEN



Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-681053.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Washington	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): State - Washington		Job #: 280-184342-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/4/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: WA02|Olympic View Sanitary LF	Project #: 28002692			
Site: WA02|Olympic View Sanitary LF	SSOW#:			

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:

Analysis Requested

Sample Identification - Client ID (Lab ID)	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)	8260C_SIM/5030C (MOD) Local Method	8260C/5030C (MOD) Appendix II Volatiles	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW-33A (280-184342-1)	11/9/23	12:29 Pacific		Water			X	X	6	
MW-39 (280-184342-2)	11/9/23	10:30 Pacific		Water			X	X	6	
MW-33C (280-184342-3)	11/9/23	13:03 Pacific		Water			X	X	6	
MW-15R (280-184342-4)	11/9/23	10:48 Pacific		Water			X	X	6	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	11-13-23 15:30		[signature]	11-14-23 1000	FedEx
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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: 2.1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-184342-1

Login Number: 184342
List Number: 1
Creator: Held, Wesley

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is 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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-184342-1

Login Number: 184342
List Number: 2
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 11/14/23 02:12 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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	2.1 ICE
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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
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	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Appendix C

2023 Annual Time Series, Trend Test, & Predication Limit Evaluation

Olympic View Sanitary Landfill

Annual Statistical Evaluation & Summary

2023 Monitoring Year

Prepared for:

SCS ENGINEERS

2405 140th Ave NE, Ste 107
Bellevue, Washington 98005
(425) 746-4600

Prepared by:

GeoChem Applications
Geochemical and Statistical Data Analysis

3941 Park Drive, Suite 20-249
El Dorado Hills, CA 95762
916 ♦ 939 ♦ 2307
www.geochemapplications.com

MARCH 2024

CONTENTS:

1. *Statistical Trend Analysis (showing status through Q4 2023)*
2. *Prediction Limits for Detection Monitoring*
    a. *2023 Prediction Limits (showing status through Q4 2023)*
    b. *Updated Prediction Limits for Use in 2024 Monitoring Year*
3. *2023 Annual UCL Calculations for Preliminary Groundwater Cleanup Goals*

---

1. Statistical Trend Analysis

- Trend Results Summary Table (showing status through Q4 2023) (Table 1-1)
- Time-Series Graphs Depicting Significant Trends for “Trend Test A”
- Time-Series Graphs Depicting Significant Trends for “Trend Test B”

TABLE 1-1

Results of Sen's Non-Parametric Test for Trend

FOURTH QUARTER 2023

Trend Test Period: January 2005 through December 2023

Trend Test Wells:

- Compliance Wells: MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43
- Performance Wells: MW-19C
- Downgradient Wells: MW-29A, MW-32, MW-33A, MW-33C, MW-36A
- Upgradient Wells* MW-13A, MW-13B, MW-16, MW-35

*trend status shown is based on most recent event with reported data, as shown

Trend Test A *= all organic parameters listed in Appendix I and Appendix II of WAC 173-351-990 that have been detected at least once in at least one of 16 wells comprising the network of 1) compliance, 2) performance, 3) downgradient, and 4) upgradient site monitoring wells, during the trend test period. This includes the following constituents:*

	Significant Increasing Trends	Significant Decreasing Trends
1,2-Dichloroethene (total)	None	None
1,2-Dichlorobenzene	None	None
1,4-Dichlorobenzene	None	None
2-Butanone (MEK)	None	None
Acetone	None	None
Carbon Disulfide	None	None
Chlorobenzene	None	None
Chlorodifluoromethane	None	None
Chloroform	None	None
Chloromethane	None	None
cis-1,2-dichloroethene	None	None
Dichlorodifluoromethane	None	None
Dichlorofluoromethane	None	None
Ethyl Ether	None	None
Methylene Chloride	None	None
Naphthalene	None	None
n-Butyl Alcohol	None	None
tert-Butyl Alcohol	None	None
Tetrahydrofuran	None	None
trans-1,2-Dichloroethene	None	None
Trichloroethene	None	MW-19C (graph 325)
Vinyl Chloride	None	MW-19C (graph 341) MW-32 (graph 343) MW-34C (graph 347)

TABLE 1-1

Trend Test B *= all metals and groundwater quality parameters listed in Appendix I and Appendix II of WAC (173-351-990)*

	Significant Increasing Trends	Significant Decreasing Trends
Alkalinity, bicarbonate (as CaCO3)	MW-13B (graph 2) MW-35 (graph 12)	MW-15R (graph 3) MW-34A (graph 10) MW-34C (graph 11) MW-36A (graph 13) MW-42 (graph 15)
Alkalinity, total (as CaCO3)	MW-13B (graph 18) MW-35 (graph 28)	MW-15R (graph 19) MW-34A (graph 26) MW-34C (graph 27) MW-36A (graph 29) MW-42 (graph 31)
Ammonia (as N)	None	MW-19C (graph 37) MW-29A (graph 38) MW-42 (graph 47) MW-43 (graph 48)
Antimony, total	None	None
Arsenic, total	MW-33A (graph 72) MW-33C (graph 73)	MW-19C (graph 69)
Barium, total	None	MW-15R (graph 83) MW-29A (graph 86) MW-42 (graph 95)
Beryllium, total	None	None
Cadmium, total	None	None
Calcium, dissolved	None	MW-15R (graph 131) MW-29A (graph 134) MW-32 (graph 135) MW-34A (graph 138) MW-34C (graph 139) MW-36A (graph 141)
Chloride	MW-39 (graph 158)	MW-15R (graph 147) MW-19C (graph 149) MW-34A (graph 154) MW-34C (graph 155) MW-42 (graph 159)
Chromium, total	None	None
Cobalt, total	None	None
Copper, total	None	None
Iron, total	None	None
Lead, total	None	None

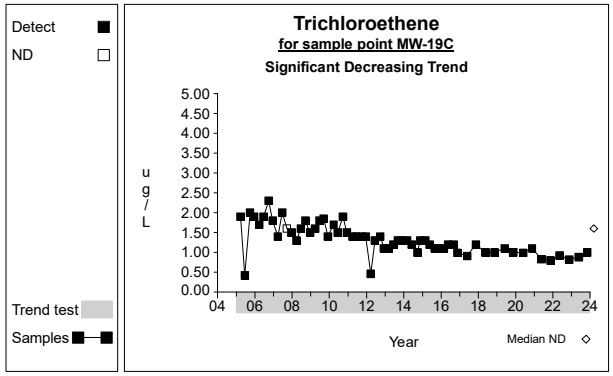
TABLE 1-1

Magnesium, dissolved	MW-39 (graph 254)	MW-15R (graph 243) MW-16 (graph 244) MW-33A (graph 248) MW-34A (graph 250) MW-34C (graph 251) MW-42 (graph 255)
Manganese, total	None	MW-42 (graph 271) MW-43 (graph 272)
Nickel, total	None	None
Nitrate (as N)	MW-35 (graph 300)	MW-13B (graph 290) MW-16 (graph 292)
pH	MW-32 (graph 311) MW-34C (graph 315) MW-42 (graph 319)	None
Potassium, dissolved	MW-42 (graph 335)	None
Selenium, total	None	None
Silver, total	None	None
Sodium, dissolved	None	MW-15R (graph 371) MW-19C (graph 373) MW-32 (graph 375) MW-34A (graph 378) MW-34C (graph 379) MW-36A (graph 381) MW-42 (graph 383) MW-43 (graph 384)
Specific Conductivity	MW-13B (graph 386) MW-33C (graph 393) MW-35 (graph 396) MW-39 (graph 398)	MW-15R (graph 387) MW-33A (graph 392) MW-34A (graph 394) MW-34C (graph 395)
Sulfate	MW-33A (graph 408)	MW-13B (graph 402) MW-19C (graph 405) MW-32 (graph 407) MW-42 (graph 415)
Temperature	MW-34A (graph 426) MW-34C (graph 427) MW-35 (graph 428)	None
Thallium, total	None	None
Total Dissolved Solids	None	MW-15R (graph 451) MW-32 (graph 455) MW-33A (graph 456) MW-34A (graph 458) MW-34C (graph 459)

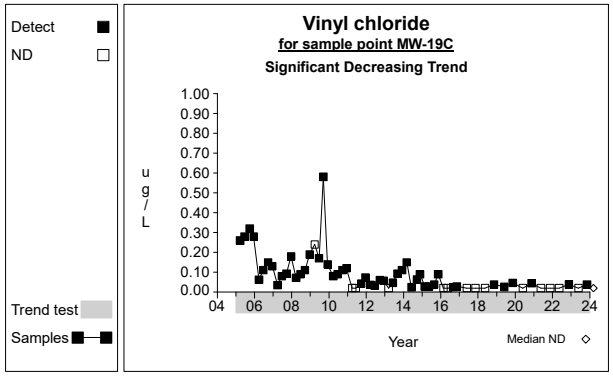
TABLE 1-1

Total Organic Carbon	None	MW-34C (graph 475)
Vanadium, total	None	None
Zinc, total	None	None

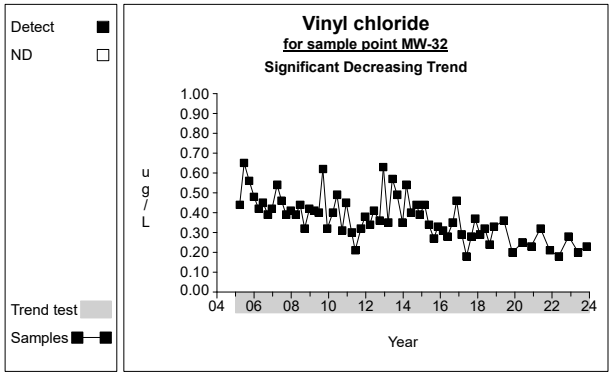
Time Series



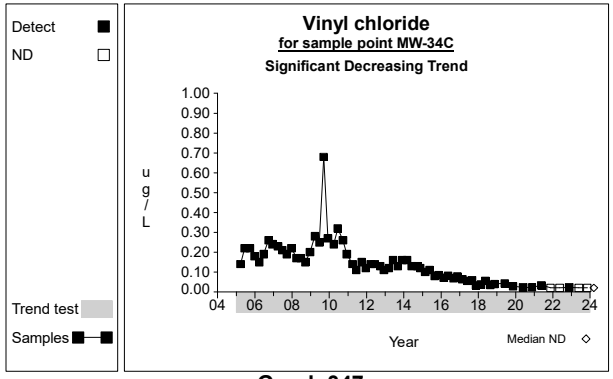
Graph 325



Graph 341

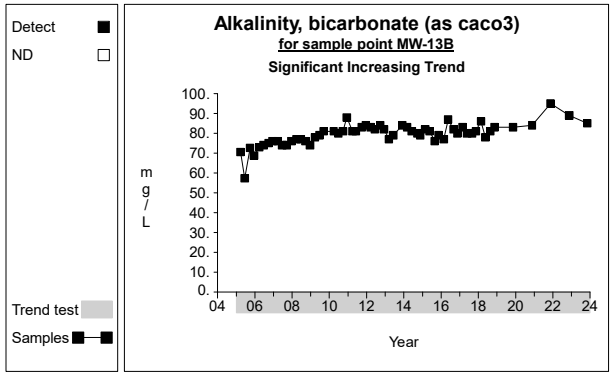


Graph 343

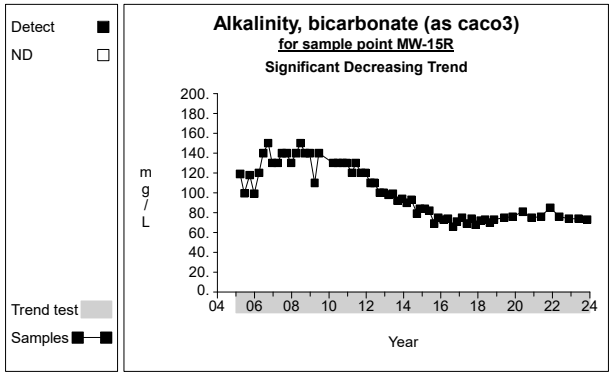


Graph 347

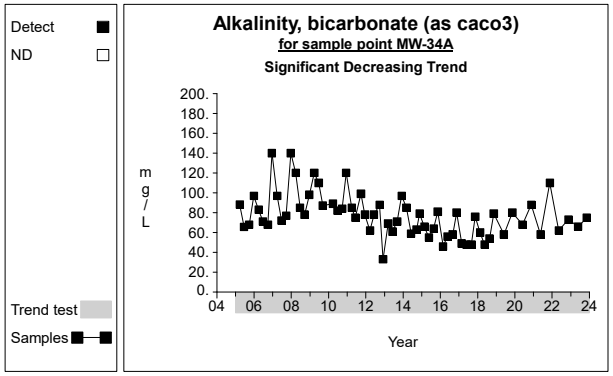
Time Series



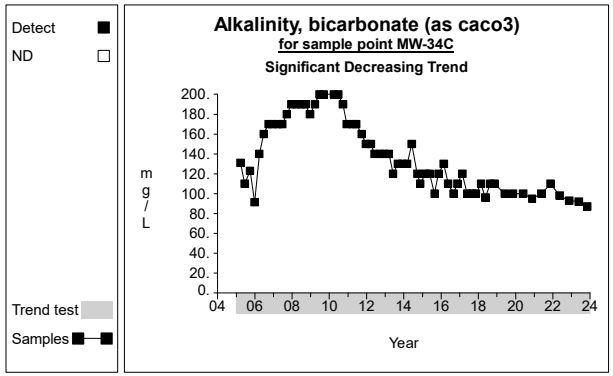
Graph 2



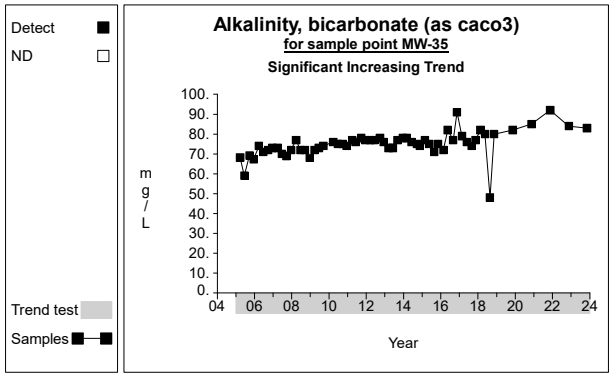
Graph 3



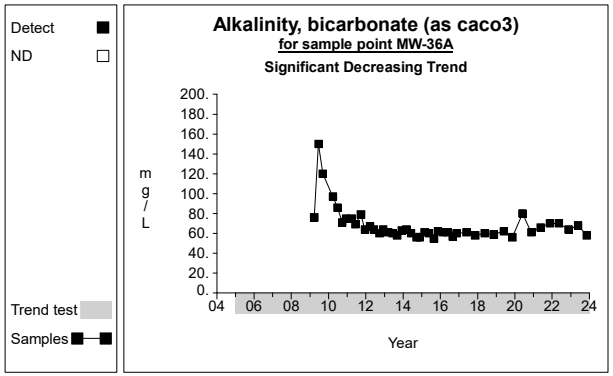
Graph 10



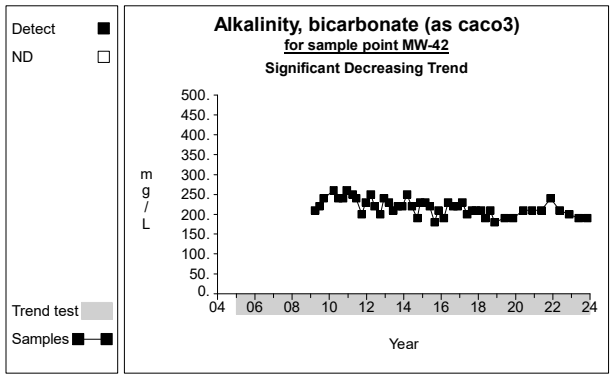
Graph 11



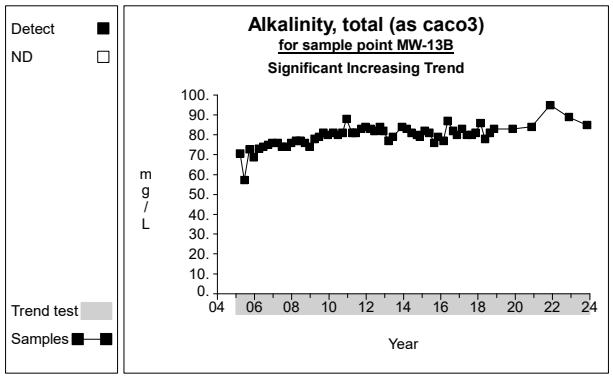
Graph 12



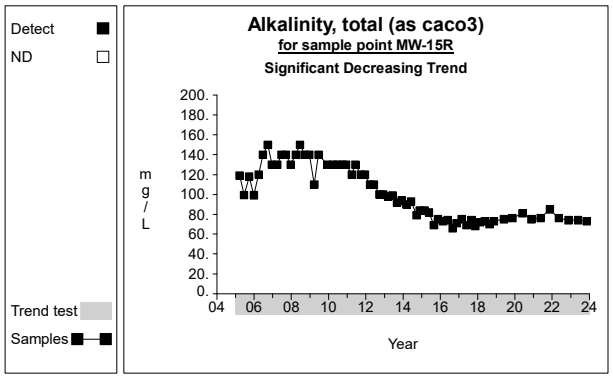
Graph 13



Graph 15

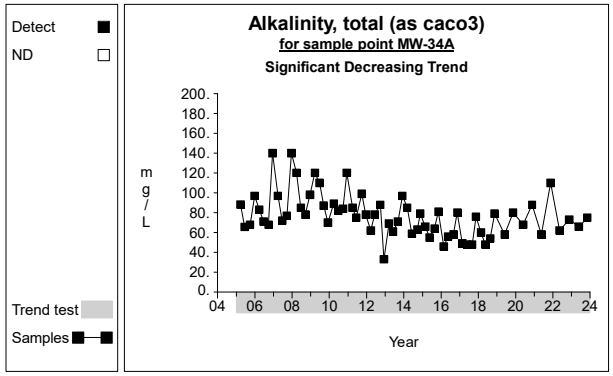


Graph 18

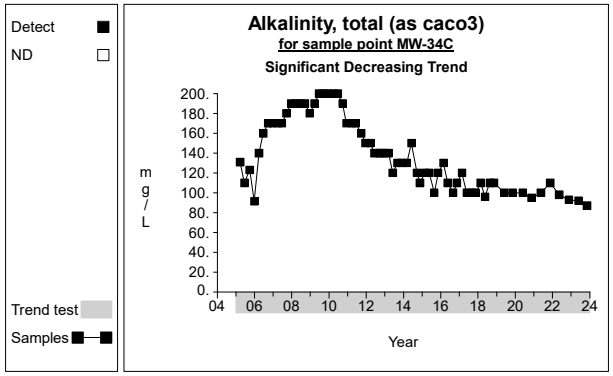


Graph 19

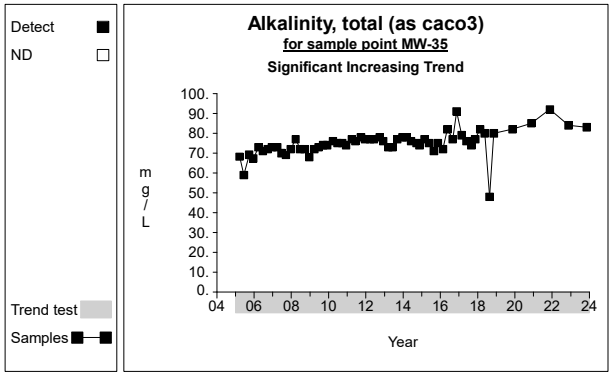
Time Series



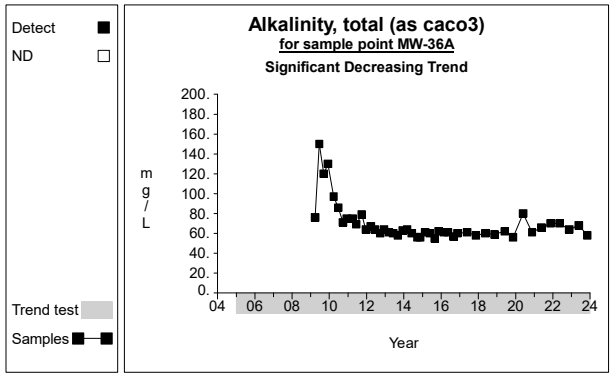
Graph 26



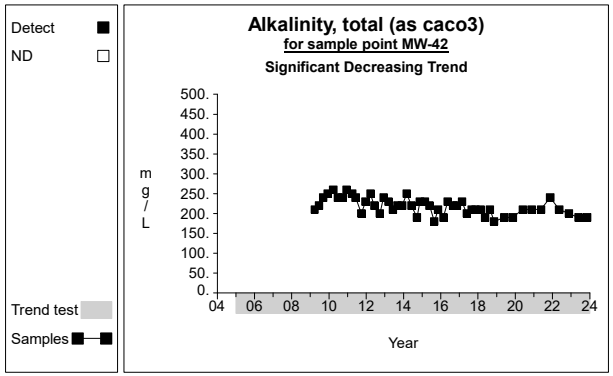
Graph 27



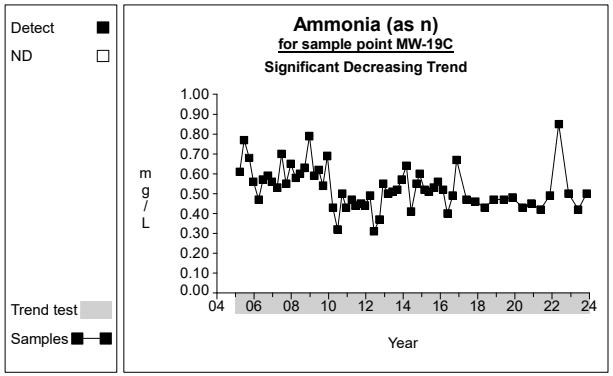
Graph 28



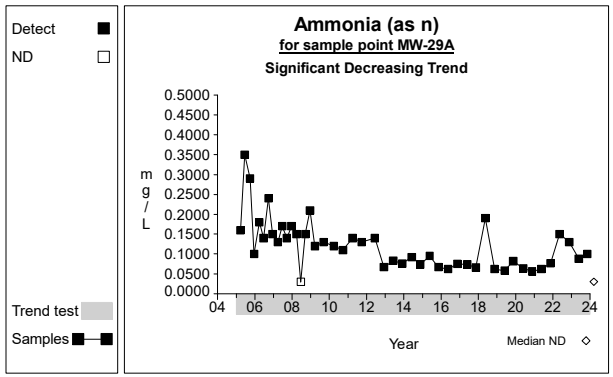
Graph 29



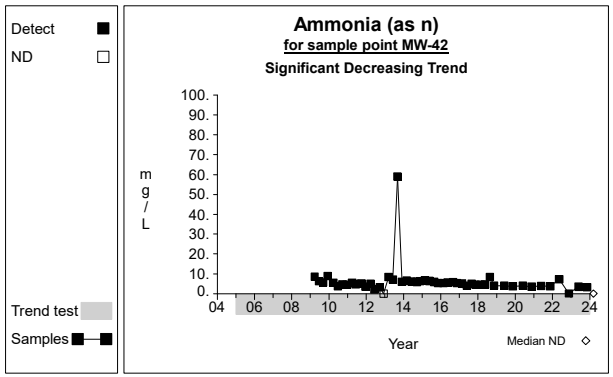
Graph 31



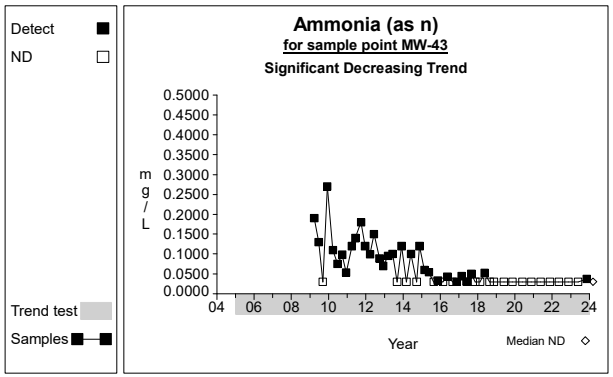
Graph 37



Graph 38

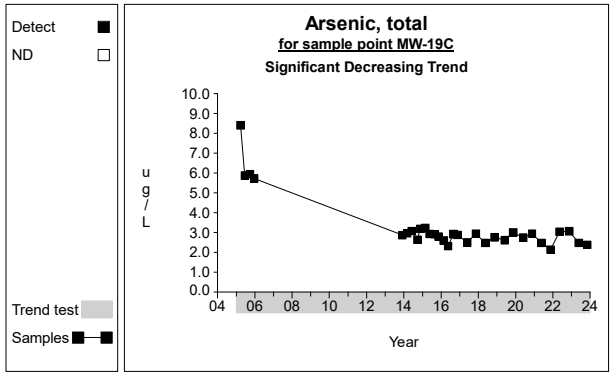


Graph 47

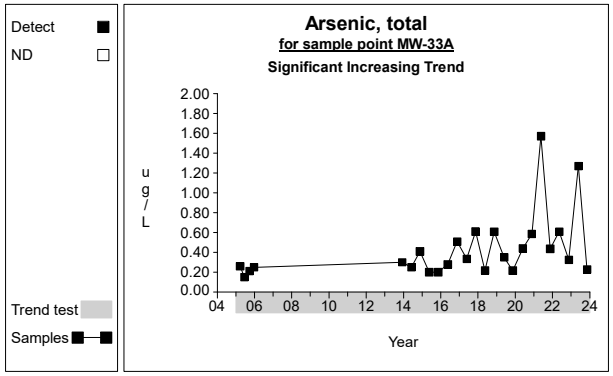


Graph 48

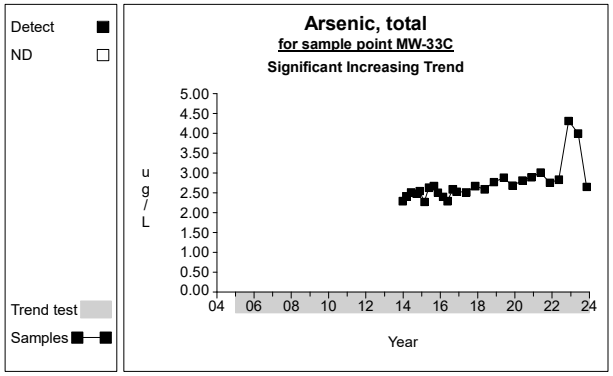
Time Series



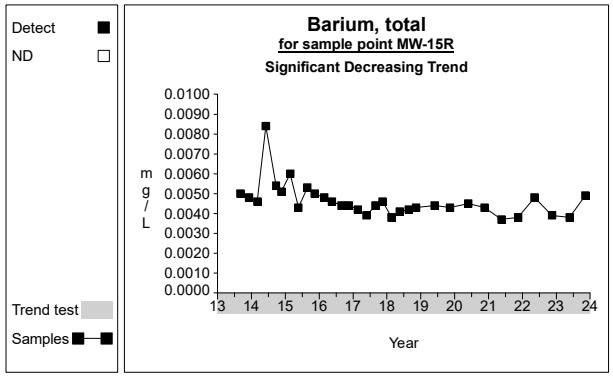
Graph 69



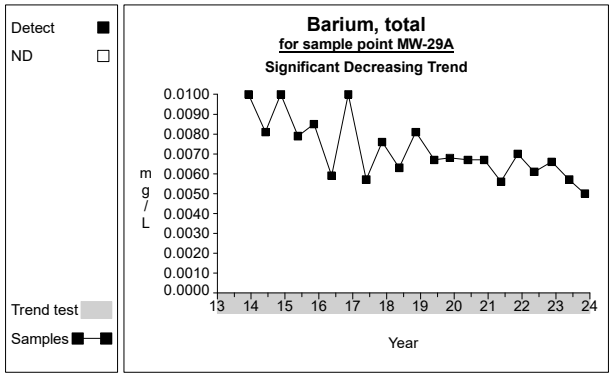
Graph 72



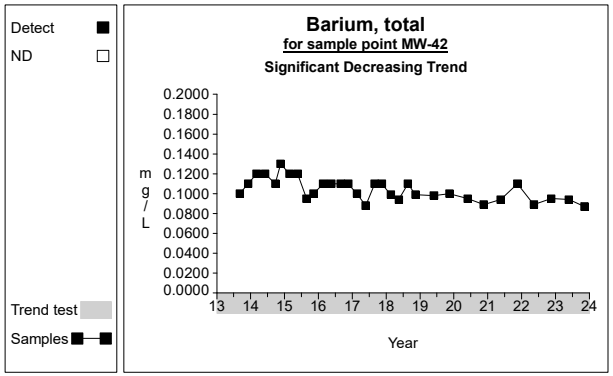
Graph 73



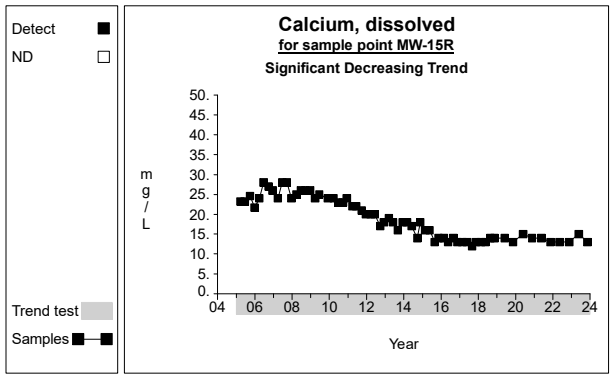
Graph 83



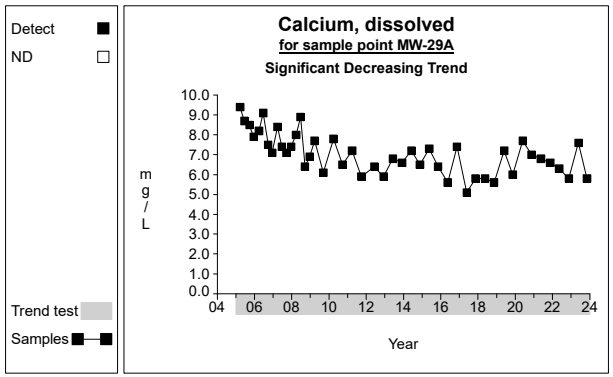
Graph 86



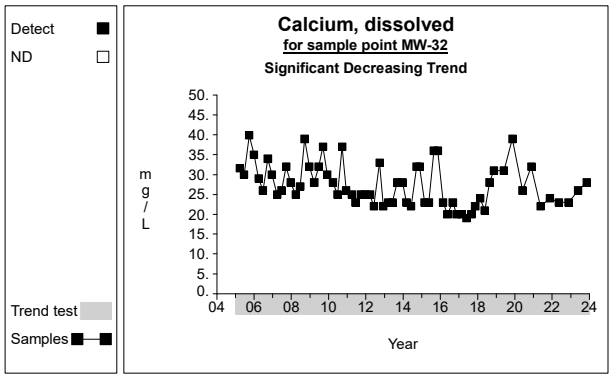
Graph 95



Graph 131

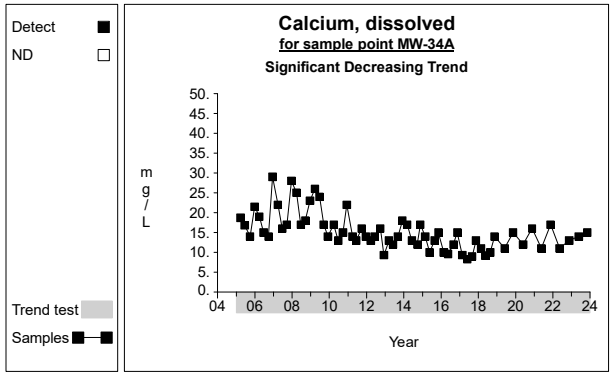


Graph 134

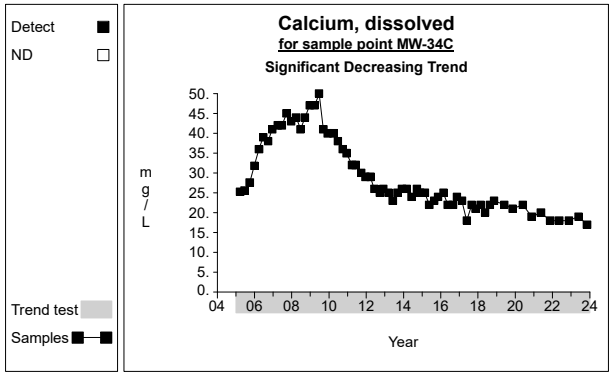


Graph 135

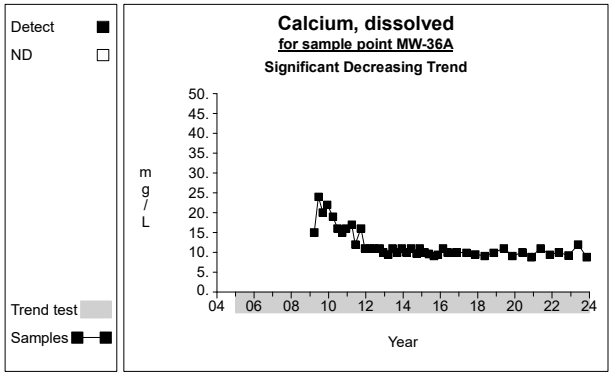
Time Series



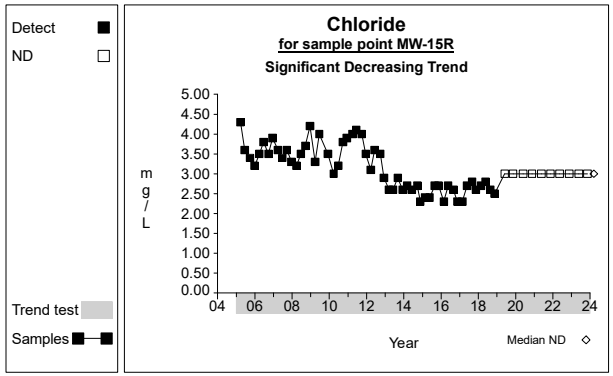
Graph 138



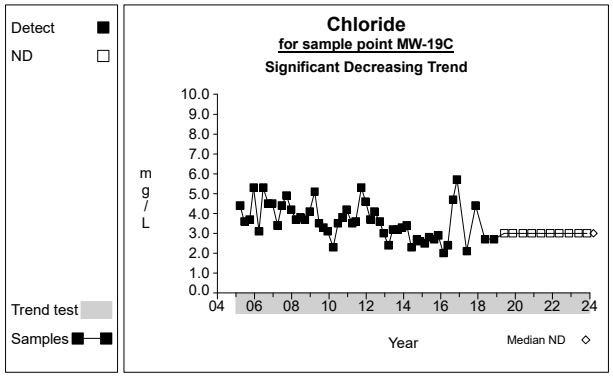
Graph 139



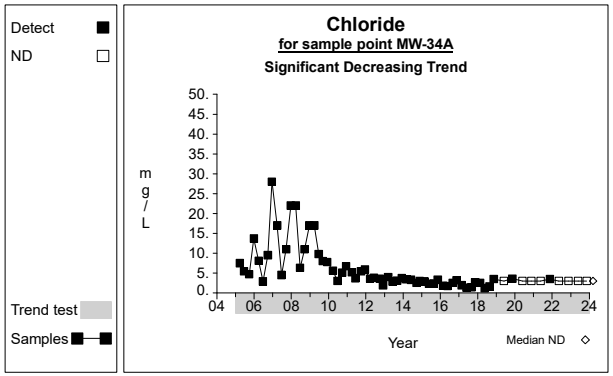
Graph 141



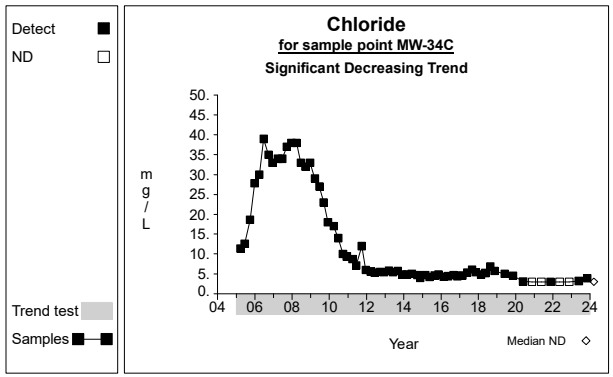
Graph 147



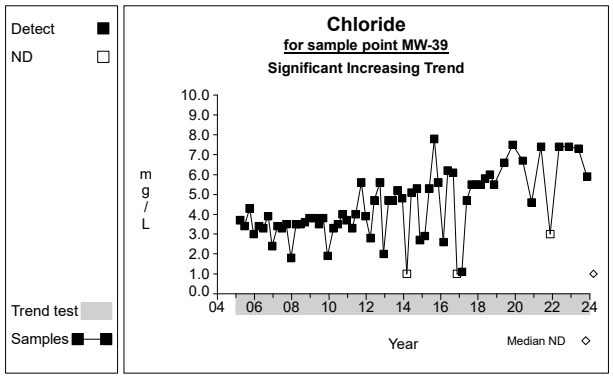
Graph 149



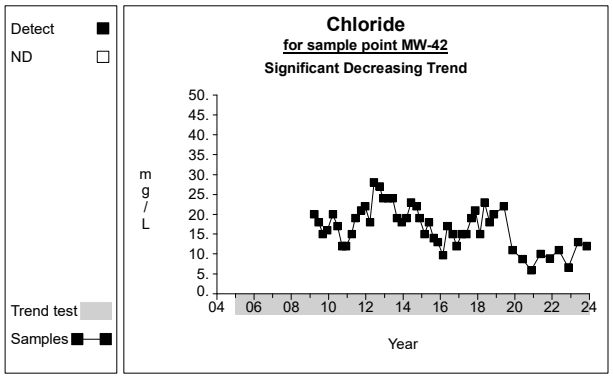
Graph 154



Graph 155

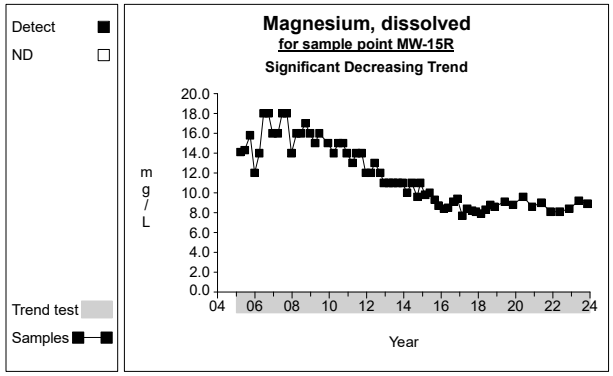


Graph 158

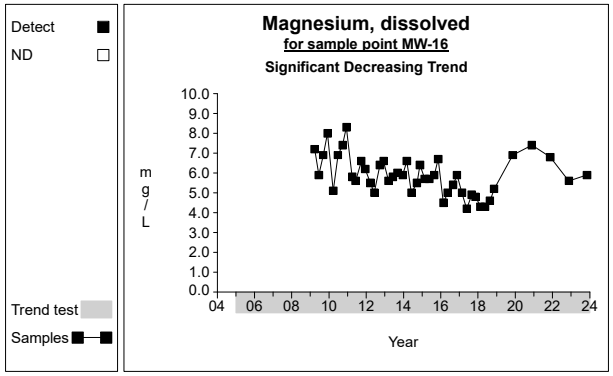


Graph 159

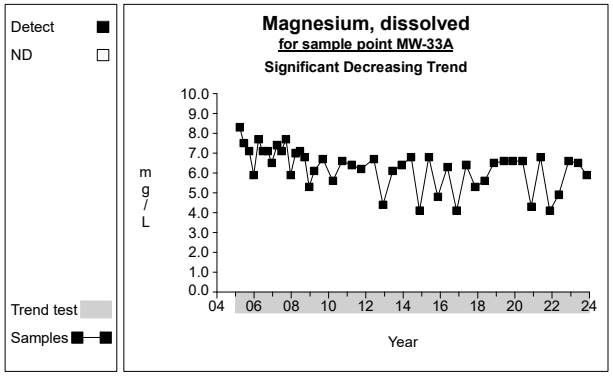
Time Series



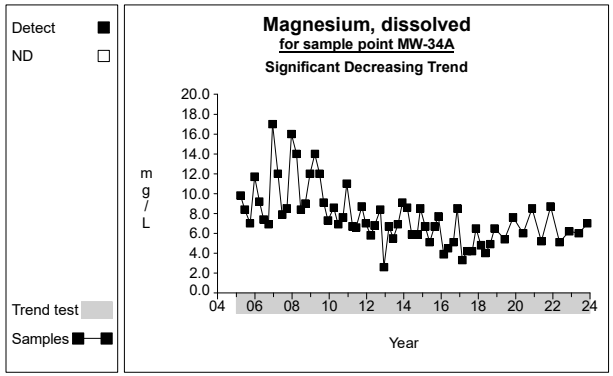
Graph 243



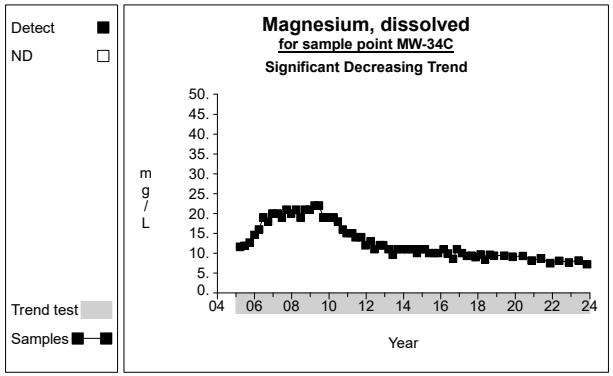
Graph 244



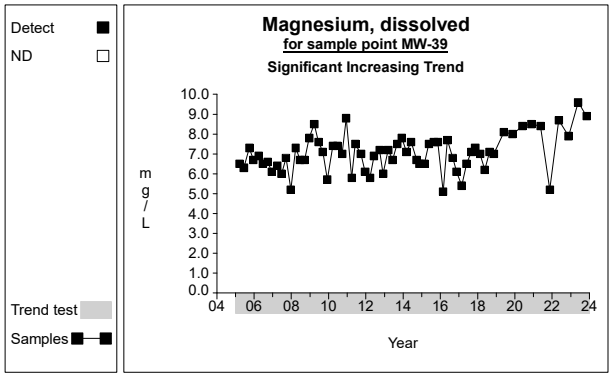
Graph 248



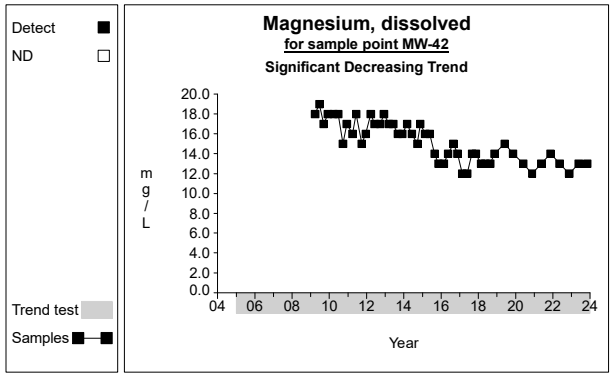
Graph 250



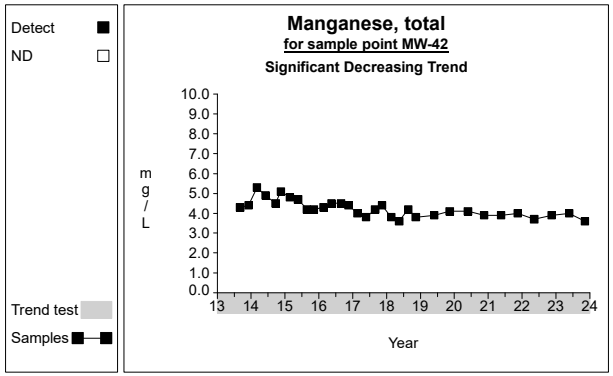
Graph 251



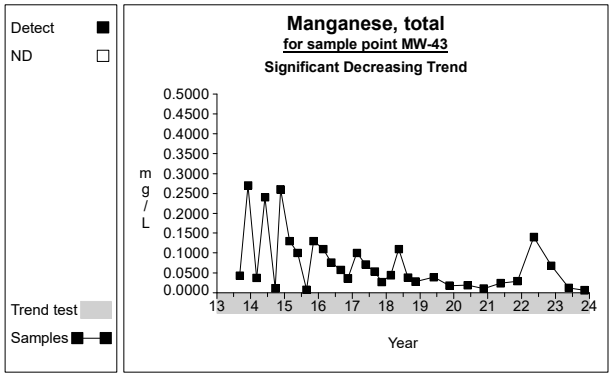
Graph 254



Graph 255

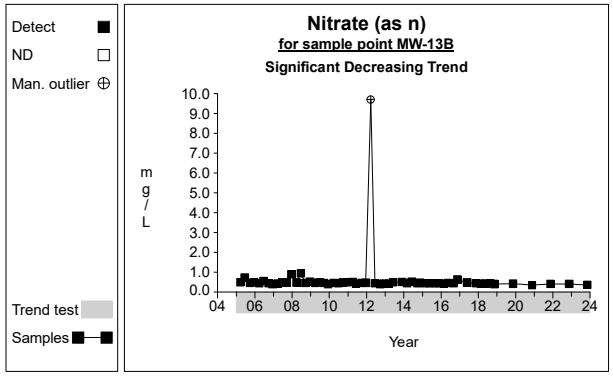


Graph 271

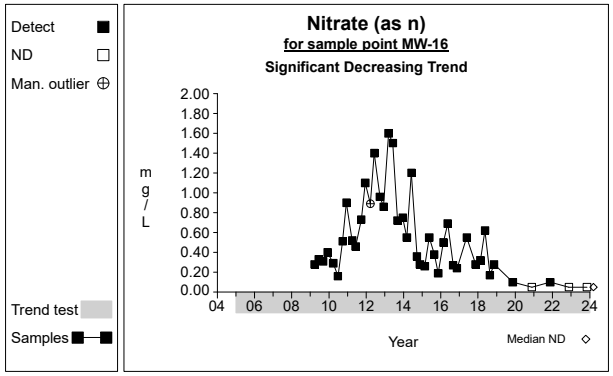


Graph 272

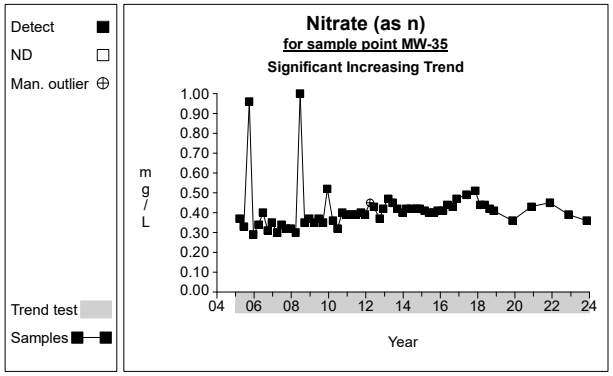
Time Series



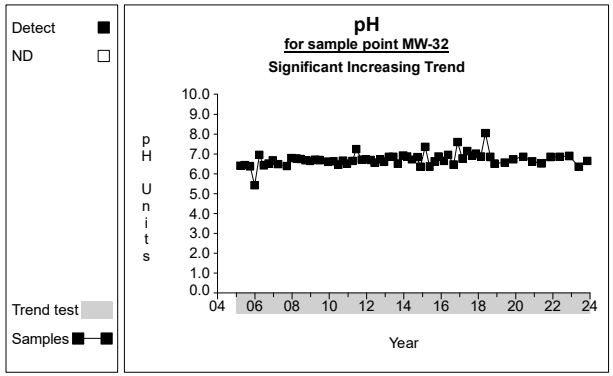
Graph 290



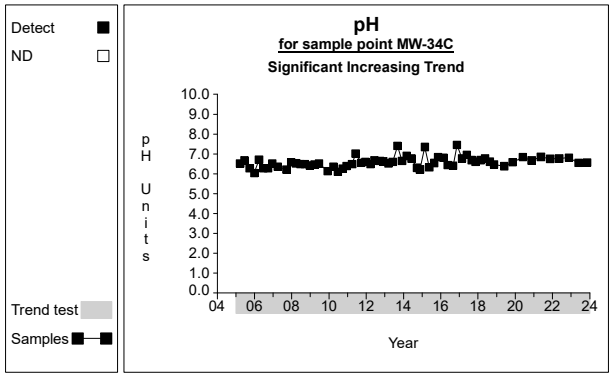
Graph 292



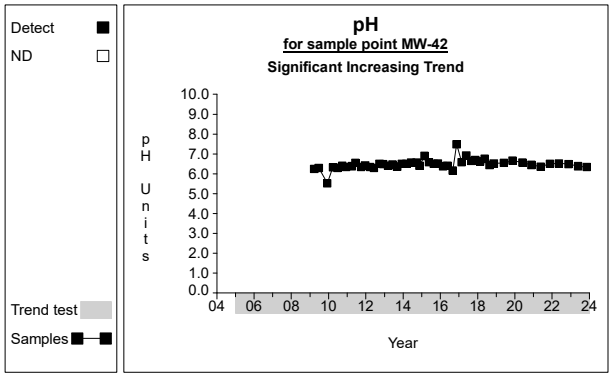
Graph 300



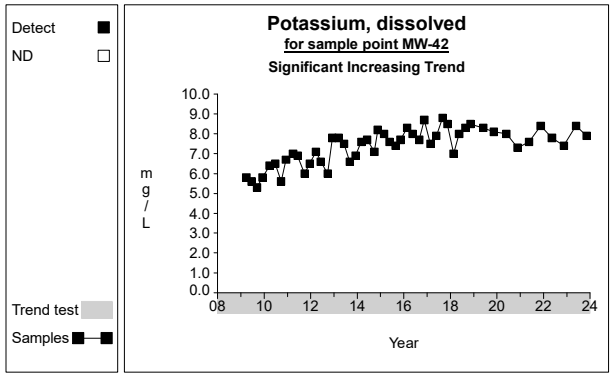
Graph 311



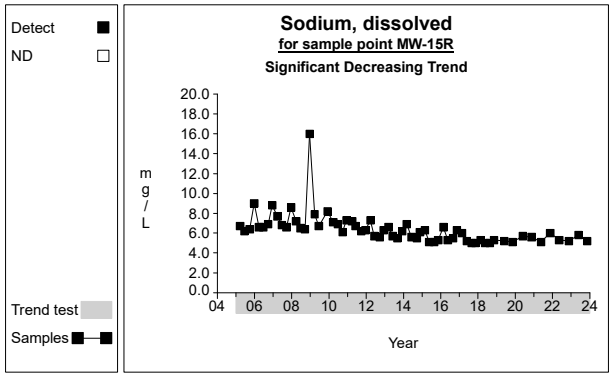
Graph 315



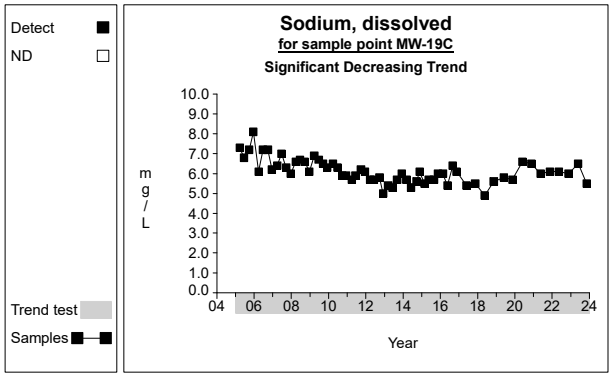
Graph 319



Graph 335

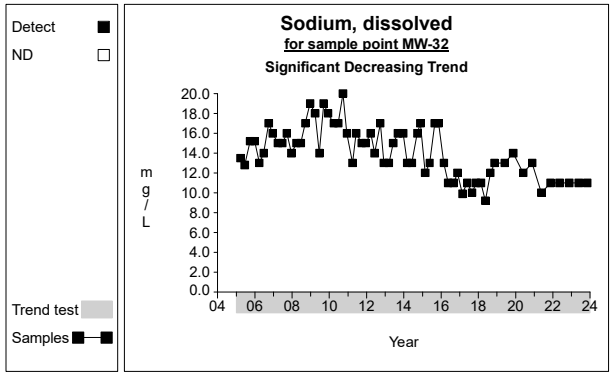


Graph 371

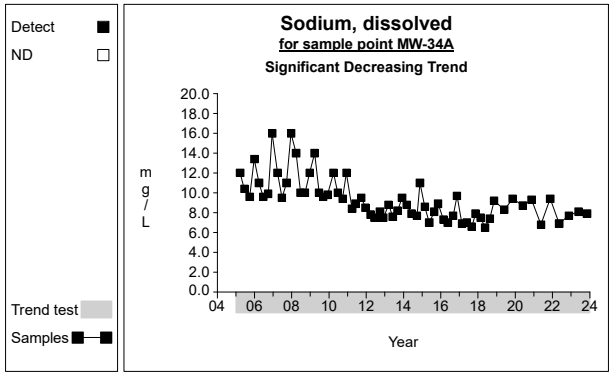


Graph 373

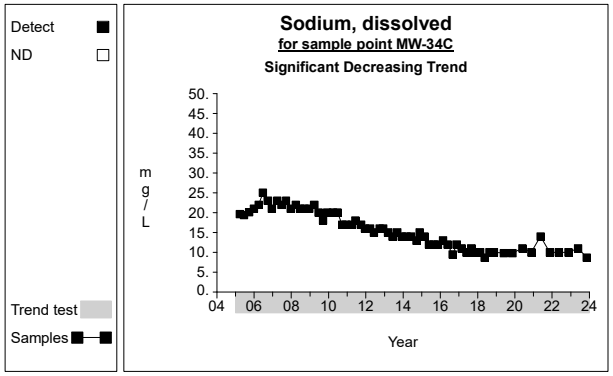
Time Series



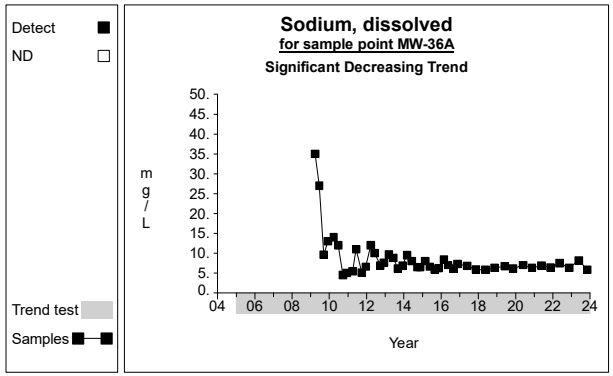
Graph 375



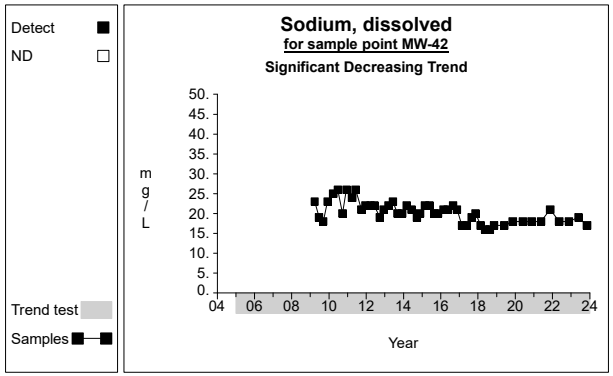
Graph 378



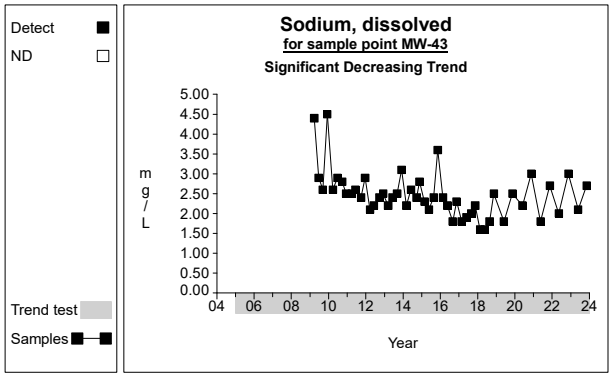
Graph 379



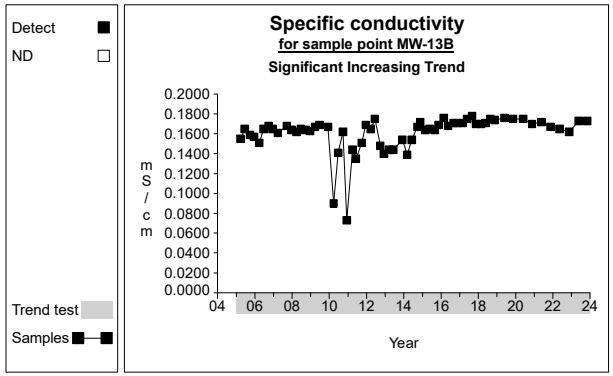
Graph 381



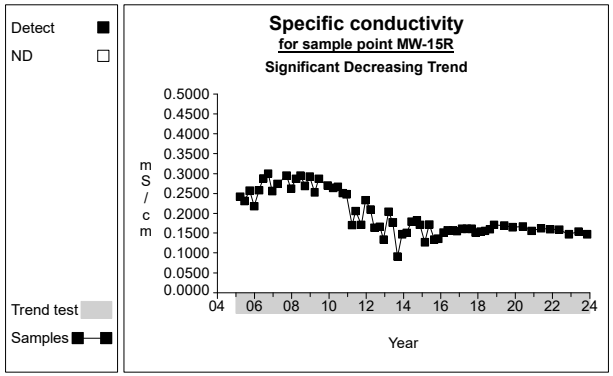
Graph 383



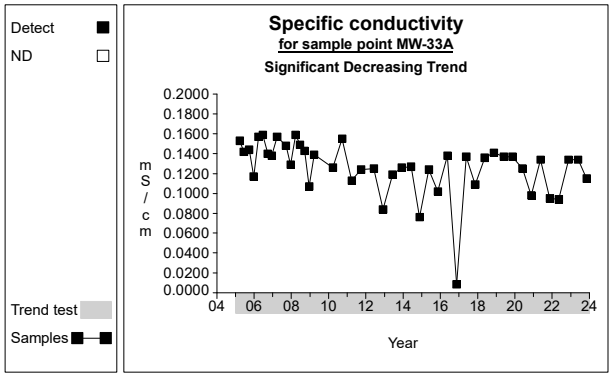
Graph 384



Graph 386

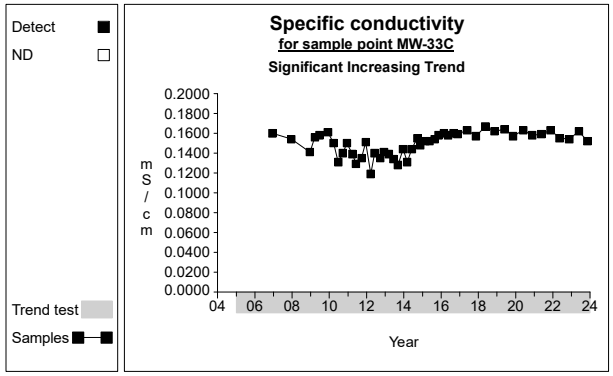


Graph 387

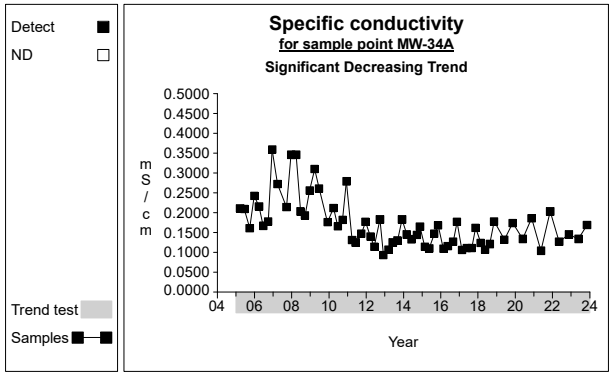


Graph 392

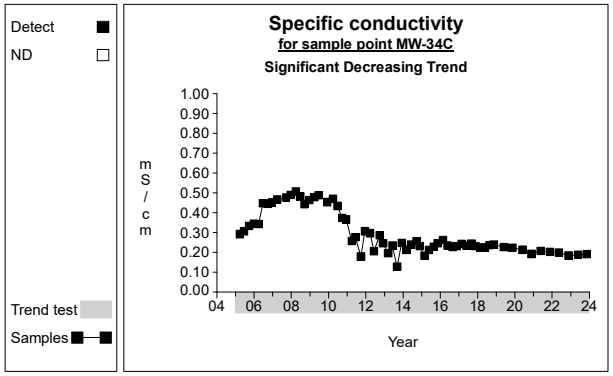
Time Series



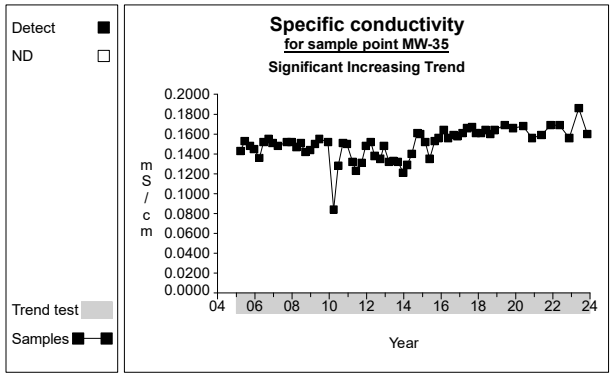
Graph 393



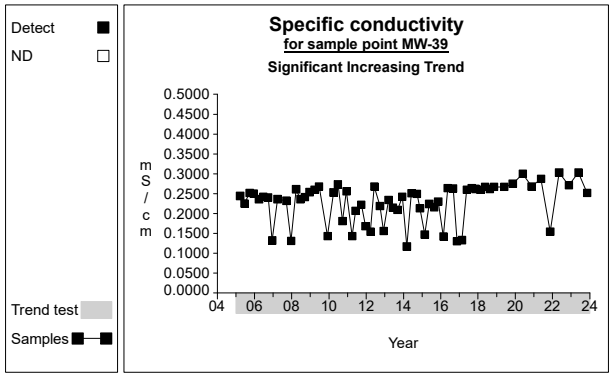
Graph 394



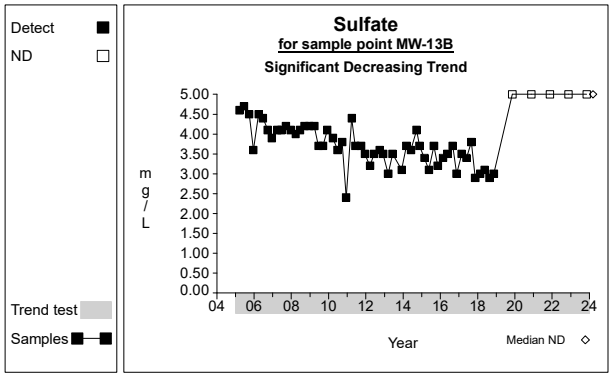
Graph 395



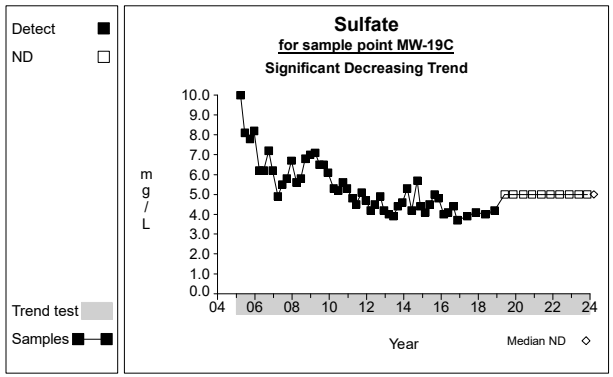
Graph 396



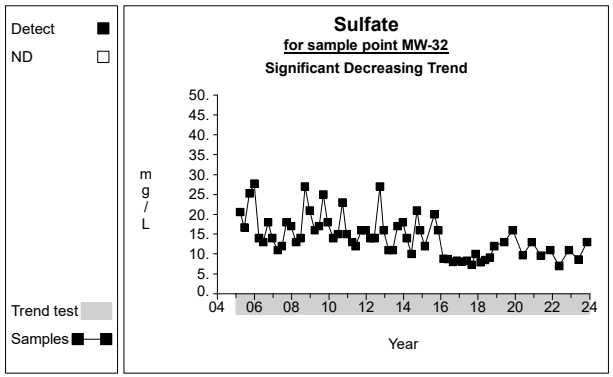
Graph 398



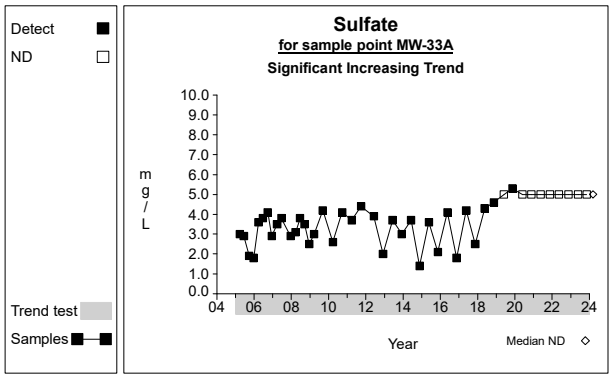
Graph 402



Graph 405

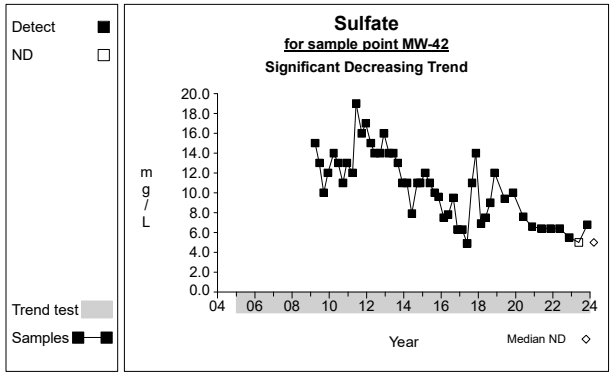


Graph 407

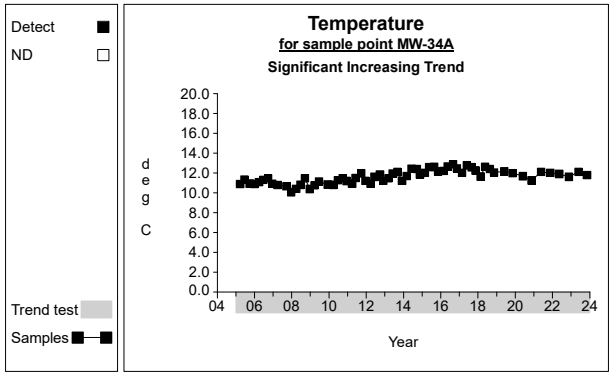


Graph 408

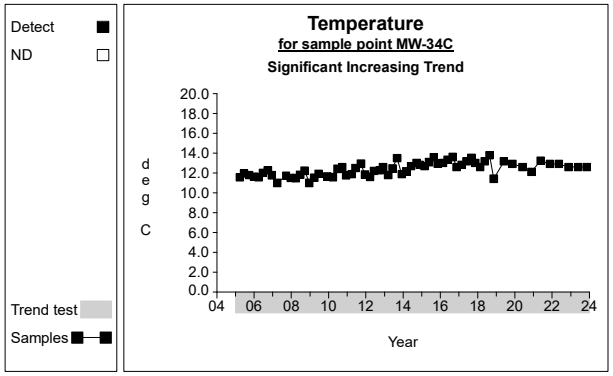
Time Series



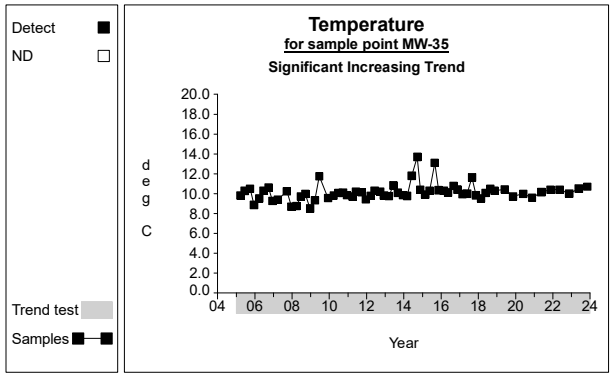
Graph 415



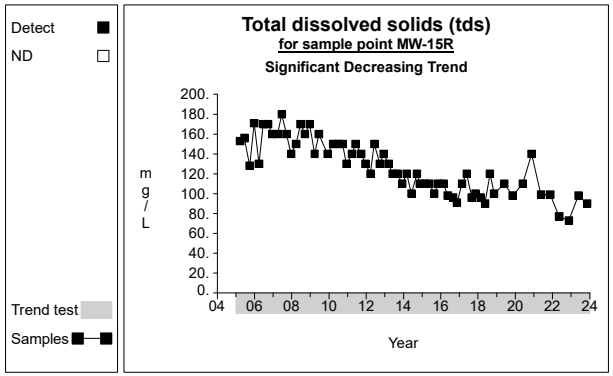
Graph 426



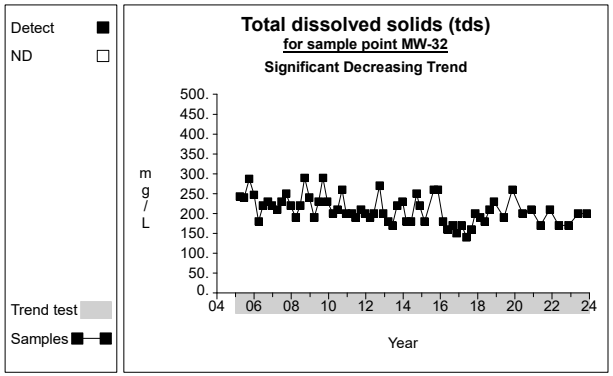
Graph 427



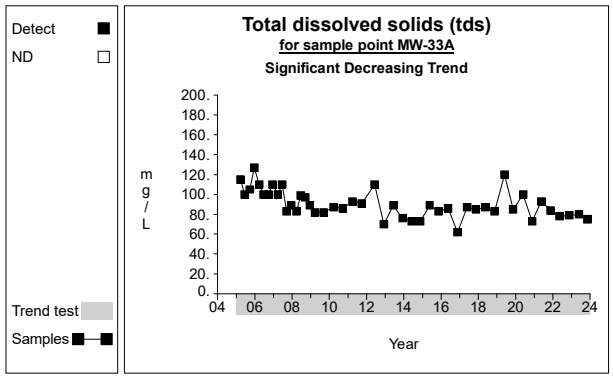
Graph 428



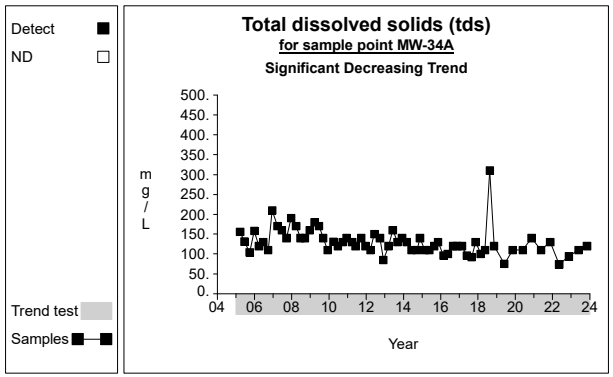
Graph 451



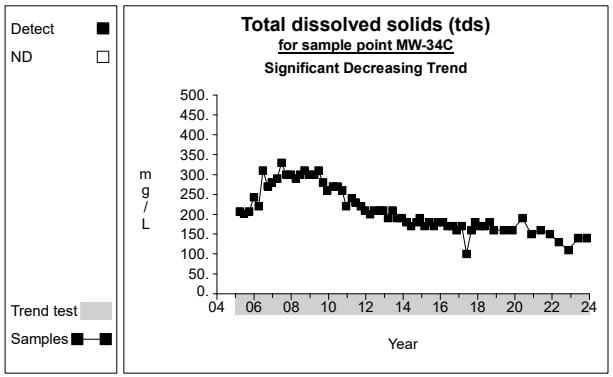
Graph 455



Graph 456

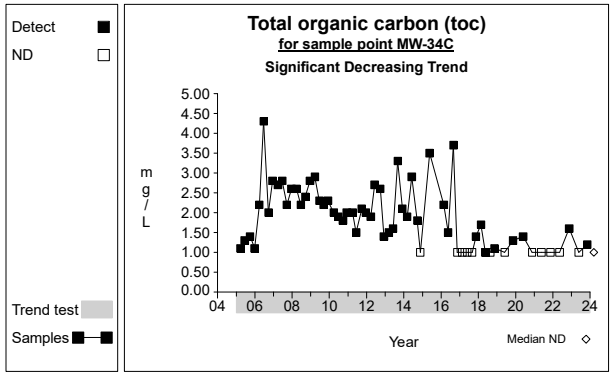


Graph 458



Graph 459

Time Series



Graph 475

2. Prediction Limits for Detection Monitoring

- 2023 Prediction Limits and Q4 2023 Exeedance Summary Table (Table 2-1)
- Updated Prediction Limits for Use During 2024 Monitoring Year (Table 2-2)
- Upgradient Data used in 2024 Prediction Limit Calculations (Table 2-3)
- Results of Shapiro-Wilk Test for Normality for 2024 Upgradient Data (Table 2-4)
- Comparison of 2024 Prediction Limits with 2023 Prediction Limits (Table 2-5)

TABLE 2-1
SUMMARY OF CURRENT PREDICTION LIMIT EXCEEDANCES
Q4 2023
Olympic View Sanitary Landfill

Statistical Methodology:

1. Inter-Well Prediction Limits using DUMPStat™
2. Upgradient Data Set: pooled data from wells MW-13A, MW-13B, MW-16, and MW-35
3. "Detection Monitoring" well comparisons:
   - complance wells: MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43
   - downgradient wells: MW-29A, MW-32, MW-33A, MW-33C, MW-36A
4. Parameters: all Appendix I and II inorganic and ground water quality parameters
5. Background Data Sets: January 2005 - December 2022
6. Arsenic: only low-level Method 200.8 data used
7. Units: mg/L = milligrams per liter; ug/L = micrograms per liter; mS/cm = millisiemens per centimeter; deg C = degrees Celcius

Parameter	Unit	Well	Latest Result	Date Sampled	Prediction Limit
Alkalinity, bicarbonate (as caco3)	mg/L	MW-32	140	11/08/2023	96
Alkalinity, bicarbonate (as caco3)	mg/L	MW-39	100	11/09/2023	96
Alkalinity, bicarbonate (as caco3)	mg/L	MW-42	190	11/08/2023	96
Alkalinity, total (as caco3)	mg/L	MW-32	140	11/08/2023	96
Alkalinity, total (as caco3)	mg/L	MW-39	100	11/09/2023	96
Alkalinity, total (as caco3)	mg/L	MW-42	190	11/08/2023	96
Ammonia (as n)	mg/L	MW-39	0.42	11/09/2023	0.28
Ammonia (as n)	mg/L	MW-42	3.3	11/08/2023	0.28
Arsenic, total	ug/L	MW-29A	1.78	11/08/2023	0.480
Arsenic, total	ug/L	MW-32	9.28	11/08/2023	0.480
Arsenic, total	ug/L	MW-33C	2.65	11/09/2023	0.480
Arsenic, total	ug/L	MW-34C	7.49	11/08/2023	0.480
Arsenic, total	ug/L	MW-36A	0.571	11/08/2023	0.480
Arsenic, total	ug/L	MW-39	1.08	11/09/2023	0.480
Arsenic, total	ug/L	MW-42	1.67	11/08/2023	0.480
Barium, total	mg/L	MW-15R	0.0049	11/09/2023	0.0045
Barium, total	mg/L	MW-29A	0.005	11/08/2023	0.0045
Barium, total	mg/L	MW-33C	0.0068	11/09/2023	0.0045
Barium, total	mg/L	MW-34C	0.13	11/08/2023	0.0045
Barium, total	mg/L	MW-39	0.014	11/09/2023	0.0045
Barium, total	mg/L	MW-42	0.087	11/08/2023	0.0045
Barium, total	mg/L	MW-43	0.0047	11/08/2023	0.0045
Calcium, dissolved	mg/L	MW-32	28	11/08/2023	18
Calcium, dissolved	mg/L	MW-42	38	11/08/2023	18
Chloride	mg/L	MW-32	10	11/08/2023	4.4
Chloride	mg/L	MW-39	5.9	11/09/2023	4.4
Chloride	mg/L	MW-42	12	11/08/2023	4.4

Parameter	Unit	Well	Latest Result	Date Sampled	Prediction Limit
Cobalt, total	mg/L	MW-39	0.0072	11/09/2023	0.003
Copper, total	mg/L	MW-34C	0.003	11/08/2023	0.0021
Iron, total	mg/L	MW-29A	3.5	11/08/2023	0.31
Iron, total	mg/L	MW-32	0.64	11/08/2023	0.31
Iron, total	mg/L	MW-33A	0.83	11/09/2023	0.31
Iron, total	mg/L	MW-33C	0.56	11/09/2023	0.31
Iron, total	mg/L	MW-34C	26	11/08/2023	0.31
Iron, total	mg/L	MW-39	30	11/09/2023	0.31
Iron, total	mg/L	MW-42	24	11/08/2023	0.31
Magnesium, dissolved	mg/L	MW-32	14	11/08/2023	11.2
Magnesium, dissolved	mg/L	MW-42	13	11/08/2023	11.2
Manganese, total	mg/L	MW-29A	1.1	11/08/2023	0.110
Manganese, total	mg/L	MW-32	2.1	11/08/2023	0.110
Manganese, total	mg/L	MW-33C	0.34	11/09/2023	0.110
Manganese, total	mg/L	MW-34C	1.6	11/08/2023	0.110
Manganese, total	mg/L	MW-39	0.48	11/09/2023	0.110
Manganese, total	mg/L	MW-42	3.6	11/08/2023	0.110
Nitrate (as n)	mg/L	MW-34A	2	11/08/2023	1.6
pH	pH Units	MW-43	5.62	11/08/2023	5.82 - 8.20
Potassium, dissolved	mg/L	MW-42	7.9	11/08/2023	1.4
Sodium, dissolved	mg/L	MW-32	11	11/08/2023	7.7
Sodium, dissolved	mg/L	MW-34A	7.9	11/08/2023	7.7
Sodium, dissolved	mg/L	MW-34C	8.7	11/08/2023	7.7
Sodium, dissolved	mg/L	MW-39	9.7	11/09/2023	7.7
Sodium, dissolved	mg/L	MW-42	17	11/08/2023	7.7
Specific conductivity	mS/cm	MW-32	0.31	11/08/2023	0.18
Specific conductivity	mS/cm	MW-34C	0.191	11/08/2023	0.18
Specific conductivity	mS/cm	MW-39	0.252	11/09/2023	0.18
Specific conductivity	mS/cm	MW-42	0.471	11/08/2023	0.18
Sulfate	mg/L	MW-32	13	11/08/2023	9.9
Total dissolved solids (tds)	mg/L	MW-32	200	11/08/2023	175
Total dissolved solids (tds)	mg/L	MW-42	230	11/08/2023	175
Total organic carbon (toc)	mg/L	MW-42	6.2	11/08/2023	6.0

TABLE 2-2
STATISTICAL PREDICTION LIMITS UPDATED FOR 2024 MONITORING YEAR
Olympic View Sanitary Landfill

Statistical Methodology:

1. Inter-Well Prediction Limits using DUMPStat
2. Upgradient Data Set: pooled data from wells 13A, 13B, 16, and 35
3. "Detection Monitoring" well comparisons:
   - compliance wells
   - performance well
   - downgradient wells
4. Parameters: all Appendix I and II inorganic and ground water quality parameters
5. Background Data Sets: January 2005 - December 2023 (updated annually)
6. Arsenic: only low-level Method 200.8 data used
7. Units: mg/L = milligrams per liter; ug/L = micrograms per liter; mS/cm = millisiemens per centimeter; deg C = degrees Celcius

Constituent	Units	Distributional Assumption[1]	Total N[2]	Detected N	Mean	Standard Deviation	Prediction Limit[3]	Nonparametric Confidence[4]
Alkalinity, bicarbonate (as caco3)	MG/L	nonparametric	222	222			96	0.99
Alkalinity, total (as caco3)	MG/L	nonparametric	226	226			96	0.99
Ammonia (as n)	MG/L	nonparametric	221	75			0.28	0.99
Antimony, total	MG/L	nonparametric	106	3			0.0013	0.99
Arsenic, total	UG/L	normal	112	112	0.2438	0.103	0.481	
Barium, total	MG/L	normal	106	106	0.0032	0.0005	0.0045	
Beryllium, total	MG/L	nonparametric	106	0			Current RL*	0.99
Cadmium, total	MG/L	nonparametric	106	0			Current RL*	0.99
Calcium, dissolved	MG/L	nonparametric	226	226			18	0.99
Chloride	MG/L	nonparametric	226	202			4.4	0.99
Chromium, total	MG/L	nonparametric	106	47			0.019	0.99
Cobalt, total	MG/L	nonparametric	106	0			Current RL*	0.99
Copper, total	MG/L	nonparametric	106	1			0.0021	0.99
Iron, total	MG/L	nonparametric	105	13			0.31	0.99
Lead, total	MG/L	nonparametric	106	1			0.0014	0.99
Magnesium, dissolved	MG/L	normal	226	226	8.17	1.31	11.2	
Manganese, total	MG/L	nonparametric	106	31			0.11	0.99
Nickel, total	MG/L	nonparametric	106	2			0.0055	0.99
Nitrate (as n)	MG/L	nonparametric	213	210			1.6	0.99
pH	pH Units	normal	237	237	7.01	0.467	5.82 - 8.20	
Potassium, dissolved	MG/L	nonparametric	226	14			1.4	0.99
Selenium, total	MG/L	nonparametric	106	0			Current RL*	0.99
Silver, total	MG/L	nonparametric	106	0			Current RL*	0.99
Sodium, dissolved	MG/L	nonparametric	226	226			7.7	0.99
Specific conductivity	mS/cm	nonparametric	239	239			0.19	0.99
Sulfate	MG/L	nonparametric	226	205			9.9	0.99
Temperature	deg C	nonparametric	239	239			14.32	0.99
Thallium, total	MG/L	nonparametric	106	0			Current RL*	0.99
Total dissolved solids (tds)	MG/L	nonparametric	226	226			175	0.99
Total organic carbon (toc)	MG/L	nonparametric	214	7			6.0	0.99
Vanadium, total	MG/L	nonparametric	106	105			0.009	0.99
Zinc, total	MG/L	nonparametric	106	1			0.0056	0.99

[1] Distributional Assumption based on Multiple Group Shapiro-Wilk Test (results presented on Table 2-4 herein).

[2] N = number of background data points from the pooled upgradient well data set AFTER removal of outliers (see Table 2-3 for outliers).

[3] Prediction Limit calculated at 95% confidence level and adjusted for multiple comparisons and one verification resample per Unified Guidance (USEPA, March 2009).

[4] Nonparametric confidence level as calculated by DUMPStat.

*Current RL: in cases where all background data are non-detected, a nonparametric prediction limit is set at the current constituent-specific laboratory reporting limit (RL).

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Constituent	Well	Date	ND	Result	Unit	ND Adjust	Flag
Alkalinity, bicarbonate (as caco3)	MW-13A	03/22/2005		75	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	06/15/2005		63.8	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	09/27/2005		75.6	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	12/15/2005		72.5	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	03/28/2006		80	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	06/21/2006		79	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	09/26/2006		80	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	12/13/2006		82	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	03/27/2007		83	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	06/19/2007		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	09/19/2007		79	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	12/19/2007		82	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	03/25/2008		83	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	06/18/2008		82	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	09/17/2008		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	12/17/2008		92	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	03/24/2009		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	06/17/2009		84	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	09/10/2009		87	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	03/25/2010		86	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	06/23/2010		86	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	09/23/2010		96	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	12/08/2010		82	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	03/30/2011		88	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	06/06/2011		89	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	09/27/2011		89	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	12/14/2011		90	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	03/21/2012		89	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	06/08/2012		87	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	09/26/2012		87	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	12/03/2012		83	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	03/11/2013		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	06/05/2013		83	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	12/03/2013		86	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	03/04/2014		87	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	06/02/2014		84	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	09/22/2014		82	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	11/17/2014		79	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	02/23/2015		84	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	05/19/2015		82	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	08/26/2015		77	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	11/10/2015		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	02/22/2016		80	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	05/16/2016		90	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	08/31/2016		84	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	11/14/2016		92	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	02/22/2017		85	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	05/24/2017		82	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	08/30/2017		80	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	11/13/2017		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	02/20/2018		87	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	05/15/2018		78	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	08/21/2018		79	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	11/12/2018		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	11/11/2019		82	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	11/19/2020		84	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	11/16/2021		96	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	11/17/2022		89	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13A	11/08/2023		86	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	03/22/2005		70.6	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	06/15/2005		57.3	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Alkalinity, bicarbonate (as caco3)	MW-13B	09/27/2005		72.7	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	12/15/2005		68.8	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	03/29/2006		73	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	06/21/2006		74	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	09/26/2006		75	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	12/13/2006		76	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	03/27/2007		76	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	06/19/2007		74	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	09/18/2007		74	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	12/19/2007		76	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	03/25/2008		77	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	06/18/2008		77	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	09/17/2008		76	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	12/16/2008		74	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	03/24/2009		78	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	06/17/2009		79	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	09/10/2009		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	03/25/2010		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	06/23/2010		80	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	09/23/2010		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	12/08/2010		88	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	03/30/2011		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	06/06/2011		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	09/27/2011		83	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	12/14/2011		84	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	03/21/2012		83	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	06/08/2012		82	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	09/26/2012		84	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	12/03/2012		82	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	03/11/2013		77	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	06/05/2013		79	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	12/03/2013		84	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	03/04/2014		83	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	06/02/2014		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	09/22/2014		80	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	11/17/2014		79	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	02/23/2015		82	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	05/19/2015		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	08/26/2015		76	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	11/10/2015		79	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	02/22/2016		77	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	05/16/2016		87	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	08/31/2016		82	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	11/14/2016		80	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	02/22/2017		83	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	05/24/2017		80	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	08/30/2017		80	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	11/13/2017		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	02/20/2018		86	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	05/15/2018		78	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	08/21/2018		81	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	11/12/2018		83	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	11/11/2019		83	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	11/19/2020		84	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	11/16/2021		95	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	11/17/2022		89	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-13B	11/08/2023		85	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	03/24/2009		66	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	06/16/2009		59	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	09/09/2009		66	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	03/25/2010		46	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	06/24/2010		71	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Alkalinity, bicarbonate (as caco3)	MW-16	09/24/2010		74	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	12/09/2010		72	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	03/30/2011		53	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	06/07/2011		59	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	09/27/2011		66	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	12/13/2011		60	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	03/21/2012		50	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	06/08/2012		49	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	09/27/2012		57	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	12/04/2012		64	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	03/12/2013		51	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	06/04/2013		50	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	09/05/2013		62	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	12/16/2013		62	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	03/05/2014		57	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	06/02/2014		44	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	09/22/2014		57	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	11/18/2014		57	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	02/23/2015		52	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	05/20/2015		51	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	08/26/2015		51	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	11/11/2015		65	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	02/24/2016		40	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	05/16/2016		50	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	08/31/2016		60	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	11/14/2016		56	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	02/22/2017		45	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	05/24/2017		42	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	08/30/2017		61	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	11/13/2017		50	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	02/20/2018		46	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	05/17/2018		43	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	08/22/2018		51	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	11/12/2018		53	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	11/12/2019		68	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	11/20/2020		85	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	11/16/2021		85	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	11/17/2022		67	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-16	11/08/2023		63	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	03/22/2005		68.2	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	06/14/2005		59	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	09/27/2005		69.2	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	12/15/2005		67.3	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	03/28/2006		74	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	06/21/2006		71	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	09/26/2006		72	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	12/12/2006		73	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	03/27/2007		73	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	06/20/2007		70	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	09/18/2007		69	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	12/20/2007		72	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	03/25/2008		77	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	06/18/2008		72	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	09/18/2008		72	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	12/19/2008		68	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	03/24/2009		72	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	06/16/2009		73	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	09/10/2009		74	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	03/25/2010		76	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	06/23/2010		75	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	09/23/2010		75	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	12/09/2010		74	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Alkalinity, bicarbonate (as caco3)	MW-35	03/30/2011		77	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	06/06/2011		76	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	09/26/2011		78	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	12/13/2011		77	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	03/21/2012		77	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	06/06/2012		77	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	09/26/2012		78	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	12/04/2012		76	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	03/13/2013		73	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	06/06/2013		73	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	09/05/2013		77	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	12/16/2013		78	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	03/04/2014		78	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	06/02/2014		76	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	09/22/2014		75	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	11/17/2014		74	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	02/25/2015		77	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	05/19/2015		75	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	08/26/2015		71	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	11/10/2015		75	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	02/22/2016		72	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	05/16/2016		82	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	08/31/2016		77	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	11/15/2016		91	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	02/22/2017		79	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	05/24/2017		76	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	08/30/2017		74	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	11/15/2017		77	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	02/20/2018		82	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	05/17/2018		80	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	08/22/2018		48	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	11/12/2018		80	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	11/12/2019		82	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	11/19/2020		85	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	11/16/2021		92	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	11/17/2022		84	mg/L		
Alkalinity, bicarbonate (as caco3)	MW-35	11/08/2023		83	mg/L		
Alkalinity, total (as caco3)	MW-13A	03/22/2005		75	mg/L		
Alkalinity, total (as caco3)	MW-13A	06/15/2005		63.8	mg/L		
Alkalinity, total (as caco3)	MW-13A	09/27/2005		75.6	mg/L		
Alkalinity, total (as caco3)	MW-13A	12/15/2005		72.5	mg/L		
Alkalinity, total (as caco3)	MW-13A	03/28/2006		80	mg/L		
Alkalinity, total (as caco3)	MW-13A	06/21/2006		79	mg/L		
Alkalinity, total (as caco3)	MW-13A	09/26/2006		80	mg/L		
Alkalinity, total (as caco3)	MW-13A	12/13/2006		82	mg/L		
Alkalinity, total (as caco3)	MW-13A	03/27/2007		83	mg/L		
Alkalinity, total (as caco3)	MW-13A	06/19/2007		81	mg/L		
Alkalinity, total (as caco3)	MW-13A	09/19/2007		79	mg/L		
Alkalinity, total (as caco3)	MW-13A	12/19/2007		82	mg/L		
Alkalinity, total (as caco3)	MW-13A	03/25/2008		83	mg/L		
Alkalinity, total (as caco3)	MW-13A	06/18/2008		82	mg/L		
Alkalinity, total (as caco3)	MW-13A	09/17/2008		81	mg/L		
Alkalinity, total (as caco3)	MW-13A	12/17/2008		92	mg/L		
Alkalinity, total (as caco3)	MW-13A	03/24/2009		81	mg/L		
Alkalinity, total (as caco3)	MW-13A	06/17/2009		84	mg/L		
Alkalinity, total (as caco3)	MW-13A	09/10/2009		87	mg/L		
Alkalinity, total (as caco3)	MW-13A	12/03/2009		84	mg/L		
Alkalinity, total (as caco3)	MW-13A	03/25/2010		86	mg/L		
Alkalinity, total (as caco3)	MW-13A	06/23/2010		86	mg/L		
Alkalinity, total (as caco3)	MW-13A	09/23/2010		96	mg/L		
Alkalinity, total (as caco3)	MW-13A	12/08/2010		82	mg/L		
Alkalinity, total (as caco3)	MW-13A	03/30/2011		88	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Alkalinity, total (as caco3)	MW-13A	06/06/2011		89	mg/L		
Alkalinity, total (as caco3)	MW-13A	09/27/2011		89	mg/L		
Alkalinity, total (as caco3)	MW-13A	12/14/2011		90	mg/L		
Alkalinity, total (as caco3)	MW-13A	03/21/2012		89	mg/L		
Alkalinity, total (as caco3)	MW-13A	06/08/2012		87	mg/L		
Alkalinity, total (as caco3)	MW-13A	09/26/2012		87	mg/L		
Alkalinity, total (as caco3)	MW-13A	12/03/2012		83	mg/L		
Alkalinity, total (as caco3)	MW-13A	03/11/2013		81	mg/L		
Alkalinity, total (as caco3)	MW-13A	06/05/2013		83	mg/L		
Alkalinity, total (as caco3)	MW-13A	12/03/2013		86	mg/L		
Alkalinity, total (as caco3)	MW-13A	03/04/2014		87	mg/L		
Alkalinity, total (as caco3)	MW-13A	06/02/2014		84	mg/L		
Alkalinity, total (as caco3)	MW-13A	09/22/2014		82	mg/L		
Alkalinity, total (as caco3)	MW-13A	11/17/2014		79	mg/L		
Alkalinity, total (as caco3)	MW-13A	02/23/2015		84	mg/L		
Alkalinity, total (as caco3)	MW-13A	05/19/2015		82	mg/L		
Alkalinity, total (as caco3)	MW-13A	08/26/2015		77	mg/L		
Alkalinity, total (as caco3)	MW-13A	11/10/2015		81	mg/L		
Alkalinity, total (as caco3)	MW-13A	02/22/2016		80	mg/L		
Alkalinity, total (as caco3)	MW-13A	05/16/2016		90	mg/L		
Alkalinity, total (as caco3)	MW-13A	08/31/2016		84	mg/L		
Alkalinity, total (as caco3)	MW-13A	11/14/2016		92	mg/L		
Alkalinity, total (as caco3)	MW-13A	02/22/2017		85	mg/L		
Alkalinity, total (as caco3)	MW-13A	05/24/2017		82	mg/L		
Alkalinity, total (as caco3)	MW-13A	08/30/2017		80	mg/L		
Alkalinity, total (as caco3)	MW-13A	11/13/2017		81	mg/L		
Alkalinity, total (as caco3)	MW-13A	02/20/2018		87	mg/L		
Alkalinity, total (as caco3)	MW-13A	05/15/2018		78	mg/L		
Alkalinity, total (as caco3)	MW-13A	08/21/2018		79	mg/L		
Alkalinity, total (as caco3)	MW-13A	11/12/2018		81	mg/L		
Alkalinity, total (as caco3)	MW-13A	11/11/2019		82	mg/L		
Alkalinity, total (as caco3)	MW-13A	11/19/2020		84	mg/L		
Alkalinity, total (as caco3)	MW-13A	11/16/2021		96	mg/L		
Alkalinity, total (as caco3)	MW-13A	11/17/2022		89	mg/L		
Alkalinity, total (as caco3)	MW-13A	11/08/2023		86	mg/L		
Alkalinity, total (as caco3)	MW-13B	03/22/2005		70.6	mg/L		
Alkalinity, total (as caco3)	MW-13B	06/15/2005		57.3	mg/L		
Alkalinity, total (as caco3)	MW-13B	09/27/2005		72.7	mg/L		
Alkalinity, total (as caco3)	MW-13B	12/15/2005		68.8	mg/L		
Alkalinity, total (as caco3)	MW-13B	03/29/2006		73	mg/L		
Alkalinity, total (as caco3)	MW-13B	06/21/2006		74	mg/L		
Alkalinity, total (as caco3)	MW-13B	09/26/2006		75	mg/L		
Alkalinity, total (as caco3)	MW-13B	12/13/2006		76	mg/L		
Alkalinity, total (as caco3)	MW-13B	03/27/2007		76	mg/L		
Alkalinity, total (as caco3)	MW-13B	06/19/2007		74	mg/L		
Alkalinity, total (as caco3)	MW-13B	09/18/2007		74	mg/L		
Alkalinity, total (as caco3)	MW-13B	12/19/2007		76	mg/L		
Alkalinity, total (as caco3)	MW-13B	03/25/2008		77	mg/L		
Alkalinity, total (as caco3)	MW-13B	06/18/2008		77	mg/L		
Alkalinity, total (as caco3)	MW-13B	09/17/2008		76	mg/L		
Alkalinity, total (as caco3)	MW-13B	12/16/2008		74	mg/L		
Alkalinity, total (as caco3)	MW-13B	03/24/2009		78	mg/L		
Alkalinity, total (as caco3)	MW-13B	06/17/2009		79	mg/L		
Alkalinity, total (as caco3)	MW-13B	09/10/2009		81	mg/L		
Alkalinity, total (as caco3)	MW-13B	12/03/2009		80	mg/L		
Alkalinity, total (as caco3)	MW-13B	03/25/2010		81	mg/L		
Alkalinity, total (as caco3)	MW-13B	06/23/2010		80	mg/L		
Alkalinity, total (as caco3)	MW-13B	09/23/2010		81	mg/L		
Alkalinity, total (as caco3)	MW-13B	12/08/2010		88	mg/L		
Alkalinity, total (as caco3)	MW-13B	03/30/2011		81	mg/L		
Alkalinity, total (as caco3)	MW-13B	06/06/2011		81	mg/L		
Alkalinity, total (as caco3)	MW-13B	09/27/2011		83	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Alkalinity, total (as caco3)	MW-13B	12/14/2011		84	mg/L		
Alkalinity, total (as caco3)	MW-13B	03/21/2012		83	mg/L		
Alkalinity, total (as caco3)	MW-13B	06/08/2012		82	mg/L		
Alkalinity, total (as caco3)	MW-13B	09/26/2012		84	mg/L		
Alkalinity, total (as caco3)	MW-13B	12/03/2012		82	mg/L		
Alkalinity, total (as caco3)	MW-13B	03/11/2013		77	mg/L		
Alkalinity, total (as caco3)	MW-13B	06/05/2013		79	mg/L		
Alkalinity, total (as caco3)	MW-13B	12/03/2013		84	mg/L		
Alkalinity, total (as caco3)	MW-13B	03/04/2014		83	mg/L		
Alkalinity, total (as caco3)	MW-13B	06/02/2014		81	mg/L		
Alkalinity, total (as caco3)	MW-13B	09/22/2014		80	mg/L		
Alkalinity, total (as caco3)	MW-13B	11/17/2014		79	mg/L		
Alkalinity, total (as caco3)	MW-13B	02/23/2015		82	mg/L		
Alkalinity, total (as caco3)	MW-13B	05/19/2015		81	mg/L		
Alkalinity, total (as caco3)	MW-13B	08/26/2015		76	mg/L		
Alkalinity, total (as caco3)	MW-13B	11/10/2015		79	mg/L		
Alkalinity, total (as caco3)	MW-13B	02/22/2016		77	mg/L		
Alkalinity, total (as caco3)	MW-13B	05/16/2016		87	mg/L		
Alkalinity, total (as caco3)	MW-13B	08/31/2016		82	mg/L		
Alkalinity, total (as caco3)	MW-13B	11/14/2016		80	mg/L		
Alkalinity, total (as caco3)	MW-13B	02/22/2017		83	mg/L		
Alkalinity, total (as caco3)	MW-13B	05/24/2017		80	mg/L		
Alkalinity, total (as caco3)	MW-13B	08/30/2017		80	mg/L		
Alkalinity, total (as caco3)	MW-13B	11/13/2017		81	mg/L		
Alkalinity, total (as caco3)	MW-13B	02/20/2018		86	mg/L		
Alkalinity, total (as caco3)	MW-13B	05/15/2018		78	mg/L		
Alkalinity, total (as caco3)	MW-13B	08/21/2018		81	mg/L		
Alkalinity, total (as caco3)	MW-13B	11/12/2018		83	mg/L		
Alkalinity, total (as caco3)	MW-13B	11/11/2019		83	mg/L		
Alkalinity, total (as caco3)	MW-13B	11/19/2020		84	mg/L		
Alkalinity, total (as caco3)	MW-13B	11/16/2021		95	mg/L		
Alkalinity, total (as caco3)	MW-13B	11/17/2022		89	mg/L		
Alkalinity, total (as caco3)	MW-13B	11/08/2023		85	mg/L		
Alkalinity, total (as caco3)	MW-16	03/24/2009		66	mg/L		
Alkalinity, total (as caco3)	MW-16	06/16/2009		59	mg/L		
Alkalinity, total (as caco3)	MW-16	09/09/2009		66	mg/L		
Alkalinity, total (as caco3)	MW-16	12/03/2009		77	mg/L		
Alkalinity, total (as caco3)	MW-16	03/25/2010		46	mg/L		
Alkalinity, total (as caco3)	MW-16	06/24/2010		71	mg/L		
Alkalinity, total (as caco3)	MW-16	09/24/2010		74	mg/L		
Alkalinity, total (as caco3)	MW-16	12/09/2010		72	mg/L		
Alkalinity, total (as caco3)	MW-16	03/30/2011		53	mg/L		
Alkalinity, total (as caco3)	MW-16	06/07/2011		59	mg/L		
Alkalinity, total (as caco3)	MW-16	09/27/2011		66	mg/L		
Alkalinity, total (as caco3)	MW-16	12/13/2011		60	mg/L		
Alkalinity, total (as caco3)	MW-16	03/21/2012		50	mg/L		
Alkalinity, total (as caco3)	MW-16	06/08/2012		49	mg/L		
Alkalinity, total (as caco3)	MW-16	09/27/2012		57	mg/L		
Alkalinity, total (as caco3)	MW-16	12/04/2012		64	mg/L		
Alkalinity, total (as caco3)	MW-16	03/12/2013		51	mg/L		
Alkalinity, total (as caco3)	MW-16	06/04/2013		50	mg/L		
Alkalinity, total (as caco3)	MW-16	09/05/2013		62	mg/L		
Alkalinity, total (as caco3)	MW-16	12/16/2013		62	mg/L		
Alkalinity, total (as caco3)	MW-16	03/05/2014		57	mg/L		
Alkalinity, total (as caco3)	MW-16	06/02/2014		44	mg/L		
Alkalinity, total (as caco3)	MW-16	09/22/2014		57	mg/L		
Alkalinity, total (as caco3)	MW-16	11/18/2014		57	mg/L		
Alkalinity, total (as caco3)	MW-16	02/23/2015		52	mg/L		
Alkalinity, total (as caco3)	MW-16	05/20/2015		51	mg/L		
Alkalinity, total (as caco3)	MW-16	08/26/2015		51	mg/L		
Alkalinity, total (as caco3)	MW-16	11/11/2015		65	mg/L		
Alkalinity, total (as caco3)	MW-16	02/24/2016		40	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Alkalinity, total (as caco3)	MW-16	05/16/2016		50	mg/L		
Alkalinity, total (as caco3)	MW-16	08/31/2016		60	mg/L		
Alkalinity, total (as caco3)	MW-16	11/14/2016		56	mg/L		
Alkalinity, total (as caco3)	MW-16	02/22/2017		45	mg/L		
Alkalinity, total (as caco3)	MW-16	05/24/2017		42	mg/L		
Alkalinity, total (as caco3)	MW-16	08/30/2017		61	mg/L		
Alkalinity, total (as caco3)	MW-16	11/13/2017		50	mg/L		
Alkalinity, total (as caco3)	MW-16	02/20/2018		46	mg/L		
Alkalinity, total (as caco3)	MW-16	05/17/2018		43	mg/L		
Alkalinity, total (as caco3)	MW-16	08/22/2018		51	mg/L		
Alkalinity, total (as caco3)	MW-16	11/12/2018		53	mg/L		
Alkalinity, total (as caco3)	MW-16	11/12/2019		68	mg/L		
Alkalinity, total (as caco3)	MW-16	11/20/2020		85	mg/L		
Alkalinity, total (as caco3)	MW-16	11/16/2021		85	mg/L		
Alkalinity, total (as caco3)	MW-16	11/17/2022		67	mg/L		
Alkalinity, total (as caco3)	MW-16	11/08/2023		63	mg/L		
Alkalinity, total (as caco3)	MW-35	03/22/2005		68.2	mg/L		
Alkalinity, total (as caco3)	MW-35	06/14/2005		59	mg/L		
Alkalinity, total (as caco3)	MW-35	09/27/2005		69.2	mg/L		
Alkalinity, total (as caco3)	MW-35	12/15/2005		67.3	mg/L		
Alkalinity, total (as caco3)	MW-35	03/28/2006		73	mg/L		
Alkalinity, total (as caco3)	MW-35	06/21/2006		71	mg/L		
Alkalinity, total (as caco3)	MW-35	09/26/2006		72	mg/L		
Alkalinity, total (as caco3)	MW-35	12/12/2006		73	mg/L		
Alkalinity, total (as caco3)	MW-35	03/27/2007		73	mg/L		
Alkalinity, total (as caco3)	MW-35	06/20/2007		70	mg/L		
Alkalinity, total (as caco3)	MW-35	09/18/2007		69	mg/L		
Alkalinity, total (as caco3)	MW-35	12/20/2007		72	mg/L		
Alkalinity, total (as caco3)	MW-35	03/25/2008		77	mg/L		
Alkalinity, total (as caco3)	MW-35	06/18/2008		72	mg/L		
Alkalinity, total (as caco3)	MW-35	09/18/2008		72	mg/L		
Alkalinity, total (as caco3)	MW-35	12/19/2008		68	mg/L		
Alkalinity, total (as caco3)	MW-35	03/24/2009		72	mg/L		
Alkalinity, total (as caco3)	MW-35	06/16/2009		73	mg/L		
Alkalinity, total (as caco3)	MW-35	09/10/2009		74	mg/L		
Alkalinity, total (as caco3)	MW-35	12/03/2009		74	mg/L		
Alkalinity, total (as caco3)	MW-35	03/25/2010		76	mg/L		
Alkalinity, total (as caco3)	MW-35	06/23/2010		75	mg/L		
Alkalinity, total (as caco3)	MW-35	09/23/2010		75	mg/L		
Alkalinity, total (as caco3)	MW-35	12/09/2010		74	mg/L		
Alkalinity, total (as caco3)	MW-35	03/30/2011		77	mg/L		
Alkalinity, total (as caco3)	MW-35	06/06/2011		76	mg/L		
Alkalinity, total (as caco3)	MW-35	09/26/2011		78	mg/L		
Alkalinity, total (as caco3)	MW-35	12/13/2011		77	mg/L		
Alkalinity, total (as caco3)	MW-35	03/21/2012		77	mg/L		
Alkalinity, total (as caco3)	MW-35	06/06/2012		77	mg/L		
Alkalinity, total (as caco3)	MW-35	09/26/2012		78	mg/L		
Alkalinity, total (as caco3)	MW-35	12/04/2012		76	mg/L		
Alkalinity, total (as caco3)	MW-35	03/13/2013		73	mg/L		
Alkalinity, total (as caco3)	MW-35	06/06/2013		73	mg/L		
Alkalinity, total (as caco3)	MW-35	09/05/2013		77	mg/L		
Alkalinity, total (as caco3)	MW-35	12/16/2013		78	mg/L		
Alkalinity, total (as caco3)	MW-35	03/04/2014		78	mg/L		
Alkalinity, total (as caco3)	MW-35	06/02/2014		76	mg/L		
Alkalinity, total (as caco3)	MW-35	09/22/2014		75	mg/L		
Alkalinity, total (as caco3)	MW-35	11/17/2014		74	mg/L		
Alkalinity, total (as caco3)	MW-35	02/25/2015		77	mg/L		
Alkalinity, total (as caco3)	MW-35	05/19/2015		75	mg/L		
Alkalinity, total (as caco3)	MW-35	08/26/2015		71	mg/L		
Alkalinity, total (as caco3)	MW-35	11/10/2015		75	mg/L		
Alkalinity, total (as caco3)	MW-35	02/22/2016		72	mg/L		
Alkalinity, total (as caco3)	MW-35	05/16/2016		82	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Alkalinity, total (as caco3)	MW-35	08/31/2016		77	mg/L		
Alkalinity, total (as caco3)	MW-35	11/15/2016		91	mg/L		
Alkalinity, total (as caco3)	MW-35	02/22/2017		79	mg/L		
Alkalinity, total (as caco3)	MW-35	05/24/2017		76	mg/L		
Alkalinity, total (as caco3)	MW-35	08/30/2017		74	mg/L		
Alkalinity, total (as caco3)	MW-35	11/15/2017		77	mg/L		
Alkalinity, total (as caco3)	MW-35	02/20/2018		82	mg/L		
Alkalinity, total (as caco3)	MW-35	05/17/2018		80	mg/L		
Alkalinity, total (as caco3)	MW-35	08/22/2018		48	mg/L		
Alkalinity, total (as caco3)	MW-35	11/12/2018		80	mg/L		
Alkalinity, total (as caco3)	MW-35	11/12/2019		82	mg/L		
Alkalinity, total (as caco3)	MW-35	11/19/2020		85	mg/L		
Alkalinity, total (as caco3)	MW-35	11/16/2021		92	mg/L		
Alkalinity, total (as caco3)	MW-35	11/17/2022		84	mg/L		
Alkalinity, total (as caco3)	MW-35	11/08/2023		83	mg/L		
Ammonia (as n)	MW-13A	03/22/2005		0.02	mg/L		
Ammonia (as n)	MW-13A	06/15/2005		0.13	mg/L		
Ammonia (as n)	MW-13A	09/27/2005		0.021	mg/L		
Ammonia (as n)	MW-13A	12/15/2005	ND	0.02	mg/L	0.03	**
Ammonia (as n)	MW-13A	03/28/2006		0.049	mg/L		
Ammonia (as n)	MW-13A	06/21/2006		0.068	mg/L		
Ammonia (as n)	MW-13A	09/26/2006		0.036	mg/L		
Ammonia (as n)	MW-13A	12/13/2006	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	03/27/2007	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	06/19/2007	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	09/19/2007	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	12/19/2007		0.042	mg/L		
Ammonia (as n)	MW-13A	03/25/2008		0.05	mg/L		
Ammonia (as n)	MW-13A	06/18/2008	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	09/17/2008	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	12/17/2008		0.063	mg/L		
Ammonia (as n)	MW-13A	03/24/2009		0.083	mg/L		
Ammonia (as n)	MW-13A	06/17/2009		0.093	mg/L		
Ammonia (as n)	MW-13A	09/10/2009	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	12/03/2009		0.059	mg/L		
Ammonia (as n)	MW-13A	03/25/2010		0.046	mg/L		
Ammonia (as n)	MW-13A	06/23/2010	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	09/23/2010		0.049	mg/L		
Ammonia (as n)	MW-13A	12/08/2010		0.061	mg/L		
Ammonia (as n)	MW-13A	03/30/2011		0.064	mg/L		
Ammonia (as n)	MW-13A	06/06/2011	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	09/27/2011		0.075	mg/L		
Ammonia (as n)	MW-13A	12/14/2011		0.086	mg/L		
Ammonia (as n)	MW-13A	03/21/2012		0.039	mg/L		
Ammonia (as n)	MW-13A	06/08/2012		0.28	mg/L		
Ammonia (as n)	MW-13A	09/26/2012		0.087	mg/L		
Ammonia (as n)	MW-13A	12/03/2012		0.12	mg/L		
Ammonia (as n)	MW-13A	03/11/2013	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	06/05/2013	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	12/03/2013	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	03/04/2014	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	06/02/2014	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	09/22/2014	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	11/17/2014	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	02/23/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	05/19/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	08/26/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	11/10/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	02/22/2016	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	05/16/2016	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	08/31/2016	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	11/14/2016	ND	0.03	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Ammonia (as n)	MW-13A	02/22/2017	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	05/24/2017	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	08/30/2017	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	11/13/2017	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	02/20/2018	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	05/15/2018	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	08/21/2018	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	11/12/2018	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	11/11/2019	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	11/19/2020	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	11/16/2021		0.052	mg/L		
Ammonia (as n)	MW-13A	11/17/2022	ND	0.03	mg/L		
Ammonia (as n)	MW-13A	11/08/2023	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	03/22/2005	ND	0.02	mg/L	0.03	**
Ammonia (as n)	MW-13B	06/15/2005		0.12	mg/L		
Ammonia (as n)	MW-13B	09/27/2005		0.17	mg/L		
Ammonia (as n)	MW-13B	12/15/2005	ND	0.02	mg/L	0.03	**
Ammonia (as n)	MW-13B	03/29/2006		0.036	mg/L		
Ammonia (as n)	MW-13B	06/21/2006	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	09/26/2006		0.03	mg/L		
Ammonia (as n)	MW-13B	12/13/2006	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	03/27/2007	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	06/19/2007		0.03	mg/L		
Ammonia (as n)	MW-13B	12/19/2007		0.11	mg/L		
Ammonia (as n)	MW-13B	03/25/2008		0.06	mg/L		
Ammonia (as n)	MW-13B	06/18/2008	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	09/17/2008	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	12/16/2008		0.056	mg/L		
Ammonia (as n)	MW-13B	03/24/2009		0.063	mg/L		
Ammonia (as n)	MW-13B	06/17/2009		0.087	mg/L		
Ammonia (as n)	MW-13B	09/10/2009		0.045	mg/L		
Ammonia (as n)	MW-13B	12/03/2009	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	03/25/2010		0.044	mg/L		
Ammonia (as n)	MW-13B	06/23/2010	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	09/23/2010		0.045	mg/L		
Ammonia (as n)	MW-13B	12/08/2010		0.052	mg/L		
Ammonia (as n)	MW-13B	03/30/2011		0.062	mg/L		
Ammonia (as n)	MW-13B	06/06/2011	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	09/27/2011		0.032	mg/L		
Ammonia (as n)	MW-13B	12/14/2011		0.03	mg/L		
Ammonia (as n)	MW-13B	03/21/2012	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	06/08/2012		0.2	mg/L		
Ammonia (as n)	MW-13B	09/26/2012		0.076	mg/L		
Ammonia (as n)	MW-13B	12/03/2012	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	03/11/2013	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	06/05/2013	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	12/03/2013	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	03/04/2014	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	06/02/2014	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	09/22/2014	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	11/17/2014	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	02/23/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	05/19/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	08/26/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	11/10/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	02/22/2016	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	05/16/2016	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	08/31/2016	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	11/14/2016	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	02/22/2017	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	05/24/2017	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	08/30/2017	ND	0.03	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Ammonia (as n)	MW-13B	11/13/2017	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	02/20/2018	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	05/15/2018	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	08/21/2018	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	11/12/2018	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	11/11/2019	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	11/19/2020	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	11/16/2021	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	11/17/2022	ND	0.03	mg/L		
Ammonia (as n)	MW-13B	11/08/2023	ND	0.03	mg/L		
Ammonia (as n)	MW-16	03/24/2009		0.062	mg/L		
Ammonia (as n)	MW-16	06/16/2009		0.093	mg/L		
Ammonia (as n)	MW-16	09/09/2009		0.036	mg/L		
Ammonia (as n)	MW-16	12/03/2009		0.058	mg/L		
Ammonia (as n)	MW-16	03/25/2010		0.046	mg/L		
Ammonia (as n)	MW-16	06/24/2010	ND	0.03	mg/L		
Ammonia (as n)	MW-16	09/24/2010	ND	0.03	mg/L		
Ammonia (as n)	MW-16	12/09/2010		0.059	mg/L		
Ammonia (as n)	MW-16	03/30/2011		0.06	mg/L		
Ammonia (as n)	MW-16	06/07/2011		0.048	mg/L		
Ammonia (as n)	MW-16	09/27/2011	ND	0.03	mg/L		
Ammonia (as n)	MW-16	12/13/2011	ND	0.03	mg/L		
Ammonia (as n)	MW-16	03/21/2012		0.042	mg/L		
Ammonia (as n)	MW-16	06/08/2012		0.34	mg/L		*
Ammonia (as n)	MW-16	09/27/2012		0.3	mg/L		*
Ammonia (as n)	MW-16	12/04/2012	ND	0.03	mg/L		
Ammonia (as n)	MW-16	03/12/2013	ND	0.03	mg/L		
Ammonia (as n)	MW-16	06/04/2013	ND	0.03	mg/L		
Ammonia (as n)	MW-16	09/05/2013	ND	0.03	mg/L		
Ammonia (as n)	MW-16	12/16/2013		0.096	mg/L		
Ammonia (as n)	MW-16	03/05/2014		0.051	mg/L		
Ammonia (as n)	MW-16	06/02/2014		0.058	mg/L		
Ammonia (as n)	MW-16	09/22/2014	ND	0.03	mg/L		
Ammonia (as n)	MW-16	11/18/2014	ND	0.03	mg/L		
Ammonia (as n)	MW-16	02/23/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-16	05/20/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-16	08/26/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-16	11/11/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-16	02/24/2016	ND	0.03	mg/L		
Ammonia (as n)	MW-16	05/16/2016	ND	0.03	mg/L		
Ammonia (as n)	MW-16	08/31/2016	ND	0.03	mg/L		
Ammonia (as n)	MW-16	11/14/2016	ND	0.03	mg/L		
Ammonia (as n)	MW-16	02/22/2017	ND	0.03	mg/L		
Ammonia (as n)	MW-16	05/24/2017	ND	0.03	mg/L		
Ammonia (as n)	MW-16	08/30/2017	ND	0.03	mg/L		
Ammonia (as n)	MW-16	11/13/2017	ND	0.03	mg/L		
Ammonia (as n)	MW-16	02/20/2018	ND	0.03	mg/L		
Ammonia (as n)	MW-16	05/17/2018		0.031	mg/L		
Ammonia (as n)	MW-16	08/22/2018	ND	0.03	mg/L		
Ammonia (as n)	MW-16	11/12/2018	ND	0.03	mg/L		
Ammonia (as n)	MW-16	11/12/2019	ND	0.03	mg/L		
Ammonia (as n)	MW-16	11/20/2020	ND	0.03	mg/L		
Ammonia (as n)	MW-16	11/16/2021	ND	0.03	mg/L		
Ammonia (as n)	MW-16	11/17/2022	ND	0.03	mg/L		
Ammonia (as n)	MW-16	11/08/2023		0.12	mg/L		
Ammonia (as n)	MW-35	03/22/2005	ND	0.02	mg/L	0.03	**
Ammonia (as n)	MW-35	06/14/2005		0.12	mg/L		
Ammonia (as n)	MW-35	09/27/2005		0.15	mg/L		
Ammonia (as n)	MW-35	12/15/2005	ND	0.02	mg/L	0.03	**
Ammonia (as n)	MW-35	03/28/2006	ND	0.03	mg/L		
Ammonia (as n)	MW-35	06/21/2006	ND	0.03	mg/L		
Ammonia (as n)	MW-35	09/26/2006		0.033	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Ammonia (as n)	MW-35	12/12/2006	ND	0.03	mg/L		
Ammonia (as n)	MW-35	03/27/2007	ND	0.03	mg/L		
Ammonia (as n)	MW-35	06/20/2007		0.042	mg/L		
Ammonia (as n)	MW-35	12/20/2007		0.06	mg/L		
Ammonia (as n)	MW-35	03/25/2008		0.059	mg/L		
Ammonia (as n)	MW-35	06/18/2008	ND	0.03	mg/L		
Ammonia (as n)	MW-35	09/18/2008	ND	0.03	mg/L		
Ammonia (as n)	MW-35	12/19/2008		0.081	mg/L		
Ammonia (as n)	MW-35	03/24/2009		0.06	mg/L		
Ammonia (as n)	MW-35	06/16/2009		0.066	mg/L		
Ammonia (as n)	MW-35	09/10/2009	ND	0.03	mg/L		
Ammonia (as n)	MW-35	12/03/2009		0.076	mg/L		
Ammonia (as n)	MW-35	03/25/2010		0.041	mg/L		
Ammonia (as n)	MW-35	06/23/2010	ND	0.03	mg/L		
Ammonia (as n)	MW-35	09/23/2010		0.053	mg/L		
Ammonia (as n)	MW-35	12/09/2010		0.055	mg/L		
Ammonia (as n)	MW-35	03/30/2011		0.063	mg/L		
Ammonia (as n)	MW-35	06/06/2011		0.18	mg/L		
Ammonia (as n)	MW-35	09/26/2011		0.065	mg/L		
Ammonia (as n)	MW-35	12/13/2011	ND	0.03	mg/L		
Ammonia (as n)	MW-35	03/21/2012		0.03	mg/L		
Ammonia (as n)	MW-35	06/06/2012		0.6	mg/L		*
Ammonia (as n)	MW-35	09/26/2012		0.069	mg/L		
Ammonia (as n)	MW-35	12/04/2012	ND	0.03	mg/L		
Ammonia (as n)	MW-35	03/13/2013	ND	0.03	mg/L		
Ammonia (as n)	MW-35	06/06/2013	ND	0.03	mg/L		
Ammonia (as n)	MW-35	09/05/2013	ND	0.03	mg/L		
Ammonia (as n)	MW-35	12/16/2013	ND	0.03	mg/L		
Ammonia (as n)	MW-35	03/04/2014	ND	0.03	mg/L		
Ammonia (as n)	MW-35	06/02/2014	ND	0.03	mg/L		
Ammonia (as n)	MW-35	09/22/2014	ND	0.03	mg/L		
Ammonia (as n)	MW-35	11/17/2014	ND	0.03	mg/L		
Ammonia (as n)	MW-35	02/25/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-35	05/19/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-35	08/26/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-35	11/10/2015	ND	0.03	mg/L		
Ammonia (as n)	MW-35	02/22/2016	ND	0.03	mg/L		
Ammonia (as n)	MW-35	05/16/2016	ND	0.03	mg/L		
Ammonia (as n)	MW-35	08/31/2016	ND	0.03	mg/L		
Ammonia (as n)	MW-35	11/15/2016	ND	0.03	mg/L		
Ammonia (as n)	MW-35	02/22/2017	ND	0.03	mg/L		
Ammonia (as n)	MW-35	05/24/2017	ND	0.03	mg/L		
Ammonia (as n)	MW-35	08/30/2017	ND	0.03	mg/L		
Ammonia (as n)	MW-35	11/15/2017	ND	0.03	mg/L		
Ammonia (as n)	MW-35	02/20/2018	ND	0.03	mg/L		
Ammonia (as n)	MW-35	05/17/2018	ND	0.03	mg/L		
Ammonia (as n)	MW-35	08/22/2018	ND	0.03	mg/L		
Ammonia (as n)	MW-35	11/12/2018	ND	0.03	mg/L		
Ammonia (as n)	MW-35	11/12/2019	ND	0.03	mg/L		
Ammonia (as n)	MW-35	11/19/2020	ND	0.03	mg/L		
Ammonia (as n)	MW-35	11/16/2021	ND	0.03	mg/L		
Ammonia (as n)	MW-35	11/17/2022	ND	0.03	mg/L		
Ammonia (as n)	MW-35	11/08/2023		0.037	mg/L		
Antimony, total	MW-13A	12/03/2013	ND	0.001	mg/L		
Antimony, total	MW-13A	03/04/2014	ND	0.001	mg/L		
Antimony, total	MW-13A	06/02/2014	ND	0.001	mg/L		
Antimony, total	MW-13A	09/22/2014	ND	0.001	mg/L		
Antimony, total	MW-13A	11/17/2014	ND	0.001	mg/L		
Antimony, total	MW-13A	02/23/2015	ND	0.001	mg/L		
Antimony, total	MW-13A	05/19/2015	ND	0.001	mg/L		
Antimony, total	MW-13A	08/26/2015	ND	0.001	mg/L		
Antimony, total	MW-13A	11/10/2015	ND	0.001	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Antimony, total	MW-13A	02/22/2016	ND	0.001	mg/L		
Antimony, total	MW-13A	05/16/2016	ND	0.001	mg/L		
Antimony, total	MW-13A	08/31/2016		0.001	mg/L		
Antimony, total	MW-13A	11/14/2016	ND	0.001	mg/L		
Antimony, total	MW-13A	02/22/2017	ND	0.001	mg/L		
Antimony, total	MW-13A	05/24/2017	ND	0.001	mg/L		
Antimony, total	MW-13A	08/30/2017	ND	0.001	mg/L		
Antimony, total	MW-13A	11/13/2017	ND	0.001	mg/L		
Antimony, total	MW-13A	02/20/2018	ND	0.001	mg/L		
Antimony, total	MW-13A	05/15/2018	ND	0.001	mg/L		
Antimony, total	MW-13A	08/21/2018	ND	0.001	mg/L		
Antimony, total	MW-13A	11/12/2018	ND	0.001	mg/L		
Antimony, total	MW-13A	11/11/2019	ND	0.001	mg/L		
Antimony, total	MW-13A	11/19/2020	ND	0.001	mg/L		
Antimony, total	MW-13A	11/16/2021	ND	0.001	mg/L		
Antimony, total	MW-13A	11/17/2022	ND	0.001	mg/L		
Antimony, total	MW-13A	11/08/2023	ND	0.001	mg/L		
Antimony, total	MW-13B	12/03/2013	ND	0.001	mg/L		
Antimony, total	MW-13B	03/04/2014	ND	0.001	mg/L		
Antimony, total	MW-13B	06/02/2014	ND	0.001	mg/L		
Antimony, total	MW-13B	09/22/2014	ND	0.001	mg/L		
Antimony, total	MW-13B	11/17/2014	ND	0.001	mg/L		
Antimony, total	MW-13B	02/23/2015	ND	0.001	mg/L		
Antimony, total	MW-13B	05/19/2015	ND	0.001	mg/L		
Antimony, total	MW-13B	08/26/2015	ND	0.001	mg/L		
Antimony, total	MW-13B	11/10/2015	ND	0.001	mg/L		
Antimony, total	MW-13B	02/22/2016	ND	0.001	mg/L		
Antimony, total	MW-13B	05/16/2016	ND	0.001	mg/L		
Antimony, total	MW-13B	08/31/2016	ND	0.001	mg/L		
Antimony, total	MW-13B	11/14/2016	ND	0.001	mg/L		
Antimony, total	MW-13B	02/22/2017	ND	0.001	mg/L		
Antimony, total	MW-13B	05/24/2017	ND	0.001	mg/L		
Antimony, total	MW-13B	08/30/2017	ND	0.001	mg/L		
Antimony, total	MW-13B	11/13/2017	ND	0.001	mg/L		
Antimony, total	MW-13B	02/20/2018	ND	0.001	mg/L		
Antimony, total	MW-13B	05/15/2018	ND	0.001	mg/L		
Antimony, total	MW-13B	08/21/2018	ND	0.001	mg/L		
Antimony, total	MW-13B	11/12/2018	ND	0.001	mg/L		
Antimony, total	MW-13B	11/11/2019	ND	0.001	mg/L		
Antimony, total	MW-13B	11/19/2020	ND	0.001	mg/L		
Antimony, total	MW-13B	11/16/2021	ND	0.001	mg/L		
Antimony, total	MW-13B	11/17/2022	ND	0.001	mg/L		
Antimony, total	MW-13B	11/08/2023	ND	0.001	mg/L		
Antimony, total	MW-16	09/05/2013	ND	0.001	mg/L		
Antimony, total	MW-16	12/16/2013	ND	0.001	mg/L		
Antimony, total	MW-16	03/05/2014	ND	0.001	mg/L		
Antimony, total	MW-16	06/02/2014	ND	0.001	mg/L		
Antimony, total	MW-16	09/22/2014	ND	0.001	mg/L		
Antimony, total	MW-16	11/18/2014	ND	0.001	mg/L		
Antimony, total	MW-16	02/23/2015		0.0011	mg/L		
Antimony, total	MW-16	05/20/2015	ND	0.001	mg/L		
Antimony, total	MW-16	08/26/2015	ND	0.001	mg/L		
Antimony, total	MW-16	11/11/2015		0.0013	mg/L		
Antimony, total	MW-16	02/24/2016	ND	0.001	mg/L		
Antimony, total	MW-16	05/16/2016	ND	0.001	mg/L		
Antimony, total	MW-16	08/31/2016	ND	0.001	mg/L		
Antimony, total	MW-16	11/14/2016	ND	0.001	mg/L		
Antimony, total	MW-16	02/22/2017	ND	0.001	mg/L		
Antimony, total	MW-16	05/24/2017	ND	0.001	mg/L		
Antimony, total	MW-16	08/30/2017	ND	0.001	mg/L		
Antimony, total	MW-16	11/13/2017	ND	0.001	mg/L		
Antimony, total	MW-16	02/20/2018	ND	0.001	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Antimony, total	MW-16	05/17/2018	ND	0.001	mg/L		
Antimony, total	MW-16	08/22/2018	ND	0.001	mg/L		
Antimony, total	MW-16	11/12/2018	ND	0.001	mg/L		
Antimony, total	MW-16	11/12/2019	ND	0.001	mg/L		
Antimony, total	MW-16	11/20/2020	ND	0.001	mg/L		
Antimony, total	MW-16	11/16/2021	ND	0.001	mg/L		
Antimony, total	MW-16	11/17/2022	ND	0.001	mg/L		
Antimony, total	MW-16	11/08/2023	ND	0.001	mg/L		
Antimony, total	MW-35	09/05/2013	ND	0.001	mg/L		
Antimony, total	MW-35	12/16/2013	ND	0.001	mg/L		
Antimony, total	MW-35	03/04/2014	ND	0.001	mg/L		
Antimony, total	MW-35	06/02/2014	ND	0.001	mg/L		
Antimony, total	MW-35	09/22/2014	ND	0.001	mg/L		
Antimony, total	MW-35	11/17/2014	ND	0.001	mg/L		
Antimony, total	MW-35	02/25/2015	ND	0.001	mg/L		
Antimony, total	MW-35	05/19/2015	ND	0.001	mg/L		
Antimony, total	MW-35	08/26/2015	ND	0.001	mg/L		
Antimony, total	MW-35	11/10/2015	ND	0.001	mg/L		
Antimony, total	MW-35	02/22/2016	ND	0.001	mg/L		
Antimony, total	MW-35	05/16/2016	ND	0.001	mg/L		
Antimony, total	MW-35	08/31/2016	ND	0.001	mg/L		
Antimony, total	MW-35	11/15/2016	ND	0.001	mg/L		
Antimony, total	MW-35	02/22/2017	ND	0.001	mg/L		
Antimony, total	MW-35	05/24/2017	ND	0.001	mg/L		
Antimony, total	MW-35	08/30/2017	ND	0.001	mg/L		
Antimony, total	MW-35	11/15/2017	ND	0.001	mg/L		
Antimony, total	MW-35	02/20/2018	ND	0.001	mg/L		
Antimony, total	MW-35	05/17/2018	ND	0.001	mg/L		
Antimony, total	MW-35	08/22/2018	ND	0.001	mg/L		
Antimony, total	MW-35	11/12/2018	ND	0.001	mg/L		
Antimony, total	MW-35	11/12/2019	ND	0.001	mg/L		
Antimony, total	MW-35	11/19/2020	ND	0.001	mg/L		
Antimony, total	MW-35	11/16/2021	ND	0.001	mg/L		
Antimony, total	MW-35	11/17/2022	ND	0.001	mg/L		
Antimony, total	MW-35	11/08/2023	ND	0.001	mg/L		
Arsenic, total	MW-13A	03/22/2005	ND	5	ug/L		*
Arsenic, total	MW-13A	06/15/2005		0.22	ug/L		
Arsenic, total	MW-13A	09/27/2005		0.23	ug/L		
Arsenic, total	MW-13A	12/15/2005		0.21	ug/L		
Arsenic, total	MW-13A	12/03/2013		0.17	ug/L		
Arsenic, total	MW-13A	03/04/2014		0.18	ug/L		
Arsenic, total	MW-13A	06/02/2014		0.2	ug/L		
Arsenic, total	MW-13A	09/22/2014		0.17	ug/L		
Arsenic, total	MW-13A	11/17/2014		0.18	ug/L		
Arsenic, total	MW-13A	02/23/2015		0.21	ug/L		
Arsenic, total	MW-13A	05/19/2015		0.18	ug/L		
Arsenic, total	MW-13A	08/26/2015		0.19	ug/L		
Arsenic, total	MW-13A	11/10/2015		0.2	ug/L		
Arsenic, total	MW-13A	02/22/2016		0.2	ug/L		
Arsenic, total	MW-13A	05/16/2016		0.16	ug/L		
Arsenic, total	MW-13A	08/31/2016		0.177	ug/L		
Arsenic, total	MW-13A	11/14/2016		0.17	ug/L		
Arsenic, total	MW-13A	02/22/2017		0.201	ug/L		
Arsenic, total	MW-13A	05/24/2017		0.181	ug/L		
Arsenic, total	MW-13A	08/30/2017		0.191	ug/L		
Arsenic, total	MW-13A	11/13/2017		0.193	ug/L		
Arsenic, total	MW-13A	02/20/2018		0.199	ug/L		
Arsenic, total	MW-13A	05/15/2018		0.183	ug/L		
Arsenic, total	MW-13A	08/21/2018		0.199	ug/L		
Arsenic, total	MW-13A	11/12/2018		0.189	ug/L		
Arsenic, total	MW-13A	11/11/2019		0.205	ug/L		
Arsenic, total	MW-13A	11/19/2020		0.198	ug/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Arsenic, total	MW-13A	11/16/2021		0.249	ug/L		
Arsenic, total	MW-13A	11/17/2022		0.206	ug/L		
Arsenic, total	MW-13A	11/08/2023		0.18	ug/L		
Arsenic, total	MW-13B	03/22/2005	ND	5	ug/L		*
Arsenic, total	MW-13B	06/15/2005		0.37	ug/L		
Arsenic, total	MW-13B	09/27/2005		0.39	ug/L		
Arsenic, total	MW-13B	12/15/2005		0.38	ug/L		
Arsenic, total	MW-13B	12/03/2013		0.28	ug/L		
Arsenic, total	MW-13B	03/04/2014		0.32	ug/L		
Arsenic, total	MW-13B	06/02/2014		0.33	ug/L		
Arsenic, total	MW-13B	09/22/2014		0.3	ug/L		
Arsenic, total	MW-13B	11/17/2014		0.3	ug/L		
Arsenic, total	MW-13B	02/23/2015		0.36	ug/L		
Arsenic, total	MW-13B	05/19/2015		0.31	ug/L		
Arsenic, total	MW-13B	08/26/2015		0.31	ug/L		
Arsenic, total	MW-13B	11/10/2015		0.3	ug/L		
Arsenic, total	MW-13B	02/22/2016		0.3	ug/L		
Arsenic, total	MW-13B	05/16/2016		0.29	ug/L		
Arsenic, total	MW-13B	08/31/2016		0.311	ug/L		
Arsenic, total	MW-13B	11/14/2016		0.314	ug/L		
Arsenic, total	MW-13B	02/22/2017		0.324	ug/L		
Arsenic, total	MW-13B	05/24/2017		0.327	ug/L		
Arsenic, total	MW-13B	08/30/2017		0.338	ug/L		
Arsenic, total	MW-13B	11/13/2017		0.311	ug/L		
Arsenic, total	MW-13B	02/20/2018		0.366	ug/L		
Arsenic, total	MW-13B	05/15/2018		0.342	ug/L		
Arsenic, total	MW-13B	08/21/2018		0.377	ug/L		
Arsenic, total	MW-13B	11/12/2018		0.337	ug/L		
Arsenic, total	MW-13B	11/11/2019		0.322	ug/L		
Arsenic, total	MW-13B	11/19/2020		0.347	ug/L		
Arsenic, total	MW-13B	11/16/2021		0.3405	ug/L		
Arsenic, total	MW-13B	11/17/2022		0.338	ug/L		
Arsenic, total	MW-13B	11/08/2023		0.326	ug/L		
Arsenic, total	MW-16	12/23/2013		0.29	ug/L		
Arsenic, total	MW-16	03/05/2014		0.43	ug/L		
Arsenic, total	MW-16	06/02/2014		0.33	ug/L		
Arsenic, total	MW-16	09/22/2014		0.32	ug/L		
Arsenic, total	MW-16	11/18/2014		0.35	ug/L		
Arsenic, total	MW-16	02/23/2015		0.37	ug/L		
Arsenic, total	MW-16	05/20/2015		0.34	ug/L		
Arsenic, total	MW-16	08/26/2015		0.32	ug/L		
Arsenic, total	MW-16	11/11/2015		0.3	ug/L		
Arsenic, total	MW-16	02/24/2016		0.3	ug/L		
Arsenic, total	MW-16	05/16/2016		0.3	ug/L		
Arsenic, total	MW-16	08/31/2016		0.311	ug/L		
Arsenic, total	MW-16	11/14/2016		0.381	ug/L		
Arsenic, total	MW-16	02/22/2017		0.383	ug/L		
Arsenic, total	MW-16	05/24/2017		0.375	ug/L		
Arsenic, total	MW-16	08/30/2017		0.353	ug/L		
Arsenic, total	MW-16	11/13/2017		0.364	ug/L		
Arsenic, total	MW-16	02/20/2018		0.446	ug/L		
Arsenic, total	MW-16	05/17/2018		0.367	ug/L		
Arsenic, total	MW-16	08/22/2018		0.173	ug/L		
Arsenic, total	MW-16	11/12/2018		0.452	ug/L		
Arsenic, total	MW-16	11/12/2019		0.413	ug/L		
Arsenic, total	MW-16	11/20/2020		1.1	ug/L		*
Arsenic, total	MW-16	11/16/2021		0.336	ug/L		
Arsenic, total	MW-16	11/17/2022		0.369	ug/L		
Arsenic, total	MW-16	11/08/2023		0.395	ug/L		
Arsenic, total	MW-35	03/22/2005	ND	5	ug/L		*
Arsenic, total	MW-35	06/14/2005		0.14	ug/L		
Arsenic, total	MW-35	09/27/2005		0.15	ug/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Arsenic, total	MW-35	12/15/2005		0.14	ug/L		
Arsenic, total	MW-35	12/23/2013		0.12	ug/L		
Arsenic, total	MW-35	03/04/2014		0.11	ug/L		
Arsenic, total	MW-35	06/02/2014		0.12	ug/L		
Arsenic, total	MW-35	09/22/2014		0.11	ug/L		
Arsenic, total	MW-35	11/17/2014		0.12	ug/L		
Arsenic, total	MW-35	02/25/2015		0.11	ug/L		
Arsenic, total	MW-35	05/19/2015		0.11	ug/L		
Arsenic, total	MW-35	08/26/2015		0.11	ug/L		
Arsenic, total	MW-35	11/10/2015		0.1	ug/L		
Arsenic, total	MW-35	02/22/2016		0.1	ug/L		
Arsenic, total	MW-35	05/16/2016		0.1	ug/L		
Arsenic, total	MW-35	08/31/2016		0.109	ug/L		
Arsenic, total	MW-35	11/15/2016		0.114	ug/L		
Arsenic, total	MW-35	02/22/2017		0.12	ug/L		
Arsenic, total	MW-35	05/24/2017		0.134	ug/L		
Arsenic, total	MW-35	08/30/2017		0.114	ug/L		
Arsenic, total	MW-35	11/15/2017		0.107	ug/L		
Arsenic, total	MW-35	02/20/2018		0.12	ug/L		
Arsenic, total	MW-35	05/17/2018		0.111	ug/L		
Arsenic, total	MW-35	08/22/2018		0.126	ug/L		
Arsenic, total	MW-35	11/12/2018		0.112	ug/L		
Arsenic, total	MW-35	11/12/2019		0.0996	ug/L		
Arsenic, total	MW-35	11/19/2020		0.115	ug/L		
Arsenic, total	MW-35	11/16/2021		0.121	ug/L		
Arsenic, total	MW-35	11/17/2022		0.114	ug/L		
Arsenic, total	MW-35	11/08/2023		0.103	ug/L		
Barium, total	MW-13A	12/03/2013		0.003	mg/L		
Barium, total	MW-13A	03/04/2014		0.0029	mg/L		
Barium, total	MW-13A	06/02/2014		0.0029	mg/L		
Barium, total	MW-13A	09/22/2014		0.0027	mg/L		
Barium, total	MW-13A	11/17/2014		0.0026	mg/L		
Barium, total	MW-13A	02/23/2015		0.0024	mg/L		
Barium, total	MW-13A	05/19/2015		0.0023	mg/L		
Barium, total	MW-13A	08/26/2015		0.0033	mg/L		
Barium, total	MW-13A	11/10/2015		0.003	mg/L		
Barium, total	MW-13A	02/22/2016		0.0023	mg/L		
Barium, total	MW-13A	05/16/2016		0.003	mg/L		
Barium, total	MW-13A	08/31/2016		0.0029	mg/L		
Barium, total	MW-13A	11/14/2016		0.0028	mg/L		
Barium, total	MW-13A	02/22/2017		0.0028	mg/L		
Barium, total	MW-13A	05/24/2017		0.0025	mg/L		
Barium, total	MW-13A	08/30/2017		0.0025	mg/L		
Barium, total	MW-13A	11/13/2017		0.003	mg/L		
Barium, total	MW-13A	02/20/2018		0.0025	mg/L		
Barium, total	MW-13A	05/15/2018		0.0027	mg/L		
Barium, total	MW-13A	08/21/2018		0.0027	mg/L		
Barium, total	MW-13A	11/12/2018		0.0028	mg/L		
Barium, total	MW-13A	11/11/2019		0.0027	mg/L		
Barium, total	MW-13A	11/19/2020		0.0025	mg/L		
Barium, total	MW-13A	11/16/2021		0.0025	mg/L		
Barium, total	MW-13A	11/17/2022		0.0026	mg/L		
Barium, total	MW-13A	11/08/2023		0.0027	mg/L		
Barium, total	MW-13B	12/03/2013		0.0035	mg/L		
Barium, total	MW-13B	03/04/2014		0.0032	mg/L		
Barium, total	MW-13B	06/02/2014		0.0031	mg/L		
Barium, total	MW-13B	09/22/2014		0.0033	mg/L		
Barium, total	MW-13B	11/17/2014		0.0037	mg/L		
Barium, total	MW-13B	02/23/2015		0.0034	mg/L		
Barium, total	MW-13B	05/19/2015		0.0033	mg/L		
Barium, total	MW-13B	08/26/2015		0.0039	mg/L		
Barium, total	MW-13B	11/10/2015		0.0036	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Barium, total	MW-13B	02/22/2016		0.0036	mg/L		
Barium, total	MW-13B	05/16/2016		0.0034	mg/L		
Barium, total	MW-13B	08/31/2016		0.0041	mg/L		
Barium, total	MW-13B	11/14/2016		0.0029	mg/L		
Barium, total	MW-13B	02/22/2017		0.0034	mg/L		
Barium, total	MW-13B	05/24/2017		0.0033	mg/L		
Barium, total	MW-13B	08/30/2017		0.0033	mg/L		
Barium, total	MW-13B	11/13/2017		0.0035	mg/L		
Barium, total	MW-13B	02/20/2018		0.0035	mg/L		
Barium, total	MW-13B	05/15/2018		0.0033	mg/L		
Barium, total	MW-13B	08/21/2018		0.0031	mg/L		
Barium, total	MW-13B	11/12/2018		0.0034	mg/L		
Barium, total	MW-13B	11/11/2019		0.0034	mg/L		
Barium, total	MW-13B	11/19/2020		0.0032	mg/L		
Barium, total	MW-13B	11/16/2021		0.0031	mg/L		
Barium, total	MW-13B	11/17/2022		0.0038	mg/L		
Barium, total	MW-13B	11/08/2023		0.0032	mg/L		
Barium, total	MW-16	09/05/2013		0.0041	mg/L		
Barium, total	MW-16	12/16/2013		0.0043	mg/L		
Barium, total	MW-16	03/05/2014		0.0036	mg/L		
Barium, total	MW-16	06/02/2014		0.0025	mg/L		
Barium, total	MW-16	09/22/2014		0.0033	mg/L		
Barium, total	MW-16	11/18/2014		0.0039	mg/L		
Barium, total	MW-16	02/23/2015		0.0036	mg/L		
Barium, total	MW-16	05/20/2015		0.0034	mg/L		
Barium, total	MW-16	08/26/2015		0.0038	mg/L		
Barium, total	MW-16	11/11/2015		0.0043	mg/L		
Barium, total	MW-16	02/24/2016		0.0027	mg/L		
Barium, total	MW-16	05/16/2016		0.0031	mg/L		
Barium, total	MW-16	08/31/2016		0.0042	mg/L		
Barium, total	MW-16	11/14/2016		0.0045	mg/L		
Barium, total	MW-16	02/22/2017		0.0027	mg/L		
Barium, total	MW-16	05/24/2017		0.0026	mg/L		
Barium, total	MW-16	08/30/2017		0.0031	mg/L		
Barium, total	MW-16	11/13/2017		0.0035	mg/L		
Barium, total	MW-16	02/20/2018		0.0027	mg/L		
Barium, total	MW-16	05/17/2018		0.0032	mg/L		
Barium, total	MW-16	08/22/2018		0.0033	mg/L		
Barium, total	MW-16	11/12/2018		0.0038	mg/L		
Barium, total	MW-16	11/12/2019		0.0043	mg/L		
Barium, total	MW-16	11/20/2020		0.0055	mg/L		
Barium, total	MW-16	11/16/2021		0.0044	mg/L		
Barium, total	MW-16	11/17/2022		0.0038	mg/L		
Barium, total	MW-16	11/08/2023		0.0038	mg/L		
Barium, total	MW-35	09/05/2013		0.0034	mg/L		
Barium, total	MW-35	12/16/2013		0.0031	mg/L		
Barium, total	MW-35	03/04/2014		0.003	mg/L		
Barium, total	MW-35	06/02/2014		0.0034	mg/L		
Barium, total	MW-35	09/22/2014		0.0034	mg/L		
Barium, total	MW-35	11/17/2014		0.0034	mg/L		
Barium, total	MW-35	02/25/2015		0.003	mg/L		
Barium, total	MW-35	05/19/2015		0.0031	mg/L		
Barium, total	MW-35	08/26/2015		0.0029	mg/L		
Barium, total	MW-35	11/10/2015		0.003	mg/L		
Barium, total	MW-35	02/22/2016		0.0031	mg/L		
Barium, total	MW-35	05/16/2016		0.0033	mg/L		
Barium, total	MW-35	08/31/2016		0.0029	mg/L		
Barium, total	MW-35	11/15/2016		0.0027	mg/L		
Barium, total	MW-35	02/22/2017		0.0031	mg/L		
Barium, total	MW-35	05/24/2017		0.0027	mg/L		
Barium, total	MW-35	08/30/2017		0.0028	mg/L		
Barium, total	MW-35	11/15/2017		0.0028	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Barium, total	MW-35	02/20/2018		0.0026	mg/L		
Barium, total	MW-35	05/17/2018		0.0032	mg/L		
Barium, total	MW-35	08/22/2018		0.0033	mg/L		
Barium, total	MW-35	11/12/2018		0.0032	mg/L		
Barium, total	MW-35	11/12/2019		0.0033	mg/L		
Barium, total	MW-35	11/19/2020		0.0029	mg/L		
Barium, total	MW-35	11/16/2021		0.0031	mg/L		
Barium, total	MW-35	11/17/2022		0.0038	mg/L		
Barium, total	MW-35	11/08/2023		0.003	mg/L		
Beryllium, total	MW-13A	12/03/2013	ND	0.001	mg/L		
Beryllium, total	MW-13A	03/04/2014	ND	0.001	mg/L		
Beryllium, total	MW-13A	06/02/2014	ND	0.001	mg/L		
Beryllium, total	MW-13A	09/22/2014	ND	0.001	mg/L		
Beryllium, total	MW-13A	11/17/2014	ND	0.001	mg/L		
Beryllium, total	MW-13A	02/23/2015	ND	0.001	mg/L		
Beryllium, total	MW-13A	05/19/2015	ND	0.001	mg/L		
Beryllium, total	MW-13A	08/26/2015	ND	0.001	mg/L		
Beryllium, total	MW-13A	11/10/2015	ND	0.001	mg/L		
Beryllium, total	MW-13A	02/22/2016	ND	0.001	mg/L		
Beryllium, total	MW-13A	05/16/2016	ND	0.001	mg/L		
Beryllium, total	MW-13A	08/31/2016	ND	0.001	mg/L		
Beryllium, total	MW-13A	11/14/2016	ND	0.001	mg/L		
Beryllium, total	MW-13A	02/22/2017	ND	0.001	mg/L		
Beryllium, total	MW-13A	05/24/2017	ND	0.001	mg/L		
Beryllium, total	MW-13A	08/30/2017	ND	0.001	mg/L		
Beryllium, total	MW-13A	11/13/2017	ND	0.001	mg/L		
Beryllium, total	MW-13A	02/20/2018	ND	0.001	mg/L		
Beryllium, total	MW-13A	05/15/2018	ND	0.001	mg/L		
Beryllium, total	MW-13A	08/21/2018	ND	0.001	mg/L		
Beryllium, total	MW-13A	11/12/2018	ND	0.001	mg/L		
Beryllium, total	MW-13A	11/11/2019	ND	0.001	mg/L		
Beryllium, total	MW-13A	11/19/2020	ND	0.001	mg/L		
Beryllium, total	MW-13A	11/16/2021	ND	0.001	mg/L		
Beryllium, total	MW-13A	11/17/2022	ND	0.001	mg/L		
Beryllium, total	MW-13A	11/08/2023	ND	0.001	mg/L		
Beryllium, total	MW-13B	12/03/2013	ND	0.001	mg/L		
Beryllium, total	MW-13B	03/04/2014	ND	0.001	mg/L		
Beryllium, total	MW-13B	06/02/2014	ND	0.001	mg/L		
Beryllium, total	MW-13B	09/22/2014	ND	0.001	mg/L		
Beryllium, total	MW-13B	11/17/2014	ND	0.001	mg/L		
Beryllium, total	MW-13B	02/23/2015	ND	0.001	mg/L		
Beryllium, total	MW-13B	05/19/2015	ND	0.001	mg/L		
Beryllium, total	MW-13B	08/26/2015	ND	0.001	mg/L		
Beryllium, total	MW-13B	11/10/2015	ND	0.001	mg/L		
Beryllium, total	MW-13B	02/22/2016	ND	0.001	mg/L		
Beryllium, total	MW-13B	05/16/2016	ND	0.001	mg/L		
Beryllium, total	MW-13B	08/31/2016	ND	0.001	mg/L		
Beryllium, total	MW-13B	11/14/2016	ND	0.001	mg/L		
Beryllium, total	MW-13B	02/22/2017	ND	0.001	mg/L		
Beryllium, total	MW-13B	05/24/2017	ND	0.001	mg/L		
Beryllium, total	MW-13B	08/30/2017	ND	0.001	mg/L		
Beryllium, total	MW-13B	11/13/2017	ND	0.001	mg/L		
Beryllium, total	MW-13B	02/20/2018	ND	0.001	mg/L		
Beryllium, total	MW-13B	05/15/2018	ND	0.001	mg/L		
Beryllium, total	MW-13B	08/21/2018	ND	0.001	mg/L		
Beryllium, total	MW-13B	11/12/2018	ND	0.001	mg/L		
Beryllium, total	MW-13B	11/11/2019	ND	0.001	mg/L		
Beryllium, total	MW-13B	11/19/2020	ND	0.001	mg/L		
Beryllium, total	MW-13B	11/16/2021	ND	0.001	mg/L		
Beryllium, total	MW-13B	11/17/2022	ND	0.001	mg/L		
Beryllium, total	MW-13B	11/08/2023	ND	0.001	mg/L		
Beryllium, total	MW-16	09/05/2013	ND	0.001	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

Beryllium, total	MW-16	12/16/2013	ND	0.001	mg/L		
Beryllium, total	MW-16	03/05/2014	ND	0.001	mg/L		
Beryllium, total	MW-16	06/02/2014	ND	0.001	mg/L		
Beryllium, total	MW-16	09/22/2014	ND	0.001	mg/L		
Beryllium, total	MW-16	11/18/2014	ND	0.001	mg/L		
Beryllium, total	MW-16	02/23/2015	ND	0.001	mg/L		
Beryllium, total	MW-16	05/20/2015	ND	0.001	mg/L		
Beryllium, total	MW-16	08/26/2015	ND	0.001	mg/L		
Beryllium, total	MW-16	11/11/2015	ND	0.001	mg/L		
Beryllium, total	MW-16	02/24/2016	ND	0.001	mg/L		
Beryllium, total	MW-16	05/16/2016	ND	0.001	mg/L		
Beryllium, total	MW-16	08/31/2016	ND	0.001	mg/L		
Beryllium, total	MW-16	11/14/2016	ND	0.001	mg/L		
Beryllium, total	MW-16	02/22/2017	ND	0.001	mg/L		
Beryllium, total	MW-16	05/24/2017	ND	0.001	mg/L		
Beryllium, total	MW-16	08/30/2017	ND	0.001	mg/L		
Beryllium, total	MW-16	11/13/2017	ND	0.001	mg/L		
Beryllium, total	MW-16	02/20/2018	ND	0.001	mg/L		
Beryllium, total	MW-16	05/17/2018	ND	0.001	mg/L		
Beryllium, total	MW-16	08/22/2018	ND	0.001	mg/L		
Beryllium, total	MW-16	11/12/2018	ND	0.001	mg/L		
Beryllium, total	MW-16	11/12/2019	ND	0.001	mg/L		
Beryllium, total	MW-16	11/20/2020	ND	0.001	mg/L		
Beryllium, total	MW-16	11/16/2021	ND	0.001	mg/L		
Beryllium, total	MW-16	11/17/2022	ND	0.001	mg/L		
Beryllium, total	MW-16	11/08/2023	ND	0.001	mg/L		
Beryllium, total	MW-35	09/05/2013	ND	0.001	mg/L		
Beryllium, total	MW-35	12/16/2013	ND	0.001	mg/L		
Beryllium, total	MW-35	03/04/2014	ND	0.001	mg/L		
Beryllium, total	MW-35	06/02/2014	ND	0.001	mg/L		
Beryllium, total	MW-35	09/22/2014	ND	0.001	mg/L		
Beryllium, total	MW-35	11/17/2014	ND	0.001	mg/L		
Beryllium, total	MW-35	02/25/2015	ND	0.001	mg/L		
Beryllium, total	MW-35	05/19/2015	ND	0.001	mg/L		
Beryllium, total	MW-35	08/26/2015	ND	0.001	mg/L		
Beryllium, total	MW-35	11/10/2015	ND	0.001	mg/L		
Beryllium, total	MW-35	02/22/2016	ND	0.001	mg/L		
Beryllium, total	MW-35	05/16/2016	ND	0.001	mg/L		
Beryllium, total	MW-35	08/31/2016	ND	0.001	mg/L		
Beryllium, total	MW-35	11/15/2016	ND	0.001	mg/L		
Beryllium, total	MW-35	02/22/2017	ND	0.001	mg/L		
Beryllium, total	MW-35	05/24/2017	ND	0.001	mg/L		
Beryllium, total	MW-35	08/30/2017	ND	0.001	mg/L		
Beryllium, total	MW-35	11/15/2017	ND	0.001	mg/L		
Beryllium, total	MW-35	02/20/2018	ND	0.001	mg/L		
Beryllium, total	MW-35	05/17/2018	ND	0.001	mg/L		
Beryllium, total	MW-35	08/22/2018	ND	0.001	mg/L		
Beryllium, total	MW-35	11/12/2018	ND	0.001	mg/L		
Beryllium, total	MW-35	11/12/2019	ND	0.001	mg/L		
Beryllium, total	MW-35	11/19/2020	ND	0.001	mg/L		
Beryllium, total	MW-35	11/16/2021	ND	0.001	mg/L		
Beryllium, total	MW-35	11/17/2022	ND	0.001	mg/L		
Beryllium, total	MW-35	11/08/2023	ND	0.001	mg/L		
Cadmium, total	MW-13A	12/03/2013	ND	0.0002	mg/L		
Cadmium, total	MW-13A	03/04/2014	ND	0.0002	mg/L		
Cadmium, total	MW-13A	06/02/2014	ND	0.0002	mg/L		
Cadmium, total	MW-13A	09/22/2014	ND	0.0002	mg/L		
Cadmium, total	MW-13A	11/17/2014	ND	0.0002	mg/L		
Cadmium, total	MW-13A	02/23/2015	ND	0.0002	mg/L		
Cadmium, total	MW-13A	05/19/2015	ND	0.0002	mg/L		
Cadmium, total	MW-13A	08/26/2015	ND	0.0002	mg/L		
Cadmium, total	MW-13A	11/10/2015	ND	0.0002	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Cadmium, total	MW-13A	02/22/2016	ND	0.0002	mg/L		
Cadmium, total	MW-13A	05/16/2016	ND	0.0002	mg/L		
Cadmium, total	MW-13A	08/31/2016	ND	0.0002	mg/L		
Cadmium, total	MW-13A	11/14/2016	ND	0.0002	mg/L		
Cadmium, total	MW-13A	02/22/2017	ND	0.0002	mg/L		
Cadmium, total	MW-13A	05/24/2017	ND	0.0002	mg/L		
Cadmium, total	MW-13A	08/30/2017	ND	0.0002	mg/L		
Cadmium, total	MW-13A	11/13/2017	ND	0.0002	mg/L		
Cadmium, total	MW-13A	02/20/2018	ND	0.0002	mg/L		
Cadmium, total	MW-13A	05/15/2018	ND	0.0002	mg/L		
Cadmium, total	MW-13A	08/21/2018	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-13A	11/12/2018	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-13A	11/11/2019	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-13A	11/19/2020	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-13A	11/16/2021	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-13A	11/17/2022	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-13A	11/08/2023	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-13B	12/03/2013	ND	0.0002	mg/L		
Cadmium, total	MW-13B	03/04/2014	ND	0.0002	mg/L		
Cadmium, total	MW-13B	06/02/2014	ND	0.0002	mg/L		
Cadmium, total	MW-13B	09/22/2014	ND	0.0002	mg/L		
Cadmium, total	MW-13B	11/17/2014	ND	0.0002	mg/L		
Cadmium, total	MW-13B	02/23/2015	ND	0.0002	mg/L		
Cadmium, total	MW-13B	05/19/2015	ND	0.0002	mg/L		
Cadmium, total	MW-13B	08/26/2015	ND	0.0002	mg/L		
Cadmium, total	MW-13B	11/10/2015	ND	0.0002	mg/L		
Cadmium, total	MW-13B	02/22/2016	ND	0.0002	mg/L		
Cadmium, total	MW-13B	05/16/2016	ND	0.0002	mg/L		
Cadmium, total	MW-13B	08/31/2016	ND	0.0002	mg/L		
Cadmium, total	MW-13B	11/14/2016	ND	0.0002	mg/L		
Cadmium, total	MW-13B	02/22/2017	ND	0.0002	mg/L		
Cadmium, total	MW-13B	05/24/2017	ND	0.0002	mg/L		
Cadmium, total	MW-13B	08/30/2017	ND	0.0002	mg/L		
Cadmium, total	MW-13B	11/13/2017	ND	0.0002	mg/L		
Cadmium, total	MW-13B	02/20/2018	ND	0.0002	mg/L		
Cadmium, total	MW-13B	05/15/2018	ND	0.0002	mg/L		
Cadmium, total	MW-13B	08/21/2018	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-13B	11/12/2018	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-13B	11/11/2019	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-13B	11/19/2020	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-13B	11/16/2021	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-13B	11/17/2022	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-13B	11/08/2023	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-16	09/05/2013	ND	0.0002	mg/L		
Cadmium, total	MW-16	12/16/2013	ND	0.0002	mg/L		
Cadmium, total	MW-16	03/05/2014	ND	0.0002	mg/L		
Cadmium, total	MW-16	06/02/2014	ND	0.0002	mg/L		
Cadmium, total	MW-16	09/22/2014	ND	0.0002	mg/L		
Cadmium, total	MW-16	11/18/2014	ND	0.0002	mg/L		
Cadmium, total	MW-16	02/23/2015	ND	0.0002	mg/L		
Cadmium, total	MW-16	05/20/2015	ND	0.0002	mg/L		
Cadmium, total	MW-16	08/26/2015	ND	0.0002	mg/L		
Cadmium, total	MW-16	11/11/2015	ND	0.0002	mg/L		
Cadmium, total	MW-16	02/24/2016	ND	0.0002	mg/L		
Cadmium, total	MW-16	05/16/2016	ND	0.0002	mg/L		
Cadmium, total	MW-16	08/31/2016	ND	0.0002	mg/L		
Cadmium, total	MW-16	11/14/2016	ND	0.0002	mg/L		
Cadmium, total	MW-16	02/22/2017	ND	0.0002	mg/L		
Cadmium, total	MW-16	05/24/2017	ND	0.0002	mg/L		
Cadmium, total	MW-16	08/30/2017	ND	0.0002	mg/L		
Cadmium, total	MW-16	11/13/2017	ND	0.0002	mg/L		
Cadmium, total	MW-16	02/20/2018	ND	0.0002	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Cadmium, total	MW-16	05/17/2018	ND	0.0002	mg/L		
Cadmium, total	MW-16	08/22/2018	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-16	11/12/2018	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-16	11/12/2019	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-16	11/20/2020	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-16	11/16/2021	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-16	11/17/2022	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-16	11/08/2023	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-35	09/05/2013	ND	0.0002	mg/L		
Cadmium, total	MW-35	12/16/2013	ND	0.0002	mg/L		
Cadmium, total	MW-35	03/04/2014	ND	0.0002	mg/L		
Cadmium, total	MW-35	06/02/2014	ND	0.0002	mg/L		
Cadmium, total	MW-35	09/22/2014	ND	0.0002	mg/L		
Cadmium, total	MW-35	11/17/2014	ND	0.0002	mg/L		
Cadmium, total	MW-35	02/25/2015	ND	0.0002	mg/L		
Cadmium, total	MW-35	05/19/2015	ND	0.0002	mg/L		
Cadmium, total	MW-35	08/26/2015	ND	0.0002	mg/L		
Cadmium, total	MW-35	11/10/2015	ND	0.0002	mg/L		
Cadmium, total	MW-35	02/22/2016	ND	0.0002	mg/L		
Cadmium, total	MW-35	05/16/2016	ND	0.0002	mg/L		
Cadmium, total	MW-35	08/31/2016	ND	0.0002	mg/L		
Cadmium, total	MW-35	11/15/2016	ND	0.0002	mg/L		
Cadmium, total	MW-35	02/22/2017	ND	0.0002	mg/L		
Cadmium, total	MW-35	05/24/2017	ND	0.0002	mg/L		
Cadmium, total	MW-35	08/30/2017	ND	0.0002	mg/L		
Cadmium, total	MW-35	11/15/2017	ND	0.0002	mg/L		
Cadmium, total	MW-35	02/20/2018	ND	0.0002	mg/L		
Cadmium, total	MW-35	05/17/2018	ND	0.0002	mg/L		
Cadmium, total	MW-35	08/22/2018	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-35	11/12/2018	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-35	11/12/2019	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-35	11/19/2020	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-35	11/16/2021	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-35	11/17/2022	ND	0.0003	mg/L	0.0002	**
Cadmium, total	MW-35	11/08/2023	ND	0.0003	mg/L	0.0002	**
Calcium, dissolved	MW-13A	03/22/2005		15.7	mg/L		
Calcium, dissolved	MW-13A	06/15/2005		14.2	mg/L		
Calcium, dissolved	MW-13A	09/27/2005		14.2	mg/L		
Calcium, dissolved	MW-13A	12/15/2005		15.1	mg/L		
Calcium, dissolved	MW-13A	03/28/2006		16	mg/L		
Calcium, dissolved	MW-13A	06/21/2006		16	mg/L		
Calcium, dissolved	MW-13A	09/26/2006		15	mg/L		
Calcium, dissolved	MW-13A	12/13/2006		15	mg/L		
Calcium, dissolved	MW-13A	03/27/2007		15	mg/L		
Calcium, dissolved	MW-13A	06/19/2007		16	mg/L		
Calcium, dissolved	MW-13A	09/19/2007		16	mg/L		
Calcium, dissolved	MW-13A	12/19/2007		15	mg/L		
Calcium, dissolved	MW-13A	03/25/2008		16	mg/L		
Calcium, dissolved	MW-13A	06/18/2008		16	mg/L		
Calcium, dissolved	MW-13A	09/17/2008		15	mg/L		
Calcium, dissolved	MW-13A	12/17/2008		16	mg/L		
Calcium, dissolved	MW-13A	03/24/2009		15	mg/L		
Calcium, dissolved	MW-13A	06/17/2009		17	mg/L		
Calcium, dissolved	MW-13A	09/10/2009		15	mg/L		
Calcium, dissolved	MW-13A	12/03/2009		15	mg/L		
Calcium, dissolved	MW-13A	03/25/2010		16	mg/L		
Calcium, dissolved	MW-13A	06/23/2010		15	mg/L		
Calcium, dissolved	MW-13A	09/23/2010		15	mg/L		
Calcium, dissolved	MW-13A	12/08/2010		16	mg/L		
Calcium, dissolved	MW-13A	03/30/2011		16	mg/L		
Calcium, dissolved	MW-13A	06/06/2011		16	mg/L		
Calcium, dissolved	MW-13A	09/27/2011		16	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Calcium, dissolved	MW-13A	12/14/2011		16	mg/L		
Calcium, dissolved	MW-13A	03/21/2012		16	mg/L		
Calcium, dissolved	MW-13A	06/08/2012		15	mg/L		
Calcium, dissolved	MW-13A	09/26/2012		15	mg/L		
Calcium, dissolved	MW-13A	12/03/2012		16	mg/L		
Calcium, dissolved	MW-13A	03/11/2013		16	mg/L		
Calcium, dissolved	MW-13A	06/05/2013		16	mg/L		
Calcium, dissolved	MW-13A	12/03/2013		16	mg/L		
Calcium, dissolved	MW-13A	03/04/2014		16	mg/L		
Calcium, dissolved	MW-13A	06/02/2014		16	mg/L		
Calcium, dissolved	MW-13A	09/22/2014		15	mg/L		
Calcium, dissolved	MW-13A	11/17/2014		15	mg/L		
Calcium, dissolved	MW-13A	02/23/2015		15	mg/L		
Calcium, dissolved	MW-13A	05/19/2015		16	mg/L		
Calcium, dissolved	MW-13A	08/26/2015		15	mg/L		
Calcium, dissolved	MW-13A	11/10/2015		15	mg/L		
Calcium, dissolved	MW-13A	02/22/2016		16	mg/L		
Calcium, dissolved	MW-13A	05/16/2016		15	mg/L		
Calcium, dissolved	MW-13A	08/31/2016		17	mg/L		
Calcium, dissolved	MW-13A	11/14/2016		16	mg/L		
Calcium, dissolved	MW-13A	02/22/2017		17	mg/L		
Calcium, dissolved	MW-13A	05/24/2017		14	mg/L		
Calcium, dissolved	MW-13A	08/30/2017		15	mg/L		
Calcium, dissolved	MW-13A	11/13/2017		15	mg/L		
Calcium, dissolved	MW-13A	02/20/2018		14	mg/L		
Calcium, dissolved	MW-13A	05/15/2018		15	mg/L		
Calcium, dissolved	MW-13A	08/21/2018		15	mg/L		
Calcium, dissolved	MW-13A	11/12/2018		15	mg/L		
Calcium, dissolved	MW-13A	11/11/2019		15	mg/L		
Calcium, dissolved	MW-13A	11/19/2020		15	mg/L		
Calcium, dissolved	MW-13A	11/16/2021		15	mg/L		
Calcium, dissolved	MW-13A	11/17/2022		15	mg/L		
Calcium, dissolved	MW-13A	11/08/2023		16	mg/L		
Calcium, dissolved	MW-13B	03/22/2005		16.9	mg/L		
Calcium, dissolved	MW-13B	06/15/2005		16	mg/L		
Calcium, dissolved	MW-13B	09/27/2005		17.1	mg/L		
Calcium, dissolved	MW-13B	12/15/2005		16.1	mg/L		
Calcium, dissolved	MW-13B	03/29/2006		17	mg/L		
Calcium, dissolved	MW-13B	06/21/2006		17	mg/L		
Calcium, dissolved	MW-13B	09/26/2006		16	mg/L		
Calcium, dissolved	MW-13B	12/13/2006		17	mg/L		
Calcium, dissolved	MW-13B	03/27/2007		16	mg/L		
Calcium, dissolved	MW-13B	06/19/2007		16	mg/L		
Calcium, dissolved	MW-13B	09/18/2007		17	mg/L		
Calcium, dissolved	MW-13B	12/19/2007		15	mg/L		
Calcium, dissolved	MW-13B	03/25/2008		16	mg/L		
Calcium, dissolved	MW-13B	06/18/2008		17	mg/L		
Calcium, dissolved	MW-13B	09/17/2008		16	mg/L		
Calcium, dissolved	MW-13B	12/16/2008		16	mg/L		
Calcium, dissolved	MW-13B	03/24/2009		16	mg/L		
Calcium, dissolved	MW-13B	06/17/2009		17	mg/L		
Calcium, dissolved	MW-13B	09/10/2009		16	mg/L		
Calcium, dissolved	MW-13B	12/03/2009		16	mg/L		
Calcium, dissolved	MW-13B	03/25/2010		17	mg/L		
Calcium, dissolved	MW-13B	06/23/2010		16	mg/L		
Calcium, dissolved	MW-13B	09/23/2010		16	mg/L		
Calcium, dissolved	MW-13B	12/08/2010		16	mg/L		
Calcium, dissolved	MW-13B	03/30/2011		16	mg/L		
Calcium, dissolved	MW-13B	06/06/2011		16	mg/L		
Calcium, dissolved	MW-13B	09/27/2011		16	mg/L		
Calcium, dissolved	MW-13B	12/14/2011		16	mg/L		
Calcium, dissolved	MW-13B	03/21/2012		16	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

Calcium, dissolved	MW-13B	06/08/2012		16	mg/L		
Calcium, dissolved	MW-13B	09/26/2012		16	mg/L		
Calcium, dissolved	MW-13B	12/03/2012		17	mg/L		
Calcium, dissolved	MW-13B	03/11/2013		17	mg/L		
Calcium, dissolved	MW-13B	06/05/2013		17	mg/L		
Calcium, dissolved	MW-13B	12/03/2013		17	mg/L		
Calcium, dissolved	MW-13B	03/04/2014		17	mg/L		
Calcium, dissolved	MW-13B	06/02/2014		16	mg/L		
Calcium, dissolved	MW-13B	09/22/2014		15	mg/L		
Calcium, dissolved	MW-13B	11/17/2014		16	mg/L		
Calcium, dissolved	MW-13B	02/23/2015		17	mg/L		
Calcium, dissolved	MW-13B	05/19/2015		17	mg/L		
Calcium, dissolved	MW-13B	08/26/2015		16	mg/L		
Calcium, dissolved	MW-13B	11/10/2015		17	mg/L		
Calcium, dissolved	MW-13B	02/22/2016		18	mg/L		
Calcium, dissolved	MW-13B	05/16/2016		16	mg/L		
Calcium, dissolved	MW-13B	08/31/2016		18	mg/L		
Calcium, dissolved	MW-13B	11/14/2016		17	mg/L		
Calcium, dissolved	MW-13B	02/22/2017		18	mg/L		
Calcium, dissolved	MW-13B	05/24/2017		14	mg/L		
Calcium, dissolved	MW-13B	08/30/2017		17	mg/L		
Calcium, dissolved	MW-13B	11/13/2017		17	mg/L		
Calcium, dissolved	MW-13B	02/20/2018		16	mg/L		
Calcium, dissolved	MW-13B	05/15/2018		17	mg/L		
Calcium, dissolved	MW-13B	08/21/2018		18	mg/L		
Calcium, dissolved	MW-13B	11/12/2018		17	mg/L		
Calcium, dissolved	MW-13B	11/11/2019		16	mg/L		
Calcium, dissolved	MW-13B	11/19/2020		16	mg/L		
Calcium, dissolved	MW-13B	11/16/2021		16	mg/L		
Calcium, dissolved	MW-13B	11/17/2022		17	mg/L		
Calcium, dissolved	MW-13B	11/08/2023		16	mg/L		
Calcium, dissolved	MW-16	03/24/2009		12	mg/L		
Calcium, dissolved	MW-16	06/16/2009		10	mg/L		
Calcium, dissolved	MW-16	09/09/2009		11	mg/L		
Calcium, dissolved	MW-16	12/03/2009		14	mg/L		
Calcium, dissolved	MW-16	03/25/2010		9.6	mg/L		
Calcium, dissolved	MW-16	06/24/2010		12	mg/L		
Calcium, dissolved	MW-16	09/24/2010		13	mg/L		
Calcium, dissolved	MW-16	12/09/2010		13	mg/L		
Calcium, dissolved	MW-16	03/30/2011		9.8	mg/L		
Calcium, dissolved	MW-16	06/07/2011		9.7	mg/L		
Calcium, dissolved	MW-16	09/27/2011		12	mg/L		
Calcium, dissolved	MW-16	12/13/2011		11	mg/L		
Calcium, dissolved	MW-16	03/21/2012		8.9	mg/L		
Calcium, dissolved	MW-16	06/08/2012		9.1	mg/L		
Calcium, dissolved	MW-16	09/27/2012		11	mg/L		
Calcium, dissolved	MW-16	12/04/2012		11	mg/L		
Calcium, dissolved	MW-16	03/12/2013		10	mg/L		
Calcium, dissolved	MW-16	06/04/2013		10	mg/L		
Calcium, dissolved	MW-16	09/05/2013		11	mg/L		
Calcium, dissolved	MW-16	12/16/2013		11	mg/L		
Calcium, dissolved	MW-16	03/05/2014		9.8	mg/L		
Calcium, dissolved	MW-16	06/02/2014		8.8	mg/L		
Calcium, dissolved	MW-16	09/22/2014		9.9	mg/L		
Calcium, dissolved	MW-16	11/18/2014		11	mg/L		
Calcium, dissolved	MW-16	02/23/2015		9.5	mg/L		
Calcium, dissolved	MW-16	05/20/2015		10	mg/L		
Calcium, dissolved	MW-16	08/26/2015		9.8	mg/L		
Calcium, dissolved	MW-16	11/11/2015		12	mg/L		
Calcium, dissolved	MW-16	02/24/2016		7.7	mg/L		
Calcium, dissolved	MW-16	05/16/2016		8.4	mg/L		
Calcium, dissolved	MW-16	08/31/2016		12	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Calcium, dissolved	MW-16	11/14/2016		9.6	mg/L		
Calcium, dissolved	MW-16	02/22/2017		8.4	mg/L		
Calcium, dissolved	MW-16	05/24/2017		7.6	mg/L		
Calcium, dissolved	MW-16	08/30/2017		9.2	mg/L		
Calcium, dissolved	MW-16	11/13/2017		8.9	mg/L		
Calcium, dissolved	MW-16	02/20/2018		7.5	mg/L		
Calcium, dissolved	MW-16	05/17/2018		7.9	mg/L		
Calcium, dissolved	MW-16	08/22/2018		8.8	mg/L		
Calcium, dissolved	MW-16	11/12/2018		9.7	mg/L		
Calcium, dissolved	MW-16	11/12/2019		12	mg/L		
Calcium, dissolved	MW-16	11/20/2020		13	mg/L		
Calcium, dissolved	MW-16	11/16/2021		12	mg/L		
Calcium, dissolved	MW-16	11/17/2022		10	mg/L		
Calcium, dissolved	MW-16	11/08/2023		11	mg/L		
Calcium, dissolved	MW-35	03/22/2005		13.9	mg/L		
Calcium, dissolved	MW-35	06/14/2005		12.9	mg/L		
Calcium, dissolved	MW-35	09/27/2005		14.8	mg/L		
Calcium, dissolved	MW-35	12/15/2005		13.2	mg/L		
Calcium, dissolved	MW-35	03/28/2006		14	mg/L		
Calcium, dissolved	MW-35	06/21/2006		14	mg/L		
Calcium, dissolved	MW-35	09/26/2006		13	mg/L		
Calcium, dissolved	MW-35	12/12/2006		14	mg/L		
Calcium, dissolved	MW-35	03/27/2007		13	mg/L		
Calcium, dissolved	MW-35	06/20/2007		14	mg/L		
Calcium, dissolved	MW-35	09/18/2007		14	mg/L		
Calcium, dissolved	MW-35	12/20/2007		13	mg/L		
Calcium, dissolved	MW-35	03/25/2008		13	mg/L		
Calcium, dissolved	MW-35	06/18/2008		13	mg/L		
Calcium, dissolved	MW-35	09/18/2008		13	mg/L		
Calcium, dissolved	MW-35	12/19/2008		12	mg/L		
Calcium, dissolved	MW-35	03/24/2009		13	mg/L		
Calcium, dissolved	MW-35	06/16/2009		13	mg/L		
Calcium, dissolved	MW-35	09/10/2009		12	mg/L		
Calcium, dissolved	MW-35	12/03/2009		13	mg/L		
Calcium, dissolved	MW-35	03/25/2010		13	mg/L		
Calcium, dissolved	MW-35	06/23/2010		13	mg/L		
Calcium, dissolved	MW-35	09/23/2010		13	mg/L		
Calcium, dissolved	MW-35	12/09/2010		14	mg/L		
Calcium, dissolved	MW-35	03/30/2011		14	mg/L		
Calcium, dissolved	MW-35	06/06/2011		13	mg/L		
Calcium, dissolved	MW-35	09/26/2011		14	mg/L		
Calcium, dissolved	MW-35	12/13/2011		14	mg/L		
Calcium, dissolved	MW-35	03/21/2012		14	mg/L		
Calcium, dissolved	MW-35	06/06/2012		13	mg/L		
Calcium, dissolved	MW-35	09/26/2012		13	mg/L		
Calcium, dissolved	MW-35	12/04/2012		14	mg/L		
Calcium, dissolved	MW-35	03/13/2013		14	mg/L		
Calcium, dissolved	MW-35	06/06/2013		13	mg/L		
Calcium, dissolved	MW-35	09/05/2013		13	mg/L		
Calcium, dissolved	MW-35	12/16/2013		14	mg/L		
Calcium, dissolved	MW-35	03/04/2014		14	mg/L		
Calcium, dissolved	MW-35	06/02/2014		14	mg/L		
Calcium, dissolved	MW-35	09/22/2014		13	mg/L		
Calcium, dissolved	MW-35	11/17/2014		14	mg/L		
Calcium, dissolved	MW-35	02/25/2015		15	mg/L		
Calcium, dissolved	MW-35	05/19/2015		13	mg/L		
Calcium, dissolved	MW-35	08/26/2015		13	mg/L		
Calcium, dissolved	MW-35	11/10/2015		15	mg/L		
Calcium, dissolved	MW-35	02/22/2016		15	mg/L		
Calcium, dissolved	MW-35	05/16/2016		14	mg/L		
Calcium, dissolved	MW-35	08/31/2016		15	mg/L		
Calcium, dissolved	MW-35	11/15/2016		14	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Calcium, dissolved	MW-35	02/22/2017		15	mg/L		
Calcium, dissolved	MW-35	05/24/2017		13	mg/L		
Calcium, dissolved	MW-35	08/30/2017		14	mg/L		
Calcium, dissolved	MW-35	11/15/2017		13	mg/L		
Calcium, dissolved	MW-35	02/20/2018		13	mg/L		
Calcium, dissolved	MW-35	05/17/2018		14	mg/L		
Calcium, dissolved	MW-35	08/22/2018		14	mg/L		
Calcium, dissolved	MW-35	11/12/2018		15	mg/L		
Calcium, dissolved	MW-35	11/12/2019		14	mg/L		
Calcium, dissolved	MW-35	11/19/2020		14	mg/L		
Calcium, dissolved	MW-35	11/16/2021		15	mg/L		
Calcium, dissolved	MW-35	11/17/2022		14	mg/L		
Calcium, dissolved	MW-35	11/08/2023		14	mg/L		
Chloride	MW-13A	03/22/2005		2.6	mg/L		
Chloride	MW-13A	06/15/2005		1.9	mg/L		
Chloride	MW-13A	09/27/2005		2.4	mg/L		
Chloride	MW-13A	12/15/2005		2.1	mg/L		
Chloride	MW-13A	03/28/2006		3	mg/L		
Chloride	MW-13A	06/21/2006		2.4	mg/L		
Chloride	MW-13A	09/26/2006		2.6	mg/L		
Chloride	MW-13A	12/13/2006		3	mg/L		
Chloride	MW-13A	03/27/2007		2.8	mg/L		
Chloride	MW-13A	06/19/2007		2.6	mg/L		
Chloride	MW-13A	09/19/2007		2.6	mg/L		
Chloride	MW-13A	12/19/2007		2.6	mg/L		
Chloride	MW-13A	03/25/2008		2.5	mg/L		
Chloride	MW-13A	06/18/2008		2.6	mg/L		
Chloride	MW-13A	09/17/2008		2.5	mg/L		
Chloride	MW-13A	12/17/2008		3.1	mg/L		
Chloride	MW-13A	03/24/2009		2.7	mg/L		
Chloride	MW-13A	06/17/2009		2.4	mg/L		
Chloride	MW-13A	09/10/2009		2.1	mg/L		
Chloride	MW-13A	12/03/2009		3.4	mg/L		
Chloride	MW-13A	03/25/2010		2.2	mg/L		
Chloride	MW-13A	06/23/2010		2.6	mg/L		
Chloride	MW-13A	09/23/2010		2.8	mg/L		
Chloride	MW-13A	12/08/2010		2.9	mg/L		
Chloride	MW-13A	03/30/2011		2.9	mg/L		
Chloride	MW-13A	06/06/2011		3	mg/L		
Chloride	MW-13A	09/27/2011		3.8	mg/L		
Chloride	MW-13A	12/14/2011		4.4	mg/L		
Chloride	MW-13A	03/21/2012		2.7	mg/L		
Chloride	MW-13A	06/08/2012		3	mg/L		
Chloride	MW-13A	09/26/2012		2.6	mg/L		
Chloride	MW-13A	12/03/2012		1.8	mg/L		
Chloride	MW-13A	03/11/2013		3	mg/L		
Chloride	MW-13A	06/05/2013		1.7	mg/L		
Chloride	MW-13A	12/03/2013		1.7	mg/L		
Chloride	MW-13A	03/04/2014		1.7	mg/L		
Chloride	MW-13A	06/02/2014		2	mg/L		
Chloride	MW-13A	09/22/2014		1.7	mg/L		
Chloride	MW-13A	11/17/2014		1.9	mg/L		
Chloride	MW-13A	02/23/2015		1.8	mg/L		
Chloride	MW-13A	05/19/2015		1.9	mg/L		
Chloride	MW-13A	08/26/2015		2.1	mg/L		
Chloride	MW-13A	11/10/2015		1.9	mg/L		
Chloride	MW-13A	02/22/2016		1.9	mg/L		
Chloride	MW-13A	05/16/2016		1.9	mg/L		
Chloride	MW-13A	08/31/2016		1.9	mg/L		
Chloride	MW-13A	11/14/2016		1.8	mg/L		
Chloride	MW-13A	02/22/2017		2	mg/L		
Chloride	MW-13A	05/24/2017		1.9	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Chloride	MW-13A	08/30/2017		2.4	mg/L		
Chloride	MW-13A	11/13/2017		1.7	mg/L		
Chloride	MW-13A	02/20/2018		2.1	mg/L		
Chloride	MW-13A	05/15/2018		1.8	mg/L		
Chloride	MW-13A	08/21/2018		1.8	mg/L		
Chloride	MW-13A	11/12/2018		1.9	mg/L		
Chloride	MW-13A	11/11/2019	ND	3	mg/L		
Chloride	MW-13A	11/19/2020	ND	3	mg/L		
Chloride	MW-13A	11/16/2021	ND	3	mg/L		
Chloride	MW-13A	11/17/2022	ND	3	mg/L		
Chloride	MW-13A	11/08/2023	ND	3	mg/L		
Chloride	MW-13B	03/22/2005		3	mg/L		
Chloride	MW-13B	06/15/2005		2.3	mg/L		
Chloride	MW-13B	09/27/2005		2.8	mg/L		
Chloride	MW-13B	12/15/2005		2.4	mg/L		
Chloride	MW-13B	03/29/2006		3.2	mg/L		
Chloride	MW-13B	06/21/2006		2.9	mg/L		
Chloride	MW-13B	09/26/2006		2.7	mg/L		
Chloride	MW-13B	12/13/2006		3.3	mg/L		
Chloride	MW-13B	03/27/2007		3	mg/L		
Chloride	MW-13B	06/19/2007		2.8	mg/L		
Chloride	MW-13B	09/18/2007		2.8	mg/L		
Chloride	MW-13B	12/19/2007		2.8	mg/L		
Chloride	MW-13B	03/25/2008		2.7	mg/L		
Chloride	MW-13B	06/18/2008		2.8	mg/L		
Chloride	MW-13B	09/17/2008		2.7	mg/L		
Chloride	MW-13B	12/16/2008		3.2	mg/L		
Chloride	MW-13B	03/24/2009		2.6	mg/L		
Chloride	MW-13B	06/17/2009		3	mg/L		
Chloride	MW-13B	09/10/2009		2.3	mg/L		
Chloride	MW-13B	12/03/2009		2.9	mg/L		
Chloride	MW-13B	03/25/2010		2.5	mg/L		
Chloride	MW-13B	06/23/2010		2.8	mg/L		
Chloride	MW-13B	09/23/2010		3	mg/L		
Chloride	MW-13B	12/08/2010		2.5	mg/L		
Chloride	MW-13B	03/30/2011		3.1	mg/L		
Chloride	MW-13B	06/06/2011		3.2	mg/L		
Chloride	MW-13B	09/27/2011		3.7	mg/L		
Chloride	MW-13B	12/14/2011		3.4	mg/L		
Chloride	MW-13B	03/21/2012		2.8	mg/L		
Chloride	MW-13B	06/08/2012		3.4	mg/L		
Chloride	MW-13B	09/26/2012		2.9	mg/L		
Chloride	MW-13B	12/03/2012		2.1	mg/L		
Chloride	MW-13B	03/11/2013		2.1	mg/L		
Chloride	MW-13B	06/05/2013		2	mg/L		
Chloride	MW-13B	12/03/2013		1.9	mg/L		
Chloride	MW-13B	03/04/2014		1.9	mg/L		
Chloride	MW-13B	06/02/2014		2.1	mg/L		
Chloride	MW-13B	09/22/2014		1.9	mg/L		
Chloride	MW-13B	11/17/2014		2.1	mg/L		
Chloride	MW-13B	02/23/2015		2	mg/L		
Chloride	MW-13B	05/19/2015		2	mg/L		
Chloride	MW-13B	08/26/2015		2.1	mg/L		
Chloride	MW-13B	11/10/2015		2	mg/L		
Chloride	MW-13B	02/22/2016		2	mg/L		
Chloride	MW-13B	05/16/2016		2	mg/L		
Chloride	MW-13B	08/31/2016		2	mg/L		
Chloride	MW-13B	11/14/2016		1.9	mg/L		
Chloride	MW-13B	02/22/2017		2	mg/L		
Chloride	MW-13B	05/24/2017		2	mg/L		
Chloride	MW-13B	08/30/2017		2.2	mg/L		
Chloride	MW-13B	11/13/2017		1.9	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Chloride	MW-13B	02/20/2018		2.2	mg/L		
Chloride	MW-13B	05/15/2018		1.9	mg/L		
Chloride	MW-13B	08/21/2018		1.9	mg/L		
Chloride	MW-13B	11/12/2018		2	mg/L		
Chloride	MW-13B	11/11/2019	ND	3	mg/L		
Chloride	MW-13B	11/19/2020	ND	3	mg/L		
Chloride	MW-13B	11/16/2021	ND	3	mg/L		
Chloride	MW-13B	11/17/2022	ND	3	mg/L		
Chloride	MW-13B	11/08/2023	ND	3	mg/L		
Chloride	MW-16	03/24/2009		2.1	mg/L		
Chloride	MW-16	06/16/2009		2.2	mg/L		
Chloride	MW-16	09/09/2009		1.3	mg/L		
Chloride	MW-16	12/03/2009		1.9	mg/L		
Chloride	MW-16	03/25/2010		1.7	mg/L		
Chloride	MW-16	06/24/2010		1.6	mg/L		
Chloride	MW-16	09/24/2010		1.7	mg/L		
Chloride	MW-16	12/09/2010		2.3	mg/L		
Chloride	MW-16	03/30/2011		3.6	mg/L		
Chloride	MW-16	06/07/2011		2.4	mg/L		
Chloride	MW-16	09/27/2011		3.9	mg/L		
Chloride	MW-16	12/13/2011		2.1	mg/L		
Chloride	MW-16	03/21/2012		2.2	mg/L		
Chloride	MW-16	06/08/2012		2.8	mg/L		
Chloride	MW-16	09/27/2012		1	mg/L		
Chloride	MW-16	12/04/2012		1.3	mg/L		
Chloride	MW-16	03/12/2013		1.3	mg/L		
Chloride	MW-16	06/04/2013		1.3	mg/L		
Chloride	MW-16	09/05/2013		1.3	mg/L		
Chloride	MW-16	12/16/2013	ND	1	mg/L	3	**
Chloride	MW-16	03/05/2014		1	mg/L		
Chloride	MW-16	06/02/2014		1.4	mg/L		
Chloride	MW-16	09/22/2014		1.1	mg/L		
Chloride	MW-16	11/18/2014		1.5	mg/L		
Chloride	MW-16	02/23/2015		1.2	mg/L		
Chloride	MW-16	05/20/2015		1.4	mg/L		
Chloride	MW-16	08/26/2015		1.1	mg/L		
Chloride	MW-16	11/11/2015	ND	1	mg/L	3	**
Chloride	MW-16	02/24/2016		1.2	mg/L		
Chloride	MW-16	05/16/2016		1.2	mg/L		
Chloride	MW-16	08/31/2016		1.1	mg/L		
Chloride	MW-16	11/14/2016		1	mg/L		
Chloride	MW-16	02/22/2017		1.3	mg/L		
Chloride	MW-16	05/24/2017		1.2	mg/L		
Chloride	MW-16	08/30/2017	ND	1	mg/L	3	**
Chloride	MW-16	11/13/2017	ND	1	mg/L	3	**
Chloride	MW-16	02/20/2018		1.6	mg/L		
Chloride	MW-16	05/17/2018		1.1	mg/L		
Chloride	MW-16	08/22/2018		1.7	mg/L		
Chloride	MW-16	11/12/2018		1.4	mg/L		
Chloride	MW-16	11/12/2019	ND	3	mg/L		
Chloride	MW-16	11/20/2020	ND	3	mg/L		
Chloride	MW-16	11/16/2021	ND	3	mg/L		
Chloride	MW-16	11/17/2022	ND	3	mg/L		
Chloride	MW-16	11/08/2023	ND	3	mg/L		
Chloride	MW-35	03/22/2005		2.2	mg/L		
Chloride	MW-35	06/14/2005		2.2	mg/L		
Chloride	MW-35	09/27/2005		2.6	mg/L		
Chloride	MW-35	12/15/2005		1.9	mg/L		
Chloride	MW-35	03/28/2006		2.9	mg/L		
Chloride	MW-35	06/21/2006		2.8	mg/L		
Chloride	MW-35	09/26/2006		2.5	mg/L		
Chloride	MW-35	12/12/2006		3	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Chloride	MW-35	03/27/2007		2.8	mg/L		
Chloride	MW-35	06/20/2007		2.6	mg/L		
Chloride	MW-35	09/18/2007		2.4	mg/L		
Chloride	MW-35	12/20/2007		2.3	mg/L		
Chloride	MW-35	03/25/2008		2.4	mg/L		
Chloride	MW-35	06/18/2008		2.6	mg/L		
Chloride	MW-35	09/18/2008		2.4	mg/L		
Chloride	MW-35	12/19/2008		2.9	mg/L		
Chloride	MW-35	03/24/2009		2.3	mg/L		
Chloride	MW-35	06/16/2009		2.4	mg/L		
Chloride	MW-35	09/10/2009		2.5	mg/L		
Chloride	MW-35	12/03/2009		2.8	mg/L		
Chloride	MW-35	03/25/2010		2	mg/L		
Chloride	MW-35	06/23/2010		2.1	mg/L		
Chloride	MW-35	09/23/2010		2.6	mg/L		
Chloride	MW-35	12/09/2010		2.7	mg/L		
Chloride	MW-35	03/30/2011		3.2	mg/L		
Chloride	MW-35	06/06/2011		2.3	mg/L		
Chloride	MW-35	09/26/2011		3	mg/L		
Chloride	MW-35	12/13/2011		3.2	mg/L		
Chloride	MW-35	03/21/2012		2.9	mg/L		
Chloride	MW-35	06/06/2012		1.3	mg/L		
Chloride	MW-35	09/26/2012		2.4	mg/L		
Chloride	MW-35	12/04/2012		1.9	mg/L		
Chloride	MW-35	03/13/2013		1.8	mg/L		
Chloride	MW-35	06/06/2013		1.7	mg/L		
Chloride	MW-35	09/05/2013		1.8	mg/L		
Chloride	MW-35	12/16/2013		1.7	mg/L		
Chloride	MW-35	03/04/2014		1.8	mg/L		
Chloride	MW-35	06/02/2014		2	mg/L		
Chloride	MW-35	09/22/2014		1.7	mg/L		
Chloride	MW-35	11/17/2014		1.8	mg/L		
Chloride	MW-35	02/25/2015		1.8	mg/L		
Chloride	MW-35	05/19/2015		1.9	mg/L		
Chloride	MW-35	08/26/2015		1.9	mg/L		
Chloride	MW-35	11/10/2015		1.8	mg/L		
Chloride	MW-35	02/22/2016		2.1	mg/L		
Chloride	MW-35	05/16/2016		1.9	mg/L		
Chloride	MW-35	08/31/2016		1.9	mg/L		
Chloride	MW-35	11/15/2016		1.8	mg/L		
Chloride	MW-35	02/22/2017		1.9	mg/L		
Chloride	MW-35	05/24/2017		1.9	mg/L		
Chloride	MW-35	08/30/2017		1.6	mg/L		
Chloride	MW-35	11/15/2017		1.7	mg/L		
Chloride	MW-35	02/20/2018		2.1	mg/L		
Chloride	MW-35	05/17/2018		1.9	mg/L		
Chloride	MW-35	08/22/2018		2.1	mg/L		
Chloride	MW-35	11/12/2018		1.9	mg/L		
Chloride	MW-35	11/12/2019	ND	3	mg/L		
Chloride	MW-35	11/19/2020	ND	3	mg/L		
Chloride	MW-35	11/16/2021	ND	3	mg/L		
Chloride	MW-35	11/17/2022	ND	3	mg/L		
Chloride	MW-35	11/08/2023	ND	3	mg/L		
Chromium, total	MW-13A	12/03/2013	ND	0.003	mg/L		
Chromium, total	MW-13A	03/04/2014	ND	0.003	mg/L		
Chromium, total	MW-13A	06/02/2014	ND	0.003	mg/L		
Chromium, total	MW-13A	09/22/2014	ND	0.003	mg/L		
Chromium, total	MW-13A	11/17/2014	ND	0.003	mg/L		
Chromium, total	MW-13A	02/23/2015	ND	0.003	mg/L		
Chromium, total	MW-13A	05/19/2015	ND	0.003	mg/L		
Chromium, total	MW-13A	08/26/2015	ND	0.003	mg/L		
Chromium, total	MW-13A	11/10/2015	ND	0.003	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Chromium, total	MW-13A	02/22/2016	ND	0.003	mg/L		
Chromium, total	MW-13A	05/16/2016	ND	0.003	mg/L		
Chromium, total	MW-13A	08/31/2016	ND	0.003	mg/L		
Chromium, total	MW-13A	11/14/2016	ND	0.003	mg/L		
Chromium, total	MW-13A	02/22/2017	ND	0.003	mg/L		
Chromium, total	MW-13A	05/24/2017	ND	0.003	mg/L		
Chromium, total	MW-13A	08/30/2017	ND	0.003	mg/L		
Chromium, total	MW-13A	11/13/2017	ND	0.003	mg/L		
Chromium, total	MW-13A	02/20/2018	ND	0.003	mg/L		
Chromium, total	MW-13A	05/15/2018	ND	0.003	mg/L		
Chromium, total	MW-13A	08/21/2018	ND	0.003	mg/L		
Chromium, total	MW-13A	11/12/2018	ND	0.003	mg/L		
Chromium, total	MW-13A	11/11/2019	ND	0.003	mg/L		
Chromium, total	MW-13A	11/19/2020	ND	0.003	mg/L		
Chromium, total	MW-13A	11/16/2021	ND	0.003	mg/L		
Chromium, total	MW-13A	11/17/2022	ND	0.003	mg/L		
Chromium, total	MW-13A	11/08/2023	ND	0.003	mg/L		
Chromium, total	MW-13B	12/03/2013		0.003	mg/L		
Chromium, total	MW-13B	03/04/2014		0.0032	mg/L		
Chromium, total	MW-13B	06/02/2014		0.0033	mg/L		
Chromium, total	MW-13B	09/22/2014	ND	0.003	mg/L		
Chromium, total	MW-13B	11/17/2014		0.0032	mg/L		
Chromium, total	MW-13B	02/23/2015	ND	0.003	mg/L		
Chromium, total	MW-13B	05/19/2015		0.003	mg/L		
Chromium, total	MW-13B	08/26/2015	ND	0.003	mg/L		
Chromium, total	MW-13B	11/10/2015		0.0033	mg/L		
Chromium, total	MW-13B	02/22/2016		0.0033	mg/L		
Chromium, total	MW-13B	05/16/2016		0.0032	mg/L		
Chromium, total	MW-13B	08/31/2016		0.0031	mg/L		
Chromium, total	MW-13B	11/14/2016		0.0036	mg/L		
Chromium, total	MW-13B	02/22/2017		0.0033	mg/L		
Chromium, total	MW-13B	05/24/2017	ND	0.003	mg/L		
Chromium, total	MW-13B	08/30/2017		0.0031	mg/L		
Chromium, total	MW-13B	11/13/2017		0.0034	mg/L		
Chromium, total	MW-13B	02/20/2018		0.0031	mg/L		
Chromium, total	MW-13B	05/15/2018	ND	0.003	mg/L		
Chromium, total	MW-13B	08/21/2018		0.0031	mg/L		
Chromium, total	MW-13B	11/12/2018		0.003	mg/L		
Chromium, total	MW-13B	11/11/2019	ND	0.003	mg/L		
Chromium, total	MW-13B	11/19/2020	ND	0.003	mg/L		
Chromium, total	MW-13B	11/16/2021		0.0034	mg/L		
Chromium, total	MW-13B	11/17/2022		0.0034	mg/L		
Chromium, total	MW-13B	11/08/2023		0.0034	mg/L		
Chromium, total	MW-16	09/05/2013		0.0063	mg/L		
Chromium, total	MW-16	12/16/2013		0.008	mg/L		
Chromium, total	MW-16	03/05/2014		0.0085	mg/L		
Chromium, total	MW-16	06/02/2014		0.0087	mg/L		
Chromium, total	MW-16	09/22/2014		0.0073	mg/L		
Chromium, total	MW-16	11/18/2014		0.0077	mg/L		
Chromium, total	MW-16	02/23/2015		0.009	mg/L		
Chromium, total	MW-16	05/20/2015		0.007	mg/L		
Chromium, total	MW-16	08/26/2015		0.0064	mg/L		
Chromium, total	MW-16	11/11/2015		0.0071	mg/L		
Chromium, total	MW-16	02/24/2016		0.0077	mg/L		
Chromium, total	MW-16	05/16/2016		0.0066	mg/L		
Chromium, total	MW-16	08/31/2016		0.0092	mg/L		
Chromium, total	MW-16	11/14/2016		0.0085	mg/L		
Chromium, total	MW-16	02/22/2017		0.0088	mg/L		
Chromium, total	MW-16	05/24/2017		0.0079	mg/L		
Chromium, total	MW-16	08/30/2017		0.0075	mg/L		
Chromium, total	MW-16	11/13/2017		0.0073	mg/L		
Chromium, total	MW-16	02/20/2018		0.0072	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Chromium, total	MW-16	05/17/2018		0.0091	mg/L		
Chromium, total	MW-16	08/22/2018		0.007	mg/L		
Chromium, total	MW-16	11/12/2018		0.0092	mg/L		
Chromium, total	MW-16	11/12/2019		0.0076	mg/L		
Chromium, total	MW-16	11/20/2020		0.019	mg/L		
Chromium, total	MW-16	11/16/2021		0.0088	mg/L		
Chromium, total	MW-16	11/17/2022		0.0085	mg/L		
Chromium, total	MW-16	11/08/2023		0.0081	mg/L		
Chromium, total	MW-35	09/05/2013	ND	0.003	mg/L		
Chromium, total	MW-35	12/16/2013	ND	0.003	mg/L		
Chromium, total	MW-35	03/04/2014	ND	0.003	mg/L		
Chromium, total	MW-35	06/02/2014	ND	0.003	mg/L		
Chromium, total	MW-35	09/22/2014	ND	0.003	mg/L		
Chromium, total	MW-35	11/17/2014	ND	0.003	mg/L		
Chromium, total	MW-35	02/25/2015	ND	0.003	mg/L		
Chromium, total	MW-35	05/19/2015	ND	0.003	mg/L		
Chromium, total	MW-35	08/26/2015	ND	0.003	mg/L		
Chromium, total	MW-35	11/10/2015	ND	0.003	mg/L		
Chromium, total	MW-35	02/22/2016	ND	0.003	mg/L		
Chromium, total	MW-35	05/16/2016	ND	0.003	mg/L		
Chromium, total	MW-35	08/31/2016	ND	0.003	mg/L		
Chromium, total	MW-35	11/15/2016	ND	0.003	mg/L		
Chromium, total	MW-35	02/22/2017	ND	0.003	mg/L		
Chromium, total	MW-35	05/24/2017	ND	0.003	mg/L		
Chromium, total	MW-35	08/30/2017	ND	0.003	mg/L		
Chromium, total	MW-35	11/15/2017	ND	0.003	mg/L		
Chromium, total	MW-35	02/20/2018	ND	0.003	mg/L		
Chromium, total	MW-35	05/17/2018	ND	0.003	mg/L		
Chromium, total	MW-35	08/22/2018		0.0047	mg/L		
Chromium, total	MW-35	11/12/2018	ND	0.003	mg/L		
Chromium, total	MW-35	11/12/2019	ND	0.003	mg/L		
Chromium, total	MW-35	11/19/2020	ND	0.003	mg/L		
Chromium, total	MW-35	11/16/2021	ND	0.003	mg/L		
Chromium, total	MW-35	11/17/2022	ND	0.003	mg/L		
Chromium, total	MW-35	11/08/2023	ND	0.003	mg/L		
Cobalt, total	MW-13A	12/03/2013	ND	0.003	mg/L		
Cobalt, total	MW-13A	03/04/2014	ND	0.003	mg/L		
Cobalt, total	MW-13A	06/02/2014	ND	0.003	mg/L		
Cobalt, total	MW-13A	09/22/2014	ND	0.003	mg/L		
Cobalt, total	MW-13A	11/17/2014	ND	0.003	mg/L		
Cobalt, total	MW-13A	02/23/2015	ND	0.003	mg/L		
Cobalt, total	MW-13A	05/19/2015	ND	0.003	mg/L		
Cobalt, total	MW-13A	08/26/2015	ND	0.003	mg/L		
Cobalt, total	MW-13A	11/10/2015	ND	0.003	mg/L		
Cobalt, total	MW-13A	02/22/2016	ND	0.003	mg/L		
Cobalt, total	MW-13A	05/16/2016	ND	0.003	mg/L		
Cobalt, total	MW-13A	08/31/2016	ND	0.003	mg/L		
Cobalt, total	MW-13A	11/14/2016	ND	0.003	mg/L		
Cobalt, total	MW-13A	02/22/2017	ND	0.003	mg/L		
Cobalt, total	MW-13A	05/24/2017	ND	0.003	mg/L		
Cobalt, total	MW-13A	08/30/2017	ND	0.003	mg/L		
Cobalt, total	MW-13A	11/13/2017	ND	0.003	mg/L		
Cobalt, total	MW-13A	02/20/2018	ND	0.003	mg/L		
Cobalt, total	MW-13A	05/15/2018	ND	0.003	mg/L		
Cobalt, total	MW-13A	08/21/2018	ND	0.003	mg/L		
Cobalt, total	MW-13A	11/12/2018	ND	0.003	mg/L		
Cobalt, total	MW-13A	11/11/2019	ND	0.003	mg/L		
Cobalt, total	MW-13A	11/19/2020	ND	0.003	mg/L		
Cobalt, total	MW-13A	11/16/2021	ND	0.003	mg/L		
Cobalt, total	MW-13A	11/17/2022	ND	0.003	mg/L		
Cobalt, total	MW-13A	11/08/2023	ND	0.003	mg/L		
Cobalt, total	MW-13B	12/03/2013	ND	0.003	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Cobalt, total	MW-13B	03/04/2014	ND	0.003	mg/L		
Cobalt, total	MW-13B	06/02/2014	ND	0.003	mg/L		
Cobalt, total	MW-13B	09/22/2014	ND	0.003	mg/L		
Cobalt, total	MW-13B	11/17/2014	ND	0.003	mg/L		
Cobalt, total	MW-13B	02/23/2015	ND	0.003	mg/L		
Cobalt, total	MW-13B	05/19/2015	ND	0.003	mg/L		
Cobalt, total	MW-13B	08/26/2015	ND	0.003	mg/L		
Cobalt, total	MW-13B	11/10/2015	ND	0.003	mg/L		
Cobalt, total	MW-13B	02/22/2016	ND	0.003	mg/L		
Cobalt, total	MW-13B	05/16/2016	ND	0.003	mg/L		
Cobalt, total	MW-13B	08/31/2016	ND	0.003	mg/L		
Cobalt, total	MW-13B	11/14/2016	ND	0.003	mg/L		
Cobalt, total	MW-13B	02/22/2017	ND	0.003	mg/L		
Cobalt, total	MW-13B	05/24/2017	ND	0.003	mg/L		
Cobalt, total	MW-13B	08/30/2017	ND	0.003	mg/L		
Cobalt, total	MW-13B	11/13/2017	ND	0.003	mg/L		
Cobalt, total	MW-13B	02/20/2018	ND	0.003	mg/L		
Cobalt, total	MW-13B	05/15/2018	ND	0.003	mg/L		
Cobalt, total	MW-13B	08/21/2018	ND	0.003	mg/L		
Cobalt, total	MW-13B	11/12/2018	ND	0.003	mg/L		
Cobalt, total	MW-13B	11/11/2019	ND	0.003	mg/L		
Cobalt, total	MW-13B	11/19/2020	ND	0.003	mg/L		
Cobalt, total	MW-13B	11/16/2021	ND	0.003	mg/L		
Cobalt, total	MW-13B	11/17/2022	ND	0.003	mg/L		
Cobalt, total	MW-13B	11/08/2023	ND	0.003	mg/L		
Cobalt, total	MW-16	09/05/2013	ND	0.003	mg/L		
Cobalt, total	MW-16	12/16/2013	ND	0.003	mg/L		
Cobalt, total	MW-16	03/05/2014	ND	0.003	mg/L		
Cobalt, total	MW-16	06/02/2014	ND	0.003	mg/L		
Cobalt, total	MW-16	09/22/2014	ND	0.003	mg/L		
Cobalt, total	MW-16	11/18/2014	ND	0.003	mg/L		
Cobalt, total	MW-16	02/23/2015	ND	0.003	mg/L		
Cobalt, total	MW-16	05/20/2015	ND	0.003	mg/L		
Cobalt, total	MW-16	08/26/2015	ND	0.003	mg/L		
Cobalt, total	MW-16	11/11/2015	ND	0.003	mg/L		
Cobalt, total	MW-16	02/24/2016	ND	0.003	mg/L		
Cobalt, total	MW-16	05/16/2016	ND	0.003	mg/L		
Cobalt, total	MW-16	08/31/2016	ND	0.003	mg/L		
Cobalt, total	MW-16	11/14/2016	ND	0.003	mg/L		
Cobalt, total	MW-16	02/22/2017	ND	0.003	mg/L		
Cobalt, total	MW-16	05/24/2017	ND	0.003	mg/L		
Cobalt, total	MW-16	08/30/2017	ND	0.003	mg/L		
Cobalt, total	MW-16	11/13/2017	ND	0.003	mg/L		
Cobalt, total	MW-16	02/20/2018	ND	0.003	mg/L		
Cobalt, total	MW-16	05/17/2018	ND	0.003	mg/L		
Cobalt, total	MW-16	08/22/2018	ND	0.003	mg/L		
Cobalt, total	MW-16	11/12/2018	ND	0.003	mg/L		
Cobalt, total	MW-16	11/12/2019	ND	0.003	mg/L		
Cobalt, total	MW-16	11/20/2020	ND	0.003	mg/L		
Cobalt, total	MW-16	11/16/2021	ND	0.003	mg/L		
Cobalt, total	MW-16	11/17/2022	ND	0.003	mg/L		
Cobalt, total	MW-16	11/08/2023	ND	0.003	mg/L		
Cobalt, total	MW-35	09/05/2013	ND	0.003	mg/L		
Cobalt, total	MW-35	12/16/2013	ND	0.003	mg/L		
Cobalt, total	MW-35	03/04/2014	ND	0.003	mg/L		
Cobalt, total	MW-35	06/02/2014	ND	0.003	mg/L		
Cobalt, total	MW-35	09/22/2014	ND	0.003	mg/L		
Cobalt, total	MW-35	11/17/2014	ND	0.003	mg/L		
Cobalt, total	MW-35	02/25/2015	ND	0.003	mg/L		
Cobalt, total	MW-35	05/19/2015	ND	0.003	mg/L		
Cobalt, total	MW-35	08/26/2015	ND	0.003	mg/L		
Cobalt, total	MW-35	11/10/2015	ND	0.003	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Cobalt, total	MW-35	02/22/2016	ND	0.003	mg/L		
Cobalt, total	MW-35	05/16/2016	ND	0.003	mg/L		
Cobalt, total	MW-35	08/31/2016	ND	0.003	mg/L		
Cobalt, total	MW-35	11/15/2016	ND	0.003	mg/L		
Cobalt, total	MW-35	02/22/2017	ND	0.003	mg/L		
Cobalt, total	MW-35	05/24/2017	ND	0.003	mg/L		
Cobalt, total	MW-35	08/30/2017	ND	0.003	mg/L		
Cobalt, total	MW-35	11/15/2017	ND	0.003	mg/L		
Cobalt, total	MW-35	02/20/2018	ND	0.003	mg/L		
Cobalt, total	MW-35	05/17/2018	ND	0.003	mg/L		
Cobalt, total	MW-35	08/22/2018	ND	0.003	mg/L		
Cobalt, total	MW-35	11/12/2018	ND	0.003	mg/L		
Cobalt, total	MW-35	11/12/2019	ND	0.003	mg/L		
Cobalt, total	MW-35	11/19/2020	ND	0.003	mg/L		
Cobalt, total	MW-35	11/16/2021	ND	0.003	mg/L		
Cobalt, total	MW-35	11/17/2022	ND	0.003	mg/L		
Cobalt, total	MW-35	11/08/2023	ND	0.003	mg/L		
Copper, total	MW-13A	12/03/2013	ND	0.002	mg/L		
Copper, total	MW-13A	03/04/2014	ND	0.002	mg/L		
Copper, total	MW-13A	06/02/2014	ND	0.002	mg/L		
Copper, total	MW-13A	09/22/2014	ND	0.002	mg/L		
Copper, total	MW-13A	11/17/2014	ND	0.002	mg/L		
Copper, total	MW-13A	02/23/2015	ND	0.002	mg/L		
Copper, total	MW-13A	05/19/2015	ND	0.002	mg/L		
Copper, total	MW-13A	08/26/2015	ND	0.002	mg/L		
Copper, total	MW-13A	11/10/2015	ND	0.002	mg/L		
Copper, total	MW-13A	02/22/2016	ND	0.002	mg/L		
Copper, total	MW-13A	05/16/2016	ND	0.002	mg/L		
Copper, total	MW-13A	08/31/2016	ND	0.002	mg/L		
Copper, total	MW-13A	11/14/2016		0.0021	mg/L		
Copper, total	MW-13A	02/22/2017	ND	0.002	mg/L		
Copper, total	MW-13A	05/24/2017	ND	0.002	mg/L		
Copper, total	MW-13A	08/30/2017	ND	0.002	mg/L		
Copper, total	MW-13A	11/13/2017	ND	0.002	mg/L		
Copper, total	MW-13A	02/20/2018	ND	0.002	mg/L		
Copper, total	MW-13A	05/15/2018	ND	0.002	mg/L		
Copper, total	MW-13A	08/21/2018	ND	0.002	mg/L		
Copper, total	MW-13A	11/12/2018	ND	0.002	mg/L		
Copper, total	MW-13A	11/11/2019	ND	0.002	mg/L		
Copper, total	MW-13A	11/19/2020	ND	0.002	mg/L		
Copper, total	MW-13A	11/16/2021	ND	0.002	mg/L		
Copper, total	MW-13A	11/17/2022	ND	0.002	mg/L		
Copper, total	MW-13A	11/08/2023	ND	0.002	mg/L		
Copper, total	MW-13B	12/03/2013	ND	0.002	mg/L		
Copper, total	MW-13B	03/04/2014	ND	0.002	mg/L		
Copper, total	MW-13B	06/02/2014	ND	0.002	mg/L		
Copper, total	MW-13B	09/22/2014	ND	0.002	mg/L		
Copper, total	MW-13B	11/17/2014	ND	0.002	mg/L		
Copper, total	MW-13B	02/23/2015	ND	0.002	mg/L		
Copper, total	MW-13B	05/19/2015	ND	0.002	mg/L		
Copper, total	MW-13B	08/26/2015	ND	0.002	mg/L		
Copper, total	MW-13B	11/10/2015	ND	0.002	mg/L		
Copper, total	MW-13B	02/22/2016	ND	0.002	mg/L		
Copper, total	MW-13B	05/16/2016	ND	0.002	mg/L		
Copper, total	MW-13B	08/31/2016	ND	0.002	mg/L		
Copper, total	MW-13B	11/14/2016	ND	0.002	mg/L		
Copper, total	MW-13B	02/22/2017	ND	0.002	mg/L		
Copper, total	MW-13B	05/24/2017	ND	0.002	mg/L		
Copper, total	MW-13B	08/30/2017	ND	0.002	mg/L		
Copper, total	MW-13B	11/13/2017	ND	0.002	mg/L		
Copper, total	MW-13B	02/20/2018	ND	0.002	mg/L		
Copper, total	MW-13B	05/15/2018	ND	0.002	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Copper, total	MW-13B	08/21/2018	ND	0.002	mg/L		
Copper, total	MW-13B	11/12/2018	ND	0.002	mg/L		
Copper, total	MW-13B	11/11/2019	ND	0.002	mg/L		
Copper, total	MW-13B	11/19/2020	ND	0.002	mg/L		
Copper, total	MW-13B	11/16/2021	ND	0.002	mg/L		
Copper, total	MW-13B	11/17/2022	ND	0.002	mg/L		
Copper, total	MW-13B	11/08/2023	ND	0.002	mg/L		
Copper, total	MW-16	09/05/2013	ND	0.002	mg/L		
Copper, total	MW-16	12/16/2013	ND	0.002	mg/L		
Copper, total	MW-16	03/05/2014	ND	0.002	mg/L		
Copper, total	MW-16	06/02/2014	ND	0.002	mg/L		
Copper, total	MW-16	09/22/2014	ND	0.002	mg/L		
Copper, total	MW-16	11/18/2014	ND	0.002	mg/L		
Copper, total	MW-16	02/23/2015	ND	0.002	mg/L		
Copper, total	MW-16	05/20/2015	ND	0.002	mg/L		
Copper, total	MW-16	08/26/2015	ND	0.002	mg/L		
Copper, total	MW-16	11/11/2015	ND	0.002	mg/L		
Copper, total	MW-16	02/24/2016	ND	0.002	mg/L		
Copper, total	MW-16	05/16/2016	ND	0.002	mg/L		
Copper, total	MW-16	08/31/2016	ND	0.002	mg/L		
Copper, total	MW-16	11/14/2016	ND	0.002	mg/L		
Copper, total	MW-16	02/22/2017	ND	0.002	mg/L		
Copper, total	MW-16	05/24/2017	ND	0.002	mg/L		
Copper, total	MW-16	08/30/2017	ND	0.002	mg/L		
Copper, total	MW-16	11/13/2017	ND	0.002	mg/L		
Copper, total	MW-16	02/20/2018	ND	0.002	mg/L		
Copper, total	MW-16	05/17/2018	ND	0.002	mg/L		
Copper, total	MW-16	08/22/2018	ND	0.002	mg/L		
Copper, total	MW-16	11/12/2018	ND	0.002	mg/L		
Copper, total	MW-16	11/12/2019	ND	0.002	mg/L		
Copper, total	MW-16	11/20/2020	ND	0.002	mg/L		
Copper, total	MW-16	11/16/2021	ND	0.002	mg/L		
Copper, total	MW-16	11/17/2022	ND	0.002	mg/L		
Copper, total	MW-16	11/08/2023	ND	0.002	mg/L		
Copper, total	MW-35	09/05/2013	ND	0.002	mg/L		
Copper, total	MW-35	12/16/2013	ND	0.002	mg/L		
Copper, total	MW-35	03/04/2014	ND	0.002	mg/L		
Copper, total	MW-35	06/02/2014	ND	0.002	mg/L		
Copper, total	MW-35	09/22/2014	ND	0.002	mg/L		
Copper, total	MW-35	11/17/2014	ND	0.002	mg/L		
Copper, total	MW-35	02/25/2015	ND	0.002	mg/L		
Copper, total	MW-35	05/19/2015	ND	0.002	mg/L		
Copper, total	MW-35	08/26/2015	ND	0.002	mg/L		
Copper, total	MW-35	11/10/2015	ND	0.002	mg/L		
Copper, total	MW-35	02/22/2016	ND	0.002	mg/L		
Copper, total	MW-35	05/16/2016	ND	0.002	mg/L		
Copper, total	MW-35	08/31/2016	ND	0.002	mg/L		
Copper, total	MW-35	11/15/2016	ND	0.002	mg/L		
Copper, total	MW-35	02/22/2017	ND	0.002	mg/L		
Copper, total	MW-35	05/24/2017	ND	0.002	mg/L		
Copper, total	MW-35	08/30/2017	ND	0.002	mg/L		
Copper, total	MW-35	11/15/2017	ND	0.002	mg/L		
Copper, total	MW-35	02/20/2018	ND	0.002	mg/L		
Copper, total	MW-35	05/17/2018	ND	0.002	mg/L		
Copper, total	MW-35	08/22/2018	ND	0.002	mg/L		
Copper, total	MW-35	11/12/2018	ND	0.002	mg/L		
Copper, total	MW-35	11/12/2019	ND	0.002	mg/L		
Copper, total	MW-35	11/19/2020	ND	0.002	mg/L		
Copper, total	MW-35	11/16/2021	ND	0.002	mg/L		
Copper, total	MW-35	11/17/2022	ND	0.002	mg/L		
Copper, total	MW-35	11/08/2023	ND	0.002	mg/L		
Iron, total	MW-13A	12/03/2013	ND	0.06	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Iron, total	MW-13A	03/04/2014	ND	0.06	mg/L		
Iron, total	MW-13A	06/02/2014	ND	0.06	mg/L		
Iron, total	MW-13A	09/22/2014	ND	0.06	mg/L		
Iron, total	MW-13A	11/17/2014	ND	0.06	mg/L		
Iron, total	MW-13A	02/23/2015	ND	0.06	mg/L		
Iron, total	MW-13A	05/19/2015	ND	0.06	mg/L		
Iron, total	MW-13A	08/26/2015	ND	0.06	mg/L		
Iron, total	MW-13A	11/10/2015	ND	0.06	mg/L		
Iron, total	MW-13A	02/22/2016	ND	0.06	mg/L		
Iron, total	MW-13A	05/16/2016	ND	0.06	mg/L		
Iron, total	MW-13A	08/31/2016	ND	0.06	mg/L		
Iron, total	MW-13A	11/14/2016		0.073	mg/L		
Iron, total	MW-13A	02/22/2017	ND	0.06	mg/L		
Iron, total	MW-13A	05/24/2017		0.087	mg/L		
Iron, total	MW-13A	08/30/2017	ND	0.06	mg/L		
Iron, total	MW-13A	11/13/2017	ND	0.06	mg/L		
Iron, total	MW-13A	02/20/2018	ND	0.06	mg/L		
Iron, total	MW-13A	05/15/2018	ND	0.06	mg/L		
Iron, total	MW-13A	08/21/2018	ND	0.06	mg/L		
Iron, total	MW-13A	11/12/2018	ND	0.06	mg/L		
Iron, total	MW-13A	11/11/2019	ND	0.06	mg/L		
Iron, total	MW-13A	11/19/2020	ND	0.06	mg/L		
Iron, total	MW-13A	11/16/2021	ND	0.06	mg/L		
Iron, total	MW-13A	11/17/2022	ND	0.06	mg/L		
Iron, total	MW-13A	11/08/2023	ND	0.06	mg/L		
Iron, total	MW-13B	12/03/2013	ND	0.06	mg/L		
Iron, total	MW-13B	03/04/2014	ND	0.06	mg/L		
Iron, total	MW-13B	06/02/2014	ND	0.06	mg/L		
Iron, total	MW-13B	09/22/2014	ND	0.06	mg/L		
Iron, total	MW-13B	11/17/2014	ND	0.06	mg/L		
Iron, total	MW-13B	02/23/2015	ND	0.06	mg/L		
Iron, total	MW-13B	05/19/2015	ND	0.06	mg/L		
Iron, total	MW-13B	08/26/2015	ND	0.06	mg/L		
Iron, total	MW-13B	11/10/2015	ND	0.06	mg/L		
Iron, total	MW-13B	02/22/2016	ND	0.06	mg/L		
Iron, total	MW-13B	05/16/2016	ND	0.06	mg/L		
Iron, total	MW-13B	08/31/2016	ND	0.06	mg/L		
Iron, total	MW-13B	11/14/2016	ND	0.06	mg/L		
Iron, total	MW-13B	02/22/2017	ND	0.06	mg/L		
Iron, total	MW-13B	05/24/2017	ND	0.06	mg/L		
Iron, total	MW-13B	08/30/2017	ND	0.06	mg/L		
Iron, total	MW-13B	11/13/2017	ND	0.06	mg/L		
Iron, total	MW-13B	02/20/2018	ND	0.06	mg/L		
Iron, total	MW-13B	05/15/2018	ND	0.06	mg/L		
Iron, total	MW-13B	08/21/2018	ND	0.06	mg/L		
Iron, total	MW-13B	11/12/2018	ND	0.06	mg/L		
Iron, total	MW-13B	11/11/2019	ND	0.06	mg/L		
Iron, total	MW-13B	11/19/2020	ND	0.06	mg/L		
Iron, total	MW-13B	11/16/2021	ND	0.06	mg/L		
Iron, total	MW-13B	11/17/2022	ND	0.06	mg/L		
Iron, total	MW-13B	11/08/2023	ND	0.06	mg/L		
Iron, total	MW-16	09/05/2013		0.12	mg/L		
Iron, total	MW-16	12/16/2013		0.068	mg/L		
Iron, total	MW-16	03/05/2014		0.2	mg/L		
Iron, total	MW-16	06/02/2014	ND	0.06	mg/L		
Iron, total	MW-16	09/22/2014	ND	0.06	mg/L		
Iron, total	MW-16	11/18/2014		0.18	mg/L		
Iron, total	MW-16	02/23/2015		0.31	mg/L		
Iron, total	MW-16	05/20/2015	ND	0.06	mg/L		
Iron, total	MW-16	08/26/2015	ND	0.06	mg/L		
Iron, total	MW-16	11/11/2015	ND	0.06	mg/L		
Iron, total	MW-16	02/24/2016	ND	0.06	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Iron, total	MW-16	05/16/2016	ND	0.06	mg/L		
Iron, total	MW-16	08/31/2016	ND	0.06	mg/L		
Iron, total	MW-16	11/14/2016		0.12	mg/L		
Iron, total	MW-16	02/22/2017	ND	0.06	mg/L		
Iron, total	MW-16	05/24/2017		0.068	mg/L		
Iron, total	MW-16	08/30/2017	ND	0.06	mg/L		
Iron, total	MW-16	11/13/2017	ND	0.06	mg/L		
Iron, total	MW-16	02/20/2018		0.067	mg/L		
Iron, total	MW-16	05/17/2018	ND	0.06	mg/L		
Iron, total	MW-16	08/22/2018	ND	0.06	mg/L		
Iron, total	MW-16	11/12/2018		0.22	mg/L		
Iron, total	MW-16	11/12/2019		0.11	mg/L		
Iron, total	MW-16	11/20/2020		0.88	mg/L		*
Iron, total	MW-16	11/16/2021		0.11	mg/L		
Iron, total	MW-16	11/17/2022	ND	0.06	mg/L		
Iron, total	MW-16	11/08/2023	ND	0.06	mg/L		
Iron, total	MW-35	09/05/2013	ND	0.06	mg/L		
Iron, total	MW-35	12/16/2013	ND	0.06	mg/L		
Iron, total	MW-35	03/04/2014	ND	0.06	mg/L		
Iron, total	MW-35	06/02/2014	ND	0.06	mg/L		
Iron, total	MW-35	09/22/2014	ND	0.06	mg/L		
Iron, total	MW-35	11/17/2014	ND	0.06	mg/L		
Iron, total	MW-35	02/25/2015	ND	0.06	mg/L		
Iron, total	MW-35	05/19/2015	ND	0.06	mg/L		
Iron, total	MW-35	08/26/2015	ND	0.06	mg/L		
Iron, total	MW-35	11/10/2015	ND	0.06	mg/L		
Iron, total	MW-35	02/22/2016	ND	0.06	mg/L		
Iron, total	MW-35	05/16/2016	ND	0.06	mg/L		
Iron, total	MW-35	08/31/2016	ND	0.06	mg/L		
Iron, total	MW-35	11/15/2016	ND	0.06	mg/L		
Iron, total	MW-35	02/22/2017	ND	0.06	mg/L		
Iron, total	MW-35	05/24/2017	ND	0.06	mg/L		
Iron, total	MW-35	08/30/2017	ND	0.06	mg/L		
Iron, total	MW-35	11/15/2017	ND	0.06	mg/L		
Iron, total	MW-35	02/20/2018	ND	0.06	mg/L		
Iron, total	MW-35	05/17/2018	ND	0.06	mg/L		
Iron, total	MW-35	08/22/2018	ND	0.06	mg/L		
Iron, total	MW-35	11/12/2018	ND	0.06	mg/L		
Iron, total	MW-35	11/12/2019	ND	0.06	mg/L		
Iron, total	MW-35	11/19/2020	ND	0.06	mg/L		
Iron, total	MW-35	11/16/2021	ND	0.06	mg/L		
Iron, total	MW-35	11/17/2022	ND	0.06	mg/L		
Iron, total	MW-35	11/08/2023	ND	0.06	mg/L		
Lead, total	MW-13A	12/03/2013	ND	0.001	mg/L		
Lead, total	MW-13A	03/04/2014	ND	0.001	mg/L		
Lead, total	MW-13A	06/02/2014	ND	0.001	mg/L		
Lead, total	MW-13A	09/22/2014	ND	0.001	mg/L		
Lead, total	MW-13A	11/17/2014	ND	0.001	mg/L		
Lead, total	MW-13A	02/23/2015	ND	0.001	mg/L		
Lead, total	MW-13A	05/19/2015	ND	0.001	mg/L		
Lead, total	MW-13A	08/26/2015	ND	0.001	mg/L		
Lead, total	MW-13A	11/10/2015	ND	0.001	mg/L		
Lead, total	MW-13A	02/22/2016	ND	0.001	mg/L		
Lead, total	MW-13A	05/16/2016	ND	0.001	mg/L		
Lead, total	MW-13A	08/31/2016	ND	0.001	mg/L		
Lead, total	MW-13A	11/14/2016	ND	0.001	mg/L		
Lead, total	MW-13A	02/22/2017	ND	0.001	mg/L		
Lead, total	MW-13A	05/24/2017	ND	0.001	mg/L		
Lead, total	MW-13A	08/30/2017	ND	0.001	mg/L		
Lead, total	MW-13A	11/13/2017	ND	0.001	mg/L		
Lead, total	MW-13A	02/20/2018	ND	0.001	mg/L		
Lead, total	MW-13A	05/15/2018	ND	0.001	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Lead, total	MW-13A	08/21/2018	ND	0.001	mg/L		
Lead, total	MW-13A	11/12/2018	ND	0.001	mg/L		
Lead, total	MW-13A	11/11/2019	ND	0.001	mg/L		
Lead, total	MW-13A	11/19/2020	ND	0.001	mg/L		
Lead, total	MW-13A	11/16/2021	ND	0.001	mg/L		
Lead, total	MW-13A	11/17/2022	ND	0.001	mg/L		
Lead, total	MW-13A	11/08/2023	ND	0.001	mg/L		
Lead, total	MW-13B	12/03/2013	ND	0.001	mg/L		
Lead, total	MW-13B	03/04/2014	ND	0.001	mg/L		
Lead, total	MW-13B	06/02/2014	ND	0.001	mg/L		
Lead, total	MW-13B	09/22/2014	ND	0.001	mg/L		
Lead, total	MW-13B	11/17/2014	ND	0.001	mg/L		
Lead, total	MW-13B	02/23/2015	ND	0.001	mg/L		
Lead, total	MW-13B	05/19/2015	ND	0.001	mg/L		
Lead, total	MW-13B	08/26/2015	ND	0.001	mg/L		
Lead, total	MW-13B	11/10/2015	ND	0.001	mg/L		
Lead, total	MW-13B	02/22/2016	ND	0.001	mg/L		
Lead, total	MW-13B	05/16/2016	ND	0.001	mg/L		
Lead, total	MW-13B	08/31/2016	ND	0.001	mg/L		
Lead, total	MW-13B	11/14/2016	ND	0.001	mg/L		
Lead, total	MW-13B	02/22/2017	ND	0.001	mg/L		
Lead, total	MW-13B	05/24/2017	ND	0.001	mg/L		
Lead, total	MW-13B	08/30/2017	ND	0.001	mg/L		
Lead, total	MW-13B	11/13/2017	ND	0.001	mg/L		
Lead, total	MW-13B	02/20/2018	ND	0.001	mg/L		
Lead, total	MW-13B	05/15/2018	ND	0.001	mg/L		
Lead, total	MW-13B	08/21/2018	ND	0.001	mg/L		
Lead, total	MW-13B	11/12/2018	ND	0.001	mg/L		
Lead, total	MW-13B	11/11/2019	ND	0.001	mg/L		
Lead, total	MW-13B	11/19/2020	ND	0.001	mg/L		
Lead, total	MW-13B	11/16/2021	ND	0.001	mg/L		
Lead, total	MW-13B	11/17/2022	ND	0.001	mg/L		
Lead, total	MW-13B	11/08/2023	ND	0.001	mg/L		
Lead, total	MW-16	09/05/2013	ND	0.001	mg/L		
Lead, total	MW-16	12/16/2013	ND	0.001	mg/L		
Lead, total	MW-16	03/05/2014	ND	0.001	mg/L		
Lead, total	MW-16	06/02/2014	ND	0.001	mg/L		
Lead, total	MW-16	09/22/2014		0.0014	mg/L		
Lead, total	MW-16	11/18/2014	ND	0.001	mg/L		
Lead, total	MW-16	02/23/2015	ND	0.001	mg/L		
Lead, total	MW-16	05/20/2015	ND	0.001	mg/L		
Lead, total	MW-16	08/26/2015	ND	0.001	mg/L		
Lead, total	MW-16	11/11/2015	ND	0.001	mg/L		
Lead, total	MW-16	02/24/2016	ND	0.001	mg/L		
Lead, total	MW-16	05/16/2016	ND	0.001	mg/L		
Lead, total	MW-16	08/31/2016	ND	0.001	mg/L		
Lead, total	MW-16	11/14/2016	ND	0.001	mg/L		
Lead, total	MW-16	02/22/2017	ND	0.001	mg/L		
Lead, total	MW-16	05/24/2017	ND	0.001	mg/L		
Lead, total	MW-16	08/30/2017	ND	0.001	mg/L		
Lead, total	MW-16	11/13/2017	ND	0.001	mg/L		
Lead, total	MW-16	02/20/2018	ND	0.001	mg/L		
Lead, total	MW-16	05/17/2018	ND	0.001	mg/L		
Lead, total	MW-16	08/22/2018	ND	0.001	mg/L		
Lead, total	MW-16	11/12/2018	ND	0.001	mg/L		
Lead, total	MW-16	11/12/2019	ND	0.001	mg/L		
Lead, total	MW-16	11/20/2020	ND	0.001	mg/L		
Lead, total	MW-16	11/16/2021	ND	0.001	mg/L		
Lead, total	MW-16	11/17/2022	ND	0.001	mg/L		
Lead, total	MW-16	11/08/2023	ND	0.001	mg/L		
Lead, total	MW-35	09/05/2013	ND	0.001	mg/L		
Lead, total	MW-35	12/16/2013	ND	0.001	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Lead, total	MW-35	03/04/2014	ND	0.001	mg/L		
Lead, total	MW-35	06/02/2014	ND	0.001	mg/L		
Lead, total	MW-35	09/22/2014	ND	0.001	mg/L		
Lead, total	MW-35	11/17/2014	ND	0.001	mg/L		
Lead, total	MW-35	02/25/2015	ND	0.001	mg/L		
Lead, total	MW-35	05/19/2015	ND	0.001	mg/L		
Lead, total	MW-35	08/26/2015	ND	0.001	mg/L		
Lead, total	MW-35	11/10/2015	ND	0.001	mg/L		
Lead, total	MW-35	02/22/2016	ND	0.001	mg/L		
Lead, total	MW-35	05/16/2016	ND	0.001	mg/L		
Lead, total	MW-35	08/31/2016	ND	0.001	mg/L		
Lead, total	MW-35	11/15/2016	ND	0.001	mg/L		
Lead, total	MW-35	02/22/2017	ND	0.001	mg/L		
Lead, total	MW-35	05/24/2017	ND	0.001	mg/L		
Lead, total	MW-35	08/30/2017	ND	0.001	mg/L		
Lead, total	MW-35	11/15/2017	ND	0.001	mg/L		
Lead, total	MW-35	02/20/2018	ND	0.001	mg/L		
Lead, total	MW-35	05/17/2018	ND	0.001	mg/L		
Lead, total	MW-35	08/22/2018	ND	0.001	mg/L		
Lead, total	MW-35	11/12/2018	ND	0.001	mg/L		
Lead, total	MW-35	11/12/2019	ND	0.001	mg/L		
Lead, total	MW-35	11/19/2020	ND	0.001	mg/L		
Lead, total	MW-35	11/16/2021	ND	0.001	mg/L		
Lead, total	MW-35	11/17/2022	ND	0.001	mg/L		
Lead, total	MW-35	11/08/2023	ND	0.001	mg/L		
Magnesium, dissolved	MW-13A	03/22/2005		9.2	mg/L		
Magnesium, dissolved	MW-13A	06/15/2005		8.2	mg/L		
Magnesium, dissolved	MW-13A	09/27/2005		8.4	mg/L		
Magnesium, dissolved	MW-13A	12/15/2005		8.6	mg/L		
Magnesium, dissolved	MW-13A	03/28/2006		9.2	mg/L		
Magnesium, dissolved	MW-13A	06/21/2006		9.1	mg/L		
Magnesium, dissolved	MW-13A	09/26/2006		9.2	mg/L		
Magnesium, dissolved	MW-13A	12/13/2006		9.3	mg/L		
Magnesium, dissolved	MW-13A	03/27/2007		9.3	mg/L		
Magnesium, dissolved	MW-13A	06/19/2007		9	mg/L		
Magnesium, dissolved	MW-13A	09/19/2007		9.4	mg/L		
Magnesium, dissolved	MW-13A	12/19/2007		8.6	mg/L		
Magnesium, dissolved	MW-13A	03/25/2008		9.1	mg/L		
Magnesium, dissolved	MW-13A	06/18/2008		9.3	mg/L		
Magnesium, dissolved	MW-13A	09/17/2008		9.2	mg/L		
Magnesium, dissolved	MW-13A	12/17/2008		9.3	mg/L		
Magnesium, dissolved	MW-13A	03/24/2009		9.6	mg/L		
Magnesium, dissolved	MW-13A	06/17/2009		9.6	mg/L		
Magnesium, dissolved	MW-13A	09/10/2009		9.3	mg/L		
Magnesium, dissolved	MW-13A	12/03/2009		9.1	mg/L		
Magnesium, dissolved	MW-13A	03/25/2010		8.7	mg/L		
Magnesium, dissolved	MW-13A	06/23/2010		9.7	mg/L		
Magnesium, dissolved	MW-13A	09/23/2010		9.4	mg/L		
Magnesium, dissolved	MW-13A	12/08/2010		8.1	mg/L		
Magnesium, dissolved	MW-13A	03/30/2011		9.6	mg/L		
Magnesium, dissolved	MW-13A	06/06/2011		10	mg/L		
Magnesium, dissolved	MW-13A	09/27/2011		9.7	mg/L		
Magnesium, dissolved	MW-13A	12/14/2011		9.3	mg/L		
Magnesium, dissolved	MW-13A	03/21/2012		9.9	mg/L		
Magnesium, dissolved	MW-13A	06/08/2012		8.9	mg/L		
Magnesium, dissolved	MW-13A	09/26/2012		9.6	mg/L		
Magnesium, dissolved	MW-13A	12/03/2012		9.2	mg/L		
Magnesium, dissolved	MW-13A	03/11/2013		9.4	mg/L		
Magnesium, dissolved	MW-13A	06/05/2013		9.8	mg/L		
Magnesium, dissolved	MW-13A	12/03/2013		9.4	mg/L		
Magnesium, dissolved	MW-13A	03/04/2014		9.8	mg/L		
Magnesium, dissolved	MW-13A	06/02/2014		9.2	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Magnesium, dissolved	MW-13A	09/22/2014		8.7	mg/L		
Magnesium, dissolved	MW-13A	11/17/2014		9.3	mg/L		
Magnesium, dissolved	MW-13A	02/23/2015		9.2	mg/L		
Magnesium, dissolved	MW-13A	05/19/2015		9.5	mg/L		
Magnesium, dissolved	MW-13A	08/26/2015		9.3	mg/L		
Magnesium, dissolved	MW-13A	11/10/2015		9.1	mg/L		
Magnesium, dissolved	MW-13A	02/22/2016		9.7	mg/L		
Magnesium, dissolved	MW-13A	05/16/2016		9.5	mg/L		
Magnesium, dissolved	MW-13A	08/31/2016		8.6	mg/L		
Magnesium, dissolved	MW-13A	11/14/2016		10	mg/L		
Magnesium, dissolved	MW-13A	02/22/2017		10	mg/L		
Magnesium, dissolved	MW-13A	05/24/2017		8.9	mg/L		
Magnesium, dissolved	MW-13A	08/30/2017		8.8	mg/L		
Magnesium, dissolved	MW-13A	11/13/2017		8.6	mg/L		
Magnesium, dissolved	MW-13A	02/20/2018		8.2	mg/L		
Magnesium, dissolved	MW-13A	05/15/2018		8.5	mg/L		
Magnesium, dissolved	MW-13A	08/21/2018		8.3	mg/L		
Magnesium, dissolved	MW-13A	11/12/2018		8.3	mg/L		
Magnesium, dissolved	MW-13A	11/11/2019		8.6	mg/L		
Magnesium, dissolved	MW-13A	11/19/2020		8.7	mg/L		
Magnesium, dissolved	MW-13A	11/16/2021		8.8	mg/L		
Magnesium, dissolved	MW-13A	11/17/2022		8.9	mg/L		
Magnesium, dissolved	MW-13A	11/08/2023		9.1	mg/L		
Magnesium, dissolved	MW-13B	03/22/2005		8.6	mg/L		
Magnesium, dissolved	MW-13B	06/15/2005		8	mg/L		
Magnesium, dissolved	MW-13B	09/27/2005		8.7	mg/L		
Magnesium, dissolved	MW-13B	12/15/2005		8	mg/L		
Magnesium, dissolved	MW-13B	03/29/2006		8.1	mg/L		
Magnesium, dissolved	MW-13B	06/21/2006		8.3	mg/L		
Magnesium, dissolved	MW-13B	09/26/2006		8.5	mg/L		
Magnesium, dissolved	MW-13B	12/13/2006		8.7	mg/L		
Magnesium, dissolved	MW-13B	03/27/2007		8.4	mg/L		
Magnesium, dissolved	MW-13B	06/19/2007		7.9	mg/L		
Magnesium, dissolved	MW-13B	09/18/2007		8.7	mg/L		
Magnesium, dissolved	MW-13B	12/19/2007		7.6	mg/L		
Magnesium, dissolved	MW-13B	03/25/2008		8	mg/L		
Magnesium, dissolved	MW-13B	06/18/2008		8.2	mg/L		
Magnesium, dissolved	MW-13B	09/17/2008		8.3	mg/L		
Magnesium, dissolved	MW-13B	12/16/2008		8.3	mg/L		
Magnesium, dissolved	MW-13B	03/24/2009		8.5	mg/L		
Magnesium, dissolved	MW-13B	06/17/2009		8.5	mg/L		
Magnesium, dissolved	MW-13B	09/10/2009		8.3	mg/L		
Magnesium, dissolved	MW-13B	12/03/2009		8	mg/L		
Magnesium, dissolved	MW-13B	03/25/2010		8.1	mg/L		
Magnesium, dissolved	MW-13B	06/23/2010		8.7	mg/L		
Magnesium, dissolved	MW-13B	09/23/2010		8.3	mg/L		
Magnesium, dissolved	MW-13B	12/08/2010		9.3	mg/L		
Magnesium, dissolved	MW-13B	03/30/2011		8.2	mg/L		
Magnesium, dissolved	MW-13B	06/06/2011		9	mg/L		
Magnesium, dissolved	MW-13B	09/27/2011		8.4	mg/L		
Magnesium, dissolved	MW-13B	12/14/2011		8.1	mg/L		
Magnesium, dissolved	MW-13B	03/21/2012		8.5	mg/L		
Magnesium, dissolved	MW-13B	06/08/2012		8.1	mg/L		
Magnesium, dissolved	MW-13B	09/26/2012		8.6	mg/L		
Magnesium, dissolved	MW-13B	12/03/2012		8.2	mg/L		
Magnesium, dissolved	MW-13B	03/11/2013		8.6	mg/L		
Magnesium, dissolved	MW-13B	06/05/2013		8.9	mg/L		
Magnesium, dissolved	MW-13B	12/03/2013		8.9	mg/L		
Magnesium, dissolved	MW-13B	03/04/2014		8.7	mg/L		
Magnesium, dissolved	MW-13B	06/02/2014		8.3	mg/L		
Magnesium, dissolved	MW-13B	09/22/2014		7.7	mg/L		
Magnesium, dissolved	MW-13B	11/17/2014		8.7	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Magnesium, dissolved	MW-13B	02/23/2015		8.6	mg/L		
Magnesium, dissolved	MW-13B	05/19/2015		8.9	mg/L		
Magnesium, dissolved	MW-13B	08/26/2015		8.8	mg/L		
Magnesium, dissolved	MW-13B	11/10/2015		8.6	mg/L		
Magnesium, dissolved	MW-13B	02/22/2016		9.1	mg/L		
Magnesium, dissolved	MW-13B	05/16/2016		8.6	mg/L		
Magnesium, dissolved	MW-13B	08/31/2016		8.1	mg/L		
Magnesium, dissolved	MW-13B	11/14/2016		9.3	mg/L		
Magnesium, dissolved	MW-13B	02/22/2017		9.3	mg/L		
Magnesium, dissolved	MW-13B	05/24/2017		8.6	mg/L		
Magnesium, dissolved	MW-13B	08/30/2017		8.5	mg/L		
Magnesium, dissolved	MW-13B	11/13/2017		8.3	mg/L		
Magnesium, dissolved	MW-13B	02/20/2018		8.2	mg/L		
Magnesium, dissolved	MW-13B	05/15/2018		7.8	mg/L		
Magnesium, dissolved	MW-13B	08/21/2018		8.6	mg/L		
Magnesium, dissolved	MW-13B	11/12/2018		8.2	mg/L		
Magnesium, dissolved	MW-13B	11/11/2019		8.3	mg/L		
Magnesium, dissolved	MW-13B	11/19/2020		8	mg/L		
Magnesium, dissolved	MW-13B	11/16/2021		7.7	mg/L		
Magnesium, dissolved	MW-13B	11/17/2022		8.6	mg/L		
Magnesium, dissolved	MW-13B	11/08/2023		8	mg/L		
Magnesium, dissolved	MW-16	03/24/2009		7.2	mg/L		
Magnesium, dissolved	MW-16	06/16/2009		5.9	mg/L		
Magnesium, dissolved	MW-16	09/09/2009		6.9	mg/L		
Magnesium, dissolved	MW-16	12/03/2009		8	mg/L		
Magnesium, dissolved	MW-16	03/25/2010		5.1	mg/L		
Magnesium, dissolved	MW-16	06/24/2010		6.9	mg/L		
Magnesium, dissolved	MW-16	09/24/2010		7.4	mg/L		
Magnesium, dissolved	MW-16	12/09/2010		8.3	mg/L		
Magnesium, dissolved	MW-16	03/30/2011		5.8	mg/L		
Magnesium, dissolved	MW-16	06/07/2011		5.6	mg/L		
Magnesium, dissolved	MW-16	09/27/2011		6.6	mg/L		
Magnesium, dissolved	MW-16	12/13/2011		6.2	mg/L		
Magnesium, dissolved	MW-16	03/21/2012		5.5	mg/L		
Magnesium, dissolved	MW-16	06/08/2012		5	mg/L		
Magnesium, dissolved	MW-16	09/27/2012		6.4	mg/L		
Magnesium, dissolved	MW-16	12/04/2012		6.6	mg/L		
Magnesium, dissolved	MW-16	03/12/2013		5.6	mg/L		
Magnesium, dissolved	MW-16	06/04/2013		5.8	mg/L		
Magnesium, dissolved	MW-16	09/05/2013		6	mg/L		
Magnesium, dissolved	MW-16	12/16/2013		5.9	mg/L		
Magnesium, dissolved	MW-16	03/05/2014		6.6	mg/L		
Magnesium, dissolved	MW-16	06/02/2014		5	mg/L		
Magnesium, dissolved	MW-16	09/22/2014		5.5	mg/L		
Magnesium, dissolved	MW-16	11/18/2014		6.4	mg/L		
Magnesium, dissolved	MW-16	02/23/2015		5.7	mg/L		
Magnesium, dissolved	MW-16	05/20/2015		5.7	mg/L		
Magnesium, dissolved	MW-16	08/26/2015		5.9	mg/L		
Magnesium, dissolved	MW-16	11/11/2015		6.7	mg/L		
Magnesium, dissolved	MW-16	02/24/2016		4.5	mg/L		
Magnesium, dissolved	MW-16	05/16/2016		5	mg/L		
Magnesium, dissolved	MW-16	08/31/2016		5.4	mg/L		
Magnesium, dissolved	MW-16	11/14/2016		5.9	mg/L		
Magnesium, dissolved	MW-16	02/22/2017		5	mg/L		
Magnesium, dissolved	MW-16	05/24/2017		4.2	mg/L		
Magnesium, dissolved	MW-16	08/30/2017		4.9	mg/L		
Magnesium, dissolved	MW-16	11/13/2017		4.8	mg/L		
Magnesium, dissolved	MW-16	02/20/2018		4.3	mg/L		
Magnesium, dissolved	MW-16	05/17/2018		4.3	mg/L		
Magnesium, dissolved	MW-16	08/22/2018		4.6	mg/L		
Magnesium, dissolved	MW-16	11/12/2018		5.2	mg/L		
Magnesium, dissolved	MW-16	11/12/2019		6.9	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Magnesium, dissolved	MW-16	11/20/2020		7.4	mg/L		
Magnesium, dissolved	MW-16	11/16/2021		6.8	mg/L		
Magnesium, dissolved	MW-16	11/17/2022		5.6	mg/L		
Magnesium, dissolved	MW-16	11/08/2023		5.9	mg/L		
Magnesium, dissolved	MW-35	03/22/2005		8.6	mg/L		
Magnesium, dissolved	MW-35	06/14/2005		8.1	mg/L		
Magnesium, dissolved	MW-35	09/27/2005		9.2	mg/L		
Magnesium, dissolved	MW-35	12/15/2005		8	mg/L		
Magnesium, dissolved	MW-35	03/28/2006		8.3	mg/L		
Magnesium, dissolved	MW-35	06/21/2006		8.4	mg/L		
Magnesium, dissolved	MW-35	09/26/2006		8.2	mg/L		
Magnesium, dissolved	MW-35	12/12/2006		8.8	mg/L		
Magnesium, dissolved	MW-35	03/27/2007		8.6	mg/L		
Magnesium, dissolved	MW-35	06/20/2007		8.4	mg/L		
Magnesium, dissolved	MW-35	09/18/2007		9.1	mg/L		
Magnesium, dissolved	MW-35	12/20/2007		8.1	mg/L		
Magnesium, dissolved	MW-35	03/25/2008		8.2	mg/L		
Magnesium, dissolved	MW-35	06/18/2008		8.1	mg/L		
Magnesium, dissolved	MW-35	09/18/2008		8.1	mg/L		
Magnesium, dissolved	MW-35	12/19/2008		8.1	mg/L		
Magnesium, dissolved	MW-35	03/24/2009		8.7	mg/L		
Magnesium, dissolved	MW-35	06/16/2009		8.1	mg/L		
Magnesium, dissolved	MW-35	09/10/2009		8.1	mg/L		
Magnesium, dissolved	MW-35	12/03/2009		8.3	mg/L		
Magnesium, dissolved	MW-35	03/25/2010		7.9	mg/L		
Magnesium, dissolved	MW-35	06/23/2010		8.8	mg/L		
Magnesium, dissolved	MW-35	09/23/2010		8.7	mg/L		
Magnesium, dissolved	MW-35	12/09/2010		9.3	mg/L		
Magnesium, dissolved	MW-35	03/30/2011		8.8	mg/L		
Magnesium, dissolved	MW-35	06/06/2011		9	mg/L		
Magnesium, dissolved	MW-35	09/26/2011		8.7	mg/L		
Magnesium, dissolved	MW-35	12/13/2011		8.8	mg/L		
Magnesium, dissolved	MW-35	03/21/2012		9	mg/L		
Magnesium, dissolved	MW-35	06/06/2012		8.3	mg/L		
Magnesium, dissolved	MW-35	09/26/2012		8.9	mg/L		
Magnesium, dissolved	MW-35	12/04/2012		8.6	mg/L		
Magnesium, dissolved	MW-35	03/13/2013		9.2	mg/L		
Magnesium, dissolved	MW-35	06/06/2013		8.5	mg/L		
Magnesium, dissolved	MW-35	09/05/2013		8.1	mg/L		
Magnesium, dissolved	MW-35	12/16/2013		8.4	mg/L		
Magnesium, dissolved	MW-35	03/04/2014		9.2	mg/L		
Magnesium, dissolved	MW-35	06/02/2014		8.6	mg/L		
Magnesium, dissolved	MW-35	09/22/2014		8.2	mg/L		
Magnesium, dissolved	MW-35	11/17/2014		8.7	mg/L		
Magnesium, dissolved	MW-35	02/25/2015		9.3	mg/L		
Magnesium, dissolved	MW-35	05/19/2015		8.5	mg/L		
Magnesium, dissolved	MW-35	08/26/2015		9	mg/L		
Magnesium, dissolved	MW-35	11/10/2015		9.3	mg/L		
Magnesium, dissolved	MW-35	02/22/2016		9.3	mg/L		
Magnesium, dissolved	MW-35	05/16/2016		9	mg/L		
Magnesium, dissolved	MW-35	08/31/2016		8.1	mg/L		
Magnesium, dissolved	MW-35	11/15/2016		10	mg/L		
Magnesium, dissolved	MW-35	02/22/2017		9.9	mg/L		
Magnesium, dissolved	MW-35	05/24/2017		8.6	mg/L		
Magnesium, dissolved	MW-35	08/30/2017		8.9	mg/L		
Magnesium, dissolved	MW-35	11/15/2017		8.5	mg/L		
Magnesium, dissolved	MW-35	02/20/2018		8.2	mg/L		
Magnesium, dissolved	MW-35	05/17/2018		8.4	mg/L		
Magnesium, dissolved	MW-35	08/22/2018		8.6	mg/L		
Magnesium, dissolved	MW-35	11/12/2018		8.6	mg/L		
Magnesium, dissolved	MW-35	11/12/2019		9	mg/L		
Magnesium, dissolved	MW-35	11/19/2020		8.6	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Magnesium, dissolved	MW-35	11/16/2021		8.9	mg/L		
Magnesium, dissolved	MW-35	11/17/2022		8.7	mg/L		
Magnesium, dissolved	MW-35	11/08/2023		8.9	mg/L		
Manganese, total	MW-13A	12/03/2013	ND	0.001	mg/L		
Manganese, total	MW-13A	03/04/2014	ND	0.001	mg/L		
Manganese, total	MW-13A	06/02/2014	ND	0.001	mg/L		
Manganese, total	MW-13A	09/22/2014	ND	0.001	mg/L		
Manganese, total	MW-13A	11/17/2014	ND	0.001	mg/L		
Manganese, total	MW-13A	02/23/2015	ND	0.001	mg/L		
Manganese, total	MW-13A	05/19/2015	ND	0.001	mg/L		
Manganese, total	MW-13A	08/26/2015	ND	0.001	mg/L		
Manganese, total	MW-13A	11/10/2015	ND	0.001	mg/L		
Manganese, total	MW-13A	02/22/2016	ND	0.001	mg/L		
Manganese, total	MW-13A	05/16/2016	ND	0.001	mg/L		
Manganese, total	MW-13A	08/31/2016	ND	0.001	mg/L		
Manganese, total	MW-13A	11/14/2016	ND	0.001	mg/L		
Manganese, total	MW-13A	02/22/2017	ND	0.001	mg/L		
Manganese, total	MW-13A	05/24/2017	ND	0.001	mg/L		
Manganese, total	MW-13A	08/30/2017	ND	0.001	mg/L		
Manganese, total	MW-13A	11/13/2017	ND	0.001	mg/L		
Manganese, total	MW-13A	02/20/2018	ND	0.001	mg/L		
Manganese, total	MW-13A	05/15/2018	ND	0.001	mg/L		
Manganese, total	MW-13A	08/21/2018	ND	0.001	mg/L		
Manganese, total	MW-13A	11/12/2018	ND	0.001	mg/L		
Manganese, total	MW-13A	11/11/2019	ND	0.001	mg/L		
Manganese, total	MW-13A	11/19/2020	ND	0.001	mg/L		
Manganese, total	MW-13A	11/16/2021	ND	0.001	mg/L		
Manganese, total	MW-13A	11/17/2022		0.02	mg/L		
Manganese, total	MW-13A	11/08/2023	ND	0.001	mg/L		
Manganese, total	MW-13B	12/03/2013	ND	0.001	mg/L		
Manganese, total	MW-13B	03/04/2014	ND	0.001	mg/L		
Manganese, total	MW-13B	06/02/2014		0.002	mg/L		
Manganese, total	MW-13B	09/22/2014	ND	0.001	mg/L		
Manganese, total	MW-13B	11/17/2014	ND	0.001	mg/L		
Manganese, total	MW-13B	02/23/2015	ND	0.001	mg/L		
Manganese, total	MW-13B	05/19/2015	ND	0.001	mg/L		
Manganese, total	MW-13B	08/26/2015	ND	0.001	mg/L		
Manganese, total	MW-13B	11/10/2015	ND	0.001	mg/L		
Manganese, total	MW-13B	02/22/2016	ND	0.001	mg/L		
Manganese, total	MW-13B	05/16/2016	ND	0.001	mg/L		
Manganese, total	MW-13B	08/31/2016	ND	0.001	mg/L		
Manganese, total	MW-13B	11/14/2016	ND	0.001	mg/L		
Manganese, total	MW-13B	02/22/2017	ND	0.001	mg/L		
Manganese, total	MW-13B	05/24/2017	ND	0.001	mg/L		
Manganese, total	MW-13B	08/30/2017	ND	0.001	mg/L		
Manganese, total	MW-13B	11/13/2017	ND	0.001	mg/L		
Manganese, total	MW-13B	02/20/2018		0.0018	mg/L		
Manganese, total	MW-13B	05/15/2018	ND	0.001	mg/L		
Manganese, total	MW-13B	08/21/2018	ND	0.001	mg/L		
Manganese, total	MW-13B	11/12/2018	ND	0.001	mg/L		
Manganese, total	MW-13B	11/11/2019	ND	0.001	mg/L		
Manganese, total	MW-13B	11/19/2020	ND	0.001	mg/L		
Manganese, total	MW-13B	11/16/2021		0.0019	mg/L		
Manganese, total	MW-13B	11/17/2022	ND	0.001	mg/L		
Manganese, total	MW-13B	11/08/2023	ND	0.001	mg/L		
Manganese, total	MW-16	09/05/2013		0.016	mg/L		
Manganese, total	MW-16	12/16/2013		0.013	mg/L		
Manganese, total	MW-16	03/05/2014		0.02	mg/L		
Manganese, total	MW-16	06/02/2014		0.0049	mg/L		
Manganese, total	MW-16	09/22/2014		0.014	mg/L		
Manganese, total	MW-16	11/18/2014		0.032	mg/L		
Manganese, total	MW-16	02/23/2015		0.062	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Manganese, total	MW-16	05/20/2015		0.0035	mg/L		
Manganese, total	MW-16	08/26/2015		0.0012	mg/L		
Manganese, total	MW-16	11/11/2015		0.0014	mg/L		
Manganese, total	MW-16	02/24/2016		0.0019	mg/L		
Manganese, total	MW-16	05/16/2016	ND	0.001	mg/L		
Manganese, total	MW-16	08/31/2016		0.0024	mg/L		
Manganese, total	MW-16	11/14/2016		0.017	mg/L		
Manganese, total	MW-16	02/22/2017		0.0045	mg/L		
Manganese, total	MW-16	05/24/2017		0.01	mg/L		
Manganese, total	MW-16	08/30/2017		0.0016	mg/L		
Manganese, total	MW-16	11/13/2017		0.0011	mg/L		
Manganese, total	MW-16	02/20/2018		0.013	mg/L		
Manganese, total	MW-16	05/17/2018		0.0033	mg/L		
Manganese, total	MW-16	08/22/2018		0.002	mg/L		
Manganese, total	MW-16	11/12/2018		0.025	mg/L		
Manganese, total	MW-16	11/12/2019		0.018	mg/L		
Manganese, total	MW-16	11/20/2020		0.11	mg/L		
Manganese, total	MW-16	11/16/2021		0.0063	mg/L		
Manganese, total	MW-16	11/17/2022		0.0016	mg/L		
Manganese, total	MW-16	11/08/2023		0.0036	mg/L		
Manganese, total	MW-35	09/05/2013	ND	0.001	mg/L		
Manganese, total	MW-35	12/16/2013	ND	0.001	mg/L		
Manganese, total	MW-35	03/04/2014	ND	0.001	mg/L		
Manganese, total	MW-35	06/02/2014	ND	0.001	mg/L		
Manganese, total	MW-35	09/22/2014	ND	0.001	mg/L		
Manganese, total	MW-35	11/17/2014	ND	0.001	mg/L		
Manganese, total	MW-35	02/25/2015	ND	0.001	mg/L		
Manganese, total	MW-35	05/19/2015		0.0014	mg/L		
Manganese, total	MW-35	08/26/2015	ND	0.001	mg/L		
Manganese, total	MW-35	11/10/2015	ND	0.001	mg/L		
Manganese, total	MW-35	02/22/2016	ND	0.001	mg/L		
Manganese, total	MW-35	05/16/2016	ND	0.001	mg/L		
Manganese, total	MW-35	08/31/2016	ND	0.001	mg/L		
Manganese, total	MW-35	11/15/2016	ND	0.001	mg/L		
Manganese, total	MW-35	02/22/2017	ND	0.001	mg/L		
Manganese, total	MW-35	05/24/2017	ND	0.001	mg/L		
Manganese, total	MW-35	08/30/2017	ND	0.001	mg/L		
Manganese, total	MW-35	11/15/2017	ND	0.001	mg/L		
Manganese, total	MW-35	02/20/2018	ND	0.001	mg/L		
Manganese, total	MW-35	05/17/2018	ND	0.001	mg/L		
Manganese, total	MW-35	08/22/2018	ND	0.001	mg/L		
Manganese, total	MW-35	11/12/2018	ND	0.001	mg/L		
Manganese, total	MW-35	11/12/2019	ND	0.001	mg/L		
Manganese, total	MW-35	11/19/2020	ND	0.001	mg/L		
Manganese, total	MW-35	11/16/2021	ND	0.001	mg/L		
Manganese, total	MW-35	11/17/2022	ND	0.001	mg/L		
Manganese, total	MW-35	11/08/2023	ND	0.001	mg/L		
Nickel, total	MW-13A	12/03/2013	ND	0.004	mg/L		
Nickel, total	MW-13A	03/04/2014	ND	0.004	mg/L		
Nickel, total	MW-13A	06/02/2014	ND	0.004	mg/L		
Nickel, total	MW-13A	09/22/2014	ND	0.004	mg/L		
Nickel, total	MW-13A	11/17/2014	ND	0.004	mg/L		
Nickel, total	MW-13A	02/23/2015	ND	0.004	mg/L		
Nickel, total	MW-13A	05/19/2015	ND	0.004	mg/L		
Nickel, total	MW-13A	08/26/2015	ND	0.004	mg/L		
Nickel, total	MW-13A	11/10/2015	ND	0.004	mg/L		
Nickel, total	MW-13A	02/22/2016	ND	0.004	mg/L		
Nickel, total	MW-13A	05/16/2016	ND	0.004	mg/L		
Nickel, total	MW-13A	08/31/2016	ND	0.004	mg/L		
Nickel, total	MW-13A	11/14/2016	ND	0.004	mg/L		
Nickel, total	MW-13A	02/22/2017	ND	0.004	mg/L		
Nickel, total	MW-13A	05/24/2017	ND	0.004	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Nickel, total	MW-13A	08/30/2017	ND	0.004	mg/L		
Nickel, total	MW-13A	11/13/2017	ND	0.004	mg/L		
Nickel, total	MW-13A	02/20/2018	ND	0.004	mg/L		
Nickel, total	MW-13A	05/15/2018	ND	0.004	mg/L		
Nickel, total	MW-13A	08/21/2018	ND	0.004	mg/L		
Nickel, total	MW-13A	11/12/2018	ND	0.004	mg/L		
Nickel, total	MW-13A	11/11/2019	ND	0.004	mg/L		
Nickel, total	MW-13A	11/19/2020	ND	0.004	mg/L		
Nickel, total	MW-13A	11/16/2021	ND	0.004	mg/L		
Nickel, total	MW-13A	11/17/2022	ND	0.004	mg/L		
Nickel, total	MW-13A	11/08/2023	ND	0.004	mg/L		
Nickel, total	MW-13B	12/03/2013	ND	0.004	mg/L		
Nickel, total	MW-13B	03/04/2014	ND	0.004	mg/L		
Nickel, total	MW-13B	06/02/2014	ND	0.004	mg/L		
Nickel, total	MW-13B	09/22/2014	ND	0.004	mg/L		
Nickel, total	MW-13B	11/17/2014	ND	0.004	mg/L		
Nickel, total	MW-13B	02/23/2015	ND	0.004	mg/L		
Nickel, total	MW-13B	05/19/2015	ND	0.004	mg/L		
Nickel, total	MW-13B	08/26/2015	ND	0.004	mg/L		
Nickel, total	MW-13B	11/10/2015	ND	0.004	mg/L		
Nickel, total	MW-13B	02/22/2016	ND	0.004	mg/L		
Nickel, total	MW-13B	05/16/2016	ND	0.004	mg/L		
Nickel, total	MW-13B	08/31/2016	ND	0.004	mg/L		
Nickel, total	MW-13B	11/14/2016	ND	0.004	mg/L		
Nickel, total	MW-13B	02/22/2017	ND	0.004	mg/L		
Nickel, total	MW-13B	05/24/2017	ND	0.004	mg/L		
Nickel, total	MW-13B	08/30/2017	ND	0.004	mg/L		
Nickel, total	MW-13B	11/13/2017	ND	0.004	mg/L		
Nickel, total	MW-13B	02/20/2018	ND	0.004	mg/L		
Nickel, total	MW-13B	05/15/2018	ND	0.004	mg/L		
Nickel, total	MW-13B	08/21/2018	ND	0.004	mg/L		
Nickel, total	MW-13B	11/12/2018	ND	0.004	mg/L		
Nickel, total	MW-13B	11/11/2019	ND	0.004	mg/L		
Nickel, total	MW-13B	11/19/2020	ND	0.004	mg/L		
Nickel, total	MW-13B	11/16/2021	ND	0.004	mg/L		
Nickel, total	MW-13B	11/17/2022	ND	0.004	mg/L		
Nickel, total	MW-13B	11/08/2023	ND	0.004	mg/L		
Nickel, total	MW-16	09/05/2013	ND	0.004	mg/L		
Nickel, total	MW-16	12/16/2013	ND	0.004	mg/L		
Nickel, total	MW-16	03/05/2014	ND	0.004	mg/L		
Nickel, total	MW-16	06/02/2014	ND	0.004	mg/L		
Nickel, total	MW-16	09/22/2014	ND	0.004	mg/L		
Nickel, total	MW-16	11/18/2014	ND	0.004	mg/L		
Nickel, total	MW-16	02/23/2015		0.0041	mg/L		
Nickel, total	MW-16	05/20/2015	ND	0.004	mg/L		
Nickel, total	MW-16	08/26/2015	ND	0.004	mg/L		
Nickel, total	MW-16	11/11/2015	ND	0.004	mg/L		
Nickel, total	MW-16	02/24/2016	ND	0.004	mg/L		
Nickel, total	MW-16	05/16/2016	ND	0.004	mg/L		
Nickel, total	MW-16	08/31/2016	ND	0.004	mg/L		
Nickel, total	MW-16	11/14/2016	ND	0.004	mg/L		
Nickel, total	MW-16	02/22/2017	ND	0.004	mg/L		
Nickel, total	MW-16	05/24/2017	ND	0.004	mg/L		
Nickel, total	MW-16	08/30/2017	ND	0.004	mg/L		
Nickel, total	MW-16	11/13/2017	ND	0.004	mg/L		
Nickel, total	MW-16	02/20/2018	ND	0.004	mg/L		
Nickel, total	MW-16	05/17/2018	ND	0.004	mg/L		
Nickel, total	MW-16	08/22/2018	ND	0.004	mg/L		
Nickel, total	MW-16	11/12/2018	ND	0.004	mg/L		
Nickel, total	MW-16	11/12/2019	ND	0.004	mg/L		
Nickel, total	MW-16	11/20/2020		0.0055	mg/L		
Nickel, total	MW-16	11/16/2021	ND	0.004	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Nickel, total	MW-16	11/17/2022	ND	0.004	mg/L		
Nickel, total	MW-16	11/08/2023	ND	0.004	mg/L		
Nickel, total	MW-35	09/05/2013	ND	0.004	mg/L		
Nickel, total	MW-35	12/16/2013	ND	0.004	mg/L		
Nickel, total	MW-35	03/04/2014	ND	0.004	mg/L		
Nickel, total	MW-35	06/02/2014	ND	0.004	mg/L		
Nickel, total	MW-35	09/22/2014	ND	0.004	mg/L		
Nickel, total	MW-35	11/17/2014	ND	0.004	mg/L		
Nickel, total	MW-35	02/25/2015	ND	0.004	mg/L		
Nickel, total	MW-35	05/19/2015	ND	0.004	mg/L		
Nickel, total	MW-35	08/26/2015	ND	0.004	mg/L		
Nickel, total	MW-35	11/10/2015	ND	0.004	mg/L		
Nickel, total	MW-35	02/22/2016	ND	0.004	mg/L		
Nickel, total	MW-35	05/16/2016	ND	0.004	mg/L		
Nickel, total	MW-35	08/31/2016	ND	0.004	mg/L		
Nickel, total	MW-35	11/15/2016	ND	0.004	mg/L		
Nickel, total	MW-35	02/22/2017	ND	0.004	mg/L		
Nickel, total	MW-35	05/24/2017	ND	0.004	mg/L		
Nickel, total	MW-35	08/30/2017	ND	0.004	mg/L		
Nickel, total	MW-35	11/15/2017	ND	0.004	mg/L		
Nickel, total	MW-35	02/20/2018	ND	0.004	mg/L		
Nickel, total	MW-35	05/17/2018	ND	0.004	mg/L		
Nickel, total	MW-35	08/22/2018	ND	0.004	mg/L		
Nickel, total	MW-35	11/12/2018	ND	0.004	mg/L		
Nickel, total	MW-35	11/12/2019	ND	0.004	mg/L		
Nickel, total	MW-35	11/19/2020	ND	0.004	mg/L		
Nickel, total	MW-35	11/16/2021	ND	0.004	mg/L		
Nickel, total	MW-35	11/17/2022	ND	0.004	mg/L		
Nickel, total	MW-35	11/08/2023	ND	0.004	mg/L		
Nitrate (as n)	MW-13A	03/22/2005		0.51	mg/L		
Nitrate (as n)	MW-13A	06/15/2005		0.44	mg/L		
Nitrate (as n)	MW-13A	09/27/2005		1.8	mg/L		*
Nitrate (as n)	MW-13A	12/15/2005		0.47	mg/L		
Nitrate (as n)	MW-13A	03/28/2006		0.44	mg/L		
Nitrate (as n)	MW-13A	06/21/2006		0.54	mg/L		
Nitrate (as n)	MW-13A	09/26/2006		0.44	mg/L		
Nitrate (as n)	MW-13A	12/13/2006		0.46	mg/L		
Nitrate (as n)	MW-13A	03/27/2007		0.42	mg/L		
Nitrate (as n)	MW-13A	06/19/2007		0.46	mg/L		
Nitrate (as n)	MW-13A	09/19/2007		0.46	mg/L		
Nitrate (as n)	MW-13A	12/19/2007		0.41	mg/L		
Nitrate (as n)	MW-13A	03/25/2008		0.49	mg/L		
Nitrate (as n)	MW-13A	06/18/2008		0.51	mg/L		
Nitrate (as n)	MW-13A	09/17/2008		0.44	mg/L		
Nitrate (as n)	MW-13A	12/17/2008		0.48	mg/L		
Nitrate (as n)	MW-13A	03/24/2009		0.47	mg/L		
Nitrate (as n)	MW-13A	06/17/2009		0.49	mg/L		
Nitrate (as n)	MW-13A	09/10/2009		0.45	mg/L		
Nitrate (as n)	MW-13A	12/03/2009		0.41	mg/L		
Nitrate (as n)	MW-13A	03/25/2010		0.48	mg/L		
Nitrate (as n)	MW-13A	06/23/2010		0.47	mg/L		
Nitrate (as n)	MW-13A	09/23/2010		0.51	mg/L		
Nitrate (as n)	MW-13A	12/08/2010		0.49	mg/L		
Nitrate (as n)	MW-13A	03/30/2011		0.53	mg/L		
Nitrate (as n)	MW-13A	06/06/2011		0.46	mg/L		
Nitrate (as n)	MW-13A	09/27/2011		0.48	mg/L		
Nitrate (as n)	MW-13A	12/14/2011		0.48	mg/L		
Nitrate (as n)	MW-13A	03/21/2012		9.4	mg/L		*
Nitrate (as n)	MW-13A	06/08/2012		0.45	mg/L		
Nitrate (as n)	MW-13A	09/26/2012		0.42	mg/L		
Nitrate (as n)	MW-13A	12/03/2012		0.54	mg/L		
Nitrate (as n)	MW-13A	03/11/2013		0.46	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Nitrate (as n)	MW-13A	06/05/2013		0.49	mg/L		
Nitrate (as n)	MW-13A	12/03/2013		0.47	mg/L		
Nitrate (as n)	MW-13A	03/04/2014		0.48	mg/L		
Nitrate (as n)	MW-13A	06/02/2014		0.48	mg/L		
Nitrate (as n)	MW-13A	09/22/2014		0.44	mg/L		
Nitrate (as n)	MW-13A	11/17/2014		0.46	mg/L		
Nitrate (as n)	MW-13A	02/23/2015		0.47	mg/L		
Nitrate (as n)	MW-13A	05/19/2015		0.45	mg/L		
Nitrate (as n)	MW-13A	08/26/2015		0.41	mg/L		
Nitrate (as n)	MW-13A	11/10/2015		0.44	mg/L		
Nitrate (as n)	MW-13A	02/22/2016		0.42	mg/L		
Nitrate (as n)	MW-13A	05/16/2016		0.45	mg/L		
Nitrate (as n)	MW-13A	08/31/2016		0.45	mg/L		
Nitrate (as n)	MW-13A	11/14/2016		0.48	mg/L		
Nitrate (as n)	MW-13A	05/24/2017		0.45	mg/L		
Nitrate (as n)	MW-13A	11/13/2017		0.42	mg/L		
Nitrate (as n)	MW-13A	02/20/2018		0.41	mg/L		
Nitrate (as n)	MW-13A	05/15/2018		0.48	mg/L		
Nitrate (as n)	MW-13A	08/21/2018		0.39	mg/L		
Nitrate (as n)	MW-13A	11/12/2018		0.38	mg/L		
Nitrate (as n)	MW-13A	11/11/2019		0.41	mg/L		
Nitrate (as n)	MW-13A	11/19/2020		0.42	mg/L		
Nitrate (as n)	MW-13A	11/16/2021		0.44	mg/L		
Nitrate (as n)	MW-13A	11/17/2022		0.48	mg/L		
Nitrate (as n)	MW-13A	11/08/2023		0.44	mg/L		
Nitrate (as n)	MW-13B	03/22/2005		0.5	mg/L		
Nitrate (as n)	MW-13B	06/15/2005		0.74	mg/L		
Nitrate (as n)	MW-13B	09/27/2005		0.46	mg/L		
Nitrate (as n)	MW-13B	12/15/2005		0.49	mg/L		
Nitrate (as n)	MW-13B	03/29/2006		0.44	mg/L		
Nitrate (as n)	MW-13B	06/21/2006		0.56	mg/L		
Nitrate (as n)	MW-13B	09/26/2006		0.44	mg/L		
Nitrate (as n)	MW-13B	12/13/2006		0.4	mg/L		
Nitrate (as n)	MW-13B	03/27/2007		0.43	mg/L		
Nitrate (as n)	MW-13B	06/19/2007		0.48	mg/L		
Nitrate (as n)	MW-13B	09/18/2007		0.48	mg/L		
Nitrate (as n)	MW-13B	12/19/2007		0.89	mg/L		
Nitrate (as n)	MW-13B	03/25/2008		0.48	mg/L		
Nitrate (as n)	MW-13B	06/18/2008		0.95	mg/L		
Nitrate (as n)	MW-13B	09/17/2008		0.46	mg/L		
Nitrate (as n)	MW-13B	12/16/2008		0.53	mg/L		
Nitrate (as n)	MW-13B	03/24/2009		0.46	mg/L		
Nitrate (as n)	MW-13B	06/17/2009		0.49	mg/L		
Nitrate (as n)	MW-13B	09/10/2009		0.46	mg/L		
Nitrate (as n)	MW-13B	12/03/2009		0.4	mg/L		
Nitrate (as n)	MW-13B	03/25/2010		0.46	mg/L		
Nitrate (as n)	MW-13B	06/23/2010		0.45	mg/L		
Nitrate (as n)	MW-13B	09/23/2010		0.48	mg/L		
Nitrate (as n)	MW-13B	12/08/2010		0.5	mg/L		
Nitrate (as n)	MW-13B	03/30/2011		0.51	mg/L		
Nitrate (as n)	MW-13B	06/06/2011		0.43	mg/L		
Nitrate (as n)	MW-13B	09/27/2011		0.46	mg/L		
Nitrate (as n)	MW-13B	12/14/2011		0.47	mg/L		
Nitrate (as n)	MW-13B	03/21/2012		9.7	mg/L		*
Nitrate (as n)	MW-13B	06/08/2012		0.45	mg/L		
Nitrate (as n)	MW-13B	09/26/2012		0.4	mg/L		
Nitrate (as n)	MW-13B	12/03/2012		0.42	mg/L		
Nitrate (as n)	MW-13B	03/11/2013		0.43	mg/L		
Nitrate (as n)	MW-13B	06/05/2013		0.49	mg/L		
Nitrate (as n)	MW-13B	12/03/2013		0.51	mg/L		
Nitrate (as n)	MW-13B	03/04/2014		0.45	mg/L		
Nitrate (as n)	MW-13B	06/02/2014		0.53	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Nitrate (as n)	MW-13B	09/22/2014		0.45	mg/L		
Nitrate (as n)	MW-13B	11/17/2014		0.47	mg/L		
Nitrate (as n)	MW-13B	02/23/2015		0.45	mg/L		
Nitrate (as n)	MW-13B	05/19/2015		0.45	mg/L		
Nitrate (as n)	MW-13B	08/26/2015		0.44	mg/L		
Nitrate (as n)	MW-13B	11/10/2015		0.45	mg/L		
Nitrate (as n)	MW-13B	02/22/2016		0.43	mg/L		
Nitrate (as n)	MW-13B	05/16/2016		0.46	mg/L		
Nitrate (as n)	MW-13B	08/31/2016		0.45	mg/L		
Nitrate (as n)	MW-13B	11/14/2016		0.64	mg/L		
Nitrate (as n)	MW-13B	05/24/2017		0.48	mg/L		
Nitrate (as n)	MW-13B	11/13/2017		0.44	mg/L		
Nitrate (as n)	MW-13B	02/20/2018		0.43	mg/L		
Nitrate (as n)	MW-13B	05/15/2018		0.43	mg/L		
Nitrate (as n)	MW-13B	08/21/2018		0.45	mg/L		
Nitrate (as n)	MW-13B	11/12/2018		0.4	mg/L		
Nitrate (as n)	MW-13B	11/11/2019		0.42	mg/L		
Nitrate (as n)	MW-13B	11/19/2020		0.35	mg/L		
Nitrate (as n)	MW-13B	11/16/2021		0.41	mg/L		
Nitrate (as n)	MW-13B	11/17/2022		0.41	mg/L		
Nitrate (as n)	MW-13B	11/08/2023		0.36	mg/L		
Nitrate (as n)	MW-16	03/24/2009		0.28	mg/L		
Nitrate (as n)	MW-16	06/16/2009		0.33	mg/L		
Nitrate (as n)	MW-16	09/09/2009		0.31	mg/L		
Nitrate (as n)	MW-16	12/03/2009		0.4	mg/L		
Nitrate (as n)	MW-16	03/25/2010		0.29	mg/L		
Nitrate (as n)	MW-16	06/24/2010		0.16	mg/L		
Nitrate (as n)	MW-16	09/24/2010		0.51	mg/L		
Nitrate (as n)	MW-16	12/09/2010		0.9	mg/L		
Nitrate (as n)	MW-16	03/30/2011		0.52	mg/L		
Nitrate (as n)	MW-16	06/07/2011		0.46	mg/L		
Nitrate (as n)	MW-16	09/27/2011		0.73	mg/L		
Nitrate (as n)	MW-16	12/13/2011		1.1	mg/L		
Nitrate (as n)	MW-16	03/21/2012		0.89	mg/L		*
Nitrate (as n)	MW-16	06/08/2012		1.4	mg/L		
Nitrate (as n)	MW-16	09/27/2012		0.96	mg/L		
Nitrate (as n)	MW-16	12/04/2012		0.86	mg/L		
Nitrate (as n)	MW-16	03/12/2013		1.6	mg/L		
Nitrate (as n)	MW-16	06/04/2013		1.5	mg/L		
Nitrate (as n)	MW-16	09/05/2013		0.72	mg/L		
Nitrate (as n)	MW-16	12/16/2013		0.75	mg/L		
Nitrate (as n)	MW-16	03/05/2014		0.55	mg/L		
Nitrate (as n)	MW-16	06/02/2014		1.2	mg/L		
Nitrate (as n)	MW-16	09/22/2014		0.36	mg/L		
Nitrate (as n)	MW-16	11/18/2014		0.28	mg/L		
Nitrate (as n)	MW-16	02/23/2015		0.26	mg/L		
Nitrate (as n)	MW-16	05/20/2015		0.55	mg/L		
Nitrate (as n)	MW-16	08/26/2015		0.38	mg/L		
Nitrate (as n)	MW-16	11/11/2015		0.19	mg/L		
Nitrate (as n)	MW-16	02/24/2016		0.5	mg/L		
Nitrate (as n)	MW-16	05/16/2016		0.69	mg/L		
Nitrate (as n)	MW-16	08/31/2016		0.27	mg/L		
Nitrate (as n)	MW-16	11/14/2016		0.24	mg/L		
Nitrate (as n)	MW-16	05/24/2017		0.55	mg/L		
Nitrate (as n)	MW-16	11/13/2017		0.28	mg/L		
Nitrate (as n)	MW-16	02/20/2018		0.32	mg/L		
Nitrate (as n)	MW-16	05/17/2018		0.62	mg/L		
Nitrate (as n)	MW-16	08/22/2018		0.17	mg/L		
Nitrate (as n)	MW-16	11/12/2018		0.28	mg/L		
Nitrate (as n)	MW-16	11/12/2019		0.1	mg/L		
Nitrate (as n)	MW-16	11/20/2020	ND	0.05	mg/L		
Nitrate (as n)	MW-16	11/16/2021		0.1	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Nitrate (as n)	MW-16	11/17/2022	ND	0.05	mg/L		
Nitrate (as n)	MW-16	11/08/2023	ND	0.05	mg/L		
Nitrate (as n)	MW-35	03/22/2005		0.37	mg/L		
Nitrate (as n)	MW-35	06/14/2005		0.33	mg/L		
Nitrate (as n)	MW-35	09/27/2005		0.96	mg/L		
Nitrate (as n)	MW-35	12/15/2005		0.29	mg/L		
Nitrate (as n)	MW-35	03/28/2006		0.34	mg/L		
Nitrate (as n)	MW-35	06/21/2006		0.4	mg/L		
Nitrate (as n)	MW-35	09/26/2006		0.31	mg/L		
Nitrate (as n)	MW-35	12/12/2006		0.35	mg/L		
Nitrate (as n)	MW-35	03/27/2007		0.3	mg/L		
Nitrate (as n)	MW-35	06/20/2007		0.34	mg/L		
Nitrate (as n)	MW-35	09/18/2007		0.32	mg/L		
Nitrate (as n)	MW-35	12/20/2007		0.32	mg/L		
Nitrate (as n)	MW-35	03/25/2008		0.3	mg/L		
Nitrate (as n)	MW-35	06/18/2008		1	mg/L		
Nitrate (as n)	MW-35	09/18/2008		0.35	mg/L		
Nitrate (as n)	MW-35	12/19/2008		0.37	mg/L		
Nitrate (as n)	MW-35	03/24/2009		0.35	mg/L		
Nitrate (as n)	MW-35	06/16/2009		0.37	mg/L		
Nitrate (as n)	MW-35	09/10/2009		0.35	mg/L		
Nitrate (as n)	MW-35	12/03/2009		0.52	mg/L		
Nitrate (as n)	MW-35	03/25/2010		0.36	mg/L		
Nitrate (as n)	MW-35	06/23/2010		0.32	mg/L		
Nitrate (as n)	MW-35	09/23/2010		0.4	mg/L		
Nitrate (as n)	MW-35	12/09/2010		0.39	mg/L		
Nitrate (as n)	MW-35	03/30/2011		0.39	mg/L		
Nitrate (as n)	MW-35	06/06/2011		0.39	mg/L		
Nitrate (as n)	MW-35	09/26/2011		0.4	mg/L		
Nitrate (as n)	MW-35	12/13/2011		0.39	mg/L		
Nitrate (as n)	MW-35	03/21/2012		0.45	mg/L		*
Nitrate (as n)	MW-35	06/06/2012		0.43	mg/L		
Nitrate (as n)	MW-35	09/26/2012		0.37	mg/L		
Nitrate (as n)	MW-35	12/04/2012		0.42	mg/L		
Nitrate (as n)	MW-35	03/13/2013		0.47	mg/L		
Nitrate (as n)	MW-35	06/06/2013		0.45	mg/L		
Nitrate (as n)	MW-35	09/05/2013		0.42	mg/L		
Nitrate (as n)	MW-35	12/16/2013		0.4	mg/L		
Nitrate (as n)	MW-35	03/04/2014		0.42	mg/L		
Nitrate (as n)	MW-35	06/02/2014		0.42	mg/L		
Nitrate (as n)	MW-35	09/22/2014		0.42	mg/L		
Nitrate (as n)	MW-35	11/17/2014		0.42	mg/L		
Nitrate (as n)	MW-35	02/25/2015		0.41	mg/L		
Nitrate (as n)	MW-35	05/19/2015		0.4	mg/L		
Nitrate (as n)	MW-35	08/26/2015		0.4	mg/L		
Nitrate (as n)	MW-35	11/10/2015		0.41	mg/L		
Nitrate (as n)	MW-35	02/22/2016		0.41	mg/L		
Nitrate (as n)	MW-35	05/16/2016		0.44	mg/L		
Nitrate (as n)	MW-35	08/31/2016		0.43	mg/L		
Nitrate (as n)	MW-35	11/15/2016		0.47	mg/L		
Nitrate (as n)	MW-35	05/24/2017		0.49	mg/L		
Nitrate (as n)	MW-35	11/15/2017		0.51	mg/L		
Nitrate (as n)	MW-35	02/20/2018		0.44	mg/L		
Nitrate (as n)	MW-35	05/17/2018		0.44	mg/L		
Nitrate (as n)	MW-35	08/22/2018		0.42	mg/L		
Nitrate (as n)	MW-35	11/12/2018		0.41	mg/L		
Nitrate (as n)	MW-35	11/12/2019		0.36	mg/L		
Nitrate (as n)	MW-35	11/19/2020		0.43	mg/L		
Nitrate (as n)	MW-35	11/16/2021		0.45	mg/L		
Nitrate (as n)	MW-35	11/17/2022		0.39	mg/L		
Nitrate (as n)	MW-35	11/08/2023		0.36	mg/L		
pH	MW-13A	03/22/2005		7.01	pH Units		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

pH	MW-13A	06/15/2005		7.21	pH Units		
pH	MW-13A	09/27/2005		7.1	pH Units		
pH	MW-13A	12/15/2005		6.34	pH Units		
pH	MW-13A	03/28/2006		6.9	pH Units		
pH	MW-13A	06/21/2006		7.25	pH Units		
pH	MW-13A	09/26/2006		7.25	pH Units		
pH	MW-13A	12/13/2006		6.87	pH Units		
pH	MW-13A	03/27/2007		7.32	pH Units		
pH	MW-13A	09/19/2007		6.68	pH Units		
pH	MW-13A	12/19/2007		7.29	pH Units		
pH	MW-13A	03/25/2008		7.12	pH Units		
pH	MW-13A	06/18/2008		7.19	pH Units		
pH	MW-13A	09/17/2008		7	pH Units		
pH	MW-13A	12/17/2008		6.51	pH Units		
pH	MW-13A	03/24/2009		6.85	pH Units		
pH	MW-13A	06/17/2009		7.07	pH Units		
pH	MW-13A	12/03/2009		7.03	pH Units		
pH	MW-13A	03/25/2010		6.96	pH Units		
pH	MW-13A	06/23/2010		6.99	pH Units		
pH	MW-13A	09/23/2010		6.78	pH Units		
pH	MW-13A	12/08/2010		7.48	pH Units		
pH	MW-13A	03/30/2011		6.95	pH Units		
pH	MW-13A	06/06/2011		7.45	pH Units		
pH	MW-13A	09/27/2011		6.91	pH Units		
pH	MW-13A	12/14/2011		7.13	pH Units		
pH	MW-13A	03/21/2012		6.78	pH Units		
pH	MW-13A	06/08/2012		6.72	pH Units		
pH	MW-13A	09/26/2012		7.35	pH Units		
pH	MW-13A	12/03/2012		6.95	pH Units		
pH	MW-13A	03/11/2013		7.18	pH Units		
pH	MW-13A	06/05/2013		7.33	pH Units		
pH	MW-13A	12/03/2013		7.16	pH Units		
pH	MW-13A	03/04/2014		7.48	pH Units		
pH	MW-13A	06/02/2014		7.26	pH Units		
pH	MW-13A	09/22/2014		7.26	pH Units		
pH	MW-13A	11/17/2014		6.99	pH Units		
pH	MW-13A	05/19/2015		7.03	pH Units		
pH	MW-13A	08/26/2015		7.07	pH Units		
pH	MW-13A	11/10/2015		6.68	pH Units		
pH	MW-13A	02/22/2016		6.69	pH Units		
pH	MW-13A	05/16/2016		6.87	pH Units		
pH	MW-13A	08/31/2016		6.65	pH Units		
pH	MW-13A	11/14/2016		6.5	pH Units		
pH	MW-13A	02/22/2017		6.97	pH Units		
pH	MW-13A	05/24/2017		7.17	pH Units		
pH	MW-13A	08/30/2017		7	pH Units		
pH	MW-13A	11/13/2017		6.79	pH Units		
pH	MW-13A	02/20/2018		6.87	pH Units		
pH	MW-13A	05/15/2018		6.91	pH Units		
pH	MW-13A	08/21/2018		6.88	pH Units		
pH	MW-13A	11/12/2018		7.02	pH Units		
pH	MW-13A	05/28/2019		6.7	pH Units		
pH	MW-13A	11/11/2019		6.72	pH Units		
pH	MW-13A	05/26/2020		7.28	pH Units		
pH	MW-13A	11/19/2020		6.99	pH Units		
pH	MW-13A	05/17/2021		7.09	pH Units		
pH	MW-13A	11/16/2021		7.17	pH Units		
pH	MW-13A	05/10/2022		7.17	pH Units		
pH	MW-13A	11/17/2022		6.93	pH Units		
pH	MW-13A	05/23/2023		6.94	pH Units		
pH	MW-13A	11/08/2023		6.8	pH Units		
pH	MW-13B	03/22/2005		7.49	pH Units		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

pH	MW-13B	06/15/2005		7.81	pH Units		
pH	MW-13B	09/27/2005		7.73	pH Units		
pH	MW-13B	12/15/2005		6.93	pH Units		
pH	MW-13B	03/29/2006		7.45	pH Units		
pH	MW-13B	06/21/2006		7.76	pH Units		
pH	MW-13B	09/26/2006		7.78	pH Units		
pH	MW-13B	12/13/2006		7.32	pH Units		
pH	MW-13B	03/27/2007		7.76	pH Units		
pH	MW-13B	09/18/2007		7.48	pH Units		
pH	MW-13B	12/19/2007		7.85	pH Units		
pH	MW-13B	03/25/2008		7.78	pH Units		
pH	MW-13B	06/18/2008		7.74	pH Units		
pH	MW-13B	09/17/2008		7.57	pH Units		
pH	MW-13B	12/16/2008		7.23	pH Units		
pH	MW-13B	03/24/2009		7.37	pH Units		
pH	MW-13B	06/17/2009		7.56	pH Units		
pH	MW-13B	12/03/2009		6.93	pH Units		
pH	MW-13B	03/25/2010		7.49	pH Units		
pH	MW-13B	06/23/2010		7.27	pH Units		
pH	MW-13B	09/23/2010		7.11	pH Units		
pH	MW-13B	12/08/2010		7.05	pH Units		
pH	MW-13B	03/30/2011		7.51	pH Units		
pH	MW-13B	06/06/2011		7.58	pH Units		
pH	MW-13B	09/27/2011		7.08	pH Units		
pH	MW-13B	12/14/2011		7.53	pH Units		
pH	MW-13B	03/21/2012		7.09	pH Units		
pH	MW-13B	06/08/2012		7.15	pH Units		
pH	MW-13B	09/26/2012		7.32	pH Units		
pH	MW-13B	12/03/2012		7.32	pH Units		
pH	MW-13B	03/11/2013		7.42	pH Units		
pH	MW-13B	06/05/2013		7.27	pH Units		
pH	MW-13B	12/03/2013		7.34	pH Units		
pH	MW-13B	03/04/2014		7.4	pH Units		
pH	MW-13B	06/02/2014		7.35	pH Units		
pH	MW-13B	09/22/2014		7.68	pH Units		
pH	MW-13B	11/17/2014		7.08	pH Units		
pH	MW-13B	05/19/2015		7.65	pH Units		
pH	MW-13B	08/26/2015		7.59	pH Units		
pH	MW-13B	11/10/2015		7.28	pH Units		
pH	MW-13B	02/22/2016		7.01	pH Units		
pH	MW-13B	05/16/2016		7.31	pH Units		
pH	MW-13B	08/31/2016		7.23	pH Units		
pH	MW-13B	11/14/2016		7.17	pH Units		
pH	MW-13B	02/22/2017		7.65	pH Units		
pH	MW-13B	05/24/2017		7.76	pH Units		
pH	MW-13B	08/30/2017		7.41	pH Units		
pH	MW-13B	11/13/2017		7.49	pH Units		
pH	MW-13B	02/20/2018		7.35	pH Units		
pH	MW-13B	05/15/2018		7.35	pH Units		
pH	MW-13B	08/21/2018		7.31	pH Units		
pH	MW-13B	11/12/2018		7.65	pH Units		
pH	MW-13B	05/28/2019		7.09	pH Units		
pH	MW-13B	11/11/2019		7.03	pH Units		
pH	MW-13B	05/26/2020		7.76	pH Units		
pH	MW-13B	11/19/2020		7.64	pH Units		
pH	MW-13B	05/17/2021		7.53	pH Units		
pH	MW-13B	11/16/2021		7.69	pH Units		
pH	MW-13B	05/10/2022		7.66	pH Units		
pH	MW-13B	11/17/2022		7.36	pH Units		
pH	MW-13B	05/23/2023		7.52	pH Units		
pH	MW-13B	11/08/2023		7.38	pH Units		
pH	MW-16	03/24/2009		6.27	pH Units		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

pH	MW-16	06/16/2009		6.33	pH Units		
pH	MW-16	12/03/2009		6.27	pH Units		
pH	MW-16	03/25/2010		6.26	pH Units		
pH	MW-16	06/24/2010		6.04	pH Units		
pH	MW-16	09/24/2010		5.9	pH Units		
pH	MW-16	12/09/2010		6.17	pH Units		
pH	MW-16	03/30/2011		6.31	pH Units		
pH	MW-16	06/07/2011		6.15	pH Units		
pH	MW-16	09/27/2011		6.44	pH Units		
pH	MW-16	12/13/2011		6.3	pH Units		
pH	MW-16	03/21/2012		6.32	pH Units		
pH	MW-16	06/08/2012		6.25	pH Units		
pH	MW-16	09/27/2012		6.26	pH Units		
pH	MW-16	12/04/2012		6.22	pH Units		
pH	MW-16	03/12/2013		6.35	pH Units		
pH	MW-16	06/04/2013		6.45	pH Units		
pH	MW-16	09/05/2013		6.62	pH Units		
pH	MW-16	12/16/2013		6.32	pH Units		
pH	MW-16	03/05/2014		6.5	pH Units		
pH	MW-16	06/02/2014		6.61	pH Units		
pH	MW-16	09/22/2014		6.4	pH Units		
pH	MW-16	11/18/2014		6.38	pH Units		
pH	MW-16	02/23/2015		6.48	pH Units		
pH	MW-16	05/20/2015		6.51	pH Units		
pH	MW-16	08/26/2015		6.35	pH Units		
pH	MW-16	11/11/2015		6.13	pH Units		
pH	MW-16	02/24/2016		6.49	pH Units		
pH	MW-16	05/16/2016		6.11	pH Units		
pH	MW-16	08/31/2016		5.93	pH Units		
pH	MW-16	11/14/2016		5.89	pH Units		
pH	MW-16	02/22/2017		6.42	pH Units		
pH	MW-16	05/24/2017		6.35	pH Units		
pH	MW-16	08/30/2017		6.17	pH Units		
pH	MW-16	11/13/2017		6.35	pH Units		
pH	MW-16	02/20/2018		6.11	pH Units		
pH	MW-16	05/17/2018		6.27	pH Units		
pH	MW-16	08/22/2018		6.1	pH Units		
pH	MW-16	11/12/2018		6.34	pH Units		
pH	MW-16	05/29/2019		5.98	pH Units		
pH	MW-16	11/12/2019		6.17	pH Units		
pH	MW-16	05/27/2020		6.5	pH Units		
pH	MW-16	11/20/2020		6.14	pH Units		
pH	MW-16	05/17/2021		6.5	pH Units		
pH	MW-16	11/16/2021		6.33	pH Units		
pH	MW-16	05/11/2022		6.39	pH Units		
pH	MW-16	11/17/2022		6.64	pH Units		
pH	MW-16	05/23/2023		6.21	pH Units		
pH	MW-16	11/08/2023		6.21	pH Units		
pH	MW-35	03/22/2005		7.06	pH Units		
pH	MW-35	06/14/2005		7.43	pH Units		
pH	MW-35	09/27/2005		7.39	pH Units		
pH	MW-35	12/15/2005		6.41	pH Units		
pH	MW-35	03/28/2006		7.1	pH Units		
pH	MW-35	06/21/2006		7.46	pH Units		
pH	MW-35	09/26/2006		7.5	pH Units		
pH	MW-35	12/12/2006		6.99	pH Units		
pH	MW-35	03/27/2007		7.51	pH Units		
pH	MW-35	09/18/2007		6.97	pH Units		
pH	MW-35	12/20/2007		7.25	pH Units		
pH	MW-35	03/25/2008		7.4	pH Units		
pH	MW-35	06/18/2008		7.44	pH Units		
pH	MW-35	09/18/2008		7.42	pH Units		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

pH	MW-35	12/19/2008		7.19	pH Units		
pH	MW-35	03/24/2009		7.21	pH Units		
pH	MW-35	06/16/2009		7.15	pH Units		
pH	MW-35	12/03/2009		7.22	pH Units		
pH	MW-35	03/25/2010		7.24	pH Units		
pH	MW-35	06/23/2010		7.37	pH Units		
pH	MW-35	09/23/2010		6.85	pH Units		
pH	MW-35	12/09/2010		7.39	pH Units		
pH	MW-35	03/30/2011		7.37	pH Units		
pH	MW-35	06/06/2011		7.23	pH Units		
pH	MW-35	09/26/2011		6.86	pH Units		
pH	MW-35	12/13/2011		7	pH Units		
pH	MW-35	03/21/2012		7.02	pH Units		
pH	MW-35	06/06/2012		6.98	pH Units		
pH	MW-35	09/26/2012		7.11	pH Units		
pH	MW-35	12/04/2012		7.16	pH Units		
pH	MW-35	03/13/2013		7.06	pH Units		
pH	MW-35	06/06/2013		7.37	pH Units		
pH	MW-35	09/05/2013		7.1	pH Units		
pH	MW-35	12/16/2013		7.15	pH Units		
pH	MW-35	03/04/2014		7.53	pH Units		
pH	MW-35	06/02/2014		7.17	pH Units		
pH	MW-35	09/22/2014		6.62	pH Units		
pH	MW-35	11/17/2014		7.48	pH Units		
pH	MW-35	02/25/2015		7.77	pH Units		
pH	MW-35	05/19/2015		6.72	pH Units		
pH	MW-35	08/26/2015		7.25	pH Units		
pH	MW-35	11/10/2015		6.92	pH Units		
pH	MW-35	02/22/2016		6.58	pH Units		
pH	MW-35	05/16/2016		6.95	pH Units		
pH	MW-35	08/31/2016		7.09	pH Units		
pH	MW-35	11/15/2016		6.61	pH Units		
pH	MW-35	02/22/2017		7.38	pH Units		
pH	MW-35	05/24/2017		7.23	pH Units		
pH	MW-35	08/30/2017		7.29	pH Units		
pH	MW-35	11/15/2017		6.98	pH Units		
pH	MW-35	02/20/2018		6.93	pH Units		
pH	MW-35	05/17/2018		6.95	pH Units		
pH	MW-35	08/22/2018		7.06	pH Units		
pH	MW-35	11/12/2018		7.4	pH Units		
pH	MW-35	05/29/2019		6.77	pH Units		
pH	MW-35	11/12/2019		6.61	pH Units		
pH	MW-35	05/27/2020		7.49	pH Units		
pH	MW-35	11/19/2020		7.2	pH Units		
pH	MW-35	05/17/2021		7.55	pH Units		
pH	MW-35	11/16/2021		7.41	pH Units		
pH	MW-35	05/10/2022		7.45	pH Units		
pH	MW-35	11/17/2022		7.49	pH Units		
pH	MW-35	05/23/2023		7.2	pH Units		
pH	MW-35	11/08/2023		7.19	pH Units		
Potassium, dissolved	MW-13A	03/22/2005		0.57	mg/L		
Potassium, dissolved	MW-13A	06/15/2005		0.52	mg/L		
Potassium, dissolved	MW-13A	09/27/2005		0.48	mg/L		
Potassium, dissolved	MW-13A	12/15/2005		0.5	mg/L		
Potassium, dissolved	MW-13A	03/28/2006	ND	1	mg/L		
Potassium, dissolved	MW-13A	06/21/2006	ND	1	mg/L		
Potassium, dissolved	MW-13A	09/26/2006	ND	1	mg/L		
Potassium, dissolved	MW-13A	12/13/2006	ND	1	mg/L		
Potassium, dissolved	MW-13A	03/27/2007	ND	1	mg/L		
Potassium, dissolved	MW-13A	06/19/2007	ND	1	mg/L		
Potassium, dissolved	MW-13A	09/19/2007	ND	1	mg/L		
Potassium, dissolved	MW-13A	12/19/2007	ND	1	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Potassium, dissolved	MW-13A	03/25/2008	ND	1	mg/L		
Potassium, dissolved	MW-13A	06/18/2008	ND	1	mg/L		
Potassium, dissolved	MW-13A	09/17/2008	ND	1	mg/L		
Potassium, dissolved	MW-13A	12/17/2008	ND	1	mg/L		
Potassium, dissolved	MW-13A	03/24/2009	ND	1	mg/L		
Potassium, dissolved	MW-13A	06/17/2009	ND	1	mg/L		
Potassium, dissolved	MW-13A	09/10/2009	ND	1	mg/L		
Potassium, dissolved	MW-13A	12/03/2009	ND	1	mg/L		
Potassium, dissolved	MW-13A	03/25/2010	ND	1	mg/L		
Potassium, dissolved	MW-13A	06/23/2010	ND	1	mg/L		
Potassium, dissolved	MW-13A	09/23/2010	ND	1	mg/L		
Potassium, dissolved	MW-13A	12/08/2010	ND	1	mg/L		
Potassium, dissolved	MW-13A	03/30/2011	ND	1	mg/L		
Potassium, dissolved	MW-13A	06/06/2011	ND	1	mg/L		
Potassium, dissolved	MW-13A	09/27/2011	ND	1	mg/L		
Potassium, dissolved	MW-13A	12/14/2011	ND	1	mg/L		
Potassium, dissolved	MW-13A	03/21/2012	ND	1	mg/L		
Potassium, dissolved	MW-13A	06/08/2012	ND	1	mg/L		
Potassium, dissolved	MW-13A	09/26/2012	ND	1	mg/L		
Potassium, dissolved	MW-13A	12/03/2012	ND	1	mg/L		
Potassium, dissolved	MW-13A	03/11/2013	ND	1	mg/L		
Potassium, dissolved	MW-13A	06/05/2013	ND	1	mg/L		
Potassium, dissolved	MW-13A	12/03/2013	ND	1	mg/L		
Potassium, dissolved	MW-13A	03/04/2014	ND	1	mg/L		
Potassium, dissolved	MW-13A	06/02/2014	ND	1	mg/L		
Potassium, dissolved	MW-13A	09/22/2014	ND	1	mg/L		
Potassium, dissolved	MW-13A	11/17/2014	ND	1	mg/L		
Potassium, dissolved	MW-13A	02/23/2015	ND	1	mg/L		
Potassium, dissolved	MW-13A	05/19/2015	ND	1	mg/L		
Potassium, dissolved	MW-13A	08/26/2015	ND	1	mg/L		
Potassium, dissolved	MW-13A	11/10/2015	ND	1	mg/L		
Potassium, dissolved	MW-13A	02/22/2016	ND	1	mg/L		
Potassium, dissolved	MW-13A	05/16/2016	ND	1	mg/L		
Potassium, dissolved	MW-13A	08/31/2016	ND	1	mg/L		
Potassium, dissolved	MW-13A	11/14/2016	ND	1	mg/L		
Potassium, dissolved	MW-13A	02/22/2017	ND	1	mg/L		
Potassium, dissolved	MW-13A	05/24/2017		1.4	mg/L		
Potassium, dissolved	MW-13A	08/30/2017	ND	1	mg/L		
Potassium, dissolved	MW-13A	11/13/2017	ND	1	mg/L		
Potassium, dissolved	MW-13A	02/20/2018	ND	1	mg/L		
Potassium, dissolved	MW-13A	05/15/2018	ND	1	mg/L		
Potassium, dissolved	MW-13A	08/21/2018	ND	1	mg/L		
Potassium, dissolved	MW-13A	11/12/2018	ND	1	mg/L		
Potassium, dissolved	MW-13A	11/11/2019	ND	1	mg/L		
Potassium, dissolved	MW-13A	11/19/2020	ND	1	mg/L		
Potassium, dissolved	MW-13A	11/16/2021	ND	1	mg/L		
Potassium, dissolved	MW-13A	11/17/2022	ND	1	mg/L		
Potassium, dissolved	MW-13A	11/08/2023	ND	1	mg/L		
Potassium, dissolved	MW-13B	03/22/2005		0.6	mg/L		
Potassium, dissolved	MW-13B	06/15/2005		0.55	mg/L		
Potassium, dissolved	MW-13B	09/27/2005		0.55	mg/L		
Potassium, dissolved	MW-13B	12/15/2005		0.52	mg/L		
Potassium, dissolved	MW-13B	03/29/2006	ND	1	mg/L		
Potassium, dissolved	MW-13B	06/21/2006	ND	1	mg/L		
Potassium, dissolved	MW-13B	09/26/2006	ND	1	mg/L		
Potassium, dissolved	MW-13B	12/13/2006	ND	1	mg/L		
Potassium, dissolved	MW-13B	03/27/2007	ND	1	mg/L		
Potassium, dissolved	MW-13B	06/19/2007	ND	1	mg/L		
Potassium, dissolved	MW-13B	09/18/2007	ND	1	mg/L		
Potassium, dissolved	MW-13B	12/19/2007	ND	1	mg/L		
Potassium, dissolved	MW-13B	03/25/2008	ND	1	mg/L		
Potassium, dissolved	MW-13B	06/18/2008	ND	1	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

Potassium, dissolved	MW-13B	09/17/2008	ND	1	mg/L		
Potassium, dissolved	MW-13B	12/16/2008	ND	1	mg/L		
Potassium, dissolved	MW-13B	03/24/2009	ND	1	mg/L		
Potassium, dissolved	MW-13B	06/17/2009	ND	1	mg/L		
Potassium, dissolved	MW-13B	09/10/2009	ND	1	mg/L		
Potassium, dissolved	MW-13B	12/03/2009	ND	1	mg/L		
Potassium, dissolved	MW-13B	03/25/2010	ND	1	mg/L		
Potassium, dissolved	MW-13B	06/23/2010	ND	1	mg/L		
Potassium, dissolved	MW-13B	09/23/2010	ND	1	mg/L		
Potassium, dissolved	MW-13B	12/08/2010	ND	1	mg/L		
Potassium, dissolved	MW-13B	03/30/2011	ND	1	mg/L		
Potassium, dissolved	MW-13B	06/06/2011	ND	1	mg/L		
Potassium, dissolved	MW-13B	09/27/2011	ND	1	mg/L		
Potassium, dissolved	MW-13B	12/14/2011	ND	1	mg/L		
Potassium, dissolved	MW-13B	03/21/2012	ND	1	mg/L		
Potassium, dissolved	MW-13B	06/08/2012	ND	1	mg/L		
Potassium, dissolved	MW-13B	09/26/2012	ND	1	mg/L		
Potassium, dissolved	MW-13B	12/03/2012	ND	1	mg/L		
Potassium, dissolved	MW-13B	03/11/2013	ND	1	mg/L		
Potassium, dissolved	MW-13B	06/05/2013	ND	1	mg/L		
Potassium, dissolved	MW-13B	12/03/2013	ND	1	mg/L		
Potassium, dissolved	MW-13B	03/04/2014	ND	1	mg/L		
Potassium, dissolved	MW-13B	06/02/2014	ND	1	mg/L		
Potassium, dissolved	MW-13B	09/22/2014	ND	1	mg/L		
Potassium, dissolved	MW-13B	11/17/2014	ND	1	mg/L		
Potassium, dissolved	MW-13B	02/23/2015	ND	1	mg/L		
Potassium, dissolved	MW-13B	05/19/2015	ND	1	mg/L		
Potassium, dissolved	MW-13B	08/26/2015	ND	1	mg/L		
Potassium, dissolved	MW-13B	11/10/2015	ND	1	mg/L		
Potassium, dissolved	MW-13B	02/22/2016	ND	1	mg/L		
Potassium, dissolved	MW-13B	05/16/2016	ND	1	mg/L		
Potassium, dissolved	MW-13B	08/31/2016	ND	1	mg/L		
Potassium, dissolved	MW-13B	11/14/2016	ND	1	mg/L		
Potassium, dissolved	MW-13B	02/22/2017	ND	1	mg/L		
Potassium, dissolved	MW-13B	05/24/2017	ND	1	mg/L		
Potassium, dissolved	MW-13B	08/30/2017	ND	1	mg/L		
Potassium, dissolved	MW-13B	11/13/2017	ND	1	mg/L		
Potassium, dissolved	MW-13B	02/20/2018	ND	1	mg/L		
Potassium, dissolved	MW-13B	05/15/2018	ND	1	mg/L		
Potassium, dissolved	MW-13B	08/21/2018	ND	1	mg/L		
Potassium, dissolved	MW-13B	11/12/2018	ND	1	mg/L		
Potassium, dissolved	MW-13B	11/11/2019	ND	1	mg/L		
Potassium, dissolved	MW-13B	11/19/2020	ND	1	mg/L		
Potassium, dissolved	MW-13B	11/16/2021	ND	1	mg/L		
Potassium, dissolved	MW-13B	11/17/2022	ND	1	mg/L		
Potassium, dissolved	MW-13B	11/08/2023	ND	1	mg/L		
Potassium, dissolved	MW-16	03/24/2009	ND	1	mg/L		
Potassium, dissolved	MW-16	06/16/2009	ND	1	mg/L		
Potassium, dissolved	MW-16	09/09/2009	ND	1	mg/L		
Potassium, dissolved	MW-16	12/03/2009	ND	1	mg/L		
Potassium, dissolved	MW-16	03/25/2010	ND	1	mg/L		
Potassium, dissolved	MW-16	06/24/2010	ND	1	mg/L		
Potassium, dissolved	MW-16	09/24/2010	ND	1	mg/L		
Potassium, dissolved	MW-16	12/09/2010	ND	1	mg/L		
Potassium, dissolved	MW-16	03/30/2011	ND	1	mg/L		
Potassium, dissolved	MW-16	06/07/2011	ND	1	mg/L		
Potassium, dissolved	MW-16	09/27/2011	ND	1	mg/L		
Potassium, dissolved	MW-16	12/13/2011	ND	1	mg/L		
Potassium, dissolved	MW-16	03/21/2012	ND	1	mg/L		
Potassium, dissolved	MW-16	06/08/2012	ND	1	mg/L		
Potassium, dissolved	MW-16	09/27/2012	ND	1	mg/L		
Potassium, dissolved	MW-16	12/04/2012	ND	1	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Potassium, dissolved	MW-16	03/12/2013	ND	1	mg/L		
Potassium, dissolved	MW-16	06/04/2013	ND	1	mg/L		
Potassium, dissolved	MW-16	09/05/2013	ND	1	mg/L		
Potassium, dissolved	MW-16	12/16/2013	ND	1	mg/L		
Potassium, dissolved	MW-16	03/05/2014	ND	1	mg/L		
Potassium, dissolved	MW-16	06/02/2014		1.2	mg/L		
Potassium, dissolved	MW-16	09/22/2014	ND	1	mg/L		
Potassium, dissolved	MW-16	11/18/2014	ND	1	mg/L		
Potassium, dissolved	MW-16	02/23/2015	ND	1	mg/L		
Potassium, dissolved	MW-16	05/20/2015	ND	1	mg/L		
Potassium, dissolved	MW-16	08/26/2015	ND	1	mg/L		
Potassium, dissolved	MW-16	11/11/2015	ND	1	mg/L		
Potassium, dissolved	MW-16	02/24/2016	ND	1	mg/L		
Potassium, dissolved	MW-16	05/16/2016	ND	1	mg/L		
Potassium, dissolved	MW-16	08/31/2016	ND	1	mg/L		
Potassium, dissolved	MW-16	11/14/2016	ND	1	mg/L		
Potassium, dissolved	MW-16	02/22/2017	ND	1	mg/L		
Potassium, dissolved	MW-16	05/24/2017	ND	1	mg/L		
Potassium, dissolved	MW-16	08/30/2017	ND	1	mg/L		
Potassium, dissolved	MW-16	11/13/2017	ND	1	mg/L		
Potassium, dissolved	MW-16	02/20/2018	ND	1	mg/L		
Potassium, dissolved	MW-16	05/17/2018	ND	1	mg/L		
Potassium, dissolved	MW-16	08/22/2018	ND	1	mg/L		
Potassium, dissolved	MW-16	11/12/2018	ND	1	mg/L		
Potassium, dissolved	MW-16	11/12/2019	ND	1	mg/L		
Potassium, dissolved	MW-16	11/20/2020	ND	1	mg/L		
Potassium, dissolved	MW-16	11/16/2021	ND	1	mg/L		
Potassium, dissolved	MW-16	11/17/2022	ND	1	mg/L		
Potassium, dissolved	MW-16	11/08/2023	ND	1	mg/L		
Potassium, dissolved	MW-35	03/22/2005		0.52	mg/L		
Potassium, dissolved	MW-35	06/14/2005		0.48	mg/L		
Potassium, dissolved	MW-35	09/27/2005		0.52	mg/L		
Potassium, dissolved	MW-35	12/15/2005		0.46	mg/L		
Potassium, dissolved	MW-35	03/28/2006	ND	1	mg/L		
Potassium, dissolved	MW-35	06/21/2006	ND	1	mg/L		
Potassium, dissolved	MW-35	09/26/2006	ND	1	mg/L		
Potassium, dissolved	MW-35	12/12/2006	ND	1	mg/L		
Potassium, dissolved	MW-35	03/27/2007	ND	1	mg/L		
Potassium, dissolved	MW-35	06/20/2007	ND	1	mg/L		
Potassium, dissolved	MW-35	09/18/2007	ND	1	mg/L		
Potassium, dissolved	MW-35	12/20/2007	ND	1	mg/L		
Potassium, dissolved	MW-35	03/25/2008	ND	1	mg/L		
Potassium, dissolved	MW-35	06/18/2008	ND	1	mg/L		
Potassium, dissolved	MW-35	09/18/2008	ND	1	mg/L		
Potassium, dissolved	MW-35	12/19/2008	ND	1	mg/L		
Potassium, dissolved	MW-35	03/24/2009	ND	1	mg/L		
Potassium, dissolved	MW-35	06/16/2009	ND	1	mg/L		
Potassium, dissolved	MW-35	09/10/2009	ND	1	mg/L		
Potassium, dissolved	MW-35	12/03/2009	ND	1	mg/L		
Potassium, dissolved	MW-35	03/25/2010	ND	1	mg/L		
Potassium, dissolved	MW-35	06/23/2010	ND	1	mg/L		
Potassium, dissolved	MW-35	09/23/2010	ND	1	mg/L		
Potassium, dissolved	MW-35	12/09/2010	ND	1	mg/L		
Potassium, dissolved	MW-35	03/30/2011	ND	1	mg/L		
Potassium, dissolved	MW-35	06/06/2011	ND	1	mg/L		
Potassium, dissolved	MW-35	09/26/2011	ND	1	mg/L		
Potassium, dissolved	MW-35	12/13/2011	ND	1	mg/L		
Potassium, dissolved	MW-35	03/21/2012	ND	1	mg/L		
Potassium, dissolved	MW-35	06/06/2012	ND	1	mg/L		
Potassium, dissolved	MW-35	09/26/2012	ND	1	mg/L		
Potassium, dissolved	MW-35	12/04/2012	ND	1	mg/L		
Potassium, dissolved	MW-35	03/13/2013	ND	1	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Potassium, dissolved	MW-35	06/06/2013	ND	1	mg/L		
Potassium, dissolved	MW-35	09/05/2013	ND	1	mg/L		
Potassium, dissolved	MW-35	12/16/2013	ND	1	mg/L		
Potassium, dissolved	MW-35	03/04/2014	ND	1	mg/L		
Potassium, dissolved	MW-35	06/02/2014	ND	1	mg/L		
Potassium, dissolved	MW-35	09/22/2014	ND	1	mg/L		
Potassium, dissolved	MW-35	11/17/2014	ND	1	mg/L		
Potassium, dissolved	MW-35	02/25/2015	ND	1	mg/L		
Potassium, dissolved	MW-35	05/19/2015	ND	1	mg/L		
Potassium, dissolved	MW-35	08/26/2015	ND	1	mg/L		
Potassium, dissolved	MW-35	11/10/2015	ND	1	mg/L		
Potassium, dissolved	MW-35	02/22/2016	ND	1	mg/L		
Potassium, dissolved	MW-35	05/16/2016	ND	1	mg/L		
Potassium, dissolved	MW-35	08/31/2016	ND	1	mg/L		
Potassium, dissolved	MW-35	11/15/2016	ND	1	mg/L		
Potassium, dissolved	MW-35	02/22/2017	ND	1	mg/L		
Potassium, dissolved	MW-35	05/24/2017	ND	1	mg/L		
Potassium, dissolved	MW-35	08/30/2017	ND	1	mg/L		
Potassium, dissolved	MW-35	11/15/2017	ND	1	mg/L		
Potassium, dissolved	MW-35	02/20/2018	ND	1	mg/L		
Potassium, dissolved	MW-35	05/17/2018	ND	1	mg/L		
Potassium, dissolved	MW-35	08/22/2018	ND	1	mg/L		
Potassium, dissolved	MW-35	11/12/2018	ND	1	mg/L		
Potassium, dissolved	MW-35	11/12/2019	ND	1	mg/L		
Potassium, dissolved	MW-35	11/19/2020	ND	1	mg/L		
Potassium, dissolved	MW-35	11/16/2021	ND	1	mg/L		
Potassium, dissolved	MW-35	11/17/2022	ND	1	mg/L		
Potassium, dissolved	MW-35	11/08/2023	ND	1	mg/L		
Selenium, total	MW-13A	12/03/2013	ND	0.001	mg/L		
Selenium, total	MW-13A	03/04/2014	ND	0.001	mg/L		
Selenium, total	MW-13A	06/02/2014	ND	0.001	mg/L		
Selenium, total	MW-13A	09/22/2014	ND	0.001	mg/L		
Selenium, total	MW-13A	11/17/2014	ND	0.001	mg/L		
Selenium, total	MW-13A	02/23/2015	ND	0.001	mg/L		
Selenium, total	MW-13A	05/19/2015	ND	0.001	mg/L		
Selenium, total	MW-13A	08/26/2015	ND	0.001	mg/L		
Selenium, total	MW-13A	11/10/2015	ND	0.001	mg/L		
Selenium, total	MW-13A	02/22/2016	ND	0.001	mg/L		
Selenium, total	MW-13A	05/16/2016	ND	0.001	mg/L		
Selenium, total	MW-13A	08/31/2016	ND	0.001	mg/L		
Selenium, total	MW-13A	11/14/2016	ND	0.001	mg/L		
Selenium, total	MW-13A	02/22/2017	ND	0.001	mg/L		
Selenium, total	MW-13A	05/24/2017	ND	0.001	mg/L		
Selenium, total	MW-13A	08/30/2017	ND	0.001	mg/L		
Selenium, total	MW-13A	11/13/2017	ND	0.001	mg/L		
Selenium, total	MW-13A	02/20/2018	ND	0.001	mg/L		
Selenium, total	MW-13A	05/15/2018	ND	0.001	mg/L		
Selenium, total	MW-13A	08/21/2018	ND	0.001	mg/L		
Selenium, total	MW-13A	11/12/2018	ND	0.001	mg/L		
Selenium, total	MW-13A	11/11/2019	ND	0.001	mg/L		
Selenium, total	MW-13A	11/19/2020	ND	0.001	mg/L		
Selenium, total	MW-13A	11/16/2021	ND	0.001	mg/L		
Selenium, total	MW-13A	11/17/2022	ND	0.001	mg/L		
Selenium, total	MW-13A	11/08/2023	ND	0.001	mg/L		
Selenium, total	MW-13B	12/03/2013	ND	0.001	mg/L		
Selenium, total	MW-13B	03/04/2014	ND	0.001	mg/L		
Selenium, total	MW-13B	06/02/2014	ND	0.001	mg/L		
Selenium, total	MW-13B	09/22/2014	ND	0.001	mg/L		
Selenium, total	MW-13B	11/17/2014	ND	0.001	mg/L		
Selenium, total	MW-13B	02/23/2015	ND	0.001	mg/L		
Selenium, total	MW-13B	05/19/2015	ND	0.001	mg/L		
Selenium, total	MW-13B	08/26/2015	ND	0.001	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Selenium, total	MW-13B	11/10/2015	ND	0.001	mg/L		
Selenium, total	MW-13B	02/22/2016	ND	0.001	mg/L		
Selenium, total	MW-13B	05/16/2016	ND	0.001	mg/L		
Selenium, total	MW-13B	08/31/2016	ND	0.001	mg/L		
Selenium, total	MW-13B	11/14/2016	ND	0.001	mg/L		
Selenium, total	MW-13B	02/22/2017	ND	0.001	mg/L		
Selenium, total	MW-13B	05/24/2017	ND	0.001	mg/L		
Selenium, total	MW-13B	08/30/2017	ND	0.001	mg/L		
Selenium, total	MW-13B	11/13/2017	ND	0.001	mg/L		
Selenium, total	MW-13B	02/20/2018	ND	0.001	mg/L		
Selenium, total	MW-13B	05/15/2018	ND	0.001	mg/L		
Selenium, total	MW-13B	08/21/2018	ND	0.001	mg/L		
Selenium, total	MW-13B	11/12/2018	ND	0.001	mg/L		
Selenium, total	MW-13B	11/11/2019	ND	0.001	mg/L		
Selenium, total	MW-13B	11/19/2020	ND	0.001	mg/L		
Selenium, total	MW-13B	11/16/2021	ND	0.001	mg/L		
Selenium, total	MW-13B	11/17/2022	ND	0.001	mg/L		
Selenium, total	MW-13B	11/08/2023	ND	0.001	mg/L		
Selenium, total	MW-16	09/05/2013	ND	0.001	mg/L		
Selenium, total	MW-16	12/16/2013	ND	0.001	mg/L		
Selenium, total	MW-16	03/05/2014	ND	0.001	mg/L		
Selenium, total	MW-16	06/02/2014	ND	0.001	mg/L		
Selenium, total	MW-16	09/22/2014	ND	0.001	mg/L		
Selenium, total	MW-16	11/18/2014	ND	0.001	mg/L		
Selenium, total	MW-16	02/23/2015	ND	0.001	mg/L		
Selenium, total	MW-16	05/20/2015	ND	0.001	mg/L		
Selenium, total	MW-16	08/26/2015	ND	0.001	mg/L		
Selenium, total	MW-16	11/11/2015	ND	0.001	mg/L		
Selenium, total	MW-16	02/24/2016	ND	0.001	mg/L		
Selenium, total	MW-16	05/16/2016	ND	0.001	mg/L		
Selenium, total	MW-16	08/31/2016	ND	0.001	mg/L		
Selenium, total	MW-16	11/14/2016	ND	0.001	mg/L		
Selenium, total	MW-16	02/22/2017	ND	0.001	mg/L		
Selenium, total	MW-16	05/24/2017	ND	0.001	mg/L		
Selenium, total	MW-16	08/30/2017	ND	0.001	mg/L		
Selenium, total	MW-16	11/13/2017	ND	0.001	mg/L		
Selenium, total	MW-16	02/20/2018	ND	0.001	mg/L		
Selenium, total	MW-16	05/17/2018	ND	0.001	mg/L		
Selenium, total	MW-16	08/22/2018	ND	0.001	mg/L		
Selenium, total	MW-16	11/12/2018	ND	0.001	mg/L		
Selenium, total	MW-16	11/12/2019	ND	0.001	mg/L		
Selenium, total	MW-16	11/20/2020	ND	0.001	mg/L		
Selenium, total	MW-16	11/16/2021	ND	0.001	mg/L		
Selenium, total	MW-16	11/17/2022	ND	0.001	mg/L		
Selenium, total	MW-16	11/08/2023	ND	0.001	mg/L		
Selenium, total	MW-35	09/05/2013	ND	0.001	mg/L		
Selenium, total	MW-35	12/16/2013	ND	0.001	mg/L		
Selenium, total	MW-35	03/04/2014	ND	0.001	mg/L		
Selenium, total	MW-35	06/02/2014	ND	0.001	mg/L		
Selenium, total	MW-35	09/22/2014	ND	0.001	mg/L		
Selenium, total	MW-35	11/17/2014	ND	0.001	mg/L		
Selenium, total	MW-35	02/25/2015	ND	0.001	mg/L		
Selenium, total	MW-35	05/19/2015	ND	0.001	mg/L		
Selenium, total	MW-35	08/26/2015	ND	0.001	mg/L		
Selenium, total	MW-35	11/10/2015	ND	0.001	mg/L		
Selenium, total	MW-35	02/22/2016	ND	0.001	mg/L		
Selenium, total	MW-35	05/16/2016	ND	0.001	mg/L		
Selenium, total	MW-35	08/31/2016	ND	0.001	mg/L		
Selenium, total	MW-35	11/15/2016	ND	0.001	mg/L		
Selenium, total	MW-35	02/22/2017	ND	0.001	mg/L		
Selenium, total	MW-35	05/24/2017	ND	0.001	mg/L		
Selenium, total	MW-35	08/30/2017	ND	0.001	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Selenium, total	MW-35	11/15/2017	ND	0.001	mg/L		
Selenium, total	MW-35	02/20/2018	ND	0.001	mg/L		
Selenium, total	MW-35	05/17/2018	ND	0.001	mg/L		
Selenium, total	MW-35	08/22/2018	ND	0.001	mg/L		
Selenium, total	MW-35	11/12/2018	ND	0.001	mg/L		
Selenium, total	MW-35	11/12/2019	ND	0.001	mg/L		
Selenium, total	MW-35	11/19/2020	ND	0.001	mg/L		
Selenium, total	MW-35	11/16/2021	ND	0.001	mg/L		
Selenium, total	MW-35	11/17/2022	ND	0.001	mg/L		
Selenium, total	MW-35	11/08/2023	ND	0.001	mg/L		
Silver, total	MW-13A	12/03/2013	ND	0.002	mg/L		
Silver, total	MW-13A	03/04/2014	ND	0.002	mg/L		
Silver, total	MW-13A	06/02/2014	ND	0.002	mg/L		
Silver, total	MW-13A	09/22/2014	ND	0.002	mg/L		
Silver, total	MW-13A	11/17/2014	ND	0.002	mg/L		
Silver, total	MW-13A	02/23/2015	ND	0.002	mg/L		
Silver, total	MW-13A	05/19/2015	ND	0.002	mg/L		
Silver, total	MW-13A	08/26/2015	ND	0.002	mg/L		
Silver, total	MW-13A	11/10/2015	ND	0.002	mg/L		
Silver, total	MW-13A	02/22/2016	ND	0.002	mg/L		
Silver, total	MW-13A	05/16/2016	ND	0.002	mg/L		
Silver, total	MW-13A	08/31/2016	ND	0.002	mg/L		
Silver, total	MW-13A	11/14/2016	ND	0.002	mg/L		
Silver, total	MW-13A	02/22/2017	ND	0.002	mg/L		
Silver, total	MW-13A	05/24/2017	ND	0.002	mg/L		
Silver, total	MW-13A	08/30/2017	ND	0.002	mg/L		
Silver, total	MW-13A	11/13/2017	ND	0.002	mg/L		
Silver, total	MW-13A	02/20/2018	ND	0.002	mg/L		
Silver, total	MW-13A	05/15/2018	ND	0.002	mg/L		
Silver, total	MW-13A	08/21/2018	ND	0.002	mg/L		
Silver, total	MW-13A	11/12/2018	ND	0.002	mg/L		
Silver, total	MW-13A	11/11/2019	ND	0.002	mg/L		
Silver, total	MW-13A	11/19/2020	ND	0.002	mg/L		
Silver, total	MW-13A	11/16/2021	ND	0.002	mg/L		
Silver, total	MW-13A	11/17/2022	ND	0.002	mg/L		
Silver, total	MW-13A	11/08/2023	ND	0.002	mg/L		
Silver, total	MW-13B	12/03/2013	ND	0.002	mg/L		
Silver, total	MW-13B	03/04/2014	ND	0.002	mg/L		
Silver, total	MW-13B	06/02/2014	ND	0.002	mg/L		
Silver, total	MW-13B	09/22/2014	ND	0.002	mg/L		
Silver, total	MW-13B	11/17/2014	ND	0.002	mg/L		
Silver, total	MW-13B	02/23/2015	ND	0.002	mg/L		
Silver, total	MW-13B	05/19/2015	ND	0.002	mg/L		
Silver, total	MW-13B	08/26/2015	ND	0.002	mg/L		
Silver, total	MW-13B	11/10/2015	ND	0.002	mg/L		
Silver, total	MW-13B	02/22/2016	ND	0.002	mg/L		
Silver, total	MW-13B	05/16/2016	ND	0.002	mg/L		
Silver, total	MW-13B	08/31/2016	ND	0.002	mg/L		
Silver, total	MW-13B	11/14/2016	ND	0.002	mg/L		
Silver, total	MW-13B	02/22/2017	ND	0.002	mg/L		
Silver, total	MW-13B	05/24/2017	ND	0.002	mg/L		
Silver, total	MW-13B	08/30/2017	ND	0.002	mg/L		
Silver, total	MW-13B	11/13/2017	ND	0.002	mg/L		
Silver, total	MW-13B	02/20/2018	ND	0.002	mg/L		
Silver, total	MW-13B	05/15/2018	ND	0.002	mg/L		
Silver, total	MW-13B	08/21/2018	ND	0.002	mg/L		
Silver, total	MW-13B	11/12/2018	ND	0.002	mg/L		
Silver, total	MW-13B	11/11/2019	ND	0.002	mg/L		
Silver, total	MW-13B	11/19/2020	ND	0.002	mg/L		
Silver, total	MW-13B	11/16/2021	ND	0.002	mg/L		
Silver, total	MW-13B	11/17/2022	ND	0.002	mg/L		
Silver, total	MW-13B	11/08/2023	ND	0.002	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Silver, total	MW-16	09/05/2013	ND	0.002	mg/L		
Silver, total	MW-16	12/16/2013	ND	0.002	mg/L		
Silver, total	MW-16	03/05/2014	ND	0.002	mg/L		
Silver, total	MW-16	06/02/2014	ND	0.002	mg/L		
Silver, total	MW-16	09/22/2014	ND	0.002	mg/L		
Silver, total	MW-16	11/18/2014	ND	0.002	mg/L		
Silver, total	MW-16	02/23/2015	ND	0.002	mg/L		
Silver, total	MW-16	05/20/2015	ND	0.002	mg/L		
Silver, total	MW-16	08/26/2015	ND	0.002	mg/L		
Silver, total	MW-16	11/11/2015	ND	0.002	mg/L		
Silver, total	MW-16	02/24/2016	ND	0.002	mg/L		
Silver, total	MW-16	05/16/2016	ND	0.002	mg/L		
Silver, total	MW-16	08/31/2016	ND	0.002	mg/L		
Silver, total	MW-16	11/14/2016	ND	0.002	mg/L		
Silver, total	MW-16	02/22/2017	ND	0.002	mg/L		
Silver, total	MW-16	05/24/2017	ND	0.002	mg/L		
Silver, total	MW-16	08/30/2017	ND	0.002	mg/L		
Silver, total	MW-16	11/13/2017	ND	0.002	mg/L		
Silver, total	MW-16	02/20/2018	ND	0.002	mg/L		
Silver, total	MW-16	05/17/2018	ND	0.002	mg/L		
Silver, total	MW-16	08/22/2018	ND	0.002	mg/L		
Silver, total	MW-16	11/12/2018	ND	0.002	mg/L		
Silver, total	MW-16	11/12/2019	ND	0.002	mg/L		
Silver, total	MW-16	11/20/2020	ND	0.002	mg/L		
Silver, total	MW-16	11/16/2021	ND	0.002	mg/L		
Silver, total	MW-16	11/17/2022	ND	0.002	mg/L		
Silver, total	MW-16	11/08/2023	ND	0.002	mg/L		
Silver, total	MW-35	09/05/2013	ND	0.002	mg/L		
Silver, total	MW-35	12/16/2013	ND	0.002	mg/L		
Silver, total	MW-35	03/04/2014	ND	0.002	mg/L		
Silver, total	MW-35	06/02/2014	ND	0.002	mg/L		
Silver, total	MW-35	09/22/2014	ND	0.002	mg/L		
Silver, total	MW-35	11/17/2014	ND	0.002	mg/L		
Silver, total	MW-35	02/25/2015	ND	0.002	mg/L		
Silver, total	MW-35	05/19/2015	ND	0.002	mg/L		
Silver, total	MW-35	08/26/2015	ND	0.002	mg/L		
Silver, total	MW-35	11/10/2015	ND	0.002	mg/L		
Silver, total	MW-35	02/22/2016	ND	0.002	mg/L		
Silver, total	MW-35	05/16/2016	ND	0.002	mg/L		
Silver, total	MW-35	08/31/2016	ND	0.002	mg/L		
Silver, total	MW-35	11/15/2016	ND	0.002	mg/L		
Silver, total	MW-35	02/22/2017	ND	0.002	mg/L		
Silver, total	MW-35	05/24/2017	ND	0.002	mg/L		
Silver, total	MW-35	08/30/2017	ND	0.002	mg/L		
Silver, total	MW-35	11/15/2017	ND	0.002	mg/L		
Silver, total	MW-35	02/20/2018	ND	0.002	mg/L		
Silver, total	MW-35	05/17/2018	ND	0.002	mg/L		
Silver, total	MW-35	08/22/2018	ND	0.002	mg/L		
Silver, total	MW-35	11/12/2018	ND	0.002	mg/L		
Silver, total	MW-35	11/12/2019	ND	0.002	mg/L		
Silver, total	MW-35	11/19/2020	ND	0.002	mg/L		
Silver, total	MW-35	11/16/2021	ND	0.002	mg/L		
Silver, total	MW-35	11/17/2022	ND	0.002	mg/L		
Silver, total	MW-35	11/08/2023	ND	0.002	mg/L		
Sodium, dissolved	MW-13A	03/22/2005		5.4	mg/L		
Sodium, dissolved	MW-13A	06/15/2005		4.4	mg/L		
Sodium, dissolved	MW-13A	09/27/2005		4.5	mg/L		
Sodium, dissolved	MW-13A	12/15/2005		4.8	mg/L		
Sodium, dissolved	MW-13A	03/28/2006		5.4	mg/L		
Sodium, dissolved	MW-13A	06/21/2006		5.2	mg/L		
Sodium, dissolved	MW-13A	09/26/2006		5.5	mg/L		
Sodium, dissolved	MW-13A	12/13/2006		4.8	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Sodium, dissolved	MW-13A	03/27/2007		5.4	mg/L		
Sodium, dissolved	MW-13A	06/19/2007		5.5	mg/L		
Sodium, dissolved	MW-13A	09/19/2007		5.4	mg/L		
Sodium, dissolved	MW-13A	12/19/2007		4.9	mg/L		
Sodium, dissolved	MW-13A	03/25/2008		5.5	mg/L		
Sodium, dissolved	MW-13A	06/18/2008		5.5	mg/L		
Sodium, dissolved	MW-13A	09/17/2008		5.2	mg/L		
Sodium, dissolved	MW-13A	12/17/2008		5.5	mg/L		
Sodium, dissolved	MW-13A	03/24/2009		5.3	mg/L		
Sodium, dissolved	MW-13A	06/17/2009		5.4	mg/L		
Sodium, dissolved	MW-13A	09/10/2009		5.2	mg/L		
Sodium, dissolved	MW-13A	12/03/2009		5.6	mg/L		
Sodium, dissolved	MW-13A	03/25/2010		6.1	mg/L		
Sodium, dissolved	MW-13A	06/23/2010		5.7	mg/L		
Sodium, dissolved	MW-13A	09/23/2010		5	mg/L		
Sodium, dissolved	MW-13A	12/08/2010		5.2	mg/L		
Sodium, dissolved	MW-13A	03/30/2011		5.4	mg/L		
Sodium, dissolved	MW-13A	06/06/2011		5.4	mg/L		
Sodium, dissolved	MW-13A	09/27/2011		5.6	mg/L		
Sodium, dissolved	MW-13A	12/14/2011		5.5	mg/L		
Sodium, dissolved	MW-13A	03/21/2012		5.3	mg/L		
Sodium, dissolved	MW-13A	06/08/2012		5.2	mg/L		
Sodium, dissolved	MW-13A	09/26/2012		5.2	mg/L		
Sodium, dissolved	MW-13A	12/03/2012		5.5	mg/L		
Sodium, dissolved	MW-13A	03/11/2013		5.7	mg/L		
Sodium, dissolved	MW-13A	06/05/2013		5.6	mg/L		
Sodium, dissolved	MW-13A	12/03/2013		5.5	mg/L		
Sodium, dissolved	MW-13A	03/04/2014		5.4	mg/L		
Sodium, dissolved	MW-13A	06/02/2014		5.2	mg/L		
Sodium, dissolved	MW-13A	09/22/2014		5.2	mg/L		
Sodium, dissolved	MW-13A	11/17/2014		5.4	mg/L		
Sodium, dissolved	MW-13A	02/23/2015		5.2	mg/L		
Sodium, dissolved	MW-13A	05/19/2015		5.5	mg/L		
Sodium, dissolved	MW-13A	08/26/2015		5.3	mg/L		
Sodium, dissolved	MW-13A	11/10/2015		5.4	mg/L		
Sodium, dissolved	MW-13A	02/22/2016		5.9	mg/L		
Sodium, dissolved	MW-13A	05/16/2016		5.5	mg/L		
Sodium, dissolved	MW-13A	08/31/2016		5.4	mg/L		
Sodium, dissolved	MW-13A	11/14/2016		5.4	mg/L		
Sodium, dissolved	MW-13A	02/22/2017		5.4	mg/L		
Sodium, dissolved	MW-13A	05/24/2017		7.7	mg/L		
Sodium, dissolved	MW-13A	08/30/2017		5.4	mg/L		
Sodium, dissolved	MW-13A	11/13/2017		5.1	mg/L		
Sodium, dissolved	MW-13A	02/20/2018		4.6	mg/L		
Sodium, dissolved	MW-13A	05/15/2018		4.8	mg/L		
Sodium, dissolved	MW-13A	08/21/2018		4.9	mg/L		
Sodium, dissolved	MW-13A	11/12/2018		5.2	mg/L		
Sodium, dissolved	MW-13A	11/11/2019		5	mg/L		
Sodium, dissolved	MW-13A	11/19/2020		5.3	mg/L		
Sodium, dissolved	MW-13A	11/16/2021		5.4	mg/L		
Sodium, dissolved	MW-13A	11/17/2022		5.4	mg/L		
Sodium, dissolved	MW-13A	11/08/2023		5.1	mg/L		
Sodium, dissolved	MW-13B	03/22/2005		5.3	mg/L		
Sodium, dissolved	MW-13B	06/15/2005		4.8	mg/L		
Sodium, dissolved	MW-13B	09/27/2005		5	mg/L		
Sodium, dissolved	MW-13B	12/15/2005		4.8	mg/L		
Sodium, dissolved	MW-13B	03/29/2006		4.9	mg/L		
Sodium, dissolved	MW-13B	06/21/2006		5	mg/L		
Sodium, dissolved	MW-13B	09/26/2006		5.5	mg/L		
Sodium, dissolved	MW-13B	12/13/2006		4.8	mg/L		
Sodium, dissolved	MW-13B	03/27/2007		5.2	mg/L		
Sodium, dissolved	MW-13B	06/19/2007		5.2	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

Sodium, dissolved	MW-13B	09/18/2007		5.2	mg/L		
Sodium, dissolved	MW-13B	12/19/2007		4.9	mg/L		
Sodium, dissolved	MW-13B	03/25/2008		5.3	mg/L		
Sodium, dissolved	MW-13B	06/18/2008		5.3	mg/L		
Sodium, dissolved	MW-13B	09/17/2008		5	mg/L		
Sodium, dissolved	MW-13B	12/16/2008		5.1	mg/L		
Sodium, dissolved	MW-13B	03/24/2009		5.1	mg/L		
Sodium, dissolved	MW-13B	06/17/2009		5.3	mg/L		
Sodium, dissolved	MW-13B	09/10/2009		5.1	mg/L		
Sodium, dissolved	MW-13B	12/03/2009		5.3	mg/L		
Sodium, dissolved	MW-13B	03/25/2010		5.3	mg/L		
Sodium, dissolved	MW-13B	06/23/2010		5.3	mg/L		
Sodium, dissolved	MW-13B	09/23/2010		4.8	mg/L		
Sodium, dissolved	MW-13B	12/08/2010		5.6	mg/L		
Sodium, dissolved	MW-13B	03/30/2011		5.1	mg/L		
Sodium, dissolved	MW-13B	06/06/2011		5.2	mg/L		
Sodium, dissolved	MW-13B	09/27/2011		5.2	mg/L		
Sodium, dissolved	MW-13B	12/14/2011		5.1	mg/L		
Sodium, dissolved	MW-13B	03/21/2012		4.9	mg/L		
Sodium, dissolved	MW-13B	06/08/2012		5.1	mg/L		
Sodium, dissolved	MW-13B	09/26/2012		5	mg/L		
Sodium, dissolved	MW-13B	12/03/2012		5.7	mg/L		
Sodium, dissolved	MW-13B	03/11/2013		5.3	mg/L		
Sodium, dissolved	MW-13B	06/05/2013		5.4	mg/L		
Sodium, dissolved	MW-13B	12/03/2013		5.4	mg/L		
Sodium, dissolved	MW-13B	03/04/2014		5.1	mg/L		
Sodium, dissolved	MW-13B	06/02/2014		4.9	mg/L		
Sodium, dissolved	MW-13B	09/22/2014		5	mg/L		
Sodium, dissolved	MW-13B	11/17/2014		5.3	mg/L		
Sodium, dissolved	MW-13B	02/23/2015		5	mg/L		
Sodium, dissolved	MW-13B	05/19/2015		5.5	mg/L		
Sodium, dissolved	MW-13B	08/26/2015		5.2	mg/L		
Sodium, dissolved	MW-13B	11/10/2015		5.2	mg/L		
Sodium, dissolved	MW-13B	02/22/2016		5.8	mg/L		
Sodium, dissolved	MW-13B	05/16/2016		5.2	mg/L		
Sodium, dissolved	MW-13B	08/31/2016		5.8	mg/L		
Sodium, dissolved	MW-13B	11/14/2016		5.1	mg/L		
Sodium, dissolved	MW-13B	02/22/2017		4.9	mg/L		
Sodium, dissolved	MW-13B	05/24/2017		5.4	mg/L		
Sodium, dissolved	MW-13B	08/30/2017		5.4	mg/L		
Sodium, dissolved	MW-13B	11/13/2017		5.1	mg/L		
Sodium, dissolved	MW-13B	02/20/2018		5	mg/L		
Sodium, dissolved	MW-13B	05/15/2018		4.6	mg/L		
Sodium, dissolved	MW-13B	08/21/2018		5.1	mg/L		
Sodium, dissolved	MW-13B	11/12/2018		5.3	mg/L		
Sodium, dissolved	MW-13B	11/11/2019		5	mg/L		
Sodium, dissolved	MW-13B	11/19/2020		5.3	mg/L		
Sodium, dissolved	MW-13B	11/16/2021		5	mg/L		
Sodium, dissolved	MW-13B	11/17/2022		5.4	mg/L		
Sodium, dissolved	MW-13B	11/08/2023		4.7	mg/L		
Sodium, dissolved	MW-16	03/24/2009		5.4	mg/L		
Sodium, dissolved	MW-16	06/16/2009		5.3	mg/L		
Sodium, dissolved	MW-16	09/09/2009		5.4	mg/L		
Sodium, dissolved	MW-16	12/03/2009		6.2	mg/L		
Sodium, dissolved	MW-16	03/25/2010		4.9	mg/L		
Sodium, dissolved	MW-16	06/24/2010		5.7	mg/L		
Sodium, dissolved	MW-16	09/24/2010		5.7	mg/L		
Sodium, dissolved	MW-16	12/09/2010		5.2	mg/L		
Sodium, dissolved	MW-16	03/30/2011		4.7	mg/L		
Sodium, dissolved	MW-16	06/07/2011		5	mg/L		
Sodium, dissolved	MW-16	09/27/2011		5.8	mg/L		
Sodium, dissolved	MW-16	12/13/2011		5.3	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Sodium, dissolved	MW-16	03/21/2012		4.7	mg/L		
Sodium, dissolved	MW-16	06/08/2012		4.8	mg/L		
Sodium, dissolved	MW-16	09/27/2012		5.4	mg/L		
Sodium, dissolved	MW-16	12/04/2012		4.7	mg/L		
Sodium, dissolved	MW-16	03/12/2013		5.1	mg/L		
Sodium, dissolved	MW-16	06/04/2013		5.3	mg/L		
Sodium, dissolved	MW-16	09/05/2013		6.2	mg/L		
Sodium, dissolved	MW-16	12/16/2013		5.7	mg/L		
Sodium, dissolved	MW-16	03/05/2014		4.9	mg/L		
Sodium, dissolved	MW-16	06/02/2014		4.5	mg/L		
Sodium, dissolved	MW-16	09/22/2014		4.9	mg/L		
Sodium, dissolved	MW-16	11/18/2014		4.8	mg/L		
Sodium, dissolved	MW-16	02/23/2015		4.7	mg/L		
Sodium, dissolved	MW-16	05/20/2015		4.6	mg/L		
Sodium, dissolved	MW-16	08/26/2015		4.9	mg/L		
Sodium, dissolved	MW-16	11/11/2015		5.7	mg/L		
Sodium, dissolved	MW-16	02/24/2016		4.4	mg/L		
Sodium, dissolved	MW-16	05/16/2016		4.8	mg/L		
Sodium, dissolved	MW-16	08/31/2016		5.4	mg/L		
Sodium, dissolved	MW-16	11/14/2016		5	mg/L		
Sodium, dissolved	MW-16	02/22/2017		4.2	mg/L		
Sodium, dissolved	MW-16	05/24/2017		4.4	mg/L		
Sodium, dissolved	MW-16	08/30/2017		4.9	mg/L		
Sodium, dissolved	MW-16	11/13/2017		4.9	mg/L		
Sodium, dissolved	MW-16	02/20/2018		4.2	mg/L		
Sodium, dissolved	MW-16	05/17/2018		4.2	mg/L		
Sodium, dissolved	MW-16	08/22/2018		4.4	mg/L		
Sodium, dissolved	MW-16	11/12/2018		5.1	mg/L		
Sodium, dissolved	MW-16	11/12/2019		5.5	mg/L		
Sodium, dissolved	MW-16	11/20/2020		5.6	mg/L		
Sodium, dissolved	MW-16	11/16/2021		5.6	mg/L		
Sodium, dissolved	MW-16	11/17/2022		5.2	mg/L		
Sodium, dissolved	MW-16	11/08/2023		4.8	mg/L		
Sodium, dissolved	MW-35	03/22/2005		5.1	mg/L		
Sodium, dissolved	MW-35	06/14/2005		4.5	mg/L		
Sodium, dissolved	MW-35	09/27/2005		5.1	mg/L		
Sodium, dissolved	MW-35	12/15/2005		4.6	mg/L		
Sodium, dissolved	MW-35	03/28/2006		5	mg/L		
Sodium, dissolved	MW-35	06/21/2006		4.9	mg/L		
Sodium, dissolved	MW-35	09/26/2006		5.1	mg/L		
Sodium, dissolved	MW-35	12/12/2006		4.7	mg/L		
Sodium, dissolved	MW-35	03/27/2007		5.1	mg/L		
Sodium, dissolved	MW-35	06/20/2007		5.2	mg/L		
Sodium, dissolved	MW-35	09/18/2007		5.2	mg/L		
Sodium, dissolved	MW-35	12/20/2007		4.8	mg/L		
Sodium, dissolved	MW-35	03/25/2008		5.1	mg/L		
Sodium, dissolved	MW-35	06/18/2008		4.9	mg/L		
Sodium, dissolved	MW-35	09/18/2008		4.8	mg/L		
Sodium, dissolved	MW-35	12/19/2008		4.7	mg/L		
Sodium, dissolved	MW-35	03/24/2009		5	mg/L		
Sodium, dissolved	MW-35	06/16/2009		5.1	mg/L		
Sodium, dissolved	MW-35	09/10/2009		4.9	mg/L		
Sodium, dissolved	MW-35	12/03/2009		5.3	mg/L		
Sodium, dissolved	MW-35	03/25/2010		5	mg/L		
Sodium, dissolved	MW-35	06/23/2010		5.1	mg/L		
Sodium, dissolved	MW-35	09/23/2010		4.7	mg/L		
Sodium, dissolved	MW-35	12/09/2010		4.8	mg/L		
Sodium, dissolved	MW-35	03/30/2011		4.9	mg/L		
Sodium, dissolved	MW-35	06/06/2011		5.1	mg/L		
Sodium, dissolved	MW-35	09/26/2011		5.2	mg/L		
Sodium, dissolved	MW-35	12/13/2011		5.1	mg/L		
Sodium, dissolved	MW-35	03/21/2012		5	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Sodium, dissolved	MW-35	06/06/2012		4.8	mg/L		
Sodium, dissolved	MW-35	09/26/2012		4.9	mg/L		
Sodium, dissolved	MW-35	12/04/2012		4.5	mg/L		
Sodium, dissolved	MW-35	03/13/2013		4.9	mg/L		
Sodium, dissolved	MW-35	06/06/2013		4.9	mg/L		
Sodium, dissolved	MW-35	09/05/2013		4.9	mg/L		
Sodium, dissolved	MW-35	12/16/2013		5.9	mg/L		
Sodium, dissolved	MW-35	03/04/2014		5.1	mg/L		
Sodium, dissolved	MW-35	06/02/2014		4.9	mg/L		
Sodium, dissolved	MW-35	09/22/2014		5.1	mg/L		
Sodium, dissolved	MW-35	11/17/2014		5.2	mg/L		
Sodium, dissolved	MW-35	02/25/2015		5.2	mg/L		
Sodium, dissolved	MW-35	05/19/2015		4.8	mg/L		
Sodium, dissolved	MW-35	08/26/2015		5.1	mg/L		
Sodium, dissolved	MW-35	11/10/2015		5.5	mg/L		
Sodium, dissolved	MW-35	02/22/2016		5.6	mg/L		
Sodium, dissolved	MW-35	05/16/2016		5.2	mg/L		
Sodium, dissolved	MW-35	08/31/2016		5.1	mg/L		
Sodium, dissolved	MW-35	11/15/2016		6.3	mg/L		
Sodium, dissolved	MW-35	02/22/2017		4.9	mg/L		
Sodium, dissolved	MW-35	05/24/2017		5	mg/L		
Sodium, dissolved	MW-35	08/30/2017		5.4	mg/L		
Sodium, dissolved	MW-35	11/15/2017		5	mg/L		
Sodium, dissolved	MW-35	02/20/2018		4.8	mg/L		
Sodium, dissolved	MW-35	05/17/2018		4.8	mg/L		
Sodium, dissolved	MW-35	08/22/2018		4.8	mg/L		
Sodium, dissolved	MW-35	11/12/2018		5.2	mg/L		
Sodium, dissolved	MW-35	11/12/2019		5.6	mg/L		
Sodium, dissolved	MW-35	11/19/2020		5.2	mg/L		
Sodium, dissolved	MW-35	11/16/2021		5.4	mg/L		
Sodium, dissolved	MW-35	11/17/2022		5.2	mg/L		
Sodium, dissolved	MW-35	11/08/2023		5.1	mg/L		
Specific conductivity	MW-13A	03/22/2005		0.158	mS/cm		
Specific conductivity	MW-13A	06/15/2005		0.167	mS/cm		
Specific conductivity	MW-13A	09/27/2005		0.161	mS/cm		
Specific conductivity	MW-13A	12/15/2005		0.159	mS/cm		
Specific conductivity	MW-13A	03/28/2006		0.152	mS/cm		
Specific conductivity	MW-13A	06/21/2006		0.169	mS/cm		
Specific conductivity	MW-13A	09/26/2006		0.171	mS/cm		
Specific conductivity	MW-13A	12/13/2006		0.17	mS/cm		
Specific conductivity	MW-13A	03/27/2007		0.167	mS/cm		
Specific conductivity	MW-13A	09/19/2007		0.167	mS/cm		
Specific conductivity	MW-13A	12/19/2007		0.169	mS/cm		
Specific conductivity	MW-13A	03/25/2008		0.166	mS/cm		
Specific conductivity	MW-13A	06/18/2008		0.17	mS/cm		
Specific conductivity	MW-13A	09/17/2008		0.168	mS/cm		
Specific conductivity	MW-13A	12/17/2008		0.139	mS/cm		
Specific conductivity	MW-13A	03/24/2009		0.168	mS/cm		
Specific conductivity	MW-13A	06/17/2009		0.174	mS/cm		
Specific conductivity	MW-13A	12/03/2009		0.173	mS/cm		
Specific conductivity	MW-13A	03/25/2010		0.093	mS/cm		
Specific conductivity	MW-13A	06/23/2010		0.145	mS/cm		
Specific conductivity	MW-13A	09/23/2010		0.17	mS/cm		
Specific conductivity	MW-13A	12/08/2010		0.07	mS/cm		
Specific conductivity	MW-13A	03/30/2011		0.151	mS/cm		
Specific conductivity	MW-13A	06/06/2011		0.158	mS/cm		
Specific conductivity	MW-13A	09/27/2011		0.158	mS/cm		
Specific conductivity	MW-13A	12/14/2011		0.176	mS/cm		
Specific conductivity	MW-13A	03/21/2012		0.171	mS/cm		
Specific conductivity	MW-13A	06/08/2012		0.18	mS/cm		
Specific conductivity	MW-13A	09/26/2012		0.15	mS/cm		
Specific conductivity	MW-13A	12/03/2012		0.107	mS/cm		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Specific conductivity	MW-13A	03/11/2013		0.145	mS/cm		
Specific conductivity	MW-13A	06/05/2013		0.147	mS/cm		
Specific conductivity	MW-13A	12/03/2013		0.156	mS/cm		
Specific conductivity	MW-13A	03/04/2014		0.141	mS/cm		
Specific conductivity	MW-13A	06/02/2014		0.154	mS/cm		
Specific conductivity	MW-13A	09/22/2014		0.166	mS/cm		
Specific conductivity	MW-13A	11/17/2014		0.172	mS/cm		
Specific conductivity	MW-13A	02/23/2015		0.165	mS/cm		
Specific conductivity	MW-13A	05/19/2015		0.164	mS/cm		
Specific conductivity	MW-13A	08/26/2015		0.166	mS/cm		
Specific conductivity	MW-13A	11/10/2015		0.169	mS/cm		
Specific conductivity	MW-13A	02/22/2016		0.177	mS/cm		
Specific conductivity	MW-13A	05/16/2016		0.169	mS/cm		
Specific conductivity	MW-13A	08/31/2016		0.171	mS/cm		
Specific conductivity	MW-13A	11/14/2016		0.169	mS/cm		
Specific conductivity	MW-13A	02/22/2017		0.17	mS/cm		
Specific conductivity	MW-13A	05/24/2017		0.175	mS/cm		
Specific conductivity	MW-13A	08/30/2017		0.175	mS/cm		
Specific conductivity	MW-13A	11/13/2017		0.171	mS/cm		
Specific conductivity	MW-13A	02/20/2018		0.17	mS/cm		
Specific conductivity	MW-13A	05/15/2018		0.17	mS/cm		
Specific conductivity	MW-13A	08/21/2018		0.171	mS/cm		
Specific conductivity	MW-13A	11/12/2018		0.169	mS/cm		
Specific conductivity	MW-13A	05/28/2019		0.169	mS/cm		
Specific conductivity	MW-13A	11/11/2019		0.169	mS/cm		
Specific conductivity	MW-13A	05/26/2020		0.17	mS/cm		
Specific conductivity	MW-13A	11/19/2020		0.168	mS/cm		
Specific conductivity	MW-13A	05/17/2021		0.171	mS/cm		
Specific conductivity	MW-13A	11/16/2021		0.168	mS/cm		
Specific conductivity	MW-13A	05/10/2022		0.166	mS/cm		
Specific conductivity	MW-13A	11/17/2022		0.166	mS/cm		
Specific conductivity	MW-13A	05/23/2023		0.175	mS/cm		
Specific conductivity	MW-13A	11/08/2023		0.175	mS/cm		
Specific conductivity	MW-13B	03/22/2005		0.155	mS/cm		
Specific conductivity	MW-13B	06/15/2005		0.165	mS/cm		
Specific conductivity	MW-13B	09/27/2005		0.159	mS/cm		
Specific conductivity	MW-13B	12/15/2005		0.157	mS/cm		
Specific conductivity	MW-13B	03/29/2006		0.151	mS/cm		
Specific conductivity	MW-13B	06/21/2006		0.165	mS/cm		
Specific conductivity	MW-13B	09/26/2006		0.168	mS/cm		
Specific conductivity	MW-13B	12/13/2006		0.165	mS/cm		
Specific conductivity	MW-13B	03/27/2007		0.161	mS/cm		
Specific conductivity	MW-13B	09/18/2007		0.168	mS/cm		
Specific conductivity	MW-13B	12/19/2007		0.164	mS/cm		
Specific conductivity	MW-13B	03/25/2008		0.162	mS/cm		
Specific conductivity	MW-13B	06/18/2008		0.165	mS/cm		
Specific conductivity	MW-13B	09/17/2008		0.164	mS/cm		
Specific conductivity	MW-13B	12/16/2008		0.163	mS/cm		
Specific conductivity	MW-13B	03/24/2009		0.167	mS/cm		
Specific conductivity	MW-13B	06/17/2009		0.169	mS/cm		
Specific conductivity	MW-13B	12/03/2009		0.167	mS/cm		
Specific conductivity	MW-13B	03/25/2010		0.09	mS/cm		
Specific conductivity	MW-13B	06/23/2010		0.141	mS/cm		
Specific conductivity	MW-13B	09/23/2010		0.162	mS/cm		
Specific conductivity	MW-13B	12/08/2010		0.073	mS/cm		
Specific conductivity	MW-13B	03/30/2011		0.144	mS/cm		
Specific conductivity	MW-13B	06/06/2011		0.135	mS/cm		
Specific conductivity	MW-13B	09/27/2011		0.151	mS/cm		
Specific conductivity	MW-13B	12/14/2011		0.169	mS/cm		
Specific conductivity	MW-13B	03/21/2012		0.165	mS/cm		
Specific conductivity	MW-13B	06/08/2012		0.175	mS/cm		
Specific conductivity	MW-13B	09/26/2012		0.148	mS/cm		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Specific conductivity	MW-13B	12/03/2012		0.14	mS/cm		
Specific conductivity	MW-13B	03/11/2013		0.144	mS/cm		
Specific conductivity	MW-13B	06/05/2013		0.144	mS/cm		
Specific conductivity	MW-13B	12/03/2013		0.154	mS/cm		
Specific conductivity	MW-13B	03/04/2014		0.139	mS/cm		
Specific conductivity	MW-13B	06/02/2014		0.154	mS/cm		
Specific conductivity	MW-13B	09/22/2014		0.167	mS/cm		
Specific conductivity	MW-13B	11/17/2014		0.172	mS/cm		
Specific conductivity	MW-13B	02/23/2015		0.164	mS/cm		
Specific conductivity	MW-13B	05/19/2015		0.165	mS/cm		
Specific conductivity	MW-13B	08/26/2015		0.164	mS/cm		
Specific conductivity	MW-13B	11/10/2015		0.169	mS/cm		
Specific conductivity	MW-13B	02/22/2016		0.176	mS/cm		
Specific conductivity	MW-13B	05/16/2016		0.168	mS/cm		
Specific conductivity	MW-13B	08/31/2016		0.171	mS/cm		
Specific conductivity	MW-13B	11/14/2016		0.171	mS/cm		
Specific conductivity	MW-13B	02/22/2017		0.171	mS/cm		
Specific conductivity	MW-13B	05/24/2017		0.175	mS/cm		
Specific conductivity	MW-13B	08/30/2017		0.178	mS/cm		
Specific conductivity	MW-13B	11/13/2017		0.17	mS/cm		
Specific conductivity	MW-13B	02/20/2018		0.17	mS/cm		
Specific conductivity	MW-13B	05/15/2018		0.171	mS/cm		
Specific conductivity	MW-13B	08/21/2018		0.175	mS/cm		
Specific conductivity	MW-13B	11/12/2018		0.174	mS/cm		
Specific conductivity	MW-13B	05/28/2019		0.176	mS/cm		
Specific conductivity	MW-13B	11/11/2019		0.175	mS/cm		
Specific conductivity	MW-13B	05/26/2020		0.175	mS/cm		
Specific conductivity	MW-13B	11/19/2020		0.17	mS/cm		
Specific conductivity	MW-13B	05/17/2021		0.172	mS/cm		
Specific conductivity	MW-13B	11/16/2021		0.167	mS/cm		
Specific conductivity	MW-13B	05/10/2022		0.165	mS/cm		
Specific conductivity	MW-13B	11/17/2022		0.162	mS/cm		
Specific conductivity	MW-13B	05/23/2023		0.173	mS/cm		
Specific conductivity	MW-13B	11/08/2023		0.173	mS/cm		
Specific conductivity	MW-16	03/24/2009		0.135	mS/cm		
Specific conductivity	MW-16	06/16/2009		0.123	mS/cm		
Specific conductivity	MW-16	12/03/2009		0.16	mS/cm		
Specific conductivity	MW-16	03/25/2010		0.118	mS/cm		
Specific conductivity	MW-16	06/24/2010		0.155	mS/cm		
Specific conductivity	MW-16	09/24/2010		0.148	mS/cm		
Specific conductivity	MW-16	12/09/2010		0.15	mS/cm		
Specific conductivity	MW-16	03/30/2011		0.102	mS/cm		
Specific conductivity	MW-16	06/07/2011		0.096	mS/cm		
Specific conductivity	MW-16	09/27/2011		0.068	mS/cm		
Specific conductivity	MW-16	12/13/2011		0.12	mS/cm		
Specific conductivity	MW-16	03/21/2012		0.079	mS/cm		
Specific conductivity	MW-16	06/08/2012		0.118	mS/cm		
Specific conductivity	MW-16	09/27/2012		0.106	mS/cm		
Specific conductivity	MW-16	12/04/2012		0.085	mS/cm		
Specific conductivity	MW-16	03/12/2013		0.118	mS/cm		
Specific conductivity	MW-16	06/04/2013		0.103	mS/cm		
Specific conductivity	MW-16	09/05/2013		0.11	mS/cm		
Specific conductivity	MW-16	12/16/2013		0.096	mS/cm		
Specific conductivity	MW-16	03/05/2014		0.099	mS/cm		
Specific conductivity	MW-16	06/02/2014		0.094	mS/cm		
Specific conductivity	MW-16	09/22/2014		0.122	mS/cm		
Specific conductivity	MW-16	11/18/2014		0.126	mS/cm		
Specific conductivity	MW-16	02/23/2015		0.08	mS/cm		
Specific conductivity	MW-16	05/20/2015		0.101	mS/cm		
Specific conductivity	MW-16	08/26/2015		0.097	mS/cm		
Specific conductivity	MW-16	11/11/2015		0.136	mS/cm		
Specific conductivity	MW-16	02/24/2016		0.091	mS/cm		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Specific conductivity	MW-16	05/16/2016		0.102	mS/cm		
Specific conductivity	MW-16	08/31/2016		0.123	mS/cm		
Specific conductivity	MW-16	11/14/2016		0.11	mS/cm		
Specific conductivity	MW-16	02/22/2017		0.097	mS/cm		
Specific conductivity	MW-16	05/24/2017		0.047	mS/cm		
Specific conductivity	MW-16	08/30/2017		0.114	mS/cm		
Specific conductivity	MW-16	11/13/2017		0.104	mS/cm		
Specific conductivity	MW-16	02/20/2018		0.095	mS/cm		
Specific conductivity	MW-16	05/17/2018		0.097	mS/cm		
Specific conductivity	MW-16	08/22/2018		0.106	mS/cm		
Specific conductivity	MW-16	11/12/2018		0.112	mS/cm		
Specific conductivity	MW-16	05/29/2019		0.108	mS/cm		
Specific conductivity	MW-16	11/12/2019		0.136	mS/cm		
Specific conductivity	MW-16	05/27/2020		0.121	mS/cm		
Specific conductivity	MW-16	11/20/2020		0.151	mS/cm		
Specific conductivity	MW-16	05/17/2021		0.123	mS/cm		
Specific conductivity	MW-16	11/16/2021		0.147	mS/cm		
Specific conductivity	MW-16	05/11/2022		0.112	mS/cm		
Specific conductivity	MW-16	11/17/2022		0.115	mS/cm		
Specific conductivity	MW-16	05/23/2023		0.123	mS/cm		
Specific conductivity	MW-16	11/08/2023		0.124	mS/cm		
Specific conductivity	MW-35	03/22/2005		0.143	mS/cm		
Specific conductivity	MW-35	06/14/2005		0.153	mS/cm		
Specific conductivity	MW-35	09/27/2005		0.148	mS/cm		
Specific conductivity	MW-35	12/15/2005		0.145	mS/cm		
Specific conductivity	MW-35	03/28/2006		0.136	mS/cm		
Specific conductivity	MW-35	06/21/2006		0.152	mS/cm		
Specific conductivity	MW-35	09/26/2006		0.155	mS/cm		
Specific conductivity	MW-35	12/12/2006		0.151	mS/cm		
Specific conductivity	MW-35	03/27/2007		0.148	mS/cm		
Specific conductivity	MW-35	09/18/2007		0.152	mS/cm		
Specific conductivity	MW-35	12/20/2007		0.152	mS/cm		
Specific conductivity	MW-35	03/25/2008		0.147	mS/cm		
Specific conductivity	MW-35	06/18/2008		0.151	mS/cm		
Specific conductivity	MW-35	09/18/2008		0.142	mS/cm		
Specific conductivity	MW-35	12/19/2008		0.144	mS/cm		
Specific conductivity	MW-35	03/24/2009		0.15	mS/cm		
Specific conductivity	MW-35	06/16/2009		0.155	mS/cm		
Specific conductivity	MW-35	12/03/2009		0.152	mS/cm		
Specific conductivity	MW-35	03/25/2010		0.084	mS/cm		
Specific conductivity	MW-35	06/23/2010		0.128	mS/cm		
Specific conductivity	MW-35	09/23/2010		0.151	mS/cm		
Specific conductivity	MW-35	12/09/2010		0.15	mS/cm		
Specific conductivity	MW-35	03/30/2011		0.132	mS/cm		
Specific conductivity	MW-35	06/06/2011		0.123	mS/cm		
Specific conductivity	MW-35	09/26/2011		0.131	mS/cm		
Specific conductivity	MW-35	12/13/2011		0.148	mS/cm		
Specific conductivity	MW-35	03/21/2012		0.152	mS/cm		
Specific conductivity	MW-35	06/06/2012		0.138	mS/cm		
Specific conductivity	MW-35	09/26/2012		0.135	mS/cm		
Specific conductivity	MW-35	12/04/2012		0.148	mS/cm		
Specific conductivity	MW-35	03/13/2013		0.132	mS/cm		
Specific conductivity	MW-35	06/06/2013		0.133	mS/cm		
Specific conductivity	MW-35	09/05/2013		0.132	mS/cm		
Specific conductivity	MW-35	12/16/2013		0.121	mS/cm		
Specific conductivity	MW-35	03/04/2014		0.129	mS/cm		
Specific conductivity	MW-35	06/02/2014		0.14	mS/cm		
Specific conductivity	MW-35	09/22/2014		0.161	mS/cm		
Specific conductivity	MW-35	11/17/2014		0.16	mS/cm		
Specific conductivity	MW-35	02/25/2015		0.152	mS/cm		
Specific conductivity	MW-35	05/19/2015		0.135	mS/cm		
Specific conductivity	MW-35	08/26/2015		0.153	mS/cm		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Specific conductivity	MW-35	11/10/2015		0.156	mS/cm		
Specific conductivity	MW-35	02/22/2016		0.164	mS/cm		
Specific conductivity	MW-35	05/16/2016		0.156	mS/cm		
Specific conductivity	MW-35	08/31/2016		0.159	mS/cm		
Specific conductivity	MW-35	11/15/2016		0.158	mS/cm		
Specific conductivity	MW-35	02/22/2017		0.161	mS/cm		
Specific conductivity	MW-35	05/24/2017		0.166	mS/cm		
Specific conductivity	MW-35	08/30/2017		0.167	mS/cm		
Specific conductivity	MW-35	11/15/2017		0.161	mS/cm		
Specific conductivity	MW-35	02/20/2018		0.161	mS/cm		
Specific conductivity	MW-35	05/17/2018		0.164	mS/cm		
Specific conductivity	MW-35	08/22/2018		0.16	mS/cm		
Specific conductivity	MW-35	11/12/2018		0.164	mS/cm		
Specific conductivity	MW-35	05/29/2019		0.169	mS/cm		
Specific conductivity	MW-35	11/12/2019		0.166	mS/cm		
Specific conductivity	MW-35	05/27/2020		0.168	mS/cm		
Specific conductivity	MW-35	11/19/2020		0.156	mS/cm		
Specific conductivity	MW-35	05/17/2021		0.159	mS/cm		
Specific conductivity	MW-35	11/16/2021		0.169	mS/cm		
Specific conductivity	MW-35	05/10/2022		0.169	mS/cm		
Specific conductivity	MW-35	11/17/2022		0.156	mS/cm		
Specific conductivity	MW-35	05/23/2023		0.186	mS/cm		
Specific conductivity	MW-35	11/08/2023		0.16	mS/cm		
Sulfate	MW-13A	03/22/2005		2.8	mg/L		
Sulfate	MW-13A	06/15/2005		2.9	mg/L		
Sulfate	MW-13A	09/27/2005		3.2	mg/L		
Sulfate	MW-13A	12/15/2005		2.1	mg/L		
Sulfate	MW-13A	03/28/2006		3.2	mg/L		
Sulfate	MW-13A	06/21/2006		3.1	mg/L		
Sulfate	MW-13A	09/26/2006		2.5	mg/L		
Sulfate	MW-13A	12/13/2006		2.3	mg/L		
Sulfate	MW-13A	03/27/2007		2.5	mg/L		
Sulfate	MW-13A	06/19/2007		2.5	mg/L		
Sulfate	MW-13A	09/19/2007		2.5	mg/L		
Sulfate	MW-13A	12/19/2007		2.5	mg/L		
Sulfate	MW-13A	03/25/2008		2.4	mg/L		
Sulfate	MW-13A	06/18/2008		2.6	mg/L		
Sulfate	MW-13A	09/17/2008		2.4	mg/L		
Sulfate	MW-13A	12/17/2008		2.4	mg/L		
Sulfate	MW-13A	03/24/2009		2.5	mg/L		
Sulfate	MW-13A	06/17/2009		2.1	mg/L		
Sulfate	MW-13A	09/10/2009		2.2	mg/L		
Sulfate	MW-13A	12/03/2009		2.3	mg/L		
Sulfate	MW-13A	03/25/2010		2.3	mg/L		
Sulfate	MW-13A	06/23/2010		2.1	mg/L		
Sulfate	MW-13A	09/23/2010		2.3	mg/L		
Sulfate	MW-13A	12/08/2010		3.7	mg/L		
Sulfate	MW-13A	03/30/2011		2.2	mg/L		
Sulfate	MW-13A	06/06/2011		2.2	mg/L		
Sulfate	MW-13A	09/27/2011		2.3	mg/L		
Sulfate	MW-13A	12/14/2011		2.5	mg/L		
Sulfate	MW-13A	03/21/2012		1.9	mg/L		
Sulfate	MW-13A	06/08/2012		2.1	mg/L		
Sulfate	MW-13A	09/26/2012		2.1	mg/L		
Sulfate	MW-13A	12/03/2012		2.2	mg/L		
Sulfate	MW-13A	03/11/2013		1.9	mg/L		
Sulfate	MW-13A	06/05/2013		1.7	mg/L		
Sulfate	MW-13A	12/03/2013		1.6	mg/L		
Sulfate	MW-13A	03/04/2014		2.1	mg/L		
Sulfate	MW-13A	06/02/2014		2.2	mg/L		
Sulfate	MW-13A	09/22/2014		2.2	mg/L		
Sulfate	MW-13A	11/17/2014		2.1	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Sulfate	MW-13A	02/23/2015		2.1	mg/L		
Sulfate	MW-13A	05/19/2015		2.1	mg/L		
Sulfate	MW-13A	08/26/2015		2.3	mg/L		
Sulfate	MW-13A	11/10/2015		2.1	mg/L		
Sulfate	MW-13A	02/22/2016		2.1	mg/L		
Sulfate	MW-13A	05/16/2016		2.2	mg/L		
Sulfate	MW-13A	08/31/2016		2.3	mg/L		
Sulfate	MW-13A	11/14/2016		2	mg/L		
Sulfate	MW-13A	02/22/2017		2	mg/L		
Sulfate	MW-13A	05/24/2017		2.1	mg/L		
Sulfate	MW-13A	08/30/2017		1.8	mg/L		
Sulfate	MW-13A	11/13/2017		1.8	mg/L		
Sulfate	MW-13A	02/20/2018		2.1	mg/L		
Sulfate	MW-13A	05/15/2018		2	mg/L		
Sulfate	MW-13A	08/21/2018		1.8	mg/L		
Sulfate	MW-13A	11/12/2018		2.1	mg/L		
Sulfate	MW-13A	11/11/2019	ND	5	mg/L		
Sulfate	MW-13A	11/19/2020	ND	5	mg/L		
Sulfate	MW-13A	11/16/2021	ND	5	mg/L		
Sulfate	MW-13A	11/17/2022	ND	5	mg/L		
Sulfate	MW-13A	11/08/2023	ND	5	mg/L		
Sulfate	MW-13B	03/22/2005		4.6	mg/L		
Sulfate	MW-13B	06/15/2005		4.7	mg/L		
Sulfate	MW-13B	09/27/2005		4.5	mg/L		
Sulfate	MW-13B	12/15/2005		3.6	mg/L		
Sulfate	MW-13B	03/29/2006		4.5	mg/L		
Sulfate	MW-13B	06/21/2006		4.4	mg/L		
Sulfate	MW-13B	09/26/2006		4.1	mg/L		
Sulfate	MW-13B	12/13/2006		3.9	mg/L		
Sulfate	MW-13B	03/27/2007		4.1	mg/L		
Sulfate	MW-13B	06/19/2007		4.1	mg/L		
Sulfate	MW-13B	09/18/2007		4.2	mg/L		
Sulfate	MW-13B	12/19/2007		4.1	mg/L		
Sulfate	MW-13B	03/25/2008		4	mg/L		
Sulfate	MW-13B	06/18/2008		4.1	mg/L		
Sulfate	MW-13B	09/17/2008		4.2	mg/L		
Sulfate	MW-13B	12/16/2008		4.2	mg/L		
Sulfate	MW-13B	03/24/2009		4.2	mg/L		
Sulfate	MW-13B	06/17/2009		3.7	mg/L		
Sulfate	MW-13B	09/10/2009		3.7	mg/L		
Sulfate	MW-13B	12/03/2009		4.1	mg/L		
Sulfate	MW-13B	03/25/2010		3.9	mg/L		
Sulfate	MW-13B	06/23/2010		3.6	mg/L		
Sulfate	MW-13B	09/23/2010		3.8	mg/L		
Sulfate	MW-13B	12/08/2010		2.4	mg/L		
Sulfate	MW-13B	03/30/2011		4.4	mg/L		
Sulfate	MW-13B	06/06/2011		3.7	mg/L		
Sulfate	MW-13B	09/27/2011		3.7	mg/L		
Sulfate	MW-13B	12/14/2011		3.5	mg/L		
Sulfate	MW-13B	03/21/2012		3.2	mg/L		
Sulfate	MW-13B	06/08/2012		3.5	mg/L		
Sulfate	MW-13B	09/26/2012		3.6	mg/L		
Sulfate	MW-13B	12/03/2012		3.5	mg/L		
Sulfate	MW-13B	03/11/2013		3	mg/L		
Sulfate	MW-13B	06/05/2013		3.5	mg/L		
Sulfate	MW-13B	12/03/2013		3.1	mg/L		
Sulfate	MW-13B	03/04/2014		3.7	mg/L		
Sulfate	MW-13B	06/02/2014		3.6	mg/L		
Sulfate	MW-13B	09/22/2014		4.1	mg/L		
Sulfate	MW-13B	11/17/2014		3.7	mg/L		
Sulfate	MW-13B	02/23/2015		3.4	mg/L		
Sulfate	MW-13B	05/19/2015		3.1	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Sulfate	MW-13B	08/26/2015		3.7	mg/L		
Sulfate	MW-13B	11/10/2015		3.2	mg/L		
Sulfate	MW-13B	02/22/2016		3.4	mg/L		
Sulfate	MW-13B	05/16/2016		3.5	mg/L		
Sulfate	MW-13B	08/31/2016		3.7	mg/L		
Sulfate	MW-13B	11/14/2016		3	mg/L		
Sulfate	MW-13B	02/22/2017		3.5	mg/L		
Sulfate	MW-13B	05/24/2017		3.4	mg/L		
Sulfate	MW-13B	08/30/2017		3.8	mg/L		
Sulfate	MW-13B	11/13/2017		2.9	mg/L		
Sulfate	MW-13B	02/20/2018		3	mg/L		
Sulfate	MW-13B	05/15/2018		3.1	mg/L		
Sulfate	MW-13B	08/21/2018		2.9	mg/L		
Sulfate	MW-13B	11/12/2018		3	mg/L		
Sulfate	MW-13B	11/11/2019	ND	5	mg/L		
Sulfate	MW-13B	11/19/2020	ND	5	mg/L		
Sulfate	MW-13B	11/16/2021	ND	5	mg/L		
Sulfate	MW-13B	11/17/2022	ND	5	mg/L		
Sulfate	MW-13B	11/08/2023	ND	5	mg/L		
Sulfate	MW-16	03/24/2009		3	mg/L		
Sulfate	MW-16	06/16/2009		2.2	mg/L		
Sulfate	MW-16	09/09/2009		4.3	mg/L		
Sulfate	MW-16	12/03/2009		3.6	mg/L		
Sulfate	MW-16	03/25/2010		9.9	mg/L		
Sulfate	MW-16	06/24/2010		2.5	mg/L		
Sulfate	MW-16	09/24/2010		2.3	mg/L		
Sulfate	MW-16	12/09/2010		2.7	mg/L		
Sulfate	MW-16	03/30/2011		7.1	mg/L		
Sulfate	MW-16	06/07/2011		2.4	mg/L		
Sulfate	MW-16	09/27/2011		4.1	mg/L		
Sulfate	MW-16	12/13/2011		2.3	mg/L		
Sulfate	MW-16	03/21/2012		1.6	mg/L		
Sulfate	MW-16	06/08/2012		3	mg/L		
Sulfate	MW-16	09/27/2012		3.1	mg/L		
Sulfate	MW-16	12/04/2012		3	mg/L		
Sulfate	MW-16	03/12/2013		1.9	mg/L		
Sulfate	MW-16	06/04/2013		2.7	mg/L		
Sulfate	MW-16	09/05/2013		1.7	mg/L		
Sulfate	MW-16	12/16/2013		2.3	mg/L		
Sulfate	MW-16	03/05/2014		2.8	mg/L		
Sulfate	MW-16	06/02/2014		3.8	mg/L		
Sulfate	MW-16	09/22/2014		2.9	mg/L		
Sulfate	MW-16	11/18/2014		3.3	mg/L		
Sulfate	MW-16	02/23/2015		2.9	mg/L		
Sulfate	MW-16	05/20/2015		2.1	mg/L		
Sulfate	MW-16	08/26/2015		3.4	mg/L		
Sulfate	MW-16	11/11/2015		2.8	mg/L		
Sulfate	MW-16	02/24/2016		2.9	mg/L		
Sulfate	MW-16	05/16/2016		2.6	mg/L		
Sulfate	MW-16	08/31/2016		1.7	mg/L		
Sulfate	MW-16	11/14/2016		1.6	mg/L		
Sulfate	MW-16	02/22/2017		2.5	mg/L		
Sulfate	MW-16	05/24/2017		2.7	mg/L		
Sulfate	MW-16	08/30/2017		1.6	mg/L		
Sulfate	MW-16	11/13/2017		1	mg/L		
Sulfate	MW-16	02/20/2018		2.2	mg/L		
Sulfate	MW-16	05/17/2018		2.3	mg/L		
Sulfate	MW-16	08/22/2018		2.1	mg/L		
Sulfate	MW-16	11/12/2018		1.6	mg/L		
Sulfate	MW-16	11/12/2019	ND	5	mg/L		
Sulfate	MW-16	11/20/2020	ND	5	mg/L		
Sulfate	MW-16	11/16/2021	ND	5	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Sulfate	MW-16	11/17/2022	ND	5	mg/L		
Sulfate	MW-16	11/08/2023	ND	5	mg/L		
Sulfate	MW-35	03/22/2005		2.5	mg/L		
Sulfate	MW-35	06/14/2005		1.6	mg/L		
Sulfate	MW-35	09/27/2005		1.3	mg/L		
Sulfate	MW-35	12/15/2005	ND	1	mg/L	5	**
Sulfate	MW-35	03/28/2006		3	mg/L		
Sulfate	MW-35	06/21/2006		3	mg/L		
Sulfate	MW-35	09/26/2006		2.4	mg/L		
Sulfate	MW-35	12/12/2006		2.2	mg/L		
Sulfate	MW-35	03/27/2007		2.5	mg/L		
Sulfate	MW-35	06/20/2007		2.4	mg/L		
Sulfate	MW-35	09/18/2007		2.6	mg/L		
Sulfate	MW-35	12/20/2007		2.4	mg/L		
Sulfate	MW-35	03/25/2008		2.4	mg/L		
Sulfate	MW-35	06/18/2008		2.6	mg/L		
Sulfate	MW-35	09/18/2008		2.3	mg/L		
Sulfate	MW-35	12/19/2008		2.6	mg/L		
Sulfate	MW-35	03/24/2009		2.7	mg/L		
Sulfate	MW-35	06/16/2009		2.2	mg/L		
Sulfate	MW-35	09/10/2009		2.4	mg/L		
Sulfate	MW-35	12/03/2009		2.5	mg/L		
Sulfate	MW-35	03/25/2010		2.6	mg/L		
Sulfate	MW-35	06/23/2010		2.3	mg/L		
Sulfate	MW-35	09/23/2010		2.5	mg/L		
Sulfate	MW-35	12/09/2010		2.2	mg/L		
Sulfate	MW-35	03/30/2011		2.6	mg/L		
Sulfate	MW-35	06/06/2011		2.5	mg/L		
Sulfate	MW-35	09/26/2011		2.6	mg/L		
Sulfate	MW-35	12/13/2011		2.5	mg/L		
Sulfate	MW-35	03/21/2012		2.1	mg/L		
Sulfate	MW-35	06/06/2012		2.4	mg/L		
Sulfate	MW-35	09/26/2012		2.4	mg/L		
Sulfate	MW-35	12/04/2012		2.5	mg/L		
Sulfate	MW-35	03/13/2013		2.3	mg/L		
Sulfate	MW-35	06/06/2013		2	mg/L		
Sulfate	MW-35	09/05/2013		2.1	mg/L		
Sulfate	MW-35	12/16/2013		2.6	mg/L		
Sulfate	MW-35	03/04/2014		2.7	mg/L		
Sulfate	MW-35	06/02/2014		2.5	mg/L		
Sulfate	MW-35	09/22/2014		3.2	mg/L		
Sulfate	MW-35	11/17/2014		2.5	mg/L		
Sulfate	MW-35	02/25/2015		2.4	mg/L		
Sulfate	MW-35	05/19/2015		2.3	mg/L		
Sulfate	MW-35	08/26/2015		2.4	mg/L		
Sulfate	MW-35	11/10/2015		2.5	mg/L		
Sulfate	MW-35	02/22/2016		2.6	mg/L		
Sulfate	MW-35	05/16/2016		2.5	mg/L		
Sulfate	MW-35	08/31/2016		2.8	mg/L		
Sulfate	MW-35	11/15/2016		2.2	mg/L		
Sulfate	MW-35	02/22/2017		2.5	mg/L		
Sulfate	MW-35	05/24/2017		2.3	mg/L		
Sulfate	MW-35	08/30/2017		2.2	mg/L		
Sulfate	MW-35	11/15/2017		2.8	mg/L		
Sulfate	MW-35	02/20/2018		2.3	mg/L		
Sulfate	MW-35	05/17/2018		2.2	mg/L		
Sulfate	MW-35	08/22/2018		2.6	mg/L		
Sulfate	MW-35	11/12/2018		2.3	mg/L		
Sulfate	MW-35	11/12/2019	ND	5	mg/L		
Sulfate	MW-35	11/19/2020	ND	5	mg/L		
Sulfate	MW-35	11/16/2021	ND	5	mg/L		
Sulfate	MW-35	11/17/2022	ND	5	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Sulfate	MW-35	11/08/2023	ND	5	mg/L		
Temperature	MW-13A	03/22/2005		9.08	deg C		
Temperature	MW-13A	06/15/2005		9.37	deg C		
Temperature	MW-13A	09/27/2005		9.65	deg C		
Temperature	MW-13A	12/15/2005		8.6	deg C		
Temperature	MW-13A	03/28/2006		9.44	deg C		
Temperature	MW-13A	06/21/2006		9.41	deg C		
Temperature	MW-13A	09/26/2006		9.71	deg C		
Temperature	MW-13A	12/13/2006		8.79	deg C		
Temperature	MW-13A	03/27/2007		9.14	deg C		
Temperature	MW-13A	09/19/2007		9.26	deg C		
Temperature	MW-13A	12/19/2007		8.17	deg C		
Temperature	MW-13A	03/25/2008		8.47	deg C		
Temperature	MW-13A	06/18/2008		9.3	deg C		
Temperature	MW-13A	09/17/2008		8.8	deg C		
Temperature	MW-13A	12/17/2008		8.75	deg C		
Temperature	MW-13A	03/24/2009		8.32	deg C		
Temperature	MW-13A	06/17/2009		9.85	deg C		
Temperature	MW-13A	12/03/2009		8.92	deg C		
Temperature	MW-13A	03/25/2010		9.22	deg C		
Temperature	MW-13A	06/23/2010		9.58	deg C		
Temperature	MW-13A	09/23/2010		9.42	deg C		
Temperature	MW-13A	12/08/2010		9.45	deg C		
Temperature	MW-13A	03/30/2011		9.37	deg C		
Temperature	MW-13A	06/06/2011		10.4	deg C		
Temperature	MW-13A	09/27/2011		9.58	deg C		
Temperature	MW-13A	12/14/2011		8.92	deg C		
Temperature	MW-13A	03/21/2012		8.74	deg C		
Temperature	MW-13A	06/08/2012		9.3	deg C		
Temperature	MW-13A	09/26/2012		10.04	deg C		
Temperature	MW-13A	12/03/2012		9.2	deg C		
Temperature	MW-13A	03/11/2013		9.22	deg C		
Temperature	MW-13A	06/05/2013		11.96	deg C		
Temperature	MW-13A	12/03/2013		8.93	deg C		
Temperature	MW-13A	03/04/2014		8.98	deg C		
Temperature	MW-13A	06/02/2014		11.15	deg C		
Temperature	MW-13A	09/22/2014		10.58	deg C		
Temperature	MW-13A	11/17/2014		9.4	deg C		
Temperature	MW-13A	02/23/2015		9.41	deg C		
Temperature	MW-13A	05/19/2015		9.89	deg C		
Temperature	MW-13A	08/26/2015		10.69	deg C		
Temperature	MW-13A	11/10/2015		9.49	deg C		
Temperature	MW-13A	02/22/2016		9.59	deg C		
Temperature	MW-13A	05/16/2016		9.77	deg C		
Temperature	MW-13A	08/31/2016		9.98	deg C		
Temperature	MW-13A	11/14/2016		9.57	deg C		
Temperature	MW-13A	02/22/2017		9.11	deg C		
Temperature	MW-13A	05/24/2017		4.59	deg C		
Temperature	MW-13A	08/30/2017		9.85	deg C		
Temperature	MW-13A	11/13/2017		9.41	deg C		
Temperature	MW-13A	02/20/2018		9.07	deg C		
Temperature	MW-13A	05/15/2018		9.63	deg C		
Temperature	MW-13A	08/21/2018		9.58	deg C		
Temperature	MW-13A	11/12/2018		9.5	deg C		
Temperature	MW-13A	05/28/2019		9.5	deg C		
Temperature	MW-13A	11/11/2019		9.24	deg C		
Temperature	MW-13A	05/26/2020		9.45	deg C		
Temperature	MW-13A	11/19/2020		9.4	deg C		
Temperature	MW-13A	05/17/2021		9.6	deg C		
Temperature	MW-13A	11/16/2021		9.4	deg C		
Temperature	MW-13A	05/10/2022		9.7	deg C		
Temperature	MW-13A	11/17/2022		9.6	deg C		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Temperature	MW-13A	05/23/2023		9.8	deg C		
Temperature	MW-13A	11/08/2023		9.3	deg C		
Temperature	MW-13B	03/22/2005		9.55	deg C		
Temperature	MW-13B	06/15/2005		9.92	deg C		
Temperature	MW-13B	09/27/2005		10.79	deg C		
Temperature	MW-13B	12/15/2005		8.11	deg C		
Temperature	MW-13B	03/29/2006		8.8	deg C		
Temperature	MW-13B	06/21/2006		9.76	deg C		
Temperature	MW-13B	09/26/2006		10.32	deg C		
Temperature	MW-13B	12/13/2006		8.85	deg C		
Temperature	MW-13B	03/27/2007		9.04	deg C		
Temperature	MW-13B	09/18/2007		10.01	deg C		
Temperature	MW-13B	12/19/2007		8.08	deg C		
Temperature	MW-13B	03/25/2008		8.09	deg C		
Temperature	MW-13B	06/18/2008		9.23	deg C		
Temperature	MW-13B	09/17/2008		9.01	deg C		
Temperature	MW-13B	12/16/2008		8.43	deg C		
Temperature	MW-13B	03/24/2009		8.37	deg C		
Temperature	MW-13B	06/17/2009		10.81	deg C		
Temperature	MW-13B	12/03/2009		8.79	deg C		
Temperature	MW-13B	03/25/2010		9.23	deg C		
Temperature	MW-13B	06/23/2010		9.97	deg C		
Temperature	MW-13B	09/23/2010		9.6	deg C		
Temperature	MW-13B	12/08/2010		9.25	deg C		
Temperature	MW-13B	03/30/2011		9.32	deg C		
Temperature	MW-13B	06/06/2011		11.3	deg C		
Temperature	MW-13B	09/27/2011		10.57	deg C		
Temperature	MW-13B	12/14/2011		8.76	deg C		
Temperature	MW-13B	03/21/2012		8.5	deg C		
Temperature	MW-13B	06/08/2012		9.4	deg C		
Temperature	MW-13B	09/26/2012		10.59	deg C		
Temperature	MW-13B	12/03/2012		9.2	deg C		
Temperature	MW-13B	03/11/2013		9.15	deg C		
Temperature	MW-13B	06/05/2013		11.41	deg C		
Temperature	MW-13B	12/03/2013		9.44	deg C		
Temperature	MW-13B	03/04/2014		9	deg C		
Temperature	MW-13B	06/02/2014		14.32	deg C		
Temperature	MW-13B	09/22/2014		11.02	deg C		
Temperature	MW-13B	11/17/2014		9.4	deg C		
Temperature	MW-13B	02/23/2015		9.76	deg C		
Temperature	MW-13B	05/19/2015		10.23	deg C		
Temperature	MW-13B	08/26/2015		10.53	deg C		
Temperature	MW-13B	11/10/2015		9.59	deg C		
Temperature	MW-13B	02/22/2016		9.3	deg C		
Temperature	MW-13B	05/16/2016		9.93	deg C		
Temperature	MW-13B	08/31/2016		10.43	deg C		
Temperature	MW-13B	11/14/2016		10.41	deg C		
Temperature	MW-13B	02/22/2017		9.06	deg C		
Temperature	MW-13B	05/24/2017		9.76	deg C		
Temperature	MW-13B	08/30/2017		10.27	deg C		
Temperature	MW-13B	11/13/2017		9.54	deg C		
Temperature	MW-13B	02/20/2018		8.82	deg C		
Temperature	MW-13B	05/15/2018		9.98	deg C		
Temperature	MW-13B	08/21/2018		10.14	deg C		
Temperature	MW-13B	11/12/2018		10	deg C		
Temperature	MW-13B	05/28/2019		10.13	deg C		
Temperature	MW-13B	11/11/2019		9.66	deg C		
Temperature	MW-13B	05/26/2020		9.97	deg C		
Temperature	MW-13B	11/19/2020		9.5	deg C		
Temperature	MW-13B	05/17/2021		9.9	deg C		
Temperature	MW-13B	11/16/2021		9.42	deg C		
Temperature	MW-13B	05/10/2022		9.9	deg C		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Temperature	MW-13B	11/17/2022		9.9	deg C		
Temperature	MW-13B	05/23/2023		9.9	deg C		
Temperature	MW-13B	11/08/2023		9.4	deg C		
Temperature	MW-16	03/24/2009		9.08	deg C		
Temperature	MW-16	06/16/2009		9.98	deg C		
Temperature	MW-16	12/03/2009		9.08	deg C		
Temperature	MW-16	03/25/2010		9.11	deg C		
Temperature	MW-16	06/24/2010		9.39	deg C		
Temperature	MW-16	09/24/2010		9.44	deg C		
Temperature	MW-16	12/09/2010		9.13	deg C		
Temperature	MW-16	03/30/2011		9.14	deg C		
Temperature	MW-16	06/07/2011		9.46	deg C		
Temperature	MW-16	09/27/2011		9.43	deg C		
Temperature	MW-16	12/13/2011		8.84	deg C		
Temperature	MW-16	03/21/2012		8.82	deg C		
Temperature	MW-16	06/08/2012		9.2	deg C		
Temperature	MW-16	09/27/2012		9.06	deg C		
Temperature	MW-16	12/04/2012		9.1	deg C		
Temperature	MW-16	03/12/2013		9.02	deg C		
Temperature	MW-16	06/04/2013		9.47	deg C		
Temperature	MW-16	09/05/2013		9.36	deg C		
Temperature	MW-16	12/16/2013		9.04	deg C		
Temperature	MW-16	03/05/2014		9.4	deg C		
Temperature	MW-16	06/02/2014		9.56	deg C		
Temperature	MW-16	09/22/2014		10.73	deg C		
Temperature	MW-16	11/18/2014		8.9	deg C		
Temperature	MW-16	02/23/2015		9.02	deg C		
Temperature	MW-16	05/20/2015		9.3	deg C		
Temperature	MW-16	08/26/2015		9.48	deg C		
Temperature	MW-16	11/11/2015		9.01	deg C		
Temperature	MW-16	02/24/2016		9.02	deg C		
Temperature	MW-16	05/16/2016		9.38	deg C		
Temperature	MW-16	08/31/2016		9.66	deg C		
Temperature	MW-16	11/14/2016		9.81	deg C		
Temperature	MW-16	02/22/2017		9.01	deg C		
Temperature	MW-16	05/24/2017		9.35	deg C		
Temperature	MW-16	08/30/2017		9.7	deg C		
Temperature	MW-16	11/13/2017		9.3	deg C		
Temperature	MW-16	02/20/2018		8.86	deg C		
Temperature	MW-16	05/17/2018		9.36	deg C		
Temperature	MW-16	08/22/2018		9.86	deg C		
Temperature	MW-16	11/12/2018		9.6	deg C		
Temperature	MW-16	05/29/2019		9.65	deg C		
Temperature	MW-16	11/12/2019		8.95	deg C		
Temperature	MW-16	05/27/2020		9.71	deg C		
Temperature	MW-16	11/20/2020		8.57	deg C		
Temperature	MW-16	05/17/2021		9.49	deg C		
Temperature	MW-16	11/16/2021		9.3	deg C		
Temperature	MW-16	05/11/2022		9.3	deg C		
Temperature	MW-16	11/17/2022		9.2	deg C		
Temperature	MW-16	05/23/2023		9.4	deg C		
Temperature	MW-16	11/08/2023		9.9	deg C		
Temperature	MW-35	03/22/2005		9.8	deg C		
Temperature	MW-35	06/14/2005		10.28	deg C		
Temperature	MW-35	09/27/2005		10.49	deg C		
Temperature	MW-35	12/15/2005		8.86	deg C		
Temperature	MW-35	03/28/2006		9.53	deg C		
Temperature	MW-35	06/21/2006		10.31	deg C		
Temperature	MW-35	09/26/2006		10.62	deg C		
Temperature	MW-35	12/12/2006		9.26	deg C		
Temperature	MW-35	03/27/2007		9.4	deg C		
Temperature	MW-35	09/18/2007		10.24	deg C		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

Temperature	MW-35	12/20/2007		8.69	deg C		
Temperature	MW-35	03/25/2008		8.75	deg C		
Temperature	MW-35	06/18/2008		9.73	deg C		
Temperature	MW-35	09/18/2008		9.98	deg C		
Temperature	MW-35	12/19/2008		8.5	deg C		
Temperature	MW-35	03/24/2009		9.32	deg C		
Temperature	MW-35	06/16/2009		11.76	deg C		
Temperature	MW-35	12/03/2009		9.57	deg C		
Temperature	MW-35	03/25/2010		9.82	deg C		
Temperature	MW-35	06/23/2010		10.07	deg C		
Temperature	MW-35	09/23/2010		10.09	deg C		
Temperature	MW-35	12/09/2010		9.85	deg C		
Temperature	MW-35	03/30/2011		9.72	deg C		
Temperature	MW-35	06/06/2011		10.2	deg C		
Temperature	MW-35	09/26/2011		10.14	deg C		
Temperature	MW-35	12/13/2011		9.41	deg C		
Temperature	MW-35	03/21/2012		9.78	deg C		
Temperature	MW-35	06/06/2012		10.3	deg C		
Temperature	MW-35	09/26/2012		10.2	deg C		
Temperature	MW-35	12/04/2012		9.8	deg C		
Temperature	MW-35	03/13/2013		9.75	deg C		
Temperature	MW-35	06/06/2013		10.83	deg C		
Temperature	MW-35	09/05/2013		10.09	deg C		
Temperature	MW-35	12/16/2013		9.84	deg C		
Temperature	MW-35	03/04/2014		9.76	deg C		
Temperature	MW-35	06/02/2014		11.79	deg C		
Temperature	MW-35	09/22/2014		13.7	deg C		
Temperature	MW-35	11/17/2014		10.4	deg C		
Temperature	MW-35	02/25/2015		9.9	deg C		
Temperature	MW-35	05/19/2015		10.3	deg C		
Temperature	MW-35	08/26/2015		13.09	deg C		
Temperature	MW-35	11/10/2015		10.34	deg C		
Temperature	MW-35	02/22/2016		10.31	deg C		
Temperature	MW-35	05/16/2016		10.12	deg C		
Temperature	MW-35	08/31/2016		10.78	deg C		
Temperature	MW-35	11/15/2016		10.41	deg C		
Temperature	MW-35	02/22/2017		9.95	deg C		
Temperature	MW-35	05/24/2017		9.99	deg C		
Temperature	MW-35	08/30/2017		11.63	deg C		
Temperature	MW-35	11/15/2017		9.83	deg C		
Temperature	MW-35	02/20/2018		9.52	deg C		
Temperature	MW-35	05/17/2018		10.07	deg C		
Temperature	MW-35	08/22/2018		10.48	deg C		
Temperature	MW-35	11/12/2018		10.3	deg C		
Temperature	MW-35	05/29/2019		10.42	deg C		
Temperature	MW-35	11/12/2019		9.73	deg C		
Temperature	MW-35	05/27/2020		9.98	deg C		
Temperature	MW-35	11/19/2020		9.58	deg C		
Temperature	MW-35	05/17/2021		10.16	deg C		
Temperature	MW-35	11/16/2021		10.4	deg C		
Temperature	MW-35	05/10/2022		10.4	deg C		
Temperature	MW-35	11/17/2022		10	deg C		
Temperature	MW-35	05/23/2023		10.5	deg C		
Temperature	MW-35	11/08/2023		10.7	deg C		
Thallium, total	MW-13A	12/03/2013	ND	0.001	mg/L		
Thallium, total	MW-13A	03/04/2014	ND	0.001	mg/L		
Thallium, total	MW-13A	06/02/2014	ND	0.001	mg/L		
Thallium, total	MW-13A	09/22/2014	ND	0.001	mg/L		
Thallium, total	MW-13A	11/17/2014	ND	0.001	mg/L		
Thallium, total	MW-13A	02/23/2015	ND	0.001	mg/L		
Thallium, total	MW-13A	05/19/2015	ND	0.001	mg/L		
Thallium, total	MW-13A	08/26/2015	ND	0.001	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

Thallium, total	MW-13A	11/10/2015	ND	0.001	mg/L		
Thallium, total	MW-13A	02/22/2016	ND	0.001	mg/L		
Thallium, total	MW-13A	05/16/2016	ND	0.001	mg/L		
Thallium, total	MW-13A	08/31/2016	ND	0.001	mg/L		
Thallium, total	MW-13A	11/14/2016	ND	0.001	mg/L		
Thallium, total	MW-13A	02/22/2017	ND	0.001	mg/L		
Thallium, total	MW-13A	05/24/2017	ND	0.001	mg/L		
Thallium, total	MW-13A	08/30/2017	ND	0.001	mg/L		
Thallium, total	MW-13A	11/13/2017	ND	0.001	mg/L		
Thallium, total	MW-13A	02/20/2018	ND	0.001	mg/L		
Thallium, total	MW-13A	05/15/2018	ND	0.001	mg/L		
Thallium, total	MW-13A	08/21/2018	ND	0.001	mg/L		
Thallium, total	MW-13A	11/12/2018	ND	0.001	mg/L		
Thallium, total	MW-13A	11/11/2019	ND	0.001	mg/L		
Thallium, total	MW-13A	11/19/2020	ND	0.001	mg/L		
Thallium, total	MW-13A	11/16/2021	ND	0.001	mg/L		
Thallium, total	MW-13A	11/17/2022	ND	0.001	mg/L		
Thallium, total	MW-13A	11/08/2023	ND	0.001	mg/L		
Thallium, total	MW-13B	12/03/2013	ND	0.001	mg/L		
Thallium, total	MW-13B	03/04/2014	ND	0.001	mg/L		
Thallium, total	MW-13B	06/02/2014	ND	0.001	mg/L		
Thallium, total	MW-13B	09/22/2014	ND	0.001	mg/L		
Thallium, total	MW-13B	11/17/2014	ND	0.001	mg/L		
Thallium, total	MW-13B	02/23/2015	ND	0.001	mg/L		
Thallium, total	MW-13B	05/19/2015	ND	0.001	mg/L		
Thallium, total	MW-13B	08/26/2015	ND	0.001	mg/L		
Thallium, total	MW-13B	11/10/2015	ND	0.001	mg/L		
Thallium, total	MW-13B	02/22/2016	ND	0.001	mg/L		
Thallium, total	MW-13B	05/16/2016	ND	0.001	mg/L		
Thallium, total	MW-13B	08/31/2016	ND	0.001	mg/L		
Thallium, total	MW-13B	11/14/2016	ND	0.001	mg/L		
Thallium, total	MW-13B	02/22/2017	ND	0.001	mg/L		
Thallium, total	MW-13B	05/24/2017	ND	0.001	mg/L		
Thallium, total	MW-13B	08/30/2017	ND	0.001	mg/L		
Thallium, total	MW-13B	11/13/2017	ND	0.001	mg/L		
Thallium, total	MW-13B	02/20/2018	ND	0.001	mg/L		
Thallium, total	MW-13B	05/15/2018	ND	0.001	mg/L		
Thallium, total	MW-13B	08/21/2018	ND	0.001	mg/L		
Thallium, total	MW-13B	11/12/2018	ND	0.001	mg/L		
Thallium, total	MW-13B	11/11/2019	ND	0.001	mg/L		
Thallium, total	MW-13B	11/19/2020	ND	0.001	mg/L		
Thallium, total	MW-13B	11/16/2021	ND	0.001	mg/L		
Thallium, total	MW-13B	11/17/2022	ND	0.001	mg/L		
Thallium, total	MW-13B	11/08/2023	ND	0.001	mg/L		
Thallium, total	MW-16	09/05/2013	ND	0.001	mg/L		
Thallium, total	MW-16	12/16/2013	ND	0.001	mg/L		
Thallium, total	MW-16	03/05/2014	ND	0.001	mg/L		
Thallium, total	MW-16	06/02/2014	ND	0.001	mg/L		
Thallium, total	MW-16	09/22/2014	ND	0.001	mg/L		
Thallium, total	MW-16	11/18/2014	ND	0.001	mg/L		
Thallium, total	MW-16	02/23/2015	ND	0.001	mg/L		
Thallium, total	MW-16	05/20/2015	ND	0.001	mg/L		
Thallium, total	MW-16	08/26/2015	ND	0.001	mg/L		
Thallium, total	MW-16	11/11/2015	ND	0.001	mg/L		
Thallium, total	MW-16	02/24/2016	ND	0.001	mg/L		
Thallium, total	MW-16	05/16/2016	ND	0.001	mg/L		
Thallium, total	MW-16	08/31/2016	ND	0.001	mg/L		
Thallium, total	MW-16	11/14/2016	ND	0.001	mg/L		
Thallium, total	MW-16	02/22/2017	ND	0.001	mg/L		
Thallium, total	MW-16	05/24/2017	ND	0.001	mg/L		
Thallium, total	MW-16	08/30/2017	ND	0.001	mg/L		
Thallium, total	MW-16	11/13/2017	ND	0.001	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Thallium, total	MW-16	02/20/2018	ND	0.001	mg/L		
Thallium, total	MW-16	05/17/2018	ND	0.001	mg/L		
Thallium, total	MW-16	08/22/2018	ND	0.001	mg/L		
Thallium, total	MW-16	11/12/2018	ND	0.001	mg/L		
Thallium, total	MW-16	11/12/2019	ND	0.001	mg/L		
Thallium, total	MW-16	11/20/2020	ND	0.001	mg/L		
Thallium, total	MW-16	11/16/2021	ND	0.001	mg/L		
Thallium, total	MW-16	11/17/2022	ND	0.001	mg/L		
Thallium, total	MW-16	11/08/2023	ND	0.001	mg/L		
Thallium, total	MW-35	09/05/2013	ND	0.001	mg/L		
Thallium, total	MW-35	12/16/2013	ND	0.001	mg/L		
Thallium, total	MW-35	03/04/2014	ND	0.001	mg/L		
Thallium, total	MW-35	06/02/2014	ND	0.001	mg/L		
Thallium, total	MW-35	09/22/2014	ND	0.001	mg/L		
Thallium, total	MW-35	11/17/2014	ND	0.001	mg/L		
Thallium, total	MW-35	02/25/2015	ND	0.001	mg/L		
Thallium, total	MW-35	05/19/2015	ND	0.001	mg/L		
Thallium, total	MW-35	08/26/2015	ND	0.001	mg/L		
Thallium, total	MW-35	11/10/2015	ND	0.001	mg/L		
Thallium, total	MW-35	02/22/2016	ND	0.001	mg/L		
Thallium, total	MW-35	05/16/2016	ND	0.001	mg/L		
Thallium, total	MW-35	08/31/2016	ND	0.001	mg/L		
Thallium, total	MW-35	11/15/2016	ND	0.001	mg/L		
Thallium, total	MW-35	02/22/2017	ND	0.001	mg/L		
Thallium, total	MW-35	05/24/2017	ND	0.001	mg/L		
Thallium, total	MW-35	08/30/2017	ND	0.001	mg/L		
Thallium, total	MW-35	11/15/2017	ND	0.001	mg/L		
Thallium, total	MW-35	02/20/2018	ND	0.001	mg/L		
Thallium, total	MW-35	05/17/2018	ND	0.001	mg/L		
Thallium, total	MW-35	08/22/2018	ND	0.001	mg/L		
Thallium, total	MW-35	11/12/2018	ND	0.001	mg/L		
Thallium, total	MW-35	11/12/2019	ND	0.001	mg/L		
Thallium, total	MW-35	11/19/2020	ND	0.001	mg/L		
Thallium, total	MW-35	11/16/2021	ND	0.001	mg/L		
Thallium, total	MW-35	11/17/2022	ND	0.001	mg/L		
Thallium, total	MW-35	11/08/2023	ND	0.001	mg/L		
Total dissolved solids (tds)	MW-13A	03/22/2005		113	mg/L		
Total dissolved solids (tds)	MW-13A	06/15/2005		111	mg/L		
Total dissolved solids (tds)	MW-13A	09/27/2005		175	mg/L		
Total dissolved solids (tds)	MW-13A	12/15/2005		166	mg/L		
Total dissolved solids (tds)	MW-13A	03/28/2006		110	mg/L		
Total dissolved solids (tds)	MW-13A	06/21/2006		120	mg/L		
Total dissolved solids (tds)	MW-13A	09/26/2006		110	mg/L		
Total dissolved solids (tds)	MW-13A	12/13/2006		100	mg/L		
Total dissolved solids (tds)	MW-13A	03/27/2007		100	mg/L		
Total dissolved solids (tds)	MW-13A	06/19/2007		100	mg/L		
Total dissolved solids (tds)	MW-13A	09/19/2007		110	mg/L		
Total dissolved solids (tds)	MW-13A	12/19/2007		84	mg/L		
Total dissolved solids (tds)	MW-13A	03/25/2008		99	mg/L		
Total dissolved solids (tds)	MW-13A	06/18/2008		110	mg/L		
Total dissolved solids (tds)	MW-13A	09/17/2008		110	mg/L		
Total dissolved solids (tds)	MW-13A	12/17/2008		90	mg/L		
Total dissolved solids (tds)	MW-13A	03/24/2009		95	mg/L		
Total dissolved solids (tds)	MW-13A	06/17/2009		110	mg/L		
Total dissolved solids (tds)	MW-13A	09/10/2009		100	mg/L		
Total dissolved solids (tds)	MW-13A	12/03/2009		100	mg/L		
Total dissolved solids (tds)	MW-13A	03/25/2010		100	mg/L		
Total dissolved solids (tds)	MW-13A	06/23/2010		120	mg/L		
Total dissolved solids (tds)	MW-13A	09/23/2010		98	mg/L		
Total dissolved solids (tds)	MW-13A	12/08/2010		90	mg/L		
Total dissolved solids (tds)	MW-13A	03/30/2011		110	mg/L		
Total dissolved solids (tds)	MW-13A	06/06/2011		110	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Total dissolved solids (tds)	MW-13A	09/27/2011		100	mg/L		
Total dissolved solids (tds)	MW-13A	12/14/2011		97	mg/L		
Total dissolved solids (tds)	MW-13A	03/21/2012		93	mg/L		
Total dissolved solids (tds)	MW-13A	06/08/2012		120	mg/L		
Total dissolved solids (tds)	MW-13A	09/26/2012		120	mg/L		
Total dissolved solids (tds)	MW-13A	12/03/2012		88	mg/L		
Total dissolved solids (tds)	MW-13A	03/11/2013		100	mg/L		
Total dissolved solids (tds)	MW-13A	06/05/2013		100	mg/L		
Total dissolved solids (tds)	MW-13A	12/03/2013		98	mg/L		
Total dissolved solids (tds)	MW-13A	03/04/2014		100	mg/L		
Total dissolved solids (tds)	MW-13A	06/02/2014		100	mg/L		
Total dissolved solids (tds)	MW-13A	09/22/2014		110	mg/L		
Total dissolved solids (tds)	MW-13A	11/17/2014		110	mg/L		
Total dissolved solids (tds)	MW-13A	02/23/2015		99	mg/L		
Total dissolved solids (tds)	MW-13A	05/19/2015		100	mg/L		
Total dissolved solids (tds)	MW-13A	08/26/2015		97	mg/L		
Total dissolved solids (tds)	MW-13A	11/10/2015		100	mg/L		
Total dissolved solids (tds)	MW-13A	02/22/2016		100	mg/L		
Total dissolved solids (tds)	MW-13A	05/16/2016		99	mg/L		
Total dissolved solids (tds)	MW-13A	08/31/2016		130	mg/L		
Total dissolved solids (tds)	MW-13A	11/14/2016		110	mg/L		
Total dissolved solids (tds)	MW-13A	02/22/2017		110	mg/L		
Total dissolved solids (tds)	MW-13A	05/24/2017		100	mg/L		
Total dissolved solids (tds)	MW-13A	08/30/2017		100	mg/L		
Total dissolved solids (tds)	MW-13A	11/13/2017		110	mg/L		
Total dissolved solids (tds)	MW-13A	02/20/2018		110	mg/L		
Total dissolved solids (tds)	MW-13A	05/15/2018		110	mg/L		
Total dissolved solids (tds)	MW-13A	08/21/2018		110	mg/L		
Total dissolved solids (tds)	MW-13A	11/12/2018		98	mg/L		
Total dissolved solids (tds)	MW-13A	11/11/2019		100	mg/L		
Total dissolved solids (tds)	MW-13A	11/19/2020		130	mg/L		
Total dissolved solids (tds)	MW-13A	11/16/2021		100	mg/L		
Total dissolved solids (tds)	MW-13A	11/17/2022		88	mg/L		
Total dissolved solids (tds)	MW-13A	11/08/2023		98	mg/L		
Total dissolved solids (tds)	MW-13B	03/22/2005		108	mg/L		
Total dissolved solids (tds)	MW-13B	06/15/2005		114	mg/L		
Total dissolved solids (tds)	MW-13B	09/27/2005		111	mg/L		
Total dissolved solids (tds)	MW-13B	12/15/2005		130	mg/L		
Total dissolved solids (tds)	MW-13B	03/29/2006		89	mg/L		
Total dissolved solids (tds)	MW-13B	06/21/2006		110	mg/L		
Total dissolved solids (tds)	MW-13B	09/26/2006		100	mg/L		
Total dissolved solids (tds)	MW-13B	12/13/2006		98	mg/L		
Total dissolved solids (tds)	MW-13B	03/27/2007		100	mg/L		
Total dissolved solids (tds)	MW-13B	06/19/2007		99	mg/L		
Total dissolved solids (tds)	MW-13B	09/18/2007		99	mg/L		
Total dissolved solids (tds)	MW-13B	12/19/2007		91	mg/L		
Total dissolved solids (tds)	MW-13B	03/25/2008		99	mg/L		
Total dissolved solids (tds)	MW-13B	06/18/2008		120	mg/L		
Total dissolved solids (tds)	MW-13B	09/17/2008		110	mg/L		
Total dissolved solids (tds)	MW-13B	12/16/2008		93	mg/L		
Total dissolved solids (tds)	MW-13B	03/24/2009		94	mg/L		
Total dissolved solids (tds)	MW-13B	06/17/2009		100	mg/L		
Total dissolved solids (tds)	MW-13B	09/10/2009		100	mg/L		
Total dissolved solids (tds)	MW-13B	12/03/2009		110	mg/L		
Total dissolved solids (tds)	MW-13B	03/25/2010		100	mg/L		
Total dissolved solids (tds)	MW-13B	06/23/2010		110	mg/L		
Total dissolved solids (tds)	MW-13B	09/23/2010		94	mg/L		
Total dissolved solids (tds)	MW-13B	12/08/2010		94	mg/L		
Total dissolved solids (tds)	MW-13B	03/30/2011		110	mg/L		
Total dissolved solids (tds)	MW-13B	06/06/2011		99	mg/L		
Total dissolved solids (tds)	MW-13B	09/27/2011		100	mg/L		
Total dissolved solids (tds)	MW-13B	12/14/2011		91	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Total dissolved solids (tds)	MW-13B	03/21/2012		100	mg/L		
Total dissolved solids (tds)	MW-13B	06/08/2012		110	mg/L		
Total dissolved solids (tds)	MW-13B	09/26/2012		110	mg/L		
Total dissolved solids (tds)	MW-13B	12/03/2012		93	mg/L		
Total dissolved solids (tds)	MW-13B	03/11/2013		100	mg/L		
Total dissolved solids (tds)	MW-13B	06/05/2013		98	mg/L		
Total dissolved solids (tds)	MW-13B	12/03/2013		99	mg/L		
Total dissolved solids (tds)	MW-13B	03/04/2014		99	mg/L		
Total dissolved solids (tds)	MW-13B	06/02/2014		100	mg/L		
Total dissolved solids (tds)	MW-13B	09/22/2014		110	mg/L		
Total dissolved solids (tds)	MW-13B	11/17/2014		110	mg/L		
Total dissolved solids (tds)	MW-13B	02/23/2015		110	mg/L		
Total dissolved solids (tds)	MW-13B	05/19/2015		110	mg/L		
Total dissolved solids (tds)	MW-13B	08/26/2015		98	mg/L		
Total dissolved solids (tds)	MW-13B	11/10/2015		100	mg/L		
Total dissolved solids (tds)	MW-13B	02/22/2016		100	mg/L		
Total dissolved solids (tds)	MW-13B	05/16/2016		99	mg/L		
Total dissolved solids (tds)	MW-13B	08/31/2016		120	mg/L		
Total dissolved solids (tds)	MW-13B	11/14/2016		100	mg/L		
Total dissolved solids (tds)	MW-13B	02/22/2017		110	mg/L		
Total dissolved solids (tds)	MW-13B	05/24/2017		97	mg/L		
Total dissolved solids (tds)	MW-13B	08/30/2017		110	mg/L		
Total dissolved solids (tds)	MW-13B	11/13/2017		110	mg/L		
Total dissolved solids (tds)	MW-13B	02/20/2018		99	mg/L		
Total dissolved solids (tds)	MW-13B	05/15/2018		100	mg/L		
Total dissolved solids (tds)	MW-13B	08/21/2018		110	mg/L		
Total dissolved solids (tds)	MW-13B	11/12/2018		110	mg/L		
Total dissolved solids (tds)	MW-13B	11/11/2019		100	mg/L		
Total dissolved solids (tds)	MW-13B	11/19/2020		120	mg/L		
Total dissolved solids (tds)	MW-13B	11/16/2021		97	mg/L		
Total dissolved solids (tds)	MW-13B	11/17/2022		93	mg/L		
Total dissolved solids (tds)	MW-13B	11/08/2023		99	mg/L		
Total dissolved solids (tds)	MW-16	03/24/2009		87	mg/L		
Total dissolved solids (tds)	MW-16	06/16/2009		85	mg/L		
Total dissolved solids (tds)	MW-16	09/09/2009		89	mg/L		
Total dissolved solids (tds)	MW-16	12/03/2009		97	mg/L		
Total dissolved solids (tds)	MW-16	03/25/2010		83	mg/L		
Total dissolved solids (tds)	MW-16	06/24/2010		95	mg/L		
Total dissolved solids (tds)	MW-16	09/24/2010		120	mg/L		
Total dissolved solids (tds)	MW-16	12/09/2010		100	mg/L		
Total dissolved solids (tds)	MW-16	03/30/2011		91	mg/L		
Total dissolved solids (tds)	MW-16	06/07/2011		94	mg/L		
Total dissolved solids (tds)	MW-16	09/27/2011		100	mg/L		
Total dissolved solids (tds)	MW-16	12/13/2011		93	mg/L		
Total dissolved solids (tds)	MW-16	03/21/2012		71	mg/L		
Total dissolved solids (tds)	MW-16	06/08/2012		95	mg/L		
Total dissolved solids (tds)	MW-16	09/27/2012		87	mg/L		
Total dissolved solids (tds)	MW-16	12/04/2012		100	mg/L		
Total dissolved solids (tds)	MW-16	03/12/2013		100	mg/L		
Total dissolved solids (tds)	MW-16	06/04/2013		68	mg/L		
Total dissolved solids (tds)	MW-16	09/05/2013		100	mg/L		
Total dissolved solids (tds)	MW-16	12/16/2013		92	mg/L		
Total dissolved solids (tds)	MW-16	03/05/2014		82	mg/L		
Total dissolved solids (tds)	MW-16	06/02/2014		79	mg/L		
Total dissolved solids (tds)	MW-16	09/22/2014		93	mg/L		
Total dissolved solids (tds)	MW-16	11/18/2014		100	mg/L		
Total dissolved solids (tds)	MW-16	02/23/2015		80	mg/L		
Total dissolved solids (tds)	MW-16	05/20/2015		99	mg/L		
Total dissolved solids (tds)	MW-16	08/26/2015		93	mg/L		
Total dissolved solids (tds)	MW-16	11/11/2015		99	mg/L		
Total dissolved solids (tds)	MW-16	02/24/2016		79	mg/L		
Total dissolved solids (tds)	MW-16	05/16/2016		83	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

Total dissolved solids (tds)	MW-16	08/31/2016		93	mg/L		
Total dissolved solids (tds)	MW-16	11/14/2016		86	mg/L		
Total dissolved solids (tds)	MW-16	02/22/2017		80	mg/L		
Total dissolved solids (tds)	MW-16	05/24/2017		93	mg/L		
Total dissolved solids (tds)	MW-16	08/30/2017		85	mg/L		
Total dissolved solids (tds)	MW-16	11/13/2017		80	mg/L		
Total dissolved solids (tds)	MW-16	02/20/2018		80	mg/L		
Total dissolved solids (tds)	MW-16	05/17/2018		65	mg/L		
Total dissolved solids (tds)	MW-16	08/22/2018		100	mg/L		
Total dissolved solids (tds)	MW-16	11/12/2018		81	mg/L		
Total dissolved solids (tds)	MW-16	11/12/2019		82	mg/L		
Total dissolved solids (tds)	MW-16	11/20/2020		100	mg/L		
Total dissolved solids (tds)	MW-16	11/16/2021		98	mg/L		
Total dissolved solids (tds)	MW-16	11/17/2022		82	mg/L		
Total dissolved solids (tds)	MW-16	11/08/2023		81	mg/L		
Total dissolved solids (tds)	MW-35	03/22/2005		100	mg/L		
Total dissolved solids (tds)	MW-35	06/14/2005		88	mg/L		
Total dissolved solids (tds)	MW-35	09/27/2005		123	mg/L		
Total dissolved solids (tds)	MW-35	12/15/2005		87	mg/L		
Total dissolved solids (tds)	MW-35	03/28/2006		91	mg/L		
Total dissolved solids (tds)	MW-35	06/21/2006		110	mg/L		
Total dissolved solids (tds)	MW-35	09/26/2006		110	mg/L		
Total dissolved solids (tds)	MW-35	12/12/2006		90	mg/L		
Total dissolved solids (tds)	MW-35	03/27/2007		93	mg/L		
Total dissolved solids (tds)	MW-35	06/20/2007		110	mg/L		
Total dissolved solids (tds)	MW-35	09/18/2007		90	mg/L		
Total dissolved solids (tds)	MW-35	12/20/2007		120	mg/L		
Total dissolved solids (tds)	MW-35	03/25/2008		76	mg/L		
Total dissolved solids (tds)	MW-35	06/18/2008		93	mg/L		
Total dissolved solids (tds)	MW-35	09/18/2008		92	mg/L		
Total dissolved solids (tds)	MW-35	12/19/2008		93	mg/L		
Total dissolved solids (tds)	MW-35	03/24/2009		84	mg/L		
Total dissolved solids (tds)	MW-35	06/16/2009		95	mg/L		
Total dissolved solids (tds)	MW-35	09/10/2009		83	mg/L		
Total dissolved solids (tds)	MW-35	12/03/2009		85	mg/L		
Total dissolved solids (tds)	MW-35	03/25/2010		96	mg/L		
Total dissolved solids (tds)	MW-35	06/23/2010		100	mg/L		
Total dissolved solids (tds)	MW-35	09/23/2010		86	mg/L		
Total dissolved solids (tds)	MW-35	12/09/2010		97	mg/L		
Total dissolved solids (tds)	MW-35	03/30/2011		91	mg/L		
Total dissolved solids (tds)	MW-35	06/06/2011		96	mg/L		
Total dissolved solids (tds)	MW-35	09/26/2011		100	mg/L		
Total dissolved solids (tds)	MW-35	12/13/2011		95	mg/L		
Total dissolved solids (tds)	MW-35	03/21/2012		85	mg/L		
Total dissolved solids (tds)	MW-35	06/06/2012		120	mg/L		
Total dissolved solids (tds)	MW-35	09/26/2012		110	mg/L		
Total dissolved solids (tds)	MW-35	12/04/2012		100	mg/L		
Total dissolved solids (tds)	MW-35	03/13/2013		96	mg/L		
Total dissolved solids (tds)	MW-35	06/06/2013		90	mg/L		
Total dissolved solids (tds)	MW-35	09/05/2013		100	mg/L		
Total dissolved solids (tds)	MW-35	12/16/2013		95	mg/L		
Total dissolved solids (tds)	MW-35	03/04/2014		94	mg/L		
Total dissolved solids (tds)	MW-35	06/02/2014		92	mg/L		
Total dissolved solids (tds)	MW-35	09/22/2014		99	mg/L		
Total dissolved solids (tds)	MW-35	11/17/2014		100	mg/L		
Total dissolved solids (tds)	MW-35	02/25/2015		93	mg/L		
Total dissolved solids (tds)	MW-35	05/19/2015		110	mg/L		
Total dissolved solids (tds)	MW-35	08/26/2015		99	mg/L		
Total dissolved solids (tds)	MW-35	11/10/2015		98	mg/L		
Total dissolved solids (tds)	MW-35	02/22/2016		93	mg/L		
Total dissolved solids (tds)	MW-35	05/16/2016		100	mg/L		
Total dissolved solids (tds)	MW-35	08/31/2016		95	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Total dissolved solids (tds)	MW-35	11/15/2016		120	mg/L		
Total dissolved solids (tds)	MW-35	02/22/2017		100	mg/L		
Total dissolved solids (tds)	MW-35	05/24/2017		110	mg/L		
Total dissolved solids (tds)	MW-35	08/30/2017		99	mg/L		
Total dissolved solids (tds)	MW-35	11/15/2017		100	mg/L		
Total dissolved solids (tds)	MW-35	02/20/2018		98	mg/L		
Total dissolved solids (tds)	MW-35	05/17/2018		92	mg/L		
Total dissolved solids (tds)	MW-35	08/22/2018		110	mg/L		
Total dissolved solids (tds)	MW-35	11/12/2018		100	mg/L		
Total dissolved solids (tds)	MW-35	11/12/2019		89	mg/L		
Total dissolved solids (tds)	MW-35	11/19/2020		110	mg/L		
Total dissolved solids (tds)	MW-35	11/16/2021		97	mg/L		
Total dissolved solids (tds)	MW-35	11/17/2022		85	mg/L		
Total dissolved solids (tds)	MW-35	11/08/2023		90	mg/L		
Total organic carbon (toc)	MW-13A	03/22/2005	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	06/15/2005	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	09/27/2005	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	12/15/2005	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	03/28/2006	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	06/21/2006		2.2	mg/L		
Total organic carbon (toc)	MW-13A	09/26/2006		6	mg/L		
Total organic carbon (toc)	MW-13A	12/13/2006	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	03/27/2007	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	06/19/2007	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	09/19/2007	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	12/19/2007	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	03/25/2008	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	06/18/2008	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	09/17/2008	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	12/17/2008		1	mg/L		
Total organic carbon (toc)	MW-13A	03/24/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	06/17/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	09/10/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	12/03/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	03/25/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	06/23/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	09/23/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	12/08/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	03/30/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	06/06/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	09/27/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	12/14/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	03/21/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	06/08/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	09/26/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	12/03/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	03/11/2013	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	06/05/2013	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	12/03/2013	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	03/04/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	06/02/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	09/22/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	11/17/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	05/19/2015	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	02/22/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	05/16/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	08/31/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	11/14/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	02/22/2017	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	05/24/2017	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	08/30/2017	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	11/13/2017	ND	1	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Total organic carbon (toc)	MW-13A	02/20/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	05/15/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	08/21/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	11/12/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	11/11/2019	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	11/19/2020	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	11/16/2021	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	11/17/2022	ND	1	mg/L		
Total organic carbon (toc)	MW-13A	11/08/2023	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	03/22/2005	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	06/15/2005	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	09/27/2005	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	12/15/2005	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	03/29/2006	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	06/21/2006	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	09/26/2006		4.8	mg/L		
Total organic carbon (toc)	MW-13B	12/13/2006	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	03/27/2007	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	06/19/2007	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	09/18/2007	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	12/19/2007	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	03/25/2008	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	06/18/2008	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	09/17/2008	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	12/16/2008	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	03/24/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	06/17/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	09/10/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	12/03/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	03/25/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	06/23/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	09/23/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	12/08/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	03/30/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	06/06/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	09/27/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	12/14/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	03/21/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	06/08/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	09/26/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	12/03/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	03/11/2013	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	06/05/2013	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	12/03/2013	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	03/04/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	06/02/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	09/22/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	11/17/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	05/19/2015	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	02/22/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	05/16/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	08/31/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	11/14/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	02/22/2017	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	05/24/2017	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	08/30/2017	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	11/13/2017	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	02/20/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	05/15/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	08/21/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	11/12/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	11/11/2019	ND	1	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Total organic carbon (toc)	MW-13B	11/19/2020	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	11/16/2021	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	11/17/2022	ND	1	mg/L		
Total organic carbon (toc)	MW-13B	11/08/2023	ND	1	mg/L		
Total organic carbon (toc)	MW-16	03/24/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-16	06/16/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-16	09/09/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-16	12/03/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-16	03/25/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-16	06/24/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-16	09/24/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-16	12/09/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-16	03/30/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-16	06/07/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-16	09/27/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-16	12/13/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-16	03/21/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-16	06/08/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-16	09/27/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-16	12/04/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-16	03/12/2013	ND	1	mg/L		
Total organic carbon (toc)	MW-16	06/04/2013	ND	1	mg/L		
Total organic carbon (toc)	MW-16	09/05/2013	ND	1	mg/L		
Total organic carbon (toc)	MW-16	12/16/2013	ND	1	mg/L		
Total organic carbon (toc)	MW-16	03/05/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-16	06/02/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-16	09/22/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-16	11/18/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-16	05/20/2015	ND	1	mg/L		
Total organic carbon (toc)	MW-16	02/24/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-16	05/16/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-16	08/31/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-16	11/14/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-16	02/22/2017	ND	1	mg/L		
Total organic carbon (toc)	MW-16	05/24/2017	ND	1	mg/L		
Total organic carbon (toc)	MW-16	08/30/2017	ND	1	mg/L		
Total organic carbon (toc)	MW-16	11/13/2017	ND	1	mg/L		
Total organic carbon (toc)	MW-16	02/20/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-16	05/17/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-16	08/22/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-16	11/12/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-16	11/12/2019	ND	1	mg/L		
Total organic carbon (toc)	MW-16	11/20/2020	ND	1	mg/L		
Total organic carbon (toc)	MW-16	11/16/2021	ND	1	mg/L		
Total organic carbon (toc)	MW-16	11/17/2022	ND	1	mg/L		
Total organic carbon (toc)	MW-16	11/08/2023	ND	1	mg/L		
Total organic carbon (toc)	MW-35	03/22/2005	ND	1	mg/L		
Total organic carbon (toc)	MW-35	06/14/2005	ND	1	mg/L		
Total organic carbon (toc)	MW-35	09/27/2005	ND	1	mg/L		
Total organic carbon (toc)	MW-35	12/15/2005	ND	1	mg/L		
Total organic carbon (toc)	MW-35	03/28/2006	ND	1	mg/L		
Total organic carbon (toc)	MW-35	06/21/2006		2.1	mg/L		
Total organic carbon (toc)	MW-35	09/26/2006		4.3	mg/L		
Total organic carbon (toc)	MW-35	12/12/2006	ND	1	mg/L		
Total organic carbon (toc)	MW-35	03/27/2007	ND	1	mg/L		
Total organic carbon (toc)	MW-35	06/20/2007	ND	1	mg/L		
Total organic carbon (toc)	MW-35	09/18/2007	ND	1	mg/L		
Total organic carbon (toc)	MW-35	12/20/2007	ND	1	mg/L		
Total organic carbon (toc)	MW-35	03/25/2008	ND	1	mg/L		
Total organic carbon (toc)	MW-35	06/18/2008	ND	1	mg/L		
Total organic carbon (toc)	MW-35	09/18/2008	ND	1	mg/L		
Total organic carbon (toc)	MW-35	12/19/2008		1	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Total organic carbon (toc)	MW-35	03/24/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-35	06/16/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-35	09/10/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-35	12/03/2009	ND	1	mg/L		
Total organic carbon (toc)	MW-35	03/25/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-35	06/23/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-35	09/23/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-35	12/09/2010	ND	1	mg/L		
Total organic carbon (toc)	MW-35	03/30/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-35	06/06/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-35	09/26/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-35	12/13/2011	ND	1	mg/L		
Total organic carbon (toc)	MW-35	03/21/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-35	06/06/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-35	09/26/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-35	12/04/2012	ND	1	mg/L		
Total organic carbon (toc)	MW-35	03/13/2013	ND	1	mg/L		
Total organic carbon (toc)	MW-35	06/06/2013	ND	1	mg/L		
Total organic carbon (toc)	MW-35	09/05/2013	ND	1	mg/L		
Total organic carbon (toc)	MW-35	12/16/2013	ND	1	mg/L		
Total organic carbon (toc)	MW-35	03/04/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-35	06/02/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-35	09/22/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-35	11/17/2014	ND	1	mg/L		
Total organic carbon (toc)	MW-35	05/19/2015	ND	1	mg/L		
Total organic carbon (toc)	MW-35	02/22/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-35	05/16/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-35	08/31/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-35	11/15/2016	ND	1	mg/L		
Total organic carbon (toc)	MW-35	02/22/2017	ND	1	mg/L		
Total organic carbon (toc)	MW-35	05/24/2017	ND	1	mg/L		
Total organic carbon (toc)	MW-35	08/30/2017	ND	1	mg/L		
Total organic carbon (toc)	MW-35	11/15/2017	ND	1	mg/L		
Total organic carbon (toc)	MW-35	02/20/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-35	05/17/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-35	08/22/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-35	11/12/2018	ND	1	mg/L		
Total organic carbon (toc)	MW-35	11/12/2019	ND	1	mg/L		
Total organic carbon (toc)	MW-35	11/19/2020	ND	1	mg/L		
Total organic carbon (toc)	MW-35	11/16/2021	ND	1	mg/L		
Total organic carbon (toc)	MW-35	11/17/2022	ND	1	mg/L		
Total organic carbon (toc)	MW-35	11/08/2023	ND	1	mg/L		
Vanadium, total	MW-13A	12/03/2013		0.0042	mg/L		
Vanadium, total	MW-13A	03/04/2014		0.0042	mg/L		
Vanadium, total	MW-13A	06/02/2014		0.0048	mg/L		
Vanadium, total	MW-13A	09/22/2014		0.0039	mg/L		
Vanadium, total	MW-13A	11/17/2014		0.0042	mg/L		
Vanadium, total	MW-13A	02/23/2015		0.0042	mg/L		
Vanadium, total	MW-13A	05/19/2015		0.0034	mg/L		
Vanadium, total	MW-13A	08/26/2015		0.0039	mg/L		
Vanadium, total	MW-13A	11/10/2015		0.004	mg/L		
Vanadium, total	MW-13A	02/22/2016		0.004	mg/L		
Vanadium, total	MW-13A	05/16/2016		0.0039	mg/L		
Vanadium, total	MW-13A	08/31/2016		0.0041	mg/L		
Vanadium, total	MW-13A	11/14/2016		0.0039	mg/L		
Vanadium, total	MW-13A	02/22/2017		0.0043	mg/L		
Vanadium, total	MW-13A	05/24/2017		0.0033	mg/L		
Vanadium, total	MW-13A	08/30/2017		0.0039	mg/L		
Vanadium, total	MW-13A	11/13/2017		0.0038	mg/L		
Vanadium, total	MW-13A	02/20/2018		0.0026	mg/L		
Vanadium, total	MW-13A	05/15/2018	ND	0.002	mg/L		
Vanadium, total	MW-13A	08/21/2018		0.0041	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Vanadium, total	MW-13A	11/12/2018		0.0039	mg/L		
Vanadium, total	MW-13A	11/11/2019		0.0022	mg/L		
Vanadium, total	MW-13A	11/19/2020		0.0037	mg/L		
Vanadium, total	MW-13A	11/16/2021		0.0041	mg/L		
Vanadium, total	MW-13A	11/17/2022		0.0043	mg/L		
Vanadium, total	MW-13A	11/08/2023		0.0037	mg/L		
Vanadium, total	MW-13B	12/03/2013		0.0058	mg/L		
Vanadium, total	MW-13B	03/04/2014		0.0057	mg/L		
Vanadium, total	MW-13B	06/02/2014		0.0057	mg/L		
Vanadium, total	MW-13B	09/22/2014		0.005	mg/L		
Vanadium, total	MW-13B	11/17/2014		0.0055	mg/L		
Vanadium, total	MW-13B	02/23/2015		0.0054	mg/L		
Vanadium, total	MW-13B	05/19/2015		0.0054	mg/L		
Vanadium, total	MW-13B	08/26/2015		0.0056	mg/L		
Vanadium, total	MW-13B	11/10/2015		0.0058	mg/L		
Vanadium, total	MW-13B	02/22/2016		0.0058	mg/L		
Vanadium, total	MW-13B	05/16/2016		0.0056	mg/L		
Vanadium, total	MW-13B	08/31/2016		0.0054	mg/L		
Vanadium, total	MW-13B	11/14/2016		0.0061	mg/L		
Vanadium, total	MW-13B	02/22/2017		0.0058	mg/L		
Vanadium, total	MW-13B	05/24/2017		0.0044	mg/L		
Vanadium, total	MW-13B	08/30/2017		0.0054	mg/L		
Vanadium, total	MW-13B	11/13/2017		0.0051	mg/L		
Vanadium, total	MW-13B	02/20/2018		0.0045	mg/L		
Vanadium, total	MW-13B	05/15/2018		0.0029	mg/L		
Vanadium, total	MW-13B	08/21/2018		0.0058	mg/L		
Vanadium, total	MW-13B	11/12/2018		0.0054	mg/L		
Vanadium, total	MW-13B	11/11/2019		0.0034	mg/L		
Vanadium, total	MW-13B	11/19/2020		0.0056	mg/L		
Vanadium, total	MW-13B	11/16/2021		0.0056	mg/L		
Vanadium, total	MW-13B	11/17/2022		0.0058	mg/L		
Vanadium, total	MW-13B	11/08/2023		0.0051	mg/L		
Vanadium, total	MW-16	09/05/2013		0.0034	mg/L		
Vanadium, total	MW-16	12/16/2013		0.0039	mg/L		
Vanadium, total	MW-16	03/05/2014		0.0042	mg/L		
Vanadium, total	MW-16	06/02/2014		0.0042	mg/L		
Vanadium, total	MW-16	09/22/2014		0.0042	mg/L		
Vanadium, total	MW-16	11/18/2014		0.004	mg/L		
Vanadium, total	MW-16	02/23/2015		0.0051	mg/L		
Vanadium, total	MW-16	05/20/2015		0.0042	mg/L		
Vanadium, total	MW-16	08/26/2015		0.0032	mg/L		
Vanadium, total	MW-16	11/11/2015		0.0034	mg/L		
Vanadium, total	MW-16	02/24/2016		0.0043	mg/L		
Vanadium, total	MW-16	05/16/2016		0.0034	mg/L		
Vanadium, total	MW-16	08/31/2016		0.0042	mg/L		
Vanadium, total	MW-16	11/14/2016		0.0049	mg/L		
Vanadium, total	MW-16	02/22/2017		0.0047	mg/L		
Vanadium, total	MW-16	05/24/2017		0.003	mg/L		
Vanadium, total	MW-16	08/30/2017		0.0033	mg/L		
Vanadium, total	MW-16	11/13/2017		0.0031	mg/L		
Vanadium, total	MW-16	02/20/2018		0.0029	mg/L		
Vanadium, total	MW-16	05/17/2018		0.0037	mg/L		
Vanadium, total	MW-16	08/22/2018		0.0034	mg/L		
Vanadium, total	MW-16	11/12/2018		0.0047	mg/L		
Vanadium, total	MW-16	11/12/2019		0.0036	mg/L		
Vanadium, total	MW-16	11/20/2020		0.009	mg/L		
Vanadium, total	MW-16	11/16/2021		0.0038	mg/L		
Vanadium, total	MW-16	11/17/2022		0.0039	mg/L		
Vanadium, total	MW-16	11/08/2023		0.0035	mg/L		
Vanadium, total	MW-35	09/05/2013		0.0042	mg/L		
Vanadium, total	MW-35	12/16/2013		0.0046	mg/L		
Vanadium, total	MW-35	03/04/2014		0.0047	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Vanadium, total	MW-35	06/02/2014		0.0042	mg/L		
Vanadium, total	MW-35	09/22/2014		0.0044	mg/L		
Vanadium, total	MW-35	11/17/2014		0.0042	mg/L		
Vanadium, total	MW-35	02/25/2015		0.0048	mg/L		
Vanadium, total	MW-35	05/19/2015		0.0042	mg/L		
Vanadium, total	MW-35	08/26/2015		0.0041	mg/L		
Vanadium, total	MW-35	11/10/2015		0.0043	mg/L		
Vanadium, total	MW-35	02/22/2016		0.0045	mg/L		
Vanadium, total	MW-35	05/16/2016		0.0046	mg/L		
Vanadium, total	MW-35	08/31/2016		0.0046	mg/L		
Vanadium, total	MW-35	11/15/2016		0.0043	mg/L		
Vanadium, total	MW-35	02/22/2017		0.005	mg/L		
Vanadium, total	MW-35	05/24/2017		0.0034	mg/L		
Vanadium, total	MW-35	08/30/2017		0.0042	mg/L		
Vanadium, total	MW-35	11/15/2017		0.004	mg/L		
Vanadium, total	MW-35	02/20/2018		0.0032	mg/L		
Vanadium, total	MW-35	05/17/2018		0.0044	mg/L		
Vanadium, total	MW-35	08/22/2018		0.0042	mg/L		
Vanadium, total	MW-35	11/12/2018		0.0042	mg/L		
Vanadium, total	MW-35	11/12/2019		0.0041	mg/L		
Vanadium, total	MW-35	11/19/2020		0.0043	mg/L		
Vanadium, total	MW-35	11/16/2021		0.0046	mg/L		
Vanadium, total	MW-35	11/17/2022		0.0041	mg/L		
Vanadium, total	MW-35	11/08/2023		0.0043	mg/L		
Zinc, total	MW-13A	12/03/2013	ND	0.005	mg/L		
Zinc, total	MW-13A	03/04/2014	ND	0.005	mg/L		
Zinc, total	MW-13A	06/02/2014	ND	0.005	mg/L		
Zinc, total	MW-13A	09/22/2014	ND	0.005	mg/L		
Zinc, total	MW-13A	11/17/2014	ND	0.005	mg/L		
Zinc, total	MW-13A	02/23/2015	ND	0.005	mg/L		
Zinc, total	MW-13A	05/19/2015	ND	0.005	mg/L		
Zinc, total	MW-13A	08/26/2015	ND	0.005	mg/L		
Zinc, total	MW-13A	11/10/2015	ND	0.005	mg/L		
Zinc, total	MW-13A	02/22/2016	ND	0.005	mg/L		
Zinc, total	MW-13A	05/16/2016	ND	0.005	mg/L		
Zinc, total	MW-13A	08/31/2016	ND	0.005	mg/L		
Zinc, total	MW-13A	11/14/2016	ND	0.005	mg/L		
Zinc, total	MW-13A	02/22/2017	ND	0.005	mg/L		
Zinc, total	MW-13A	05/24/2017	ND	0.005	mg/L		
Zinc, total	MW-13A	08/30/2017	ND	0.005	mg/L		
Zinc, total	MW-13A	11/13/2017	ND	0.005	mg/L		
Zinc, total	MW-13A	02/20/2018	ND	0.005	mg/L		
Zinc, total	MW-13A	05/15/2018	ND	0.005	mg/L		
Zinc, total	MW-13A	08/21/2018	ND	0.005	mg/L		
Zinc, total	MW-13A	11/12/2018	ND	0.005	mg/L		
Zinc, total	MW-13A	11/11/2019	ND	0.005	mg/L		
Zinc, total	MW-13A	11/19/2020	ND	0.005	mg/L		
Zinc, total	MW-13A	11/16/2021	ND	0.005	mg/L		
Zinc, total	MW-13A	11/17/2022	ND	0.005	mg/L		
Zinc, total	MW-13A	11/08/2023	ND	0.005	mg/L		
Zinc, total	MW-13B	12/03/2013	ND	0.005	mg/L		
Zinc, total	MW-13B	03/04/2014	ND	0.005	mg/L		
Zinc, total	MW-13B	06/02/2014	ND	0.005	mg/L		
Zinc, total	MW-13B	09/22/2014	ND	0.005	mg/L		
Zinc, total	MW-13B	11/17/2014	ND	0.005	mg/L		
Zinc, total	MW-13B	02/23/2015	ND	0.005	mg/L		
Zinc, total	MW-13B	05/19/2015	ND	0.005	mg/L		
Zinc, total	MW-13B	08/26/2015	ND	0.005	mg/L		
Zinc, total	MW-13B	11/10/2015	ND	0.005	mg/L		
Zinc, total	MW-13B	02/22/2016	ND	0.005	mg/L		
Zinc, total	MW-13B	05/16/2016	ND	0.005	mg/L		
Zinc, total	MW-13B	08/31/2016	ND	0.005	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Zinc, total	MW-13B	11/14/2016	ND	0.005	mg/L		
Zinc, total	MW-13B	02/22/2017	ND	0.005	mg/L		
Zinc, total	MW-13B	05/24/2017	ND	0.005	mg/L		
Zinc, total	MW-13B	08/30/2017	ND	0.005	mg/L		
Zinc, total	MW-13B	11/13/2017	ND	0.005	mg/L		
Zinc, total	MW-13B	02/20/2018	ND	0.005	mg/L		
Zinc, total	MW-13B	05/15/2018	ND	0.005	mg/L		
Zinc, total	MW-13B	08/21/2018	ND	0.005	mg/L		
Zinc, total	MW-13B	11/12/2018	ND	0.005	mg/L		
Zinc, total	MW-13B	11/11/2019	ND	0.005	mg/L		
Zinc, total	MW-13B	11/19/2020	ND	0.005	mg/L		
Zinc, total	MW-13B	11/16/2021	ND	0.005	mg/L		
Zinc, total	MW-13B	11/17/2022	ND	0.005	mg/L		
Zinc, total	MW-13B	11/08/2023	ND	0.005	mg/L		
Zinc, total	MW-16	09/05/2013	ND	0.005	mg/L		
Zinc, total	MW-16	12/16/2013	ND	0.005	mg/L		
Zinc, total	MW-16	03/05/2014	ND	0.005	mg/L		
Zinc, total	MW-16	06/02/2014	ND	0.005	mg/L		
Zinc, total	MW-16	09/22/2014	ND	0.005	mg/L		
Zinc, total	MW-16	11/18/2014	ND	0.005	mg/L		
Zinc, total	MW-16	02/23/2015	ND	0.005	mg/L		
Zinc, total	MW-16	05/20/2015	ND	0.005	mg/L		
Zinc, total	MW-16	08/26/2015	ND	0.005	mg/L		
Zinc, total	MW-16	11/11/2015	ND	0.005	mg/L		
Zinc, total	MW-16	02/24/2016	ND	0.005	mg/L		
Zinc, total	MW-16	05/16/2016	ND	0.005	mg/L		
Zinc, total	MW-16	08/31/2016	ND	0.005	mg/L		
Zinc, total	MW-16	11/14/2016		0.0056	mg/L		
Zinc, total	MW-16	02/22/2017	ND	0.005	mg/L		
Zinc, total	MW-16	05/24/2017	ND	0.005	mg/L		
Zinc, total	MW-16	08/30/2017	ND	0.005	mg/L		
Zinc, total	MW-16	11/13/2017	ND	0.005	mg/L		
Zinc, total	MW-16	02/20/2018	ND	0.005	mg/L		
Zinc, total	MW-16	05/17/2018	ND	0.005	mg/L		
Zinc, total	MW-16	08/22/2018	ND	0.005	mg/L		
Zinc, total	MW-16	11/12/2018	ND	0.005	mg/L		
Zinc, total	MW-16	11/12/2019	ND	0.005	mg/L		
Zinc, total	MW-16	11/20/2020	ND	0.005	mg/L		
Zinc, total	MW-16	11/16/2021	ND	0.005	mg/L		
Zinc, total	MW-16	11/17/2022	ND	0.005	mg/L		
Zinc, total	MW-16	11/08/2023	ND	0.005	mg/L		
Zinc, total	MW-35	09/05/2013	ND	0.005	mg/L		
Zinc, total	MW-35	12/16/2013	ND	0.005	mg/L		
Zinc, total	MW-35	03/04/2014	ND	0.005	mg/L		
Zinc, total	MW-35	06/02/2014	ND	0.005	mg/L		
Zinc, total	MW-35	09/22/2014	ND	0.005	mg/L		
Zinc, total	MW-35	11/17/2014	ND	0.005	mg/L		
Zinc, total	MW-35	02/25/2015	ND	0.005	mg/L		
Zinc, total	MW-35	05/19/2015	ND	0.005	mg/L		
Zinc, total	MW-35	08/26/2015	ND	0.005	mg/L		
Zinc, total	MW-35	11/10/2015	ND	0.005	mg/L		
Zinc, total	MW-35	02/22/2016	ND	0.005	mg/L		
Zinc, total	MW-35	05/16/2016	ND	0.005	mg/L		
Zinc, total	MW-35	08/31/2016	ND	0.005	mg/L		
Zinc, total	MW-35	11/15/2016	ND	0.005	mg/L		
Zinc, total	MW-35	02/22/2017	ND	0.005	mg/L		
Zinc, total	MW-35	05/24/2017	ND	0.005	mg/L		
Zinc, total	MW-35	08/30/2017	ND	0.005	mg/L		
Zinc, total	MW-35	11/15/2017	ND	0.005	mg/L		
Zinc, total	MW-35	02/20/2018	ND	0.005	mg/L		
Zinc, total	MW-35	05/17/2018	ND	0.005	mg/L		
Zinc, total	MW-35	08/22/2018	ND	0.005	mg/L		

* = outlier for that well/constituent

** = ND value replaced with median reporting limit

ND = not detected; Result = reporting limit

TABLE 2-3
Upgradient Data Used to Calculate 2024 Prediction Limits

Zinc, total	MW-35	11/12/2018	ND	0.005	mg/L		
Zinc, total	MW-35	11/12/2019	ND	0.005	mg/L		
Zinc, total	MW-35	11/19/2020	ND	0.005	mg/L		
Zinc, total	MW-35	11/16/2021	ND	0.005	mg/L		
Zinc, total	MW-35	11/17/2022	ND	0.005	mg/L		
Zinc, total	MW-35	11/08/2023	ND	0.005	mg/L		

* = outlier for that well/constituent
** = ND value replaced with median reporting limit
ND = not detected; Result = reporting limit

TABLE 2-4
Shapiro-Wilk Multiple Group Test of Normality

Constituent	N (Detects)	N (Total)	Detection Frequency	G (raw)	G (log)	Critical Value	Distributional Form	Model Type
Alkalinity, bicarbonate (as caco3)	222	222	1.000	4.355	3.683	2.326	non-norm	nonpar
Alkalinity, total (as caco3)	226	226	1.000	4.425	3.717	2.326	non-norm	nonpar
Ammonia (as n)	75	221	0.339	6.402	0.82	2.326	lognor	nonpar
Antimony, total	3	106	0.028					nonpar
Arsenic, total	112	112	1.000	2.24	2.142	2.326	normal	normal
Barium, total	106	106	1.000	0.308	0.524	2.326	normal	normal
Beryllium, total	0	106	0.000					nonpar
Cadmium, total	0	106	0.000					nonpar
Calcium, dissolved	226	226	1.000	7.284	7.188	2.326	non-norm	nonpar
Chloride	202	226	0.894	6.876	5.156	2.326	non-norm	nonpar
Chromium, total	47	106	0.443	5.048	3.761	2.326	non-norm	nonpar
Cobalt, total	0	106	0.000					nonpar
Copper, total	1	106	0.009					nonpar
Iron, total	13	105	0.124	1.251	0.44	2.326	normal	nonpar
Lead, total	1	106	0.009					nonpar
Magnesium, dissolved	226	226	1.000	1.905	1.479	2.326	normal	normal
Manganese, total	31	106	0.292	2.436	0.784	2.326	lognor	nonpar
Nickel, total	2	106	0.019					nonpar
Nitrate (as n)	210	213	0.986	9.11	5.483	2.326	non-norm	nonpar
pH	237	237	1.000	0.732	0.966	2.326	normal	normal
Potassium, dissolved	14	226	0.062	2.153	1.799	2.326	normal	nonpar
Selenium, total	0	106	0.000					nonpar
Silver, total	0	106	0.000					nonpar
Sodium, dissolved	226	226	1.000	5.594	4.529	2.326	non-norm	nonpar
Specific conductivity	239	239	1.000	7.949	10.908	2.326	non-norm	nonpar
Sulfate	205	226	0.907	6.308	3.428	2.326	non-norm	nonpar
Temperature	239	239	1.000	8.384	7.773	2.326	non-norm	nonpar
Thallium, total	0	106	0.000					nonpar
Total dissolved solids (tds)	226	226	1.000	5.289	4.663	2.326	non-norm	nonpar
Total organic carbon (toc)	7	214	0.033	0.146	2.225	2.326	normal	nonpar
Vanadium, total	105	106	0.991	7.612	7.793	2.326	non-norm	nonpar
Zinc, total	1	106	0.009					nonpar

Fit to distribution is confirmed if G <= critical value.
Model type may not match distributional form when detection frequency < 50%.
Data in this table are based on pooled data shown in Table 2-3, outliers excluded

TABLE 2-5
COMPARISON OF UPDATED (2024) PREDICTION LIMITS† TO PREVIOUS YEAR (2023) PREDICTION LIMITS
Olympic View Sanitary Landfill

Constituent	2024 Pred. Limit	unit	Distributional Assumption	Constituent	2023 Pred. Limit	unit	Distributional Assumption
Alkalinity, bicarbonate (as CaCO3)	96	mg/L	nonparametric	Alkalinity, bicarbonate (as CaCO3)	96	mg/L	nonparametric
Alkalinity, total (as CaCO3)	96	mg/L	nonparametric	Alkalinity, total (as CaCO3)	96	mg/L	nonparametric
Ammonia (as N)	0.28	mg/L	nonparametric	Ammonia (as N)	0.28	mg/L	nonparametric
Antimony, total	0.0013	mg/L	nonparametric	Antimony, total	0.0013	mg/L	nonparametric
Arsenic, total	0.481	ugL	normal	Arsenic, total	0.480	ugL	normal
Barium, total	0.0045	mg/L	normal	Barium, total	0.0045	mg/L	normal
Beryllium, total	Current RL*	mg/L	nonparametric	Beryllium, total	Current RL*	mg/L	nonparametric
Cadmium, total	Current RL*	mg/L	nonparametric	Cadmium, total	Current RL*	mg/L	nonparametric
Calcium, dissolved	18	mg/L	nonparametric	Calcium, dissolved	18	mg/L	nonparametric
Chloride	4.4	mg/L	nonparametric	Chloride	4.4	mg/L	nonparametric
Chromium, total	0.019	mg/L	nonparametric	Chromium, total	0.019	mg/L	nonparametric
Cobalt, total	Current RL*	mg/L	nonparametric	Cobalt, total	Current RL*	mg/L	nonparametric
Copper, total	0.0021	mg/L	nonparametric	Copper, total	0.0021	mg/L	nonparametric
Iron, total	0.31	mg/L	nonparametric	Iron, total	0.31	mg/L	nonparametric
Lead, total	0.0014	mg/L	nonparametric	Lead, total	0.0014	mg/L	nonparametric
Magnesium, dissolved	11.2	mg/L	normal	Magnesium, dissolved	11.2	mg/L	normal
Manganese, total	0.11	mg/L	nonparametric	Manganese, total	0.11	mg/L	nonparametric
Nickel, total	0.0055	mg/L	nonparametric	Nickel, total	0.0055	mg/L	nonparametric
Nitrate (as N)	1.6	mg/L	nonparametric	Nitrate (as N)	1.6	mg/L	nonparametric
pH	5.82 - 8.20	units	normal	pH	5.82 - 8.20	units	normal
Potassium, dissolved	1.4	mg/L	nonparametric	Potassium, dissolved	1.4	mg/L	nonparametric
Selenium, total	Current RL*	mg/L	nonparametric	Selenium, total	Current RL*	mg/L	nonparametric
Silver, total	Current RL*	mg/L	nonparametric	Silver, total	Current RL*	mg/L	nonparametric
Sodium, dissolved	7.7	mg/L	nonparametric	Sodium, dissolved	7.7	mg/L	nonparametric
Specific conductivity	0.19	mS/cm	nonparametric	Specific conductivity	0.18	mS/cm	nonparametric
Sulfate	9.9	mg/L	nonparametric	Sulfate	9.9	mg/L	nonparametric
Temperature	14.32	deg C	nonparametric	Temperature	14.32	deg C	nonparametric
Thallium, total	Current RL*	mg/L	nonparametric	Thallium, total	Current RL*	mg/L	nonparametric
Total dissolved solids (tds)	175	mg/L	nonparametric	Total dissolved solids (tds)	175	mg/L	nonparametric
Total organic carbon (toc)	6.0	mg/L	nonparametric	Total organic carbon (toc)	6.0	mg/L	nonparametric
Vanadium, total	0.009	mg/L	nonparametric	Vanadium, total	0.009	mg/L	nonparametric
Zinc, total	0.0056	mg/L	nonparametric	Zinc, total	0.0056	mg/L	nonparametric

† Note that beginning in 2016, Prediction Limits for Trace Metals became based on "total" analyses vs "dissolved" previously

* for background data sets with all non-detected values, a nonparametric prediction limit is the current constituent-specific laboratory reporting limit (RL)

mg/L = milligrams per liter

ug/L = micrograms per liter

mS/cm = milliSiemens per centimeter

deg C = degrees Celsius

3. Annual UCL Calculations using Preliminary Groundwater Cleanup Goals

- 2023 Annual Preliminary Groundwater Cleanup Goals Statistical Evaluation Summary (Table 3-1)

TABLE 3-1: 2023 Annual Groundwater Cleanup Level Statistical Evaluation Summary

Olympic View Sanitary Landfill

Statistical Methodology: calculation of 95% UCL of mean per MTCAStat

Data Input (general): 3-year "moving window", updated annually

Data Input (specific): January 1, 2021 through December 31, 2023

Wells Evaluated: (1) Compliance -- MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43; (2) Downgradient -- MW-29A, MW-32, MW-33A, MW-33C, MW-36A

Monitoring Well	Monitoring Well Type	Corrective Action Monitoring Parameter	N[1]	% Detect	Max[2]	95% UCL of Mean[3]	Units[4]	Note	Groundwater Cleanup Level[5]	Units[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend?[6]
MW-15R	Compliance	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-15R	Compliance	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-15R	Compliance	Arsenic, total	6	100%	0.257	0.248	ug/L	Z	4.27	ug/L	No	No
MW-15R	Compliance	Iron, total	6	0%	0.06 (ND)	0.06	mg/L	B	1.9	mg/L	No	No
MW-15R	Compliance	Manganese, total	6	100%	0.0051	0.004	mg/L	LN	0.73	mg/L	No	No
MW-15R	Compliance	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-15R	Compliance	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-15R	Compliance	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-15R	Compliance	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
MW-15R	Compliance	Ammonia as N	6	17%	0.045	0.045	mg/L	A	0.19	mg/L	No	No
MW-34A	Compliance	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-34A	Compliance	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-34A	Compliance	Arsenic, total	6	100%	0.522	0.489	ug/L	Z	4.27	ug/L	No	No
MW-34A	Compliance	Iron, total	6	17%	0.11	0.11	mg/L	A	1.9	mg/L	No	No
MW-34A	Compliance	Manganese, total	6	33%	0.0028	0.0028	mg/L	A	0.73	mg/L	No	No
MW-34A	Compliance	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-34A	Compliance	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-34A	Compliance	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-34A	Compliance	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
MW-34A	Compliance	Ammonia as N	6	33%	0.075	0.075	mg/L	A	0.19	mg/L	No	No

TABLE 3-1: 2023 Annual Groundwater Cleanup Level Statistical Evaluation Summary

Olympic View Sanitary Landfill

Statistical Methodology: calculation of 95% UCL of mean per MTCAStat

Data Input (general): 3-year "moving window", updated annually

Data Input (specific): January 1, 2021 through December 31, 2023

Wells Evaluated: (1) Compliance -- MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43; (2) Downgradient -- MW-29A, MW-32, MW-33A, MW-33C, MW-36A

Monitoring Well	Monitoring Well Type	Corrective Action Monitoring Parameter	N[1]	% Detect	Max[2]	95% UCL of Mean[3]	Units[4]	Note	Groundwater Cleanup Level[5]	Units[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend?[6]
MW-34C	Compliance	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-34C	Compliance	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-34C	Compliance	Arsenic, total	6	100%	21.9	12.6	ug/L	Z	4.27	ug/L	**Yes**	No
MW-34C	Compliance	Iron, total	6	100%	44	44	mg/L	A**	1.9	mg/L	**Yes**	No
MW-34C	Compliance	Manganese, total	6	100%	3.4	3.0	mg/L	N	0.73	mg/L	**Yes**	No
MW-34C	Compliance	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-34C	Compliance	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-34C	Compliance	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-34C	Compliance	Vinyl Chloride	6	33%	0.033	0.033	ug/L	A	0.20	ug/L	No	**Yes (▼)**
MW-34C	Compliance	Ammonia as N	6	33%	0.036	0.036	mg/L	A	0.19	mg/L	No	No
MW-39	Compliance	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-39	Compliance	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-39	Compliance	Arsenic, total	6	100%	2.68	2.34	ug/L	Z	4.27	ug/L	No	No
MW-39	Compliance	Iron, total	6	100%	41	40	mg/L	Z	1.9	mg/L	**Yes**	No
MW-39	Compliance	Manganese, total	6	100%	0.52	0.52	mg/L	Z	0.73	mg/L	No	No
MW-39	Compliance	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-39	Compliance	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-39	Compliance	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-39	Compliance	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
MW-39	Compliance	Ammonia as N	6	83%	0.94	0.94	mg/L	A***	0.19	mg/L	**Yes**	No

TABLE 3-1: 2023 Annual Groundwater Cleanup Level Statistical Evaluation Summary

Olympic View Sanitary Landfill

Statistical Methodology: calculation of 95% UCL of mean per MTCAStat

Data Input (general): 3-year "moving window", updated annually

Data Input (specific): January 1, 2021 through December 31, 2023

Wells Evaluated: (1) Compliance -- MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43; (2) Downgradient -- MW-29A, MW-32, MW-33A, MW-33C, MW-36A

Monitoring Well	Monitoring Well Type	Corrective Action Monitoring Parameter	N[1]	% Detect	Max[2]	95% UCL of Mean[3]	Units[4]	Note	Groundwater Cleanup Level[5]	Units[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend?[6]
MW-42	Compliance	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-42	Compliance	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-42	Compliance	Arsenic, total	6	100%	2.18	1.91	ug/L	Z	4.27	ug/L	No	No
MW-42	Compliance	Iron, total	6	100%	29	27.5	mg/L	LN	1.9	mg/L	Yes	No
MW-42	Compliance	Manganese, total	6	100%	4.0	4.0	mg/L	Z	0.73	mg/L	Yes	Yes (▼)
MW-42	Compliance	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-42	Compliance	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-42	Compliance	Trichloroethene	6	0%	0.46 (ND)	0.47	ug/L	A	1.0	ug/L	No	No
MW-42	Compliance	Vinyl Chloride	6	83%	0.10	0.15	ug/L	LN	0.20	ug/L	No	No
MW-42	Compliance	Ammonia as N	6	100%	7.3	5.2	mg/L	Z	0.19	mg/L	Yes	Yes (▼)
MW-43	Compliance	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-43	Compliance	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-43	Compliance	Arsenic, total	6	83%	0.157	0.293	ug/L	LN	4.27	ug/L	No	No
MW-43	Compliance	Iron, total	6	83%	6.6	6.6	mg/L	A**	1.9	mg/L	Yes	No
MW-43	Compliance	Manganese, total	6	100%	0.14	0.55	mg/L	LN	0.73	mg/L	No	Yes (▼)
MW-43	Compliance	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-43	Compliance	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-43	Compliance	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-43	Compliance	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
MW-43	Compliance	Ammonia as N	6	17%	0.037	0.037	mg/L	A	0.19	mg/L	No	Yes (▼)

TABLE 3-1: 2023 Annual Groundwater Cleanup Level Statistical Evaluation Summary

Olympic View Sanitary Landfill

Statistical Methodology: calculation of 95% UCL of mean per MTCAStat

Data Input (general): 3-year "moving window", updated annually

Data Input (specific): January 1, 2021 through December 31, 2023

Wells Evaluated: (1) Compliance -- MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43; (2) Downgradient -- MW-29A, MW-32, MW-33A, MW-33C, MW-36A

Monitoring Well	Monitoring Well Type	Corrective Action Monitoring Parameter	N[1]	% Detect	Max[2]	95% UCL of Mean[3]	Units[4]	Note	Groundwater Cleanup Level[5]	Units[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend?[6]
MW-29A	Downgradient	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-29A	Downgradient	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-29A	Downgradient	Arsenic, total	6	100%	2.25	2.02	ug/L	Z	4.27	ug/L	No	No
MW-29A	Downgradient	Iron, total	6	100%	5.0	4.7	mg/L	LN	1.9	mg/L	Yes	No
MW-29A	Downgradient	Manganese, total	6	100%	1.5	1.42	mg/L	LN	0.73	mg/L	Yes	No
MW-29A	Downgradient	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-29A	Downgradient	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-29A	Downgradient	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-29A	Downgradient	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
MW-29A	Downgradient	Ammonia as N	6	100%	0.15	0.14	mg/L	LN	0.19	mg/L	No	Yes (▼)
MW-32	Downgradient	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-32	Downgradient	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-32	Downgradient	Arsenic, total	6	100%	11.4	11.1	ug/L	LN	4.27	ug/L	Yes	No
MW-32	Downgradient	Iron, total	6	100%	1.1	0.83	mg/L	Z	1.9	mg/L	No	No
MW-32	Downgradient	Manganese, total	6	100%	2.1	2.0	mg/L	LN	0.73	mg/L	Yes	No
MW-32	Downgradient	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-32	Downgradient	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-32	Downgradient	Trichloroethene	6	67%	0.54	0.52	ug/L	LN	1.0	ug/L	No	No
MW-32	Downgradient	Vinyl Chloride	6	100%	0.32	0.29	ug/L	LN	0.20	ug/L	Yes	Yes (▼)
MW-32	Downgradient	Ammonia as N	6	100%	0.11	0.10	mg/L	LN	0.19	mg/L	No	No

TABLE 3-1: 2023 Annual Groundwater Cleanup Level Statistical Evaluation Summary

Olympic View Sanitary Landfill

Statistical Methodology: calculation of 95% UCL of mean per MTCAStat

Data Input (general): 3-year "moving window", updated annually

Data Input (specific): January 1, 2021 through December 31, 2023

Wells Evaluated: (1) Compliance -- MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43; (2) Downgradient -- MW-29A, MW-32, MW-33A, MW-33C, MW-36A

Monitoring Well	Monitoring Well Type	Corrective Action Monitoring Parameter	N[1]	% Detect	Max[2]	95% UCL of Mean[3]	Units[4]	Note	Groundwater Cleanup Level[5]	Units[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend?[6]
MW-33A	Downgradient	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-33A	Downgradient	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-33A	Downgradient	Arsenic, total	6	100%	1.57	2.45	ug/L	LN	4.27	ug/L	No	Yes (▲)
MW-33A	Downgradient	Iron, total	6	100%	8.9	8.9	mg/L	A**	1.9	mg/L	Yes	No
MW-33A	Downgradient	Manganese, total	6	100%	0.086	0.35	mg/L	LN	0.73	mg/L	No	No
MW-33A	Downgradient	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-33A	Downgradient	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-33A	Downgradient	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-33A	Downgradient	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
MW-33A	Downgradient	Ammonia as N	6	67%	0.38	1.25	mg/L	LN	0.19	mg/L	Yes	No
MW-33C	Downgradient	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-33C	Downgradient	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-33C	Downgradient	Arsenic, total	6	100%	4.31	3.73	ug/L	Z	4.27	ug/L	No	Yes (▲)
MW-33C	Downgradient	Iron, total	6	100%	1.7	1.04	mg/L	Z	1.9	mg/L	No	No
MW-33C	Downgradient	Manganese, total	6	100%	0.96	1.05	mg/L	LN	0.73	mg/L	Yes	No
MW-33C	Downgradient	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-33C	Downgradient	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-33C	Downgradient	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-33C	Downgradient	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
MW-33C	Downgradient	Ammonia as N	6	17%	0.059	0.059	mg/L	A	0.19	mg/L	No	No

TABLE 3-1: 2023 Annual Groundwater Cleanup Level Statistical Evaluation Summary

Olympic View Sanitary Landfill

Statistical Methodology: calculation of 95% UCL of mean per MTCAStat

Data Input (general): 3-year "moving window", updated annually

Data Input (specific): January 1, 2021 through December 31, 2023

Wells Evaluated: (1) Compliance -- MW-15R, MW-34A, MW-34C, MW-39, MW-42, MW-43; (2) Downgradient -- MW-29A, MW-32, MW-33A, MW-33C, MW-36A

Monitoring Well	Monitoring Well Type	Corrective Action Monitoring Parameter	N[1]	% Detect	Max[2]	95% UCL of Mean[3]	Units[4]	Note	Groundwater Cleanup Level[5]	Units[4]	Does 95% UCL Exceed Cleanup Level?	Significant Trend?[6]
MW-36A	Downgradient	1,1-Dichloroethane	6	0%	0.38 (ND)	0.38	ug/L	B	50	ug/L	No	No
MW-36A	Downgradient	1,4-Dichlorobenzene	6	0%	0.84 (ND)	0.84	ug/L	B	2.0	ug/L	No	No
MW-36A	Downgradient	Arsenic, total	6	100%	0.667	0.632	ug/L	LN	4.27	ug/L	No	No
MW-36A	Downgradient	Iron, total	6	50%	0.096	0.096	mg/L	A	1.9	mg/L	No	No
MW-36A	Downgradient	Manganese, total	6	67%	0.0047	0.0076	mg/L	LN	0.73	mg/L	No	No
MW-36A	Downgradient	cis-1,2-dichloroethene	6	0%	0.81 (ND)	0.81	ug/L	B	35	ug/L	No	No
MW-36A	Downgradient	Ethyl ether	6	0%	0.72 (ND)	0.72	ug/L	B	50	ug/L	No	No
MW-36A	Downgradient	Trichloroethene	6	0%	0.46 (ND)	0.46	ug/L	B	1.0	ug/L	No	No
MW-36A	Downgradient	Vinyl Chloride	6	0%	0.02 (ND)	0.02	ug/L	B	0.20	ug/L	No	No
MW-36A	Downgradient	Ammonia as N	6	17%	0.053	0.053	mg/L	A	0.19	mg/L	No	No

NOTES:

[1] N = number of data points used for UCL calculation of the mean; only SIM results used for Vinyl Chloride (e.g., duplicate results with higher RLs by non-SIM were omitted).

[2] MAX = maximum detected result in the data set; if no detected results, then = maximum reporting limit for non-detect results (indicated with ND).

[3] A 3-year moving data set is used for calculation of the UCL.

[4] ug/L - micrograms per liter; mg/L = milligrams per liter.

[5] Groundwater Cleanup Levels for VOCs are from Table 3 of the Oct 2010 Draft Cleanup Action Plan; and for As, Fe, Mn and Ammonia-N from the July 15, 2021 Ecology letter approving Groundwater Quality Standards

[6] Trend analysis results are based on data for the period January 2005 through December 2023; arrows indicated increasing (▲) or decreasing (▼) trends.

A = Detection frequency of data set too low and/or N too few to calculate 95% UCL of mean; therefore, the highest detected result in the data set used to represent 95% UCL of mean.

A* = Same as note "A" except that the highest value in the data set is below the reporting limit of one or more non-detected results; therefore, the highest reporting limit is used to represent the 95% UCL of the mean.

A** = MTCAStat suggests use of lognormal formula but calculation of 95% UCL of mean by Land's formula provides unrealistic result; therefore, the highest detected result is used to represent the 95% UCL of the mean.

A*** = MTCAStat suggests use of the Z-score method but then cites inability to calculate due to presence of censored values; therefore, the highest detected result is used to represent the 95% UCL of the mean.

B = Detection frequency = 0; therefore, the highest reporting limit in the data set is used to represent the 95% UCL of mean.

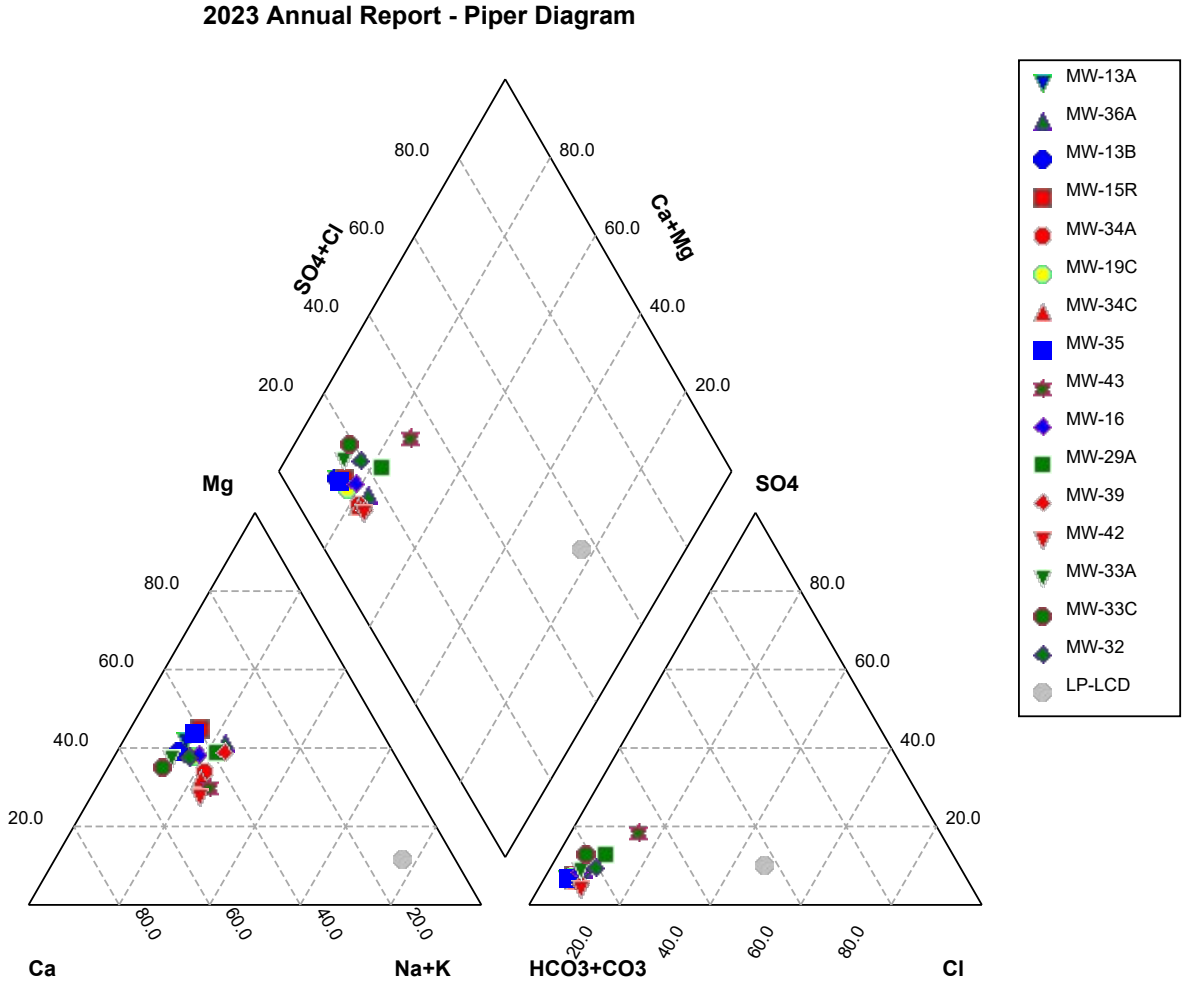
LN = The 95% UCL of the mean is calculated using Land's formula since lognormal distribution is indicated.

N = The 95% UCL of the mean is calculated using a normal-based t-statistic since a normal distribution is indicated.

Z = the 95% UCL of the mean is calculated using the Z-score method in MTCAStat since neither normal nor lognormal distribution can be determined.

Appendix D

November 2023 Groundwater Geochemical Evaluation



Piper Diagram

Olympic View Sanitary Landfill

Waste Management Closed Sites
04204027.27
March 18, 2024

Cation/Anion Balance Report
November 2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

MW-13A				
11/8/2023				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	5.57	No
	Sum of anions	meq/L	1.61	
	Sum of cations	meq/L	1.79	
	Sum of ions	meq/L	3.40	
MW-13B				
11/8/2023				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	3.03	No
	Sum of anions	meq/L	1.59	
	Sum of cations	meq/L	1.69	
	Sum of ions	meq/L	3.27	
MW-15R				
11/9/2023				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	8.08	No
	Sum of anions	meq/L	1.39	
	Sum of cations	meq/L	1.63	
	Sum of ions	meq/L	3.02	
MW-16				
11/8/2023				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	1.88	No
	Sum of anions	meq/L	1.22	
	Sum of cations	meq/L	1.27	
	Sum of ions	meq/L	2.49	
MW-19C				
11/8/2023				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	3.71	No
	Sum of anions	meq/L	1.48	
	Sum of cations	meq/L	1.60	
	Sum of ions	meq/L	3.08	
MW-29A				
11/8/2023				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	-2.12	No
	Sum of anions	meq/L	0.81	
	Sum of cations	meq/L	0.78	
	Sum of ions	meq/L	1.59	
MW-32				
11/8/2023				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	4.69	No
	Sum of anions	meq/L	2.85	
	Sum of cations	meq/L	3.13	
	Sum of ions	meq/L	5.98	

Cation/Anion Balance Report
November 2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

MW-33A **11/9/2023**				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	3.94	No
	Sum of anions	meq/L	1.21	
	Sum of cations	meq/L	1.30	
	Sum of ions	meq/L	2.51	
MW-33C **11/9/2023**				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	9.12	No
	Sum of anions	meq/L	1.42	
	Sum of cations	meq/L	1.70	
	Sum of ions	meq/L	3.12	
MW-34A **11/8/2023**				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	7.75	No
	Sum of anions	meq/L	1.45	
	Sum of cations	meq/L	1.69	
	Sum of ions	meq/L	3.14	
MW-34C **11/8/2023**				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	6.29	No
	Sum of anions	meq/L	1.64	
	Sum of cations	meq/L	1.86	
	Sum of ions	meq/L	3.50	
MW-35 **11/8/2023**				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	3.82	No
	Sum of anions	meq/L	1.55	
	Sum of cations	meq/L	1.68	
	Sum of ions	meq/L	3.23	
MW-36A **11/8/2023**				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	3.11	No
	Sum of anions	meq/L	1.15	
	Sum of cations	meq/L	1.22	
	Sum of ions	meq/L	2.36	
MW-39 **11/9/2023**				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	-0.36	No
	Sum of anions	meq/L	1.91	
	Sum of cations	meq/L	1.90	
	Sum of ions	meq/L	3.81	

Cation/Anion Balance Report
November 2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

MW-42 **11/8/2023**				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	5.86	No
	Sum of anions	meq/L	3.59	
	Sum of cations	meq/L	4.04	
	Sum of ions	meq/L	7.64	
MW-43 **11/8/2023**				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	-1.24	No
	Sum of anions	meq/L	0.59	
	Sum of cations	meq/L	0.58	
	Sum of ions	meq/L	1.17	
LP-LCD **11/9/2023**				
	Function	Unit	Value	Exceedance
	E.N. (Balance)	%	2.81	No
	Sum of anions	meq/L	37.36	
	Sum of cations	meq/L	39.52	
	Sum of ions	meq/L	76.87	

Appendix E

Landfill Gas Monitoring Results

Table E1. 10 Year Historical Results of Methane (CH_4) Measurements
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Date Monitored	OV-GP-07	OV-GP-08	OV-GP-9S	OV-GP-9D	OV-GP10S	OV-GP10D	OV-GP11S	OV-GP11D	OV-GP12S	OV-GP12M	OV-GP12D	OV-GP13S	OV-GP13M	OV-GP13D	OV-GP14	OV-GP15	OV-GP16
11/8/2023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9/7/2023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/16/2023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/2/2023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11/17/2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0
9/29/2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7/11/2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3/29/2022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/16/2021	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	0.0	0.0	2.2	0.0
10/19/2021	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
6/11/2021	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0
3/17/2021	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0.1	0.0	0.0	0.0	0.5	0.0
11/18/2020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9/21/2020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
6/5/2020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0
3/11/2020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0	0.0	0.0	0.0
11/14/2019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
8/5/2019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0
4/22/2019	0.0	0.0	0.0	0.0	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3/28/2019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/23/2018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9/10/2018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/16/2018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3/14/2018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11/22/2017	—	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0	0.0	0.5	0.0
8/28/2017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0	0.0	0.0	0.0
5/30/2017	0.0	0.0	0.0	—	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0
3/17/2017	—	0.0	0.0	—	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0	0.0	0.0	0.0
11/15/2016	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0
9/20/2016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/27/2016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3/24/2016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
12/15/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9/29/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/7/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0	0.0	0.0	0.0
3/30/2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0	0.0	0.2	0.0
12/29/2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
9/24/2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/16/2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0	0.0	1.0	0.0
3/28/2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.0	0.0	0.0	3.7	0.0
12/13/2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0
7/13/2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.7	0.0
5/13/2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/13/2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0

Notes:
OV-GP = Gas Probe
S = Shallow Monitoring Zone
M = Middle Monitoring Zone
D = Deep Monitoring Zone
Detected CH4>0.3% vol.
— Screened interval submerged

Table E2. 10 Year Historical Results of Carbon Dioxide (CO_2) Measurements
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Port Orchard, Washington

Date Monitored	OV-GP-07	OV-GP-08	OV-GP-9S	OV-GP-9D	OV-GP10S	OV-GP10D	OV-GP11S	OV-GP11D	OV-GP12S	OV-GP12M	OV-GP12D	OV-GP13S	OV-GP13M	OV-GP13D	OV-GP14	OV-GP15	OV-GP16
11/8/2023	10.8	3.3	1.9	1.4	0.8	0.7	2.4	2.0	0.9	0.8	1.5	5.1	4.2	3.9	8.0	7.6	3.5
9/7/2023	10.3	5.4	1.8	1.4	0.7	0.6	2.4	1.9	1.3	1.0	1.3	4.2	3.6	3.6	7.1	8.2	2.4
5/16/2023	6.6	3.2	1.4	1.1	0.5	0.4	2.2	0.4	0.9	1.3	0.0	4.4	3.4	3.4	3.8	4.5	2.7
2/2/2023	6.2	3.5	1.6	1.5	0.6	0.7	2.1	1.4	1.6	1.5	0.3	4.6	4.2	3.9	4.7	4.1	2.0
11/17/2022	9.8	6.3	1.5	1.5	0.7	0.7	2.4	2.2	1.7	0.9	0.9	1.7	4.5	4.5	7.5	10.2	2.5
9/29/2022	10.9	5.5	1.8	1.4	0.6	0.7	2.1	2.5	1.4	1.1	1.2	1.8	4.1	4.2	7.4	9.7	2.5
7/11/2022	7.4	3.8	2.5	1.3	0.4	0.6	1.0	2.8	0.5	1.3	1.2	3.1	3.2	4.5	4.7	5.5	4.0
3/29/2022	4.7	2.7	1.8	0.1	0.7	0.7	1.7	2.5	0.1	0.1	1.1	0.1	3.5	4.5	4.0	0.1	2.0
12/16/2021	2.5	4.3	2.7	1.7	1.0	0.8	3.0	2.4	1.3	1.5	—	5.5	4.4	4.1	5.5	6.4	3.5
10/19/2021	11.3	6.6	2.2	1.6	0.9	0.8	2.5	2.4	1.7	1.5	1.7	4.9	4.3	4.2	8.4	9.2	3.8
6/11/2021	8.0	3.7	2.1	1.5	0.8	0.7	3.2	2.4	1.3	1.2	1.2	4.5	3.7	3.7	6.1	6.8	3.0
3/17/2021	5.4	3.1	2.1	1.6	0.8	0.8	2.7	2.0	1.5	1.3	—	4.6	3.6	3.4	4.4	4.4	2.4
11/18/2020	11.2	4.4	2.5	1.4	1.1	0.9	3.1	2.8	1.8	1.7	1.7	5.3	4.5	4.4	9.2	9.4	4.2
9/21/2020	11.5	6.3	2.0	1.4	0.9	0.7	2.9	2.4	0.1	1.4	1.4	3.9	3.8	3.7	8.5	11.1	3.1
6/5/2020	8.9	3.8	2.2	1.4	0.8	0.7	3.0	2.1	1.3	1.2	1.0	4.3	3.3	3.2	6.1	6.1	4.3
3/11/2020	6.8	3.0	2.2	1.5	0.9	0.8	2.7	—	1.1	1.4	—	4.5	3.8	3.5	5.0	5.7	2.5
11/14/2019	10.9	6.3	2.3	1.5	1.1	0.8	2.9	2.7	1.6	1.5	1.5	4.3	4.0	3.8	8.6	11.2	4.1
8/5/2019	10.8	4.4	1.6	1.1	0.6	0.5	2.7	1.3	1.1	1.1	0.8	3.7	3.4	3.0	7.5	9.0	3.0
4/22/2019	7.7	3.1	2.2	1.8	—	—	3.0	0.7	0.9	1.2	0.9	4.0	3.5	2.8	6.5	0.1	2.8
3/28/2019	6.5	2.9	2.1	1.7	0.7	0.8	2.5	0.7	0.9	0.9	0.9	3.6	3.6	1.9	4.2	0.2	2.1
10/23/2018	10.0	0.1	1.6	1.4	0.7	0.7	2.1	0.6	1.1	1.0	1.4	3.0	3.6	3.1	7.6	9.5	2.2
9/10/2018	10.6	5.6	1.9	1.3	0.7	0.6	2.5	0.6	1.2	1.0	1.3	3.2	3.4	3.2	7.7	9.8	2.1
5/16/2018	5.8	2.1	1.1	1.7	0.6	0.5	0.8	2.5	0.9	1.6	0.6	3.4	3.0	1.7	4.3	5.2	2.3
3/14/2018	4.5	2.2	1.8	1.3	0.8	0.7	2.3	1.0	0.9	1.1	0.7	3.4	3.3	1.1	4.3	6.0	2.0
11/22/2017	—	3.7	2.0	1.6	0.9	0.7	2.7	—	1.3	1.2	—	3.4	3.6	0.0	6.5	5.8	2.8
8/28/2017	8.9	4.8	2.2	1.1	0.7	0.5	3.0	—	1.0	1.2	—	3.2	2.4	2.9	6.3	1.6	2.3
5/30/2017	4.5	1.1	2.3	—	0.8	0.6	3.2	—	1.0	2.5	—	3.5	3.2	—	4.7	3.7	1.5
3/17/2017	—	1.2	1.7	—	0.6	0.7	0.0	—	1.1	1.4	—	3.4	3.3	0.0	3.4	4.2	1.6
11/15/2016	8.2	3.6	2.1	1.4	0.9	0.7	2.2	1.5	1.2	1.3	0.4	3.0	2.6	0.2	5.6	6.6	1.5
9/20/2016	11.2	5.0	2.2	1.4	0.5	0.3	1.9	0.6	0.9	0.9	0.7	1.8	2.5	0.1	2.0	3.0	2.0
6/27/2016	7.3	2.8	1.9	1.0	0.7	0.5	1.0	2.9	1.0	1.1	0.5	2.8	2.4	0.3	5.8	3.3	2.5
3/24/2016	3.1	1.4	1.8	1.3	0.7	0.7	2.1	2.1	1.7	1.6	1.1	3.3	3.3	2.1	4.8	4.3	2.4
12/15/2015	6.4	2.3	1.9	1.6	0.9	0.7	2.6	2.0	1.2	1.0	1.0	3.9	3.5	1.6	5.9	3.5	3.8
9/29/2015	10.8	6.2	1.6	1.5	0.6	0.7	2.0	2.6	0.9	1.0	1.3	2.9	1.9	0.2	8.7	9.4	4.0
5/7/2015	7.9	3.6	2.6	1.7	0.9	0.8	3.6	—	1.1	2.4	—	3.4	3.3	0.0	6.1	5.0	4.5
3/30/2015	6.2	2.0	2.4	1.7	0.9	0.8	3.3	—	1.3	1.4	—	0.8	3.3	3.4	5.7	6.5	3.8
12/29/2014	8.3	2.6	2.6	1.8	1.0	0.9	3.2	3.5	1.3	1.2	1.7	3.6	3.5	0.1	6.8	7.3	3.9
9/24/2014	11.2	6.1	2.0	1.6	0.8	0.7	3.4	3.0	1.2	1.3	1.6	2.9	3.3	1.3	9.3	10.1	4.2
6/16/2014	8.9	4.0	2.9	1.8	1.2	1.0	4.2	—	2.0	1.7	—	3.7	3.3	1.1	6.6	6.1	5.0
3/28/2014	5.9	2.0	1.8	1.8	0.8	0.9	2.5	—	1.9	2.2	—	3.3	3.5	3.2	6.4	2.2	3.3
12/13/2013	9.6	5.4	2.6	1.7	1.1	0.9	3.5	3.6	1.7	1.9	1.7	3.9	3.8	3.7	8.5	9.5	5.1
7/13/2013	9.6	4.5	2.9	1.5	1.1	0.7	3.9	0.4	1.8	1.7	0.4	3.5	3.1	3.1	7.8	7.8	7.4
5/13/2013	6.2	2.6	2.3	1.7	0.8	0.7	2.4	2.2	1.9	1.0	0.8	2.3	2.6	0.1	5.3	4.0	5.0
2/13/2013	4.2	2.5	1.7	1.5	0.7	0.7	1.8	2.4	1.1	0.9	0.8	2.3	2.4	0.8	5.1	6.2	3.9

Notes:
OV-GP = Gas Probe
S = Shallow Monitoring Zone
M = Middle Monitoring Zone
D = Deep Monitoring Zone
Detected CO2>0.3% vol.
— Screened interval submerged

Table E3. 10 Year Historical Results of Oxygen (O_2) Measurements
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Port Orchard, Washington

Date Monitored	OV-GP-07	OV-GP-08	OV-GP-9S	OV-GP-9D	OV-GP10S	OV-GP10D	OV-GP11S	OV-GP11D	OV-GP12S	OV-GP12M	OV-GP12D	OV-GP13S	OV-GP13M	OV-GP13D	OV-GP14	OV-GP15	OV-GP16
11/8/2023	5.8	13.8	19.5	20.1	20.5	20.2	18.0	18.9	19.3	20.2	16.5	16.0	16.2	16.1	6.4	1.7	17.1
9/7/2023	9.0	11.3	19.4	19.2	20.3	19.5	19.2	18.8	17.8	19.9	15.9	20.7	20.9	20.9	8.6	7.4	18.9
5/16/2023	6.1	10.5	18.9	19.1	19.2	18.1	16.9	18.4	19.3	18.9	19.4	15.4	16.3	16.5	7.9	2.8	17.2
2/2/2023	6.5	11.0	19.5	19.8	20.5	19.0	19.0	19.4	18.3	18.6	21.0	15.9	16.1	16.3	8.4	0.0	19.6
11/17/2022	9.2	10.5	19.5	19.7	19.3	20.0	18.9	18.9	16.8	20.4	20.7	19.5	16.7	17.6	9.5	0.0	19.5
9/29/2022	8.0	11.2	20.2	19.7	19.6	20.3	18.2	18.1	14.8	19.5	19.7	18.5	15.8	17.3	20.6	4.4	19.2
7/11/2022	3.8	8.0	17.8	18.3	19.1	19.8	17.9	17.5	18.8	19.2	18.4	16.8	16.0	15.1	5.2	5.6	16.5
3/29/2022	6.0	20.9	19.2	21.1	18.8	20.5	18.3	18.7	21.1	21.1	20.3	21.1	16.6	16.2	7.6	21.2	18.6
12/16/2021	16.3	5.4	18.3	19.4	20.3	19.7	17.8	18.4	20.1	19.9	—	15.5	16.5	16.7	7.0	0.4	17.2
10/19/2021	6.4	7.9	19.0	19.4	20.2	19.7	18.3	18.8	17.7	18.6	16.0	16.3	16.6	16.6	8.1	0.3	17.1
6/11/2021	7.4	10.4	19.5	19.3	20.8	19.5	18.8	19.2	18.8	19.4	18.2	17.2	16.6	16.7	6.2	0.0	18.7
3/17/2021	5.0	8.9	19.5	18.7	20.5	18.8	18.6	18.5	19.2	19.2	—	16.8	17.5	16.8	5.9	0.0	18.6
11/18/2020	4.3	10.8	19.0	19.8	20.4	19.9	18.4	18.9	18.3	18.9	16.9	16.0	16.4	16.4	3.5	0.7	16.7
9/21/2020	8.0	9.9	19.3	19.1	20.3	19.6	18.9	18.7	20.9	18.7	15.8	17.6	16.7	16.6	6.6	0.1	18.4
6/5/2020	5.8	9.5	17.9	18.6	19.7	18.8	17.7	18.3	18.5	19.0	17.9	16.5	17.0	17.2	5.0	0.2	16.1
3/11/2020	4.1	10.5	19.1	18.7	20.7	19.0	18.9	—	21.0	20.5	—	17.2	17.7	18.1	7.1	0.3	18.2
11/14/2019	5.6	8.9	19.3	10.8	20.7	20.4	18.9	19.3	18.9	19.4	17.6	17.6	17.5	17.5	5.0	0.1	17.3
8/5/2019	7.7	11.1	21.7	21.7	22.5	21.8	20.6	21.7	19.7	20.6	19.7	18.6	18.0	19.7	7.1	0.0	19.5
4/22/2019	6.3	11.7	19.7	19.9	—	—	19.1	21.5	21.1	20.9	20.1	17.6	17.1	18.2	5.7	20.1	18.7
3/28/2019	5.5	12.1	19.3	19.2	20.6	19.1	18.9	21.0	20.6	20.6	19.1	17.5	17.4	19.6	8.3	21.6	19.2
10/23/2018	8.8	20.8	20.0	19.7	20.9	20.1	19.7	21.1	20.0	20.3	16.8	18.7	17.5	18.5	9.6	5.4	19.6
9/10/2018	8.8	10.4	19.7	19.7	20.9	20.0	19.5	20.8	17.9	19.6	15.4	17.7	16.7	17.1	8.8	4.0	19.2
5/16/2018	6.2	11.6	19.1	18.8	19.7	18.4	19.8	17.6	19.4	19.3	19.9	17.2	16.9	18.6	7.0	4.2	18.4
3/14/2018	6.1	10.5	19.9	19.3	20.8	19.3	17.4	19.6	20.5	19.9	18.7	17.6	17.4	20.2	5.4	1.5	19.2
11/22/2017	—	10.0	18.9	19.2	20.2	19.7	18.9	—	19.7	19.7	—	17.7	17.4	21.2	7.6	0.1	17.8
8/28/2017	7.8	8.6	18.7	18.5	20.1	18.9	18.1	—	16.4	16.4	—	17.3	17.0	16.1	8.0	16.1	19.0
5/30/2017	4.6	13.3	18.3	—	20.2	18.6	17.5	—	19.9	19.2	—	17.2	16.3	—	6.5	10.4	18.7
3/17/2017	—	8.8	18.2	—	20.0	18.1	0.0	—	19.7	19.1	—	17.7	17.0	0.0	6.7	1.1	19.2
11/15/2016	4.7	4.0	17.5	18.9	19.7	19.4	18.3	19.1	18.3	18.1	20.0	16.6	17.8	20.7	8.2	0.0	17.3
9/20/2016	7.7	11.9	19.7	19.6	20.5	20.7	19.2	19.9	19.5	20.0	17.8	18.5	17.9	21.1	15.8	16.8	18.8
6/27/2016	6.8	11.3	19.3	18.6	20.2	19.3	18.7	18.2	19.7	19.9	19.4	18.5	17.5	20.6	8.0	7.0	18.5
3/24/2016	9.7	6.7	18.4	18.8	20.1	18.2	17.5	15.6	18.7	18.8	17.7	16.7	15.9	18.5	4.9	0.0	17.6
12/15/2015	5.9	3.7	18.6	19.7	20.1	19.3	18.3	17.5	20.7	20.3	18.8	16.6	17.3	19.0	5.0	5.7	16.1
9/29/2015	7.0	7.8	19.8	19.6	20.4	19.6	19.2	18.5	19.9	19.6	16.2	17.4	18.4	20.4	7.4	5.0	16.6
5/7/2015	4.1	7.0	19.0	19.4	20.2	18.9	17.6	—	18.9	18.3	—	16.9	16.6	20.7	5.5	5.5	16.0
3/30/2015	4.5	9.4	18.6	19.0	20.3	18.9	17.7	—	19.3	18.3	—	19.7	17.1	17.7	5.0	0.1	16.3
12/29/2014	3.6	5.3	18.5	19.6	20.5	19.8	17.9	14.4	20.1	19.5	16.4	17.5	17.5	20.7	5.7	0.0	16.4
9/24/2014	8.3	8.6	19.9	19.6	20.4	19.4	18.6	17.4	19.5	18.7	15.2	18.5	17.7	19.5	7.0	3.2	17.7
6/16/2014	3.7	5.7	18.5	18.8	20.0	18.5	16.9	—	19.1	18.8	—	17.7	17.3	20.1	5.9	0.0	16.9
3/28/2014	4.8	3.3	19.0	19.5	20.9	18.8	18.7	—	18.7	18.2	—	18.3	18.1	18.2	5.5	5.8	16.8
12/13/2013	4.9	6.3	19.4	19.6	20.1	19.3	17.6	11.5	18.5	17.8	16.6	17.6	17.3	17.3	3.9	1.2	16.1
7/13/2013	4.4	5.8	18.5	19.1	20.0	19.2	16.9	20.2	17.3	16.3	19.1	17.0	17.7	18.0	0.0	0.0	13.6
5/13/2013	4.5	8.4	18.8	19.0	20.1	18.7	18.2	15.7	19.6	20.0	18.7	18.2	17.9	20.8	6.2	7.2	15.4
2/13/2013	4.0	7.4	19.2	18.2	20.4	18.4	18.9	14.2	20.5	20.2	18.1	18.6	17.1	20.2	5.8	0.3	15.9

Notes:
OV-GP = Gas Probe
S = Shallow Monitoring Zone
M = Middle Monitoring Zone
D = Deep Monitoring Zone
Depressed O2<20.3% vol.
— Screened interval submerged

Table E-4. 2023 Landfill Gas Collection (at Flare Inlet)
2023 Annual Monitoring Report
Olympic View Sanitary Landfill, Kitsap County, Washington

Device Name	Date Time	CH4 (Methane %)	CO_2 (Carbon Dioxide %)	O2 (Oxygen %)	Balance Gas (%)	Temperature (^{o}F)	Flow (SCFM)
OV-FL-IN	1/4/2023 10:16	28.6	16.8	2.4	52.2	44.80	149.1
OV-FL-IN	1/9/2023 9:10	30.0	17.1	1.6	51.3	48.70	153.5
OV-FL-IN	1/17/2023 14:45	25.0	15.6	2.8	56.6	53.80	118.0
OV-FL-IN	1/24/2023 8:45	24.0	15.6	2.7	57.7	45.50	121.7
OV-FL-IN	1/30/2023 10:12	23.6	15.5	2.9	58.0	33.90	129.4
OV-FL-IN	2/6/2023 10:30	22.0	14.9	3.0	60.1	50.40	105.9
OV-FL-IN	2/13/2023 10:00	27.0	16.3	1.8	54.9	49.00	133.9
OV-FL-IN	2/21/2023 9:59	28.0	16.6	1.6	53.8	47.40	139.5
OV-FL-IN	2/28/2023 9:44	25.3	16.2	2.2	56.3	44.90	114.7
OV-FL-IN	3/13/2023 9:57	25.0	16.0	2.0	57.0	48.50	122.7
OV-FL-IN	3/20/2023 9:18	36.9	18.8	0.5	43.8	50.50	158.8
OV-FL-IN	3/27/2023 9:05	21.7	14.7	3.1	60.5	49.70	128.9
OV-FL-IN	4/3/2023 12:14	21.3	15.2	2.6	60.9	54.80	113.9
OV-FL-IN	4/10/2023 8:30	22.7	16.1	1.6	59.6	50.10	111.5
OV-FL-IN	4/17/2023 6:20	24.0	15.9	2.0	58.1	52.80	133.6
OV-FL-IN	4/24/2023 13:21	21.4	15.1	2.2	61.3	68.90	100.5
OV-FL-IN	5/2/2023 11:23	34.2	18.0	0.9	46.9	79.80	154.9
OV-FL-IN	5/3/2023 14:01	25.3	15.5	1.6	57.6	98.20	121.9
OV-FL-IN	5/8/2023 10:47	23.1	15.3	2.1	59.5	70.10	114.7
OV-FL-IN	5/15/2023 10:14	33.2	18.3	1.3	47.2	96.70	135.8
OV-FL-IN	5/22/2023 10:33	22.5	15.1	2.2	60.2	67.70	116.5
OV-FL-IN	5/30/2023 10:54	23.0	15.1	2.4	59.5	63.30	122.5
OV-FL-IN	6/5/2023 10:51	26.6	16.3	2.0	55.1	81.40	130.4
OV-FL-IN	6/6/2023 8:37	25.5	15.7	1.7	57.1	69.30	126.5
OV-FL-IN	6/12/2023 10:55	23.7	15.3	1.8	59.2	82.40	113.9
OV-FL-IN	6/19/2023 10:45	23.4	15.6	1.9	59.1	64.60	116.1
OV-FL-IN	6/26/2023 10:45	22.4	15.4	1.9	60.3	69.10	115.4
OV-FL-IN	7/3/2023 10:43	29.6	17.3	1.1	52.0	88.10	140.1
OV-FL-IN	7/4/2023 8:14	23.2	15.4	2.1	59.3	75.70	126.7
OV-FL-IN	7/10/2023 11:15	21.7	15.2	2.1	61.0	77.40	118.9
OV-FL-IN	7/17/2023 10:33	21.7	15.4	2.0	60.9	84.00	117.1
OV-FL-IN	7/24/2023 10:28	21.0	14.5	2.8	61.7	66.40	121.6
OV-FL-IN	8/1/2023 11:39	20.6	14.6	2.8	62.0	0.00	120.4
OV-FL-IN	8/8/2023 10:58	21.5	14.8	2.9	60.8	76.80	126.1
OV-FL-IN	8/14/2023 11:30	21.2	14.6	3.0	61.2	102.90	121.7
OV-FL-IN	8/21/2023 11:50	20.6	14.6	3.3	61.5	87.00	125.0
OV-FL-IN	8/28/2023 10:55	20.2	14.9	3.0	61.9	73.00	122.0
OV-FL-IN	9/5/2023 10:55	19.8	14.4	3.7	62.1	77.10	124.7
OV-FL-IN	9/11/2023 10:32	20.3	14.7	3.1	61.9	70.70	124.0
OV-FL-IN	9/19/2023 12:46	19.8	14.8	3.5	61.9	77.80	122.4
OV-FL-IN	9/25/2023 11:06	22.1	15.3	3.2	59.4	61.80	130.0
OV-FL-IN	10/2/2023 6:59	20.0	14.9	3.9	61.2	56.00	140.4
OV-FL-IN	10/9/2023 8:37	21.3	15.4	3.7	59.6	68.00	132.5
OV-FL-IN	10/16/2023 7:12	23.8	17.1	1.3	57.8	57.30	119.4
OV-FL-IN	10/23/2023 16:48	21.6	16.3	2.0	60.1	63.90	113.6
OV-FL-IN	10/30/2023 14:44	20.6	15.6	3.3	60.5	48.80	181.8
OV-FL-IN	11/1/2023 14:33	20.9	15.5	3.3	60.3	55.00	192.6
OV-FL-IN	11/6/2023 14:19	24.5	16.7	2.0	56.8	56.20	139.2
OV-FL-IN	11/13/2023 13:45	20.7	15.7	2.9	60.7	56.40	107.2
OV-FL-IN	11/20/2023 14:16	18.8	15.4	3.0	62.8	50.80	1379.3
OV-FL-IN	11/27/2023 13:37	21.0	15.8	2.9	60.3	44.50	161.5
OV-FL-IN	12/4/2023 13:47	21.1	16.0	2.3	60.6	49.10	151.1
OV-FL-IN	12/11/2023 13:38	20.9	16.2	2.2	60.7	51.50	119.3
OV-FL-IN	12/19/2023 12:26	26.2	17.6	1.1	55.1	50.10	123.8
OV-FL-IN	12/26/2023 12:54	21.1	16.3	1.8	60.8	51.50	112.0
Annualized Averege LFG Component (%, ^{0}F or scfm)		**23.55**	**15.76**	**2.35**	**58.34**	**62.07**	**151.25**
Estimated Volume of LFG Removed During 2023 (MMscf)							**79.50**

-- = measurement not taken

% = percent by volume

^{0}F = degrees Fahrenheit

scfm = standard cubic foot per minute

MMscf = million cubic feet

Figure E-1: LFG Probe Methane Timeseries

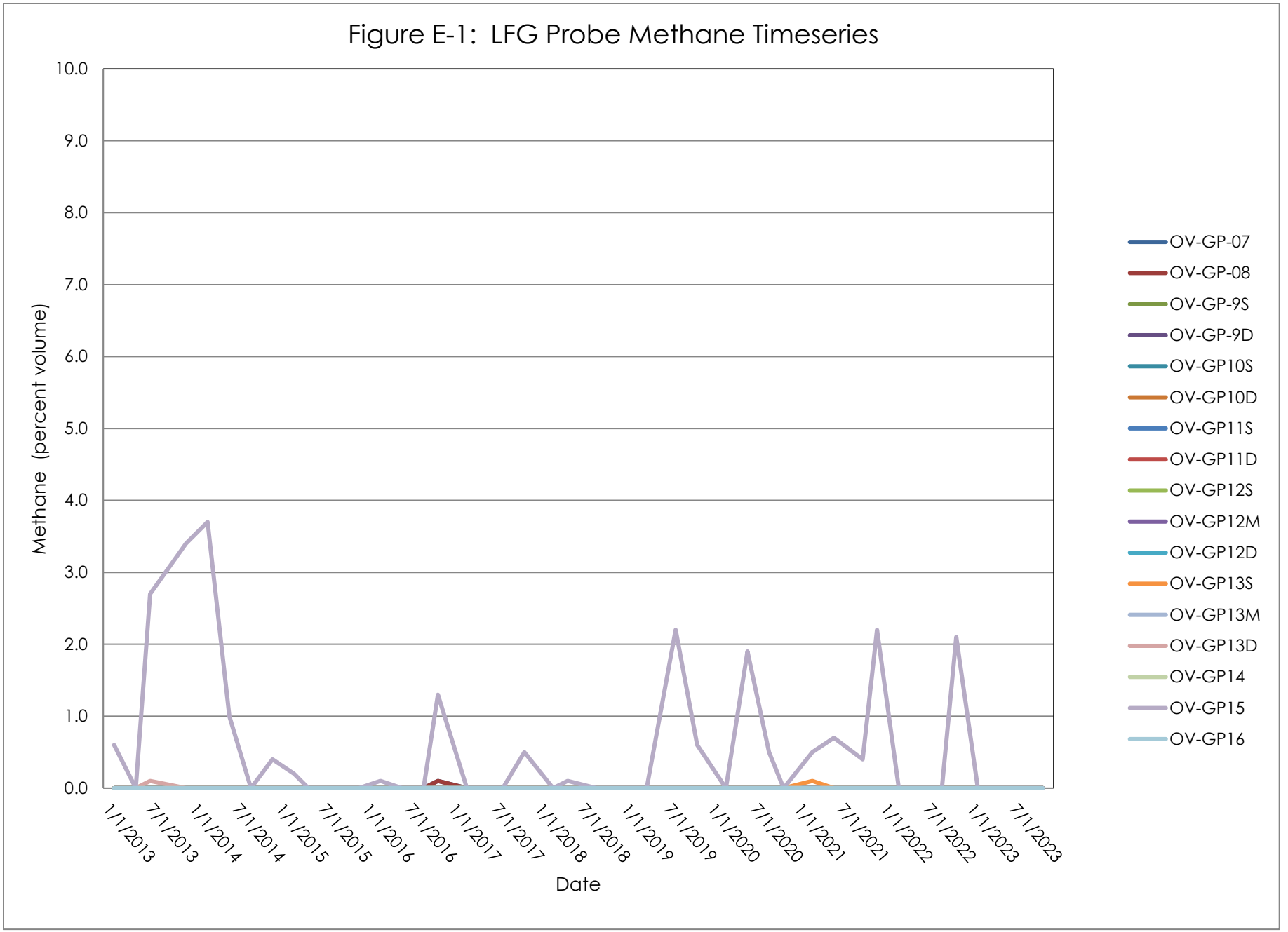


Figure E-2: LFG Probe Carbon Dioxide Timeseries

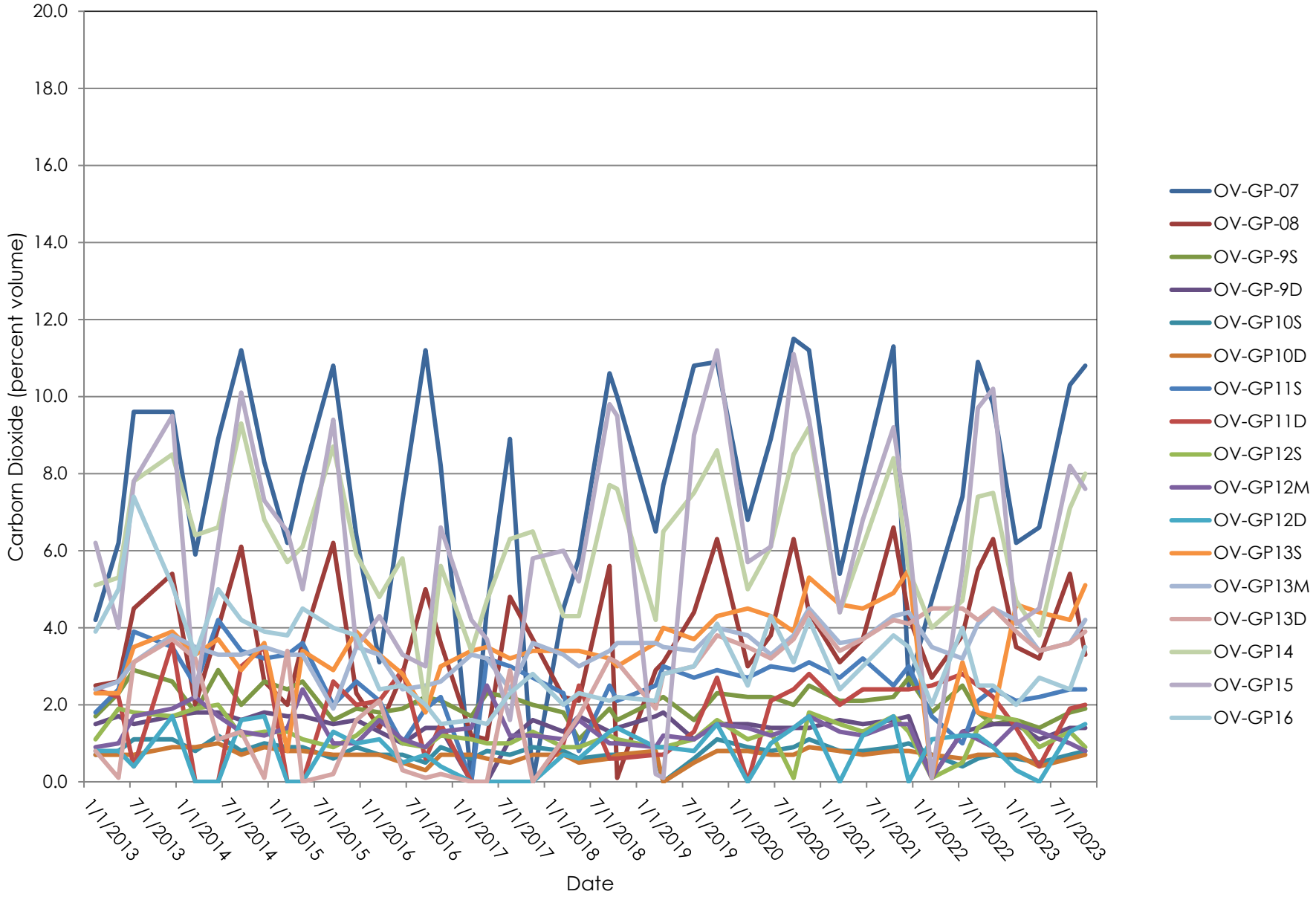


Figure E-3: LFG Probe Depressed Oxygen Timeseries