

Prepared for:
Village of Wellsville
Department of Public Works
200 Bolivar Road
Wellsville, NY 14895

PERIODIC REVIEW REPORT

February 15, 2023 to February 15, 2024

Wellsville/Andover Landfill Site Site Number 9-02-004 Allegany County, New York

Prepared by:
On-Site Geological Services, D.P.C.
72 Railroad Avenue
Wellsville, NY 14895

March 2024

TABLE OF CONTENTS

1.0	OVERVIEW	1
1.1	<u>Introduction</u>	1
1.2	<u>Site Background</u>.....	1
1.3	<u>Summary of 2023 Monitoring, Inspection and Maintenance Activities</u>.....	2
2.0	MONITORING, INSPECTION AND MAINTENANCE REQUIREMENTS	3
2.1	<u>Monitoring Requirements</u>.....	3
2.2	<u>Inspection and Maintenance Requirements</u>	4
3.0	GROUNDWATER MONITORING RESULTS.....	4
3.1	<u>Fall Monitoring Event Results</u>.....	5
3.2	<u>Data Quality Assessment</u>.....	7
3.3	<u>Potentiometric Mapping</u>	8
4.0	SURFACE WATER AND SEDIMENT MONITORING RESULTS	8
5.0	LEACHATE SUMP AND MANHOLE MONITORING RESULTS.....	9
5.1	<u>Leachate Monitoring Results</u>.....	9
5.2	<u>Manhole Monitoring Results</u>	9
6.0	AIR QUALITY MONITORING RESULTS.....	10
7.0	RESIDENTIAL WATER SUPPLY MONITORING RESULTS.....	10
8.0	INSPECTIONS AND MAINTENANCE ACTIVITES	11
9.0	CONCLUSIONS.....	12

Tables

Table 2-1 – Monitoring Requirements

Table 2-2 – Approved Analyte List

Table 2-3 – 2023 Static Groundwater Level Monitoring Data

Table 3-1 –Groundwater Analytical Results (Last 3 Years)

Table 3-2 –Groundwater Emerging Contaminants Analytical Results (Last 3 Years)

Table 3-3 – 2023 Field Duplicate Sample Comparison

Table 3-4 – 2023 Equipment Blank Analytical Results

Table 4-1 –Surface Water Analytical Results (Last 3 Years)

Table 5-1 –Leachate Sump and Manhole Analytical Results (Last 3 Years)

Table 6-1 – Fall 2023 Air Monitoring Results

Table 7-1 – Spring and Fall 2023 Residential Water Supply Contact and Sampling Summary

Table 7-2 – 2023 Residential Water Analytical Results

Table 8-1 – 2023 Leachate Collection System Cleaning Summary

TABLE OF CONTENTS CONTINUED

Figures

- Figure 1 – Site Location
- Figure 2 – 2023 Monitoring Locations
- Figure 3 – October 23, 2023 Overburden Monitoring Well Potentiometric Map
- Figure 4 – October 23, 2023 Bedrock Monitoring Well Potentiometric Map
- Figure 5 – October 23, 2023 Air Monitoring Locations

Appendices

- Appendix A – NYSDEC Site Management Periodic Review Report Certification
- Appendix B – Monitoring Evaluation, Approved Revised Monitoring Plan and NYSDEC Response
- Appendix C – Field Sampling Forms
- Appendix D – 2023 Laboratory Analytical Reports
- Appendix E – 2023 Quarterly Inspection & Maintenance Checklist
- Appendix F –Concentration Time Trend Graphs
- Appendix G – 2023 Residential Water Supply Results Letters

1.0 OVERVIEW

1.1 Introduction

This report presents operations, maintenance and monitoring activities associated with the closed Wellsville/Andover Landfill (Site) for the period of February 15, 2023 to February 15, 2024 and is being submitted as part of the New York State Department of Environmental Conservation (NYSDEC) Periodic Review Report (PRR) process with a the PRR certification provided in Appendix A.

The Site is located on Snyder Hill Road (previously known as Gorman Road) in Wellsville and Andover townships, Allegany County, New York (Figure 1). Operation, maintenance and monitoring requirements for this Site are detailed in *Operation and Maintenance Manual for the Wellsville/Andover Landfill Site Number 9-02-004 Allegany County, New York*, dated November 1997 (O&M Plan), prepared by Ecology and Environment Engineering, P.C. (E&E) with subsequent revisions. Revisions to the O&M Plan have been approved by NYSDEC and the current O&M requirements are summarized in Section 2 of this report (hereafter referred to as approved O&M Plan) with details included in Appendix B.

1.2 Site Background

The Wellsville/Andover Landfill was operated by the Village of Wellsville from 1964 to 1983, accepting both municipal and industrial waste. NYSDEC added the Site to the New York State Superfund with a 1994 Record of Decision (ROD) requiring waste consolidation and capping as the remedial action. Remedial construction commenced in April 1996. Waste from the northwest and northeast fill areas was removed and consolidated on the south/south-central fill area. Following consolidation, the fill was compacted and capped with a 19-acre cover system. The cover system incorporates a passive landfill gas (LFG) venting system, a leachate collection and storage system and groundwater cut-off trench on the north and east sides. Remedial construction was completed in September 1997.

The leachate collection system gravity drains to a Leachate Sump (LS-1), from which leachate is pumped into two 15,000 gallon underground storage tanks. The Village of Wellsville transports water from the storage tanks to the Village of Wellsville Publicly Owned Treatment Works (POTW) for treatment. The Village of Wellsville POTW operates under a SPDES permit and the Village has a waste hauler permit to transport the leachate to the POTW.

The groundwater cutoff trench is intended to capture groundwater from the north and east landfill perimeters. The north side collection trench drains to Manhole 32 (MH-32) located at the northwest corner of the landfill, while the east side collection trench drains to Manhole 33 (MH-33) at the southeast corner of the landfill. Both MH-32 and MH-33 are piped to drain either to the leachate collection system or to the landfill perimeter surface water drainage channels. To date, water in MH-32 and MH-33 has been drained to the leachate collection system. The pipes from the manholes to the drainage channel are closed with removable plugs.

Post remedial action (post-closure) monitoring has been ongoing at the Site since June 1998.

1.3 Summary of 2023 Monitoring, Inspection and Maintenance Activities

This section provides an overview of the monitoring, inspection and maintenance activities completed in 2023.

The required 2023 environmental monitoring was completed by On-Site Geological Services, D.P.C. (On-Site) in accordance with the current O&M Plan. Monitoring is primarily conducted in an annual fall event consisting of: 1) sampling groundwater, leachate and four residential water supplies; and 2) air quality monitoring at landfill gas vents, lateral cleanouts, manholes and landfill perimeter. Spring sampling of surface water and one residential water supply is also conducted. The fall 2023 groundwater monitoring event included Emerging Contaminants (EC) sampling and analysis of select monitoring wells in accordance with the approved O&M Plan. EC include Per- and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane. Field sampling forms are included in Appendix C. Laboratory analysis was conducted by ALS Environmental (ALS), located in Rochester, New York. The 2023 monitoring shows consistent results as compared to historical monitoring indicating the Site remedy is operating as designed. Details of these monitoring activities are provided in Section 3 through 7 and the 2023 laboratory analytical reports are included in Appendix D.

Quarterly inspections are conducted and documented on Inspection and Maintenance Checklist by Village of Wellsville personnel (Appendix E). 2023 Quarterly inspections resulted with no unresolved problems. 2023 maintenance activities included the following:

- annual mowing of landfill cap and landfill perimeter vegetation;
- leachate management and disposal;
- leachate sump pump 1 replacement;

- leachate collection system water jet cleaning; and
- WAL-19 residential water treatment unit maintenance.

Details of the maintenance activities are provided in Section 8.

2.0 MONITORING, INSPECTION AND MAINTENANCE REQUIREMENTS

This section outlines monitoring, inspection and maintenance requirements specified by the approved O&M Plan.

2.1 Monitoring Requirements

The analytical program for the site is based on the requirements of Title 6 NYCRR Subdivision 360-2.11(c) and 360-2.17(f). Previous revisions to the monitoring program were approved in May 2009. The most recent revisions are provided in the May 19, 2021 and April 26, 2022 letters from the NYSDEC included in Appendix B, which took effect spring 2022. These updates include conducting annual groundwater sampling and analysis each fall and eliminating sampling of monitoring wells MW-3S, MW-15S and MW-16S. Additionally based on 2021 EC sampling analysis, NYSDEC has requested annual EC sampling and analysis for monitoring wells CW-3B, CW-4A, CW-4B and MW-17S, and MW-5D annually for 1,4-Dioxane.

Table 2-1 presents the approved monitoring program, with the current analyte list presented in Table 2-2. Sampling locations are presented in Figure 2. Monitoring is conducted primarily annually and includes testing groundwater, surface water, leachate, air quality and four residential water supplies. Details of the approved monitoring requirements are provided below.

- Each fall, 13 monitoring wells are sampled for field parameters, VOCs and metals listed on Table 2-2. Additionally CW-3B, CW-4A, CW-4B and MW-17S are sampled annually for EC and MW-5D is tested annually for 1,4-Dioxane. Surface water location SWS-1, Groundwater cut-off system locations MH-32 and MW-33, and leachate sump LS-1 are sampled annually for the parameters listed on Table 2-2. Due to dry conditions often preventing surface water sampling in the fall, starting in 2016, surface water sampling is generally conducted in spring.
- Static groundwater levels are required to be measured in the monitoring wells and piezometers located on and around the landfill cap as part of each fall monitoring event. Groundwater elevations are used to construct potentiometric maps. Table 2-3 provides a tabular listing of the current year's static water elevations along with well construction information.
- Air quality monitoring is conducted annually to check for the presences of landfill gas.

Landfill cap vents, leachate collection system cleanouts and landfill perimeter air monitoring is conducted each fall for VOCs, Lower Explosive Level (LEL) and Oxygen (O₂). Air quality monitoring locations are presented in Figure 5.

- Four residential water supplies, designated as WAL-1, WAL-2, WAL-5 and WAL-19 are included in the monitoring program (Figure 2). WAL-1, WAL-2 and WAL-5 require annual monitoring each fall. WAL-1 was unoccupied for several years until 2016, when it was added back into the monitoring program as a generally full-time occupied residence. WAL-2 is a minimally occupied hunting camp. WAL-5 residence is unoccupied and has not been monitored since 2014. WAL-19 is a generally full-time occupied residence adjacent to the southwest side of the landfill. The Village of Wellsville continues to provide contracted maintenance of a water filtration system at WAL-19. The filter system includes a particulate filter and two granulated activated carbon (GAC) filters plumbed in series. This water supply is sampled semi-annually (spring and fall). Water samples are collected for VOCs analysis before the first GAC filter (sample location: WAL-19 Pre), between the GAC filters (WAL-19 Inter) and after the second GAC filter (WAL-19 Post).

2.2 Inspection and Maintenance Requirements

Site inspection and maintenance requirements are specified in the O&M Plan and include the following.

- Conduct quarterly inspections and maintenance (if required) of cover system, leachate collection and storage system, gas venting system, storm water system, groundwater monitoring system, and facility access system (i.e. access roads and gates). Quarterly Inspection and Maintenance Checklists are provided within the O&M Plan and are completed by Village of Wellsville Department of Public Works personnel.
- Annual mowing of the vegetative cover is performed by Village of Wellsville personnel.
- The Village of Wellsville is responsible for maintenance of a residential water treatment unit at residence WAL-19, located at 3914 Snyder Hill Road.

3.0 GROUNDWATER MONITORING RESULTS

Groundwater monitoring was conducted in fall 2023. The fall event is a Site wide monitoring event which includes sampling and analysis of 13 monitoring wells. Table 3-1 provides last three years of groundwater analytical results and includes NYSDEC Class GA Standard (TOGS 1.1.1), NYSDEC Class GA Guidance Value (TOGS 1.1.1) and NYSDOH Maximum Contaminant Level (MCL) exceedances listed in bold. Table 3-2 lists the last three years of EC analytical results with comparisons to NYSDOH MCL and

NYSDEC Class GA Guidance Values (NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs). Monitoring well locations are presented in Figure 2. Field sampling forms are included in Appendix C. Concentration time trend plots for parameters that most frequently exceed Class GA Standards for each monitoring well sampled during 2023 are presented in Appendix F.

3.1 Fall Monitoring Event Results

Groundwater samples were collected from 13 monitoring wells scheduled for sampling during the fall 2023 monitoring event. A discussion of the analytical results is provided below.

Inorganic Compounds (metals)

Groundwater samples were analyzed for fifteen metals during the fall 2023 sampling event (Table 2-2). Iron, Manganese and Sodium exceeded Class GA standards in 2023 and are the metals that exceed Class GA Standards on a frequent basis. Concentration time trend plots for these three metals have been created to graphically present the most recent 10 years of monitoring data. These plots are presented in Appendix F for monitoring wells that have shown NYSDEC Class GA Standard exceedances of these metals during this time period. Monitoring wells CW-3A, CW-3B, CW-4A, CW-4B, MW-4D, MW-5D, MW-5S, MW-11S, MW-17D, MW-17S, MW-18D and MW-18S are included. These graphs illustrate generally stable Iron, Manganese and Sodium concentrations for the past 10 years. These three metals have been detected at various concentrations above standards at both upgradient and downgradient wells. Also consistent with historical data, 2023 CW-3B and MW-17S Magnesium results are above NYSDEC Class GA Guidance Value. These detected metals are common soil constituents and regionally occur naturally at the concentrations detected in Site groundwater.

VOCs

Groundwater from each well sampled during the fall 2023 sampling event was analyzed for VOCs, which include 36 compounds (Table 2-2). Consistent with historical monitoring data, 2023 results show cDCE, TCE and Vinyl chloride exceeding Class GA Standards. cDCE, TCE and Vinyl chloride are the primary Site constituents of interest and commonly exceed Class GA Standards. Therefore concentration time trend plots for these three VOCs have been created. The plots include data from 2014 through 2023 and are included in Appendix F for monitoring wells that have shown Class GA Standard exceedances for these compounds. These monitoring wells include CW-3A, CW-3B, MW-3D, MW-4D, MW-5D, MW-5S, MW-11S, MW-17S and MW-18S. A discussion of the VOC time trend graphs is provided below.

- Downgradient overburden well CW-3A TCE concentrations are generally stable at approximately 0.04 mg/L, while cDCE and Vinyl chloride have been near or below reporting limit the last 10 years.
- TCE at downgradient overburden well CW-3B has varied between 0.34 mg/L and 0.47 mg/L and has been primarily stable. cDCE concentrations have been stable at approximately 0.1 mg/L and Vinyl chloride has been non-detect.
- Upgradient bedrock well MW-3D has shown cDCE generally stable with minor variations between approximately 0.0019 mg/L and 0.013 mg/L over this 10 year monitoring period. The cDCE variations over time are likely associated with changes in groundwater levels but do not directly correlate with the measured groundwater elevations. TCE and Vinyl chloride results are primarily non-detect.
- Cross-gradient bedrock well MW-4D has shown cDCE and Vinyl chloride on a generally decreasing to stable trend, while TCE has been primarily non-detect.
- Cross-gradient bedrock well MW-5D exhibits low-level detections of TCE and Vinyl chloride throughout this 10 year monitoring period. cDCE has been generally stable between approximately 0.083 mg/L and 0.96 mg/L with some expression of seasonality. NYSDEC has requested 1,1-Dichloroethene and Trans-1,2-Dichloroethene also is included on the MW-5D plot. The graph shows these two parameters at or near reporting limits the last 10 years.
- Cross-gradient overburden well MW-5S exhibits generally stable cDCE, TCE and Vinyl chloride since 2014.
- Downgradient overburden well MW-11S has shown Vinyl chloride near reporting limits and cDCE has been stable at approximately 0.3 mg/L. TCE appears generally stable between 2.1 mg/L and 3.5 mg/L.
- Cross-gradient overburden well MW-17S shows cDCE concentrations with a slight decreasing trend starting in 2014. TCE and Vinyl chloride concentrations have been at or near reporting limits.
- Cross-gradient overburden well MW-18S has generally exhibited cDCE, TCE and Vinyl Chloride concentration near or below reporting limits the last 10 years. However, TCE was detected at 0.021 mg/L in 2022, which represents a moderate increase. In 2023 TCE has returned to historical levels at a concentration of 0.0015 mg/L, which is below the Class GA Standard.

Emerging Contaminants

As required by NYSDEC letter dated April 26, 2022 (Appendix B), the NYSDEC assessed the EC sampling results detailed within the 2021-2022 PPR and requested monitoring wells CW-3B, CW-4A, CW-4B and MW-17S continue to be sampled annually for PFAS and 1,4-dioxane. Additionally, MW-5D is required to be sampled annually for 1,4-dioxane only. EC results for the last three years are presented in Table 3-2 and the 2023

laboratory analytical report is included in Appendix D. The table below provides the 2023 detected PFAS compounds in ng/L (nanograms per liter or parts per trillion) and 2023 detected 1,4-Dioxane compounds in ug/L (micrograms per liter or parts per billion) with concentration in bold exceeding guidance value.

Parameter	Units	CW3B-1023	CW4A-1023	CW4B-1023	MW5D-1023	MW17S-1023	Guidance Value GA
Perfluorobutanesulfonic Acid (PFBS)	ng/L	2.3 J	1.4 J	1.6 J	NA	2 J	
Perfluorobutanoic Acid (PFBA)	ng/L	4 J	7	8.8	NA	8.8	
Perfluoroheptanoic Acid (PFHpA)	ng/L	2.4 J	ND	ND	NA	4.5 J	
Perfluorohexanesulfonic Acid (PFHxS)	ng/L	2.7 J	1.3 J	1.7 J	NA	2.3 J	
Perfluorohexanoic Acid (PFHxA)	ng/L	6.8	0.77 J	ND	NA	5.4	
Perfluorooctanesulfonic Acid (PFOS)	ng/L	9.9	5.1	6.3	NA	3.2 J	2.7
Perfluorooctanoic Acid (PFOA)	ng/L	7.7	7.8	10	NA	28	6.7
Perfluoropentane sulfonic acid (PFPeS)	ng/L	1.7 J	ND	ND	NA	0.95 J	
Perfluoropentanoic Acid (PFPeA)	ng/L	2.9 J	0.97 J	1.2 J	NA	3.2 J	
Total PFAS	ng/L	40.4	24.34	29.6	NA	58.35	
1,4-Dioxane	ug/L	0.75	0.22	0.34	0.62	0.34	0.35

J - Estimated Value ND - Not Detected NA – Not Analyzed Concentrations in **bold** exceed Guidance Value

Many of these detections are flagged “J”, indicating the result is a low-level estimated value between the laboratory method detection limit and laboratory reporting limit. These values are estimated as they are not accurately quantified at this low-level concentration. The three compounds with guidance values are PFOS, PFOA and 1,4-Dioxane. Results above guidance values are listed in bold in the above table.

3.2 Data Quality Assessment

Samples were collected following proper procedures and were placed in laboratory supplied, pre-labeled containers, pre-preserved as appropriate, recorded on chain-of-custody form(s), placed in coolers, and packed with bagged wet ice. At the end of each sampling day, chain-of-custody forms were reviewed for completeness, coolers were re-iced and sealed. Samples were received by the laboratory in good condition and within temperature requirements. Samples were generally analyzed within appropriate hold times and the laboratory reported no significant analysis anomalies. Additional data quality control information is provided in the laboratory analytical reports located in Appendix D. The results presented in this report should be considered technically correct and usable.

Field Duplicate Samples

A field duplicate sample was collected during the fall sampling event. A field duplicated sample (DUP1-1023) was collected from monitoring well MW-5D on October 26, 2023. Results from the MW-5D sample compare favorably with the associated duplicate sample, indicating good sampling and analysis precision. A field duplicate sample comparison is presented in Table 3-3.

Field Equipment Blank Sample

A field sampling pump equipment blank sample was collected during the fall sampling event (EB1-1023). The field equipment blank sample was collected by pumping laboratory provided deionized water through the sampling pump and tubing. Sample EB1-1023 was collected from the bladder pump and tubing used to sample monitoring wells CW-3A, CW-4A, MW-5D, MW-5S and MW-17D. The 2023 equipment blank results are primarily non-detect and consistent with deionized water, indicative of proper sampling equipment cleaning. Equipment blank results are provided in Table 3-4.

3.3 Potentiometric Mapping

Prior to monitoring well purging and groundwater sample collection, static groundwater levels were measured at monitoring wells and piezometers. The fall 2023 groundwater elevations represent generally low groundwater elevation setting (dry conditions) and are utilized to develop separate potentiometric maps for wells screened in overburden and wells screened in bedrock. The potentiometric maps for 2023 are included as Figures 3 and Figure 4. Each contour represents a line of equivalent groundwater elevation. The direction of groundwater flow is generally to the southwest from higher to lower groundwater elevation. The 2023 potentiometric maps are consistent with historical groundwater level data indicating stable and predictable groundwater flow.

4.0 SURFACE WATER AND SEDIMENT MONITORING RESULTS

Surface water and sediment location SWS-1 is positioned at the southwest corner of the landfill at the downstream side of the culvert within the drainage ditch that leads to an unnamed tributary to Duffy Hollow Creek (Figure 2). Both the unnamed tributary and Duffy Hollow Creek are classified as NYSDEC Class C streams. Surface water and sediment sampling at SWS-1 is required on an annual basis. In 2023 SWS-1 was sampled on May 1, 2023. Sediment was not observed within the surface water ditch in 2023 as typical and therefore not sampled. Surface water results from the last three samplings are presented in Table 4-1. The 2023 surface water results are below Class C Standards with VOCs reported as non-detect. Surface water seeps along the perimeter of the landfill have not been observed to be active since 2003; therefore no seep samples

were collected in 2023.

5.0 LEACHATE SUMP AND MANHOLE MONITORING RESULTS

Water samples are required to be collected at Leachate Sump (LS-1) and two groundwater cut-off manholes (MH-32 and MH-33) annually. Sampling locations are presented in Figure 2. Table 5-1 lists results from the last three years with comparisons to Class GA Standards and Guidance Values. A discussion of leachate sump and manhole analytical results is provided below.

5.1 Leachate Monitoring Results

Metals

Metals were analyzed in one leachate sample during 2023. Metals detected in 2023 include Arsenic, Barium, Calcium, Iron, Magnesium, Manganese, Nickel, Potassium, Sodium and Zinc. 2023 Metals results are consistent with historical data and show Iron, Magnesium, Manganese and Sodium exceeding Class GA Standards or Guidance Value (Magnesium). A concentration time trend plot for Iron, Manganese and Sodium is included in Appendix F. This plot illustrates LS-1 Iron, Manganese and Sodium concentrations generally stable the last 10 years with Sodium showing a moderate increase in 2023.

VOCs

VOCs were analyzed in one leachate sample during 2023 with results consistent with historical data. TCE and Vinyl chloride concentrations are typically observed near reporting limits. cDCE is generally detected at concentrations up to 0.47 mg/L. In 2023 LS-1 VOC results are non-detect. A concentration time trend plot for cDCE, TCE and Vinyl Chloride is included in Appendix F.

5.2 Manhole Monitoring Results

Metals

Metals were analyzed in two manhole water samples in fall 2023. Metals detected in 2023 at MH-32 or MH-33 includes Barium, Calcium, Iron, Magnesium, Manganese, Nickel, Potassium, Selenium, Sodium and Zinc. 2023 Manhole metals results are consistent with historical data and show Class GA exceedances for Iron and Manganese at MH-32 and Iron at MH-33. Concentration time trend plots for Iron, Manganese and Sodium have been created as presented in Appendix F. MH-32 and MH-33 Iron, Manganese and Sodium concentrations appear generally stable the last 10 years.

VOCs

VOCs were analyzed in two manhole water samples in fall 2023. MH-32 shows detections of Benzene (0.0026 J), cDCE (3.6 D mg/L), Dichloromethane (0.088 mg/L), Toluene (0.0075 J), TCE (1.9 mg/L) and Vinyl chloride (0.04 mg/L), which are generally typical for this location. With the exception of cDCE (0.18 mg/L), TCE (0.17 mg/L) and Vinyl chloride (0.00052 J), MH-33 2023 VOC results are non-detect. Concentration time trend plots for cDCE, TCE and Vinyl chloride are included in Appendix F. MH-32 cDCE concentrations have fluctuated from near reporting limit to 9.1 mg/L while TCE and Vinyl chloride generally at or near reporting limit the last 10 years. With the exception of fall 2023 MH-33 has shown cDCE, TCE and Vinyl chloride at or near reporting limits the last 10 years. The moderate increase observed in 2023 may be related to dry conditions.

General Chemistry

Manholes MH-32 and MH-33 samples were analyzed for Nitrate Nitrogen and Total Dissolved Solids (TDS) in 2023. With the exception of MH-33 Nitrate nitrogen (0.3 J) low-level estimated detection, results are non-detect. MH-32 and MH-33 2023 TDS results are 533 mg/L (exceeds Class GA Standard) and 331 mg/L, respectively.

6.0 AIR QUALITY MONITORING RESULTS

Air monitoring at the landfill perimeter, gas vents and LCS locations were conducted during the fall 2023 event utilizing a QRAE Mini RAE 3000 Photo Ionization Detector (PID) for VOCs and a QRAE3 four-gas meter for Oxygen (O_2) and Lower Explosive Limit (LEL). Please see Figure 5 for monitoring locations.

Prior to commencing air monitoring, the air monitoring instruments were properly calibrated according to manufacturer specifications. PID readings at the gas vents, LCS manholes and clean-out vents range from 0.0 ppm to 17.8 ppm. Oxygen levels ranged from 18.1% to 20.9%. 2023 LEL readings range from 0% to >99%. Upwind and downwind PID and LEL readings at the landfill perimeter are not above background readings indicating no measurable landfill gas at the landfill perimeter. Oxygen readings at the landfill perimeter are also within normal range. The air monitoring readings are recorded in tabular form and presented in Table 6-1.

7.0 RESIDENTIAL WATER SUPPLY MONITORING RESULTS

Three residential water supplies were sampled in 2023. Residential location WAL-19 was sampled in the spring and fall 2023 while residential locations WAL-1 and WAL-2 were sampled in fall 2023. WAL-5 was not sampled as it remains vacant. Table 7-1

presents an overview of 2023 residential contact information and sampling summary. Table 7-2 is a tabular listing of 2023 residential water analytical results. Figure 2 presents the approximate sampling locations. Letters mailed to the property owners providing the 2023 sampling results are included as Appendix G. A discussion of analytical results is provided below.

Metals

WAL-1 2023 metals results are below NYSDOH MCLs and Class GA Standards. WAL-2, sampled for metals only, shows Iron at 0.62 mg/L and Manganese at 0.784 mg/L, exceeding the NYSDOH MCLs and Class GA Standards. Additionally, Sodium at 47.4 mg/L exceeds the Class GA Standard. The WAL-2 2023 metals results are consistent with historical results and ambient groundwater quality. The water quality exceedances are likely naturally occurring detections and not associated with the landfill. Metals analysis is not required at WAL-19.

VOCs

The residential water supply samples requiring VOC analysis are tested for Target Compound List VOCs (method 524.2) as required by the current O&M Plan. WAL-1 VOCs are non-detect in 2023, as typical. VOC analysis is not required at WAL-2. WAL-19 was tested for VOCs before filters, between filters, and after filters on April 28, 2023 and again on October 24, 2023. WAL-19 results are typical of historical data with detected compounds cDCE and TCE before filters at concentrations below Class GA standards and NYSDOH MCLs and non-detect after filtration.

8.0 INSPECTIONS AND MAINTENANCE ACTIVITES

Quarterly Inspections and routine maintenance were performed by Village of Wellsville personnel and recorded on the Quarterly Inspection and Maintenance Checklist provided in the O&M Plan. Quarterly inspections were completed on March 31, June 30, September 29 and December 29, 2023. No unresolved problems were noted on the inspection forms. The 2023 completed inspection forms are included in Appendix D. A description of maintenance activities performed during 2023 is provided below.

- The landfill cap vegetative cover was mowed by Village of Wellsville in October 2023.
- The Village of Wellsville continues to contract maintenance of the water treatment unit at WAL-19 residence.
- Spring 2023 Village of Wellsville replaced leachate sump pump number 1.
- On June 21, 2023, leachate collection system manholes and laterals were cleaned by JJH Power wash utilizing water jet with oversight provided by On-Site. Details of this work are presented in Table 8-1.
- Approximately 1,485,000 gallons of leachate was hauled by Village of Wellsville from

the Site to the Village of Wellsville POTW during 2023. The table below lists the total leachate gallons by year for the previous six years.

Year/Gallons	2017	2018	2019	2020	2021	2022	2023
	2,521,185	2,891,240	2,480,000	1,990,000	2,128,000	1,390,000	1,485,000

9.0 CONCLUSIONS

Monitoring and maintenance activities are being performed as required at the Wellsville/Andover Landfill. Routine maintenance and inspections are being conducted to maintain the Site. The approved monitoring plan requires annual groundwater EC sampling starting in 2021. Twenty-six years of post-closure monitoring has been completed and illustrates the Site is stable. Monitoring will continue as required by the approved plan detailed in Section 2 of this report. Maintenance activities planned for 2024 include:

- annual mowing of landfill cap vegetation;
- leachate management and disposal;
- leachate collection system cleaning; and
- WAL-19 water treatment unit maintenance.

Tables

Table 2-1

Monitoring Requirements
Wellsville/Andover Landfill
Wellsville, New York

Location	Sampling Frequency	Analyte List ¹	Location	Sampling Frequency	Analyte List ¹
Groundwater⁸					
CW-3A	Annual - Fall	Field, VOCs, Metals	WAL-1 ⁷	Annual - Fall	VOCs ⁵ , Metals
CW-3B	Annual - Fall	Field, VOCs, Metals, ECs	WAL-2	Annual - Fall	Metals
CW-4A	Annual - Fall	Field, VOCs, Metals, ECs	WAL-5	Annual - Fall	VOCs ⁵ , Metals
CW-4B	Annual - Fall	Field, VOCs, Metals, ECs	WAL-19	Semiannual - Spring/Fall	VOCs ^{2,5}
MW-17D	Annual - Fall	Field, VOCs, Metals			
MW-17S	Annual - Fall	Field, VOCs, Metals, ECs			
MW-18D	Annual - Fall	Field, VOCs, Metals			
MW-18S	Annual - Fall	Field, VOCs, Metals			
MW-3D	Annual - Fall	Field, VOCs, Metals			
MW-4D	Annual - Fall	Field, VOCs, Metals			
MW-5D	Annual - Fall	Field, VOCs, Metals, 1,4-D			
MW-5S	Annual - Fall	Field, VOCs, Metals			
MW-11S	Annual - Fall	Field, VOCs, Metals			
Leachate					
LS-1	Annual - Fall	Field, VOCs, Metals			
Groundwater Cut-Off System					
MH-32	Annual - Fall	Field, VOCs, Metals, NO ₃ , TDS	SWS-1	Annual - Spring	Field, VOCs, Metals, Wet Chem ³
MH-33	Annual - Fall	Field, VOCs, Metals, NO ₃ , TDS	SWS-1	Annual - Spring	Field, VOCs, Metals, Wet Chem ³
Residential Water Supply					
Vents	Annual - Fall	PID, LEL, O ₂			
Leachate Clean-outs	Annual - Fall	PID, LEL, O ₂			
Manholes	Annual - Fall	PID, LEL, O ₂			
Perimeter	Annual - Fall	PID, LEL, O ₂			
Landfill Gas Monitoring					
Surface Water⁶					
SWS-1	Annual - Spring	Field, VOCs, Metals, Wet Chem ³			
Sediment⁶					
SWS-1	Annual - Spring	Field, VOCs, Metals, Wet Chem ³			
Groundwater Level Monitoring					
Active Wells	Annual - Fall	Depth to Groundwater			
Reporting					
Annual	Annual Periodic Review Report ⁴				

Notes

Revised monitoring program is based on: April 3, 2009 On-Site letter *Site Monitoring Evaluation and Proposed Revised Monitoring Program*; NYSDEC May 12, 2009 response follow up e-mail and May 19, 2021 NYSDEC Letter (Appendix B).

¹ - Field = Field Parameters (WL, pH, Conductivity, Dissolved Oxygen, Turbidity, Oxidation Reduction Potential)

- VOCs = Volatile Organic Compounds method 8260

- Metals = As, Ba, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Na, Z

- NO₃ = Nitrate Nitrogen and TDS = Total Dissolved Solids

- ECs = PFAS & 1,4-Dioxane

- 1,4-D = 1,4-Dioxane

² WAL-19 tested for VOCs prior to filters, between filters and after filters

³ Wet Chemistry - Color, TOC, Total Phenolics, Alkalinity, BOD, Cl, Br, SO₄, TDS, NO₃, NH₃, COD, TKN

⁴ Annual periodic review report will include details of the year's monitoring results, comparison of results to standards and historic results, potentiometric maps, details operation and maintenance and IC/EC certification.

⁵ Residential VOCs are tested using method 524.2

⁶ Starting in 2016 Surface Water and Sediment sampling changed from fall to spring due to dry conditions in fall often prohibiting sample collection

⁷ Starting 2016, WAL-1 residential water supply added back into the monitoring programs as this residence is occupied.

⁸ Starting 2022, only annual groundwater sampling required in Fall. Additionally, MW-3S, MW-15S and MW-16S removed from sampling program and annual EC sampling added to select monitoring wells.

Table 2-2

Approved Analyte List
Wellsville/Andover Landfill
Wellsville, New York

Field Parameters	Volatile Organic Compounds
Specific Conductance	1,1,1-Trichloroethane
Temperature	1,1,2,2-Tetrachloroethane
Field pH	1,1,2-Trichloroethane
Oxygen Reduction Potential	1,1-Dichloroethane
Dissolved Oxygen	1,1-Dichloroethene
Turbidity	1,2-Dibromoethane
	1,2-Dichloroethane
	1,2-Dichloropropane
	2-Butanone (MEK)
	2-Hexanone
	4-Methyl-2-pentanone
	Acetone
	Benzene
	Bromodichloromethane
	Bromoform
	Bromomethane
	Carbon disulfide
	Carbon tetrachloride
	Chlorobenzene
	Chloroethane
	Chloroform
	Chloromethane
	cis-1,2-Dichloroethene
	cis-1,3-Dichloropropene
	Dibromochloromethane
	Dichloromethane (Methylene chloride)
	Ethyl benzene
	m&p-Xylene
	o-Xylene
	Styrene
	Tetrachloroethene
	Toluene
	trans-1,2-Dichloroethene
	trans-1,3-Dichloropropene
	Trichloroethene
	Vinyl chloride
Groundwater Cut-Off System	Emerging Contaminants (EC)
General Chemistry	
Nitrate Nitrogen	PFAS by EPA 1633
Total Dissolved Solids	1,4-Dioxane
Surface Water and Sediment	
General Chemistry	
Alkalinity	
Ammonia Nitrogen	
Biochemical Oxygen Demand	
Bromide	
Chemical Oxygen Demand	
Chloride	
Color (True) (C.U.)	
Nitrate Nitrogen	
Sulfate	
Total Dissolved Solids	
Total Kjeldahl Nitrogen	
Total Organic Carbon (TOC)	
Total Phenolics	

Table 2-3

2023 Static Groundwater Level Monitoring Data
Wellsville/Andover Landfill
Wellsville, New York

Well Number	Well Diameter (in)	TOC Elevation (ft amsl)	Protective Casing Elevation (ft amsl)	Ground Elevation (ft amsl)	Well Depth from TOC (ft)	Screened Interval from Ground (ft)	Screened Bedrock or Overburden	10/23/2023 DTW From TOC (ft)	10/23/2023 Static Water Elevation (ft amsl)
MW-1D	2	2193.32	2193.75	2190.6	77.39	64 - 74	Bedrock	70.16	2123.16
MW-3D	2	2095.80	2096.07	2092.4	46.75	30 - 40	Bedrock	23.11	2072.69
MW-3S	2	2095.70	2095.96	2093.1	25.92	9 - 19	Overburden	13.55	2082.15
MW-4D	2	2092.22	2092.39	2090.3	24.63	12 - 22	Bedrock	16.70	2075.52
MW-5D*	2	2067.58	2067.78	2065.4	37.74	26.5 - 36.5	Bedrock	5.58	2062.00
MW-5S	2	2067.30	2067.59	2065.5	21.20	10 - 20	Overburden	4.72	2062.58
MW-7D	2	2012.13	2012.69	2009.6	47.97	35 - 45	Bedrock	37.87	1974.26
MW-11S	2	2003.52	2003.86	2001.6	20.40	8 - 18	Overburden	9.88	1993.64
MW-15S	2	2022.88	2023.05	2020.2	22.10	9 - 19	Overburden	21.51	2001.37
MW-15DA	2	2022.67	2023.08	2020.4	56.28	43 - 53	Bedrock	56.15	1966.52
MW-16D	2	1924.73	1925.25	1922.0	53.00	40 - 50	Bedrock	28.20	1896.53
MW-16S	2	1924.98	1925.15	1922.2	18.67	6 - 16	Overburden	15.40	1909.58
MW-17D	4	2037.36	NA	2034.9	65.1	(open hole)	Bedrock	32.98	2004.38
MW-17S	2	2037.59	2037.68	2034.6	26.94	9 - 24	Overburden	9.82	2027.77
MW-18D	4	2066.19	NA	2062.6	28.50	24.5 - 39.5 (open hole)	Bedrock	15.22	2050.97
MW-18S**	2	2064.60	2065.72	2063.0	20.49	4 - 19	Overburden	12.21	2053.51
CW-3A	2	2013.75	2013.90	2012.9	27.47	21 - 26	Overburden	10.84	2002.91
CW-3B	2	2013.90	2014.10	2012.9	37.70	33.5 - 38.5	Overburden	21.88	1992.02
CW-4A	2	2006.11	2006.35	2004.7	19.12	13 - 18	Overburden	7.58	1998.53
CW-4B	2	2005.84	2005.93	2004.7	30.16	25.5 - 30.5	Overburden	6.94	1998.90
PZ-1	2	2095.11	2095.27	2092.2	NM	6 - 13	Overburden/ Refuse	15.51	2079.60
PZ-2	2	2095.83	2096.13	2092.9	NM	14 - 24	Overburden/ Refuse	20.19	2075.64
PZ-4	2	2067.13	2067.38	2064.4	NM	12 - 22	Overburden/ Refuse	26.10	2041.03
PZ-5	2	2059.71	2059.71	2056.7	NM	8 - 18	Overburden/ Refuse	12.20	2047.51
PZ-6	2	2042.18	2042.31	2039.2	NM	8 - 18	Overburden/ Refuse	22.65	2019.53

Notes:**Dry** - Water not present**NM** - Not Measured**NA** - Not Applicable

* MW-5D Repaired on 10/29/2019. After repair measured new TOC elevation at 2067.58 ft and Protective Casing at 2067.78 ft

** MW-18S 10/23/2023 groundwater measured from top protective casing

Table 3-1

Groundwater Analytical Results (Last 3 Years)
Wellsville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	CW-3A 10/18/2021	CW-3A 10/20/2022	CW-3A 10/25/2023	CW-3B 10/18/2021	CW-3B 10/18/2022	CW-3B 10/25/2023	CW-4A 10/18/2021	CW-4A 10/19/2022	CW-4A 10/25/2023	CW-4B 10/18/2021	CW-4B 10/18/2022	CW-4B 10/25/2023	Class GA Standard	Guidance Value GA	NYSDOH MCL
-----------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	----------------------	----------------------	---------------

Field Parameters

Depth to Groundwater (ft)	9.3	9.79	10.43	20.84	20.78	21.85	3.34	6.6	7.52	5.09	5.62	9.68			
Dissolved Oxygen	6.16	9.42	6.69	1.75	0.91	1.63	2.85	7.31	0.46	3.12	4.42	1.95			
Field pH (std. units)	11.68	12.01	11.99	6.73	6.59	6.88	6.16	6.33	6.46	6.73	6.58	6.81	6.5 - 8.5		
ORP (mV)	113.2	96.3	-1	272	139.6	147.4	229.4	106.6	161.2	265	194.8	163.5			
Specific Conductivity (us/cm)	639.9	1479	1251	595.7	604.9	563.9	319.2	279.9	276.4	348.9	353.5	325.6			
Temperature (deg. C)	10.5	4.9	15.7	8.8	7.8	12.5	10.9	9.7	13.2	11.7	9.9	13.1			
Turbidity (NTU)	9.37	1.15	23.2	0.25	3.4	1.32	1.68	9.61	12.5	0.34	0.57	1.14	5		5

Inorganic Compounds

Arsenic	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025		0.01						
Barium	0.0628	0.098	0.092	0.0384	0.039	0.036	0.0609	0.056	0.051	0.0316	0.03	0.029	1		2
Cadmium	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005		0.005						
Calcium	36.9	123	119	69.9	69.6	68	33.4	29.1	29.1	40.7	39.7	38.7			
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05		0.1						
Copper	0.02 U	0.02 U	0.007 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.2		1.3
Iron	0.1 U	0.51	0.1 U	0.1 U	0.1	0.1 U	0.1 U	0.28	0.36	0.1 U	0.1 U	0.1 U	0.3		0.3
Lead	0.05 U	0.005 U	0.005 U	0.05 U	0.005 U	0.005 U	0.05 U	0.005 U	0.005 U	0.05 U	0.005 U	0.005 U	0.025		0.015
Magnesium	2.86	1 U	3.8	35.5	35.4	35.5	17.1	16.2	16	17.1	17	16.8		35	
Manganese	0.0183	0.01	0.037	0.0298	0.041	0.027	0.491	0.293	0.199	0.249	0.033	0.214	0.3		0.3
Nickel	0.04 U	0.04 U	0.003 J	0.04 U	0.04 U	0.04 U	0.1		0.1						
Potassium	12	12.4	11.7	2.46	2.6	2.5	2 U	2 U	1.3 J	2 U	2 U	1.8 J			
Selenium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01		0.05						
Sodium	55.7	36.4	39.5	22.3	21.9	22.1	13.9	13.6	13.3	15.5	14.7	14.5	20		
Zinc	0.02 U	0.02 U	0.022	0.02 U	0.02 U	0.008 J	0.02 U	0.02 U	0.016 J	0.02 U	0.02 U	0.005 J	2		5

Volatile Organic Compounds

1,1,1-Trichloroethane	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
1,1,2,2-Tetrachloroethane	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
1,1,2-Trichloroethane	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001		0.005
1,1-Dichloroethane	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
1,1-Dichloroethene	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0011 J	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
1,2-Dibromoethane	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005

Table 3-1

Groundwater Analytical Results (Last 3 Years)
Wellsville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	CW-3A 10/18/2021	CW-3A 10/20/2022	CW-3A 10/25/2023	CW-3B 10/18/2021	CW-3B 10/18/2022	CW-3B 10/25/2023	CW-4A 10/18/2021	CW-4A 10/19/2022	CW-4A 10/25/2023	CW-4B 10/18/2021	CW-4B 10/18/2022	CW-4B 10/25/2023	Class GA Standard	Guidance Value GA	NYSDOH MCL
Volatile Organic Compounds (con't)															
1,2-Dichloroethane	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.0006		0.005
1,2-Dichloropropane	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001		0.005
2-Butanone (MEK)	0.01 U	0.005 U	0.005 U	0.05 U	0.025 U	0.013 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.005	0.05	0.05
2-Hexanone	0.01 U	0.005 U	0.005 U	0.05 U	0.025 U	0.013 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U			0.05
4-Methyl-2-pentanone	0.01 U	0.005 U	0.005 U	0.05 U	0.025 U	0.013 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U			0.05
Acetone	0.01 U	0.005 U	0.005 U	0.05 U	0.025 U	0.013 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.05	0.05	0.05
Benzene	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001		0.005
Bromodichloromethane	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.05	0.08	
Bromoform	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.05	0.08	
Bromomethane	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
Carbon disulfide	0.01 U	0.001 U	0.001 U	0.05 U	0.005 U	0.0025 U	0.01 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U		0.06	0.06
Carbon tetrachloride	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
Chlorobenzene	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
Chloroethane	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.00095 J	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
Chloroform	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.007		0.08
Chloromethane	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
cis-1,2-Dichloroethene	0.005 U	0.0048	0.0049	0.1	0.077	0.078	0.005 U	0.001 U	0.00097 J	0.005 U	0.001 U	0.00053 J	0.005		0.005
cis-1,3-Dichloropropene	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.0004		0.005
Dibromochloromethane	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005	0.05	0.08
Dichloromethane (Methylene chloride)	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U			0.005
Ethyl benzene	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
m&p-Xylene	0.005 U	0.002 U	0.002 U	0.025 U	0.01 U	0.005 U	0.005 U	0.002 U	0.002 U	0.005 U	0.002 U	0.002 U	0.005		0.005
o-Xylene	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
Styrene	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
Tetrachloroethene	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
Toluene	0.005 U	0.001 U	0.00052 J	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
trans-1,2-Dichloroethene	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.00066 J	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
trans-1,3-Dichloropropene	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.0025 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.0004		0.005
Trichloroethene	0.017	0.026	0.025	0.43	0.36	0.38	0.005 U	0.001 U	0.00041 J	0.005 U	0.001 U	0.001 U	0.005		0.005
Vinyl chloride	0.005 U	0.001 U	0.001 U	0.025 U	0.005 U	0.001 J	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.002		0.002

Table 3-1

Groundwater Analytical Results (Last 3 Years)
Wellsville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	MW-3D 10/20/2021	MW-3D 10/20/2022	MW-3D 10/24/2023	MW-4D 10/20/2021	MW-4D 10/19/2022	MW-4D 10/24/2023	MW-5D 10/19/2021	MW-5D 10/19/2022	MW-5D 10/26/2023	MW-5S 10/19/2021	MW-5S 10/19/2022	MW-5S 10/26/2023	Class GA Standard	Guidance Value GA	NYSDOH MCL
-----------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	----------------------	----------------------	---------------

Field Parameters

Depth to Groundwater (ft)	17.93	21.7	23.12	10.92	15.4	16.16	1.94	4.6	5.5	1.98	4.1	5.26			
Dissolved Oxygen	1.47	6.11	7.04	1.6	5.99	2.18	1.33	5.22	1.39	0.76	4.57	1.11			
Field pH (std. units)	6.57	10.75	9.55	6.32	6.21	6.14	6.6	6.83	6.6	6.1	6.19	6.31	6.5 - 8.5		
ORP (mV)	136.9	214.6	97.4	16.4	33.2	23.2	174.4	9	37.5	39.9	45.2	31.7			
Specific Conductivity (us/cm)	658	415.8	332.1	270.6	221.1	248	167.3	155.9	296.8	162.2	144.6	143.8			
Temperature (deg. C)	16.5	5.5	14	18.9	6.6	18.8	16.2	8.1	12.4	16.2	7.7	16.9			
Turbidity (NTU)	0.34	0.36	1.19	0.91	1.94	22.2	0.35	2.24	2.09	9.09	0.93	0.7	5		5

Inorganic Compounds

Arsenic	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025		0.01
Barium	0.11	0.065	0.055	0.021	0.02 U	0.036	0.0379	0.03	0.057	0.02 U	0.02 U	0.008 J	1		2
Cadmium	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005		0.005
Calcium	70.1	44.9	37.8	23.9	20.2	22.9	20.1	15.1	26.8	14.7	13.5	13.2			
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05		0.1
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.005 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.2		1.3
Iron	0.1 U	0.37	0.1 U	0.63	0.52	1.32	0.125	1.03	0.31	2.17	0.2	0.14	0.3		0.3
Lead	0.05 U	0.005 U	0.005 U	0.05 U	0.005 U	0.005 U	0.05 U	0.005 U	0.005 U	0.05 U	0.005 U	0.005 U	0.025		0.015
Magnesium	36.3	6.5	10.7	19.7	18.1	19.6	14.1	9.5	21.1	9.97	9.8	9.8		35	
Manganese	0.022	0.01 U	0.012	3.15	1.61	3.22	0.519	0.414	0.844	0.172	0.076	0.08	0.3		0.3
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.01 J	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.1		0.1
Potassium	2.4	4.6	4.2	2.4	2.4	2.7	2 U	2 U	1.6 J	2 U	2 U	1.3 J			
Selenium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01		0.05
Sodium	16.9	19	18.7	5.7	5.7	5.1	7.37	6.3	8.6	6.54	6.3	5.8	20		
Zinc	0.02 U	0.02 U	0.008 J	0.02 U	0.021	0.019 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.005 J		2	5

Volatile Organic Compounds

1,1,1-Trichloroethane	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
1,1,2,2-Tetrachloroethane	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
1,1,2-Trichloroethane	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001		0.005
1,1-Dichloroethane	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.0003 J	0.005 U	0.001 U	0.00033 J	0.005 U	0.001 U	0.00035 J	0.005		0.005
1,1-Dichloroethene	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.00025 J	0.005 U	0.001 U	0.0037	0.005 U	0.001 U	0.00037 J	0.005		0.005
1,2-Dibromoethane	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005

Table 3-1

Groundwater Analytical Results (Last 3 Years)

Wellsville/Andover Landfill

Wellsville, New York

(mg/L except where noted)

Parameter	MW-3D 10/20/2021	MW-3D 10/20/2022	MW-3D 10/24/2023	MW-4D 10/20/2021	MW-4D 10/19/2022	MW-4D 10/24/2023	MW-5D 10/19/2021	MW-5D 10/19/2022	MW-5D 10/26/2023	MW-5S 10/19/2021	MW-5S 10/19/2022	MW-5S 10/26/2023	Class GA Standard	Guidance Value GA	NYSDOH MCL
-----------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	----------------------	----------------------	---------------

Volatile Organic Compounds (con't)

1,2-Dichloroethane	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.0006		0.005
1,2-Dichloropropane	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001		0.005
2-Butanone (MEK)	0.01 U	0.005 U	0.005 U	0.02 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.005	0.05	0.05
2-Hexanone	0.01 U	0.005 U	0.005 U	0.02 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U			0.05
4-Methyl-2-pentanone	0.01 U	0.005 U	0.005 U	0.02 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U			0.05
Acetone	0.01 U	0.005 U	0.005 U	0.02 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.05	0.05	
Benzene	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.00048 J	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001		0.005
Bromodichloromethane	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.05	0.08	
Bromoform	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.05	0.08	
Bromomethane	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 UJ	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
Carbon disulfide	0.01 U	0.001 U	0.001 U	0.02 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.06	0.06	
Carbon tetrachloride	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
Chlorobenzene	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
Chloroethane	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.00094 J	0.005 U	0.001 U	0.00047 J	0.005 U	0.001 U	0.001 U	0.005		0.005
Chloroform	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.007		0.08
Chloromethane	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
cis-1,2-Dichloroethene	0.007	0.0019	0.0022	0.19	0.16	0.19	0.15	0.083	0.38 D	0.18	0.17	0.16	0.005		0.005
cis-1,3-Dichloropropene	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.0004		0.005
Dibromochloromethane	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005	0.05	0.08
Dichloromethane (Methylene chloride)	0.005 U	0.0011	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U			0.005
Ethyl benzene	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.0011	0.005 U	0.001 U	0.001 U	0.005		0.005
m&p-Xylene	0.005 U	0.002 U	0.002 U	0.01 U	0.002 U	0.002 U	0.005 U	0.002 U	0.002 U	0.005 U	0.002 U	0.002 U	0.005		0.005
o-Xylene	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
Styrene	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
Tetrachloroethene	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
Toluene	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
trans-1,2-Dichloroethene	0.005 U	0.001 U	0.001 U	0.01 U	0.001	0.0015	0.005 U	0.001 U	0.0015	0.005 U	0.001 U	0.00052 J	0.005		0.005
trans-1,3-Dichloropropene	0.005 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.0004		0.005
Trichloroethene	0.005 U	0.001 U	0.0019	0.01 U	0.0027	0.017	0.052	0.014	0.21 D	0.035	0.031	0.024	0.005		0.005
Vinyl chloride	0.005 U	0.001 U	0.001 U	0.055	0.077	0.093	0.013	0.0047	0.038	0.016	0.011	0.012	0.002		0.002

Table 3-1

Groundwater Analytical Results (Last 3 Years)

Wellsville/Andover Landfill

Wellsville, New York

(mg/L except where noted)

Parameter	MW-11S 10/20/2021	MW-11S 10/20/2022	MW-11S 10/24/2023	MW-17D 10/19/2021	MW-17D 10/21/2022	MW-17D 10/26/2023	MW-17S 10/19/2021	MW-17S 10/18/2022	MW-17S 10/25/2023	MW-18D 10/21/2021	MW-18D 10/20/2022	MW-18D 10/24/2023	MW-18S 10/21/2021	MW-18S 10/20/2022	MW-18S 10/24/2023	Class GA Standard	Guidance Value GA	NYSDOH MCL
-----------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	---------------

Field Parameters

Depth to Groundwater (ft)	6.13	8.22	9.87	31.86	32.25	33.1	8.61	9.53	9.82	13.43	14.78	15.24	4.29	11.46	12.23			
Dissolved Oxygen	2.32	1.21	0.92	8.67	1.64	1.9	5.61	0.8	0.7	1.11	0.76	0.4	0.67	1.81	0.34			
Field pH (std. units)	6.64	5.75	6.74	9.38	9.48	9.3	7.13	6.49	7.12	7.34	7.56	7.69	6.03	4.93	6.39	6.5 - 8.5		
ORP (mV)	82.5	97.2	45.4	132.9	34.7	45.9	163.4	241.9	131.5	-170.8	-78.6	-188.9	145.6	217.6	-36			
Specific Conductivity (us/cm)	550.9	551.9	507.8	298.4	287.1	286.8	1149	946	1146	382.7	363.7	348.1	276.9	264.4	235.8			
Temperature (deg. C)	17.2	9.3	12.5	10.7	10.6	19.4	13.9	8.1	17.8	12.3	7.6	20.8	13.1	7.4	18.9			
Turbidity (NTU)	1.4	2.27	16.5	59.9	38.4	49.8	3.08	7.35	5.17	25.4	25.7	112	3.17	9.07	5.18	5		5

Inorganic Compounds

Arsenic	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025		0.01
Barium	0.027	0.026	0.034	0.02 U	0.02 U	0.02 U	0.0404	0.04	0.044	0.067	0.066	0.065	0.048	0.051	0.032	1		2
Cadmium	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005		0.005
Calcium	55.3	57	55.3	5.26	2.5	3.4	91.2	76.3	93.4	43	39.4	38.1	40.1	34	30.2			
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05		0.1
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.2		1.3
Iron	0.11	0.15	0.44	16.2	5.5	9.08	0.1 U	0.18	0.15	13.6	4.79	9.49	0.61	0.64	2.3	0.3		0.3
Lead	0.05 U	0.005 U	0.005 U	0.05 U	0.005 U	0.005 U	0.05 U	0.005 U	0.005 U	0.05 U	0.005 U	0.005 U	0.05 U	0.005 U	0.005 U	0.025		0.015
Magnesium	33.7	35.1	35	19.4	21.4	22.2	64.1	49.8	66.8	16.5	18.2	19.3	14.4	15.3	14.1		35	
Manganese	0.758	0.814	0.761	0.214	0.108	0.111	0.055	0.047	0.044	0.635	0.495	0.497	0.079	0.156	0.387	0.3		0.3
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.003 J	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.1		0.1
Potassium	2 U	2 U	2.1	5.26	6.4	4.8	3.65	3.6	3.9	2.7	2.8	2.8	2	2.2	1.9 J			
Selenium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01		0.05
Sodium	21.4	20.7	20.4	35.9	34.2	33.4	78.4	62.7	78	20.4	20.9	21.6	4.3	4.8	3.7	20		
Zinc	0.02 U	0.02 U	0.006 J	0.02 U	0.02 U	0.006 J	0.02 U	0.026	0.004 J	2		5						

Volatile Organic Compounds

1,1,1-Trichloroethane	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
1,1,2,2-Tetrachloroethane	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
1,1,2-Trichloroethane	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001		0.005
1,1-Dichloroethane	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.00072 J	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
1,1-Dichloroethene	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005
1,2-Dibromoethane	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005

Table 3-1

Groundwater Analytical Results (Last 3 Years)

Wellsville/Andover Landfill

Wellsville, New York

(mg/L except where noted)

Parameter	MW-11S 10/20/2021	MW-11S 10/20/2022	MW-11S 10/24/2023	MW-17D 10/19/2021	MW-17D 10/21/2022	MW-17D 10/26/2023	MW-17S 10/19/2021	MW-17S 10/18/2022	MW-17S 10/25/2023	MW-18D 10/21/2021	MW-18D 10/20/2022	MW-18D 10/24/2023	MW-18S 10/21/2021	MW-18S 10/20/2022	MW-18S 10/24/2023	Class GA Standard	Guidance Value GA	NYSDOH MCL
-----------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	---------------

Volatile Organic Compounds (con't)

1,2-Dichloroethane	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.0006		0.005	
1,2-Dichloropropane	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001		0.005	
2-Butanone (MEK)	0.2 U	0.1 U	0.1 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.005	0.05	0.05	
2-Hexanone	0.2 U	0.1 U	0.1 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U			0.05	
4-Methyl-2-pentanone	0.2 U	0.1 U	0.1 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U			0.05	
Acetone	0.2 U	0.1 U	0.1 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U		0.05	0.05	
Benzene	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001		0.005	
Bromodichloromethane	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U		0.05	0.08	
Bromoform	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U		0.05	0.08	
Bromomethane	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005	
Carbon disulfide	0.2 U	0.02 U	0.02 U	0.01 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U	0.01 U	0.001 U	0.001 U		0.06	0.06	
Carbon tetrachloride	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005	
Chlorobenzene	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005	
Chloroethane	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005	
Chloroform	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.007		0.08	
Chloromethane	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005	
cis-1,2-Dichloroethene	0.25	0.23	0.26	0.005 U	0.001 U	0.001 U	0.033	0.02	0.026	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.0018	0.005		0.005	
cis-1,3-Dichloropropene	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.0004		0.005	
Dibromochloromethane	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005	0.05	0.08	
Dichloromethane (Methylene chloride)	0.1 U	0.02 U	0.02 U	0.005 U	0.001	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U			0.005	
Ethyl benzene	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005	
m&p-Xylene	0.1 U	0.04 U	0.04 U	0.005 U	0.002 U	0.002 U	0.005 U	0.002 U	0.002 U	0.005 U	0.002 U	0.002 U	0.005 U	0.002 U	0.002 U	0.005		0.005	
o-Xylene	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005	
Styrene	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005	
Tetrachloroethene	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005	
Toluene	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005	
trans-1,2-Dichloroethene	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.0002 J	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005		0.005	
trans-1,3-Dichloropropene	0.1 U	0.02 U	0.02 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.0004		0.005	
Trichloroethene	2.8	2.7	2.2	0.005 U	0.001 U	0.001 U	0.011	0.0081	0.0073	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.021	0.0015	0.005		0.005
Vinyl chloride	0.1 U	0.02 U	0.0082 J	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.002		0.002	

Notes :

U - Concentration not detected at specified limit

J - Estimated Value

D - Concentration is a result of dilution

Concentrations in **bold** exceed Class GA Standards, Guidance Values and or NYSDOH MCL

Table 3-2

Groundwater Emerging Contaminants Analytical Results

(Last 3 Years)

Wellville/Andover Landfill

Wellsville, New York

Parameter	Units	CW-3B 10/18/2021	CW-3B 10/18/2022	CW-3B 10/25/2023	CW-4A 10/18/2021	CW-4A 10/19/2022	CW-4A 10/25/2023	CW-4B 10/18/2021	CW-4B 10/18/2022	CW-4B 10/25/2023	MW-5D 10/19/2021	MW-5D 10/19/2022	MW-5D 10/26/2023	MW-17S 10/19/2021	MW-17S 10/18/2022	MW-17S 10/25/2023	NYSDOH MCL	Guidance Value GA
11Cl-Pf3OUDs	ng/L	NA	NA	4.4 U	NA	NA	4.8 U	NA	NA	4.4 U	NA	NA	NA	NA	NA	4.8 U		
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ng/L	NA	NA	180 U	NA	NA	190 U	NA	NA	180 U	NA	NA	NA	NA	NA	190 U		
2H,2H,3H,3H-Perfluoroctanoic acid (5:3 FTCA)	ng/L	NA	NA	180 U	NA	NA	190 U	NA	NA	180 U	NA	NA	NA	NA	NA	190 U		
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ng/L	NA	NA	180 U	NA	NA	190 U	NA	NA	180 U	NA	NA	NA	NA	NA	190 U		
4,8-Dioxa-3H-perfluorononanoic Acid (DONA)	ng/L	NA	NA	4.4 U	NA	NA	4.8 U	NA	NA	4.4 U	NA	NA	NA	NA	NA	4.8 U		
6:2 Fluorotelomer sulfonate (FtS 6:2)	ng/L	4.2 U	4.5 U	4.4 U	4.1 U	4.5 U	4.8 U	4.3 U	1.7 J	4.4 U	0.93 J	NA	NA	1.2 J	4.6 U	4.8 U		
8:2 Fluorotelomer sulfonic acid (FtS 8:2)	ng/L	4.2 U	4.5 U	4.4 U	4.1 U	4.5 U	4.8 U	4.3 U	4.5 U	4.4 U	4.2 U	NA	NA	4.3 U	4.6 U	4.8 U		
9Cl-PF3ONS	ng/L	NA	NA	4.4 U	NA	NA	4.8 U	NA	NA	4.4 U	NA	NA	NA	NA	NA	4.8 U		
N-ethylperfluoro-1-octanesulfonamidoacetic acid	ng/L	4.2 U	4.5 U	4.4 U	4.1 U	4.5 U	4.8 U	4.3 U	4.5 U	4.4 U	4.2 U	NA	NA	4.3 U	4.6 U	4.8 U		
N-Ethylperfluoroctane sulfonamide (EtFOSAm)	ng/L	NA	NA	4.4 U	NA	NA	4.8 U	NA	NA	4.4 U	NA	NA	NA	NA	NA	4.8 U		
N-methylperfluoro-1-octanesulfonamidoacetic acid	ng/L	4.2 U	4.5 U	4.4 U	4.1 U	4.5 U	4.8 U	4.3 U	4.5 U	4.4 U	4.2 U	NA	NA	4.3 U	4.6 U	4.8 U		
N-Methylperfluoroctane sulfonamide (MeFOSA)	ng/L	NA	NA	4.4 U	NA	NA	4.8 U	NA	NA	4.4 U	NA	NA	NA	NA	NA	4.8 U		
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ng/L	NA	NA	4.4 U	NA	NA	4.8 U	NA	NA	4.4 U	NA	NA	NA	NA	NA	4.8 U		
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ng/L	NA	NA	4.4 U	NA	NA	4.8 U	NA	NA	4.4 U	AN	NA	NA	NA	NA	4.8 U		
Perfluoro-3-methoxypropanoic acid (PFMPA)	ng/L	NA	NA	4.4 U	NA	NA	4.8 U	NA	NA	4.4 U	NA	NA	NA	NA	NA	4.8 U		
Perfluoro-4-methoxybutanoic acid (PFMBA)	ng/L	NA	NA	4.4 U	NA	NA	4.8 U	NA	NA	4.4 U	NA	NA	NA	NA	NA	4.8 U		
Perfluorobutanesulfonic Acid (PFBS)	ng/L	2.2 J	1.9 J	2.3 J	1.4 J	1.4 J	1.4 J	1.7 J	1.7 J	1.6 J	4.2 U	NA	NA	2 J	1.6 J	2 J		
Perfluorobutanoic Acid (PFBA)	ng/L	4.3 U	3.5 J	4 J	6.1 U	5.6	7	6.8 U	6.1	8.8	4.3 U	NA	NA	7 U	7.2	8.8		
Perfluorodecane Sulfonate (PFDS)	ng/L	4.2 U	4.5 U	4.4 U	4.1 U	4.5 U	4.8 U	4.3 U	4.5 U	4.4 U	4.2 U	NA	NA	4.3 U	4.6 U	4.8 U		
Perfluorodecanoic Acid (PFDA)	ng/L	4.2 U	4.5 U	4.4 U	4.1 U	4.5 U	4.8 U	4.3 U	4.5 U	4.4 U	4.2 U	NA	NA	4.3 U	4.6 U	4.8 U		
Perfluorododecane sulfonic acid (PFDoS)	ng/L	NA	NA	4.4 U	NA	NA	4.8 U	NA	NA	4.4 U	NA	NA	NA	NA	NA	4.8 U		
Perfluorododecanoic Acid (PFDoA)	ng/L	4.2 U	4.5 U	4.4 U	4.1 U	4.5 U	4.8 U	4.3 U	4.5 U	4.4 U	4.2 U	NA	NA	4.3 U	4.6 U	4.8 U		
Perfluoroheptane sulfonate (PFHpS)	ng/L	4.2 U	4.5 U	4.4 U	4.1 U	4.5 U	4.8 U	4.3 U	4.5 U	4.4 U	4.2 U	NA	NA	4.3 U	4.6 U	4.8 U		
Perfluoroheptanoic Acid (PFHpA)	ng/L	4.7 U	2.6 J	2.4 J	4.1 U	1.1 J	4.8 U	4.3 U	4.5 U	4.4 U	4.2 U	NA	NA	6.4 U	6.5	4.5 J		
Perfluorohexanesulfonic Acid (PFHxs)	ng/L	4.2 U	2.6 J	2.7 J	4.1 U	1.4 J	1.3 J	4.3 U	3.2 J	1.7 J	4.2 U	NA	NA	4.3 U	2.7 J	2.3 J		
Perfluorohexanoic Acid (PFHxA)	ng/L	11 U	9.2 U	6.8	4.1 U	9.2 U	0.77 J	4.3 U	9.2 U	4.4 U	4.2 U	NA	NA	8.6 U	9.3 U	5.4		
Perfluorononane sulfonic acid (PFNS)	ng/L	NA	NA	4.4 U	NA	NA	4.8 U	NA	NA	4.4 U	NA	NA	NA	NA	NA	4.8 U		
Perfluorononanoic Acid (PFNA)	ng/L	4.2 U	4.5 U	4.4 U	4.1 U	4.5 U	4.8 U	4.3 U	4.5 U	4.4 U	4.2 U	NA	NA	4.3 U	1.7 J	4.8 U		
Perfluorooctanesulfonamide (PFOSA)	ng/L	4.2 U	4.5 U	4.4 U	4.1 U	4.5 U	4.8 U	4.3 U	4.5 U	4.4 U	4.2 U	NA	NA	4.3 U	4.6 U	4.8 U		
Perfluorooctanesulfonic Acid (PFOS)	ng/L	11	9.2	9.9	6.5	6.4	5.1	6.2	5.8	6.3	1.7 U	NA	NA	4.2	4.4	3.2 J	10 2.7	
Perfluorooctanoic Acid (PFOA)	ng/L	8.5	6.1	7.7	7.2 J	6.7	7.8	8.9	6.3	10	1.7 U	NA	NA	27	40	28	10 6.7	
Perfluoropentane sulfonic acid (PPeS)	ng/L	NA	NA	1.7 J	NA	NA	4.8 U	NA	NA	4.4 U	NA	NA	NA	NA	NA	0.95 J		
Perfluoropentanoic Acid (PPeA)	ng/L	4.3 U	2.4 J	2.9 J	4.5 UH	4.5 U	0.97 J	4.3 UH	4.5 U	1.2 J	4.3 UH	NA	NA	4.3 U	3.5 J	3.2 J		
Perfluorotetradecanoic acid (PFTeDA)	ng/L	4.2 U	4.5 U	4.4 U	4.1 U	4.5 U	4.8 U	4.3 U	4.5 U	4.4 U	4.2 U	NA	NA	4.3 U	4.6 U	4.8 U		
Perfluorotridecanoic acid (PFTrDA)	ng/L	4.2 U	4.5 U	4.4 U	0.74 J	4.5 U	4.8 U	4.3 U	4.5 U	4.4 U	4.2 U	NA	NA	4.3 U	4.6 U	4.8 U		
Perfluoroundecanoic Acid (PFUnA)	ng/L	4.2 U	4.5 U	4.4 U	4.1 U	4.5 U	4.8 U	4.3 U	4.5 U	4.4 U	0.84 J	NA	NA	4.3 U	4.6 U	4.8 U		
Total PFAS	ng/L	21.7	28.3	40.4	15.84	22.6	24.34	16.8	24.8	29.6	1.77	NA	NA	34.4	67.6	58.35		
1,4-Dioxane	ug/L	0.9	0.85	0.75	0.39	0.35	0.22	0.4	0.34	0.34	0.66	0.18 B	0.62	0.41	0.3 B	0.34	1 0.35	

Notes :

U - Concentration not detected at specified limit

J - Estimated Value

NA - Not Analyzed

B - Analyte was also detected in the associated method blank

Concentrations in **Bold** exceed Guidance Value

2021 & 2022 PFAS analysis by method 537m and 2023 PFAS analysis by method 1633

Table 3-3

2023 Field Duplicate Sample Comparisons
Analytical Results
Wellville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	MW5D-1023	DUP1-1023
-----------	-----------	-----------

Inorganic Compounds

Arsenic	0.01 U	0.01 U
Barium	0.057	0.057
Cadmium	0.005 U	0.005 U
Calcium	26.8	26.9
Chromium	0.01 U	0.01 U
Copper	0.02 U	0.02 U
Iron	0.31	0.33
Lead	0.005 U	0.005 U
Magnesium	21.1	21.2
Manganese	0.844	0.848
Nickel	0.04 U	0.04 U
Potassium	1.6 J	1.7 J
Selenium	0.01 U	0.01 U
Sodium	8.6	8.5
Zinc	0.02 U	0.02 U

Semi Volatile Organic Compounds

1,4-Dioxane	0.00062	0.00064
-------------	---------	---------

Volatile Organic Compounds

1,1,1-Trichloroethane	0.00044 J	0.00043 J
1,1,2,2-Tetrachloroethane	0.001 U	0.001 U
1,1,2-Trichloroethane	0.001 U	0.001 U
1,1-Dichloroethane	0.00033 J	0.00041 J
1,1-Dichloroethene	0.0037	0.0039
1,2-Dibromoethane	0.001 U	0.001 U
1,2-Dichloroethane	0.001 U	0.001 U
1,2-Dichloropropane	0.001 U	0.001 U
2-Butanone (MEK)	0.005 U	0.005 U
2-Hexanone	0.005 U	0.005 U

Table 3-3

2023 Field Duplicate Sample Comparisons
Analytical Results
Wellville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	MW5D-1023	DUP1-1023
-----------	-----------	-----------

Volatile Organic Compounds (con't)

4-Methyl-2-pentanone	0.005 U	0.005 U
Acetone	0.005 U	0.005 U
Benzene	0.001 U	0.001 U
Bromodichloromethane	0.001 U	0.001 U
Bromoform	0.001 U	0.001 U
Bromomethane	0.001 U	0.001 U
Carbon disulfide	0.001 U	0.001 U
Carbon tetrachloride	0.001 U	0.001 U
Chlorobenzene	0.001 U	0.001 U
Chloroethane	0.00047 J	0.0004 J
Chloroform	0.001 U	0.001 U
Chloromethane	0.001 U	0.001 U
cis-1,2-Dichloroethene	0.38 D	0.37 D
cis-1,3-Dichloropropene	0.001 U	0.001 U
Dibromochloromethane	0.001 U	0.001 U
Dichloromethane (Methylene chloride)	0.001 U	0.001 U
Ethyl benzene	0.0011	0.0011
m&p-Xylene	0.002 U	0.002 U
o-Xylene	0.001 U	0.001 U
Styrene	0.001 U	0.001 U
Tetrachloroethene	0.001 U	0.001 U
Toluene	0.001 U	0.001 U
trans-1,2-Dichloroethene	0.0015	0.0017
trans-1,3-Dichloropropene	0.001 U	0.001 U
Trichloroethene	0.21 D	0.2 D
Vinyl chloride	0.038	0.038

Notes:

U - Concentration not detected at specified detection limit.

B - Analyte was also detected in associated method blank.

D - Concentration is a result of dilution

Table 3-4

2023 Equipment Blank Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	EB1-1023
-----------	----------

Inorganic Compounds

Arsenic	0.01 U
Barium	0.02 U
Cadmium	0.005 U
Calcium	1 U
Chromium	0.01 U
Copper	0.014 J
Iron	0.1 U
Lead	0.005 U
Magnesium	1 U
Manganese	0.01 U
Nickel	0.04 U
Potassium	2 U
Selenium	0.01 U
Sodium	1 U
Zinc	0.006 J

Volatile Organic Compounds

1,1,1-Trichloroethane	0.001 U
1,1,2,2-Tetrachloroethane	0.001 U
1,1,2-Trichloroethane	0.001 U
1,1-Dichloroethane	0.001 U
1,1-Dichloroethene	0.001 U
1,2-Dibromoethane	0.001 U
1,2-Dichloroethane	0.001 U
1,2-Dichloropropane	0.001 U
2-Butanone (MEK)	0.005 U
2-Hexanone	0.005 U

Table 3-4

2023 Equipment Blank Analytical Results
Wellville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	EB1-1023
Volatile Organic Compounds (con't)	
4-Methyl-2-pentanone	0.00047 J
Acetone	0.005 U
Benzene	0.001 U
Bromodichloromethane	0.001 U
Bromoform	0.001 U
Bromomethane	0.001 U
Carbon disulfide	0.001 U
Carbon tetrachloride	0.001 U
Chlorobenzene	0.001 U
Chloroethane	0.001 U
Chloroform	0.001 U
Chloromethane	0.001 U
cis-1,2-Dichloroethene	0.001 U
cis-1,3-Dichloropropene	0.001 U
Dibromochloromethane	0.001 U
Dichloromethane (Methylene chloride)	0.001 U
Ethyl benzene	0.001 U
m&p-Xylene	0.002 U
o-Xylene	0.001 U
Styrene	0.001 U
Tetrachloroethene	0.001 U
Toluene	0.00021 J
trans-1,2-Dichloroethene	0.001 U
trans-1,3-Dichloropropene	0.001 U
Trichloroethene	0.001 U
Vinyl chloride	0.001 U

Notes :

U - Concentration not detected at specified limit

J - Estimated Value

Table 4-1

Surface Water Analytical Results (Last 3 Years)
Wellsville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	SWS-1 4/20/2021	SWS-1 5/18/2022	SWS-1 5/1/2023	Class C Standard
-----------	--------------------	--------------------	-------------------	---------------------

Field Parameter

Dissolved Oxygen	8.97		10.23	
Field pH (std. units)	7.71	7.75	7.67	
ORP (mV)	197.9	175.6	39.6	
Specific Conductivity (us/cm)	270.5	628.1	263.4	
Temperature (deg. C)	8.3	13	7.5	
Turbidity (NTU)	3.36	2.08	15.7	

Inorganic Compounds

Arsenic	0.01 U	0.01 U	0.01 U	
Barium	0.02 U	0.039	0.024	
Cadmium	0.005 U	0.005 U	0.005 U	
Calcium	28.4	58.6	26.2	
Chromium	0.01 U	0.01 U	0.01 U	
Copper	0.02 U	0.02 U	0.02 U	
Iron	0.22	0.29	0.79	
Lead	0.05 U	0.05 U	0.005 U	0.008
Magnesium	9.2	17.9	8.9	
Manganese	0.017	0.184	0.045	
Nickel	0.04 U	0.04 U	0.04 U	0.0082
Potassium	2 U	2.4	2 U	
Selenium	0.01 U	0.01 U	0.01 U	
Sodium	16.4	55.4	21.2	
Zinc	0.02 U	0.034	0.02 U	

Volatile Organic Compounds

1,1,1-Trichloroethane	0.005 U	0.005 U	0.001 U	
1,1,2-Tetrachloroethane	0.005 U	0.005 U	0.001 U	
1,1,2-Trichloroethane	0.005 U	0.005 U	0.001 U	
1,1-Dichloroethane	0.005 U	0.005 U	0.001 U	
1,1-Dichloroethene	0.005 U	0.005 U	0.001 U	
1,2-Dibromoethane	0.005 U	0.005 U	0.001 U	
1,2-Dichloroethane	0.005 U	0.005 U	0.001 U	
1,2-Dichloropropane	0.005 U	0.005 U	0.001 U	
2-Butanone (MEK)	0.01 U	0.01 U	0.005 U	
2-Hexanone	0.01 U	0.01 U	0.005 U	
4-Methyl-2-pentanone	0.01 U	0.01 U	0.005 U	
Acetone	0.01 U	0.01 U	0.005 U	
Benzene	0.005 U	0.005 U	0.001 U	0.01
Bromodichloromethane	0.005 U	0.005 U	0.001 U	
Bromoform	0.005 U	0.005 U	0.001 U	
Bromomethane	0.005 U	0.005 U	0.001 U	

Table 4-1

Surface Water Analytical Results (Last 3 Years)
Wellsville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	SWS-1 4/20/2021	SWS-1 5/18/2022	SWS-1 5/1/2023	Class C Standard
-----------	--------------------	--------------------	-------------------	---------------------

Volatile Organic Compounds (con't)

Carbon disulfide	0.01 U	0.01 U	0.001 U	
Carbon tetrachloride	0.005 U	0.005 U	0.001 U	
Chlorobenzene	0.005 U	0.005 U	0.001 U	0.005
Chloroethane	0.005 U	0.005 U	0.001 U	
Chloroform	0.005 U	0.005 U	0.001 U	
Chloromethane	0.005 U	0.005 U	0.001 U	
cis-1,2-Dichloroethene	0.005 U	0.005 U	0.001 U	
cis-1,3-Dichloropropene	0.005 U	0.005 U	0.001 U	
Dibromochloromethane	0.005 U	0.005 U	0.001 U	
Dichloromethane (Methylene chloride)	0.005 U	0.005 U	0.001 U	0.2
Ethyl benzene	0.005 U	0.005 U	0.001 U	
m&p-Xylene	0.005 U	0.005 U	0.002 U	
o-Xylene	0.005 U	0.005 U	0.001 U	
Styrene	0.005 U	0.005 U	0.001 U	
Tetrachloroethene	0.005 U	0.005 U	0.001 U	
Toluene	0.005 U	0.005 U	0.001 U	6
trans-1,2-Dichloroethene	0.005 U	0.005 U	0.001 U	
trans-1,3-Dichloropropene	0.005 U	0.005 U	0.001 U	
Trichloroethene	0.005 U	0.005 U	0.001 U	0.04
Vinyl chloride	0.005 U	0.005 U	0.001 U	

Inorganic Compounds

Alkalinity	103	190	98.6	
Ammonia Nitrogen	0.05 U	0.05 U	0.05 U	2
Biochemical Oxygen Demand	2 U	2 U	2 U	
Bromide	1 U	1 U	1 U	
Chemical Oxygen Demand	20.6	30.7	40.2	
Chloride	32.4	110	35.5	
Color (True) (C.U.)	48	35	100	
Nitrate Nitrogen	1 U	1 U	1 U	
pH of Color Analysis	8.05	7.74	7.79	
Sulfate	2 U	2.1	2 U	
Total Dissolved Solids	169	388	182	500
Total Kjeldahl Nitrogen	0.45	0.59	1.01	
Total Organic Carbon (TOC)	7.9	8.7	11.2	
Total Phenolics	0.005 U	0.005 U	0.005 U	

Notes:**Class C Standard** - NYSDEC Class C Surface Water Standard

Concentrations are within Class C Standards

U - Concentration not detected at specified detection limit

Table 5-1

Leachate Sump and Manhole Analytical Results (Last 3 Years)

Wellsville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	LS-1 10/20/2022	LS-1 10/21/2021	LS-1 10/25/2023	MH-32 10/20/2021	MH-32 10/24/2022	MH-32 10/25/2023	MH-33 10/20/2021	MH-33 10/24/2022	MH-33 10/25/2023	Class GA Standard	Guidance Value GA
-----------	--------------------	--------------------	--------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	----------------------	----------------------

Field Parameters

Field pH (std. units)	7.72	6.58	7.46	6.17	7.56	6.94	6.36	7.56	6.82	6.5 - 8.5	
ORP (mV)	69	256.4	133.8	44.1	-0.5	121.1	152.9	6.6	130.8		
Specific Conductivity (us/cm)	827	487	971	417.5	609.7	881	341.1	658	520.1		
Temperature (deg. C)	10.6	14.3	14.2	13.8	14	14.4	14.1	12.9	11.7		
Turbidity (NTU)	5.08	5.58	44	13	5.37	93.9	9.77	10.4	4.1	5	

Inorganic Compounds

Arsenic	0.01 U	0.01 U	0.006 J	0.0108	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025	
Barium	0.094	0.066	0.117	0.076	0.1	0.162	0.0481	0.049	0.042	1	
Cadmium	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005	
Calcium	119	81.1	126	76	105	138	54.6	96.6	88.9		
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05	
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.2	
Iron	0.73	2.13	5.22	11.6	0.88	8.52	2.43	1.46	0.6	0.3	
Lead	0.005 U	0.05 U	0.005 U	0.05 U	0.005 U	0.005 U	0.05 U	0.005 U	0.005 U	0.025	
Magnesium	32.9	18.2	37.4	13.2	19.6	19	15.5	22	19.4		35
Manganese	0.816	2.08	1.61	2.25	0.405	1.93	0.939	0.567	0.474	0.3	
Nickel	0.04 U	0.04 U	0.006 J	0.04 U	0.04 U	0.004 J	0.04 U	0.04 U	0.04 U	0.1	
Potassium	4.7	2.3	5.2	2 U	5.6	12	2 U	2 U	1.9 J		
Selenium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.007 J	0.01	
Sodium	30.3	6.6	48.1	1.83	7.4	19.8	2.37	6.8	7.6	20	
Zinc	0.02 U	0.02 U	0.021	0.0251	0.02 U	0.025	0.02 U	0.02 U	0.02 U		2

Volatile Organic Compounds

1,1,1-Trichloroethane	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.005	
1,1,2,2-Tetrachloroethane	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.005	
1,1,2-Trichloroethane	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.001	
1,1-Dichloroethane	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.005	
1,1-Dichloroethene	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.005	
1,2-Dibromoethane	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.005	
1,2-Dichloroethane	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.0006	
1,2-Dichloropropane	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.001	
2-Butanone (MEK)	0.005 U	0.025 U	0.005 U	0.1 U	0.013 U	0.05 U	0.01 U	0.005 U	0.005 U	0.005	0.05
2-Hexanone	0.005 U	0.025 U	0.005 U	0.1 U	0.013 U	0.05 U	0.01 U	0.005 U	0.005 U		
4-Methyl-2-pentanone	0.005 U	0.025 U	0.005 U	0.1 U	0.013 U	0.05 U	0.01 U	0.005 U	0.005 U		

Table 5-1

Leachate Sump and Manhole Analytical Results (Last 3 Years)

Wellsville/Andover Landfill

Wellsville, New York

(mg/L except where noted)

Parameter	LS-1 10/20/2022	LS-1 10/21/2021	LS-1 10/25/2023	MH-32 10/20/2021	MH-32 10/24/2022	MH-32 10/25/2023	MH-33 10/20/2021	MH-33 10/24/2022	MH-33 10/25/2023	Class GA Standard	Guidance Value GA
-----------	--------------------	--------------------	--------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	----------------------	----------------------

Volatile Organic Compounds (con't)

Acetone	0.005 U	0.025 U	0.005 U	0.1 U	0.013 U	0.05 U	0.01 U	0.005 U	0.005 U		0.05
Benzene	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.0026 J	0.005 U	0.001 U	0.001 U	0.001	
Bromodichloromethane	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U		0.05
Bromoform	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U		0.05
Bromomethane	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.005	
Carbon disulfide	0.001 U	0.025 U	0.001 U	0.1 U	0.0025 U	0.01 U	0.01 U	0.001 U	0.001 U		0.06
Carbon tetrachloride	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.005	
Chlorobenzene	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.005	
Chloroethane	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.005	
Chloroform	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.007	
Chloromethane	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.005	
cis-1,2-Dichloroethene	0.0026	0.47	0.0032	8.8 D	0.26	3.6 D	0.031	0.001	0.18	0.005	
cis-1,3-Dichloropropene	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.0004	
Dibromochloromethane	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.005	0.05
Dichloromethane (Methylene chloride)	0.001 U	0.013 U	0.001 U	0.51	0.016	0.088	0.005 U	0.001 U	0.001 U		
Ethyl benzene	0.001 U	0.013 U	0.001 U	0.072	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.005	
m&p-Xylene	0.002 U	0.013 U	0.002 U	0.05 U	0.005 U	0.02 U	0.005 U	0.002 U	0.002 U	0.005	
o-Xylene	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.005	
Styrene	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.005	
Tetrachloroethene	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.005	
Toluene	0.001 U	0.013 U	0.001 U	0.15	0.0025 U	0.0075 J	0.005 U	0.001 U	0.001 U	0.005	
trans-1,2-Dichloroethene	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.0035 J	0.005 U	0.001 U	0.001 U	0.005	
trans-1,3-Dichloropropene	0.001 U	0.013 U	0.001 U	0.05 U	0.0025 U	0.01 U	0.005 U	0.001 U	0.001 U	0.0004	
Trichloroethene	0.001 U	0.013 U	0.0011	0.37	0.14	1.9	0.005 U	0.001 U	0.17	0.005	
Vinyl chloride	0.001 U	0.015	0.001 U	0.31	0.0028	0.04	0.005 U	0.001 U	0.00052 J	0.002	

General Chemistry

Nitrate Nitrogen				1 U	1 U	1 U	1 U	1 U	0.3 J	10	
Total Dissolved Solids				258	405	533	216	360	331	500	

Notes:

Class GA Standard - NYSDEC Class GA Groundwater Standard

Concentrations in **bold** exceed Class GA Standards.

U - Concentration not detected at specified detection limit

J - Estimated value

D - Concentration is a result of a dilution see lab report for further explanation.

Table 6-1

Fall 2023 Air Monitoring Results
Wellsville/Andover Landfill
Wellsville, New York

Monitoring Point	Date	PID (ppm)	O ₂ %	LEL %
V-1	10/23/2023	0.0	20.9	0
V-2	10/23/2023	0.2	20.9	0
V-3	10/23/2023	0.0	20.9	0
V-4	10/23/2023	0.8	20.9	0
V-5	10/23/2023	0.0	20.9	0
V-6	10/23/2023	3.6	20.9	9
V-7	10/23/2023	0.0	20.9	0
V-8	10/23/2023	0.6	20.9	0
V-9	10/23/2023	8.5	20.9	56
V-10	10/23/2023	0.0	20.9	0
V-11	10/23/2023	1.4	20.9	0
V-12	10/23/2023	0.0	20.9	0
V-13	10/23/2023	0.2	20.9	0
V-14	10/23/2023	0.6	20.9	0
V-15	10/23/2023	0.0	20.9	0
V-16	10/23/2023	0.0	20.9	0
V-17	10/23/2023	0.3	20.9	0
V-18	10/23/2023	2.2	20.9	20
V-19	10/23/2023	0.0	20.9	0
V-20	10/23/2023	0.0	20.9	0
V-21	10/23/2023	0.0	20.9	0
L-16	10/23/2023	0.6	20.9	0
L-17	10/23/2023	1.9	18.4	59
L-19	10/23/2023	6.4	18.5	>99
L-21	10/23/2023	0.8	20.9	4
L-23	10/23/2023	17.8	20.1	>99
L-25	10/23/2023	3.9	19.0	>99
L-27	10/23/2023	1.8	18.1	>99
L-29	10/23/2023	3.6	20.9	0
L-31	10/23/2023	0.0	20.9	0
MH-6	10/23/2023	1.1	20.9	0
MH-7	10/23/2023	0.0	20.9	0
MH-8	10/23/2023	0.5	20.9	0
MH-9	10/23/2023	1.1	20.9	0
MH-10	10/23/2023	0.4	20.9	0
MH-11	10/23/2023	0.6	20.9	0
MH-12	10/23/2023	8.5	20.9	0
MH-13	10/23/2023	14.4	20.9	0
MH-32	10/23/2023	0.0	20.9	0
MH-33	10/23/2023	0.0	20.9	0
Upwind	10/23/2023	0.0	20.9	0
Downwind-1	10/23/2023	0.0	20.9	0
Downwind-2	10/23/2023	0.0	20.9	0
Downwind-3	10/23/2023	0.0	20.9	0

(1)- Denotes Cap Ajar

BG - Background

BG PID: 0.1

BG LEL: 0

BG O₂: 20.9

Weather: 46dg Clear

Winds: 0-5 mph

Meter(s): Q-RAE 3 4gas. & PID

Monitored By: S. Watson

Oxygen: 19.5% - 23.5%

LEL: ≤ 10%

CO: ≤ 25 ppm

H2S: ≤ 10 ppm

Table 7-1

Spring and Fall 2023
Residential Water Supply Contact and Sampling Summary
Wellsville/Andover Landfill

Name	Mailing Address	Physical Address of Sampling Location	Phone No.	Location ID	Water Source	Telephone Contact		Sampling Approved	Sampling Location	Sample Collection	
						Date	Time			Date	Time
Mr. John Carl	3987 Snyder Rd Wellsville, NY 14895	3987 Snyder Rd Wellsville, NY 14895	585-610-8581	WAL-1	Well ³	10/20/2023	1327	Yes	Kitchen Sink	10/24/2023	1400
Mr. Phil Rosini	72 Havenshire Rd Rochester, NY 14625	3899 Snyder Road Wellsville, NY	(C) 585-754-6328 (H) 585-671-3831	WAL-2	Well ^{1,2} 150 ft deep	10/20/2023	1328	Yes	Kitchen Sink	10/23/2023	1220
Adam Fantrazzo ⁴	4011 Duffy Hollow Rd Wellsville, NY 14895	4011 Duffy Hollow Rd Wellsville, NY 14895	585-296-0007	WAL-5	Spring ³	Vacant		No Contact ⁴	Kitchen Sink	NA	NA
Mrs. Barbara LaDue	3914 Snyder Rd. Wellsville, NY 14895	3914 Snyder Rd. Wellsville, NY 14895	(H) 585-593-7200 (C) 585-593-8524	WAL-19	Spring ²	4/14/2023	1040	Yes	Post - Kitchen Sink	810	4/28/2023
						10/24/2023	934		Inter - Between Filters		
									Pre - Before Filters	830	
									Post - Kitchen Sink	1300	
									Inter - Between Filters	1310	10/24/2023
									Pre - Before Filters	1315	

Notes:

¹ Water source information from *Remedial Investigation Report, Wellsville-Andover Landfill Site*, November 1993, prepared by Ecology & Environment

² Water source information from *Phase II State Superfund Investigation Report, Wellsville-Andover Landfill Site*, December 1986, prepared by Malcolm Pirnie

³ Water Source from land owner

⁴ Last known owner, property appears vacant

NA - Not applicable

Table 7-2

2023 Residential Water Supply Analytical Results

Wellsville/Andover Landfill

Wellsville, New York

(mg/L)

Parameter	WAL1 10/24/2023	WAL2 10/23/2023	WAL19Pre 4/28/2023	WAL19Inter 4/28/2023	WAL19Post 4/28/2023	WAL19Pre 10/24/2023	WAL19Inter 10/24/2023	WAL19Post 10/24/2023	Class GA Standard	NYSDOH MCL
-----------	--------------------	--------------------	-----------------------	-------------------------	------------------------	------------------------	--------------------------	-------------------------	----------------------	---------------

Inorganic Compounds

Arsenic	0.0024	0.01 U							0.025	0.01
Barium	0.0663	0.032							1	2
Cadmium	0.001 U	0.005 U							0.005	0.005
Calcium	41.9	47.2								
Chromium	0.01 U	0.01 U							0.05	0.1
Copper	0.0012	0.02 U							0.2	1.3
Iron	0.1 U	0.62							0.3	0.3
Lead	0.001 U	0.005 U							0.025	0.015
Magnesium	13.7	16								
Manganese	0.107	0.784							0.3	0.3
Nickel	0.001 U	0.04 U							0.1	0.1
Potassium	1.5 J	2.5								
Selenium	0.002 U	0.01 U							0.01	0.05
Sodium	9	47.4							20	
Zinc	0.011 J	0.007 J								5

Volatile Organic Compounds

1,1,1,2-Tetrachloroethane	0.0005 U		0.0005 U	0.005	0.005					
1,1,2,2-Tetrachloroethane	0.0005 U		0.0005 U	0.005	0.005					
1,1,2-Trichloroethane	0.0005 U		0.0005 U	0.001	0.005					
1,1-Dichloroethane	0.0005 U		0.0005 U	0.005	0.005					
1,1-Dichloroethene	0.0005 U		0.0005 U	0.005	0.005					
1,2,3-Trichloropropane	0.0005 U		0.0005 U	0.00004	0.005					
1,2,4-Trimethylbenzene	0.0005 U		0.0005 U	0.005	0.005					
1,2-Dichlorobenzene	0.0005 U		0.0005 U	0.003	0.005					
1,2-Dichloroethane	0.0005 U		0.0005 U	0.0006	0.005					
1,2-Dichloropropane	0.0005 U		0.0005 U	0.001	0.005					
1,3,5-Trimethylbenzene	0.0005 U		0.0005 U	0.005	0.005					
1,3-Dichlorobenzene	0.0005 U		0.0005 U	0.003	0.005					
1,3-Dichloropropane	0.0005 U		0.0005 U	0.005	0.005					
1,4-Dichlorobenzene	0.0005 U		0.0005 U	0.003	0.005					
2,2-Dichloropropane	0.0005 U		0.0005 U	0.005	0.005					
2-Chlorotoluene	0.0005 U		0.0005 U	0.005	0.005					
4-Chlorotoluene	0.0005 U		0.0005 U	0.005	0.005					
Benzene	0.0005 U		0.0005 U	0.001	0.005					
Bromobenzene	0.0005 U		0.0005 U	0.005	0.005					
Bromochloromethane	0.0005 U		0.0005 U	0.005	0.005					
Bromodichloromethane	0.0005 U		0.0005 U		0.08					
Bromoform	0.0005 U		0.0005 U		0.08					

Table 7-2

2023 Residential Water Supply Analytical Results

Wellsville/Andover Landfill

Wellsville, New York

(mg/L)

Parameter	WAL1 10/24/2023	WAL2 10/23/2023	WAL19Pre 4/28/2023	WAL19Inter 4/28/2023	WAL19Post 4/28/2023	WAL19Pre 10/24/2023	WAL19Inter 10/24/2023	WAL19Post 10/24/2023	Class GA Standard	NYSDOH MCL
-----------	--------------------	--------------------	-----------------------	-------------------------	------------------------	------------------------	--------------------------	-------------------------	----------------------	---------------

Volatile Organic Compounds (con't)

Bromomethane	0.0005 U		0.0005 U	0.005	0.005					
Carbon tetrachloride	0.0005 U		0.0005 U	0.005	0.005					
Chlorobenzene	0.0005 U		0.0005 U	0.005	0.005					
Chloroethane	0.0005 U		0.0005 U	0.005	0.005					
Chloroform	0.0005 U		0.0005 U	0.007	0.08					
Chloromethane	0.0005 U		0.0005 U	0.005	0.005					
cis-1,2-Dichloroethene	0.0005 U		0.0017	0.0005 U	0.0005 U	0.0017	0.0005 U	0.0005 U	0.005	0.005
cis-1,3-Dichloropropene	0.0005 U		0.0005 U	0.0004	0.005					
Dibromochloromethane	0.0005 U		0.0005 U	0.005	0.08					
Dibromomethane	0.0005 U		0.0005 U	0.005	0.005					
Dichlorodifluoromethane	0.0005 U		0.0005 U	0.005	0.005					
Dichloromethane (Methylene chloride)	0.0005 U		0.0005 U		0.005					
Ethyl benzene	0.0005 U		0.0005 U	0.005	0.005					
Isopropylbenzene	0.0005 U		0.0005 U	0.005	0.005					
m&p-Xylene	0.001 U		0.001 U	0.005	0.005					
Methyl tert-butyl ether (MTBE)	0.0005 U		0.0005 U	0.005	0.01					
n-Butylbenzene	0.0005 U		0.0005 U	0.005	0.005					
n-Propylbenzene	0.0005 U		0.0005 U	0.005	0.005					
o-Xylene	0.0005 U		0.0005 U	0.005	0.005					
p-Isopropyltoluene	0.0005 U		0.0005 U	0.005	0.005					
sec-Butylbenzene	0.0005 U		0.0005 U	0.005	0.005					
Styrene	0.0005 U		0.0005 U	0.005	0.005					
tert-Butylbenzene	0.0005 U		0.0005 U	0.005	0.005					
Tetrachloroethene	0.0005 U		0.0005 U	0.005	0.005					
Toluene	0.0005 U		0.0005 U	0.005	0.005					
trans-1,2-Dichloroethene	0.0005 U		0.0005 U	0.005	0.005					
trans-1,3-Dichloropropene	0.0005 U		0.0005 U	0.0004	0.005					
Trichloroethene	0.0005 U		0.0022	0.0005 U	0.0005 U	0.0022	0.0005 U	0.0005 U	0.005	0.005
Trichlorofluoromethane	0.0005 U		0.0005 U	0.005	0.005					
Vinyl chloride	0.0005 U		0.0005 U	0.005	0.002					
1,2,3-Trichlorobenzene	0.0005 U		0.0005 U		0.005					
1,2,3-Trichlorobenzene	0.0005 U		0.0005 U	0.005	0.005					
1,2,4-Trichlorobenzene	0.0005 U		0.0005 U		0.005					
1,2,4-Trichlorobenzene	0.0005 U		0.0005 U	0.005	0.005					
Hexachlorobutadiene	0.0005 U		0.0005 U	0.0005	0.005					
Naphthalene	0.0005 U		0.0005 U	0.005	0.05					

Notes:

Concentrations in **bold** exceed Class GA Standards and or NYSDOH MCL

U - Concentrations not detected at specified limit

J - Estimated value

Table 8-1

2023 Leachate Collection System Cleaning Summary
Wellsville-Andover Landfill Site

Lateral Clean-Out	Associated Manhole	Date Cleaned	Length Jetted (ft)	Approximate Gallons Jetted	Manhole Observations During Lateral Jetting - distances and volumes are approximate
L-16	Leachate Sump	6/21/2023	475	30	Began jetting from cleanout L-16 @ 11:41, advanced 475 ft. Little to no resistance during jetting, jetter was audible at Leachate Sump. Slight trickle of water into sump. No vacuum operations required at this location.
L-17	MH-6	6/21/2023	500	30	Began jetting from cleanout L-17 @ 11:12, advanced 500 ft. Little to no resistance during jetting, jetter was audible at MH-6, however no visible water flow into manhole. No vacuum operations required at this location.
L-19	MH-7	6/21/2023	500	30	Began jetting from cleanout L-19 @ 11:05, advanced 500 ft. Little to no resistance during jetting. No visible water flow into MH-7. No vacuum operations required at this location.
L-21	MH-8	6/21/2023	535	30	Began jetting from cleanout L-21 @ 10:40, advanced 535 ft. Little to no resistance during jetting. No visible water flow into MH-8. No vacuum operations required at this location.
L-23	MH-9	6/21/2023	450	30	Began jetting from cleanout L-23 @ 10:20, advanced 450 ft. Little to no resistance during jetting, however refusal at 450'. No visible water flow into MH-9. No vacuum operations required at this location.
L-25	MH-10	6/21/2023	600	40	Began jetting from cleanout L-25 @ 09:56, advanced 600 ft with no resistance during jetting (600 ft is full hose length). Minimal water flow into MH-10 observed. No vacuum operations required at this location.
L-27	MH-11	6/21/2023	600	60	Began jetting from cleanout L-27 @ 09:20, advanced 600 ft. with no resistance during jetting (600 ft is full hose length). No visible water flow into MH-11 observed. No vacuum operations required at this location.
L-29	MH-12				Not jetted - See note 3
L-31	MH-13	6/21/2023	600	60	Began jetting from cleanout L-31 @ 08:30, advanced 600 ft. with no resistance during jetting (600 ft is full hose length). Minor visible water flow into MH-13 observed. No vacuum operations required at this location.
Pump Station Inlet Manhole		6/21/2023	NA	NA	Structure observed to be dry with very minimal accumulation of silty sand, therefore no vacuuming operations required at this location.
Manhole Trunk Line		6/21/2023	Entire length of Trunk	200	Jetted from MH-6 up L-17 lateral line and up trunk towards MH-7. Jetted from MH-7 up lateral L-19, up trunk towards MH-8 then back down towards MH-6. Jetted from MH-8 back down towards MH-7 then up lateral L-21 and up trunk towards MH-9. Jetted from MH-9 up lateral L-23, and up truck towards MH-10. Jetted from MH-10 up lateral L-25 and up trunk towards MH-11. Jetted from MH-11 up lateral L-27 then up trunk towards MH-12. Jetted from MH-12 up lateral L-29 (400 ft. to refusal at obstruction) then up trunk towards MH-13. Jetted from MH-13 up lateral L-31 then up trunk towards MH-14.

Notes:

1) Laterals and clean-outs listed in order from South to North

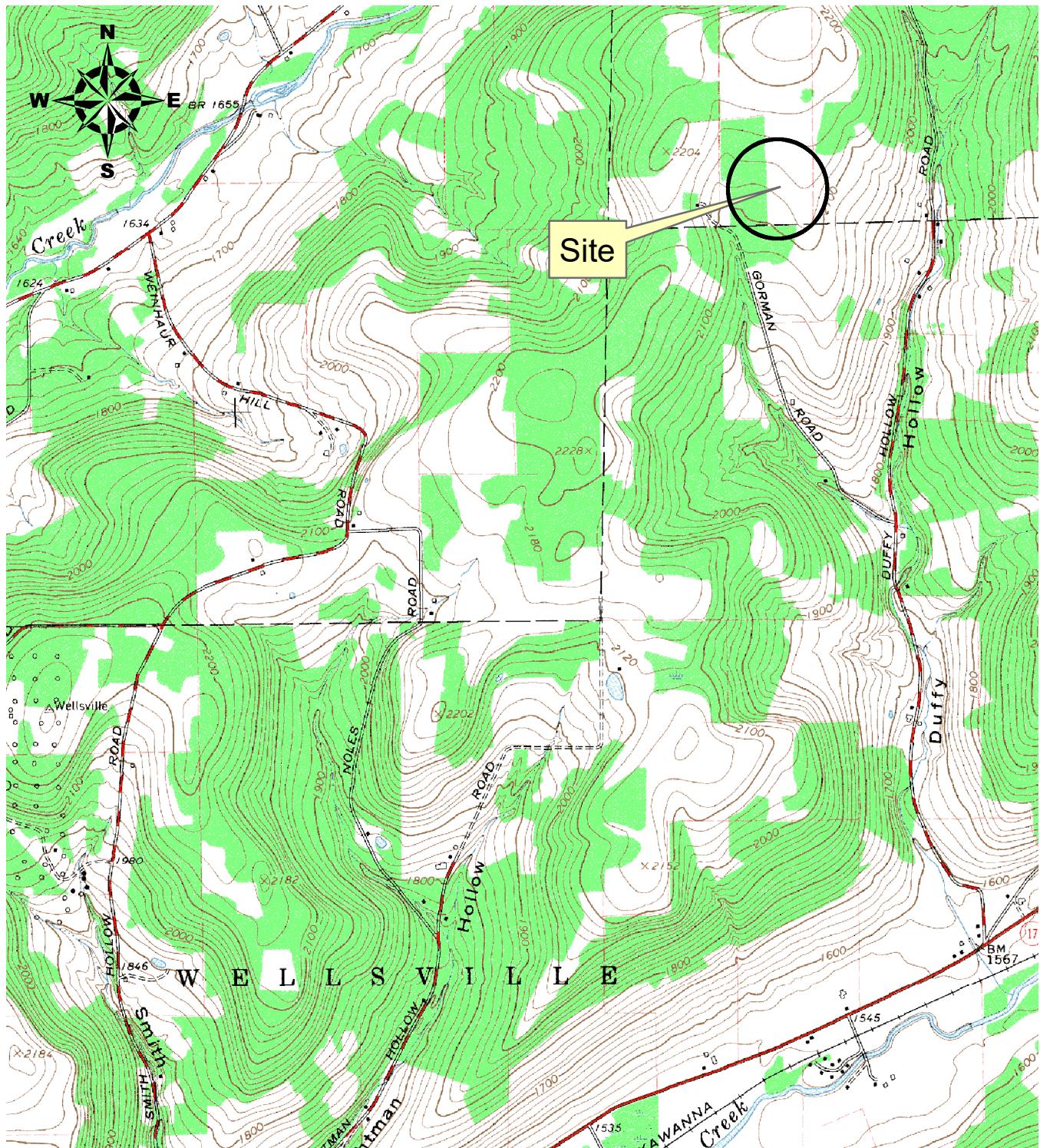
2) Associated manhole means the manhole located at the downstream end of the lateral (i.e. Leachate Sump is downstream end of lateral with clean-out L-16 at upstream end).

3) Lateral L-29 to MH-12 previously determined not continuous and is not intended to be water jetted.

Figures

WELLSVILLE-ANDOVER LANDFILL SITE LOCATION (902004)

Snyder Road Wellsville, New York



SOURCE: WELLSVILLE NORTH, USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE, DATED 1965.
NOTE: GORMAN ROAD IS NOW SNYDER ROAD.

2,000 1,000 0 2,000
Feet
1 inch = 2,000 feet

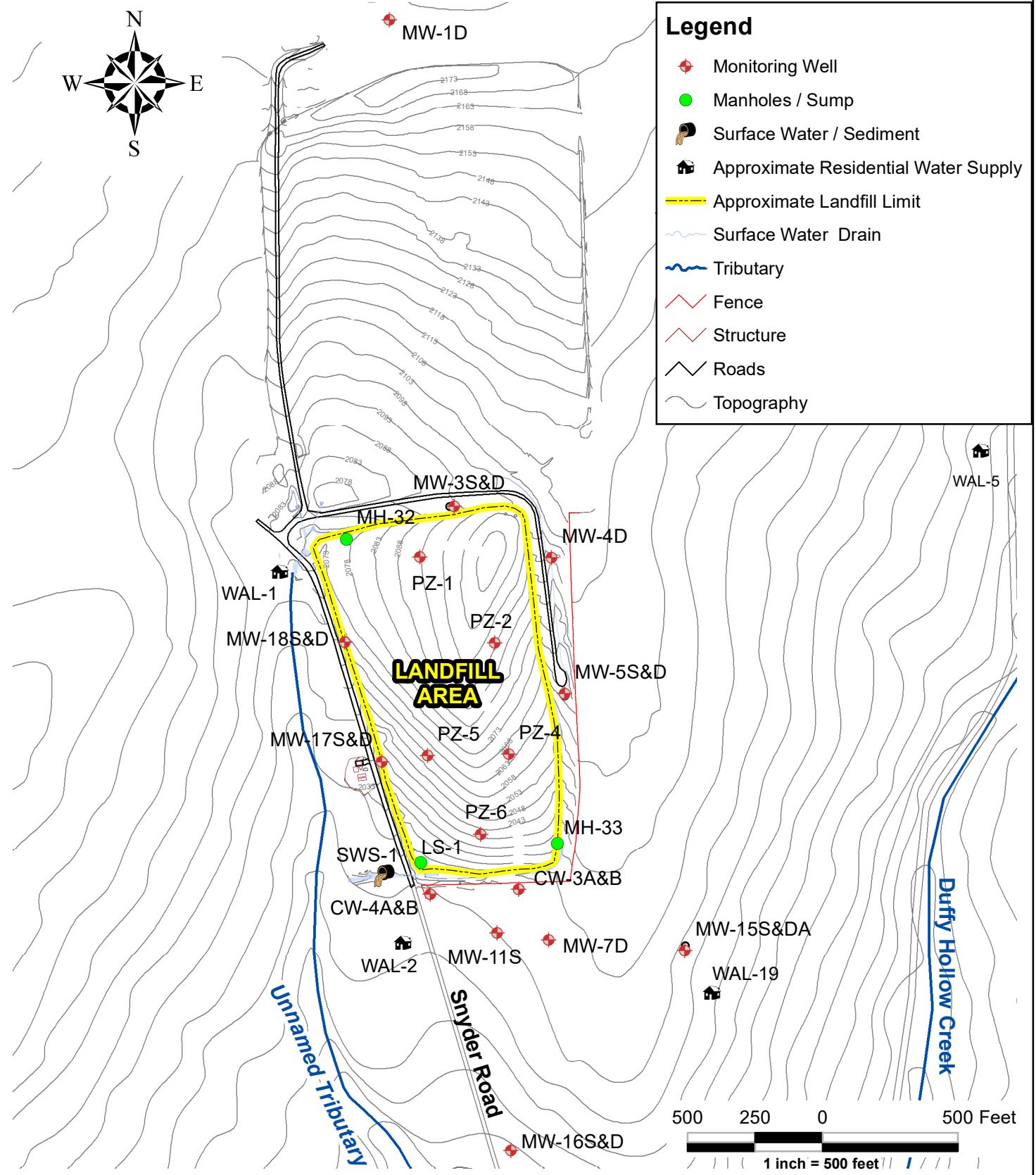


ON-SITE GEOLOGICAL SERVICES, D.P.C.

72 Railroad Avenue Wellsville, NY14895

FIGURE NO.	1
PROJECT	WAL
DOCUMENT	Annual Report
FILE NO.	Site_Loc.mxd

2023 MONITORING LOCATIONS
Wellsville-Andover Landfill Snyder Road Wellsville, New York

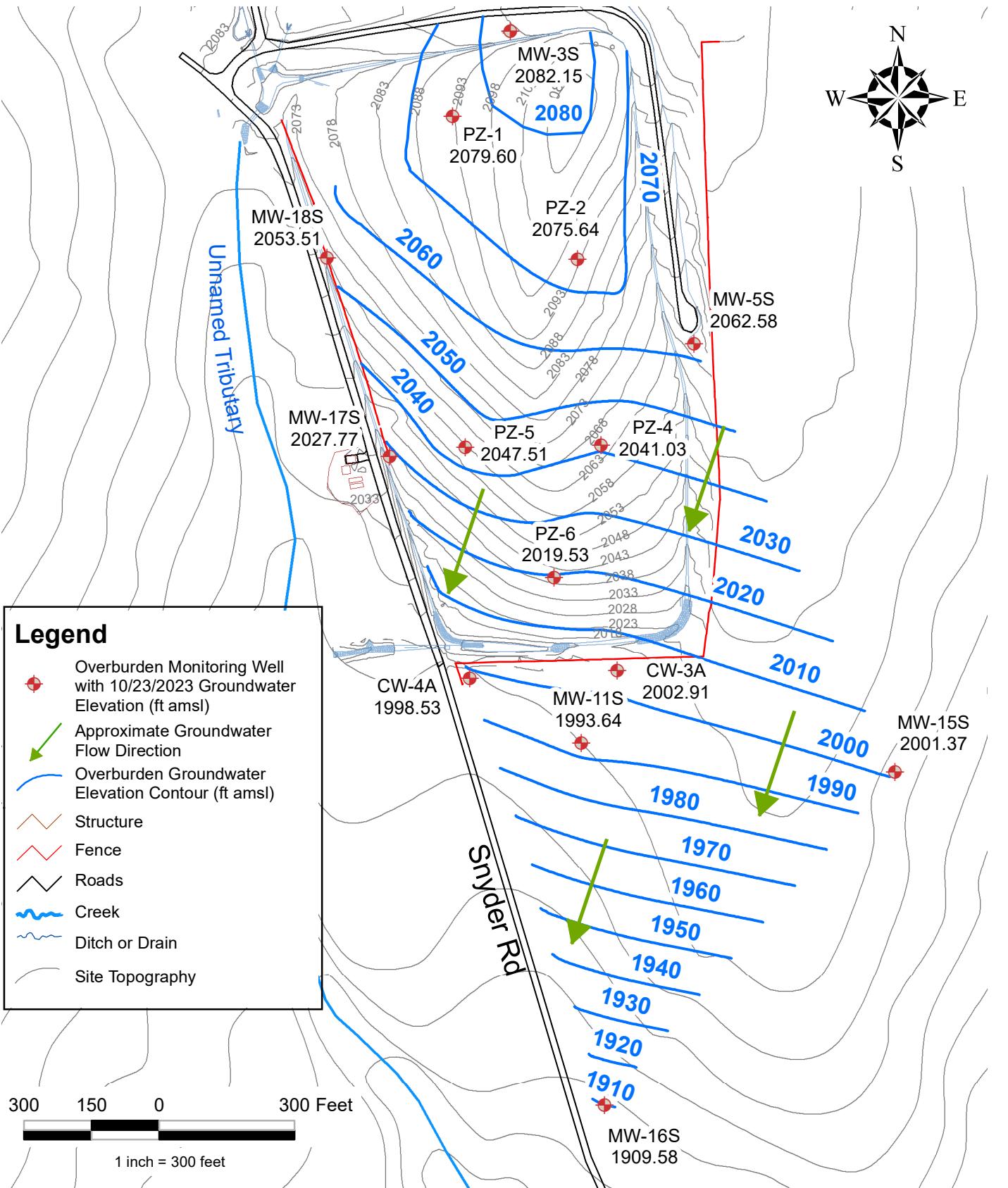


ON-SITE GEOLOGICAL SERVICES, D.P.C.

72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	2
PROJECT	WAL
DOCUMENT	2023 Annual Report
FILE NO.	Fig 2.mxd

OCTOBER 23, 2023 OVERBURDEN MONITORING WELL POTENTIOMETRIC MAP
Wellsville-Andover Landfill Snyder Road Wellsville, New York

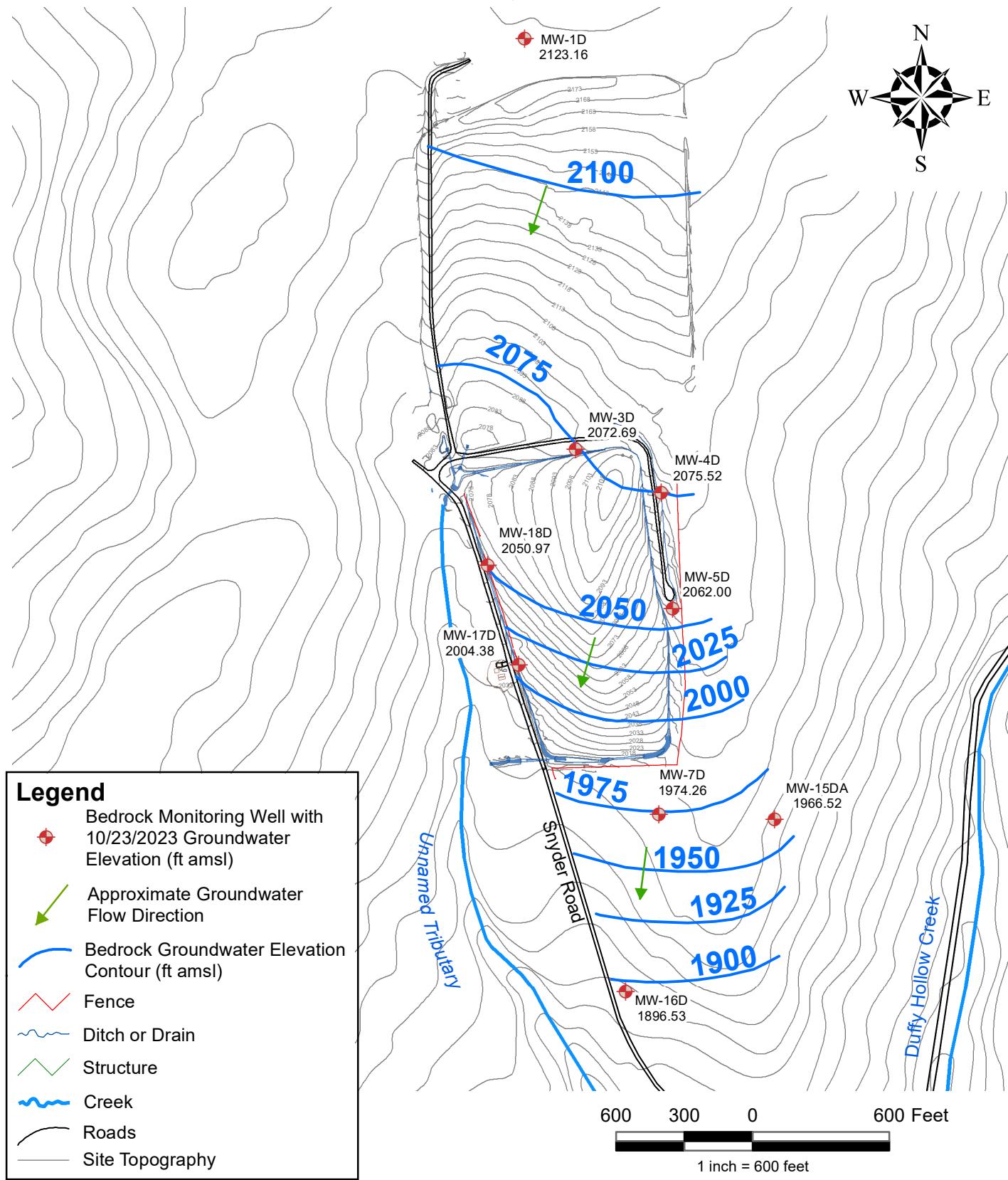


ON-SITE GEOLOGICAL SERVICES, D.P.C.

72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	3
PROJECT	WAL
DOCUMENT	2023 Annual Report
FILE NO	Fig 3 1023 OB.mxd

OCTOBER 23, 2023 BEDROCK MONITORING WELL POTENSIOMETRIC MAP
Wellsville-Andover Landfill Snyder Road Wellsville, New York

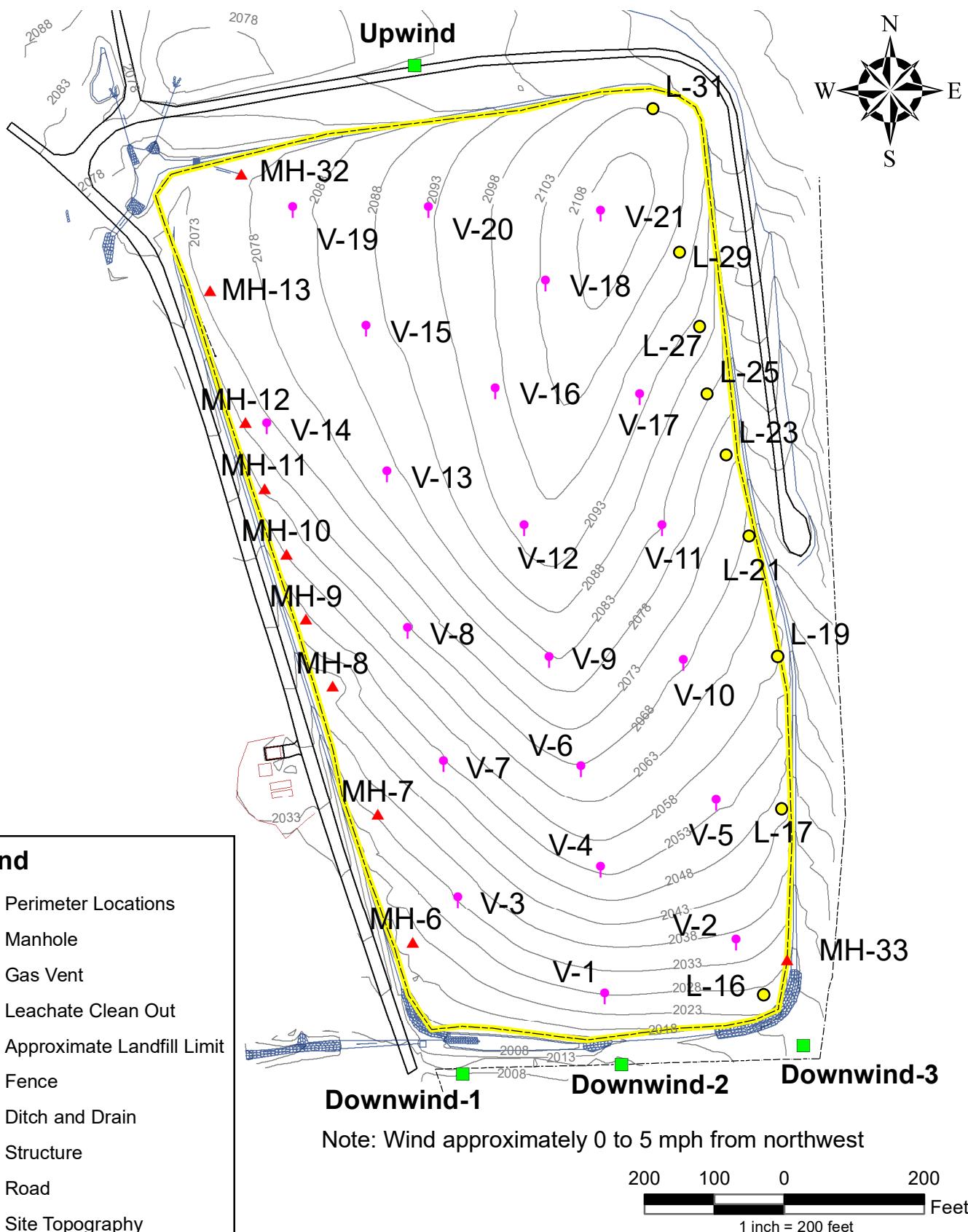


ON-SITE GEOLOGICAL SERVICES, D.P.C.

72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	4
PROJECT	WAL
DOCUMENT	2023 Annual Report
FILE NO	Fig 4 1023 BR.mxd

OCTOBER 23, 2023 AIR MONITORING LOCATIONS
Wellsville-Andover Landfill Snyder Road Wellsville, New York



ON-SITE GEOLOGICAL SERVICES, D.P.C.

72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	5
PROJECT	WAL
DOCUMENT	2023 ANNUAL RPT
FILE NO.	FIG 5.MXD

Appendix A

NYSDEC Site Management Periodic Review Report Certification



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site Details

Box 1

Site No. **902004**

Site Name **Wellsville-Andover Landfill**

Site Address: Snyder Hill Road Zip Code: 14895
City/Town: Wellsville
County: Allegany
Site Acreage: 19.000

Reporting Period: February 15, 2023 to February 15, 2024

YES NO

1. Is the information above correct?

If NO, include handwritten above or on a separate sheet.

2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?

3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?

4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?

If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.

5. Is the site currently undergoing development?

Box 2

YES NO

6. Is the current site use consistent with the use(s) listed below?
Closed Landfill

7. Are all ICs in place and functioning as designed?

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
214.-1-2.1	VILLAGE OF WELLSVILLE	
		Ground Water Use Restriction Monitoring Plan O&M Plan

Description of Engineering Controls

<u>Parcel</u>	<u>Engineering Control</u>
214.-1-2.1	Cover System Fencing/Access Control Leachate Collection
Per Site O&M Manual (11/01/1997), Environmental Control Systems:	

- Cover System.
- Leachate Collection and Storage System.
- Gas Venting System.
- Storm Water System.
- Groundwater Monitoring System; and
- Facility Access System (i.e., Access Roads and gates).

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES NO

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

- (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 902004

Box 6

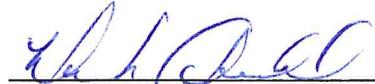
SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I, J. DEAN L ARNOLD at 200 Bolivar Rd. Wethersfield, NY
print name print business address

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.



Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

3-5-2024

Date

EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Jonathan E Brando at 72 Railroad Ave Wellsville, NY 14805
print name print business address

am certifying as a Qualified Environmental Professional for the Owner
(Owner or Remedial Party)

Jonathan E Brando

Signature of Qualified Environmental Professional, for
the Owner or Remedial Party, Rendering Certification

Stamp
(Required for PE)

3/5/24

Date

Appendix B

Monitoring Evaluation,
Approved Revised
Monitoring Plan and
NYSDEC Response



ON-SITE TECHNICAL SERVICES, INC

72 Railroad Avenue
Wellsville, New York 14895

Phone: (585) 593-1824
Fax: (585) 593-7471

April 3, 2009

Linda Ross, CPG
New York State Department of Environmental Conservation
Division of Solid and Hazardous Materials, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Re: Wellsville/Andover Landfill Site (Site # 9-02-004) – Site Monitoring Evaluation and Proposed Revised Monitoring Plan

Dear Linda:

On behalf of the Village of Wellsville, this letter has been prepared to evaluate the above referenced site's post remedial action monitoring results and propose a revised monitoring plan tailored to the site for continued ample monitoring.

Background

The Wellsville/Andover Landfill was operated by the Village of Wellsville from 1964 to 1983, accepting both municipal and industrial waste. The site was added to the New York State Superfund and the New York State Department of Environmental Conservation (NYSDEC) selected capping with waste consolidation as the remedial action in the Record of Decision (ROD) for the site (NYSDEC 1994). Waste from the Northwest and Northeast fill areas was consolidated and capped on the South/South-central fill area. Following consolidation, the fill was compacted and capped with a 19-acre cover system, which incorporates a passive landfill gas (LFG) venting system, a leachate collection and storage system and a groundwater cut-off trench. Remedial construction activities were completed in September 1997.

An operation and maintenance plan was prepared for the site: *Operation and Maintenance Manual For The Wellsville/Andover Landfill Site Number 9-02-004 Allegany County, New York*, dated November 1997 (O&M Plan); which details O&M requirements. Section 3.3 of the O&M Plan states:

The primary goals of this action were to minimize leachate production, control and manage leachate produced, control LFG, consolidate the waste to reduce the size of the landfill, reduce the potential for

surface contact with waste and contaminated soils, and mitigate the spread of contaminated groundwater off site. The remedial action mitigated significant threats to the public health and the environment by:

- Reducing the production of leachate within the fill mass;
- Eliminating the threat to surface waters by eliminating any future contaminated surface water runoff from the contaminated soils on site;
- Eliminating the potential for direct human or animal contact with the contaminated soils on site;
- Mitigate the impacts of contaminated groundwater to the environment;
- Mitigating, to the extent practicable, migration of contaminates in the landfill to groundwater; and
- Controlling LFG.

Site Hydrogeology

Groundwater hydrogeology was investigated during the remedial investigation as summarized in the O&M Plan. Generally, groundwater flows from the North-Northeast to the South-Southwest as dictated primarily by topography. The overburden and bedrock beneath the site have been interpreted as being one continuous aquifer with no separating confining layer. However, in some areas of the site discontinuous low permeability horizons of silt and clay are present within the overburden creating perched water bearing zones. Groundwater flow is restricted vertically by localized clay/silt lenses, but aided in other areas by sand and gravel zones. In the top of bedrock, groundwater flow appears to be controlled by fractures and joints. Open and clay-filled bedrock fractures with many orientations were observed from remedial investigation borings. This indicates that groundwater can flow both horizontally and vertically within the overburden and top of bedrock.

Potentiometric mapping as part of approximately 11 years of post remediation monitoring indicate that groundwater flow conditions and directions have shown little variations from that observed during the remedial investigation.

Evaluation of Monitoring Results

Post remedial action site monitoring commenced in June 1998 and was conducted quarterly through 1999. Starting in 2000 and continuing through 2008, site monitoring has been conducted semi-annually. The monitoring has included sampling and analysis of groundwater, surface water and sediment, groundwater collection system water and leachate. These samples are tested for field parameters, Volatile Organic Compounds (VOCs), 15 Metals and 14 wet chemistry compounds listed in the table below.

<u>Field Parameters</u>	<u>Volatile Organic Compounds</u>	<u>Wet Chemistry</u>
Specific Conductance	1,1,1-Trichloroethane	Alkalinity
Temperature	1,1,2,2-Tetrachloroethane	Ammonia
pH	1,1,2-Trichloroethane	Biochemical Oxygen Demand
Oxygen Reduction Potential	1,1-Dichloroethane	Bromide
Dissolved Oxygen	1,1-Dichloroethene	Chemical Oxygen Demand
Turbidity	1,2-Dibromoethane	Chloride
<u>Inorganic Compounds</u>	1,2-Dichloroethane	Color (True)
Arsenic	1,2-Dichloropropane	Hardness
Barium	2-Butanone (MEK)	Sulfate
Cadmium	2-Hexanone	Total Dissolved Solids
Calcium	4-Methyl-2-pentanone	Total Kjeldahl Nitrogen
Chromium	Acetone	Total Organic Carbon (TOC)
Copper	Benzene	Total Phenolics
Iron	Bromodichloromethane	Turbidity
Lead	Bromoform	
Magnesium	Bromomethane	
Manganese	Carbon disulfide	
Nickel	Carbon tetrachloride	
Potassium	Chlorobenzene	
Selenium	Chloroethane	
Sodium	Chloroform	
Zinc	Chloromethane	
	cis-1,2-Dichloroethene	
	cls-1,3-Dichloropropene	
	Dibromochloromethane	
	Dichloromethane (Methylene chloride)	
	Ethyl benzene	
	m&p-Xylene	
	o-Xylene	
	Styrene	
	Tetrachloroethene	
	Toluene	
	trans-1,2-Dichloroethene	
	trans-1,3-Dichloropropene	
	Trichloroethene	
	Vinyl chloride	

Additionally potentiometric mapping, landfill gas monitoring and sampling and analysis of nearby residential water supplies is conducted. An evaluation of these approximately 11 years of monitoring results is presented below.

Groundwater

The current site monitoring well network consists of 18 wells required to be sampled annually and 11 of the 18 wells sampled semi-annually. Please see attached figure 1 for monitoring well locations. The table below presents a summary of parameters detected in groundwater during the last five years of monitoring.

Summary of 2004 through 2008 Groundwater Detected Parameters (mg/L)

Parameter	Number of Samples	Number of Detections	Minimum Detection	Maximum Detection	Class GA Standard	Number of Class GA Exceedances
-----------	-------------------	----------------------	-------------------	-------------------	-------------------	--------------------------------

Metals

Barium	119	98	0.0202	0.32	1	0
Calcium	119	119	2.96	140		
Chromium	119	1	0.011	0.011	0.05	0
Iron	119	97	0.108	13.4	0.3	77
Lead	119	8	0.0052	0.0733	0.025	1
Magnesium	119	118	0.651	64		
Manganese	119	112	0.0102	1.65	0.3	58
Potassium	119	85	2.1	33.5		
Selenium	119	1	0.00522	0.00522	0.01	0
Sodium	119	119	1.56	67.4	20	45
Zinc	119	21	0.0205	0.347		0

VOCs

1,1-Dichloroethene	134	1	0.0066	0.0066	0.005	1
cis-1,2-Dichloroethene	134	94	0.005	3	0.005	93
Ethyl benzene	134	1	0.0073	0.0073	0.005	1
Toluene	134	1	0.0065	0.0065	0.005	1
trans-1,2-Dichloroethene	134	4	0.011	0.021	0.005	4
Trichloroethene	134	80	0.0052	3.2	0.005	80
Vinyl chloride	134	34	0.005	0.83	0.002	34

Wet Chemistry

Alkalinity	113	113	7.2	410		
Ammonia Nitrogen	115	11	0.0512	0.161	2	0
Biochemical Oxygen Demand	111	15	2.13	13		
Bromide	113	6	1.06	1.38		
Chemical Oxygen Demand	115	40	5.13	18.8		
Chloride	113	89	2.04	71.4	250	0
Color (True) (C.U.)	116	70	5	75	15	10
Hardness	117	117	12.2	519		
Sulfate	113	113	3.49	161	250	0
Total Dissolved Solids	113	113	32	698	500	5
Total Kjeldahl Nitrogen	115	34	0.203	2.74		
Total Organic Carbon (TOC)	115	70	1.01	7.51		
Total Phenolics	114	2	0.00706	0.0181	0.001	2

As observed in the table above and also previously described in site monitoring reports, there are three metals (Iron, Manganese and Sodium) and three VOCs (cis-1,2-Dichloroethene (cDCE), Trichloroethene (TCE) and Vinyl chloride) that frequently exceed NYSDEC Class GA Groundwater Standards. Therefore, concentration verses time plots for these six compounds have been prepared for monitoring wells that exhibit exceedances. These wells include CW-3A, CW-3B, CW-4B, MW-5D, MW-5S, MW-15S and MW-18S for metals and VOCs and MW-11S and MW-16S for VOCs. These plots are attached for reference.

In General, for Iron, Manganese and Sodium, increasing or decreasing time trends are not apparent. The three metals have been detected at various concentrations above standards at both upgradient and downgradient wells. These metals are common constituents of soil and groundwater and often occur naturally at the concentrations detected.

Volatile Organic Compound analyses of groundwater have shown evident time trends and VOCs are the primary constituents of concern at this site. For this reason statistical analysis was performed to evaluate total VOCs (sum of detected VOCs in a given sample). The data set utilized for the analysis includes all available post remediation VOC results, which generally includes 24 sampling events over an 11 year period. The statistical analysis was conducted using the Mann-Kendall test using a normal approximation method in accordance with *USEPA Data Quality Assessment: Statistical Methods for Practitioners EPA QA/G-9S*, dated February 2006. In this analysis, a null hypothesis of "There is no trend" is tested against an alternative hypothesis of either "There is an upward trend" or "There is a downward trend". This analysis involves using a triangular table to compute a Statistic (S) and test it against a critical value and a probability value at a 5 % significance level (95% confidence level). If both criteria are met, then the null hypothesis of no trend is rejected in favor of the alternative hypothesis. Rejecting the null hypothesis suggests that the alternative hypothesis may be true. Alternative hypotheses are upward trend for S greater than zero and downward trend for S less than zero. If only one criterion or neither criteria are met, then the result is not enough evidence to show a trend. These statistical analyses are presented in Table 1 attached. A discussion of time trend plots and statistical analysis by individual monitoring well is provided below.

CW-3A – This is an overburden well located immediately downgradient of the landfill.

Plot observation: This well exhibited anomalous high results in June 2005, but has returned to lower levels the last seven samplings. TCE and cDCE have shown a decreasing trend the last three samplings, while vinyl chloride has been non-detect except in June 2005.

Statistical analysis: There is strong evidence of an upward trend in total VOC concentrations.

CW-3B – This is an overburden well located immediately downgradient of the landfill and adjacent to CW-3A. This well is approximately 12.5 feet deeper than CW-3A.

Plot observation: There is an apparent slight increasing trend in concentrations of TCE and cDCE.

Statistical analysis: There is strong evidence of an upward trend in total VOC concentrations.

CW-4B – This is an overburden well located immediately downgradient of the landfill.

Plot observation: The plot shows a slight downward trend with TCE and Vinyl chloride results non-detect the last five years and cDCE has been non-detect since December 2005.

Statistical Analysis: There is evidence of a downward trend, but not statistically significant at the 5% significance level (95% confidence level). Therefore, the result of the statistics is no trend.

MW-4D – This is a bedrock well located cross-gradient and East of the Northern portion of the landfill.

Plot observation: This well exhibits an apparent seasonal fluctuation in VOCs with an inverse proportional relationship to groundwater elevation. Elevated concentrations of primarily cDCE occur in the fall when groundwater elevations are low and then decrease in the spring when groundwater elevations are high. However, this seasonal fluctuation is not represented in the graph for the period of 2003 to 2007 when semi-annual sampling was conducted in the months of June and December and did not include samplings at low groundwater elevation periods. This period may have included times of elevated cDCE, but this is unknown because sampling was not conducted during periods of low groundwater levels.

Statistical Analysis: There is evidence of a downward trend, but not statistically significant at the 5% significance level (95% confidence level). Therefore, the result of the statistics is no trend.

MW-5S – This is an overburden well located cross-gradient and East of the central portion of the landfill.

Plot observation: There is a decreasing trend apparent from 1998 to 2002 and concentrations have remained low and relatively stable since 2002.

Statistical analysis: There is evidence of a downward trend, but not statistically significant at the 5% significance level (95% confidence level). Therefore, the result of the statistics is no trend.

MW-5D – This is a bedrock well located immediately adjacent to MW-5S.

Plot observations: cDCE is observed at higher concentrations than TCE and Vinyl chloride, but there is not an apparent increasing or decreasing trend.

Statistical analysis: There is no trend.

MW-11S – This is an overburden well located approximately 230 feet downgradient of the landfill and has been sampled semi-annually since 2005.

Plot observation: The plot shows fairly consistent VOC concentrations over time. TCE is the highest concentration (approximately 3 mg/L), cDCE is consistently around 0.5 mg/L and Vinyl chloride has been non-detect.

Statistical analysis: There is no trend.

MW-15S – This is an overburden well located cross/downgradient and approximately 600 feet from the landfill.

Plot observation: There is no discernable upward or downward trend. cDCE has been detected at concentrations between 0.011 mg/L and 0.04 mg/L, TCE fluctuates between

approximately 0.5 mg/L and non-detect and Vinyl chloride has been non-detect since 2002. However, this well does appear to exhibit seasonal fluctuations in VOC concentrations similar to MW-4D.

Statistical analysis: There is no trend.

MW-16S – This is an overburden well located approximately 1000 feet downgradient of the landfill. This well has been sampled on the same frequency as MW-11S.

Plot observation: cDCE, TCE and Vinyl chloride results are below detection limits, with the exception of TCE at 0.066 mg/L in September 2006.

Statistical analysis: Since there is only one VOC detection at this well; statistical analysis is not applicable.

MW-18S - This is an overburden well located cross-gradient and West of the northern portion of the landfill.

Plot observation: A time trend is not obvious, but there is a good correlation between cDCE and TCE, while Vinyl chloride has not been detected. cDCE and TCE concentrations increased in 2000 as compared to 1998 through 1999 and remained at similar concentration through 2007.

Statistical analysis: There is evidence of an upward trend. However, it should be noted that both criteria thresholds were just slightly exceeded, indicating that there is just enough evidence to reject no trend in favor of an upward trend.

Surface Water and Sediment

Surface water and sediment samples have been collected annually since 2000 from location SWS-1 (see figure 1). Prior to spring 2000 surface water and sediment samples were collected quarterly from SWS-1 and two other down stream locations. Additionally, three landfill perimeter seep samples were collected between 2001 and 2003. Seeps have not been observed active since 2003. SWS-1 is the currently required surface water and sediment sampling location; therefore results from this location are discussed below.

Location SWS-1 is located at the downstream side of the culvert within the drainage ditch that leads to an unnamed tributary to Duffy Hollow Creek. Both the unnamed tributary and Duffy Hollow Creek are classified as NYSDEC Class C streams. Since June 1998, 15 surface water samples have been collected at SWS-1. From these 15 samples, four samples have exhibited Class C surface water exceedances as presented in the table below.

SWS-1 Surface Water Class C Exceedances (mg/L)

Parameter	SWS-1 6/25/1998	SWS-1 12/2/1998	SWS-1 3/25/1999	SWS-1 6/16/2005	Class C Standard
Lead	0.0088		0.0089		0.008
Nickel			0.0176 B		0.0082
Thallium		0.0127			0.008
Total Dissolved Solids				642	500

VOCs have not been detected at SWS-1 with the following exceptions. There were three Acetone detections between 1998 and 1999, which are probable laboratory artifacts. cDCE was detected five times at a maximum concentration of 0.0067 mg/L. The last cDCE detection was reported in April 2003.

Sediment sampling at SWS-1 has shown typical metal and wet chemistry parameter detections along with minimal VOC detections. A summary of SWS-1 sediment detections is presented in the table below.

SWS-1 Sediment Analytical Result Summary (mg/Kg)

Parameter	Number of Samples	Number of Detections	Minimum Detection	Maximum Detection
Aluminum	7	7	8780	13100
Arsenic	15	15	7.16	73.4
Barium	15	15	51.2	348
Beryllium	7	5	0.628	0.876
Boron	7	2	27.1	41.1
Cadmium	15	2	0.18	1.14
Calcium	15	15	3850	43200
Chromium	15	15	7.26	21.2
Cobalt	7	7	9.9	17.4
Copper	15	15	10.2	25.5
Iron	15	15	11800	41200
Lead	15	15	6.22	30
Magnesium	15	15	1780	8490
Manganese	15	15	579	8160
Mercury	7	1	0.01	0.01
Nickel	15	15	10.3	32.3
Potassium	15	15	862	4600
Selenium	15	6	1.3	13.1
Sodium	15	12	81.9	1390
Thallium	7	1	3.21	3.21
Vanadium	7	7	11.2	23.4
Zinc	14	14	74.3	2610
1,1,2-Trichloroethane	15	1	0.012	0.012
1,2-Dichloroethane	15	1	0.012	0.012
2-Butanone (MEK)	15	2	0.004	0.033
Acetone	15	5	0.016	0.22
Chloromethane	15	1	0.004	0.004
Toluene	15	2	0.0027	0.071

SWS-1 Sediment Analytical Result Summary (mg/Kg)

Parameter	Number of Samples	Number of Detections	Minimum Detection	Maximum Detection
Alkalinity	15	14	376	14300
Ammonia Nitrogen	15	11	8.12	339
Biochemical Oxygen Demand	14	13	203	49500
Bromide	15	1	13.1	13.1
Chemical Oxygen Demand	15	15	15600	535000
Chloride	15	4	41.8	144
Hardness	14	13	689	44300
Sulfate	15	4	39.3	1700
Total Kjeldahl Nitrogen	15	15	168	5790
Total Organic Carbon (TOC)	10	10	0.34	46700
Total Phenolics	15	1	0.447	0.447
Total Solids	14	14	14.1	82.6

Groundwater Cut-off System

The groundwater cut-off system is intended to capture upgradient groundwater from the North and East landfill perimeters prior to contacting waste within the landfill. The North side collection trench drains to Manhole MH-32 located at the Northwest corner of the landfill, while the East side collection trench drains to Manhole MH-33 at the Southeast corner of the landfill. Both MH-32 and MH-33 are piped to drain either to the leachate collection system or to the landfill perimeter surface water drainage channels. To date, water in MH-32 and MH-33 has been drained to the leachate collection system. The pipes from the manholes to the drainage channel are closed with removable plugs. Sampling of these two manholes has been conducted since 1998 in anticipation of demonstrating acceptable water quality for discharge to the surface water drainage channels. A summary of parameters exceeding Class C surface water standards is provided below.

MH-32 & MH-33 Groundwater Cut-off System Class C Surface Water Exceedance Summary (mg/L)

Parameter	Number of Sample	Number of Detections	Minimum Detection	Maximum Detection	Class C Standard	Number of Class C Exceedances
Cobalt	12	4	0.0056	0.154	0.005	4
Lead	46	11	0.0027	0.165	0.008	7
Nickel	46	4	0.0056	0.272	0.0082	3
Thallium	12	3	0.0055	0.0178	0.008	2
Vanadium	12	4	0.0043	0.0826	0.014	2
Dichloromethane (Methylene chloride)	42	9	0.0027	1.9	0.2	1
Trichloroethene	42	20	0.0011	1.6	0.04	6
Ammonia Nitrogen	42	41	0.0955	7.69	2	12
Total Dissolved Solids	42	42	203	1650	500	16

Additionally, since cDCE, TCE and Vinyl chloride are the three primary constituents of concern in groundwater; time trend plots of these three compounds were created for MH-32 and MH-33 and are attached. MH-32, and to a greater extent MH-33, show a decreasing trend in these VOCs. However, at this time groundwater cut-off trench water does not meet standards to allow discharge to surface water.

Leachate

The quantity of leachate generated at the site has greatly decreased following the remedial action (please see attached graph). Leachate is sampled from the leachate sump. Since the groundwater cut-off system has drained to the leachate sump to date, leachate samples are a composite from the leachate collection system and groundwater cut-off trench. Various metals, VOCs and wet chemistry parameters are typically detected as presented in the summary table below.

Summary of Leachate Sump Detected Parameters (mg/L)

Parameter	Number of Samples	Number of Detections	Minimum Detection	Maximum Detection
Aluminum	5	4	0.164	8.76
Arsenic	21	12	0.0051	0.238
Barium	21	21	0.112	0.961
Boron	4	3	0.163	0.659
Cadmium	21	1	0.00572	0.00572
Calcium	21	21	78.7	151
Chromium	21	4	0.0101	0.0205
Cobalt	4	1	0.0034	0.0034
Copper	21	4	0.0043	0.0392
Iron	21	21	3.22	360
Lead	21	10	0.0043	0.0738
Magnesium	21	21	25.1	62.2
Manganese	21	21	3.72	13.7
Nickel	21	1	0.0054	0.0054
Potassium	21	21	3.57	16.9
Selenium	21	3	0.005	0.00981
Sodium	21	21	14.6	112
Tin	3	1	0.198	0.198
Vanadium	4	1	0.0632	0.0632
Zinc	18	11	0.0159	0.21
1,1-Dichloroethane	21	2	0.0014	0.0022
2-Butanone (MEK)	21	2	0.031	0.05
4-Methyl-2-pentanone	21	1	0.0049	0.0049
Acetone	21	5	0.0056	0.044
Benzene	21	2	0.0022	0.0044
Chlorobenzene	21	1	0.0019	0.0019
Chloroethane	21	1	0.0027	0.0027
Chloroform	21	2	0.0018	0.0034
cis-1,2-Dichloroethene	21	21	0.011	0.95
Dichloromethane (Methylene)	21	2	0.0023	0.067

Summary of Leachate Sump Detected Parameters (mg/L)

Parameter	Number of Samples	Number of Detections	Minimum Detection	Maximum Detection
chloride)				
Ethyl benzene	21	6	0.005	0.1
m&p-Xylene	21	1	0.0075	0.0075
o-Xylene	21	1	0.0038	0.0038
Phenol	5	1	0.044	0.044
Toluene	21	4	0.0022	0.026
trans-1,2-Dichloroethene	21	4	0.0026	0.0075
Trichloroethene	21	14	0.0064	0.038
Vinyl chloride	21	16	0.0029	0.05
Alkalinity	19	19	276	566
Ammonia Nitrogen	19	19	0.0873	12.1
Biochemical Oxygen Demand	19	8	2.01	5.4
Bromide	19	3	1.02	1.43
Chemical Oxygen Demand	19	18	12.3	17100
Chloride	19	19	27.8	200
Color (True) (C.U.)	19	19	10	200
Hardness	19	19	328	675
Sulfate	19	19	4.26	26.3
Total Dissolved Solids	19	19	357	925
Total Kjeldahl Nitrogen	19	19	2.17	14.8
Total Organic Carbon (TOC)	18	18	2.04	26
Total Phenolics	19	1	0.00588	0.00588

Landfill Gas Monitoring

Landfill gas monitoring has been conducted at the site for approximately 10 years using an FID and an O₂/LEL meter. This monitoring has provided substantial characterization of the landfill gas and shown fairly consistent results. Several of the gas vents, leachate clean outs and manholes exhibit high concentrations of Methane and low levels of Oxygen, while the landfill perimeter readings are generally within normal background levels. Additional gas monitoring was conducted in June 2005 using a GEM 2000 landfill gas meter to provide more characterization of the landfill gas. The June 2005 monitoring showed several locations with Methane readings between approximately 33% and 97%. This monitoring has demonstrated that the primary landfill gas is Methane. Starting with the March 2007 monitoring event, a PID has been utilized instead of an FID. The PID provides monitoring of VOCs while an O₂/LEL meter continues to be used to monitor Oxygen and Methane.

Residential Water Supplies

There are 20 residential water supply locations in the monitoring program. The current monitoring schedule requires that three water supplies be sampled semi-annually (spring and fall) and the remaining 17 locations be sampled every three years. The table below presents a summary of detected parameters from the last five years of sampling, which includes sampling of the available 20 locations in 2005 and 2008.

Summary of 2004 through 2008 Residential Water Supply Detected Parameters (mg/L)

Parameter	Number of Samples	Number of Detections	Minimum Detection	Maximum Detection	Class GA Standard	Number of Class GA Exceedances	NYSDOH MCL	Number of NYSDOH MCL Exceedances
Barium	53	52	0.002	0.11	1	0	1	0
Calcium	53	53	3.4	54.4				
Copper	53	20	0.01	0.16	0.2	0	1	0
Iron	53	25	0.06	1	0.3	9	0.3	9
Lead	53	1	0.015	0.015	0.025	0	0.05	0
Magnesium	53	53	1.6	20.8				
Manganese	57	35	0.0054	2.8	0.3	14	0.3	14
Potassium	53	53	0.7	4.4				
Sodium	53	53	1.1	104	20	28		0
Zinc	53	11	0.011	0.22			5	0
cis-1,2-Dichloroethene	58	9	0.00084	0.0021	0.005	0		
Trichloroethene	58	9	0.0012	0.0028	0.005	0	0.005	0

As shown in the table above, two parameters (Iron and Manganese) have shown exceedances of standards during the last five years. Eight of the nine Iron exceedances are from location WAL-2, which is a seasonal hunting camp adjacent to the Southwest corner of the landfill. The other Iron exceedance is WAL-17 in November 2005. WAL-17 is located approximately 8000 feet from the landfill; therefore this exceedance is unlikely related to the site. The Manganese exceedances are from WAL-2 and WAL-20. WAL-20 is also located approximately 8000 feet from the site and Manganese concentrations have been near or below detection limits since this residential well was replaced in 2005. The VOC detections shown in the table above are from pre-filtered WAL-19 samples. WAL-19 is located Southeast of the landfill and includes a two-stage carbon treatment system maintained by the Village of Wellsville.

Summary of Monitoring Results Evaluation

Volatile Organic Compounds and to a lesser extent, metals, are the constituents of concern at the site. VOCs groundwater concentrations are stable at most wells and trending upward at three wells. The locations where VOCs are trending upward are immediately adjacent to the landfill and this upward trend is indicative of minimal groundwater flow. Groundwater level drawdown during sampling and slow recovery (in some cases days) further illustrate that groundwater flow is extremely measured. Metals have shown exceedances of standards in both upgradient and downgradient wells and in many cases are naturally occurring. Wet Chemistry parameters in groundwater are generally below standards and do not appear to be a good indicator of landfill impacts on groundwater at this site. This is contrary to typical municipal solid waste landfills and should be considered when evaluating future site monitoring needs. Surface water and sediment sampled at location SWS-1 appears un-impacted by the site. Groundwater collection system sampling shows some signs of decreasing concentrations, but results do not meet surface water standards at this time. Leachate continues to show several detections, but is generally

more dilute as compared to operating municipal landfills. Two Residential water supplies close to the landfill continue to show detections of constituents of concern.

These 11 years of monitoring results demonstrate that the remedial action goals continue to be met. Leachate quantities have greatly decreased following the remedial action. Surface water is not impacted by the site. Contaminated groundwater and landfill gas migration is being controlled. The remedial action has mitigated significant threats to public health and the environment.

Proposed Monitoring Program

Based on the above evaluation of monitoring results, a revised monitoring program has been designed to meet the needs of continued surveillance of the remedial objectives into the future. VOCs and metals are the primary constituents of concern and wet chemistry parameters do not appear to be good indicators at this site. The project analyte list is proposed to be revised to include field parameters, VOCs and metals with a few exceptions. The proposed monitoring requirements are presented in Table 2 attached and discussed below.

Groundwater

Groundwater sampling is proposed to be conducted annually, each Fall, in an attempt to capture annual high groundwater concentrations. Sampling locations will include currently sampled wells, with the following exceptions. Upgradient well MW-1D will not be sampled because upgradient water quality has been adequately characterized and no concern of an upgradient contaminant source. Sampling of overburden wells CW-3A and CW-4A will be discontinued because overburden wells CW-3B and CW-4B are immediately adjacent to these wells and show similar water chemistry. Bedrock well MW-15DA has not been sampled following the remedial action, because it has been dry. MW-15DA will be removed from the required sampling list.

Surface Water and Sediment

Surface water at location SWS-1 will be sampled during the annual Fall event with analysis for field parameters, VOCs, Metals, Nitrate Nitrogen and Total Dissolved Solids (TDS). Nitrate Nitrogen and TDS are tested in anticipation that the groundwater cut-off system may one day discharge to surface water and these two parameters frequently exceed Class C surface water standards in groundwater cut-off system water. Sediment sampling at this location has limited usefulness and is therefore discontinued.

Groundwater Cut-Off System

Manholes MH-32 and MH-33 will be sampled during the annual Fall event with analysis for field parameters, VOCs, Metals, Nitrate Nitrogen and TDS. Sampling of these locations is conducted in anticipation of future discharge to surface water.

Leachate

Leachate sump will be sampled during the annual Fall event.

Landfill Gas Monitoring

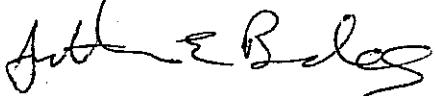
Landfill gas has been adequately characterized and has not been detected at the landfill perimeter; therefore landfill gas monitoring will be discontinued.

Residential Water Supply

Hunting camp WAL-2 will be sampled annually for metals. Resident WAL-5 will be sampled annually for VOCs and Metals. The two-stage carbon treatment unit will be maintained at residence WAL-19 with semi-annual sampling for VOCs prior to filtration, between the filters and post filtration. The remainder of the residential water supply sampling will be discontinued.

The Village of Wellsville and On-Site appreciate your review and consideration on this matter. If you have any questions or require any clarification on the information presented in this letter, please call the undersigned.

Sincerely,



Jonathan E. Brandes, P.G.

Senior Geologist

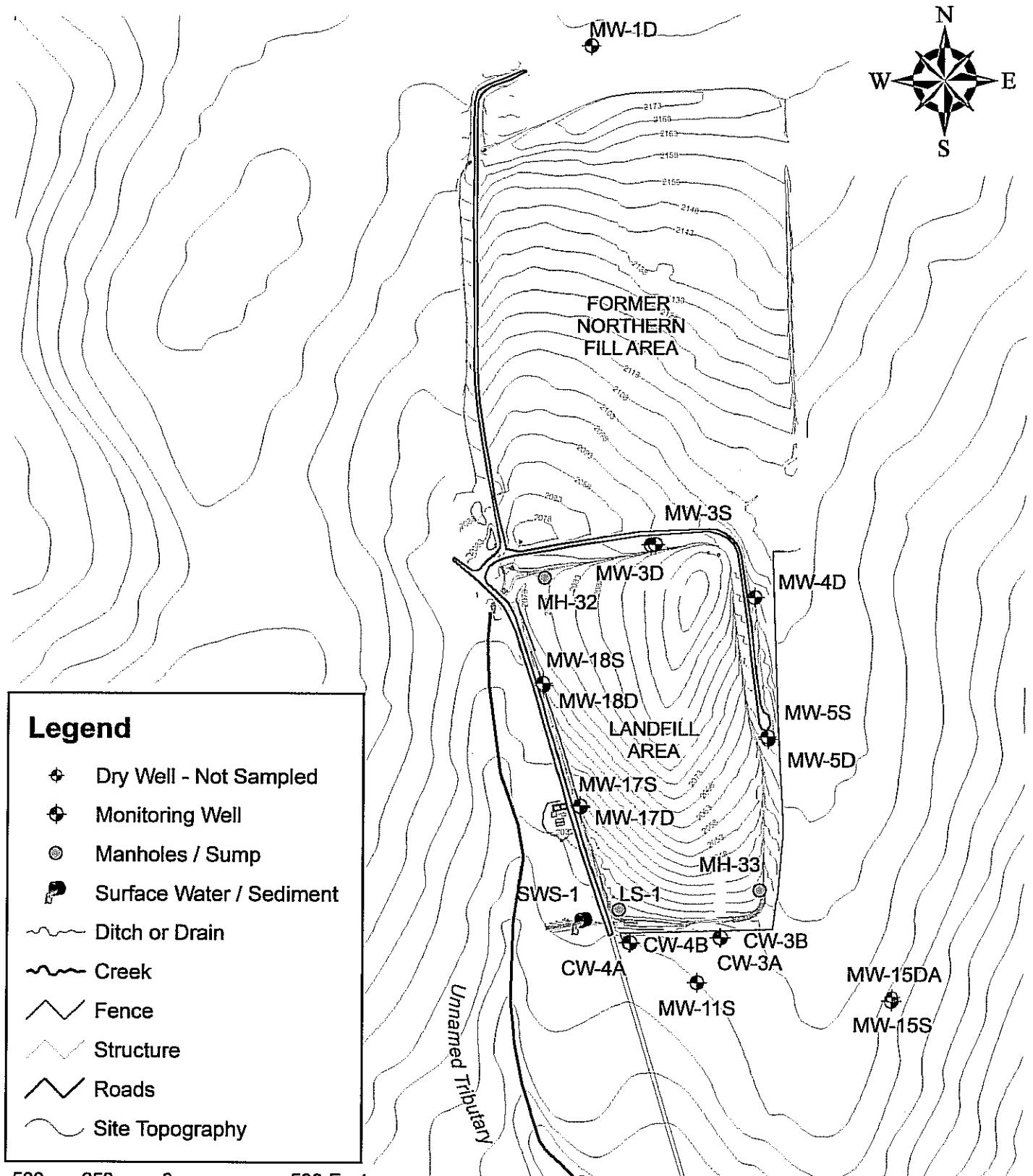
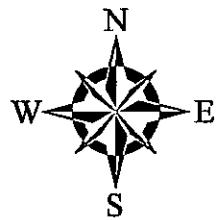
cc: Bill Whitfield, Village of Wellsville

Judy Lynch, Village Trustee, Liaison to Landfill

Tamara S. Girard, NYSDOH

Attachments

SAMPLING LOCATIONS

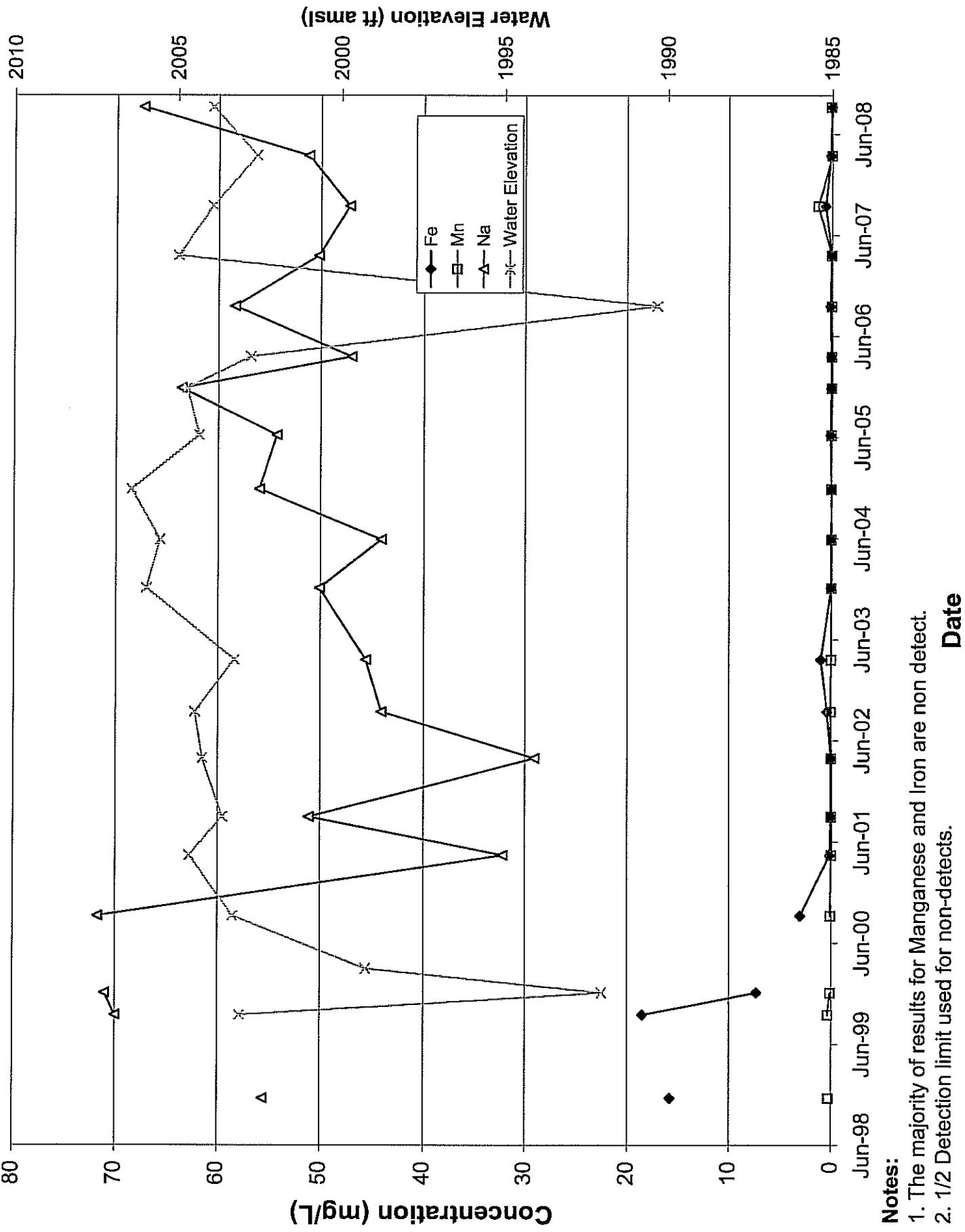


ON-SITE TECHNICAL SERVICES, INC.

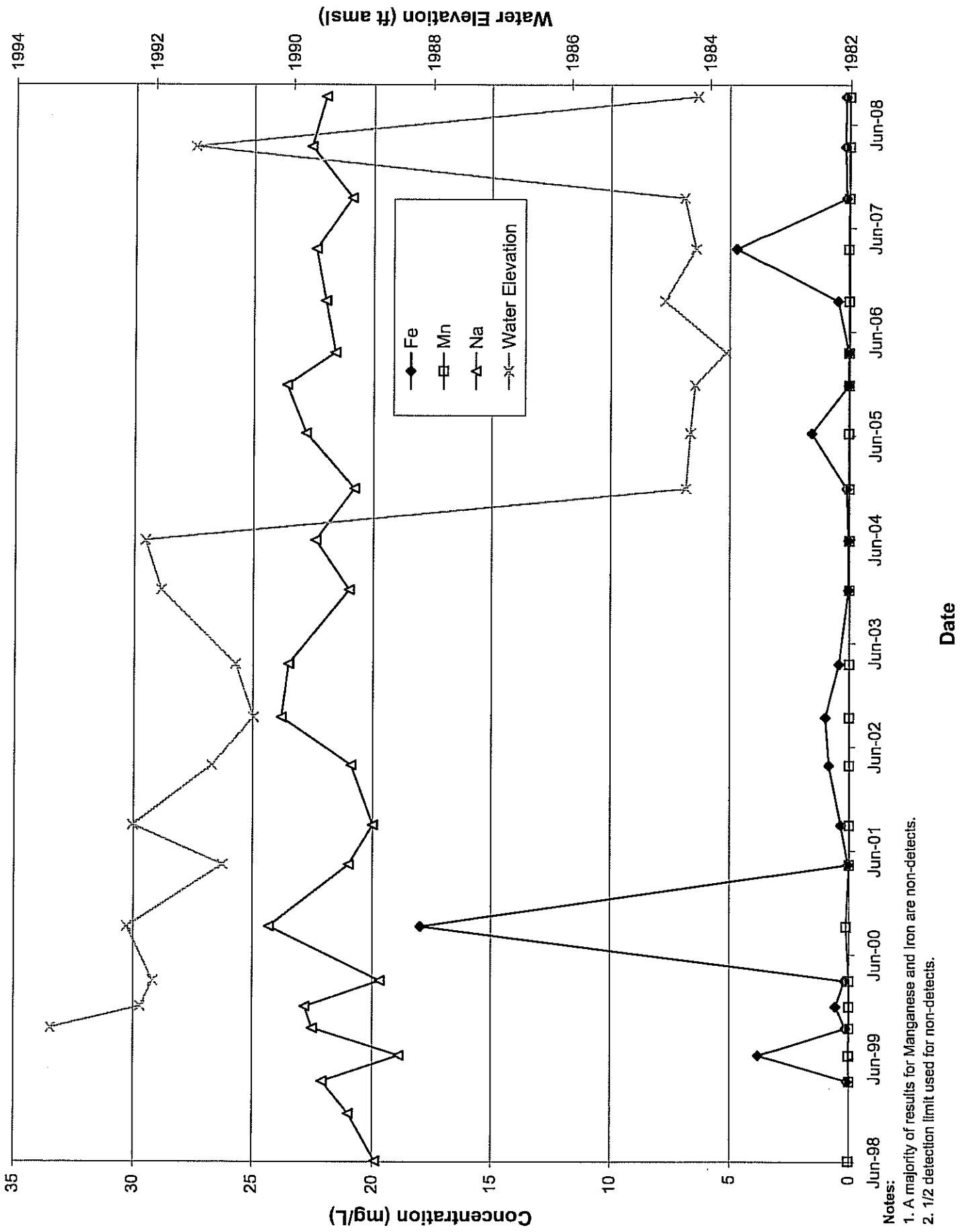
72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	1
PROJECT	WAL
DOCUMENT	2009 Site Review
FILE NO.	Fig 1 - Samp Locs.mxd

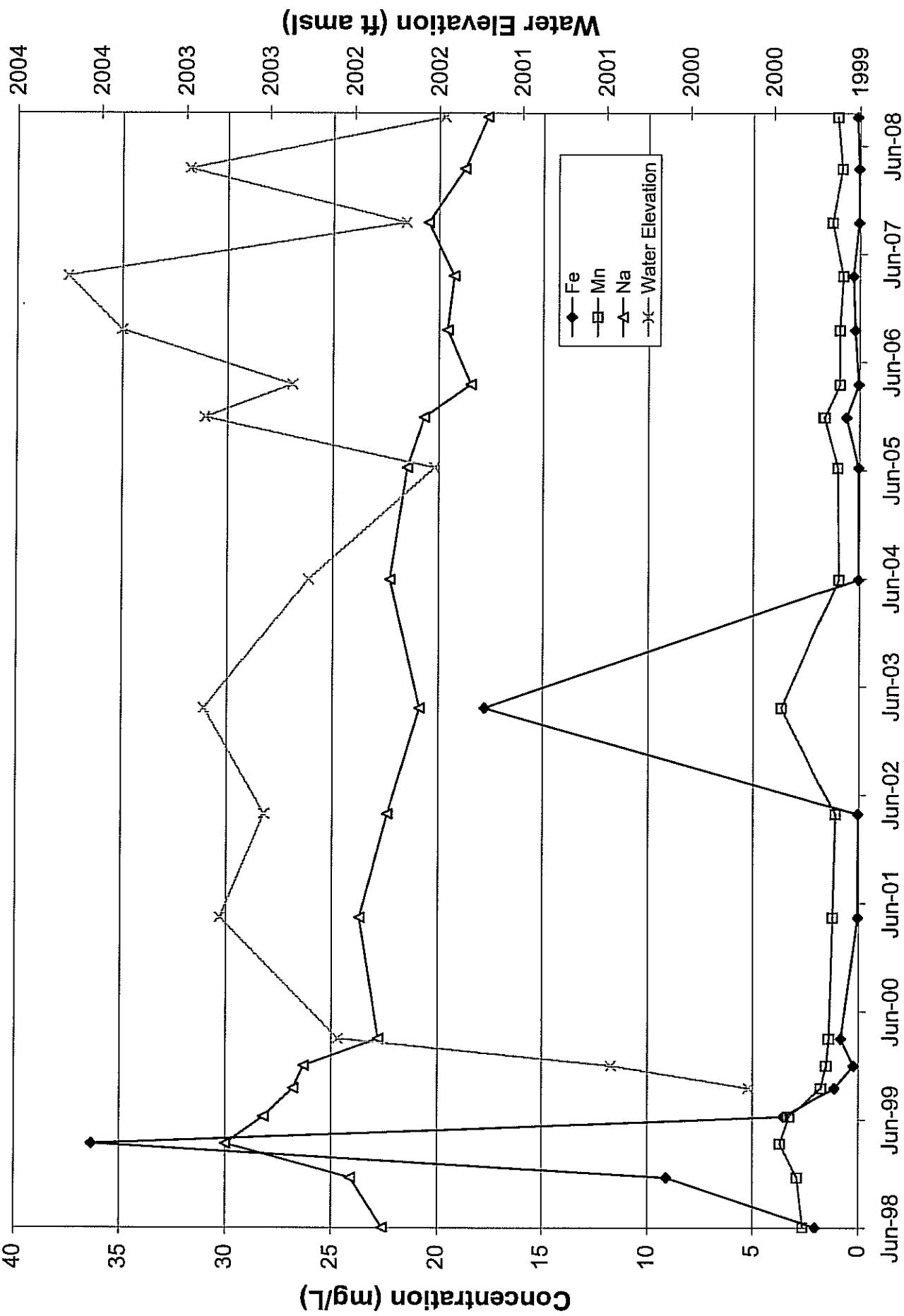
CW-3A Metals



CW-3B Metals



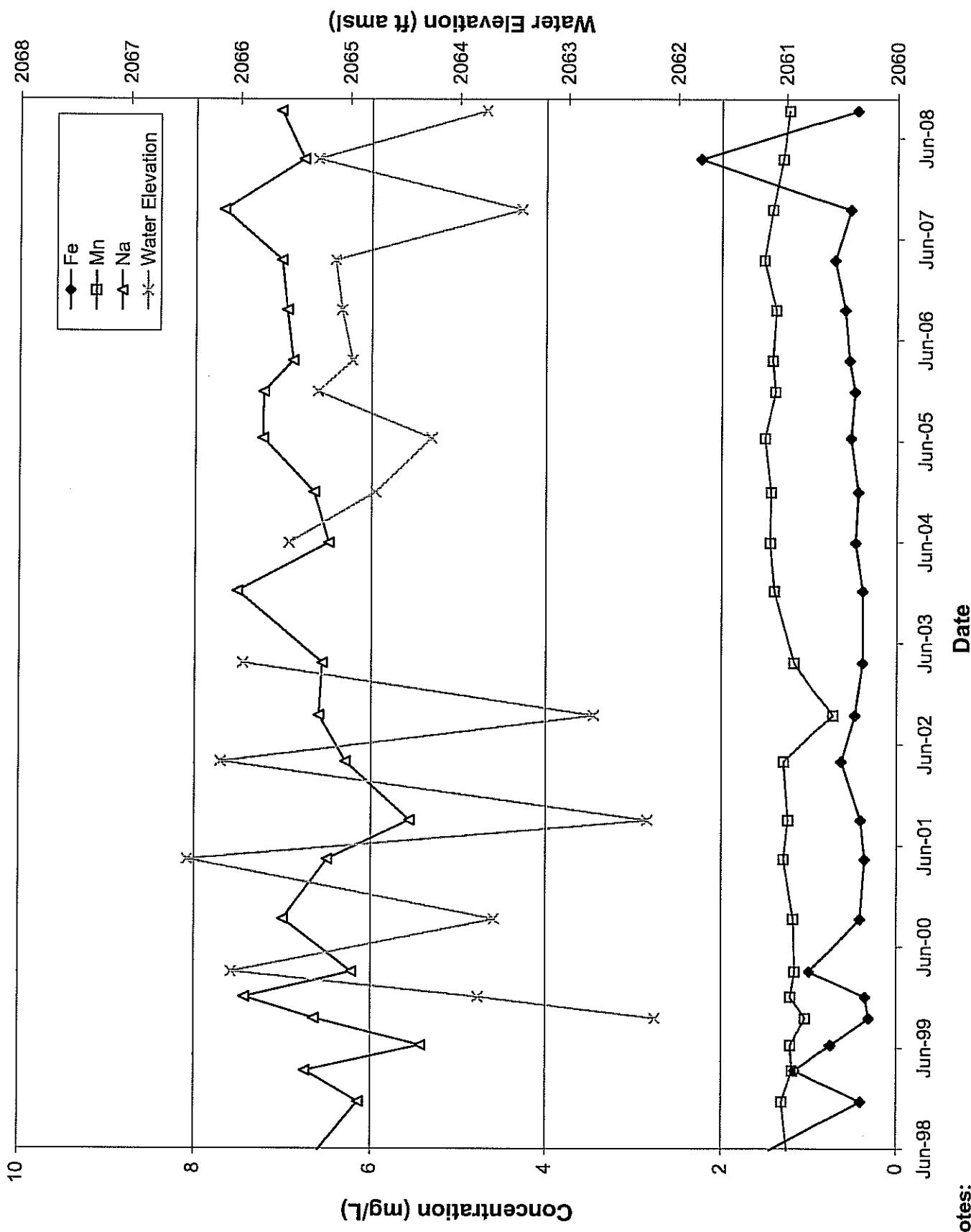
CW-4B Metals



Notes:

- 1/2 detection limit used for non-detects
- Iron is non-detect on 4/25/2001, 4/9/2002, 6/8/2004, 6/20/2005, 3/28/2006, 9/25/2007 and 3/25/2008

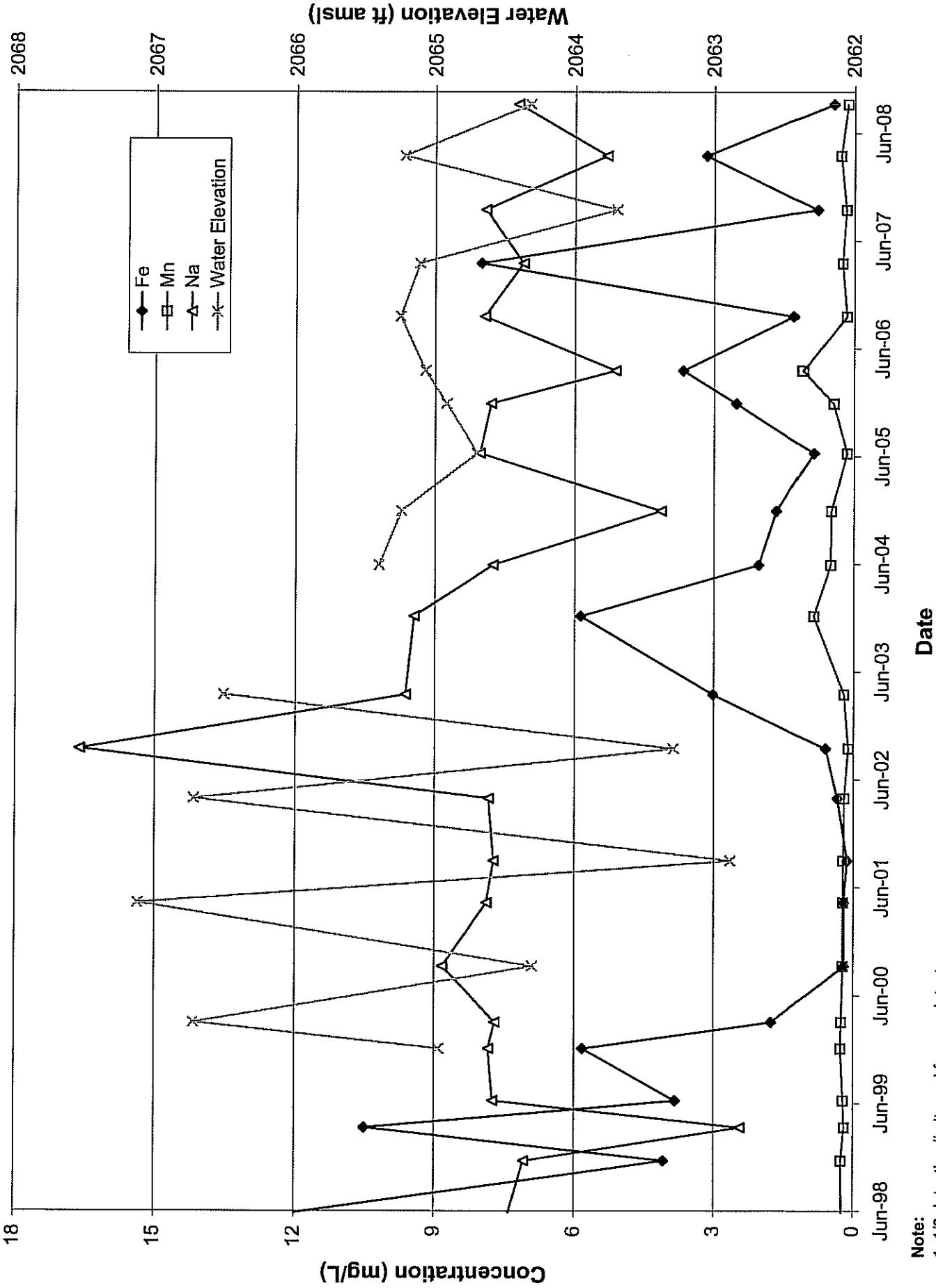
MW-5D Metals



Notes:

- 1/2 Detection limit used for non-detects
- No water elevation available December 2003.

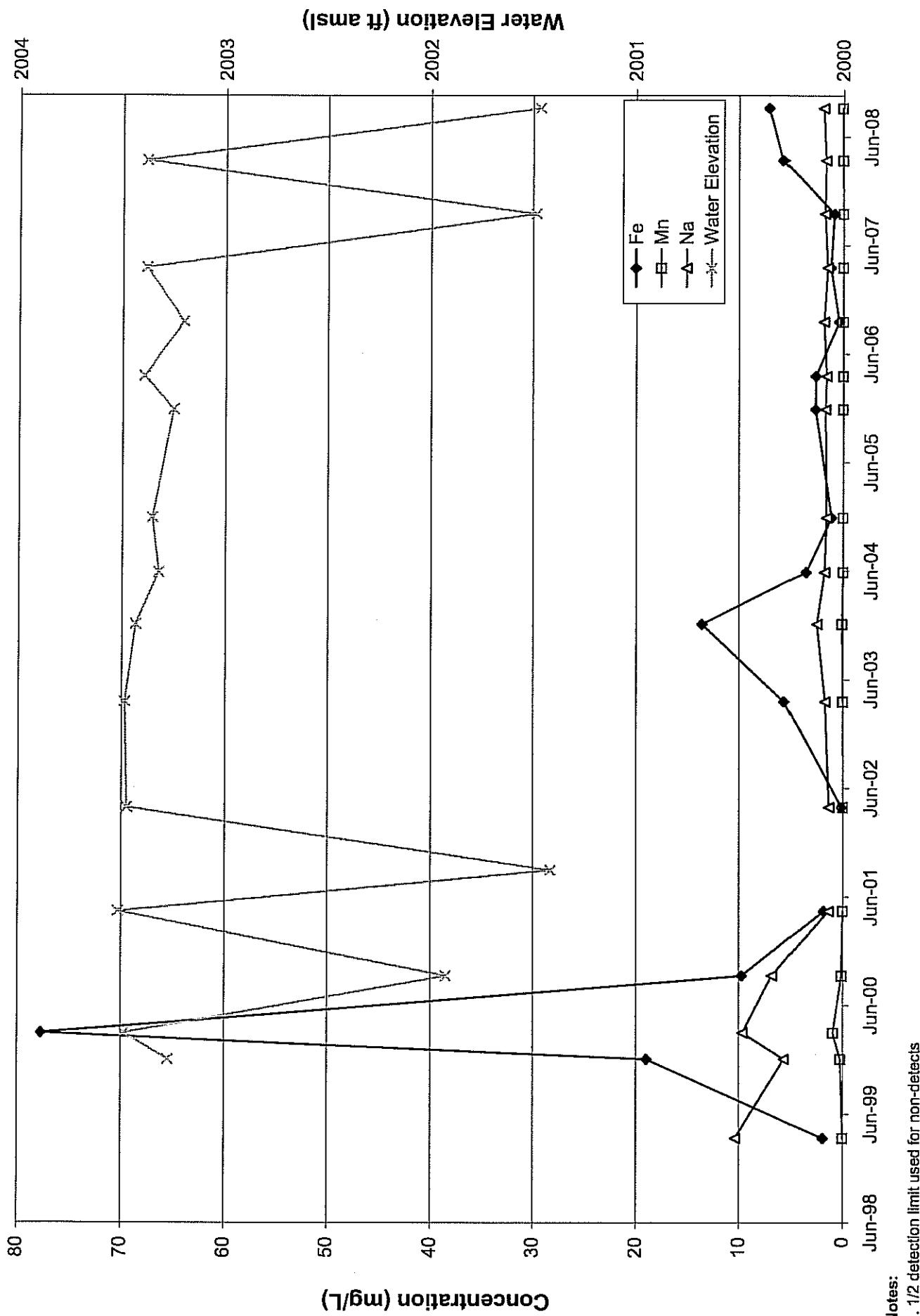
MW-5S Metals



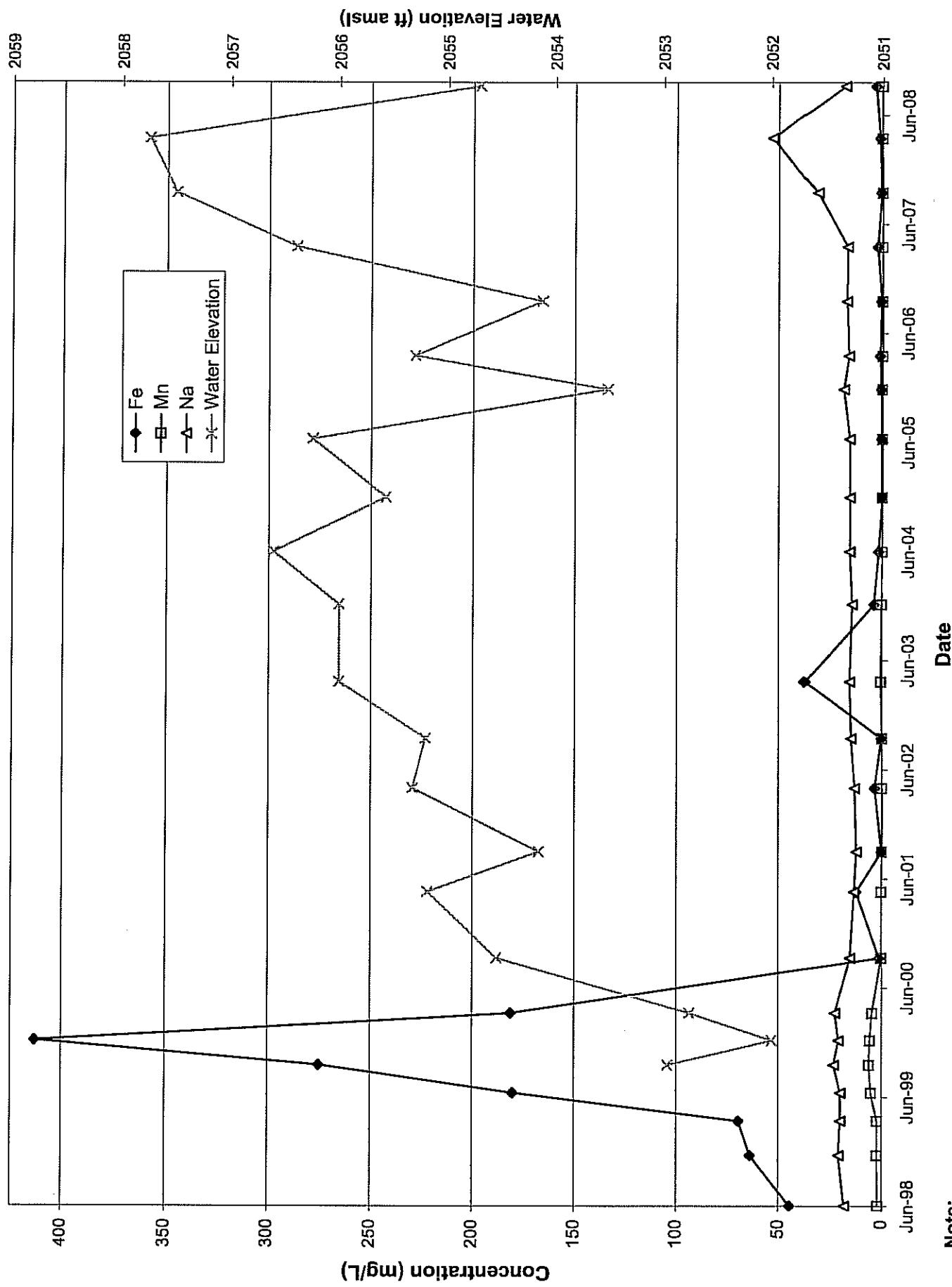
Note:

1. 1/2 detection limit used for non-detects.
2. No water elevation available for December 2003.

MW-15S Metals



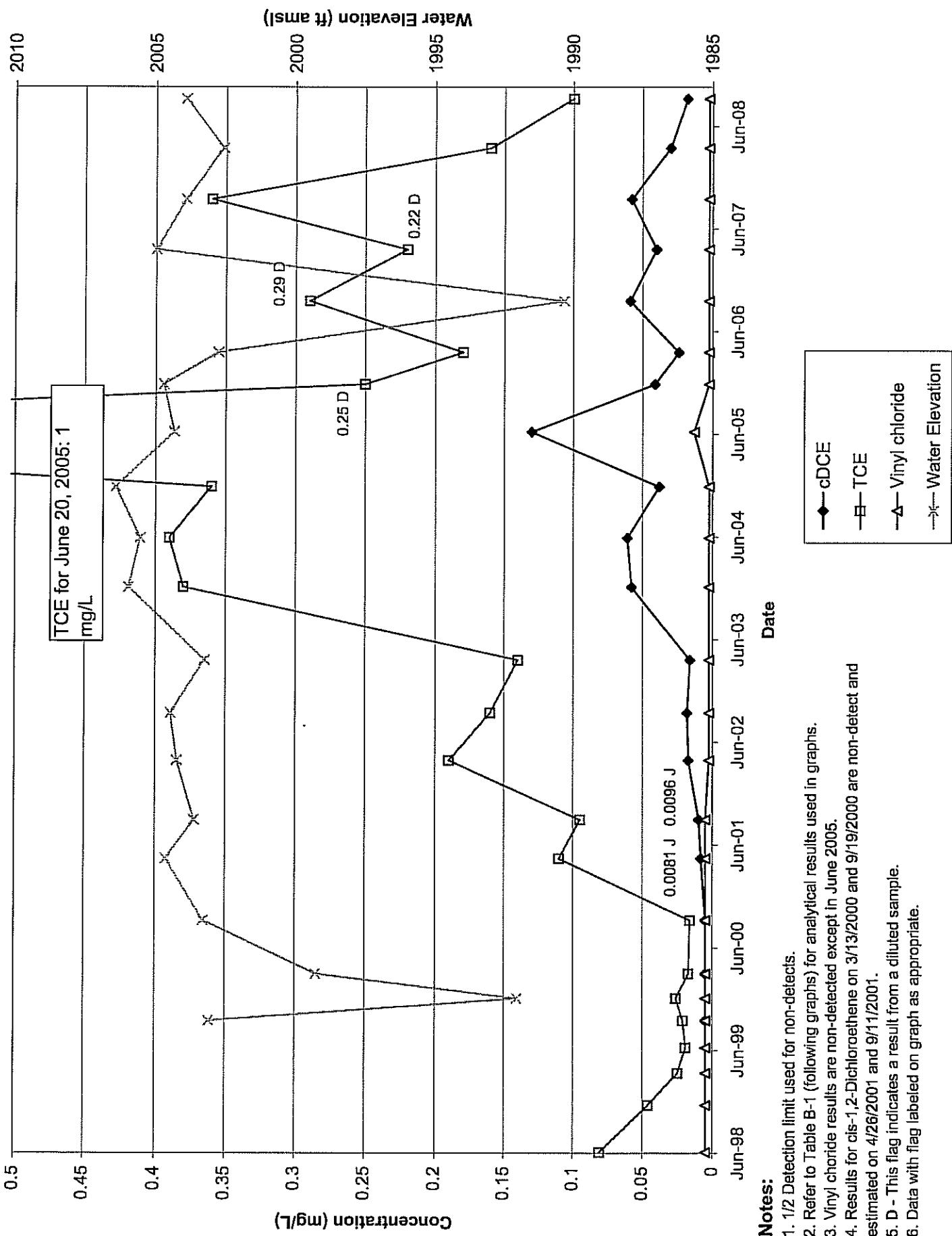
MW-18S Metals



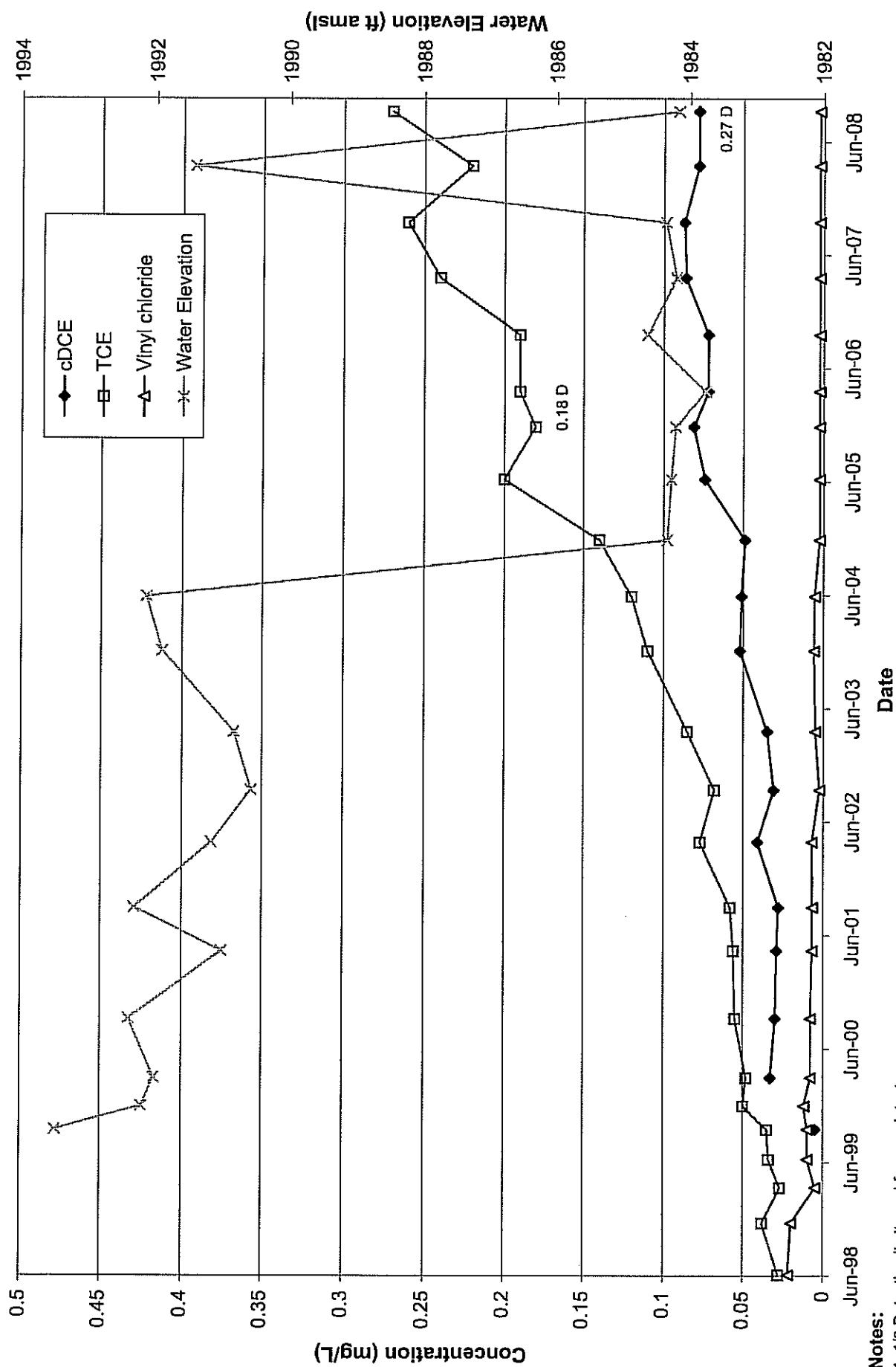
Note:

1. 1/2 Detection limit used for non-detects

CW-3A VOCs



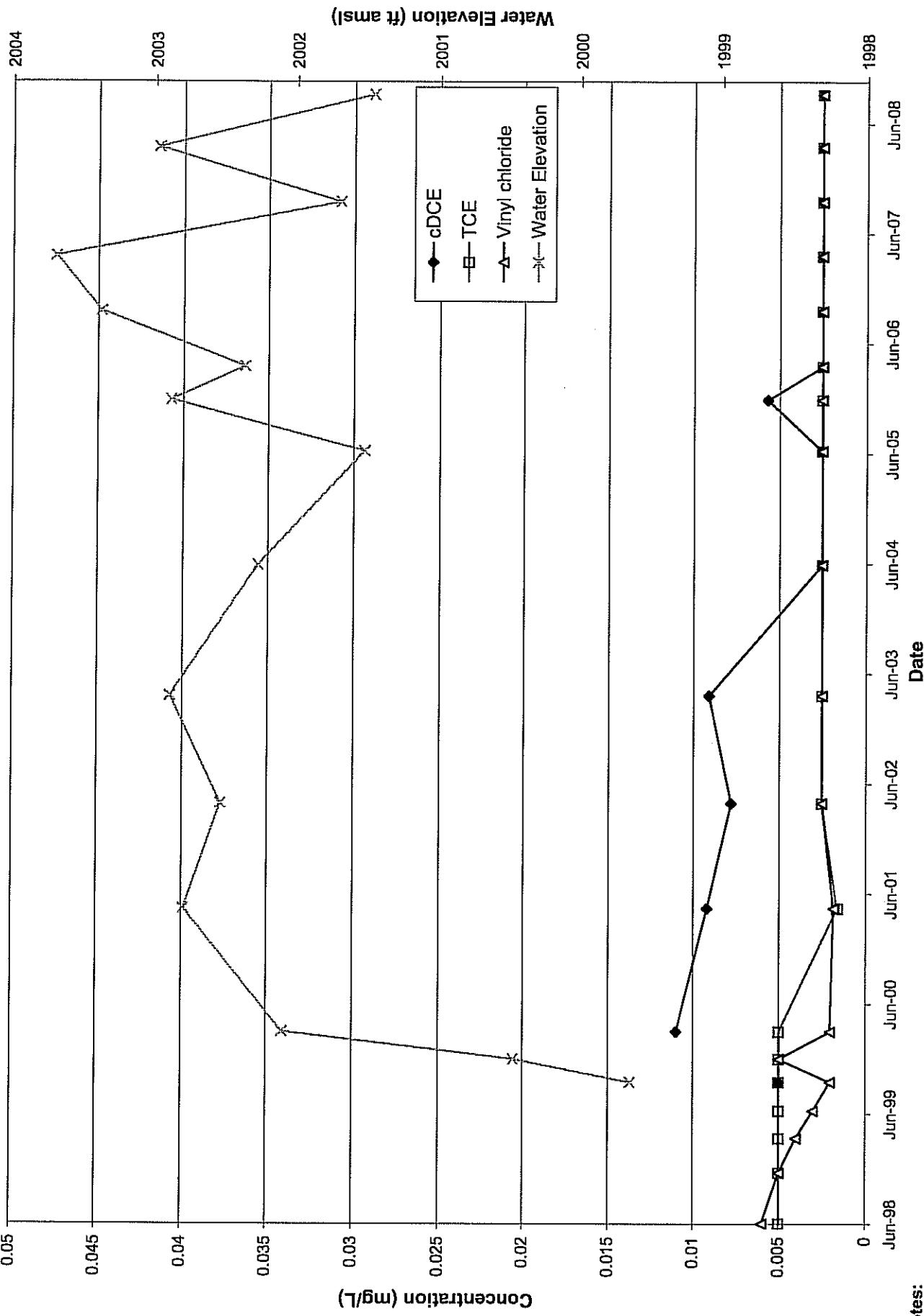
CW-3B VOCs



Notes:

1. 1/2 Detection limit used for non-detects.
2. Refer to Table B-1 (following graphs) for analytical results used in graphs.
3. The majority of Vinyl chloride results are non-detect. Vinyl chloride results on 3/13/2000, 9/19/2000, 4/25/2001 and on 9/11/2001 are estimated values.
4. Results for cDCE on 9/28/1999 are non-detect.
5. D - This flag indicates a result from a diluted sample.
6. Data with flag labeled on graph as appropriate.

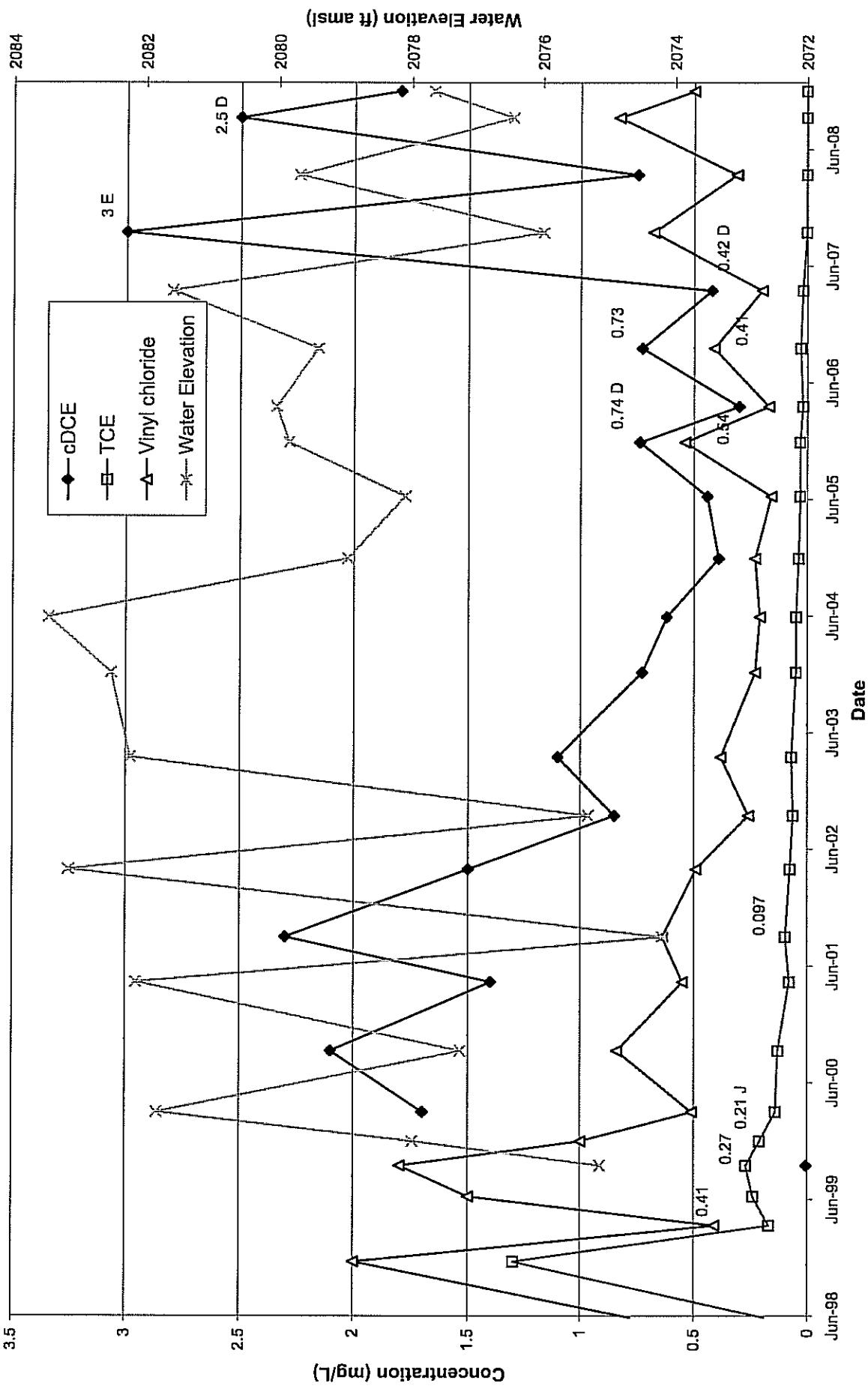
CW-4B VOCs



Notes:

1. 1/2 Detection limit used for non-detects.
2. Refer to Table B-1 (following graphs) for analytical results used in graphs.
3. TCE and Vinyl chloride results are either non-detect or estimated values.
4. A majority of cDCE results are non-detect.

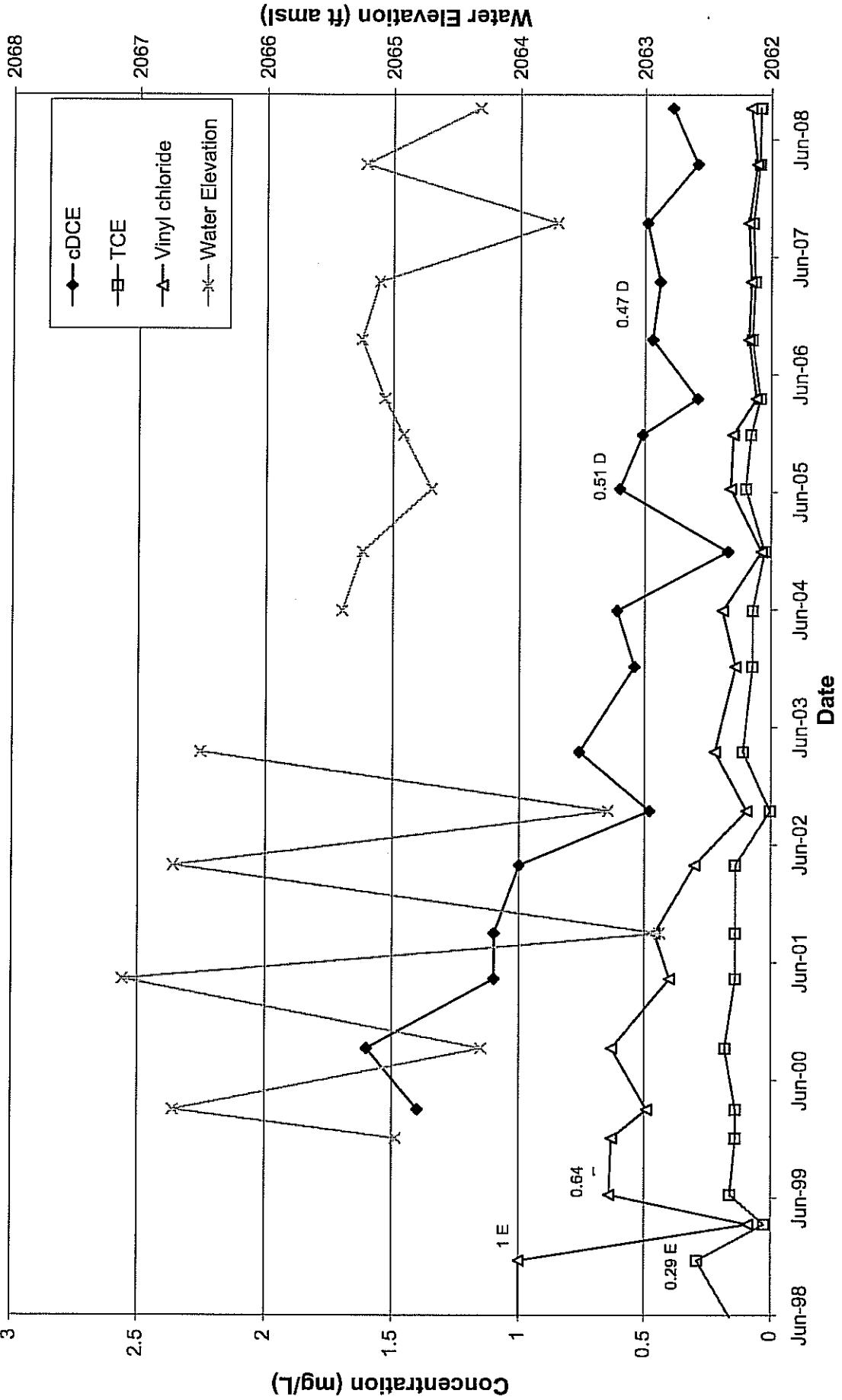
MW-4D VOCs



NOTES:

1. 1/2 Detection limit used for non-detects.
2. Refer to Table B-1 (following graphs) for analytical results used in graphs.
3. E - Results are greater than the calibration range of the instrument used for analysis
4. J - Estimated value.
5. D - This flag indicates a result from a diluted sample.
6. TCE is non-detect on 9/25/2007 and 3/24/2008.
7. Data with flag labeled on graph as appropriate.

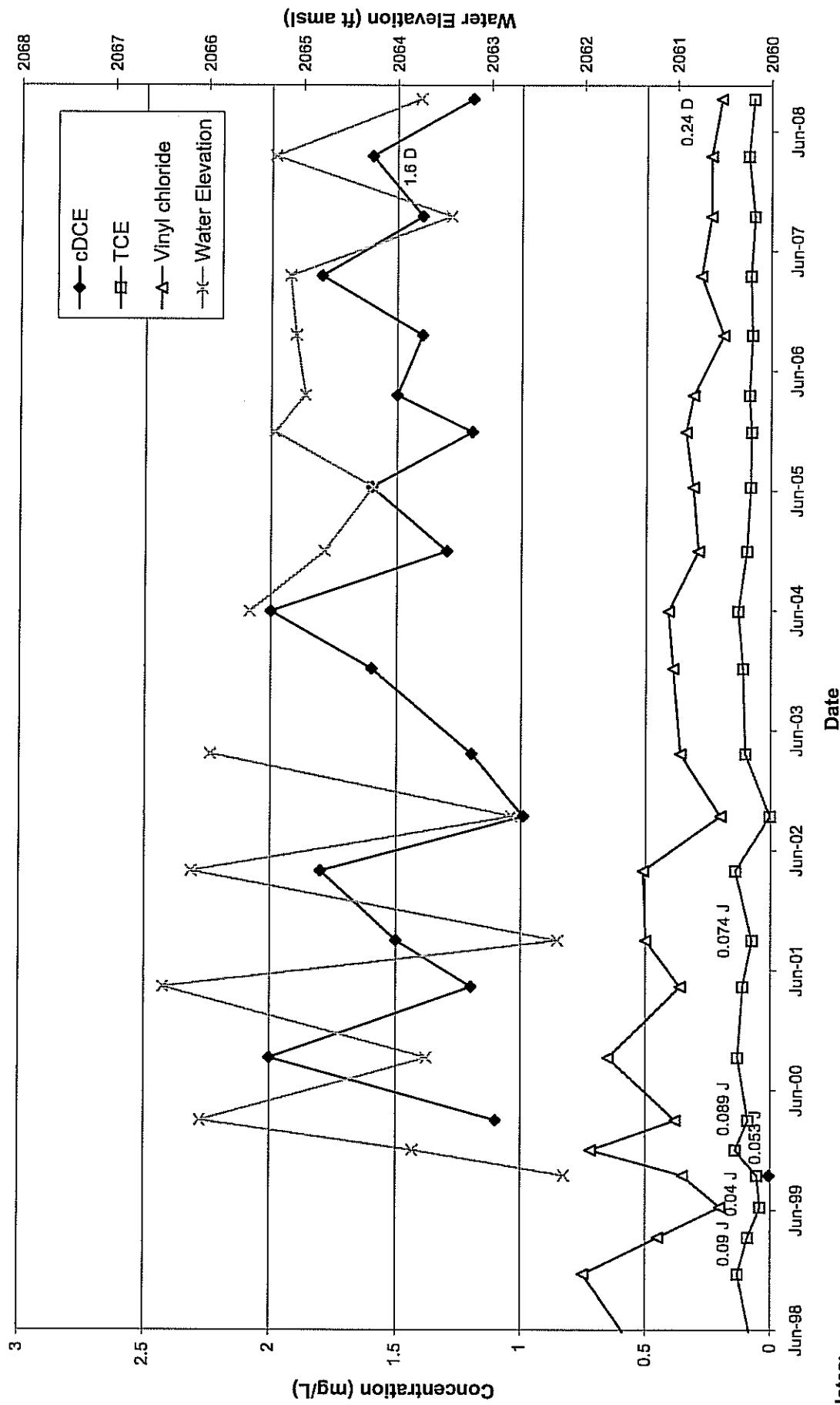
MW-5S VOCs



Notes:

1. 1/2 Detection limit used for non-detects.
2. Refer to Table B-1 (following graphs) for analytical results used in graphs.
3. TCE result on 9/26/2002 is non-detect.
4. E - Results are greater than the calibration range of the instrument used for analysis.
5. D - This flag indicates a result from a diluted sample.
6. Data with flag labeled on graph as appropriate.
7. No water elevation available for December 2003.

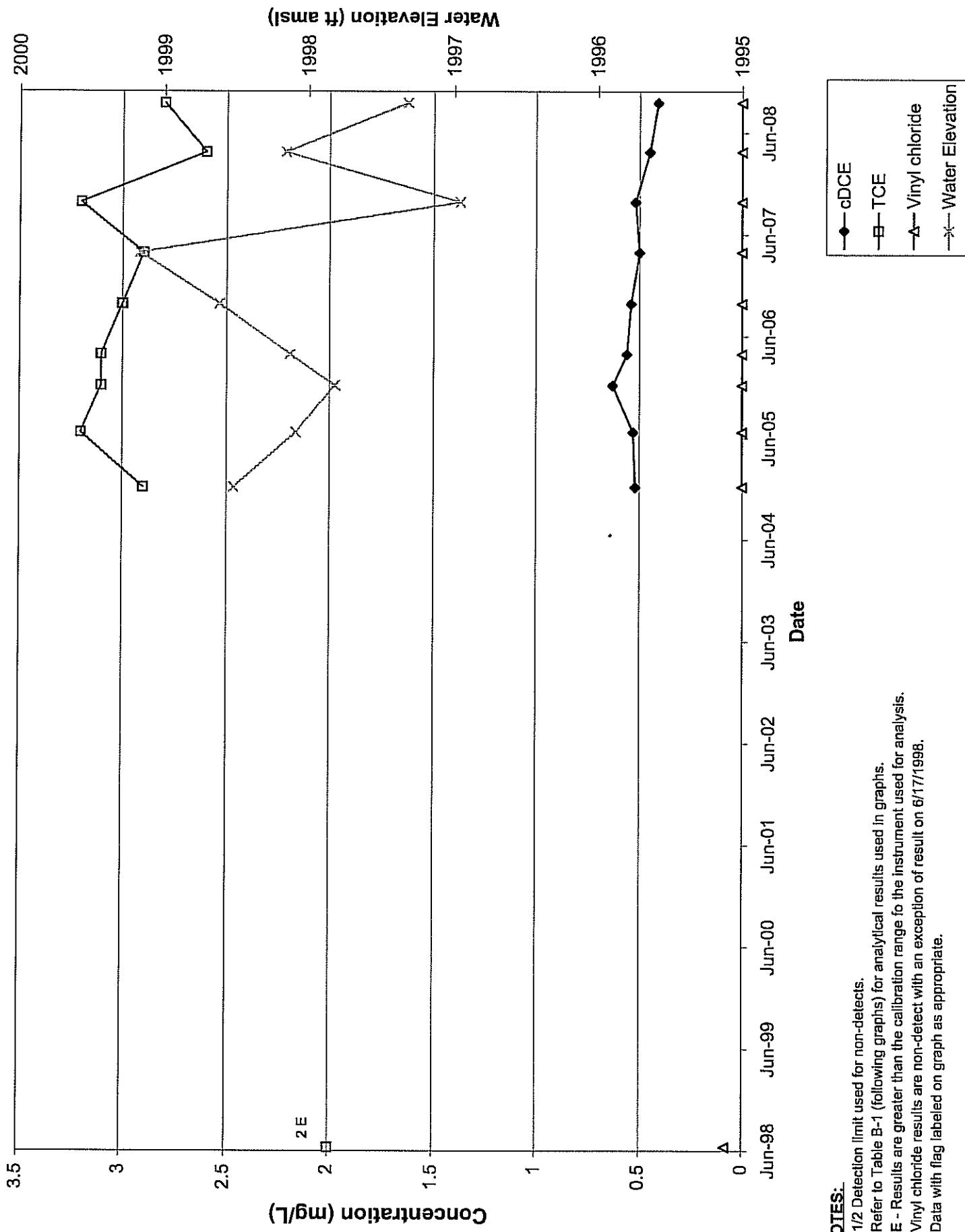
MW-5D VOCs



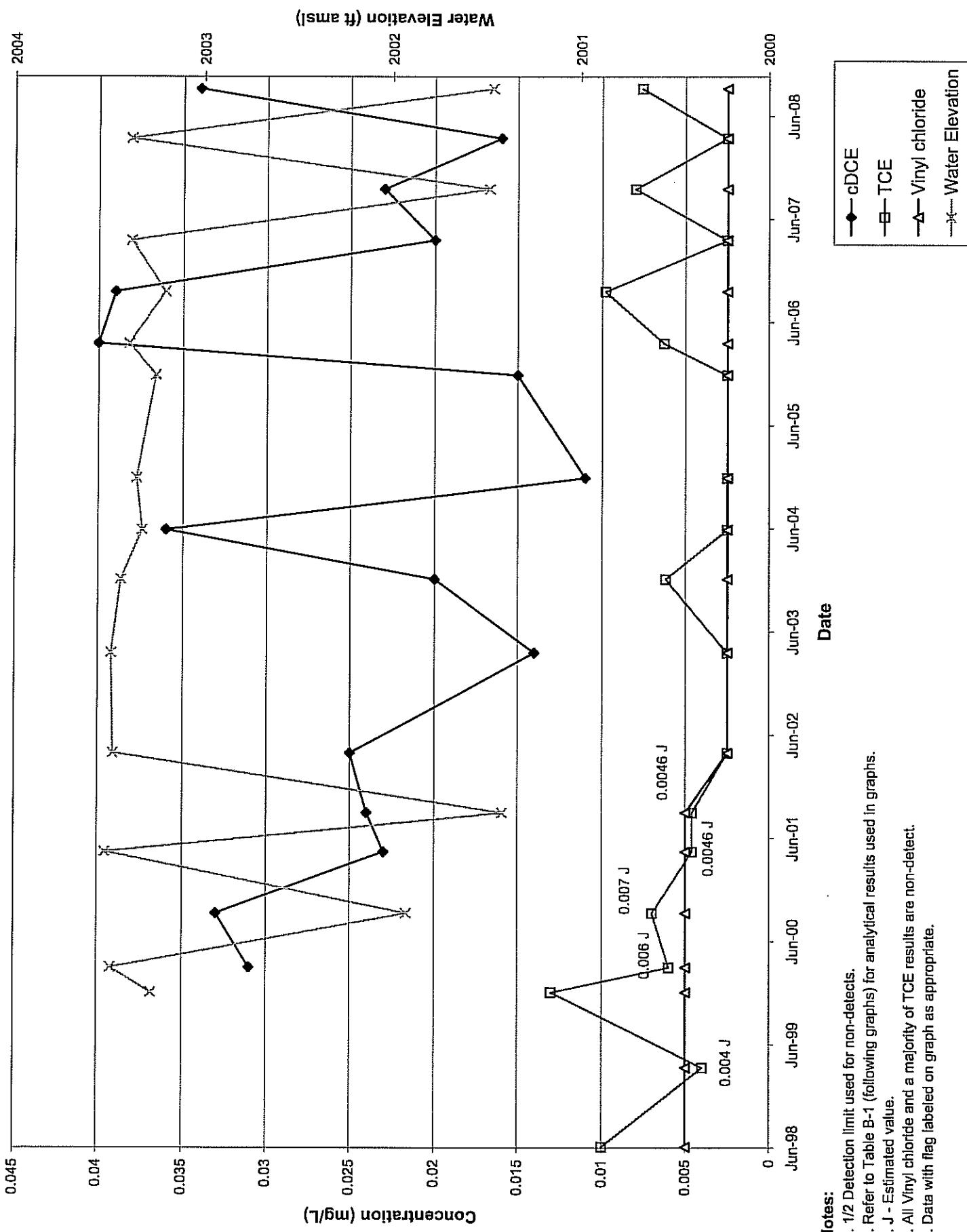
Notes:

- 1/2 Detection limit used for non-detects.
2. Refer to Table B-1 (following graphs) for analytical results used in graphs.
3. TCE results on 6/9/1998, 9/23/1999, 6/23/1999, 9/28/1999, 3/14/2000 and 9/12/2001 are estimated values.
4. Result for cDCE on 9/28/1999 is non-detect.
5. J - Estimated values.
6. D - This flag indicates a result from a diluted sample.
7. Data with flag labeled on graph as appropriate.
8. No water elevation available December 2003.

MW-11S VOCs



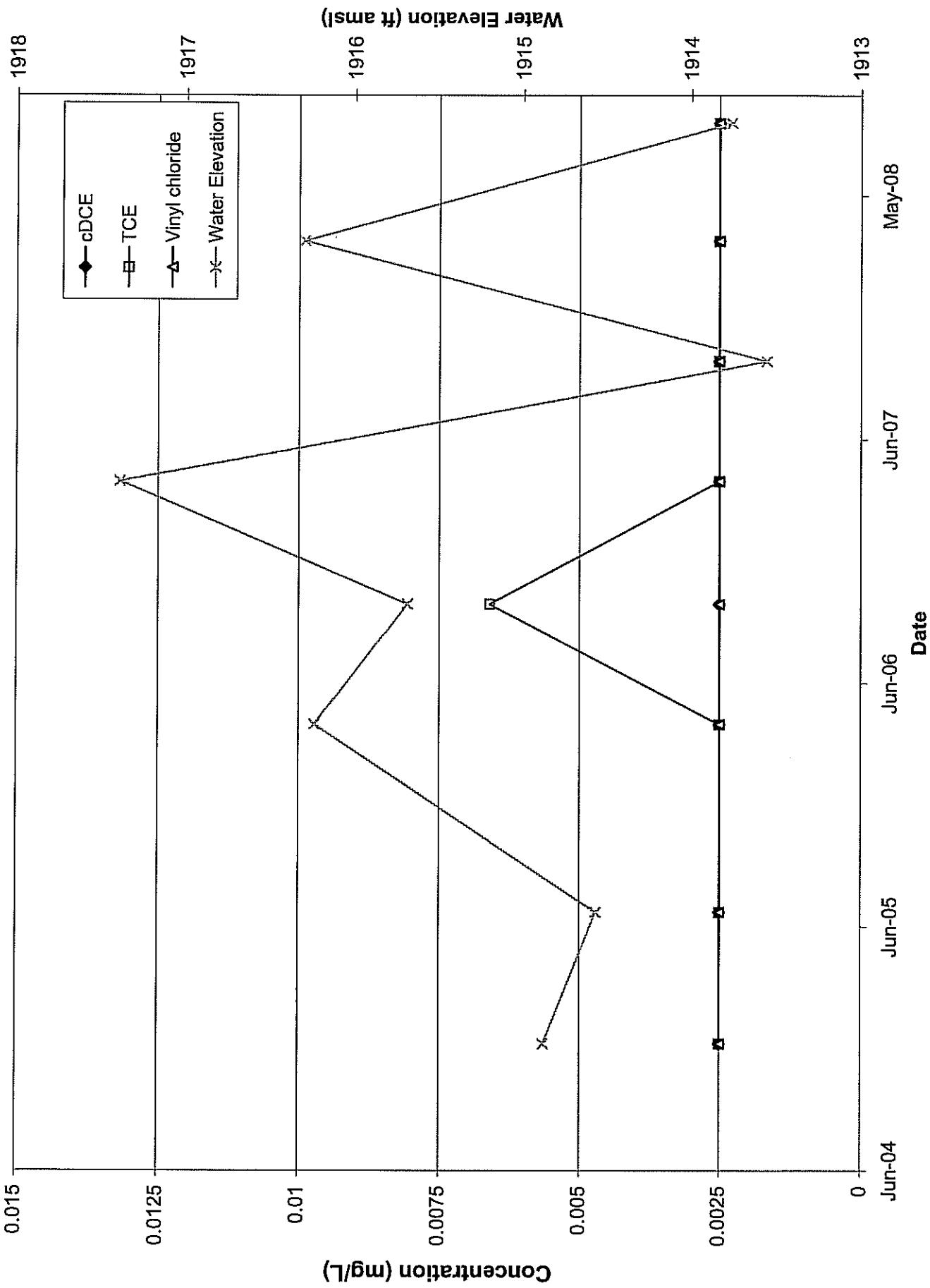
MW-15S VOCs



Notes:

1. 1/2 Detection limit used for non-detects.
2. Refer to Table B-1 (following graphs) for analytical results used in graphs.
3. J - Estimated value.
4. All Vinyl chloride and a majority of TCE results are non-detect.
5. Data with flag labeled on graph as appropriate.

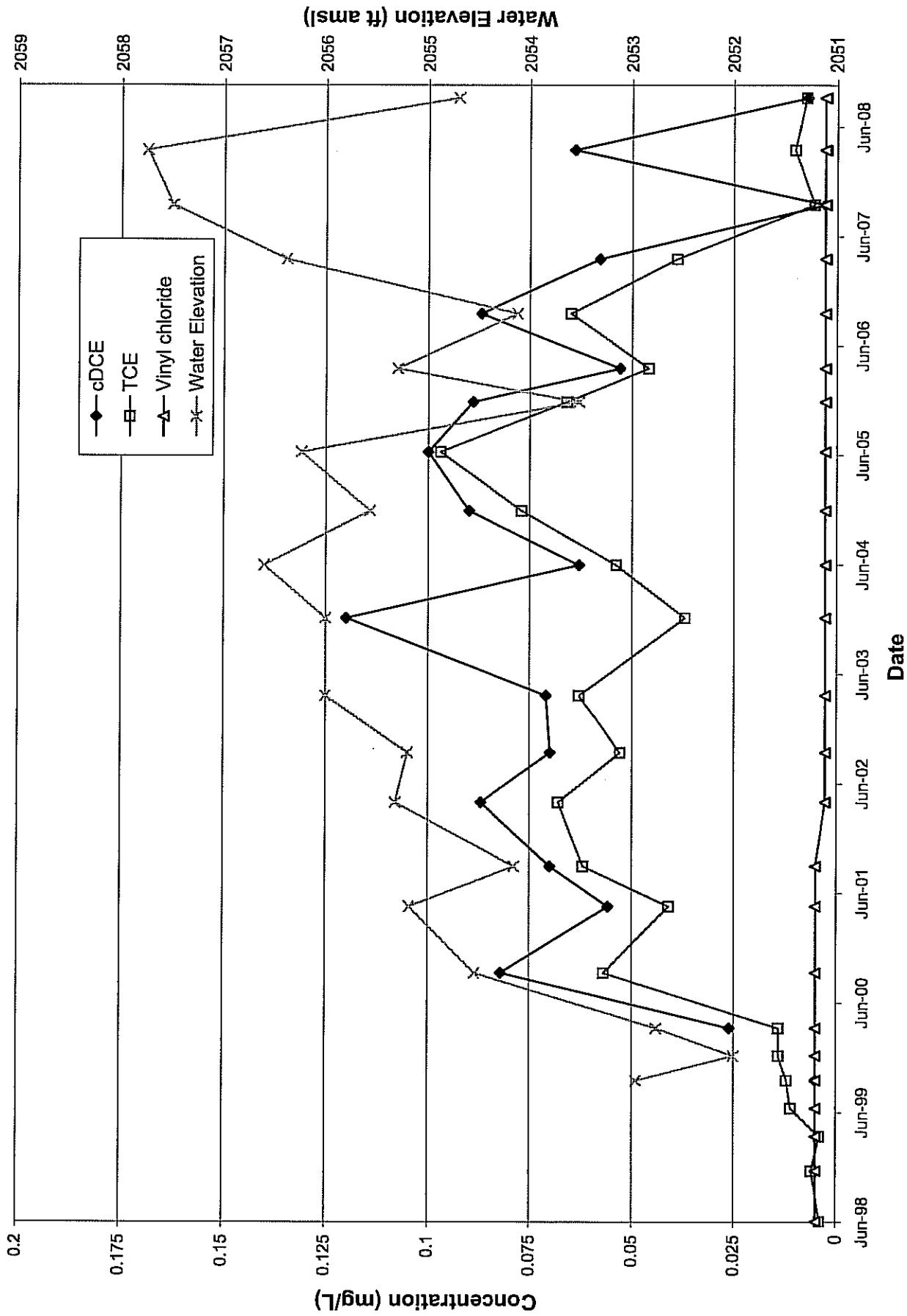
MW-16S VOCs



Notes:

- All values for cDCE, TCE and Vinyl chloride are non-detect with the exception of TCE on 9/27/2006.
- There is no data available for MW-16S prior to December 2004.

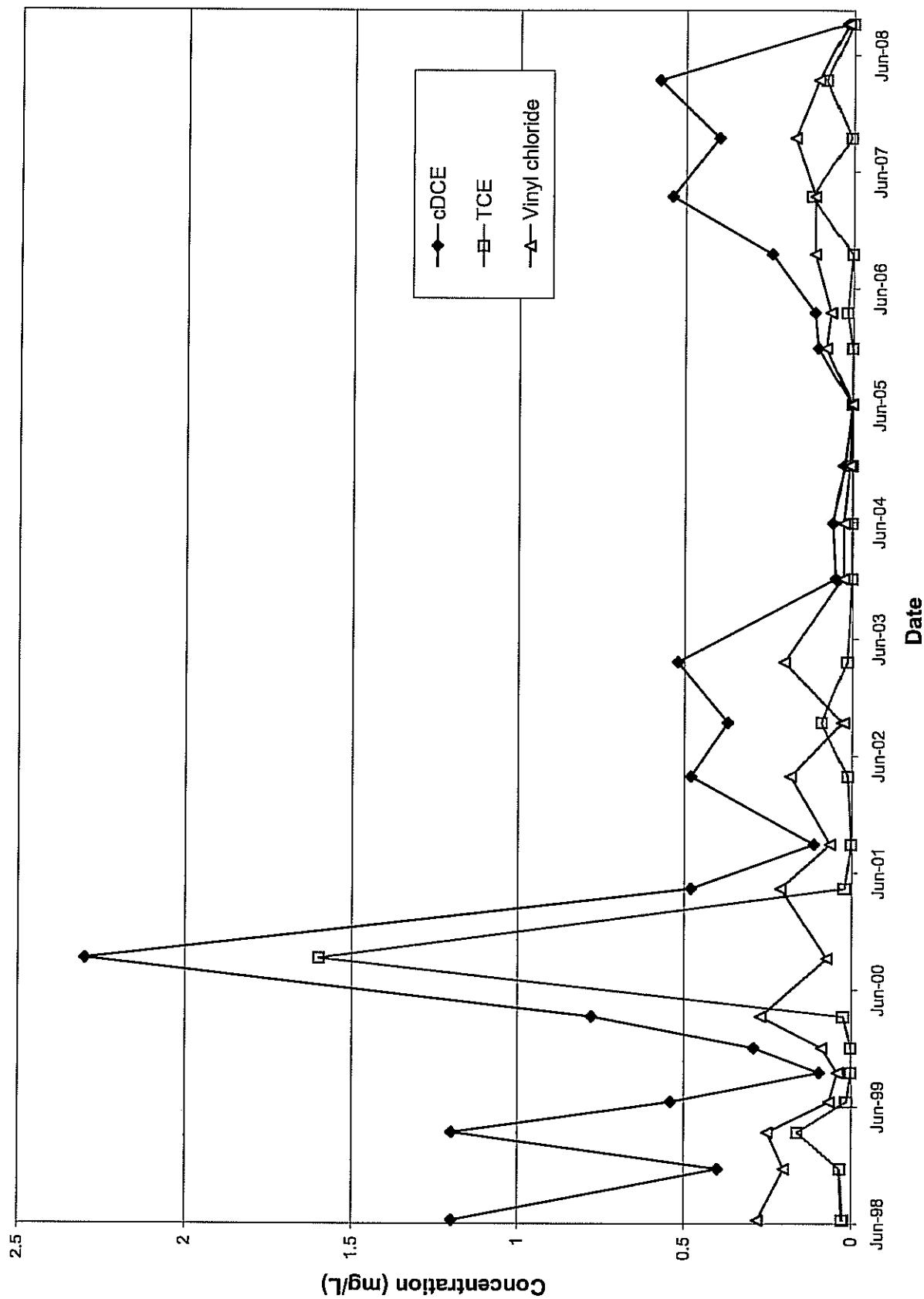
MW-18S VOCs



Notes:

1. 1/2 Detection limit used for non-detects.
2. Refer to Table B-1 (following graphs) for analytical results used in graphs.
3. TCE results on 6/1/1998, 12/1/1998 and 3/26/1999 are estimated values.
4. Vinyl chloride results are non-detect; cDCE is non-detect on 9/29/1999 and 9/25/2007.

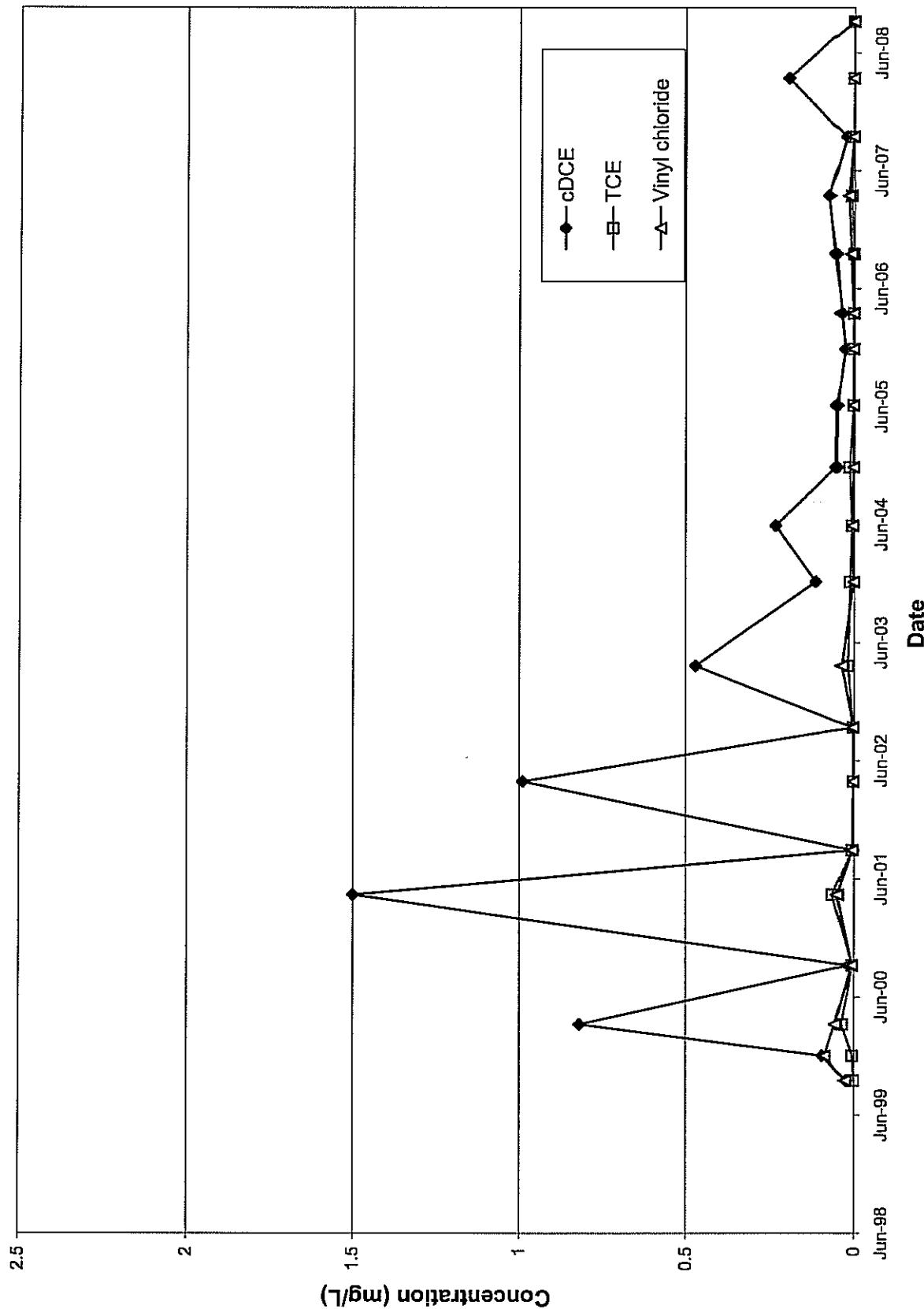
MH-32



Notes:

- 1/2 Detection limit used for non-detects.

MH-33



Notes:

- 1/2 Detection limit used for non-detects.

Table 1

Statistical Analysis of Groundwater Data (1998-2008)
Wellsville/Andover Landfill
Wellsville, New York

COMPUTATIONS: Compute Statistic (S).

Monitoring Well CW-3A Total VOCs

Date	6/17/98	12/1/98	3/25/99	6/24/99	9/28/99	12/16/99	3/13/00	9/19/00	4/25/01	9/17/01	4/1/02	9/25/02	4/1/03	12/16/03	6/8/04	12/7/04	6/20/05	12/6/05	3/30/06	6/28/06	3/25/07	9/25/07	3/25/08	9/17/08	
Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Result (mg/L)	0.086	0.048	0.03	0.021	0.024	0.027	0.017	0.032	0.1301	0.113	0.207	0.178	0.156	0.438	0.451	0.398	1.143	0.291	0.19	0.204	0.349	0.26	0.418	0.19	0.118
0.048	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.1301	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.207	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.178	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.156	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.458	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.451	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.398	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.291	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.204	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.349	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.448	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

S = Total Number of "4" minus Total Number of ":" = 130

STEP 4. a) Critical Value: From Table A-2, $z_{\alpha/2}$ (critical value at 5% significance level) ≈ 1.645

STEP 4. b) Probability Value: $p\text{-value} = P(Z > z_0) = 1 - z_p$, where z_p from Table A-1 = 0.9993

STEP 5. a) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if absolute value of z_0 is $> z_{0.05}$

Since absolute value $z_0 = 3.1998 > 1.645$
we reject the null hypothesis of no trend

STEP 5. b) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 If p-value is less than significance level = 0.05.

Since p-value = .0007 < .05
we reject the null hypothesis of no trend

Therefore: We reject the null hypothesis of no trend in favor of the alternative hypothesis (i.e. evidence of upward trend).

STEP 3. Test Statistics: $V(S)/V(S)^{0.5}$ Where: $\text{sign}(S) = 1$ if $S > 0$, 0 if $S = 0$, and -1 if $S < 0$

and $V(S) = 1/8(n(n-1)(2n+5) - [1(t_1-1)(2t_1+5)+1(t_2-1)(2t_2+5)] + \dots + 1(t_l-1)(2t_l+5)] / n(n-1))^{1/2}$

Where:
 n (number of samples) = 24
 t_1 = number of tied samples in the first group = 0
 t_2 = number of tied samples in second group = 0
 g = the number of tied sample groups

$V(S) = 1625.33$
 $z_0 = 3.1998$

$1/2$ detection limit used for non-detects.

Table 1

Statistical Analysis of Groundwater Data (1998-2009)
Wellsville/Andover Landfill
Wellsville, New York

COMPUTATIONS: Compute Statistic (S).

Monitoring Well CW-3B Total VOCs

Date	8/17/98	12/1/98	3/25/99	6/24/99	9/28/99	12/13/99	3/13/00	9/19/00	4/25/01	9/11/01	4/8/02	9/24/02	3/31/03	12/16/03	6/8/04	12/7/04	6/20/05	12/6/05	3/30/06	9/28/06	3/30/07	9/25/07	3/25/08	9/17/08	Count "+"	Count "-"
Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Count "+"	Count "-"
Result (mg/L)	0.104	0.094	0.054	0.085	0.085	0.08	0.116	0.091	0.083	0.0939	0.0947	0.1251	0.099	0.1765	0.189	0.274	0.537	0.262	0.262	0.326	0.347	0.268	0.348	Count "+"	Count "-"	
0.094	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	9	
0.054	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	6	
0.085	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	0	
0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	0	
0.116	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	5	
0.091	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	0	
0.093	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	0	
0.0939	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	0	
0.0947	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	0	
0.1251	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	1	
0.099	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	0	
0.1251	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	0	
0.168	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	0	
0.1765	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	0	
0.189	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	0	
0.274	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	2	
0.537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	
0.262	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
0.262	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	
0.326	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	0	
0.347	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	
0.298	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	

$S = \text{Total Number of "+" minus Total Number of "-"}$ = 210

STEP 4. a) Critical Value: From Table A-2, $Z_{0.05}$ (critical value at 5% significance level) = 1.645

STEP 4. b) Probability Value: $p\text{-value} = P(Z > z_0) = 1 - z_p$, where z_p from Table A-1 = 0.9999 (off scale)

$p\text{-value} = 0.0001$

H_A : There is an upward trend.

STEP 5. a) Conclusion:

For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if absolute value of z_0 is $> Z_{0.05}$

Since absolute value $z_0 = 5.1873$

we reject the null hypothesis of no trend

For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if p-value is less than significance level = 0.05.

Since p-value = 0.0001 < 0.05

we reject the null hypothesis of no trend

$V(S) = 1623.33$

$Z_0 = 5.1873$

Therefore: We reject the null hypothesis of no trend in favor of the alternative hypothesis (i.e. evidence of upward trend)

Reference: USEPA Data Quality Assessment: Statistical Methods for Practitioner EPA QA/G-9-DS, dated February 2006

1/2 detection limit used for non-detects.

Table 1

Statistical Analysis of Groundwater Data (1998-2008)
Wellsville/Andover Landfill
Wellsville, New York

Monitoring Well CW-4B Total VOCs

COMPUTATIONS: Compute Statistic (S).

S = Total Number of "+" minus Total Number of "-" = 95

STEP 2. Alternative Hypothesis: H_A : There is a downward trend.

TEST 3 Test Statistics:

卷之三

$$\sigma = \text{sign}(S) / V(S)^{1/0.5}$$

$$\text{and } V(S) = 1/18 \sum_{n=1}^{\infty} (2n+5) = 1/18 \cdot (-1)(2(-1)+5) + 1/18 \cdot (-1)(2(-1)+5) + \dots + 1/18 \cdot [9(-1)]$$

תְּלִימָדָה בְּבֵית־הַמִּזְבֵּחַ

Where: n (number of samples) = 19

t_1 = number of tied samples in the first group = 9

$t = \text{number of filled samples in second group} = 0$

Digitized by srujanika@gmail.com

g = the number of tied sample groups

$$V(S) = 725.00$$

$$z_0 = -3,4911$$

level (i.e. there is evidence of a downward trend but not enough to overcome the seasonal effect).

Reference: USEPA Data Quality Assessment: Statistical Methods for Practitioner EPA QA/G-9S, dated February 2006

Table 1

Statistical Analysis of Groundwater Data (1998-2008)
Wellsboro Andover Landfill
Wellsboro, New York

Monitoring Well MW-4D Total VOCs

COMPUTATIONS: Compute Statistic (S).

Date	6/9/98	12/1/98	3/24/99	6/23/99	9/26/99	12/13/99	3/14/00	6/21/00	9/24/01	1/12/01	4/11/02	9/26/02	12/28/03	6/9/04	12/9/04	5/21/05	12/7/05	5/25/06	9/24/06	12/11/08						
Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Result (mg/L)	1.83	15.3	1.784	6.774	11.25	6.81	2.35	3.07	2.0401	3.037	2.067	1.173	3.012	1.011	0.88	0.659	1.317	1.312	0.503	1.17	0.651	3.98	1.06	3.33	2.3	
1.83	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
15.3	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-
1.784	-	-	+	-	+	-	+	-	+	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-
6.774	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.0401	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.087	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.173	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.041	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.659	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.317	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.312	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.503	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.651	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

$S = \text{Total Number of "+" minus Total Number of "-"} = -114$

STEP 4. a) Critical Value: From Table A-2, $z_{0.05}$ (critical value at 5% significance level) = 1.845

H₀: There is no trend.

STEP 4. b) Probability Value: p-value = $P(Z > z_0) = 1 - z_{0.05}$, where z_0 from Table A-1 = 0.0041

p-value = 0.9959

H_A: There is a downward trend.

STEP 5. a) Conclusion:

For testing the hypothesis, H₀ (no trend) against H_A - reject H₀ if absolute value of z_0 is $> z_{0.05}$

Since absolute value of $z_0 = 2.6391 > 1.845$

we reject the null hypothesis of no trend

STEP 5. b) Conclusion: For testing the hypothesis, H₀ (no trend) against H_A - reject H₀ if p-value is less than significance level = 0.05.

Since p-value = 0.9959 > 0.05

we fail to reject the null hypothesis of no trend

Therefore: We fail to reject the null hypothesis of no trend at the 5% significance level (i.e. there is evidence of a downward trend but not enough to over rule no trend)

Reference: USEPA Data Quality Assessment: Statistical Methods for Practitioner EPA QA/G-9/S, dated February 2006

1/2 detection limit used for non-detects.

Table 1

Statistical Analysis of Groundwater Data (1998-2008)
Wellsboro/Andover Landfill
Wellsboro, New York

COMPUTATIONS: Compute Statistic (S).

Monitoring Well MW-5D Total VOCs

Date	6/9/98	12/1/98	3/23/99	9/28/99	12/14/99	3/14/00	9/20/00	4/24/01	9/12/01	4/11/02	4/2/03	9/25/02	12/18/03	6/9/04	12/7/05	6/22/05	12/7/06	9/28/06	3/27/07	9/25/07	9/28/08	3/26/08	9/17/08		
Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
Result (mg/L)	2.484	2.484	2.98	1.74	1.66	1.84	3.134	1.581	2.76	1.7073	4.4528	4.9869	1.19	1.66	2.1	2.5814	1.686	1.991	1.618	1.897	1.665	2.161	1.706	1.945	1.469
2.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.134	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.581	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.7073	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.4528	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.9869	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.5814	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.6016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.991	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.618	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.897	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.665	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.161	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.945	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

S = Total Number of "+" minus Total Number of "-" = -40

STEP 4. a) Critical Value: From Table A-2, $z_{0.05}$ (critical value at 5% significance level) = 1.645

STEP 4. b) Probability Value: $p\text{-value} = P(Z > z_0) = 1 - z_p$, where z_p from Table A-1 = 1.655
 $p\text{-value} = 0.8350$

STEP 2. Alternative Hypothesis: H_A : There is a downward trend.

Therefore: We fail to reject the null hypothesis of no trend.

STEP 5. a) Conclusion:

For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if absolute value of z_0 is $> z_{0.05}$. Since absolute value $z_0 = 0.9674$ < 1.645 , we fail to reject the null hypothesis of no trend.

STEP 5. b) Conclusion:

For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if p-value is less than significance level = 0.05. Since p-value = 0.8350 > 0.05 , we fail to reject the null hypothesis of no trend.

Therefore: We fail to reject the null hypothesis of no trend (i.e. No trend / stable)

V(S) = 1625.33
 $z_0 = -0.9674$

Reference: USEPA Data Quality Assessment: Statistical Methods for Practitioner EPA QA/G-9/S, dated February 2006

Table 1

Table 1

Statistical Analysis of Groundwater Data (1998-2008)
 Wellsville/Andover Landfill
 Wellsville, New York

COMPUTATIONS: Compute Statistic (S).

Monitoring Well MW-5S Total VOCs

Date	6/9/98	12/1/98	3/24/99	6/23/99	12/16/99	3/14/00	9/20/00	4/23/01	9/12/01	4/11/02	9/25/02	3/28/03	12/18/03	6/9/04	12/9/04	6/22/05	12/7/05	3/29/06	9/28/06	3/27/07	9/25/08	9/17/08	Count "+"	
Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Count "-"
Result (mg/L)	3.06	4.736	0.116	2.413	5.14	2.03	2.41	1.6543	1.7	1.44	0.575	0.09	0.753	0.672	0.233	0.86	0.74	0.391	0.634	1.118	0.651	0.391	0.512	Count "0"
4.796	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
0.116	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	
2.413	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
5.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	
2.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
2.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	
1.6543	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
1.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	
1.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	
0.575	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	
1.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	
0.753	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
0.872	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
0.233	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	
0.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
0.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
0.391	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	
0.634	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	
1.118	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	
0.551	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
0.391	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	

S = Total Number of "+" minus Total Number of "-" = -140

STEP 4. a) Critical Value: From Table A-2, $z_{0.05}$ (critical value at 5% significance level) = 1.645

STEP 4. b) Probability Value: p-value = $(P(Z > z_0) = 1 - z_0)$, where z_0 from Table A-1 = 0.0001 (off scale)

STEP 2. Alternative Hypothesis: H_A : There is a downward trend.

STEP 3. Test Statistics: $Z_0 = S - \text{sign}(S) / \sqrt{S}y_0$. Where: $\text{sign}(S) = 1$ if $S > 0$, 0 if $S = 0$, and -1 if $S < 0$

and $V(S) = 1/(18n(n-1)(2n+5) - t_1(t_1-1)(2t_2+5) + \dots + t_n(t_n-1)(2t_{n-1}+5))$

Where:

t_1 = number of tied samples in the first group = 23

t_2 = number of tied samples in second group = 0

g = the number of tied sample groups

$V(S) = 1432.67$

$Z_0 = -3.6723$

STEP 5. a) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if absolute value of z_0 is $> z_{0.05}$. Since absolute value $Z_0 = 3.6723 > 1.645$ we reject the null hypothesis of no trend

STEP 5. b) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if p-value is less than significance level = 0.05. Since p-value = 0.9999 > 0.05 we fail to reject the null hypothesis of no trend

Therefore: We fail to reject the null hypothesis of no trend at the 5% significance level (i.e. there is evidence of a downward trend but not enough to over rule no trend)

Reference: USEPA Data Quality Assessment: Statistical Methods for Practitioner EPA QA/G-9S, dated February 2006

Table 1

Statistical Analysis of Groundwater Data (1998-2008)
Wellsville/Andover Landfill
Wellsville, New York

Monitoring Well MW-11S Total VOCs

COMPUTATIONS: Compute Statistic (S).

	Date	6/17/98	12/8/04	6/23/05	12/8/05	3/31/06	9/27/06	3/30/07	9/26/07	3/24/08	9/17/08	Count "+"	Count "++"
Event	1	2	3	4	5	6	7	8	9	10		0	0
Result (mg/L)	2.752	3.42	3.73	3.73	3.66	3.54	3.4	3.72	3.05	3.21		+	+
3.42	+	+	+	+	+	+	+	+	+	+	+	9	0
3.73			+	+	+	-	-	-	-	-	-	5	3
3.73			0	-	-	-	-	-	-	-	-	0	6
3.66				-	-	-	-	-	-	-	-	0	6
3.54					-	-	-	-	-	-	-	1	4
3.4						-	-	-	-	-	-	1	3
3.72							-	-	-	-	-	1	2
3.05								-	-	-	-	0	2

S = Total Number of "+" minus Total Number of "-" =

STEP 1 Null Hypothesis:

STEP 1. Null Hypothesis:	H_0 : There is no trend.
STEP 2. Alternative Hypothesis:	H_A : There is a downward trend

卷之三

STEP 2. Alternative Hypothesis

STEP 3. Test Statistics: $Z_0 = S - \text{sign}(S) \cdot \sqrt{V(S)}$ vs. $H_0: S = 0$, $H_A: S < 0$
 Where: $\text{sign}(S) = 1$ if $S > 0$, 0 if $S = 0$, and -1 if $S < 0$

STEP 5. h) Conclusion:

absolute value of z_0 is $> z_{0.95}$
 Since absolute value $z_0 = 0.6286 < 1.645$
 we fail to reject the null hypothesis of no trend

Where:
 n (number of samples) = 10
 t_1 = number of tied samples in the first
 t_2 = number of tied samples in second

$$g = \text{the number of tied sample groups}$$

Therefore: We fail to reject the null hypothesis of no trend (i.e. No trend / stable)

Reference: USEPA Data Quality Assessment: Statistical Methods for Practitioner EPA QA/G-9S, dated February 2006

Table 1

Statistical Analysis of Groundwater Data (1998-2008)
Wellsboro/Andover Landfill
Wellsboro, New York

COMPUTATIONS: Compute Statistic (S).

Monitoring Well MW-15S Total VOCs

Date	6/17/98	3/25/99	12/16/99	3/13/00	9/21/00	4/26/01	9/11/01	4/10/02	3/31/02	12/16/03	6/8/04	12/8/04	12/7/05	3/30/06	9/28/06	3/29/07	9/26/07	3/24/08	9/16/08	9/17/03	Count "+"	Count "-"
Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Count "04"	Count "00"
Result (mg/L)	0.103	0.027	0.073	0.037	0.04	0.0276	0.0286	0.025	0.014	0.0262	0.036	0.011	0.015	0.0463	0.0488	0.02	0.031	0.016	0.0416	0.0416	Count "04"	Count "00"
0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	19
0.073	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	11	7
0.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	17
0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	11
0.0276	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	11
0.0286	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	7
0.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	7
0.014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	5
0.0262	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	1
0.036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	4
0.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	5
0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	0
0.0463	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	0
0.0488	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5
0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	5
0.031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1
0.016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1
0.0416	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
																				0	0	
																				83	106	

S = Total Number of "+" minus Total Number of "-" = -23

STEP 4. a) Critical Value: From Table A-2, $z_{0.05}$ (critical value at 5% significance level) = 1.645

STEP 1. Null Hypothesis: H_0 : There is no trend.

STEP 2. Alternative Hypothesis: H_A : There is a downward trend.

STEP 3. Test Statistics: $Z_0 = S - \text{sign}(S) \cdot V(S)^{0.5}$ Where: $\text{sign}(S) = 1$ if $S > 0$, 0 if $S = 0$, and -1 if $S < 0$ and $V(S) = 1/18n(n-1)(2n+5) - l_1(l_1-1)(2l_1+5)+l_2(l_2-1)(2l_2+5)+\dots$ up to t_0)

Where: n (number of samples) = 20

l_1 = number of tied samples in the first group = 2

l_2 = number of tied samples in second group = 0

g = the number of tied sample groups

$$V(S) = 949.00$$

$$Z_0 = -0.7142$$

STEP 4. b) Probability Value: $P\text{-value} = (\text{P}(Z > z_0)) = 1 - z_p$, where z_p from Table A-1 = 0.2376

STEP 5. a) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if absolute value of Z_0 is $> Z_{0.05}$

Since absolute value $Z_0 = 0.7142 < 1.645$ we fail to reject the null hypothesis of no trend

STEP 5. b) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if p-value is less than significance level = 0.05.

Since p-value = 0.7624 > 0.05 we fail to reject the null hypothesis of no trend

Therefore:

We fail to reject the null hypothesis of no trend (i.e. No trend / stable)

Reference: USEPA Data Quality Assessment: Statistical Methods for Practitioner EPA QA/G-9S, dated February 2006

Table 1

Statistical Analysis of Groundwater Data (1998-2008)
 Wellsville/Andover Landfill
 Wellsville, New York

Monitoring Well MW-18S Total VOCs

COMPUTATIONS: Compute Statistic (S).

Date	6/15/98	7/1/98	3/26/99	6/28/99	7/29/99	12/20/99	3/21/00	9/21/00	4/30/01	9/11/01	4/12/02	9/25/02	4/3/03	12/17/03	6/1/04	12/9/04	6/23/05	12/6/05	3/28/06	9/27/06	3/26/07	9/25/07	3/26/08	9/16/08	Count "+"	Count "-"	Count "0"
Event	1	2	3	4	5	6	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	Count "	
Result (mg/L)	0.024	0.024	0.026	0.018	0.038	0.04	0.049	0.007	0.39	0.097	0.132	0.155	0.123	0.134	0.157	0.117	0.167	0.197	0.155	0.099	0.152	0.097	0.052	0.074	0.0141	Count "	
0.024	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	20	
0.026	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	19	
0.018	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	18	
0.038	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	17	
0.04	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	16	
0.049	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	14	
0.087	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	6	
0.139	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	
0.097	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	11	
0.132	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	3	
0.155	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	7	
0.123	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	3	
0.134	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	6	
0.157	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	5	
0.117	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	2	
0.167	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	4	
0.197	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	1	
0.155	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	0	
0.099	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	0	
0.152	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	1	
0.097	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	0	
0.0052	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	0	
0.074	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	0	

$S = \text{Total Number of "+" minus Total Number of "-"}$ = **68** STEP 4. a) Critical Value: From Table A-2, $z_{0.05}$ (critical value at 5% significance level) = **1.645**

STEP 1. Null Hypothesis: H_0 : There is no trend. STEP 4. b) Probability Value: $p\text{-value} = P(Z > z_0) = 1 - z_p$, where z_p from Table A-1 = **0.9516** p-value = **0.0492**

STEP 2. Alternative Hypothesis: H_A : There is an upward trend.

STEP 5. a) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if

absolute value of z_0 is $> z_{0.05}$
 Since absolute value $z_0 = 1.6629$ > 1.645
we reject the null hypothesis of no trend

STEP 5. b) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 If p-value
 is less than significance level = 0.05.
 Since p-value = **0.0492** < 0.05
we reject the null hypothesis of no trend

Therefore: We **reject the null hypothesis of no trend in favor of the alternative hypothesis [i.e. evidence of upward trend]**

Reference: USEPA Data Quality Assessment: Statistical Methods for Practitioner EPA QA/G-9S, dated February 2006

$V(S) = 1623.33$ $z_0 = 1.6629$

Table 2

**2009 Proposed Monitoring Program
Wellsville/Andover Landfill**

Location	Current Sampling Frequency	Proposed Sampling Frequency	Proposed Analyte List ¹
----------	----------------------------	-----------------------------	------------------------------------

Groundwater

CW-3A	Semiannual	NR	NR
CW-3B	Semiannual	Annual - Fall	Field, VOCs, Metals
CW-4A	Annual	NR	NR
CW-4B	Semiannual	Annual - Fall	Field, VOCs, Metals
MW-15DA	Semiannual	NR	NR
MW-15S	Semiannual	Annual - Fall	Field, VOCs, Metals
MW-17D	Annual	Annual - Fall	Field, VOCs, Metals
MW-17S	Annual	Annual - Fall	Field, VOCs, Metals
MW-18D	Annual	Annual - Fall	Field, VOCs, Metals
MW-18S	Semiannual	Annual - Fall	Field, VOCs, Metals
MW-1D	Annual	NR	NR
MW-3D	Annual	Annual - Fall	Field, VOCs, Metals
MW-3S	Annual	Annual - Fall	Field, VOCs, Metals
MW-4D	Semiannual	Annual - Fall	Field, VOCs, Metals
MW-5D	Semiannual	Annual - Fall	Field, VOCs, Metals
MW-5S	Semiannual	Annual - Fall	Field, VOCs, Metals
MW-11S	Semiannual	Annual - Fall	VOCs
MW-16S	Semiannual	Annual - Fall	VOCs

Surface Water

SWS-1	Annual	Annual	Field, VOCs, Metals, Wet Chem
-------	--------	--------	----------------------------------

Sediment

SWS-1	Annual	NR	NR
-------	--------	----	----

Groundwater Cut-Off System

MH-32	Semiannual	Annual - Fall	Field, VOCs, Metals, Wet Chem
MH-33	Semiannual	Annual - Fall	Field, VOCs, Metals, Wet Chem

Leachate

LS-1	Semiannual	Annual - Fall	Field, VOCs, Metals
------	------------	---------------	---------------------

Notes

NR - Not required unless site conditions warrant (I.e., significant leachate breakout, leachate spill, etc.)

¹ - Field = Field Parameters (pH, Conductivity, Dissolved Oxygen, Turbidity, Oxidation Reduction Potential)

- VOCs = Volatile Organic Compounds method 8260

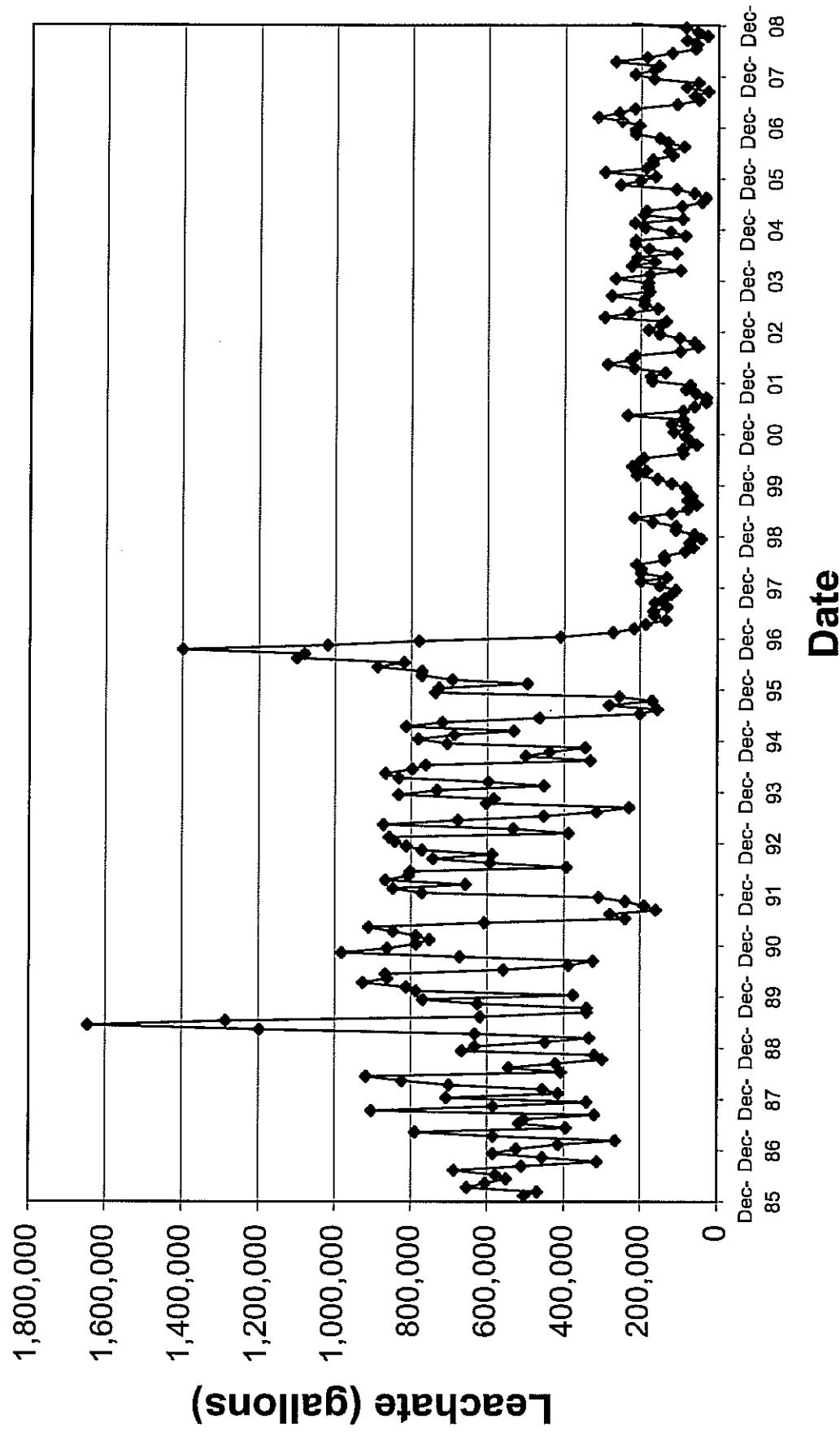
- Metals = As, Ba, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, P, Se, Na, Z

- Wet Chem = Nitrate Nitrogen and Total Dissolved Solids

² WAL-19 tested for VOCs prior to filters, between filters and after filters

Location	Current Sampling Frequency	Proposed Sampling Frequency	Proposed Analyte List ¹
WAL-1	Every 3 Years	NR	NR
WAL-2	Semiannual	Annual	Metals
WAL-3	Every 3 Years	NR	NR
WAL-4	Every 3 Years	NR	NR
WAL-5	Semiannual	Annual	VOCs, Metals
WAL-6	Every 3 Years	NR	NR
WAL-7	Every 3 Years	NR	NR
WAL-8	Every 3 Years	NR	NR
WAL-9	Every 3 Years	NR	NR
WAL-10	Every 3 Years	NR	NR
WAL-11	Every 3 Years	NR	NR
WAL-12	Every 3 Years	NR	NR
WAL-13	Every 3 Years	NR	NR
WAL-14	Every 3 Years	NR	NR
WAL-15	Every 3 Years	NR	NR
WAL-16	Every 3 Years	NR	NR
WAL-17	Every 3 Years	NR	NR
WAL-18	Every 3 Years	NR	NR
WAL-19	Semiannual	Semiannual	VOCs ²
WAL-20	Every 3 Years	NR	NR

Leachate Quantity Wellsville-Andover Landfill



New York State Department of Environmental Conservation

Division of Environmental Remediation, Region 9
270 Michigan Avenue, Buffalo, New York 14203-2915
Phone: (716) 851-7220; Fax (716) 851-7226
Website: www.dec.ny.gov



Alexander B. Grannis
Commissioner

May 12, 2009

William Whitfield
Director of Public Works
Village of Wellsville
200 Bolivar Road
Wellsville, New York 14895

Dear Mr. Whitfield:

Wellsville-Andover Landfill
Site hw902004
Wellsville, Allegany County

The New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) have reviewed the Site Monitoring Evaluation and Proposed Revised Monitoring Plan dated April 3, 2009, for the Wellsville-Andover Landfill site. This plan recommends modification of the environmental sampling for the landfill and the surrounding residences. Based on this review, the following determinations regarding the sampling frequency have been made.

Groundwater Monitoring Well CW-3A

This overburden monitoring well has increasing Volatile Organic Compounds (VOC) contamination and should be retained for annual sampling for field, VOC and metal analytes. It monitors a different interval of the overburden formation than the neighboring CW-3B monitoring well. The location is adjacent and downgradient from the landfill and could be an important sentinel well if the groundwater flow patterns should change.

Groundwater Monitoring Wells CW-3B, CW-4B, MW-15S, MW-17D, MW-17S, MW-18D, MW-18S, MW-3D, MW-3S

We concur with the proposed annual frequency and the proposed analyte list for these monitoring wells.

William D. Whitfield

May 12, 2009

Page 2

Groundwater Monitoring Well CW-4A

This monitoring well should be retained for annual sampling since it monitors a different interval of the overburden formation than the neighboring CW-4B. The location is adjacent and downgradient from the landfill and could be an important sentinel well if the groundwater flow patterns should change.

Groundwater Monitoring Well MW-15DA

This bedrock well has not been sampled following the remedial action since it has been dry. We concur with the removal from the required sampling list. This monitoring well should be decommissioned.

Groundwater Monitoring Well MW-1D

This monitoring well can also be decommissioned. MW-3S and MW-3D can both function as the upgradient monitoring wells. We concur with the deletion from the sampling schedule. This monitoring well is located at too great a distance to be useful as an upgradient well.

Groundwater Monitoring Wells MW-4D, MW-5D, MW-5S, MW-11S and MW-16S

These monitoring wells should all be sampled annually for the field, VOCs and metals parameters. In addition, there should be a sampling round in the spring for VOCs only. The VOCs in MW-4D, MW-5D, MW-5S and MW-11S are of concern to the Departments. In addition, groundwater concentrations in the sentinel landfill well MW-16 is of particular concern, since it is the furthest downgradient monitoring well from the landfill. If MW-16 becomes contaminated, there should be an assessment of both the remedy and the downgradient monitoring and residential sampling.

Surface Water and Sediment Sampling – SWS-1

Since these monitoring points are potential exposure points, they should be monitored annually for the field, VOCs and metals parameters. In addition the surface water and sediment sampling should be sampled for the full wet chemistry list that is currently in effect.

Groundwater Cut-Off System MH-32, MH-33 and Leachate LS-1

We concur with the proposed sampling frequency and analyte list for these sampling points.

Recommendation to discontinue sampling of several residential wells

We concur with the recommendation to discontinue sampling at the following residential wells currently within the sampling program:

WAL-1:Shettine Residence; WAL-16 Cornell Residence

No site-related constituents have been detected in these wells at concentrations that exceed NYSDOH standards for public drinking water supplies. Additionally, given that the WAL-1 residence is currently unoccupied and the WAL-16 residence is significantly distant from the landfill, we agree with the recommendation to discontinue sampling of these wells.

WAL-3: Gephart Residence; WAL-4: Hanabach Residence; WAL-8: Dodge Residence; WAL-9: Greene Residence; WAL-10: Schettine Residence; WAL-14 Carl Residence; WAL-18: Geffer Residence; WAL-13: Wispel Residence; WAL-15: Kelly Residence

Sodium has been detected in these residential wells at concentrations that exceed NYSDOH public drinking water standards. Standards for sodium were originally based on aesthetic and taste properties, and the NYSDOH public drinking water supply guideline for people on severely restricted sodium diet is no more than 20 mg/L of sodium. If concerned about sodium intake, the homeowner may wish to use an alternate supply of water for drinking and cooking purposes. While semi-volatile organic compounds have been detected sporatically in several sampling events, these compounds were detected at concentrations significantly lower than the NYSDOH public drinking water standards. Based on this information, we agree with the recommendation to discontinue sampling of these wells.

WAL-6: Cimino Residence

Iron and manganese have been detected at concentrations that exceed NYSDOH public drinking water standards in two sampling events. However, no compounds were detected at levels which exceed NYSDOH drinking water standards in the last three of the six sampling events completed. Based on this information, we agree with the recommendation to discontinue sampling of this well.

WAL-11: Urban Residence

Iron has been historically detected in WAL-11 at concentrations that exceed NYSDOH public drinking water standards. However, levels of iron detected in the last of the twelve sampling events completed did not exceed drinking water standards. Standards for iron were based on aesthetic properties and were set to prevent problems such as poor taste, odor and fixture staining. Given this information, we concur with the recommendation to discontinue sampling of this well.

William D. Whitfield

May 12, 2009

Page 4

WAL-12: Blaske Residence

Iron and sodium have been detected in this residential well during the three completed sampling events at concentrations that exceed NYSDOH public drinking water standards. Standards for sodium and iron were based on aesthetic and taste properties, and the NYSDOH public drinking water supply guideline for people on severely restricted sodium diet is no more than 20 mg/L of sodium. If concerned about sodium intake, the homeowner may wish to use an alternative supply of water for drinking and cooking purposes. Based on this information, we concur with the recommendation to discontinue sampling of this well.

WAL-17: Meisenzhal Residence

Iron and sodium have been detected at WAL-17 at concentrations that exceed NYSDOH public drinking water standards. Standards for sodium and iron were based on aesthetic and taste properties, and the NYSDOH public drinking water supply guideline for people on a severely restricted sodium diet is no more than 20 mg/L of sodium. If concerned about sodium intake, the homeowner may wish to use an alternate supply of water for drinking and cooking purposes. Based on this information, we agree with the proposal to discontinue sampling of this well.

WAL-20: Fanton Residence

Current sampling frequency: every three years

Proposed sampling frequency: discontinue sampling

Three sampling events have been completed since the granulated activated carbon filter system was removed from WAL-20 in January of 2007 (subsequent to placement of a new drinking water well in 2005). With the exception of sodium, no site-related constituents have been detected in WAL-20 at levels that exceed applicable standards. Additionally, this well is located a substantial distance from the landfill. Based on this information, we agree with the recommendation to discontinue sampling of this well.

Recommendation to modify sampling frequency

We concur with the recommendation to modify the sampling frequency at the following residential wells currently within the sampling program:

WAL-2: Rossini Residence

Inorganic compounds (metals), including sodium, iron and manganese have historically been detected in WAL-2 at concentrations that exceed NYSDOH public drinking water standards. We understand that this residence is adjacent to the Wellsville-Andover landfill, is occupied seasonally and that the homeowner uses bottled water as a source of potable water while in-residence. Given this information, we concur with the recommendation of annual sampling for metals compounds. This is reduced from semi-annual sampling for inorganic compounds.

William D. Whitfield

May 12, 2009

Page 5

WAL-5: Ormsby Residence

Volatile organic compounds, including cis-1,2-dichloroethene and trichloroethene and metals compounds have been detected at low concentrations (below NYSDOH drinking water standards) in WAL-5. The concentrations of these compounds has remained relatively consistent over semi-annual sampling events completed from 1998 to 2002 and have not been detected in the last twelve sampling events. Based on this information, we concur with the recommendation to reduce the sampling frequency from semi-annual to annual sampling.

WAL-19: LaDue Residence

We concur with the recommendation to continue semi-annual sampling.

Although a review of the available data supports the proposed modifications to the sampling program, it should be noted that, should conditions change additional sampling or re-sampling of the environmental media may be warranted and requested by either NYSDOH or NYSDEC.

If you have any questions, please contact me at 716-851-7220.

Sincerely,

Linda C. Ross

Linda C. Ross
Project Manager
Division of Environmental Remediation

LCR/tml

cc: Mr. Jonathan Brandes, On-Site Technical Services, Inc
Ms. Tamara Girard, NYSDOH

Jon Brandes

From: "Linda Ross" <lcross@gw.dec.state.ny.us>
To: "Jon Brandes" <Jonb@on-sitehs.com>
Cc: "Tamara Girard" <tsg01@health.state.ny.us>; "William Whitfield" <billwhitfield@wellsvilleny.com>
Sent: Friday, May 22, 2009 1:15 PM
Attach: MON PROGRAM REV Table.xls
Subject: Fwd: Wellsville Andover Landfill

Jon, I agree with your proposal below in the email and the attached monitoring schedule. Please continue with the landfill gas monitoring, since they are potential exposure points. Thanks. L.

Linda C. Ross
Engineering Geologist 1
New York State Department of Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, NY 14203-2999
lcross@gw.dec.state.ny.us
office: 716. 851. 7220
fax: 716. 851. 7226

>>> "Jon Brandes" <Jonb@on-sitehs.com> 5/22/2009 11:59 AM >>>
Linda,

Based on your response to the site evaluation and proposed monitoring program, we have revised the monitoring program table - please see attached. We will follow this schedule starting with the fall event. One item that was not commented on is the request to discontinue landfill gas monitoring. Please provide comment.

Also I propose the following for reporting:

- 1) The spring 2009 sampling event was completed following the old monitoring schedule and the typical report will be completed.
- 2) For each future spring and fall event a letter report will be prepared once analytical results are received. The letter report will present the results of the monitoring event.
- 3) A annual report each year similar to previous annual reports.

Thanks and have a great holiday weekend!!

Jon Brandes, P.G.
Senior Geologist
On-Site Technical Services, Inc.
72 Railroad Ave
Wellsville, NY 14895
Phone: 585-593-1824
Fax: 585-593-7471

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation

270 Michigan Avenue, Buffalo, NY 14203-2915

P: (716) 851-7220| F: (716) 851-7226

www.dec.ny.gov

May 19, 2021

William Whitfield
Village of Wellsville
200 Bolivar Road
Wellsville, NY 14895

Re: Site Management (SM) -
Groundwater Sampling Modification
Wellsville-Andover Landfill, Wellsville
Allegany County, Site No.: **902004**

Dear William Whitfield (as the Certifying Party):

The Department has reviewed your letter, received May 13, 2021, regarding potential grants to assist with onsite sampling. Unfortunately, no grants or assistance are available from the Department.

In order to diminish sampling costs onsite, the Department has reviewed the groundwater monitoring wells that are sampled semi-annually and annually. Going forward, please only conduct annual groundwater sampling in the Fall. Additionally, MW-15S, MW-16S, and MW-3S can be removed from the monitoring program. If the Village and On-Site Geological Services (On-Site) believe additional monitoring parameters or frequencies should be modified, please submit a proposal letter to the Department for review.

In regard to the requested emergent contaminant sampling, additional onsite sampling is being requested in order to further characterize the site. The three samples collected in 2018 did not give an encompassing representation of emergent contaminant concentrations over the entire site. An additional round of sampling at the monitoring wells CW-3A/3B, CW-4A/4B, MW-5S/5D, and MW-17S/17D will provide additional details on the location of emergent contaminants and be used to determine if further sampling is warranted. After these eight samples are collected, the Village and On-Site can indicate to the Department if they believe additional emergent contaminant sampling is warranted at each location.

If you have any questions, please contact me at 716-851-7220 or email: megan.kuczka@dec.ny.gov.

Sincerely,


Megan Kuczka

Environmental Program Specialist – 1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation

270 Michigan Avenue, Buffalo, NY 14203-2915

P: (716) 851-7220| F: (716) 851-7226

www.dec.ny.gov

ec: Andrea Caprio – NYSDEC
 James Sullivan – NYSDOH
 Charlotte Bethoney - NYSDOH
 Jon Brandes – On-Site Geological Services, D.P.C.
 Randy Shayler – Village of Wellsville
 Melissa Mullen – Village of Wellsville

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation
270 Michigan Avenue, Buffalo, NY 14203-2915
P: (716) 851-7220| F: (716) 851-7226
www.dec.ny.gov

April 26, 2022

Dean Arnold
Village of Wellsville
200 Bolivar Road
Wellsville, NY 14895

Re: Site Management (SM) –
Periodic Review Report (PRR) Response Letter
Wellsville-Andover Landfill, Wellsville
Allegany County, Site No.: **902004**

Dear Dean Arnold (as the Certifying Party):

The Department has reviewed your Periodic Review Report (PRR) and IC/EC Certification for the following period: February 15, 2021 to February 15, 2022. The Department hereby accepts the PRR and IC/EC Certification.

The frequency of Periodic Reviews for this site is once a year, and your next PRR will be due on March 17, 2023. You should receive a reminder letter and updated certification form 75-days prior to the report's due date. Regardless of receipt or not of the reminder notice, the next PRR, including the signed certification form, is still due on the date specified above.

The Department has assessed the emergent contaminant sampling results detailed within the 2021-2022 PRR and requests that CW-3B, CW-4A, CW-4B, and MW-17S continue to be sampled annually for emergent contaminants (PFAS and 1,4-dioxane). Additionally, please sample MW-5D annually for 1,4-dioxane only. Sampling of these wells are being requested to track onsite concentrations in excess of the Drinking Water Quality Council screening thresholds and the Department's Draft Guidance Values for Emergent Contaminants.

As noted within the 2021-2022 PRR, please replace Leachate Pump 2 during the 2022-2023 Certifying Period. Additionally, hard copies of the quarterly inspection and maintenance checklist no longer need to be mailed to the Department. Please send an electronic copy only.

Within future PRR submittals, please complete the following revisions:

- Some of the laboratory reporting limits are above the corresponding groundwater quality standard/guidance values (GWQS/V). Please ensure reporting limits are below GWQS/V where applicable
- Convert PFAS data to ng/L
- Indicate the NYSDEC PFAS guidance values are in draft form
- Bold or highlight any exceedances of GWQS/V or Class C Standards in the tables

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation

270 Michigan Avenue, Buffalo, NY 14203-2915

P: (716) 851-7220| F: (716) 851-7226

www.dec.ny.gov

- Add the applicable GWQS/V, Class C Standards, and/or NYSDOH MCL to each Table
- Revise Figure 1 to detail the 19 acre site boundary only
- Include the Residential Water Supply results letters as an appendix

If you have any questions, please contact me at 716-851-7220 or email: megan.kuczka@dec.ny.gov.

Sincerely,



Megan Kuczka
Environmental Program Specialist – 1

cc:
Andrea Caprio – NYSDEC
Jim Sullivan – NYSDOH
Charlotte Bethoney – NYSDOH
Deb Harvey – Village of Wellsville
Jon Brandes – On-Site Geological Services, D.P.C.

Appendix C

**Spring/Fall
Field Forms**

On-Site Geological Services, D.P.C.
Groundwater Cutoff, Leachate, Surface Water, Sediment,
Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 5-1-23

Sampling Location: SWS - 1 Sample ID: SWS1-0523 Arrival Time: 0822

Weather Conditions

Temp. 72 ° F () Sunny () Partly Cloudy (X) Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: light wind

Location Type

() Groundwater Cutoff, () Leachate, (X) Surface Water, () Sediment, Other _____

Flow and Depth Information (as appropriate)

Depth: 4.5' Estimated Flow: Appx 2 GPM Comments: _____

Field Parameters (as appropriate)

Meter: YSI (sn: 2A/02673), Hach 2100P (sn: 22,174105)
Measured in: (X) Directly Submerged Probe () Cup Note: Turbidity measured from a vial grab sample

Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)
<u>0845</u>	<u>7.67</u>	<u>263.4</u>	<u>15.7</u>	<u>10.23</u>	<u>7.5</u>	<u>-32.6</u>

Sample Information

Sample Type: (X) Grab () Composite

Sample Location: () Discharge Pipe () Pond (X) Ditch () Leachate Sump

Location Description/Condition: _____

Sample Collection Equipment/Method: Dipper Sample Description (clarity/color): Clear slightly浑浊

Sample Odor: No odor Other Observations/Comments: _____

Analysis Requested: metals Sample Time: 0845 Number of Containers: 10

Sampling Completion: Time 0908 Date 5-1-23 Samplers KQE

On-Site Geological Services, D.P.C.

Residential Water Supply Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 4-28-23

Sampling Location: WAL-19

Sample ID: _____

Arrival Time: 0800

Weather Conditions

Temp. 38 ° F () Sunny () Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-5 mph

Sample Information

Sample Type: Grab () Composite

Sample Location: Post=Kitchen Sink, Pre=before Filter, Inter=Filter between

Location Description/Condition: Good

Sample Collection Equipment/Method: Direct Grab Sample Description (clarity\color): Clear No Color

Sample Odor: No odor

Other Observations/Comments: _____

Analysis Requested: Voc's

Sample Time: Post=0810
Pre=0820
Inter=0830 Number of Containers: 3 each

Comment:

Sampling Completion: Time 0844 Date 4-28-23 Samplers K Dye

On-Site Geological Services, D.P.C.
Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-25-23

Monitoring Well: CW-3A Sample ID: CW3A-1023 Arrival Time: 1210

Weather Conditions

Temp. 71° F () Sunny () Partly Cloudy (X) Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-5 mph

Well Condition Checklist

Bump posts: NA Pro. Casing/lock: OK Surface pad: OK

Well Visibility (paint): OK Well Label: OK Comment: _____

Depth & Purging Information

TD: 22.47 ft - SWL: 10.43 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 2.7 gals Purge Vol: 3.8 gals.

Start Purge: 1220 Pumping Rate: 100sec. 1500 mL Purge Duration: 1hr. Start Sampling: 1320

Purging Method: () Bladder Pump # 3 () Grundfos Pump () Bail () Peristaltic () Pencil Bladder

Field Parameters

Meters: YSI (sn: 17D108273), Turbidity (sn: 22043923) Measured in: Flow Cell Cup

Stabilization Criteria: 1) field parameters \pm 0.1 pH, \pm 3% conductivity, \pm 10 mv ORP, \pm 10% DO, \pm 10% Turbidity; 2) 3 well volumes or dry

Sample Collection Method: Bladder pump Sample clarity/color: Clear/Colorless Sample Odor: No odor

Other Observations/Comments: _____

Controller Fill Time: 35 Controller Discharge Time: 9 BP300 PSI: _____

Analysis Requested: VOCs - metals Number of Containers: 4

Well Sampling Completion Date 10-25-23 Time 1335 Samplers J. Watson

On-Site Geological Services, D.P.C.
Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-25-23

Monitoring Well:GW-3B Sample ID: CW3B-1023 Arrival Time: 1040

Weather Conditions

Temp. 55° F () Sunny (X) Partly Cloudy (X) Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-5 mph

Well Condition Checklist

Bump posts: N/A Pro. Casing/lock: OK Surface pad: OK

Well Visibility (paint): COK Well Label: OIC Comment: _____

Depth & Purging Information

TD: 37.70 ft - SWL: 21.85 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 2.5 gals Purge Vol: 3.0 gals.

Start Purge: 1050 Pumping Rate: 150 mL/min Purge Duration: 1 hr. Start Sampling: 1150

Purging Method: () Bladder Pump # xxx () Grundfos Pump () Bail () Peristaltic () Pencil Bladder

Field Parameters

Meters: YSI (sn: 17D108273), Turbidity (sn: 22043923) Measured in: () Flow Cell () Cup

Stabilization Criteria: 1) field parameters \pm 0.1 pH, \pm 3% conductivity, \pm 10 mv ORP, \pm 10% DO, \pm 10% Turbidity; 2) 3 well volumes or dry

Sample Collection Method: Bladder pump Sample clarity\color: Clear / Colorless Sample Odor: No odor

Other Observations/Comments:

Controller Fill Time: 35 Controller Discharge Time: 9 BP300 PSI: _____

Analysis Requested: VOCs - Metals - PFA - 1:4 dilution Number of Containers: 8

Well Sampling Completion: Date 10-25-23 Time 13:00 Samplers 5 (14 total)

PFAS FB-1 - 1023
0855

On-Site Geological Services, D.P.C.
Groundwater Purguing and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-25-29

Monitoring Well: CW-4A Sample ID: CW4A-1023 Arrival Time: 0735

Weather Conditions

Temp. 51 °F () Sunny (X) Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: None

Well Condition Checklist

Bump posts: NA Pro. Casing/lock: OK Surface pad: OK

Well Visibility (paint): OK Well Label: ✓ Comment: _____

Depth & Purging Information

TD: 19.12 ft - SWL: 7.52 ft $\times 0.16$ if 2" or 0.65 if 4" = 1 Well Volume: 19 gals Purge Vol: 2.7 gals.

Start Purge: 0740 Pumping Rate: /500 mL Purge Duration: 1 hr. 5 min. Start Sampling: 0845

Purging Method: Bladder Pump # NA Grundfos Pump Bail Peristaltic Pencil Bladder

Field Parameters

Meters: YSI (sn: 170108273), Turbidity (sn: 22043923) Measured in: Flow Cell Cup

Stabilization Criteria: 1) field parameters \pm 0.1 pH, \pm 3% conductivity, \pm 10 mv ORP, \pm 10% DO, \pm 10% Turbidity; 2) 3 well volumes or dry

Sample Collection Method: Bladder pump Sample clarity/color: Clear/Colorless Sample Odor: No odor

Other Observations/Comments:

Controller Fill Time: 45 Controller Discharge Time: 9 BP300 PSI: _____

Analysis Requested: VOC's + metals + PFAS / 1.4 Dick. Number of Containers: 8

Well Sampling Completion Date 10-25-23 Time 09:0 Samplers S. Weller

PFAS

On-Site Geological Services, D.P.C.
Groundwater Purguing and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-25-23

Monitoring Well: CW-4B Sample ID: CW4B-1023 Arrival Time: 0910

Weather Conditions

Temp. 51 ° F () Sunny () Partly Cloudy (X) Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: On-Syph

Well Condition Checklist

Bump posts: NA Pro. Casing/lock: ok Surface pad: ok

Well Visibility (paint): ok Well Label: ok Comment: _____

Depth & Purging Information

TD: 30.16 ft - SWL: 9.68 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 3.3 gals Purge Vol: 4.0 gals.

Start Purge: 0920 Pumping Rate: 101 sec. 1500 mL Purge Duration: 1 hr. Start Sampling: 1020

Purging Method: () Bladder Pump # 3 () Grundfos Pump () Bail () Peristaltic () Pencil Bladder

Field Parameters

Meters: YSI (sn: 170108273), Turbidity (sn: 22043923) Measured in: (X) Flow Cell () Cup

Stabilization Criteria: 1) field parameters \pm 0.1 pH, \pm 3% conductivity, \pm 10 mv ORP, \pm 10% DO, \pm 10% Turbidity; 2) 3 well volumes or dry
9/30

Sample Collection Method: Bladder pump Sample clarity/color: Clear/Colorless Sample Odor: No odor

Other Observations/Comments:

Controller Fill Time: 90 Controller Discharge Time: 9 BP300 PSI: _____

Analysis Requested: VIC's + Metals + PEAS - 1.4 days Number of Containers: 8

Well Sampling Completion: Date 10-25-23 Time 1035 Samplers S. Wierwille

On-Site Geological Services, D.P.C.
Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-24-23

Monitoring Well: MW-3D Sample ID: MW3D-1023 Arrival Time: 0730

Weather Conditions

Temp. 48° F () Sunny (X) Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-5 mph

Well Condition Checklist

Bump posts: ✓ Pro. Casing/lock: ✓ Surface pad: ✓

Well Visibility (paint): OK Well Label: OK Comment: _____

Depth & Purging Information

TD: 46.75 ft - SWL: 23.12 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 3.8 gals Purge Vol: 1.0 gals.

Start Purge: 0936 Pumping Rate: 380 sec /500 mL Purge Duration: 1 hr. Start Sampling: 1035'

Purging Method: () Bladder Pump #_____ () Grundfos Pump () Bail () Peristaltic (X) Pencil Bladder

Field Parameters

Meters: YSI (sn: 170108273), Turbidity (sn: 22043923) Measured in: Flow Cell (Cup)

Stabilization Criteria: 1) field parameters \pm 0.1 pH, \pm 3% conductivity, \pm 10 mv ORP, \pm 10% DO, \pm 10% Turbidity; 2) 3 well volumes or dry

Sample Collection Method: Bladder pump Sample clarity\color: Clear/Colorless Sample Odor: None

Other Observations/Comments: _____

Controller Fill Time: 25 Controller Discharge Time: 5 BP300 PSI: _____

Analysis Requested: VOC's Materials Number of Containers: 4

Well Sampling Completion: Date 10-24-23 Time 1645 Samplers S.W. 1

On-Site Geological Services, D.P.C.
Groundwater Purguing and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-24-23

Monitoring Well: MW-4D **Sample ID:** mw4D-1023 **Arrival Time:** 1100

Weather Conditions

Temp. 55 ° F () Sunny (X) Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-10 mph

Well Condition Checklist

Bump posts: OK Pro. Casing/lock: OK Surface pad: OK

Well Visibility (paint): OK Well Label: Comment: _____

Depth & Purging Information

TD: 24.63 ft - SWL: 16.16 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 1.4 gals Purge Vol: 2.0 gals.

Start Purge: 1115 Pumping Rate: 138 sec. /1500 mL Purge Duration: 55 min. Start Sampling: 1210

Purging Method: Bladder Pump # 3 Grundfos Pump Bail Peristaltic Pencil Bladder

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 22043923) Measured in: Flow Cell Cup

Stabilization Criteria: 1) field parameters \pm 0.1 pH, \pm 3% conductivity, \pm 10 mv ORP, \pm 10% DO, \pm 10% Turbidity; 2) 3 well volumes or dry

Sample Collection Method: Blackdog pump Sample clarity/color: Slightly cloudy - Sample Odor: Slight earthy odor

Other Observations/Comments: # DTW meter hits top of pump.

12/35

Analysis Requested: VOC's - metals

Number of Containers: 4

Well Sampling Completion Date 10-24-23

Time 1225

Samplers S. WATSON

DJPI-1023
0855

On-Site Geological Services, D.P.C.
Groundwater Purguing and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-26-23

Monitoring Well: mw-5D Sample ID: mw5D-1023 Arrival Time: 08/15

Weather Conditions

Temp. 50° F () Sunny () Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: None

Well Condition Checklist

Bump posts: NA Pro. Casing/lock: OK Surface pad: OK

Well Visibility (paint): OK Well Label: Needs Comment: _____

Depth & Purging Information

TD: 37.65 ft - SWL: 5.50 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 5.1 gals Purge Vol: 5.1 gals.

Start Purge: 08:30 Pumping Rate: 100 sec. /500 mL Purge Duration: 1hr. 15 min Start Sampling: 0945

Purging Method: Bladder Pump # 3 Grundfos Pump Bail Peristaltic Pencil Bladder

Field Parameters

Meters: YSI (sn: 170108273), Turbidity (sn: 22042923) Measured in: Flow Cell Cup

Stabilization Criteria: 1) field parameters ± 0.1 pH, $\pm 3\%$ conductivity, ± 10 mv ORP, $\pm 10\%$ DO, $\pm 10\%$ Turbidity; 2) 3 well volumes or dry

Sample Collection Method: Biopsy pump Sample clarity\color: Clear/Colorless Sample Odor: No odor

Other Observations/Comments: _____

Controller Fill Time: 30 Controller Discharge Time: 9 BP300 PSI: 1 DOP 1-102

Analysis Requested: VOC's - metals - 1.4.D Number of Containers: 6 + 6

Well Sampling Completion: Date 10-26-23 Time 105 Samplers S. Clemons

On-Site Geological Services, D.P.C.
Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-26-23

Monitoring Well: MW-55 **Sample ID:** MW 55 -1023 **Arrival Time:** 1015

Weather Conditions

Temp. 65° F () Sunny (X) Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: None

Well Condition Checklist

Bump posts: NA Pro. Casing/lock: OK Surface pad: OK

Well Visibility (paint): OK Well Label: OK Comment: _____

Depth & Purging Information

TD: 21.20 ft - SWL: 5.26 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 2.6 gals Purge Vol: 2.8 gals.

Start Purge: 1020 Pumping Rate: 0.5 sec. 1500 mL Purge Duration: 55 min Start Sampling: 1115

Purging Method: () Bladder Pump # N/A () Grundfos Pump () Bail () Peristaltic () Pencil Bladder

Field Parameters

Meters: YSI (sn: 17D108273), Turbidity (sn: 22043923) Measured in: (X) Flow Cell () Cup

Stabilization Criteria: 1) field parameters ± 0.1 pH, $\pm 3\%$ conductivity, ± 10 mv ORP, $\pm 10\%$ DO, $\pm 10\%$ Turbidity; 2) 3 well volumes or dry

Sample Collection Method: Bladder pump Sample clarity\color: Clear/Colorless Sample Odor: No odor

Other Observations/Comments: _____

Controller Fill Time: 35 Controller Discharge Time: ? BP300 PSI: —

Analysis Requested: *VSCC - Metals* Number of Containers: 4

Well Sampling Completion: Date 10-26-23 Time 1140 Samplers S. Watson

MS/MSD

On-Site Geological Services, D.P.C.
Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-24-23

Monitoring Well: mw-115 Sample ID: mw115 - 1023 Arrival Time: 0755

Weather Conditions

Temp. 42 ° F () Sunny (X) Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-5 mph

Well Condition Checklist

Bump posts: NA Pro. Casing/lock: OK Surface pad: OK

Well Visibility (paint): OK Well Label: OK Comment: _____

Depth & Purging Information

TD: 20.40 ft - SWL: 9.87 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 1.7 gals Purge Vol: 2.5 gals.

Start Purge: 0810 Pumping Rate: 77 sec./500 mL Purge Duration: 1 hr. Start Sampling: 0910

Purging Method: () Bladder Pump # 3 () Grundfos Pump () Bail () Peristaltic () Pencil Bladder

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 22043923) Measured in: Flow Cell Cup

Stabilization Criteria: 1) field parameters ± 0.1 pH, $\pm 3\%$ conductivity, ± 10 mv ORP, $\pm 10\%$ DO, $\pm 10\%$ Turbidity; 2) 3 well volumes or dry

Sample Collection Method: Bladder pump Sample clarity\color: Clear / Colorless Sample Odor: None

Other Observations/Comments: _____
12/30 ms/msD

Analysis Requested: VOC's + metals Number of Containers: 4+4

Well Sampling Completion: Date 10-24-23 Time 0925 Samplers S. Water

On-Site Geological Services, D.P.C.
Groundwater Purguing and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-26-23

Monitoring Well: MW-17D **Sample ID:** MW17D-1023 **Arrival Time:** 1150

Weather Conditions

Temp. 70 ° F () Sunny () Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-5 mph

Well Condition Checklist

Bump posts: WA Pro. Casing/lock: ef Surface pad: ok

Well Visibility (paint): OK Well Label: Needs Comment:

Depth & Purging Information

TD: 65' 10 ft - SWL: 33' 10 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 20.8 gals Purge Vol: 3.2 gals.

Start Purge: 1205 Pumping Rate: 125 sec 1500 mL Purge Duration: 1 hr. Start Sampling: 1305

Purging Method: () Bladder Pump # 3 () Grundfos Pump () Bail () Peristaltic () Pencil Bladder

Field Parameters

Meters: YSI (sn: 17D108273), Turbidity (sn: 22043923) Measured in: Flow Cell (Cup

Stabilization Criteria: 1) field parameters ± 0.1 pH, $\pm 3\%$ conductivity, ± 10 mv ORP, $\pm 10\%$ DO, $\pm 10\%$ Turbidity; 2) 3 well volumes or dry

Sample Collection Method: Bladder pump Sample clarity/color: Slightly cloudy reddish tint / Clear Sample Odor: No odor
Other Observations/Comments:

Controller Fill Time: 35 Controller Discharge Time: 15 BP300 PSI: _____

Analysis Requested: VPC¹⁵ - Metals Number of Containers: 4

Well Sampling Completion Date 10-26-23 Time 13:35 Samplers S. Weller

PFAS

On-Site Geological Services, D.P.C.
Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-25-23

Monitoring Well: MW-175 Sample ID: MW175-1023 Arrival Time: 1338

Weather Conditions

Temp. 71 ° F () Sunny () Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-5 mph

Well Condition Checklist

Bump posts: NA Pro. Casing/lock: OK Surface pad: BAD - Broken sticker loose
Well Visibility (paint): ok Well Label: OK Comment: _____

Depth & Purging Information

TD: 26.94 ft - SWL: 9.82 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 2.7 gals Purge Vol: 3.5 gals.

Start Purge: 13415 Pumping Rate: 109 sec / 1500 mL Purge Duration: 55 min. Start Sampling: 1440

Purging Method: () Bladder Pump # 3 () Grundfos Pump () Bail () Peristaltic () Pencil Bladder

Field Parameters

Meters: YSI (sn: 17D108273), Turbidity (sn: 22043922) Measured in: Flow Cell Cup

Stabilization Criteria: 1) field parameters \pm 0.1 pH, \pm 3% conductivity, \pm 10 mv ORP, \pm 10% DO, \pm 10% Turbidity; 2) 3 well volumes or dry

Sample Collection Method: Bladder pump Sample clarity\color: Clear/Colorless Sample Odor: No odor

Other Observations/Comments: _____

Controller Fill Time: 30 Controller Discharge Time: 8 BP300 PSI: _____

Analysis Requested: VOC's - Metals - PFAS - 1,4 diox. Number of Containers: 8

Well Sampling Completion: Date 10-25-23 Time 1500 Samplers S. White

On-Site Geological Services, D.P.C.
Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-24-23

Monitoring Well: MW-18D **Sample ID:** mw18D-1023 **Arrival Time:** 1230

Weather Conditions

Temp. 66° F () Sunny (X) Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-5 mph

Well Condition Checklist

Bump posts: NA Pro. Casing/lock: OK Surface pad: OK

Well Visibility (paint): OK Well Label: OK Comment: _____

Depth & Purging Information

TD: 28.50 ft - SWL: 15.24 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 8.6 gals Purge Vol: 4.5 gals.

Start Purge: 1240 Pumping Rate: 85 sec. /500 mL Purge Duration: 1hr. Start Sampling: 1340

Purging Method: () Bladder Pump # NA () Grundfos Pump () Bail () Peristaltic () Pencil Bladder

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 22041872) Measured in: Flow Cell Cup

Stabilization Criteria: 1) field parameters ± 0.1 pH, $\pm 3\%$ conductivity, ± 10 mv ORP, $\pm 10\%$ DO, $\pm 10\%$ Turbidity; 2) 3 well volumes or dry

Sample Collection Method: Bladder pump Sample clarity/color: Clear / reddish Sample Odor:

Other Observations/Comments:

Analysis Requested: VOC's + metals Number of Containers: 4

Well Sampling Completion: Date 16-24-23 Time 1350 Samplers S. W. Wade

On-Site Geological Services, D.P.C.
Groundwater Purguing and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-24-23

Monitoring Well: MW-185 Sample ID: MW185-1023 Arrival Time: 1350

Weather Conditions

Temp. 66° F () Sunny (X) Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-5 mph

Well Condition Checklist

Bump posts: NA Pro. Casing/lock: OK Surface pad: OK

Well Visibility (paint): ex Well Label: ex Comment: _____

Depth & Purging Information

TD: 20.49 ft - SWL: 12.23 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: .13 gals Purge Vol: 3.0 gals.

Start Purge: 1353 Pumping Rate: _____ /500 ml Purge Duration: 55 min Start Sampling: 1450

Purging Method: () Bladder Pump # 3 () Grundfos Pump () Bail () Peristaltic () Pencil Bladder

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 22043923) Measured in: Flow Cell (Cup

Stabilization Criteria: 1) field parameters \pm 0.1 pH, \pm 3% conductivity, \pm 10 mv ORP, \pm 10% DO, \pm 10% Turbidity; 2) 3 well volumes or dry

Sample Collection Method: Bladder pump Sample clarity/color: Clear/Colorless Sample Odor: No odor

Other Observations/Comments:

9/45

Analysis Requested: Spec + Metals Number of Containers: 4

Well Sampling Completion: Date 10-24-23 Time 1505 Samplers S. Warszawski

On-Site Geological Services, D.P.C.

Groundwater Cutoff, Leachate, Surface Water, Sediment, Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/25/23

Sampling Location: LEACHATE SUMP Sample ID: LS-1023 Arrival Time: 1013

Weather Conditions

Temp. 58 ° F () Sunny () Partly Cloudy (X) Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-2 mph.

Location Type

() Groundwater Cutoff, (X) Leachate, () Surface Water, () Sediment, Other _____
SUM?

Flow and Depth Information (as appropriate)

Depth: 17.12 Estimated Flow: NA Comments: DEPTH OF WATER APPROX. 2'
TO WATER
MEAS FROM TOP OF
BILCO DOOR

Field Parameters (as appropriate)

Meter: YSI (sn: 204101639), Turbidity (sn: 20110D001656)
Measured in: () Directly Submerged Probe (X) Cup Note: Turbidity measured from a vial grab sample

Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)
<u>1018</u>	<u>7.46</u>	<u>971</u>	<u>44.0</u>	<u>—</u>	<u>14.2</u>	<u>133.8</u>

Sample Information

Sample Type: (X) Grab () Composite Sample Location: () Discharge Pipe () Pond () Ditch (X) Leachate Sump

Location Description/Condition: LEACHATE SUMP

Sample Collection Equipment/Method: BAILER Sample Description (clarity/color): VERY SLIGHTLY CLOUDY/TAN

Sample Odor: None Other Observations/Comments: _____

Analysis Requested: VOC's, METALS Sample Time: 1025 Number of Containers: 4

Sampling Completion: Time 1043 Date 10/25/23 Samplers SP2

On-Site Geological Services, D.P.C.
Groundwater Cutoff, Leachate, Surface Water, Sediment,
Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/25/23

Sampling Location: MH-32 Sample ID: MH32-1023 Arrival Time: 1050

Weather Conditions

Temp. 55 ° F () Sunny () Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-5

Location Type

() Groundwater Cutoff, () Leachate, () Surface Water, () Sediment, Other _____

Flow and Depth Information (as appropriate)

Depth: APPROX 4.5" Estimated Flow: No visible flow Comments: _____

Field Parameters (as appropriate)

Meter: YSI (sn: 204101689), Turbidity (sn: 201100001656)
Measured in: () Directly Submerged Probe () Cup Note: Turbidity measured from a vial grab sample

Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)
<u>1055</u>	<u>6.94</u>	<u>881</u>	<u>93.9</u>	<u>—</u>	<u>14.4</u>	<u>121.1</u>

Sample Information

Sample Type: () Grab () Composite Sample Location: () Discharge Pipe () Pond () Ditch () Leachate Sump

Location Description/Condition: MANHOLE MH-32

Sample Collection Equipment/Method: DIPPER Sample Description (clarity/color): CLOUDY/YELLOWISH TAN COLOR
Sample Odor: NONE Other Observations/Comments: _____

Analysis Requested: VOC'S, METALS, NO₃/TDS Sample Time: 1105 Number of Containers: 5
Sampling Completion: Time 1115 Date 10/25/23 Samplers JPL

On-Site Geological Services, D.P.C.
Groundwater Cutoff, Leachate, Surface Water, Sediment,
Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/25/23

Sampling Location: MH-33 Sample ID: MH 33-1023 Arrival Time: 0940

Weather Conditions

Temp. 55 ° F () Sunny () Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-2 mph

Location Type

() Groundwater Cutoff, () Leachate, () Surface Water, () Sediment, Other _____

Flow and Depth Information (as appropriate)

Depth: APPROX 5" Estimated Flow: NO FLOW Comments: _____

Field Parameters (as appropriate)

Meter: YSI (sn: 20H101689), Turbidity (sn: 20110D001656)
Measured in: () Directly Submerged Probe () Cup Note: Turbidity measured from a vial grab sample

Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)
<u>0955</u>	<u>6.82</u>	<u>520.1</u>	<u>4.10</u>	<u>—</u>	<u>11.7</u>	<u>132.3</u>
_____	_____	_____	_____	_____	_____	_____

Sample Information

Sample Type: () Grab () Composite Sample Location: () Discharge Pipe () Pond () Ditch () Leachate Sump

Location Description/Condition: MANHOLE MH 33 @ SE corner of WIL. LOCATION NOT RECENTLY
MOWED

Sample Collection Equipment/Method: DIPPER Sample Description (clarity/color): Clean / No color

Sample Odor: None Other Observations/Comments: _____

Analysis Requested: VOC's, METALS, NOS/TDS Sample Time: 0950 Number of Containers: 5

Sampling Completion: Time 1005 Date 10/25/23 Samplers JPL

On-Site Geological Services, D.P.C.

Residential Water Supply Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/24/23

Sampling Location: WAL-1 **Sample ID:** WAL-1023 **Arrival Time:** 1345

Weather Conditions

Temp. 67 ° F Sunny Partly Cloudy Cloudy Light Rain Hvy. Rain Snow

Wind Conditions: light

Sample Information

Sample Type: Grab Composite

Sample Location: Kitchen Sink CWT w/ aerator removed

Location Description/Condition: good

Sample Collection Equipment/Method: direct grab **Sample Description (clarity/color):** clear, no color

Sample Odor: No odor **Other Observations/Comments:** _____

Analysis Requested: VOCs, Metals **Sample Time:** 1400 **Number of Containers:** 4

Comment:

Sampling Completion: Time 1405 **Date** 10/24/23 **Samplers** J. Brinkley

On-Site Geological Services, D.P.C.

Residential Water Supply Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/23/23

Sampling Location: WAL-2 Sample ID: WA2-1023 Arrival Time: 1210

Weather Conditions

Temp. 50 ° F () Sunny () Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: light

Sample Information

Sample Type: () Grab () Composite

Sample Location: Kitchen Sink CUT

Location Description/Condition: Sink CUT, no airator

Sample Collection Equipment/Method: direct grab Sample Description (clarity/color): clear, no color

Sample Odor: none Other Observations/Comments: _____

Analysis Requested: metals Sample Time: 1220 Number of Containers: 1

Comment:

Owner has been running water for 1 hour before arrival

Sampling Completion: Time 1230 Date 10/23/23 Samplers Ji Bradley

On-Site Geological Services, D.P.C.

Residential Water Supply Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/24/23

WAL19-Post-1023
WAL19 Inter-1023
WAL19 Pre-1023

Sampling Location: WAL-19 Sample ID: _____ Arrival Time: 1250

Weather Conditions

Temp. 65 °F () Sunny () Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: light - moderate

Sample Information

Sample Type: () Grab () Composite

Sample Location: Post = Kitchen Sink CWT
Inter = basement between filters
Pre = basement before filters

Location Description/Condition: Good

Sample Collection Equipment/Method: direct grab Sample Description (clarity/color): clear, no color

Sample Odor: none Other Observations/Comments: _____

Analysis Requested: VOLs Sample Time: Post = 1300 Number of Containers: 3/3/3

Comment:

Sampling Completion: Time 1320 Date 10/24/23 Samplers J. Brindos

Appendix D

2023 Laboratory Analytical Reports



May 05, 2023

Service Request No:R2303692

Mr. Jon Brandes
On-Site Technical Services, Inc.
72 Railroad Avenue
Wellsville, NY 14895

Laboratory Results for: WAL - Annual Sampling

Dear Mr.Brandes,

Enclosed are the results of the sample(s) submitted to our laboratory April 28, 2023
For your reference, these analyses have been assigned our service request number **R2303692**.

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

A handwritten signature in black ink, appearing to read "Janice Jaeger".

Janice Jaeger
Project Manager



Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water

Service Request: R2303692
Date Received: 04/28/2023

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Three drinking water samples were received for analysis at ALS Environmental on 04/28/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Volatiles by GC/MS:

No significant anomalies were noted with this analysis.

A handwritten signature in black ink that appears to read "Janice Dugay".

Approved by _____

Date 05/04/2023



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: WAL19-Pre-0423		Lab ID: R2303692-002					
Analyte		Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene		1.7			0.50	ug/L	524.2
Trichloroethene		2.2			0.50	ug/L	524.2



Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2303692

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2303692-001	WAL19-Post-0423	4/28/2023	0810
R2303692-002	WAL19-Pre-0423	4/28/2023	0820
R2303692-003	WAL19-Inter-0423	4/28/2023	0830



ALS-Environmental
1565 Jefferson Rd, Bldg 300, Suite 360
Rochester, NY 14623
585.288.5380

Client: On-Site						CHAIN of CUSTODY						Page <u>1</u> of <u>1</u>									
72 Railroad Ave. Wellsville, NY 14895						Project: WAL - Annual Sampling						Method of Shipment									
Project Manager Jon Brandes						Telephone No. 585-593-1824			Email: jonb@on-sitehs.com			Special Detection Limit/Reporting									
Lab Sample No.	No. of Containers	Matrix		Prsv.		Sampling Date	Sampling Time	GC/MS VOA's 8260 (HCl)		GC/MS VOA's 524.2 (C6H8O6)		T-Metals (HNO3)	TDS, NO3, Br, Cl, SO4 (NP) (SW/SED)	NH3, TKN, COD (H2SO4) (SW/SED)	Total Color (NP) (SW/SED)	BOD (NP) (SW/SED)	Alkalinity (NP) (SW/SED)	TDS, NO3 (NP) (Manhole)			
		Soil	Water	Air	Other			Yes	No												
WAL19 Post-0423	3	X		X		4-28-23	0810														
WAL19 Pre-0423	2	X		X		4-28-23	0820	X													
WAL19 Inter-0423	3	X		X		4-28-23	0830	X													
Sample Received Intact: Yes No						Temperature received: Ice No ice						REMARKS									
Relinq. by sampler (Sign & Print Name) <i>Kevin De/ Kevin De</i>						Date 4/28/23		Time 11:11		Received by (Sign & Print Name) <i>Du M. H.</i> <i>ALS 4/28/23 11:44</i>						Lab Work No.					
Relinquished by						Date		Time		Received by											
Relinquished by						Date		Time		Received by											
Relinquished by						Date		Time		Received by laboratory											

R2303692
On-Site Technical Services, Inc.
WAL - Annual Sampling

5





Cooler Receipt and Preservation Check Fo

R2303692
On-Site Technical Services, Inc.
WAL - Annual Sampling

5

Project/Client

Caseila/ONSITE

Folder Number

Cooler received on: 4/28/23by: MECOURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	<u>Y</u> <u>N</u>
2	Custody papers properly completed (ink, signed)?	<u>Y</u> <u>N</u>
3	Did all bottles arrive in good condition (unbroken)?	<u>Y</u> <u>N</u> *
4	Circle: Wet Ice Dry Ice Gel packs present?	<u>Y</u> <u>N</u>

5a	Perchlorate samples have required headspace?	<u>Y</u> <u>N</u> <u>NA</u>
5b	Did VOA vials, Alk or Sulfide have sig* bubbles?	<u>Y</u> <u>N</u> <u>NA</u>
6	Where did the bottles originate?	<u>ALS/ROC</u> <u>CLIENT</u>
7	Soil VOA received as:	Bulk Encore 5035set <u>NA</u>

8. Temperature Readings Date: 4/28/23 Time: 11:52 ID: IR#12 IR#11 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>3.9</u>	<u>3.4</u>	<u>5.5</u>				
Within 0-6°C?	<u>Y</u> <u>N</u>						
If <0°C, were samples frozen?	<u>Y</u> <u>N</u>						

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

& Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: IR#12 by ME on 4/28/23 at 12:125035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y NCooler Breakdown/Preservation Check**: Date: 5/1/23 Time: 11:05 by: ME

9. Were all bottle labels complete (i.e. analysis, preservation, etc.)?

YES NO

10. Did all bottle labels and tags agree with custody papers?

YES NO

11. Were correct containers used for the tests indicated?

YES NO

12. Were 5035 vials acceptable (no extra labels, not leaking)?

YES NO N/A

13. Were dissolved metals filtered in the field?

YES NO N/A14. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
≤2		HNO ₃								
≤2		H ₂ SO ₄								
<4		NaHSO ₄								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add Na ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃								
		ZnAcetate	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis.
Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: 091022-3EA1

Explain all Discrepancies/ Other Comments:

* PFAS Bottle for MWSOA slipped out of my hand while unloading cooler, and the bottle broke. The plastic may have had a flaw in it as the sample was only dropped from about 6 inches off the counter.

C₆H₈O₄ Lot: AD434187

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: MEPC Secondary Review: JMS/ME

*significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter



Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.	+	Correlation coefficient for MSA is <0.995.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.	P	Concentration >40% difference between the two GC columns.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed ($\geq 100\%$ Difference between two GC columns).
#	Spike was diluted out.	X	See Case Narrative for discussion.
		MRL	Method Reporting Limit. Also known as:
		LOQ	Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
		MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
		LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
		ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations¹



NELAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to <https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental>

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.
dba ALS Environmental

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2303692

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
524.2	Drinking Water	m,p-Xylenes
524.2	Drinking Water	o-Xylene

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client:
Project:On-Site Technical Services, Inc.
WAL - Annual Sampling/**Service Request:** R2303692**Sample Name:** WAL19-Post-0423
Lab Code: R2303692-001
Sample Matrix: Drinking Water**Date Collected:** 04/28/23
Date Received: 04/28/23**Analysis Method**
524.2**Extracted/Digested By****Analyzed By**
KRUEST**Sample Name:** WAL19-Pre-0423
Lab Code: R2303692-002
Sample Matrix: Drinking Water**Date Collected:** 04/28/23
Date Received: 04/28/23**Analysis Method**
524.2**Extracted/Digested By****Analyzed By**
KRUEST**Sample Name:** WAL19-Inter-0423
Lab Code: R2303692-003
Sample Matrix: Drinking Water**Date Collected:** 04/28/23
Date Received: 04/28/23**Analysis Method**
524.2**Extracted/Digested By****Analyzed By**
KRUEST



INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

RIGHT SOLUTIONS | RIGHT PARTNER



Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water

Sample Name: WAL19-Post-0423
Lab Code: R2303692-001

Service Request: R2303692
Date Collected: 04/28/23 08:10
Date Received: 04/28/23 11:44

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Benzene	0.50 U	0.50	1	05/02/23 12:58	
Bromobenzene	0.50 U	0.50	1	05/02/23 12:58	
Bromoform	0.50 U	0.50	1	05/02/23 12:58	
Bromochloromethane	0.50 U	0.50	1	05/02/23 12:58	
Bromodichloromethane	0.50 U	0.50	1	05/02/23 12:58	
Bromomethane	0.50 U	0.50	1	05/02/23 12:58	
Methyl tert-Butyl Ether	0.50 U	0.50	1	05/02/23 12:58	
tert-Butylbenzene	0.50 U	0.50	1	05/02/23 12:58	
sec-Butylbenzene	0.50 U	0.50	1	05/02/23 12:58	
n-Butylbenzene	0.50 U	0.50	1	05/02/23 12:58	
Carbon Tetrachloride	0.50 U	0.50	1	05/02/23 12:58	
Chlorobenzene	0.50 U	0.50	1	05/02/23 12:58	
Chloroethane	0.50 U	0.50	1	05/02/23 12:58	
Chloroform	0.50 U	0.50	1	05/02/23 12:58	
Chloromethane	0.50 U	0.50	1	05/02/23 12:58	
2-Chlorotoluene	0.50 U	0.50	1	05/02/23 12:58	
4-Chlorotoluene	0.50 U	0.50	1	05/02/23 12:58	
Dibromochloromethane	0.50 U	0.50	1	05/02/23 12:58	
Dibromomethane	0.50 U	0.50	1	05/02/23 12:58	
1,2-Dichlorobenzene	0.50 U	0.50	1	05/02/23 12:58	
1,4-Dichlorobenzene	0.50 U	0.50	1	05/02/23 12:58	
1,3-Dichlorobenzene	0.50 U	0.50	1	05/02/23 12:58	
Dichlorodifluoromethane	0.50 U	0.50	1	05/02/23 12:58	
1,1-Dichloroethane	0.50 U	0.50	1	05/02/23 12:58	
1,2-Dichloroethane	0.50 U	0.50	1	05/02/23 12:58	
1,1-Dichloroethene	0.50 U	0.50	1	05/02/23 12:58	
trans-1,2-Dichloroethene	0.50 U	0.50	1	05/02/23 12:58	
cis-1,2-Dichloroethene	0.50 U	0.50	1	05/02/23 12:58	
2,2-Dichloropropane	0.50 U	0.50	1	05/02/23 12:58	
1,2-Dichloropropane	0.50 U	0.50	1	05/02/23 12:58	
1,3-Dichloropropane	0.50 U	0.50	1	05/02/23 12:58	
trans-1,3-Dichloropropene	0.50 U	0.50	1	05/02/23 12:58	
cis-1,3-Dichloropropene	0.50 U	0.50	1	05/02/23 12:58	
Ethylbenzene	0.50 U	0.50	1	05/02/23 12:58	
Hexachlorobutadiene	0.50 U	0.50	1	05/02/23 12:58	
Isopropylbenzene	0.50 U	0.50	1	05/02/23 12:58	
p-Isopropyltoluene	0.50 U	0.50	1	05/02/23 12:58	
Methylene Chloride	0.50 U	0.50	1	05/02/23 12:58	
Naphthalene	0.50 U	0.50	1	05/02/23 12:58	
n-Propylbenzene	0.50 U	0.50	1	05/02/23 12:58	
Styrene	0.50 U	0.50	1	05/02/23 12:58	
1,1,1,2-Tetrachloroethane	0.50 U	0.50	1	05/02/23 12:58	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	1	05/02/23 12:58	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water

Sample Name: WAL19-Post-0423
Lab Code: R2303692-001

Service Request: R2303692
Date Collected: 04/28/23 08:10
Date Received: 04/28/23 11:44

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Tetrachloroethene	0.50 U	0.50	1	05/02/23 12:58	
Toluene	0.50 U	0.50	1	05/02/23 12:58	
1,2,4-Trichlorobenzene	0.50 U	0.50	1	05/02/23 12:58	
1,2,3-Trichlorobenzene	0.50 U	0.50	1	05/02/23 12:58	
1,1,2-Trichloroethane	0.50 U	0.50	1	05/02/23 12:58	
Trichloroethene	0.50 U	0.50	1	05/02/23 12:58	
Trichlorofluoromethane	0.50 U	0.50	1	05/02/23 12:58	
1,2,3-Trichloropropane	0.50 U	0.50	1	05/02/23 12:58	
1,3,5-Trimethylbenzene	0.50 U	0.50	1	05/02/23 12:58	
1,2,4-Trimethylbenzene	0.50 U	0.50	1	05/02/23 12:58	
Vinyl Chloride	0.50 U	0.50	1	05/02/23 12:58	
m,p-Xylenes	1.0 U	1.0	1	05/02/23 12:58	
o-Xylene	0.50 U	0.50	1	05/02/23 12:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	70 - 130	05/02/23 12:58	
1,2-Dichlorobenzene-d4	87	70 - 130	05/02/23 12:58	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water

Sample Name: WAL19-Pre-0423
Lab Code: R2303692-002

Service Request: R2303692
Date Collected: 04/28/23 08:20
Date Received: 04/28/23 11:44

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Benzene	0.50 U	0.50	1	05/02/23 13:23	
Bromobenzene	0.50 U	0.50	1	05/02/23 13:23	
Bromoform	0.50 U	0.50	1	05/02/23 13:23	
Bromochloromethane	0.50 U	0.50	1	05/02/23 13:23	
Bromodichloromethane	0.50 U	0.50	1	05/02/23 13:23	
Bromomethane	0.50 U	0.50	1	05/02/23 13:23	
Methyl tert-Butyl Ether	0.50 U	0.50	1	05/02/23 13:23	
tert-Butylbenzene	0.50 U	0.50	1	05/02/23 13:23	
sec-Butylbenzene	0.50 U	0.50	1	05/02/23 13:23	
n-Butylbenzene	0.50 U	0.50	1	05/02/23 13:23	
Carbon Tetrachloride	0.50 U	0.50	1	05/02/23 13:23	
Chlorobenzene	0.50 U	0.50	1	05/02/23 13:23	
Chloroethane	0.50 U	0.50	1	05/02/23 13:23	
Chloroform	0.50 U	0.50	1	05/02/23 13:23	
Chloromethane	0.50 U	0.50	1	05/02/23 13:23	
2-Chlorotoluene	0.50 U	0.50	1	05/02/23 13:23	
4-Chlorotoluene	0.50 U	0.50	1	05/02/23 13:23	
Dibromochloromethane	0.50 U	0.50	1	05/02/23 13:23	
Dibromomethane	0.50 U	0.50	1	05/02/23 13:23	
1,2-Dichlorobenzene	0.50 U	0.50	1	05/02/23 13:23	
1,4-Dichlorobenzene	0.50 U	0.50	1	05/02/23 13:23	
1,3-Dichlorobenzene	0.50 U	0.50	1	05/02/23 13:23	
Dichlorodifluoromethane	0.50 U	0.50	1	05/02/23 13:23	
1,1-Dichloroethane	0.50 U	0.50	1	05/02/23 13:23	
1,2-Dichloroethane	0.50 U	0.50	1	05/02/23 13:23	
1,1-Dichloroethene	0.50 U	0.50	1	05/02/23 13:23	
trans-1,2-Dichloroethene	0.50 U	0.50	1	05/02/23 13:23	
cis-1,2-Dichloroethene	1.7	0.50	1	05/02/23 13:23	
2,2-Dichloropropane	0.50 U	0.50	1	05/02/23 13:23	
1,2-Dichloropropane	0.50 U	0.50	1	05/02/23 13:23	
1,3-Dichloropropane	0.50 U	0.50	1	05/02/23 13:23	
trans-1,3-Dichloropropene	0.50 U	0.50	1	05/02/23 13:23	
cis-1,3-Dichloropropene	0.50 U	0.50	1	05/02/23 13:23	
Ethylbenzene	0.50 U	0.50	1	05/02/23 13:23	
Hexachlorobutadiene	0.50 U	0.50	1	05/02/23 13:23	
Isopropylbenzene	0.50 U	0.50	1	05/02/23 13:23	
p-Isopropyltoluene	0.50 U	0.50	1	05/02/23 13:23	
Methylene Chloride	0.50 U	0.50	1	05/02/23 13:23	
Naphthalene	0.50 U	0.50	1	05/02/23 13:23	
n-Propylbenzene	0.50 U	0.50	1	05/02/23 13:23	
Styrene	0.50 U	0.50	1	05/02/23 13:23	
1,1,1,2-Tetrachloroethane	0.50 U	0.50	1	05/02/23 13:23	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	1	05/02/23 13:23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	Service Request:	R2303692
Project:	WAL - Annual Sampling	Date Collected:	04/28/23 08:20
Sample Matrix:	Drinking Water	Date Received:	04/28/23 11:44
Sample Name:	WAL19-Pre-0423	Units:	ug/L
Lab Code:	R2303692-002	Basis:	NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Tetrachloroethene	0.50 U	0.50	1	05/02/23 13:23	
Toluene	0.50 U	0.50	1	05/02/23 13:23	
1,2,4-Trichlorobenzene	0.50 U	0.50	1	05/02/23 13:23	
1,2,3-Trichlorobenzene	0.50 U	0.50	1	05/02/23 13:23	
1,1,2-Trichloroethane	0.50 U	0.50	1	05/02/23 13:23	
Trichloroethene	2.2	0.50	1	05/02/23 13:23	
Trichlorofluoromethane	0.50 U	0.50	1	05/02/23 13:23	
1,2,3-Trichloropropane	0.50 U	0.50	1	05/02/23 13:23	
1,3,5-Trimethylbenzene	0.50 U	0.50	1	05/02/23 13:23	
1,2,4-Trimethylbenzene	0.50 U	0.50	1	05/02/23 13:23	
Vinyl Chloride	0.50 U	0.50	1	05/02/23 13:23	
m,p-Xylenes	1.0 U	1.0	1	05/02/23 13:23	
o-Xylene	0.50 U	0.50	1	05/02/23 13:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	70 - 130	05/02/23 13:23	
1,2-Dichlorobenzene-d4	87	70 - 130	05/02/23 13:23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water

Sample Name: WAL19-Inter-0423
Lab Code: R2303692-003

Service Request: R2303692
Date Collected: 04/28/23 08:30
Date Received: 04/28/23 11:44

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Benzene	0.50 U	0.50	1	05/02/23 13:49	
Bromobenzene	0.50 U	0.50	1	05/02/23 13:49	
Bromoform	0.50 U	0.50	1	05/02/23 13:49	
Bromochloromethane	0.50 U	0.50	1	05/02/23 13:49	
Bromodichloromethane	0.50 U	0.50	1	05/02/23 13:49	
Bromomethane	0.50 U	0.50	1	05/02/23 13:49	
Methyl tert-Butyl Ether	0.50 U	0.50	1	05/02/23 13:49	
tert-Butylbenzene	0.50 U	0.50	1	05/02/23 13:49	
sec-Butylbenzene	0.50 U	0.50	1	05/02/23 13:49	
n-Butylbenzene	0.50 U	0.50	1	05/02/23 13:49	
Carbon Tetrachloride	0.50 U	0.50	1	05/02/23 13:49	
Chlorobenzene	0.50 U	0.50	1	05/02/23 13:49	
Chloroethane	0.50 U	0.50	1	05/02/23 13:49	
Chloroform	0.50 U	0.50	1	05/02/23 13:49	
Chloromethane	0.50 U	0.50	1	05/02/23 13:49	
2-Chlorotoluene	0.50 U	0.50	1	05/02/23 13:49	
4-Chlorotoluene	0.50 U	0.50	1	05/02/23 13:49	
Dibromochloromethane	0.50 U	0.50	1	05/02/23 13:49	
Dibromomethane	0.50 U	0.50	1	05/02/23 13:49	
1,2-Dichlorobenzene	0.50 U	0.50	1	05/02/23 13:49	
1,4-Dichlorobenzene	0.50 U	0.50	1	05/02/23 13:49	
1,3-Dichlorobenzene	0.50 U	0.50	1	05/02/23 13:49	
Dichlorodifluoromethane	0.50 U	0.50	1	05/02/23 13:49	
1,1-Dichloroethane	0.50 U	0.50	1	05/02/23 13:49	
1,2-Dichloroethane	0.50 U	0.50	1	05/02/23 13:49	
1,1-Dichloroethene	0.50 U	0.50	1	05/02/23 13:49	
trans-1,2-Dichloroethene	0.50 U	0.50	1	05/02/23 13:49	
cis-1,2-Dichloroethene	0.50 U	0.50	1	05/02/23 13:49	
2,2-Dichloropropane	0.50 U	0.50	1	05/02/23 13:49	
1,2-Dichloropropane	0.50 U	0.50	1	05/02/23 13:49	
1,3-Dichloropropane	0.50 U	0.50	1	05/02/23 13:49	
trans-1,3-Dichloropropene	0.50 U	0.50	1	05/02/23 13:49	
cis-1,3-Dichloropropene	0.50 U	0.50	1	05/02/23 13:49	
Ethylbenzene	0.50 U	0.50	1	05/02/23 13:49	
Hexachlorobutadiene	0.50 U	0.50	1	05/02/23 13:49	
Isopropylbenzene	0.50 U	0.50	1	05/02/23 13:49	
p-Isopropyltoluene	0.50 U	0.50	1	05/02/23 13:49	
Methylene Chloride	0.50 U	0.50	1	05/02/23 13:49	
Naphthalene	0.50 U	0.50	1	05/02/23 13:49	
n-Propylbenzene	0.50 U	0.50	1	05/02/23 13:49	
Styrene	0.50 U	0.50	1	05/02/23 13:49	
1,1,1,2-Tetrachloroethane	0.50 U	0.50	1	05/02/23 13:49	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	1	05/02/23 13:49	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	Service Request:	R2303692
Project:	WAL - Annual Sampling	Date Collected:	04/28/23 08:30
Sample Matrix:	Drinking Water	Date Received:	04/28/23 11:44
Sample Name:	WAL19-Inter-0423	Units:	ug/L
Lab Code:	R2303692-003	Basis:	NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Tetrachloroethene	0.50 U	0.50	1	05/02/23 13:49	
Toluene	0.50 U	0.50	1	05/02/23 13:49	
1,2,4-Trichlorobenzene	0.50 U	0.50	1	05/02/23 13:49	
1,2,3-Trichlorobenzene	0.50 U	0.50	1	05/02/23 13:49	
1,1,2-Trichloroethane	0.50 U	0.50	1	05/02/23 13:49	
Trichloroethene	0.50 U	0.50	1	05/02/23 13:49	
Trichlorofluoromethane	0.50 U	0.50	1	05/02/23 13:49	
1,2,3-Trichloropropane	0.50 U	0.50	1	05/02/23 13:49	
1,3,5-Trimethylbenzene	0.50 U	0.50	1	05/02/23 13:49	
1,2,4-Trimethylbenzene	0.50 U	0.50	1	05/02/23 13:49	
Vinyl Chloride	0.50 U	0.50	1	05/02/23 13:49	
m,p-Xylenes	1.0 U	1.0	1	05/02/23 13:49	
o-Xylene	0.50 U	0.50	1	05/02/23 13:49	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	70 - 130	05/02/23 13:49	
1,2-Dichlorobenzene-d4	89	70 - 130	05/02/23 13:49	



QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water

Service Request: R2303692

SURROGATE RECOVERY SUMMARY
Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Sample Name	Lab Code	1,2-Dichlorobenzene-d4	4-Bromofluorobenzene
		70 - 130	70 - 130
WAL19-Post-0423	R2303692-001	87	101
WAL19-Pre-0423	R2303692-002	87	100
WAL19-Inter-0423	R2303692-003	89	101
Lab Control Sample	RQ2305144-03	89	121
Duplicate Lab Control Sample	RQ2305144-04	91	114
Method Blank	RQ2305144-05	87	106
Method Detection Limit Verification MDLV	RQ2305144-06	89	106

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water

Sample Name: Method Blank
Lab Code: RQ2305144-05

Service Request: R2303692
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Benzene	0.50 U	0.50	1	05/02/23 10:25	
Bromobenzene	0.50 U	0.50	1	05/02/23 10:25	
Bromochloromethane	0.50 U	0.50	1	05/02/23 10:25	
Bromodichloromethane	0.50 U	0.50	1	05/02/23 10:25	
Bromoform	0.50 U	0.50	1	05/02/23 10:25	
Bromomethane	0.50 U	0.50	1	05/02/23 10:25	
Methyl tert-Butyl Ether	0.50 U	0.50	1	05/02/23 10:25	
tert-Butylbenzene	0.50 U	0.50	1	05/02/23 10:25	
sec-Butylbenzene	0.50 U	0.50	1	05/02/23 10:25	
n-Butylbenzene	0.50 U	0.50	1	05/02/23 10:25	
Carbon Tetrachloride	0.50 U	0.50	1	05/02/23 10:25	
Chlorobenzene	0.50 U	0.50	1	05/02/23 10:25	
Chloroethane	0.50 U	0.50	1	05/02/23 10:25	
Chloroform	0.50 U	0.50	1	05/02/23 10:25	
Chloromethane	0.50 U	0.50	1	05/02/23 10:25	
2-Chlorotoluene	0.50 U	0.50	1	05/02/23 10:25	
4-Chlorotoluene	0.50 U	0.50	1	05/02/23 10:25	
Dibromochloromethane	0.50 U	0.50	1	05/02/23 10:25	
Dibromomethane	0.50 U	0.50	1	05/02/23 10:25	
1,2-Dichlorobenzene	0.50 U	0.50	1	05/02/23 10:25	
1,4-Dichlorobenzene	0.50 U	0.50	1	05/02/23 10:25	
1,3-Dichlorobenzene	0.50 U	0.50	1	05/02/23 10:25	
Dichlorodifluoromethane	0.50 U	0.50	1	05/02/23 10:25	
1,1-Dichloroethane	0.50 U	0.50	1	05/02/23 10:25	
1,2-Dichloroethane	0.50 U	0.50	1	05/02/23 10:25	
1,1-Dichloroethene	0.50 U	0.50	1	05/02/23 10:25	
trans-1,2-Dichloroethene	0.50 U	0.50	1	05/02/23 10:25	
cis-1,2-Dichloroethene	0.50 U	0.50	1	05/02/23 10:25	
2,2-Dichloropropane	0.50 U	0.50	1	05/02/23 10:25	
1,2-Dichloropropane	0.50 U	0.50	1	05/02/23 10:25	
1,3-Dichloropropane	0.50 U	0.50	1	05/02/23 10:25	
trans-1,3-Dichloropropene	0.50 U	0.50	1	05/02/23 10:25	
cis-1,3-Dichloropropene	0.50 U	0.50	1	05/02/23 10:25	
Ethylbenzene	0.50 U	0.50	1	05/02/23 10:25	
Hexachlorobutadiene	0.50 U	0.50	1	05/02/23 10:25	
Isopropylbenzene	0.50 U	0.50	1	05/02/23 10:25	
p-Isopropyltoluene	0.50 U	0.50	1	05/02/23 10:25	
Methylene Chloride	0.50 U	0.50	1	05/02/23 10:25	
Naphthalene	0.50 U	0.50	1	05/02/23 10:25	
n-Propylbenzene	0.50 U	0.50	1	05/02/23 10:25	
Styrene	0.50 U	0.50	1	05/02/23 10:25	
1,1,1,2-Tetrachloroethane	0.50 U	0.50	1	05/02/23 10:25	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	1	05/02/23 10:25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water

Service Request: R2303692
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2305144-05

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Tetrachloroethene	0.50 U	0.50	1	05/02/23 10:25	
Toluene	0.50 U	0.50	1	05/02/23 10:25	
1,2,4-Trichlorobenzene	0.50 U	0.50	1	05/02/23 10:25	
1,2,3-Trichlorobenzene	0.50 U	0.50	1	05/02/23 10:25	
1,1,2-Trichloroethane	0.50 U	0.50	1	05/02/23 10:25	
Trichloroethene	0.50 U	0.50	1	05/02/23 10:25	
Trichlorofluoromethane	0.50 U	0.50	1	05/02/23 10:25	
1,2,3-Trichloropropane	0.50 U	0.50	1	05/02/23 10:25	
1,3,5-Trimethylbenzene	0.50 U	0.50	1	05/02/23 10:25	
1,2,4-Trimethylbenzene	0.50 U	0.50	1	05/02/23 10:25	
Vinyl Chloride	0.50 U	0.50	1	05/02/23 10:25	
m,p-Xylenes	1.0 U	1.0	1	05/02/23 10:25	
o-Xylene	0.50 U	0.50	1	05/02/23 10:25	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	70 - 130	05/02/23 10:25	
1,2-Dichlorobenzene-d4	87	70 - 130	05/02/23 10:25	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water

Service Request: R2303692
Date Analyzed: 05/02/23

Duplicate Lab Control Sample Summary
Purgeable Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Analyte Name	Analytical Method	Lab Control Sample			Duplicate Lab Control Sample					
		RQ2305144-03	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD
Benzene	524.2	5.60	5.00	112	5.26	5.00	105	70-130	6	20
Bromobenzene	524.2	4.57	5.00	91	4.33	5.00	87	70-130	5	20
Bromochloromethane	524.2	5.03	5.00	101	4.72	5.00	94	70-130	6	20
Bromodichloromethane	524.2	5.17	5.00	103	4.85	5.00	97	70-130	6	20
Bromoform	524.2	5.02	5.00	100	4.63	5.00	93	70-130	8	20
Bromomethane	524.2	5.71	5.00	114	5.40	5.00	108	70-130	6	20
Methyl tert-Butyl Ether	524.2	4.84	5.00	97	4.62	5.00	92	70-130	5	20
tert-Butylbenzene	524.2	4.95	5.00	99	4.49	5.00	90	70-130	10	20
sec-Butylbenzene	524.2	5.03	5.00	101	4.65	5.00	93	70-130	8	20
n-Butylbenzene	524.2	5.33	5.00	107	4.78	5.00	96	70-130	11	20
Carbon Tetrachloride	524.2	5.46	5.00	109	5.13	5.00	103	70-130	6	20
Chlorobenzene	524.2	4.96	5.00	99	4.72	5.00	94	70-130	5	20
Chloroethane	524.2	5.26	5.00	105	4.82	5.00	96	70-130	9	20
Chloroform	524.2	4.82	5.00	96	4.49	5.00	90	70-130	7	20
Chloromethane	524.2	5.81	5.00	116	5.42	5.00	108	70-130	7	20
2-Chlorotoluene	524.2	5.12	5.00	102	4.88	5.00	98	70-130	5	20
4-Chlorotoluene	524.2	5.28	5.00	106	4.91	5.00	98	70-130	7	20
Dibromochloromethane	524.2	5.03	5.00	101	4.81	5.00	96	70-130	4	20
Dibromomethane	524.2	5.24	5.00	105	5.09	5.00	102	70-130	3	20
1,2-Dichlorobenzene	524.2	5.05	5.00	101	4.67	5.00	93	70-130	8	20
1,4-Dichlorobenzene	524.2	5.03	5.00	101	4.74	5.00	95	70-130	6	20
1,3-Dichlorobenzene	524.2	5.07	5.00	101	4.74	5.00	95	70-130	7	20
Dichlorodifluoromethane	524.2	4.96	5.00	99	4.37	5.00	87	70-130	13	20
1,1-Dichloroethane	524.2	5.72	5.00	114	5.44	5.00	109	70-130	5	20
1,2-Dichloroethane	524.2	5.51	5.00	110	5.29	5.00	106	70-130	4	20
1,1-Dichloroethene	524.2	5.35	5.00	107	5.04	5.00	101	70-130	6	20
trans-1,2-Dichloroethene	524.2	5.32	5.00	106	5.16	5.00	103	70-130	3	20
cis-1,2-Dichloroethene	524.2	5.23	5.00	105	5.08	5.00	102	70-130	3	20
2,2-Dichloropropane	524.2	5.39	5.00	108	5.05	5.00	101	70-130	7	20
1,2-Dichloropropane	524.2	5.59	5.00	112	5.23	5.00	105	70-130	7	20
1,3-Dichloropropane	524.2	5.25	5.00	105	5.05	5.00	101	70-130	4	20
trans-1,3-Dichloropropene	524.2	5.17	5.00	103	4.82	5.00	96	70-130	7	20
cis-1,3-Dichloropropene	524.2	5.44	5.00	109	5.02	5.00	100	70-130	8	20

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water

Service Request: R2303692
Date Analyzed: 05/02/23

Duplicate Lab Control Sample Summary
Purgeable Organic Compounds by GC/MS

Units: ug/L
Basis: NA

Lab Control Sample	Duplicate Lab Control Sample
RQ2305144-03	RQ2305144-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Ethylbenzene	524.2	5.08	5.00	102	4.45	5.00	89	70-130	13	20
Hexachlorobutadiene	524.2	4.63	5.00	93	4.10	5.00	82	70-130	12	20
Isopropylbenzene	524.2	5.07	5.00	101	4.70	5.00	94	70-130	8	20
p-Isopropyltoluene	524.2	4.75	5.00	95	4.29	5.00	86	70-130	10	20
Methylene Chloride	524.2	5.46	5.00	109	5.11	5.00	102	70-130	7	20
Naphthalene	524.2	4.63	5.00	93	3.93	5.00	79	70-130	16	20
n-Propylbenzene	524.2	5.23	5.00	105	4.77	5.00	95	70-130	9	20
Styrene	524.2	5.09	5.00	102	4.75	5.00	95	70-130	7	20
1,1,1,2-Tetrachloroethane	524.2	5.22	5.00	104	4.79	5.00	96	70-130	9	20
1,1,2,2-Tetrachloroethane	524.2	4.98	5.00	100	4.97	5.00	99	70-130	<1	20
Tetrachloroethene	524.2	4.98	5.00	100	4.69	5.00	94	70-130	6	20
Toluene	524.2	5.11	5.00	102	4.87	5.00	97	70-130	5	20
1,2,4-Trichlorobenzene	524.2	4.46	5.00	89	3.76	5.00	75	70-130	17	20
1,2,3-Trichlorobenzene	524.2	4.04	5.00	81	3.74	5.00	75	70-130	8	20
1,1,2-Trichloroethane	524.2	5.34	5.00	107	5.17	5.00	103	70-130	3	20
Trichloroethene	524.2	5.13	5.00	103	4.91	5.00	98	70-130	4	20
Trichlorofluoromethane	524.2	5.39	5.00	108	5.00	5.00	100	70-130	8	20
1,2,3-Trichloropropane	524.2	4.88	5.00	98	4.92	5.00	98	70-130	<1	20
1,3,5-Trimethylbenzene	524.2	4.94	5.00	99	4.56	5.00	91	70-130	8	20
1,2,4-Trimethylbenzene	524.2	4.86	5.00	97	4.46	5.00	89	70-130	9	20
Vinyl Chloride	524.2	4.83	5.00	97	4.52	5.00	90	70-130	7	20
m,p-Xylenes	524.2	9.93	10.0	99	9.25	10.0	93	70-130	7	20
o-Xylene	524.2	4.83	5.00	97	4.70	5.00	94	70-130	3	20



May 25, 2023

Service Request No:R2303740

Mr. Jon Brandes
On-Site Technical Services, Inc.
72 Railroad Avenue
Wellsville, NY 14895

Laboratory Results for: WAL - Annual Sampling

Dear Mr.Brandes,

Enclosed are the results of the sample(s) submitted to our laboratory May 02, 2023
For your reference, these analyses have been assigned our service request number **R2303740**.

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

A handwritten signature in black ink, appearing to read "Janice Jaeger".

Janice Jaeger
Project Manager



Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2303740
Date Received: 05/02/2023

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

One water sample was received for analysis at ALS Environmental on 05/02/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

Volatiles by GC/MS:

No significant anomalies were noted with this analysis.

A handwritten signature in black ink that appears to read "Janice Dugay".

Approved by _____

Date 05/25/2023



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: SWS1-0523	Lab ID: R2303740-001					
Analyte	Results	Flag	MDL	MRL	Units	Method
Alkalinity, Total as CaCO ₃	98.6			2.0	mg/L	SM 2320 B-1997 (2011)
Barium, Total	24		20	ug/L		6010C
Calcium, Total	26200		1000	ug/L		6010C
Carbon, Total Organic (TOC)	11.2		1.0	mg/L		SM 5310 B-2014
Chemical Oxygen Demand, Total	40.2		5.0	mg/L		410.4
Chloride	35.5		2.0	mg/L		300.0
Color, True	100		5.0	ColorUnits		SM 2120 B-2001 (2011)
Iron, Total	790		100	ug/L		6010C
Magnesium, Total	8900		1000	ug/L		6010C
Manganese, Total	45		10	ug/L		6010C
Nitrogen, Total Kjeldahl (TKN)	1.01		0.20	mg/L		351.2
pH of Color Analysis	7.79			pH Units		SM 2120 B-2001 (2011)
Sodium, Total	21200		1000	ug/L		6010C
Solids, Total Dissolved (TDS)	182		10	mg/L		SM 2540 C-2015



Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2303740

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2303740-001	SWS1-0523	5/1/2023	0845



ALS-Environmental
1565 Jefferson Rd, Bldg 300, Suite 360
Rochester, NY 14623
585.288.5380

Client: **On-Site**
72 Railroad Ave.

72 Railroad Ave.
Wellsville, NY 14895

Project Manager **Jon Brandes**

CHAIN of CUSTODY

Project: WAL - Annual Sampling

Telephone No. 585-593-1824 Email: jonb@on-sitehs.com

Page 1 of 1

Method of Shipment
ups

Sample Received Intact: Yes No

Temperature received: Ice No ice

Ice

No ice

Reling. by sampler (Sign & Print Name)

Date _____ Time _____

Received by (Sign & Print Name)

Lab Work No.

Relinquished by

Date _____ Time _____

Received by

Relinquished by

Date Time

Received by

Relinquished by

Date Time

~~Received by editor~~

Date 5/2/23 Time 09:30

R2303740
On-Site Technical Services, Inc.
WAL - Annual Sampling

5





R2303740
On-Site Technical Services, Inc.
WAL - Annual Sampling

5

Cooler Receipt and Preservation Check

Project/Client casella/ON-SITE Folder Number _____

Cooler received on 5/2/23 by: ME

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
2	Custody papers properly completed (ink, signed)?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
3	Did all bottles arrive in good condition (unbroken)?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
4	Circle: Wet Ice Dry Ice Gel packs present?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N

5a	Perchlorate samples have required headspace?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA
5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
6	Where did the bottles originate? _____	ALS/ROC CLIENT
7	Soil VOA received as:	Bulk Encore 5035set <input type="checkbox"/> NA

8. Temperature Readings Date: 5/2/23 Time: 09:50

ID: IR#12 IR#11

From: Temp Blank

Sample Bottle

Observed Temp (°C)	<u>2.8</u>	<u>4.1</u>					
Within 0-6°C?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N					
If <0°C, were samples frozen?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N						

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

& Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location:	<u>YES</u>	by: <u>ME</u>	on <u>5/2/23</u> at <u>10:00</u>
5035 samples placed in storage location:	_____	by _____	on _____ at _____ within 48 hours of sampling? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N

Cooler Breakdown/Preservation Check**: Date: 5/3/23 Time: 07:10 by: ME

9. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
10. Did all bottle labels and tags agree with custody papers? YES NO
11. Were correct containers used for the tests indicated? YES NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO N/A
13. Were dissolved metals filtered in the field? YES NO N/A

14. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
≤2	<u>225320</u>	HNO ₃	X		<u>20140189</u>	<u>04/24</u>				
≤2	<u>↓</u>	H ₂ SO ₄	X		<u>M095-15</u>	<u>01/24</u>				
<4		NaHSO ₄								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol 625, 608pest, 522	X		If +, contact PM to add Na ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃								
		ZnAcetate	-	-						
		HCl	**	**	<u>61321</u>	<u>02/25</u>				

**VOAs and 1664 Not to be tested before analysis.
Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: 031323-2AES, 23-043, 011623-1EP, 030623-2ADD, 050922-3AXH, 050922-2EFQ
Explain all Discrepancies/ Other Comments:

H₂SO₄ lot for phenol/TOC: 22208059 exp: 05/25

HPROD	BULK
HTR	FLDT
SUB	HGBF
ALS	LL3541

Labels secondary reviewed by: ME

PC Secondary Review: JW S/9/23 *significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter



Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.	+	Correlation coefficient for MSA is <0.995.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.	P	Concentration >40% difference between the two GC columns.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed ($\geq 100\%$ Difference between two GC columns).
#	Spike was diluted out.	X	See Case Narrative for discussion.
		MRL	Method Reporting Limit. Also known as:
		LOQ	Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
		MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
		LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
		ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations¹



NELAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to <https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental>

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling/**Service Request:** R2303740**Sample Name:** SWS1-0523
Lab Code: R2303740-001
Sample Matrix: Water**Date Collected:** 05/1/23
Date Received: 05/2/23

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KAWONG
350.1		MROGERSON
351.2	STALARICO	GNITAJOUPPI
410.4		SDUBE
420.4		BBOWE
6010C	CDISTEFANO	NMANSEN
8260C		KRUEST
SM 2120 B-2001(2011)		SBIRNBERG
SM 2320 B-1997(2011)		KAWONG
SM 2540 C-2015		HCASTROVINCI
SM 5210 B-2016		CCAMPBELL
SM 5310 B-2014		KWONG



INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

RIGHT SOLUTIONS | RIGHT PARTNER



Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	Service Request:	R2303740
Project:	WAL - Annual Sampling	Date Collected:	05/01/23 08:45
Sample Matrix:	Water	Date Received:	05/02/23 09:30
Sample Name:	SWS1-0523	Units:	ug/L
Lab Code:	R2303740-001	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	1	05/09/23 22:05	
Benzene	1.0 U	1.0	1	05/09/23 22:05	
Bromodichloromethane	1.0 U	1.0	1	05/09/23 22:05	
Bromoform	1.0 U	1.0	1	05/09/23 22:05	
Bromomethane	1.0 U	1.0	1	05/09/23 22:05	
2-Butanone (MEK)	5.0 U	5.0	1	05/09/23 22:05	
Carbon Disulfide	1.0 U	1.0	1	05/09/23 22:05	
Carbon Tetrachloride	1.0 U	1.0	1	05/09/23 22:05	
Chlorobenzene	1.0 U	1.0	1	05/09/23 22:05	
Chloroethane	1.0 U	1.0	1	05/09/23 22:05	
Chloroform	1.0 U	1.0	1	05/09/23 22:05	
Chloromethane	1.0 U	1.0	1	05/09/23 22:05	
Dibromochloromethane	1.0 U	1.0	1	05/09/23 22:05	
1,1-Dichloroethane	1.0 U	1.0	1	05/09/23 22:05	
1,2-Dibromoethane	1.0 U	1.0	1	05/09/23 22:05	
1,2-Dichloroethane	1.0 U	1.0	1	05/09/23 22:05	
1,1-Dichloroethene	1.0 U	1.0	1	05/09/23 22:05	
cis-1,2-Dichloroethene	1.0 U	1.0	1	05/09/23 22:05	
trans-1,2-Dichloroethene	1.0 U	1.0	1	05/09/23 22:05	
1,2-Dichloropropane	1.0 U	1.0	1	05/09/23 22:05	
cis-1,3-Dichloropropene	1.0 U	1.0	1	05/09/23 22:05	
trans-1,3-Dichloropropene	1.0 U	1.0	1	05/09/23 22:05	
Ethylbenzene	1.0 U	1.0	1	05/09/23 22:05	
2-Hexanone	5.0 U	5.0	1	05/09/23 22:05	
Methylene Chloride	1.0 U	1.0	1	05/09/23 22:05	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	1	05/09/23 22:05	
Styrene	1.0 U	1.0	1	05/09/23 22:05	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	1	05/09/23 22:05	
Tetrachloroethene	1.0 U	1.0	1	05/09/23 22:05	
Toluene	1.0 U	1.0	1	05/09/23 22:05	
1,1,1-Trichloroethane	1.0 U	1.0	1	05/09/23 22:05	
1,1,2-Trichloroethane	1.0 U	1.0	1	05/09/23 22:05	
Trichloroethene	1.0 U	1.0	1	05/09/23 22:05	
Vinyl Chloride	1.0 U	1.0	1	05/09/23 22:05	
o-Xylene	1.0 U	1.0	1	05/09/23 22:05	
m,p-Xylenes	2.0 U	2.0	1	05/09/23 22:05	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc. **Service Request:** R2303740
Project: WAL - Annual Sampling **Date Collected:** 05/01/23 08:45
Sample Matrix: Water **Date Received:** 05/02/23 09:30

Sample Name: SWS1-0523 **Units:** ug/L
Lab Code: R2303740-001 **Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	85 - 122	05/09/23 22:05	
Toluene-d8	100	87 - 121	05/09/23 22:05	
Dibromofluoromethane	101	80 - 116	05/09/23 22:05	



Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	Service Request:	R2303740
Project:	WAL - Annual Sampling	Date Collected:	05/01/23 08:45
Sample Matrix:	Water	Date Received:	05/02/23 09:30
Sample Name:	SWS1-0523	Basis:	NA
Lab Code:	R2303740-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	05/05/23 16:58	05/04/23	
Barium, Total	6010C	24	ug/L	20	1	05/05/23 16:58	05/04/23	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	05/05/23 16:58	05/04/23	
Calcium, Total	6010C	26200	ug/L	1000	1	05/05/23 16:58	05/04/23	
Chromium, Total	6010C	10 U	ug/L	10	1	05/05/23 16:58	05/04/23	
Copper, Total	6010C	20 U	ug/L	20	1	05/05/23 16:58	05/04/23	
Iron, Total	6010C	790	ug/L	100	1	05/05/23 16:58	05/04/23	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	05/05/23 16:58	05/04/23	
Magnesium, Total	6010C	8900	ug/L	1000	1	05/05/23 16:58	05/04/23	
Manganese, Total	6010C	45	ug/L	10	1	05/05/23 16:58	05/04/23	
Nickel, Total	6010C	40 U	ug/L	40	1	05/05/23 16:58	05/04/23	
Potassium, Total	6010C	2000 U	ug/L	2000	1	05/05/23 16:58	05/04/23	
Selenium, Total	6010C	10 U	ug/L	10	1	05/05/23 16:58	05/04/23	
Sodium, Total	6010C	21200	ug/L	1000	1	05/05/23 16:58	05/04/23	
Zinc, Total	6010C	20 U	ug/L	20	1	05/05/23 16:58	05/04/23	



General Chemistry

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: SWS1-0523
Lab Code: R2303740-001

Service Request: R2303740
Date Collected: 05/01/23 08:45
Date Received: 05/02/23 09:30

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Date Q
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	98.6	mg/L	2.0	1	05/09/23 16:35	NA	
Ammonia as Nitrogen, undistilled	350.1	0.050 U	mg/L	0.050	1	05/09/23 23:13	NA	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2016	2.0 U	mg/L	2.0	1	05/03/23 08:33	NA	
Bromide	300.0	1.0 U	mg/L	1.0	10	05/03/23 06:23	NA	
Carbon, Total Organic (TOC)	SM 5310 B-2014	11.2	mg/L	1.0	1	05/24/23 08:52	NA	
Chemical Oxygen Demand, Total	410.4	40.2	mg/L	5.0	1	05/04/23 15:25	NA	
Chloride	300.0	35.5	mg/L	2.0	10	05/03/23 06:23	NA	
Color, True	SM 2120 B-2001(2011)	100	ColorUnits	5.0	5	05/02/23 13:10	NA	
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	05/03/23 06:23	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	1.01	mg/L	0.20	1	05/17/23 10:08	05/16/23	
pH of Color Analysis	SM 2120 B-2001(2011)	7.79	pH Units	-	5	05/02/23 15:18	NA	
Phenolics, Total Recoverable	420.4	0.0050 U	mg/L	0.0050	1	05/08/23 13:30	NA	
Solids, Total Dissolved (TDS)	SM 2540 C-2015	182	mg/L	10	1	05/05/23 10:30	NA	
Sulfate	300.0	2.0 U	mg/L	2.0	10	05/03/23 06:23	NA	



QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2303740

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85 - 122	Dibromofluoromethane 80 - 116	Toluene-d8 87 - 121
SWS1-0523	R2303740-001	101	101	100
Lab Control Sample	RQ2305544-03	104	105	105
Method Blank	RQ2305544-04	98	99	97

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: RQ2305544-04

Service Request: R2303740
Date Collected: NA
Date Received: NA
Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	1	05/09/23 15:47	
Benzene	1.0 U	1.0	1	05/09/23 15:47	
Bromodichloromethane	1.0 U	1.0	1	05/09/23 15:47	
Bromoform	1.0 U	1.0	1	05/09/23 15:47	
Bromomethane	1.0 U	1.0	1	05/09/23 15:47	
2-Butanone (MEK)	5.0 U	5.0	1	05/09/23 15:47	
Carbon Disulfide	1.0 U	1.0	1	05/09/23 15:47	
Carbon Tetrachloride	1.0 U	1.0	1	05/09/23 15:47	
Chlorobenzene	1.0 U	1.0	1	05/09/23 15:47	
Chloroethane	1.0 U	1.0	1	05/09/23 15:47	
Chloroform	1.0 U	1.0	1	05/09/23 15:47	
Chloromethane	1.0 U	1.0	1	05/09/23 15:47	
Dibromochloromethane	1.0 U	1.0	1	05/09/23 15:47	
1,1-Dichloroethane	1.0 U	1.0	1	05/09/23 15:47	
1,2-Dibromoethane	1.0 U	1.0	1	05/09/23 15:47	
1,2-Dichloroethane	1.0 U	1.0	1	05/09/23 15:47	
1,1-Dichloroethene	1.0 U	1.0	1	05/09/23 15:47	
cis-1,2-Dichloroethene	1.0 U	1.0	1	05/09/23 15:47	
trans-1,2-Dichloroethene	1.0 U	1.0	1	05/09/23 15:47	
1,2-Dichloropropane	1.0 U	1.0	1	05/09/23 15:47	
cis-1,3-Dichloropropene	1.0 U	1.0	1	05/09/23 15:47	
trans-1,3-Dichloropropene	1.0 U	1.0	1	05/09/23 15:47	
Ethylbenzene	1.0 U	1.0	1	05/09/23 15:47	
2-Hexanone	5.0 U	5.0	1	05/09/23 15:47	
Methylene Chloride	1.0 U	1.0	1	05/09/23 15:47	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	1	05/09/23 15:47	
Styrene	1.0 U	1.0	1	05/09/23 15:47	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	1	05/09/23 15:47	
Tetrachloroethene	1.0 U	1.0	1	05/09/23 15:47	
Toluene	1.0 U	1.0	1	05/09/23 15:47	
1,1,1-Trichloroethane	1.0 U	1.0	1	05/09/23 15:47	
1,1,2-Trichloroethane	1.0 U	1.0	1	05/09/23 15:47	
Trichloroethene	1.0 U	1.0	1	05/09/23 15:47	
Vinyl Chloride	1.0 U	1.0	1	05/09/23 15:47	
o-Xylene	1.0 U	1.0	1	05/09/23 15:47	
m,p-Xylenes	2.0 U	2.0	1	05/09/23 15:47	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc. **Service Request:** R2303740
Project: WAL - Annual Sampling **Date Collected:** NA
Sample Matrix: Water **Date Received:** NA

Sample Name: Method Blank **Units:** ug/L
Lab Code: RQ2305544-04 **Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	05/09/23 15:47	
Toluene-d8	97	87 - 121	05/09/23 15:47	
Dibromofluoromethane	99	80 - 116	05/09/23 15:47	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2303740
Date Analyzed: 05/09/23

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2305544-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	18.3	20.0	92	40-161
Benzene	8260C	20.1	20.0	100	79-119
Bromodichloromethane	8260C	19.6	20.0	98	81-123
Bromoform	8260C	19.6	20.0	98	65-146
Bromomethane	8260C	21.1	20.0	106	42-166
2-Butanone (MEK)	8260C	17.5	20.0	87	61-137
Carbon Disulfide	8260C	19.2	20.0	96	66-128
Carbon Tetrachloride	8260C	19.8	20.0	99	70-127
Chlorobenzene	8260C	19.4	20.0	97	80-121
Chloroethane	8260C	19.2	20.0	96	62-131
Chloroform	8260C	20.2	20.0	101	79-120
Chloromethane	8260C	21.4	20.0	107	65-135
Dibromochloromethane	8260C	19.4	20.0	97	72-128
1,1-Dichloroethane	8260C	20.8	20.0	104	80-124
1,2-Dibromoethane	8260C	19.3	20.0	97	82-127
1,2-Dichloroethane	8260C	19.7	20.0	98	71-127
1,1-Dichloroethene	8260C	20.5	20.0	102	71-118
cis-1,2-Dichloroethene	8260C	19.7	20.0	99	80-121
trans-1,2-Dichloroethene	8260C	20.3	20.0	102	73-118
1,2-Dichloropropane	8260C	19.7	20.0	98	80-119
cis-1,3-Dichloropropene	8260C	20.9	20.0	105	77-122
trans-1,3-Dichloropropene	8260C	20.9	20.0	104	71-133
Ethylbenzene	8260C	19.9	20.0	99	76-120
2-Hexanone	8260C	18.9	20.0	94	63-124
Methylene Chloride	8260C	20.2	20.0	101	73-122
4-Methyl-2-pentanone (MIBK)	8260C	18.9	20.0	95	66-124
Styrene	8260C	20.2	20.0	101	80-124
1,1,2,2-Tetrachloroethane	8260C	18.7	20.0	93	78-126
Tetrachloroethene	8260C	20.3	20.0	101	72-125
Toluene	8260C	19.9	20.0	99	79-119
1,1,1-Trichloroethane	8260C	20.2	20.0	101	75-125
1,1,2-Trichloroethane	8260C	19.0	20.0	95	82-121
Trichloroethene	8260C	19.9	20.0	100	74-122

Printed 5/25/2023 3:33:02 PM

Superset Reference:23-0000662009 rev 00

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2303740
Date Analyzed: 05/09/23

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units: ug/L
Basis: NA

Lab Control Sample
RQ2305544-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	8260C	18.2	20.0	91	74-159
o-Xylene	8260C	19.6	20.0	98	79-123
m,p-Xylenes	8260C	40.0	40.0	100	80-126



Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc. **Service Request:** R2303740
Project: WAL - Annual Sampling **Date Collected:** NA
Sample Matrix: Water **Date Received:** NA
Sample Name: Method Blank **Basis:** NA
Lab Code: R2303740-MB

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	05/05/23 16:03	05/04/23	
Barium, Total	6010C	20 U	ug/L	20	1	05/05/23 16:03	05/04/23	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	05/05/23 16:03	05/04/23	
Calcium, Total	6010C	1000 U	ug/L	1000	1	05/05/23 16:03	05/04/23	
Chromium, Total	6010C	10 U	ug/L	10	1	05/05/23 16:03	05/04/23	
Copper, Total	6010C	20 U	ug/L	20	1	05/05/23 16:03	05/04/23	
Iron, Total	6010C	100 U	ug/L	100	1	05/05/23 16:03	05/04/23	
Lead, Total	6010C	5.0 U	ug/L	5.0	1	05/05/23 16:03	05/04/23	
Magnesium, Total	6010C	1000 U	ug/L	1000	1	05/05/23 16:03	05/04/23	
Manganese, Total	6010C	10 U	ug/L	10	1	05/05/23 16:03	05/04/23	
Nickel, Total	6010C	40 U	ug/L	40	1	05/05/23 16:03	05/04/23	
Potassium, Total	6010C	2000 U	ug/L	2000	1	05/05/23 16:03	05/04/23	
Selenium, Total	6010C	10 U	ug/L	10	1	05/05/23 16:03	05/04/23	
Sodium, Total	6010C	1000 U	ug/L	1000	1	05/05/23 16:03	05/04/23	
Zinc, Total	6010C	20 U	ug/L	20	1	05/05/23 16:03	05/04/23	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2303740
Date Analyzed: 05/05/23

Lab Control Sample Summary
Inorganic Parameters

Units: ug/L
Basis: NA

Lab Control Sample
R2303740-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic, Total	6010C	34.1	40	85	80-120
Barium, Total	6010C	2030	2000	101	80-120
Cadmium, Total	6010C	52.1	50.0	104	80-120
Calcium, Total	6010C	2200	2000	108	80-120
Chromium, Total	6010C	206	200	103	80-120
Copper, Total	6010C	241	250	97	80-120
Iron, Total	6010C	970	1000	97	80-120
Lead, Total	6010C	509	500	102	80-120
Magnesium, Total	6010C	2000	2000	99	80-120
Manganese, Total	6010C	501	500	100	80-120
Nickel, Total	6010C	529	500	106	80-120
Potassium, Total	6010C	18800	20000	94	80-120
Selenium, Total	6010C	1010	1010	100	80-120
Sodium, Total	6010C	20000	20000	100	80-120
Zinc, Total	6010C	504	500	101	80-120



General Chemistry

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	Service Request:	R2303740
Project:	WAL - Annual Sampling	Date Collected:	NA
Sample Matrix:	Water	Date Received:	NA
Sample Name:	Method Blank	Basis:	NA
Lab Code:	R2303740-MB		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	2.0 U	mg/L	2.0	1	05/09/23 12:25	NA	
Ammonia as Nitrogen, undistilled	350.1	0.050 U	mg/L	0.050	1	05/09/23 22:49	NA	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2016	2.0 U	mg/L	2.0	1	05/03/23 18:40	NA	
Bromide	300.0	0.10 U	mg/L	0.10	1	05/03/23 05:48	NA	
Carbon, Total Organic (TOC)	SM 5310 B-2014	1.0 U	mg/L	1.0	1	05/24/23 03:05	NA	
Chemical Oxygen Demand, Total	410.4	5.0 U	mg/L	5.0	1	05/04/23 15:25	NA	
Chloride	300.0	0.20 U	mg/L	0.20	1	05/03/23 05:48	NA	
Color, True	SM 2120 B-2001(2011)	1.0	ColorUnits	1.0	1	05/02/23 13:10	NA	
Nitrate as Nitrogen	300.0	0.10 U	mg/L	0.10	1	05/03/23 05:48	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.20 U	mg/L	0.20	1	05/17/23 10:03	05/16/23	
Phenolics, Total Recoverable	420.4	0.0050 U	mg/L	0.0050	1	05/08/23 12:23	NA	
Solids, Total Dissolved (TDS)	SM 2540 C-2015	10 U	mg/L	10	1	05/05/23 10:30	NA	
Sulfate	300.0	0.20 U	mg/L	0.20	1	05/03/23 05:48	NA	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2303740
Date Collected: 05/01/23
Date Received: 05/02/23
Date Analyzed: 05/24/23

Duplicate Matrix Spike Summary
Carbon, Total Organic (TOC)

Sample Name: SWS1-0523 **Units:** mg/L
Lab Code: R2303740-001 **Basis:** NA
Analysis Method: SM 5310 B-2014

Analyte Name	Matrix Spike				Duplicate Matrix Spike				% Rec Limits	RPD	RPD Limit
	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec				
Carbon, Total Organic (TOC)	11.2	33.4	25.0	89	33.1	25.0	88	48-135	<1	20	

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2303740
Date Collected: 05/01/23
Date Received: 05/02/23
Date Analyzed: 05/09/23

Replicate Sample Summary General Chemistry Parameters

Sample Name: SWS1-0523 **Units:** mg/L
Lab Code: R2303740-001 **Basis:** NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R2303740-001DUP Result	Average	RPD	RPD Limit
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	2.0	98.6	98.7	98.7	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2303740
Date Analyzed: 05/03/23 - 05/24/23

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Lab Control Sample
R2303740-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	27.0	25.0	108	80-120
Ammonia as Nitrogen, undistilled	350.1	0.245	0.250	98	90-110
Biochemical Oxygen Demand (BOD)	SM 5210 B-2016	176	198	89	85-115
Bromide	300.0	0.99	1.00	99	90-110
Carbon, Total Organic (TOC)	SM 5310 B-2014	23.3	25.0	93	80-121
Chemical Oxygen Demand, Total	410.4	51.1	50.0	102	90-110
Chloride	300.0	2.03	2.00	102	90-110
Nitrate as Nitrogen	300.0	0.99	1.00	99	90-110
Nitrogen, Total Kjeldahl (TKN)	351.2	2.46	2.50	98	90-110
Phenolics, Total Recoverable	420.4	0.0402	0.0400	101	90-110
Solids, Total Dissolved (TDS)	SM 2540 C-2015	886	914	97	90-110
Sulfate	300.0	1.97	2.00	99	90-110



December 14, 2023

Service Request No:R2309891

Mr. Jon Brandes
On-Site Technical Services, Inc.
72 Railroad Avenue
Wellsville, NY 14895

Laboratory Results for: WAL - Annual Sampling

Dear Mr.Brandes,

Enclosed are the results of the sample(s) submitted to our laboratory October 25, 2023
For your reference, these analyses have been assigned our service request number **R2309891**.

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

A handwritten signature in black ink, appearing to read "Janice Jaeger".

Janice Jaeger
Project Manager



Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water, Drinking Water

Service Request: R2309891
Date Received: 10/25/2023

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Twenty water, drinking water samples were received for analysis at ALS Environmental on 10/25/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Semivolatiles by GC/MS:

No significant anomalies were noted with this analysis.

Metals:

Method 200.8, 11/02/2023: The upper control limit was exceeded for Selenium in the CRDL. The field samples analyzed in this sequence did not contain the analyte in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

General Chemistry:

No significant anomalies were noted with this analysis.

Subcontracted Analytical Parameters:

No significant anomalies were noted with this analysis.

Volatiles by GC/MS:

Method 524.2, 11/02/2023: The lower control limit for the spike recovery of the Laboratory Control Sample Duplicate (LCSD) was exceeded for one or more analytes. There were no detections of the analytes in the associated field samples. The discrepancy associated with reduced recovery equates to a potential low bias. Additional analysis of the associated field samples was not performed because the analytes are within acceptable limits in the LCS. There were no detections of the analytes and they analytes are flagged in the LCS Summary.

Method 8260C, 11/04/2023: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) above the MRL in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Method 8260C, 11/05/2023: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) above the MRL in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Method 8260C, 11/05/2023: The lower control limit for the spike recovery of the Laboratory Control Sample (LCS) was exceeded for one or more analyte. There were no detections of the analyte(s) in the associated field samples. The discrepancy associated with reduced recovery equates to a potential low bias. The analytes affected are flagged in the LCS Summary.

A handwritten signature in black ink, appearing to read "James J. Saylor".

Approved by _____

Date 12/14/2023



Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling

Service Request: R2309891

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2309891-001	WAL2-1023	10/23/2023	1220
R2309891-002	MW11S-1023	10/24/2023	0910
R2309891-003	MW3D-1023	10/24/2023	1035
R2309891-004	MW4D-1023	10/24/2023	1210
R2309891-005	WAL19Post-1023	10/24/2023	1300
R2309891-006	WAL19Inter-1023	10/24/2023	1310
R2309891-007	WAL19Pre-1023	10/24/2023	1315
R2309891-008	MW18D-1023	10/24/2023	1340
R2309891-009	WAL1-1023	10/24/2023	1400
R2309891-010	MW18S-1023	10/24/2023	1450
R2309891-011	MH33-1023	10/25/2023	0950
R2309891-012	LS-1023	10/25/2023	1025
R2309891-013	MH32-1023	10/25/2023	1105
R2309891-014	CW3A-1023	10/25/2023	1320
R2309891-015	CW4A-1023	10/25/2023	0845
R2309891-016	FB1-1023	10/25/2023	0855
R2309891-017	CW4B-1023	10/25/2023	1020
R2309891-018	CW3B-1023	10/25/2023	1150
R2309891-019	MW17S-1023	10/25/2023	1440
R2309891-020	Trip Blank	10/25/2023	



ALS-Environmental
1565 Jefferson Rd, Bldg 300, Suite 360
Rochester, NY 14623
585.288.5380

Client: On-Site		CHAIN of CUSTODY		Page <u>1</u> of <u>2</u>
72 Railroad Ave. Wellsville, NY 14895		Project: WAL - Annual Sampling		Method of Shipment <i>on-site</i>
Project Manager	Jon Brandes	Telephone No. 585-593-1824	Email: jonb@on-sitehs.com	
				Special Detection Limit/Reporting

Sample I.D.	Lab Sample No.	Matrix		Prsv.		Sampling Date	Sampling Time	GC;MS VOA's 8260 (HCl)		GC;MS VOA's 524.2 (C6H8O6)		T-Metals (HNO3)		TDS, NO3, Br, Cl, SO4 (NP) (SW/SED)		NH3, TKN, COD (H2SO4) (SW/SED)		Total Color (NP) (SW/SED)		BOD (NP) (SW/SED)		Alkalinity (NP) (SW/SED)		TDS, NO3 (NP) (Manhole)					
		No. of Containers	Soil	Water	Air	Other	Yes	No																					
WAL2-1023	1	1		X		10/23/23	1220					X																	
MW115-1023	8	X		X		10/24/23	0910	X		X																			
MW3D-1023	4	X		X		10/24/23	1035	X		X																			
MW4D-1023	4	X		X		10/24/23	1210	X		X																			
WAL19Post-1023	3	X		X		10/24/23	1300		X																				
WAL19Inter-1023	3	X		X		10/24/23	1310			X																			
WAL19Pre-1023	3	X		X		10/24/23	1315			X																			
MW18D-1023	4	X		X		10/24/23	1340	X		X																			
WAL2-1023	4	X		X		10/24/23	1400			X																			
MW18S-1023	4	X		X		10/24/23	1450	X		X																			
MH33-1023	5	X		XX		10/25/23	0950	X		X																			
LS-1023	4	X		X		10/25/23	1025	X		X																			
MH32-1023	5	X		XX		10/25/23	1105	X		X																			
CW3A-1023	4	X		X		10/25/23	1320	X		X																			
Sample Received Intact:	Yes	No	Temperature received:					Ice		No ice																			
Relinq. by sampler (Sign & Print Name)	<i>Jon Brandes</i>	Date	Time	Received by (Sign & Print Name)				<i>Randy Dine</i> 10/25/23 1714				<i>Randy Dine</i> 10/25/23 1714				ALS				Lab Work No.									
Relinquished by		Date	Time	Received by																									
Relinquished by		Date	Time	Received by																									
Relinquished by		Date	Time	Received by laboratory				Date		Time																			

R2309891
On-Site Technical Services, Inc.
WAL - Annual Sampling

5





ALS-Environmental
1565 Jefferson Rd, Bldg 300, Suite 360
Rochester, NY 14623
585.288.5380

Client: **On-Site**
72 Railroad Ave.
Wellsville, NY 14895

CHAIN of CUSTODY

P: 2 of 2

Project: WAL - Semiannual Sampling

Method of Segment

on-site

Special Detection Limit/Reporting

Sample I.D.

B E M A D K S

Sample Received Intact: Yes No

Temperature received: Ice No ice

Being sampled (Sign & Print Name)

Beijing, by sampler (Sign & Print Name)

 Scott Wilson

Date	Time
------	------

Received by (Sign & Print Name)

Lab Work No

Relinquished by

Date Time

Received by

Relinquished by

Date Time

Received by

Relinquished by

Date Time

Received by laboratory

Date _____ Time _____



Cooler Receipt and Preserva

R2309891
On-Site Technical Services, Inc.
WAL - Annual Sampling

5

Project/Client

Folder Number

Cooler received on 10/25/23by: RR

1	Were Custody seals on outside of cooler?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
2	Custody papers properly completed (ink, signed)?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
3	Did all bottles arrive in good condition (unbroken)?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
4	Circle: Wet Ice Dry Ice Gel packs present?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N

COURIER: ALS UPS FEDEX VELOCITY CLIENT

5a	Perchlorate samples have required headspace?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
6	Where did the bottles originate?	<u>ALS/ROC</u> <u>CLIENT</u>
7	Soil VOA received as:	Bulk Encore 5035set <input type="checkbox"/> NA

8. Temperature Readings Date: 10/25/23 Time: 1746

ID: IR#10 IR#11

From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>5.2</u>	<u>6.9</u>	<u>4.8</u>				
Within 0-6°C?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N			
If <0°C, were samples frozen?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N

If out of Temperature, note packing/ice condition: Ice melted Poorly Packed (described below) Same Day Rule

& Client Approval to Run Samples: Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location:	<u>RR</u>	by <u>RR</u>	on <u>10/25/23</u> at <u>1755</u>
5035 samples placed in storage location:	by _____	on _____ at _____	within 48 hours of sampling? <input type="checkbox"/> Y <input type="checkbox"/> N

Cooler Breakdown/Preservation Check**: Date: 10/26/23 Time: 1215 by: RR

9. Were all bottle labels complete (i.e. analysis, preservation, etc.)?

 YES NO

10. Did all bottle labels and tags agree with custody papers?

 YES NO

11. Were correct containers used for the tests indicated?

 YES NO

12. Were 5035 vials acceptable (no extra labels, not leaking)?

 YES NO N/A

13. Were dissolved metals filtered in the field?

 YES NO N/A14. Air Samples: Cassettes / Tubes Intact Y N with MS Y N Canisters Pressurized Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved?	Lot Received	Exp. Adjusted	Sample ID	Vol. Added	Lot Added	Final pH
			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>						
>12		NaOH							
≤2	<u>206722</u>	HNO ₃	<input checked="" type="checkbox"/>	<u>24002372</u>	<u>5/25</u>				
≤2		H ₂ SO ₄							
<4		NaHSO ₄							
5-9		For 608pest		No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522		If +, contact PM to add Na ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃							
		ZnAcetate	- -						
		HCl	** **	<u>23040119</u>	<u>2/26</u>				

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: 090423-2AES, 082823-3AXH, 061923-3EAI, 090423-2ERG,
Explain all Discrepancies/ Other Comments: Bottle labels, 060622-1AMLabels secondary reviewed by: RR
PC Secondary Review: SWL 11/3/23

HPROD	BULK
HTR	FLDT
SUB	HGBF
ALS	LL3541

*significant air bubbles: VOA > 5-6 mm - WC > 1-in. diameter



Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.	+	Correlation coefficient for MSA is <0.995.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.	P	Concentration >40% difference between the two GC columns.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed ($\geq 100\%$ Difference between two GC columns).
#	Spike was diluted out.	X	See Case Narrative for discussion.
		MRL	Method Reporting Limit. Also known as:
		LOQ	Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
		MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
		LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
		ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations¹



NE LAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory. To verify NH accredited analytes, go to <https://www4.des.state.nh.us/CertifiedLabs/Certified-Method.aspx>.

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling

Service Request: R2309891

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
524.2	Drinking Water	m,p-Xylenes
524.2	Drinking Water	o-Xylene

ALS Group USA, Corp.
dba ALS Environmental
Analyst Summary report

Sample Name: WAL2-1023 **Date Collected:** 10/23/23
Lab Code: R2309891-001 **Date Received:** 10/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CDISTEFANO	NMANSEN

Sample Name: MW11S-1023 **Date Collected:** 10/24/23
Lab Code: R2309891-002 **Date Received:** 10/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CDISTEFANO	NMANSEN
8260C		FNAEGLER

Sample Name: MW3D-1023 **Date Collected:** 10/24/23
Lab Code: R2309891-003 **Date Received:** 10/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CDISTEFANO	NMANSEN
8260C		FNAEGLER

Sample Name: MW4D-1023 **Date Collected:** 10/24/23
Lab Code: R2309891-004 **Date Received:** 10/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CDISTEFANO	NMANSEN
8260C		FNAEGLER

ALS Group USA, Corp.
dba ALS Environmental

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling/

Sample Name: WAL19Post-1023 **Date Collected:** 10/24/23
Lab Code: R2309891-005 **Date Received:** 10/25/23
Sample Matrix: Drinking Water

Sample Name: WAL19Inter-1023 **Date Collected:** 10/24/23
Lab Code: R2309891-006 **Date Received:** 10/25/23
Sample Matrix: Drinking Water

Analysis Method Extracted/Digested By Analyzed By
524.2 KRUEST

Sample Name: WAL19Pre-1023 **Date Collected:** 10/24/23
Lab Code: R2309891-007 **Date Received:** 10/25/23
Sample Matrix: Drinking Water

Analysis Method Extracted/Digested By Analyzed By
524.2 KRUEST

Sample Name: MW18D-1023 **Date Collected:** 10/24/23
Lab Code: R2309891-008 **Date Received:** 10/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CDISTEFANO	NMANSEN
8260C		FNAEGLER

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling/

Sample Name: WAL1-1023 **Date Collected:** 10/24/23
Lab Code: R2309891-009 **Date Received:** 10/25/23
Sample Matrix: Drinking Water

Analysis Method	Extracted/Digested By	Analyzed By
200.7	CDISTEFANO	NMANSEN
200.8	CDISTEFANO	MMCMAHON
524.2		KRUEST

Sample Name: MW18S-1023 **Date Collected:** 10/24/23
Lab Code: R2309891-010 **Date Received:** 10/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CDISTEFANO	NMANSEN
8260C		FNAEGLER

Sample Name: MH33-1023 **Date Collected:** 10/25/23
Lab Code: R2309891-011 **Date Received:** 10/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KAWONG
6010C	CDISTEFANO	NMANSEN
8260C		FNAEGLER
SM 2540 C-2015		HCASTROVINCI

Sample Name: LS-1023 **Date Collected:** 10/25/23
Lab Code: R2309891-012 **Date Received:** 10/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CDISTEFANO	NMANSEN
8260C		FNAEGLER

ALS Group USA, Corp.
dba ALS Environmental
Analyst Summary report

Sample Name: MH32-1023 **Date Collected:** 10/25/23
Lab Code: R2309891-013 **Date Received:** 10/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
300.0		KAWONG
6010C	CDISTEFANO	NMANSEN
8260C		FNAEGLER
SM 2540 C-2015		HCASTROVINCI

Sample Name: MH32-1023 **Date Collected:** 10/25/23
Lab Code: R2309891-013.R01 **Date Received:** 10/25/23
Sample Matrix: Water

Sample Name: CW3A-1023 **Date Collected:** 10/25/23
Lab Code: R2309891-014 **Date Received:** 10/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CDISTEFANO	NMANSEN
8260C		FNAEGLER

Sample Name: CW4A-1023 **Date Collected:** 10/25/23
Lab Code: R2309891-015 **Date Received:** 10/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1633	CMORGAN	PSALYARDS
6010C	CDISTEFANO	NMANSEN
8260C		FNAEGLER
8270D SIM	AFELSER	AMOSES

ALS Group USA, Corp.
dba ALS Environmental
Analyst Summary report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling/

Sample Name: FB1-1023 **Date Collected:** 10/25/23
Lab Code: R2309891-016 **Date Received:** 10/25/23
Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By
1633 CMORGAN PSALYARDS

Sample Name: CW4B-1023 **Date Collected:** 10/25/23
Lab Code: R2309891-017 **Date Received:** 10/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1633	CMORGAN	PSALYARDS
6010C	CDISTEFANO	NMANSEN
8260C		FNAEGLER
8270D SIM	AFELSER	AMOSES

Sample Name: CW3B-1023 **Date Collected:** 10/25/23
Lab Code: R2309891-018 **Date Received:** 10/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1633	CMORGAN	PSALYARDS
6010C	CDISTEFANO	NMANSEN
8260C		FNAEGLER
8270D SIM	AFELSER	AMOSES

Sample Name: MW17S-1023 **Date Collected:** 10/25/23
Lab Code: R2309891-019 **Date Received:** 10/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
1633	CMORGAN	PSALYARDS
6010C	CDISTEFANO	NMANSEN
8260C		FNAEGLER
8270D SIM	AFELSER	AMOSES

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling/

Service Request: R2309891

Sample Name: Trip Blank
Lab Code: R2309891-020
Sample Matrix: Water

Date Collected: 10/25/23
Date Received: 10/25/23

Analysis Method
8260C

Extracted/Digested By

Analyzed By
FNAEGLER



INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

RIGHT SOLUTIONS | RIGHT PARTNER



Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water
Sample Name: WAL19Post-1023
Lab Code: R2309891-005

Service Request: R2309891
Date Collected: 10/24/23 13:00
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	0.50 U	0.50	0.20	1	11/02/23 16:36	
Bromobenzene	0.50 U	0.50	0.20	1	11/02/23 16:36	
Bromoform	0.50 U	0.50	0.20	1	11/02/23 16:36	
Bromochloromethane	0.50 U	0.50	0.20	1	11/02/23 16:36	
Bromodichloromethane	0.50 U	0.50	0.20	1	11/02/23 16:36	
Bromomethane	0.50 U	0.50	0.20	1	11/02/23 16:36	
Methyl tert-Butyl Ether	0.50 U	0.50	0.20	1	11/02/23 16:36	
tert-Butylbenzene	0.50 U	0.50	0.20	1	11/02/23 16:36	
sec-Butylbenzene	0.50 U	0.50	0.20	1	11/02/23 16:36	
n-Butylbenzene	0.50 U	0.50	0.20	1	11/02/23 16:36	
Carbon Tetrachloride	0.50 U	0.50	0.20	1	11/02/23 16:36	
Chlorobenzene	0.50 U	0.50	0.20	1	11/02/23 16:36	
Chloroethane	0.50 U	0.50	0.23	1	11/02/23 16:36	
Chloroform	0.50 U	0.50	0.44	1	11/02/23 16:36	
Chloromethane	0.50 U	0.50	0.20	1	11/02/23 16:36	
2-Chlorotoluene	0.50 U	0.50	0.20	1	11/02/23 16:36	
4-Chlorotoluene	0.50 U	0.50	0.20	1	11/02/23 16:36	
Dibromochloromethane	0.50 U	0.50	0.20	1	11/02/23 16:36	
Dibromomethane	0.50 U	0.50	0.20	1	11/02/23 16:36	
1,2-Dichlorobenzene	0.50 U	0.50	0.20	1	11/02/23 16:36	
1,4-Dichlorobenzene	0.50 U	0.50	0.20	1	11/02/23 16:36	
1,3-Dichlorobenzene	0.50 U	0.50	0.20	1	11/02/23 16:36	
Dichlorodifluoromethane	0.50 U	0.50	0.20	1	11/02/23 16:36	
1,1-Dichloroethane	0.50 U	0.50	0.20	1	11/02/23 16:36	
1,2-Dichloroethane	0.50 U	0.50	0.20	1	11/02/23 16:36	
1,1-Dichloroethene	0.50 U	0.50	0.20	1	11/02/23 16:36	
trans-1,2-Dichloroethene	0.50 U	0.50	0.20	1	11/02/23 16:36	
cis-1,2-Dichloroethene	0.50 U	0.50	0.20	1	11/02/23 16:36	
2,2-Dichloropropane	0.50 U	0.50	0.20	1	11/02/23 16:36	
1,2-Dichloropropane	0.50 U	0.50	0.20	1	11/02/23 16:36	
1,3-Dichloropropane	0.50 U	0.50	0.20	1	11/02/23 16:36	
trans-1,3-Dichloropropene	0.50 U	0.50	0.20	1	11/02/23 16:36	
cis-1,3-Dichloropropene	0.50 U	0.50	0.20	1	11/02/23 16:36	
Ethylbenzene	0.50 U	0.50	0.20	1	11/02/23 16:36	
Hexachlorobutadiene	0.50 U	0.50	0.20	1	11/02/23 16:36	
Isopropylbenzene	0.50 U	0.50	0.20	1	11/02/23 16:36	
p-Isopropyltoluene	0.50 U	0.50	0.20	1	11/02/23 16:36	
Methylene Chloride	0.50 U	0.50	0.20	1	11/02/23 16:36	
Naphthalene	0.50 U	0.50	0.23	1	11/02/23 16:36	
n-Propylbenzene	0.50 U	0.50	0.20	1	11/02/23 16:36	
Styrene	0.50 U	0.50	0.20	1	11/02/23 16:36	
1,1,1,2-Tetrachloroethane	0.50 U	0.50	0.20	1	11/02/23 16:36	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.20	1	11/02/23 16:36	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water
Sample Name: WAL19Post-1023
Lab Code: R2309891-005

Service Request: R2309891
Date Collected: 10/24/23 13:00
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene	0.50 U	0.50	0.20	1	11/02/23 16:36	
Toluene	0.50 U	0.50	0.20	1	11/02/23 16:36	
1,2,4-Trichlorobenzene	0.50 U	0.50	0.24	1	11/02/23 16:36	
1,2,3-Trichlorobenzene	0.50 U	0.50	0.22	1	11/02/23 16:36	
1,1,2-Trichloroethane	0.50 U	0.50	0.20	1	11/02/23 16:36	
Trichloroethene	0.50 U	0.50	0.20	1	11/02/23 16:36	
Trichlorofluoromethane	0.50 U	0.50	0.20	1	11/02/23 16:36	
1,2,3-Trichloropropane	0.50 U	0.50	0.20	1	11/02/23 16:36	
1,3,5-Trimethylbenzene	0.50 U	0.50	0.20	1	11/02/23 16:36	
1,2,4-Trimethylbenzene	0.50 U	0.50	0.20	1	11/02/23 16:36	
Vinyl Chloride	0.50 U	0.50	0.22	1	11/02/23 16:36	
m,p-Xylenes	1.0 U	1.0	0.20	1	11/02/23 16:36	
o-Xylene	0.50 U	0.50	0.20	1	11/02/23 16:36	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	85	70 - 130	11/02/23 16:36	
1,2-Dichlorobenzene-d4	91	70 - 130	11/02/23 16:36	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water
Sample Name: WAL19Inter-1023
Lab Code: R2309891-006

Service Request: R2309891
Date Collected: 10/24/23 13:10
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	0.50 U	0.50	0.20	1	11/02/23 17:01	
Bromobenzene	0.50 U	0.50	0.20	1	11/02/23 17:01	
Bromoform	0.50 U	0.50	0.20	1	11/02/23 17:01	
Bromochloromethane	0.50 U	0.50	0.20	1	11/02/23 17:01	
Bromodichloromethane	0.50 U	0.50	0.20	1	11/02/23 17:01	
Bromomethane	0.50 U	0.50	0.20	1	11/02/23 17:01	
Methyl tert-Butyl Ether	0.50 U	0.50	0.20	1	11/02/23 17:01	
tert-Butylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:01	
sec-Butylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:01	
n-Butylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:01	
Carbon Tetrachloride	0.50 U	0.50	0.20	1	11/02/23 17:01	
Chlorobenzene	0.50 U	0.50	0.20	1	11/02/23 17:01	
Chloroethane	0.50 U	0.50	0.23	1	11/02/23 17:01	
Chloroform	0.50 U	0.50	0.44	1	11/02/23 17:01	
Chloromethane	0.50 U	0.50	0.20	1	11/02/23 17:01	
2-Chlorotoluene	0.50 U	0.50	0.20	1	11/02/23 17:01	
4-Chlorotoluene	0.50 U	0.50	0.20	1	11/02/23 17:01	
Dibromochloromethane	0.50 U	0.50	0.20	1	11/02/23 17:01	
Dibromomethane	0.50 U	0.50	0.20	1	11/02/23 17:01	
1,2-Dichlorobenzene	0.50 U	0.50	0.20	1	11/02/23 17:01	
1,4-Dichlorobenzene	0.50 U	0.50	0.20	1	11/02/23 17:01	
1,3-Dichlorobenzene	0.50 U	0.50	0.20	1	11/02/23 17:01	
Dichlorodifluoromethane	0.50 U	0.50	0.20	1	11/02/23 17:01	
1,1-Dichloroethane	0.50 U	0.50	0.20	1	11/02/23 17:01	
1,2-Dichloroethane	0.50 U	0.50	0.20	1	11/02/23 17:01	
1,1-Dichloroethene	0.50 U	0.50	0.20	1	11/02/23 17:01	
trans-1,2-Dichloroethene	0.50 U	0.50	0.20	1	11/02/23 17:01	
cis-1,2-Dichloroethene	0.50 U	0.50	0.20	1	11/02/23 17:01	
2,2-Dichloropropane	0.50 U	0.50	0.20	1	11/02/23 17:01	
1,2-Dichloropropane	0.50 U	0.50	0.20	1	11/02/23 17:01	
1,3-Dichloropropane	0.50 U	0.50	0.20	1	11/02/23 17:01	
trans-1,3-Dichloropropene	0.50 U	0.50	0.20	1	11/02/23 17:01	
cis-1,3-Dichloropropene	0.50 U	0.50	0.20	1	11/02/23 17:01	
Ethylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:01	
Hexachlorobutadiene	0.50 U	0.50	0.20	1	11/02/23 17:01	
Isopropylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:01	
p-Isopropyltoluene	0.50 U	0.50	0.20	1	11/02/23 17:01	
Methylene Chloride	0.50 U	0.50	0.20	1	11/02/23 17:01	
Naphthalene	0.50 U	0.50	0.23	1	11/02/23 17:01	
n-Propylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:01	
Styrene	0.50 U	0.50	0.20	1	11/02/23 17:01	
1,1,1,2-Tetrachloroethane	0.50 U	0.50	0.20	1	11/02/23 17:01	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.20	1	11/02/23 17:01	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water
Sample Name: WAL19Inter-1023
Lab Code: R2309891-006

Service Request: R2309891
Date Collected: 10/24/23 13:10
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene	0.50 U	0.50	0.20	1	11/02/23 17:01	
Toluene	0.50 U	0.50	0.20	1	11/02/23 17:01	
1,2,4-Trichlorobenzene	0.50 U	0.50	0.24	1	11/02/23 17:01	
1,2,3-Trichlorobenzene	0.50 U	0.50	0.22	1	11/02/23 17:01	
1,1,2-Trichloroethane	0.50 U	0.50	0.20	1	11/02/23 17:01	
Trichloroethene	0.50 U	0.50	0.20	1	11/02/23 17:01	
Trichlorofluoromethane	0.50 U	0.50	0.20	1	11/02/23 17:01	
1,2,3-Trichloropropane	0.50 U	0.50	0.20	1	11/02/23 17:01	
1,3,5-Trimethylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:01	
1,2,4-Trimethylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:01	
Vinyl Chloride	0.50 U	0.50	0.22	1	11/02/23 17:01	
m,p-Xylenes	1.0 U	1.0	0.20	1	11/02/23 17:01	
o-Xylene	0.50 U	0.50	0.20	1	11/02/23 17:01	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	84	70 - 130	11/02/23 17:01	
1,2-Dichlorobenzene-d4	87	70 - 130	11/02/23 17:01	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water
Sample Name: WAL19Pre-1023
Lab Code: R2309891-007

Service Request: R2309891
Date Collected: 10/24/23 13:15
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	0.50 U	0.50	0.20	1	11/02/23 17:26	
Bromobenzene	0.50 U	0.50	0.20	1	11/02/23 17:26	
Bromoform	0.50 U	0.50	0.20	1	11/02/23 17:26	
Bromochloromethane	0.50 U	0.50	0.20	1	11/02/23 17:26	
Bromodichloromethane	0.50 U	0.50	0.20	1	11/02/23 17:26	
Bromomethane	0.50 U	0.50	0.20	1	11/02/23 17:26	
Methyl tert-Butyl Ether	0.50 U	0.50	0.20	1	11/02/23 17:26	
tert-Butylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:26	
sec-Butylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:26	
n-Butylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:26	
Carbon Tetrachloride	0.50 U	0.50	0.20	1	11/02/23 17:26	
Chlorobenzene	0.50 U	0.50	0.20	1	11/02/23 17:26	
Chloroethane	0.50 U	0.50	0.23	1	11/02/23 17:26	
Chloroform	0.50 U	0.50	0.44	1	11/02/23 17:26	
Chloromethane	0.50 U	0.50	0.20	1	11/02/23 17:26	
2-Chlorotoluene	0.50 U	0.50	0.20	1	11/02/23 17:26	
4-Chlorotoluene	0.50 U	0.50	0.20	1	11/02/23 17:26	
Dibromochloromethane	0.50 U	0.50	0.20	1	11/02/23 17:26	
Dibromomethane	0.50 U	0.50	0.20	1	11/02/23 17:26	
1,2-Dichlorobenzene	0.50 U	0.50	0.20	1	11/02/23 17:26	
1,4-Dichlorobenzene	0.50 U	0.50	0.20	1	11/02/23 17:26	
1,3-Dichlorobenzene	0.50 U	0.50	0.20	1	11/02/23 17:26	
Dichlorodifluoromethane	0.50 U	0.50	0.20	1	11/02/23 17:26	
1,1-Dichloroethane	0.50 U	0.50	0.20	1	11/02/23 17:26	
1,2-Dichloroethane	0.50 U	0.50	0.20	1	11/02/23 17:26	
1,1-Dichloroethene	0.50 U	0.50	0.20	1	11/02/23 17:26	
trans-1,2-Dichloroethene	0.50 U	0.50	0.20	1	11/02/23 17:26	
cis-1,2-Dichloroethene	1.7	0.50	0.20	1	11/02/23 17:26	
2,2-Dichloropropane	0.50 U	0.50	0.20	1	11/02/23 17:26	
1,2-Dichloropropane	0.50 U	0.50	0.20	1	11/02/23 17:26	
1,3-Dichloropropane	0.50 U	0.50	0.20	1	11/02/23 17:26	
trans-1,3-Dichloropropene	0.50 U	0.50	0.20	1	11/02/23 17:26	
cis-1,3-Dichloropropene	0.50 U	0.50	0.20	1	11/02/23 17:26	
Ethylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:26	
Hexachlorobutadiene	0.50 U	0.50	0.20	1	11/02/23 17:26	
Isopropylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:26	
p-Isopropyltoluene	0.50 U	0.50	0.20	1	11/02/23 17:26	
Methylene Chloride	0.50 U	0.50	0.20	1	11/02/23 17:26	
Naphthalene	0.50 U	0.50	0.23	1	11/02/23 17:26	
n-Propylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:26	
Styrene	0.50 U	0.50	0.20	1	11/02/23 17:26	
1,1,1,2-Tetrachloroethane	0.50 U	0.50	0.20	1	11/02/23 17:26	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.20	1	11/02/23 17:26	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water
Sample Name: WAL19Pre-1023
Lab Code: R2309891-007

Service Request: R2309891
Date Collected: 10/24/23 13:15
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene	0.50 U	0.50	0.20	1	11/02/23 17:26	
Toluene	0.50 U	0.50	0.20	1	11/02/23 17:26	
1,2,4-Trichlorobenzene	0.50 U	0.50	0.24	1	11/02/23 17:26	
1,2,3-Trichlorobenzene	0.50 U	0.50	0.22	1	11/02/23 17:26	
1,1,2-Trichloroethane	0.50 U	0.50	0.20	1	11/02/23 17:26	
Trichloroethene	2.2	0.50	0.20	1	11/02/23 17:26	
Trichlorofluoromethane	0.50 U	0.50	0.20	1	11/02/23 17:26	
1,2,3-Trichloropropane	0.50 U	0.50	0.20	1	11/02/23 17:26	
1,3,5-Trimethylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:26	
1,2,4-Trimethylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:26	
Vinyl Chloride	0.50 U	0.50	0.22	1	11/02/23 17:26	
m,p-Xylenes	1.0 U	1.0	0.20	1	11/02/23 17:26	
o-Xylene	0.50 U	0.50	0.20	1	11/02/23 17:26	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	80	70 - 130	11/02/23 17:26	
1,2-Dichlorobenzene-d4	85	70 - 130	11/02/23 17:26	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water
Sample Name: WAL1-1023
Lab Code: R2309891-009

Service Request: R2309891
Date Collected: 10/24/23 14:00
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	0.50 U	0.50	0.20	1	11/02/23 17:50	
Bromobenzene	0.50 U	0.50	0.20	1	11/02/23 17:50	
Bromoform	0.50 U	0.50	0.20	1	11/02/23 17:50	
Bromochloromethane	0.50 U	0.50	0.20	1	11/02/23 17:50	
Bromodichloromethane	0.50 U	0.50	0.20	1	11/02/23 17:50	
Bromomethane	0.50 U	0.50	0.20	1	11/02/23 17:50	
Methyl tert-Butyl Ether	0.50 U	0.50	0.20	1	11/02/23 17:50	
tert-Butylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:50	
sec-Butylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:50	
n-Butylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:50	
Carbon Tetrachloride	0.50 U	0.50	0.20	1	11/02/23 17:50	
Chlorobenzene	0.50 U	0.50	0.20	1	11/02/23 17:50	
Chloroethane	0.50 U	0.50	0.23	1	11/02/23 17:50	
Chloroform	0.50 U	0.50	0.44	1	11/02/23 17:50	
Chloromethane	0.50 U	0.50	0.20	1	11/02/23 17:50	
2-Chlorotoluene	0.50 U	0.50	0.20	1	11/02/23 17:50	
4-Chlorotoluene	0.50 U	0.50	0.20	1	11/02/23 17:50	
Dibromochloromethane	0.50 U	0.50	0.20	1	11/02/23 17:50	
Dibromomethane	0.50 U	0.50	0.20	1	11/02/23 17:50	
1,2-Dichlorobenzene	0.50 U	0.50	0.20	1	11/02/23 17:50	
1,4-Dichlorobenzene	0.50 U	0.50	0.20	1	11/02/23 17:50	
1,3-Dichlorobenzene	0.50 U	0.50	0.20	1	11/02/23 17:50	
Dichlorodifluoromethane	0.50 U	0.50	0.20	1	11/02/23 17:50	
1,1-Dichloroethane	0.50 U	0.50	0.20	1	11/02/23 17:50	
1,2-Dichloroethane	0.50 U	0.50	0.20	1	11/02/23 17:50	
1,1-Dichloroethene	0.50 U	0.50	0.20	1	11/02/23 17:50	
trans-1,2-Dichloroethene	0.50 U	0.50	0.20	1	11/02/23 17:50	
cis-1,2-Dichloroethene	0.50 U	0.50	0.20	1	11/02/23 17:50	
2,2-Dichloropropane	0.50 U	0.50	0.20	1	11/02/23 17:50	
1,2-Dichloropropane	0.50 U	0.50	0.20	1	11/02/23 17:50	
1,3-Dichloropropane	0.50 U	0.50	0.20	1	11/02/23 17:50	
trans-1,3-Dichloropropene	0.50 U	0.50	0.20	1	11/02/23 17:50	
cis-1,3-Dichloropropene	0.50 U	0.50	0.20	1	11/02/23 17:50	
Ethylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:50	
Hexachlorobutadiene	0.50 U	0.50	0.20	1	11/02/23 17:50	
Isopropylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:50	
p-Isopropyltoluene	0.50 U	0.50	0.20	1	11/02/23 17:50	
Methylene Chloride	0.50 U	0.50	0.20	1	11/02/23 17:50	
Naphthalene	0.50 U	0.50	0.23	1	11/02/23 17:50	
n-Propylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:50	
Styrene	0.50 U	0.50	0.20	1	11/02/23 17:50	
1,1,1,2-Tetrachloroethane	0.50 U	0.50	0.20	1	11/02/23 17:50	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.20	1	11/02/23 17:50	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water

Sample Name: WAL1-1023
Lab Code: R2309891-009

Service Request: R2309891
Date Collected: 10/24/23 14:00
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene	0.50 U	0.50	0.20	1	11/02/23 17:50	
Toluene	0.50 U	0.50	0.20	1	11/02/23 17:50	
1,2,4-Trichlorobenzene	0.50 U	0.50	0.24	1	11/02/23 17:50	
1,2,3-Trichlorobenzene	0.50 U	0.50	0.22	1	11/02/23 17:50	
1,1,2-Trichloroethane	0.50 U	0.50	0.20	1	11/02/23 17:50	
Trichloroethene	0.50 U	0.50	0.20	1	11/02/23 17:50	
Trichlorofluoromethane	0.50 U	0.50	0.20	1	11/02/23 17:50	
1,2,3-Trichloropropane	0.50 U	0.50	0.20	1	11/02/23 17:50	
1,3,5-Trimethylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:50	
1,2,4-Trimethylbenzene	0.50 U	0.50	0.20	1	11/02/23 17:50	
Vinyl Chloride	0.50 U	0.50	0.22	1	11/02/23 17:50	
m,p-Xylenes	1.0 U	1.0	0.20	1	11/02/23 17:50	
o-Xylene	0.50 U	0.50	0.20	1	11/02/23 17:50	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	70 - 130	11/02/23 17:50	
1,2-Dichlorobenzene-d4	91	70 - 130	11/02/23 17:50	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	10/24/23 09:10
Sample Matrix:	Water	Date Received:	10/25/23 17:14
Sample Name:	MW11S-1023	Units:	ug/L
Lab Code:	R2309891-002	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	100 U	100	100	20	11/05/23 00:19	
Benzene	20 U	20	4.0	20	11/05/23 00:19	
Bromodichloromethane	20 U	20	4.0	20	11/05/23 00:19	
Bromoform	20 U	20	5.0	20	11/05/23 00:19	
Bromomethane	20 U	20	14	20	11/05/23 00:19	
2-Butanone (MEK)	100 U	100	16	20	11/05/23 00:19	
Carbon Disulfide	20 U	20	8.4	20	11/05/23 00:19	
Carbon Tetrachloride	20 U	20	6.8	20	11/05/23 00:19	
Chlorobenzene	20 U	20	4.0	20	11/05/23 00:19	
Chloroethane	20 U	20	4.6	20	11/05/23 00:19	
Chloroform	20 U	20	11	20	11/05/23 00:19	
Chloromethane	20 U	20	16	20	11/05/23 00:19	
Dibromochloromethane	20 U	20	4.0	20	11/05/23 00:19	
1,1-Dichloroethane	20 U	20	4.0	20	11/05/23 00:19	
1,2-Dibromoethane	20 U	20	4.0	20	11/05/23 00:19	
1,2-Dichloroethane	20 U	20	4.0	20	11/05/23 00:19	
1,1-Dichloroethene	20 U	20	4.0	20	11/05/23 00:19	
cis-1,2-Dichloroethene	260	20	4.6	20	11/05/23 00:19	
trans-1,2-Dichloroethene	20 U	20	4.0	20	11/05/23 00:19	
1,2-Dichloropropane	20 U	20	4.0	20	11/05/23 00:19	
cis-1,3-Dichloropropene	20 U	20	4.0	20	11/05/23 00:19	
trans-1,3-Dichloropropene	20 U	20	4.6	20	11/05/23 00:19	
Ethylbenzene	20 U	20	4.0	20	11/05/23 00:19	
2-Hexanone	100 U	100	4.0	20	11/05/23 00:19	
Methylene Chloride	20 U	20	13	20	11/05/23 00:19	
4-Methyl-2-pentanone (MIBK)	100 U	100	4.0	20	11/05/23 00:19	
Styrene	20 U	20	4.0	20	11/05/23 00:19	
1,1,2,2-Tetrachloroethane	20 U	20	4.0	20	11/05/23 00:19	
Tetrachloroethene	20 U	20	4.2	20	11/05/23 00:19	
Toluene	20 U	20	4.0	20	11/05/23 00:19	
1,1,1-Trichloroethane	20 U	20	4.0	20	11/05/23 00:19	
1,1,2-Trichloroethane	20 U	20	4.0	20	11/05/23 00:19	
Trichloroethene	2200	20	4.0	20	11/05/23 00:19	
Vinyl Chloride	8.2 J	20	4.0	20	11/05/23 00:19	
o-Xylene	20 U	20	4.0	20	11/05/23 00:19	
m,p-Xylenes	40 U	40	4.0	20	11/05/23 00:19	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling **Date Collected:** 10/24/23 09:10
Sample Matrix: Water **Date Received:** 10/25/23 17:14

Sample Name: MW11S-1023 **Units:** ug/L
Lab Code: R2309891-002 **Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	11/05/23 00:19	
Toluene-d8	95	87 - 121	11/05/23 00:19	
Dibromofluoromethane	93	80 - 116	11/05/23 00:19	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: MW3D-1023
Lab Code: R2309891-003

Service Request: R2309891
Date Collected: 10/24/23 10:35
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/04/23 19:52	
Benzene	1.0 U	1.0	0.20	1	11/04/23 19:52	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/04/23 19:52	
Bromoform	1.0 U	1.0	0.25	1	11/04/23 19:52	
Bromomethane	1.0 U	1.0	0.70	1	11/04/23 19:52	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/04/23 19:52	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/04/23 19:52	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/04/23 19:52	
Chlorobenzene	1.0 U	1.0	0.20	1	11/04/23 19:52	
Chloroethane	1.0 U	1.0	0.23	1	11/04/23 19:52	
Chloroform	1.0 U	1.0	0.51	1	11/04/23 19:52	
Chloromethane	1.0 U	1.0	0.80	1	11/04/23 19:52	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/04/23 19:52	
1,1-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 19:52	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/04/23 19:52	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 19:52	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 19:52	
cis-1,2-Dichloroethene	2.2	1.0	0.23	1	11/04/23 19:52	
trans-1,2-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 19:52	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/04/23 19:52	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/04/23 19:52	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/04/23 19:52	
Ethylbenzene	1.0 U	1.0	0.20	1	11/04/23 19:52	
2-Hexanone	5.0 U	5.0	0.20	1	11/04/23 19:52	
Methylene Chloride	1.0 U	1.0	0.65	1	11/04/23 19:52	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/04/23 19:52	
Styrene	1.0 U	1.0	0.20	1	11/04/23 19:52	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/04/23 19:52	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/04/23 19:52	
Toluene	1.0 U	1.0	0.20	1	11/04/23 19:52	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 19:52	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 19:52	
Trichloroethene	1.9	1.0	0.20	1	11/04/23 19:52	
Vinyl Chloride	1.0 U	1.0	0.20	1	11/04/23 19:52	
o-Xylene	1.0 U	1.0	0.20	1	11/04/23 19:52	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/04/23 19:52	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling **Date Collected:** 10/24/23 10:35
Sample Matrix: Water **Date Received:** 10/25/23 17:14

Sample Name: MW3D-1023 **Units:** ug/L
Lab Code: R2309891-003 **Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	11/04/23 19:52	
Toluene-d8	95	87 - 121	11/04/23 19:52	
Dibromofluoromethane	94	80 - 116	11/04/23 19:52	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: MW4D-1023
Lab Code: R2309891-004

Service Request: R2309891
Date Collected: 10/24/23 12:10
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/04/23 23:13	
Benzene	0.48 J	1.0	0.20	1	11/04/23 23:13	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/04/23 23:13	
Bromoform	1.0 U	1.0	0.25	1	11/04/23 23:13	
Bromomethane	1.0 U	1.0	0.70	1	11/04/23 23:13	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/04/23 23:13	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/04/23 23:13	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/04/23 23:13	
Chlorobenzene	1.0 U	1.0	0.20	1	11/04/23 23:13	
Chloroethane	0.94 J	1.0	0.23	1	11/04/23 23:13	
Chloroform	1.0 U	1.0	0.51	1	11/04/23 23:13	
Chloromethane	1.0 U	1.0	0.80	1	11/04/23 23:13	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/04/23 23:13	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/04/23 23:13	
1,1-Dichloroethane	0.30 J	1.0	0.20	1	11/04/23 23:13	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 23:13	
1,1-Dichloroethene	0.25 J	1.0	0.20	1	11/04/23 23:13	
cis-1,2-Dichloroethene	190	1.0	0.23	1	11/04/23 23:13	
trans-1,2-Dichloroethene	1.5	1.0	0.20	1	11/04/23 23:13	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/04/23 23:13	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/04/23 23:13	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/04/23 23:13	
Ethylbenzene	1.0 U	1.0	0.20	1	11/04/23 23:13	
2-Hexanone	5.0 U	5.0	0.20	1	11/04/23 23:13	
Methylene Chloride	1.0 U	1.0	0.65	1	11/04/23 23:13	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/04/23 23:13	
Styrene	1.0 U	1.0	0.20	1	11/04/23 23:13	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/04/23 23:13	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/04/23 23:13	
Toluene	1.0 U	1.0	0.20	1	11/04/23 23:13	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 23:13	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 23:13	
Trichloroethene	17	1.0	0.20	1	11/04/23 23:13	
Vinyl Chloride	93	1.0	0.20	1	11/04/23 23:13	
o-Xylene	1.0 U	1.0	0.20	1	11/04/23 23:13	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/04/23 23:13	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling **Date Collected:** 10/24/23 12:10
Sample Matrix: Water **Date Received:** 10/25/23 17:14

Sample Name: MW4D-1023 **Units:** ug/L
Lab Code: R2309891-004 **Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	11/04/23 23:13	
Toluene-d8	94	87 - 121	11/04/23 23:13	
Dibromofluoromethane	93	80 - 116	11/04/23 23:13	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: MW18D-1023
Lab Code: R2309891-008

Service Request: R2309891
Date Collected: 10/24/23 13:40
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/04/23 20:15	
Benzene	1.0 U	1.0	0.20	1	11/04/23 20:15	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/04/23 20:15	
Bromoform	1.0 U	1.0	0.25	1	11/04/23 20:15	
Bromomethane	1.0 U	1.0	0.70	1	11/04/23 20:15	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/04/23 20:15	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/04/23 20:15	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/04/23 20:15	
Chlorobenzene	1.0 U	1.0	0.20	1	11/04/23 20:15	
Chloroethane	1.0 U	1.0	0.23	1	11/04/23 20:15	
Chloroform	1.0 U	1.0	0.51	1	11/04/23 20:15	
Chloromethane	1.0 U	1.0	0.80	1	11/04/23 20:15	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/04/23 20:15	
1,1-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 20:15	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/04/23 20:15	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 20:15	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 20:15	
cis-1,2-Dichloroethene	1.0 U	1.0	0.23	1	11/04/23 20:15	
trans-1,2-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 20:15	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/04/23 20:15	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/04/23 20:15	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/04/23 20:15	
Ethylbenzene	1.0 U	1.0	0.20	1	11/04/23 20:15	
2-Hexanone	5.0 U	5.0	0.20	1	11/04/23 20:15	
Methylene Chloride	1.0 U	1.0	0.65	1	11/04/23 20:15	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/04/23 20:15	
Styrene	1.0 U	1.0	0.20	1	11/04/23 20:15	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/04/23 20:15	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/04/23 20:15	
Toluene	1.0 U	1.0	0.20	1	11/04/23 20:15	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 20:15	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 20:15	
Trichloroethene	1.0 U	1.0	0.20	1	11/04/23 20:15	
Vinyl Chloride	1.0 U	1.0	0.20	1	11/04/23 20:15	
o-Xylene	1.0 U	1.0	0.20	1	11/04/23 20:15	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/04/23 20:15	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling **Date Collected:** 10/24/23 13:40
Sample Matrix: Water **Date Received:** 10/25/23 17:14

Sample Name: MW18D-1023 **Units:** ug/L
Lab Code: R2309891-008 **Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	11/04/23 20:15	
Toluene-d8	94	87 - 121	11/04/23 20:15	
Dibromofluoromethane	93	80 - 116	11/04/23 20:15	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: MW18S-1023
Lab Code: R2309891-010

Service Request: R2309891
Date Collected: 10/24/23 14:50
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/04/23 20:37	
Benzene	1.0 U	1.0	0.20	1	11/04/23 20:37	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/04/23 20:37	
Bromoform	1.0 U	1.0	0.25	1	11/04/23 20:37	
Bromomethane	1.0 U	1.0	0.70	1	11/04/23 20:37	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/04/23 20:37	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/04/23 20:37	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/04/23 20:37	
Chlorobenzene	1.0 U	1.0	0.20	1	11/04/23 20:37	
Chloroethane	1.0 U	1.0	0.23	1	11/04/23 20:37	
Chloroform	1.0 U	1.0	0.51	1	11/04/23 20:37	
Chloromethane	1.0 U	1.0	0.80	1	11/04/23 20:37	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/04/23 20:37	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/04/23 20:37	
1,1-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 20:37	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 20:37	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 20:37	
cis-1,2-Dichloroethene	1.8	1.0	0.23	1	11/04/23 20:37	
trans-1,2-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 20:37	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/04/23 20:37	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/04/23 20:37	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/04/23 20:37	
Ethylbenzene	1.0 U	1.0	0.20	1	11/04/23 20:37	
2-Hexanone	5.0 U	5.0	0.20	1	11/04/23 20:37	
Methylene Chloride	1.0 U	1.0	0.65	1	11/04/23 20:37	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/04/23 20:37	
Styrene	1.0 U	1.0	0.20	1	11/04/23 20:37	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/04/23 20:37	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/04/23 20:37	
Toluene	1.0 U	1.0	0.20	1	11/04/23 20:37	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 20:37	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 20:37	
Trichloroethene	1.5	1.0	0.20	1	11/04/23 20:37	
Vinyl Chloride	1.0 U	1.0	0.20	1	11/04/23 20:37	
o-Xylene	1.0 U	1.0	0.20	1	11/04/23 20:37	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/04/23 20:37	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Sample Name: MW18S-1023
Lab Code: R2309891-010

Service Request: R2309891
Date Collected: 10/24/23 14:50
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	11/04/23 20:37	
Toluene-d8	94	87 - 121	11/04/23 20:37	
Dibromofluoromethane	93	80 - 116	11/04/23 20:37	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: MH33-1023
Lab Code: R2309891-011

Service Request: R2309891
Date Collected: 10/25/23 09:50
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/04/23 20:59	
Benzene	1.0 U	1.0	0.20	1	11/04/23 20:59	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/04/23 20:59	
Bromoform	1.0 U	1.0	0.25	1	11/04/23 20:59	
Bromomethane	1.0 U	1.0	0.70	1	11/04/23 20:59	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/04/23 20:59	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/04/23 20:59	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/04/23 20:59	
Chlorobenzene	1.0 U	1.0	0.20	1	11/04/23 20:59	
Chloroethane	1.0 U	1.0	0.23	1	11/04/23 20:59	
Chloroform	1.0 U	1.0	0.51	1	11/04/23 20:59	
Chloromethane	1.0 U	1.0	0.80	1	11/04/23 20:59	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/04/23 20:59	
1,1-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 20:59	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/04/23 20:59	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 20:59	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 20:59	
cis-1,2-Dichloroethene	180	1.0	0.23	1	11/04/23 20:59	
trans-1,2-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 20:59	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/04/23 20:59	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/04/23 20:59	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/04/23 20:59	
Ethylbenzene	1.0 U	1.0	0.20	1	11/04/23 20:59	
2-Hexanone	5.0 U	5.0	0.20	1	11/04/23 20:59	
Methylene Chloride	1.0 U	1.0	0.65	1	11/04/23 20:59	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/04/23 20:59	
Styrene	1.0 U	1.0	0.20	1	11/04/23 20:59	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/04/23 20:59	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/04/23 20:59	
Toluene	1.0 U	1.0	0.20	1	11/04/23 20:59	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 20:59	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 20:59	
Trichloroethene	170	1.0	0.20	1	11/04/23 20:59	
Vinyl Chloride	0.52 J	1.0	0.20	1	11/04/23 20:59	
o-Xylene	1.0 U	1.0	0.20	1	11/04/23 20:59	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/04/23 20:59	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Sample Name: MH33-1023
Lab Code: R2309891-011

Service Request: R2309891
Date Collected: 10/25/23 09:50
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	11/04/23 20:59	
Toluene-d8	94	87 - 121	11/04/23 20:59	
Dibromofluoromethane	93	80 - 116	11/04/23 20:59	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: LS-1023
Lab Code: R2309891-012

Service Request: R2309891
Date Collected: 10/25/23 10:25
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/04/23 21:21	
Benzene	1.0 U	1.0	0.20	1	11/04/23 21:21	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/04/23 21:21	
Bromoform	1.0 U	1.0	0.25	1	11/04/23 21:21	
Bromomethane	1.0 U	1.0	0.70	1	11/04/23 21:21	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/04/23 21:21	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/04/23 21:21	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/04/23 21:21	
Chlorobenzene	1.0 U	1.0	0.20	1	11/04/23 21:21	
Chloroethane	1.0 U	1.0	0.23	1	11/04/23 21:21	
Chloroform	1.0 U	1.0	0.51	1	11/04/23 21:21	
Chloromethane	1.0 U	1.0	0.80	1	11/04/23 21:21	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/04/23 21:21	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/04/23 21:21	
1,1-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 21:21	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 21:21	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 21:21	
cis-1,2-Dichloroethene	3.2	1.0	0.23	1	11/04/23 21:21	
trans-1,2-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 21:21	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/04/23 21:21	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/04/23 21:21	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/04/23 21:21	
Ethylbenzene	1.0 U	1.0	0.20	1	11/04/23 21:21	
2-Hexanone	5.0 U	5.0	0.20	1	11/04/23 21:21	
Methylene Chloride	1.0 U	1.0	0.65	1	11/04/23 21:21	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/04/23 21:21	
Styrene	1.0 U	1.0	0.20	1	11/04/23 21:21	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/04/23 21:21	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/04/23 21:21	
Toluene	1.0 U	1.0	0.20	1	11/04/23 21:21	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 21:21	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 21:21	
Trichloroethene	1.1	1.0	0.20	1	11/04/23 21:21	
Vinyl Chloride	1.0 U	1.0	0.20	1	11/04/23 21:21	
o-Xylene	1.0 U	1.0	0.20	1	11/04/23 21:21	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/04/23 21:21	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Sample Name: LS-1023
Lab Code: R2309891-012

Service Request: R2309891
Date Collected: 10/25/23 10:25
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85 - 122	11/04/23 21:21	
Toluene-d8	92	87 - 121	11/04/23 21:21	
Dibromofluoromethane	91	80 - 116	11/04/23 21:21	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: MH32-1023
Lab Code: R2309891-013

Service Request: R2309891
Date Collected: 10/25/23 11:05
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	50 U	50	50	10	11/04/23 23:35	
Benzene	2.6 J	10	2.0	10	11/04/23 23:35	
Bromodichloromethane	10 U	10	2.0	10	11/04/23 23:35	
Bromoform	10 U	10	2.5	10	11/04/23 23:35	
Bromomethane	10 U	10	7.0	10	11/04/23 23:35	
2-Butanone (MEK)	50 U	50	7.8	10	11/04/23 23:35	
Carbon Disulfide	10 U	10	4.2	10	11/04/23 23:35	
Carbon Tetrachloride	10 U	10	3.4	10	11/04/23 23:35	
Chlorobenzene	10 U	10	2.0	10	11/04/23 23:35	
Chloroethane	10 U	10	2.3	10	11/04/23 23:35	
Chloroform	10 U	10	5.1	10	11/04/23 23:35	
Chloromethane	10 U	10	8.0	10	11/04/23 23:35	
Dibromochloromethane	10 U	10	2.0	10	11/04/23 23:35	
1,2-Dibromoethane	10 U	10	2.0	10	11/04/23 23:35	
1,1-Dichloroethane	10 U	10	2.0	10	11/04/23 23:35	
1,2-Dichloroethane	10 U	10	2.0	10	11/04/23 23:35	
1,1-Dichloroethene	10 U	10	2.0	10	11/04/23 23:35	
cis-1,2-Dichloroethene	3300 E	10	2.3	10	11/04/23 23:35	
trans-1,2-Dichloroethene	3.5 J	10	2.0	10	11/04/23 23:35	
1,2-Dichloropropane	10 U	10	2.0	10	11/04/23 23:35	
cis-1,3-Dichloropropene	10 U	10	2.0	10	11/04/23 23:35	
trans-1,3-Dichloropropene	10 U	10	2.3	10	11/04/23 23:35	
Ethylbenzene	10 U	10	2.0	10	11/04/23 23:35	
2-Hexanone	50 U	50	2.0	10	11/04/23 23:35	
Methylene Chloride	88	10	6.5	10	11/04/23 23:35	
4-Methyl-2-pentanone (MIBK)	50 U	50	2.0	10	11/04/23 23:35	
Styrene	10 U	10	2.0	10	11/04/23 23:35	
1,1,2,2-Tetrachloroethane	10 U	10	2.0	10	11/04/23 23:35	
Tetrachloroethene	10 U	10	2.1	10	11/04/23 23:35	
Toluene	7.5 J	10	2.0	10	11/04/23 23:35	
1,1,1-Trichloroethane	10 U	10	2.0	10	11/04/23 23:35	
1,1,2-Trichloroethane	10 U	10	2.0	10	11/04/23 23:35	
Trichloroethene	1900	10	2.0	10	11/04/23 23:35	
Vinyl Chloride	40	10	2.0	10	11/04/23 23:35	
o-Xylene	10 U	10	2.0	10	11/04/23 23:35	
m,p-Xylenes	20 U	20	2.0	10	11/04/23 23:35	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	11/04/23 23:35	
Toluene-d8	95	87 - 121	11/04/23 23:35	
Dibromofluoromethane	95	80 - 116	11/04/23 23:35	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: MH32-1023
Lab Code: R2309891-013

Service Request: R2309891
Date Collected: 10/25/23 11:05
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	250 U	250	250	50	11/05/23 18:50	
Benzene	50 U	50	10	50	11/05/23 18:50	
Bromodichloromethane	50 U	50	10	50	11/05/23 18:50	
Bromoform	50 U	50	13	50	11/05/23 18:50	
Bromomethane	50 U	50	35	50	11/05/23 18:50	
2-Butanone (MEK)	250 U	250	39	50	11/05/23 18:50	
Carbon Disulfide	50 U	50	21	50	11/05/23 18:50	
Carbon Tetrachloride	50 U	50	17	50	11/05/23 18:50	
Chlorobenzene	50 U	50	10	50	11/05/23 18:50	
Chloroethane	50 U	50	12	50	11/05/23 18:50	
Chloroform	50 U	50	26	50	11/05/23 18:50	
Chloromethane	50 U	50	40	50	11/05/23 18:50	
Dibromochloromethane	50 U	50	10	50	11/05/23 18:50	
1,1-Dichloroethane	50 U	50	10	50	11/05/23 18:50	
1,2-Dibromoethane	50 U	50	10	50	11/05/23 18:50	
1,2-Dichloroethane	50 U	50	10	50	11/05/23 18:50	
1,1-Dichloroethene	50 U	50	10	50	11/05/23 18:50	
cis-1,2-Dichloroethene	3600 D	50	12	50	11/05/23 18:50	
trans-1,2-Dichloroethene	12 DJ	50	10	50	11/05/23 18:50	
1,2-Dichloropropane	50 U	50	10	50	11/05/23 18:50	
cis-1,3-Dichloropropene	50 U	50	10	50	11/05/23 18:50	
trans-1,3-Dichloropropene	50 U	50	12	50	11/05/23 18:50	
Ethylbenzene	50 U	50	10	50	11/05/23 18:50	
2-Hexanone	250 U	250	10	50	11/05/23 18:50	
Methylene Chloride	99 D	50	33	50	11/05/23 18:50	
4-Methyl-2-pentanone (MIBK)	250 U	250	10	50	11/05/23 18:50	
Styrene	50 U	50	10	50	11/05/23 18:50	
1,1,2,2-Tetrachloroethane	50 U	50	10	50	11/05/23 18:50	
Tetrachloroethene	50 U	50	11	50	11/05/23 18:50	
Toluene	12 DJ	50	10	50	11/05/23 18:50	
1,1,1-Trichloroethane	50 U	50	10	50	11/05/23 18:50	
1,1,2-Trichloroethane	50 U	50	10	50	11/05/23 18:50	
Trichloroethene	2200 D	50	10	50	11/05/23 18:50	
Vinyl Chloride	45 DJ	50	10	50	11/05/23 18:50	
o-Xylene	50 U	50	10	50	11/05/23 18:50	
m,p-Xylenes	11 DJ	100	10	50	11/05/23 18:50	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	11/05/23 18:50	
Toluene-d8	95	87 - 121	11/05/23 18:50	
Dibromofluoromethane	96	80 - 116	11/05/23 18:50	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: CW3A-1023
Lab Code: R2309891-014

Service Request: R2309891
Date Collected: 10/25/23 13:20
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/04/23 21:44	
Benzene	1.0 U	1.0	0.20	1	11/04/23 21:44	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/04/23 21:44	
Bromoform	1.0 U	1.0	0.25	1	11/04/23 21:44	
Bromomethane	1.0 U	1.0	0.70	1	11/04/23 21:44	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/04/23 21:44	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/04/23 21:44	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/04/23 21:44	
Chlorobenzene	1.0 U	1.0	0.20	1	11/04/23 21:44	
Chloroethane	1.0 U	1.0	0.23	1	11/04/23 21:44	
Chloroform	1.0 U	1.0	0.51	1	11/04/23 21:44	
Chloromethane	1.0 U	1.0	0.80	1	11/04/23 21:44	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/04/23 21:44	
1,1-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 21:44	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/04/23 21:44	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 21:44	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 21:44	
cis-1,2-Dichloroethene	4.9	1.0	0.23	1	11/04/23 21:44	
trans-1,2-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 21:44	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/04/23 21:44	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/04/23 21:44	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/04/23 21:44	
Ethylbenzene	1.0 U	1.0	0.20	1	11/04/23 21:44	
2-Hexanone	5.0 U	5.0	0.20	1	11/04/23 21:44	
Methylene Chloride	1.0 U	1.0	0.65	1	11/04/23 21:44	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/04/23 21:44	
Styrene	1.0 U	1.0	0.20	1	11/04/23 21:44	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/04/23 21:44	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/04/23 21:44	
Toluene	0.52 J	1.0	0.20	1	11/04/23 21:44	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 21:44	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 21:44	
Trichloroethene	25	1.0	0.20	1	11/04/23 21:44	
Vinyl Chloride	1.0 U	1.0	0.20	1	11/04/23 21:44	
o-Xylene	1.0 U	1.0	0.20	1	11/04/23 21:44	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/04/23 21:44	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling **Date Collected:** 10/25/23 13:20
Sample Matrix: Water **Date Received:** 10/25/23 17:14

Sample Name: CW3A-1023 **Units:** ug/L
Lab Code: R2309891-014 **Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85 - 122	11/04/23 21:44	
Toluene-d8	91	87 - 121	11/04/23 21:44	
Dibromofluoromethane	89	80 - 116	11/04/23 21:44	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: CW4A-1023
Lab Code: R2309891-015

Service Request: R2309891
Date Collected: 10/25/23 08:45
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/04/23 22:06	
Benzene	1.0 U	1.0	0.20	1	11/04/23 22:06	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/04/23 22:06	
Bromoform	1.0 U	1.0	0.25	1	11/04/23 22:06	
Bromomethane	1.0 U	1.0	0.70	1	11/04/23 22:06	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/04/23 22:06	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/04/23 22:06	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/04/23 22:06	
Chlorobenzene	1.0 U	1.0	0.20	1	11/04/23 22:06	
Chloroethane	1.0 U	1.0	0.23	1	11/04/23 22:06	
Chloroform	1.0 U	1.0	0.51	1	11/04/23 22:06	
Chloromethane	1.0 U	1.0	0.80	1	11/04/23 22:06	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/04/23 22:06	
1,1-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 22:06	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/04/23 22:06	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 22:06	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 22:06	
cis-1,2-Dichloroethene	0.97 J	1.0	0.23	1	11/04/23 22:06	
trans-1,2-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 22:06	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/04/23 22:06	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/04/23 22:06	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/04/23 22:06	
Ethylbenzene	1.0 U	1.0	0.20	1	11/04/23 22:06	
2-Hexanone	5.0 U	5.0	0.20	1	11/04/23 22:06	
Methylene Chloride	1.0 U	1.0	0.65	1	11/04/23 22:06	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/04/23 22:06	
Styrene	1.0 U	1.0	0.20	1	11/04/23 22:06	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/04/23 22:06	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/04/23 22:06	
Toluene	1.0 U	1.0	0.20	1	11/04/23 22:06	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 22:06	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 22:06	
Trichloroethene	0.41 J	1.0	0.20	1	11/04/23 22:06	
Vinyl Chloride	1.0 U	1.0	0.20	1	11/04/23 22:06	
o-Xylene	1.0 U	1.0	0.20	1	11/04/23 22:06	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/04/23 22:06	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Sample Name: CW4A-1023
Lab Code: R2309891-015

Service Request: R2309891
Date Collected: 10/25/23 08:45
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	11/04/23 22:06	
Toluene-d8	94	87 - 121	11/04/23 22:06	
Dibromofluoromethane	93	80 - 116	11/04/23 22:06	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: CW4B-1023
Lab Code: R2309891-017

Service Request: R2309891
Date Collected: 10/25/23 10:20
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/04/23 22:28	
Benzene	1.0 U	1.0	0.20	1	11/04/23 22:28	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/04/23 22:28	
Bromoform	1.0 U	1.0	0.25	1	11/04/23 22:28	
Bromomethane	1.0 U	1.0	0.70	1	11/04/23 22:28	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/04/23 22:28	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/04/23 22:28	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/04/23 22:28	
Chlorobenzene	1.0 U	1.0	0.20	1	11/04/23 22:28	
Chloroethane	1.0 U	1.0	0.23	1	11/04/23 22:28	
Chloroform	1.0 U	1.0	0.51	1	11/04/23 22:28	
Chloromethane	1.0 U	1.0	0.80	1	11/04/23 22:28	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/04/23 22:28	
1,1-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 22:28	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/04/23 22:28	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 22:28	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 22:28	
cis-1,2-Dichloroethene	0.53 J	1.0	0.23	1	11/04/23 22:28	
trans-1,2-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 22:28	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/04/23 22:28	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/04/23 22:28	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/04/23 22:28	
Ethylbenzene	1.0 U	1.0	0.20	1	11/04/23 22:28	
2-Hexanone	5.0 U	5.0	0.20	1	11/04/23 22:28	
Methylene Chloride	1.0 U	1.0	0.65	1	11/04/23 22:28	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/04/23 22:28	
Styrene	1.0 U	1.0	0.20	1	11/04/23 22:28	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/04/23 22:28	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/04/23 22:28	
Toluene	1.0 U	1.0	0.20	1	11/04/23 22:28	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 22:28	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 22:28	
Trichloroethene	1.0 U	1.0	0.20	1	11/04/23 22:28	
Vinyl Chloride	1.0 U	1.0	0.20	1	11/04/23 22:28	
o-Xylene	1.0 U	1.0	0.20	1	11/04/23 22:28	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/04/23 22:28	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling **Date Collected:** 10/25/23 10:20
Sample Matrix: Water **Date Received:** 10/25/23 17:14

Sample Name: CW4B-1023 **Units:** ug/L
Lab Code: R2309891-017 **Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	11/04/23 22:28	
Toluene-d8	94	87 - 121	11/04/23 22:28	
Dibromofluoromethane	92	80 - 116	11/04/23 22:28	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: CW3B-1023
Lab Code: R2309891-018

Service Request: R2309891
Date Collected: 10/25/23 11:50
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	13 U	13	13	2.5	11/04/23 23:57	
Benzene	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
Bromodichloromethane	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
Bromoform	2.5 U	2.5	0.63	2.5	11/04/23 23:57	
Bromomethane	2.5 U	2.5	1.8	2.5	11/04/23 23:57	
2-Butanone (MEK)	13 U	13	2.0	2.5	11/04/23 23:57	
Carbon Disulfide	2.5 U	2.5	1.1	2.5	11/04/23 23:57	
Carbon Tetrachloride	2.5 U	2.5	0.85	2.5	11/04/23 23:57	
Chlorobenzene	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
Chloroethane	0.95 J	2.5	0.58	2.5	11/04/23 23:57	
Chloroform	2.5 U	2.5	1.3	2.5	11/04/23 23:57	
Chloromethane	2.5 U	2.5	2.0	2.5	11/04/23 23:57	
Dibromochloromethane	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
1,2-Dibromoethane	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
1,1-Dichloroethane	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
1,2-Dichloroethane	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
1,1-Dichloroethene	1.1 J	2.5	0.50	2.5	11/04/23 23:57	
cis-1,2-Dichloroethene	78	2.5	0.58	2.5	11/04/23 23:57	
trans-1,2-Dichloroethene	0.66 J	2.5	0.50	2.5	11/04/23 23:57	
1,2-Dichloropropane	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
cis-1,3-Dichloropropene	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
trans-1,3-Dichloropropene	2.5 U	2.5	0.58	2.5	11/04/23 23:57	
Ethylbenzene	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
2-Hexanone	13 U	13	0.50	2.5	11/04/23 23:57	
Methylene Chloride	2.5 U	2.5	1.7	2.5	11/04/23 23:57	
4-Methyl-2-pentanone (MIBK)	13 U	13	0.50	2.5	11/04/23 23:57	
Styrene	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
1,1,2,2-Tetrachloroethane	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
Tetrachloroethene	2.5 U	2.5	0.53	2.5	11/04/23 23:57	
Toluene	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
1,1,1-Trichloroethane	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
1,1,2-Trichloroethane	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
Trichloroethene	380	2.5	0.50	2.5	11/04/23 23:57	
Vinyl Chloride	1.0 J	2.5	0.50	2.5	11/04/23 23:57	
o-Xylene	2.5 U	2.5	0.50	2.5	11/04/23 23:57	
m,p-Xylenes	5.0 U	5.0	0.50	2.5	11/04/23 23:57	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling **Date Collected:** 10/25/23 11:50
Sample Matrix: Water **Date Received:** 10/25/23 17:14

Sample Name: CW3B-1023 **Units:** ug/L
Lab Code: R2309891-018 **Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	11/04/23 23:57	
Toluene-d8	94	87 - 121	11/04/23 23:57	
Dibromofluoromethane	94	80 - 116	11/04/23 23:57	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: MW17S-1023
Lab Code: R2309891-019

Service Request: R2309891
Date Collected: 10/25/23 14:40
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/04/23 22:50	
Benzene	1.0 U	1.0	0.20	1	11/04/23 22:50	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/04/23 22:50	
Bromoform	1.0 U	1.0	0.25	1	11/04/23 22:50	
Bromomethane	1.0 U	1.0	0.70	1	11/04/23 22:50	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/04/23 22:50	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/04/23 22:50	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/04/23 22:50	
Chlorobenzene	1.0 U	1.0	0.20	1	11/04/23 22:50	
Chloroethane	1.0 U	1.0	0.23	1	11/04/23 22:50	
Chloroform	1.0 U	1.0	0.51	1	11/04/23 22:50	
Chloromethane	1.0 U	1.0	0.80	1	11/04/23 22:50	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/04/23 22:50	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/04/23 22:50	
1,1-Dichloroethane	0.72 J	1.0	0.20	1	11/04/23 22:50	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 22:50	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 22:50	
cis-1,2-Dichloroethene	26	1.0	0.23	1	11/04/23 22:50	
trans-1,2-Dichloroethene	0.20 J	1.0	0.20	1	11/04/23 22:50	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/04/23 22:50	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/04/23 22:50	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/04/23 22:50	
Ethylbenzene	1.0 U	1.0	0.20	1	11/04/23 22:50	
2-Hexanone	5.0 U	5.0	0.20	1	11/04/23 22:50	
Methylene Chloride	1.0 U	1.0	0.65	1	11/04/23 22:50	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/04/23 22:50	
Styrene	1.0 U	1.0	0.20	1	11/04/23 22:50	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/04/23 22:50	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/04/23 22:50	
Toluene	1.0 U	1.0	0.20	1	11/04/23 22:50	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 22:50	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 22:50	
Trichloroethene	7.3	1.0	0.20	1	11/04/23 22:50	
Vinyl Chloride	1.0 U	1.0	0.20	1	11/04/23 22:50	
o-Xylene	1.0 U	1.0	0.20	1	11/04/23 22:50	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/04/23 22:50	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Sample Name: MW17S-1023
Lab Code: R2309891-019

Service Request: R2309891
Date Collected: 10/25/23 14:40
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	11/04/23 22:50	
Toluene-d8	96	87 - 121	11/04/23 22:50	
Dibromofluoromethane	96	80 - 116	11/04/23 22:50	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: Trip Blank
Lab Code: R2309891-020

Service Request: R2309891
Date Collected: 10/25/23
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/04/23 19:30	
Benzene	1.0 U	1.0	0.20	1	11/04/23 19:30	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/04/23 19:30	
Bromoform	1.0 U	1.0	0.25	1	11/04/23 19:30	
Bromomethane	1.0 U	1.0	0.70	1	11/04/23 19:30	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/04/23 19:30	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/04/23 19:30	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/04/23 19:30	
Chlorobenzene	1.0 U	1.0	0.20	1	11/04/23 19:30	
Chloroethane	1.0 U	1.0	0.23	1	11/04/23 19:30	
Chloroform	1.0 U	1.0	0.51	1	11/04/23 19:30	
Chloromethane	1.0 U	1.0	0.80	1	11/04/23 19:30	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/04/23 19:30	
1,1-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 19:30	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/04/23 19:30	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 19:30	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 19:30	
cis-1,2-Dichloroethene	1.0 U	1.0	0.23	1	11/04/23 19:30	
trans-1,2-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 19:30	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/04/23 19:30	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/04/23 19:30	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/04/23 19:30	
Ethylbenzene	1.0 U	1.0	0.20	1	11/04/23 19:30	
2-Hexanone	5.0 U	5.0	0.20	1	11/04/23 19:30	
Methylene Chloride	1.0 U	1.0	0.65	1	11/04/23 19:30	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/04/23 19:30	
Styrene	1.0 U	1.0	0.20	1	11/04/23 19:30	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/04/23 19:30	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/04/23 19:30	
Toluene	1.0 U	1.0	0.20	1	11/04/23 19:30	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 19:30	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 19:30	
Trichloroethene	1.0 U	1.0	0.20	1	11/04/23 19:30	
Vinyl Chloride	1.0 U	1.0	0.20	1	11/04/23 19:30	
o-Xylene	1.0 U	1.0	0.20	1	11/04/23 19:30	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/04/23 19:30	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling **Date Collected:** 10/25/23
Sample Matrix: Water **Date Received:** 10/25/23 17:14

Sample Name: Trip Blank **Units:** ug/L
Lab Code: R2309891-020 **Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	11/04/23 19:30	
Toluene-d8	94	87 - 121	11/04/23 19:30	
Dibromofluoromethane	93	80 - 116	11/04/23 19:30	



Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling **Date Collected:** 10/25/23 08:45
Sample Matrix: Water **Date Received:** 10/25/23 17:14

Sample Name: CW4A-1023 **Units:** ug/L
Lab Code: R2309891-015 **Basis:** NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	0.22	0.040	0.027	1	10/28/23 00:57	10/27/23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Tetrahydrofuran-d8 (SUR)	107	64 - 124	10/28/23 00:57	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling **Date Collected:** 10/25/23 10:20
Sample Matrix: Water **Date Received:** 10/25/23 17:14

Sample Name: CW4B-1023 **Units:** ug/L
Lab Code: R2309891-017 **Basis:** NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	0.34	0.040	0.027	1	10/28/23 01:15	10/27/23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Tetrahydrofuran-d8 (SUR)	114	64 - 124	10/28/23 01:15	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Sample Name: CW3B-1023
Lab Code: R2309891-018

Service Request: R2309891
Date Collected: 10/25/23 11:50
Date Received: 10/25/23 17:14

Units: ug/L
Basis: NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	0.75	0.040	0.027	1	10/28/23 01:33	10/27/23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Tetrahydrofuran-d8 (SUR)	112	64 - 124	10/28/23 01:33	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling **Date Collected:** 10/25/23 14:40
Sample Matrix: Water **Date Received:** 10/25/23 17:14

Sample Name: MW17S-1023 **Units:** ug/L
Lab Code: R2309891-019 **Basis:** NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	0.34	0.040	0.027	1	10/28/23 01:51	10/27/23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Tetrahydrofuran-d8 (SUR)	115	64 - 124	10/28/23 01:51	



Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Form 1

Inorganic Analysis Data Sheet

6010C, EPA 200.8, EPA 200.7

Workorder
R2309891

Client
On-Site Technical Services, Inc.

Project
WAL - Annual Sampling

12/14/2023

ALS Environmental–Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

WAL2-1023		Collected		Received		Matrix		Prep Method		
R2309891-001		10/23/23 1220		10/25/23 1714		Water		EPA 3005A/3010A		
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	P	10	U	6	10	1	11/02/23 04:03	RPAES07_822642	429178
Barium, Total	ug/L	P	32		3	20	1	11/02/23 04:03	RPAES07_822642	429178
Cadmium, Total	ug/L	P	5.0	U	0.4	5.0	1	11/02/23 04:03	RPAES07_822642	429178
Calcium, Total	ug/L	P	47200		300	1000	1	11/02/23 04:03	RPAES07_822642	429178
Chromium, Total	ug/L	P	10	U	2	10	1	11/02/23 04:03	RPAES07_822642	429178
Copper, Total	ug/L	P	20	U	4	20	1	11/02/23 04:03	RPAES07_822642	429178
Iron, Total	ug/L	P	620		70	100	1	11/02/23 04:03	RPAES07_822642	429178
Lead, Total	ug/L	P	5.0	U	3.2	5.0	1	11/02/23 04:03	RPAES07_822642	429178
Magnesium, Total	ug/L	P	16000		30	1000	1	11/02/23 04:03	RPAES07_822642	429178
Manganese, Total	ug/L	P	784		4	10	1	11/02/23 04:03	RPAES07_822642	429178
Nickel, Total	ug/L	P	40	U	3	40	1	11/02/23 04:03	RPAES07_822642	429178
Potassium, Total	ug/L	P	2500		400	2000	1	11/02/23 04:03	RPAES07_822642	429178
Selenium, Total	ug/L	P	10	U	7	10	1	11/02/23 04:03	RPAES07_822642	429178
Sodium, Total	ug/L	P	47400		300	1000	1	11/03/23 18:45	RPAES07_822963	429178
Zinc, Total	ug/L	P	7	J	3	20	1	11/02/23 04:03	RPAES07_822642	429178

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

MW11S-1023		Collected		Received		Matrix		Prep Method		
R2309891-002		10/24/23 0910		10/25/23 1714		Water		EPA 3005A/3010A		
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	P	10	U	6	10	1	11/02/23 04:06	RPAES07_822642	429178
Barium, Total	ug/L	P	34		3	20	1	11/02/23 04:06	RPAES07_822642	429178
Cadmium, Total	ug/L	P	5.0	U	0.4	5.0	1	11/02/23 04:06	RPAES07_822642	429178
Calcium, Total	ug/L	P	55300		300	1000	1	11/02/23 04:06	RPAES07_822642	429178
Chromium, Total	ug/L	P	10	U	2	10	1	11/02/23 04:06	RPAES07_822642	429178
Copper, Total	ug/L	P	20	U	4	20	1	11/02/23 04:06	RPAES07_822642	429178
Iron, Total	ug/L	P	440		70	100	1	11/02/23 04:06	RPAES07_822642	429178
Lead, Total	ug/L	P	5.0	U	3.2	5.0	1	11/02/23 04:06	RPAES07_822642	429178
Magnesium, Total	ug/L	P	35000		30	1000	1	11/02/23 04:06	RPAES07_822642	429178
Manganese, Total	ug/L	P	761		4	10	1	11/02/23 04:06	RPAES07_822642	429178
Nickel, Total	ug/L	P	40	U	3	40	1	11/02/23 04:06	RPAES07_822642	429178
Potassium, Total	ug/L	P	2100		400	2000	1	11/02/23 04:06	RPAES07_822642	429178
Selenium, Total	ug/L	P	10	U	7	10	1	11/02/23 04:06	RPAES07_822642	429178
Sodium, Total	ug/L	P	20400		300	1000	1	11/03/23 18:48	RPAES07_822963	429178
Zinc, Total	ug/L	P	6	J	3	20	1	11/02/23 04:06	RPAES07_822642	429178

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

MW3D-1023		Collected		Received		Matrix		Prep Method		
R2309891-003		10/24/23 1035		10/25/23 1714		Water		EPA 3005A/3010A		
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	P	10	U	6	10	1	11/02/23 04:29	RPAES07_822642	429178
Barium, Total	ug/L	P	55		3	20	1	11/02/23 04:29	RPAES07_822642	429178
Cadmium, Total	ug/L	P	5.0	U	0.4	5.0	1	11/02/23 04:29	RPAES07_822642	429178
Calcium, Total	ug/L	P	37800		300	1000	1	11/02/23 04:29	RPAES07_822642	429178
Chromium, Total	ug/L	P	10	U	2	10	1	11/02/23 04:29	RPAES07_822642	429178
Copper, Total	ug/L	P	20	U	4	20	1	11/02/23 04:29	RPAES07_822642	429178
Iron, Total	ug/L	P	100	U	70	100	1	11/02/23 04:29	RPAES07_822642	429178
Lead, Total	ug/L	P	5.0	U	3.2	5.0	1	11/02/23 04:29	RPAES07_822642	429178
Magnesium, Total	ug/L	P	10700		30	1000	1	11/02/23 04:29	RPAES07_822642	429178
Manganese, Total	ug/L	P	12		4	10	1	11/02/23 04:29	RPAES07_822642	429178
Nickel, Total	ug/L	P	40	U	3	40	1	11/02/23 04:29	RPAES07_822642	429178
Potassium, Total	ug/L	P	4200		400	2000	1	11/02/23 04:29	RPAES07_822642	429178
Selenium, Total	ug/L	P	10	U	7	10	1	11/02/23 04:29	RPAES07_822642	429178
Sodium, Total	ug/L	P	18700		300	1000	1	11/03/23 19:11	RPAES07_822963	429178
Zinc, Total	ug/L	P	8	J	3	20	1	11/02/23 04:29	RPAES07_822642	429178

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

MW4D-1023		Collected		Received		Matrix		Prep Method		
R2309891-004		10/24/23 1210		10/25/23 1714		Water		EPA 3005A/3010A		
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	P	10	U	6	10	1	11/02/23 04:32	RPAES07_822642	429178
Barium, Total	ug/L	P	36		3	20	1	11/02/23 04:32	RPAES07_822642	429178
Cadmium, Total	ug/L	P	5.0	U	0.4	5.0	1	11/02/23 04:32	RPAES07_822642	429178
Calcium, Total	ug/L	P	22900		300	1000	1	11/02/23 04:32	RPAES07_822642	429178
Chromium, Total	ug/L	P	10	U	2	10	1	11/02/23 04:32	RPAES07_822642	429178
Copper, Total	ug/L	P	5	J	4	20	1	11/02/23 04:32	RPAES07_822642	429178
Iron, Total	ug/L	P	1320		70	100	1	11/02/23 04:32	RPAES07_822642	429178
Lead, Total	ug/L	P	5.0	U	3.2	5.0	1	11/02/23 04:32	RPAES07_822642	429178
Magnesium, Total	ug/L	P	19600		30	1000	1	11/02/23 04:32	RPAES07_822642	429178
Manganese, Total	ug/L	P	3220		4	10	1	11/02/23 04:32	RPAES07_822642	429178
Nickel, Total	ug/L	P	10	J	3	40	1	11/02/23 04:32	RPAES07_822642	429178
Potassium, Total	ug/L	P	2700		400	2000	1	11/02/23 04:32	RPAES07_822642	429178
Selenium, Total	ug/L	P	10	U	7	10	1	11/02/23 04:32	RPAES07_822642	429178
Sodium, Total	ug/L	P	5100		300	1000	1	11/03/23 19:14	RPAES07_822963	429178
Zinc, Total	ug/L	P	19	J	3	20	1	11/02/23 04:32	RPAES07_822642	429178

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

MW18D-1023		Collected		Received		Matrix		Prep Method		
R2309891-008		10/24/23 1340		10/25/23 1714		Water		EPA 3005A/3010A		
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	P	10	U	6	10	1	11/02/23 04:36	RPAES07_822642	429178
Barium, Total	ug/L	P	65		3	20	1	11/02/23 04:36	RPAES07_822642	429178
Cadmium, Total	ug/L	P	5.0	U	0.4	5.0	1	11/02/23 04:36	RPAES07_822642	429178
Calcium, Total	ug/L	P	38100		300	1000	1	11/02/23 04:36	RPAES07_822642	429178
Chromium, Total	ug/L	P	10	U	2	10	1	11/02/23 04:36	RPAES07_822642	429178
Copper, Total	ug/L	P	20	U	4	20	1	11/02/23 04:36	RPAES07_822642	429178
Iron, Total	ug/L	P	9490		70	100	1	11/02/23 04:36	RPAES07_822642	429178
Lead, Total	ug/L	P	5.0	U	3.2	5.0	1	11/02/23 04:36	RPAES07_822642	429178
Magnesium, Total	ug/L	P	19300		30	1000	1	11/02/23 04:36	RPAES07_822642	429178
Manganese, Total	ug/L	P	497		4	10	1	11/02/23 04:36	RPAES07_822642	429178
Nickel, Total	ug/L	P	40	U	3	40	1	11/02/23 04:36	RPAES07_822642	429178
Potassium, Total	ug/L	P	2800		400	2000	1	11/02/23 04:36	RPAES07_822642	429178
Selenium, Total	ug/L	P	10	U	7	10	1	11/02/23 04:36	RPAES07_822642	429178
Sodium, Total	ug/L	P	21600		300	1000	1	11/03/23 19:17	RPAES07_822963	429178
Zinc, Total	ug/L	P	6	J	3	20	1	11/02/23 04:36	RPAES07_822642	429178

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

EPA 200.8, EPA 200.7

WAL1-1023		Collected		Received		Matrix		Prep Method		
R2309891-009		10/24/23 1400		10/25/23 1714		Drinking Water		EPA 200.2		
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	MS	2.4		0.4	1.0	1	11/02/23 16:05	RPMS02_822773	429167
Barium, Total	ug/L	MS	66.3		0.3	1.0	1	11/02/23 16:05	RPMS02_822773	429167
Cadmium, Total	ug/L	MS	1.0	U	0.2	1.0	1	11/02/23 16:05	RPMS02_822773	429167
Calcium, Total	ug/L	P	41900		200	1000	1	11/06/23 21:16	RPAES06_823096	429166
Chromium, Total	ug/L	P	10	U	1.0	10	1	11/06/23 21:16	RPAES06_823096	429166
Copper, Total	ug/L	MS	1.2		0.7	1.0	1	11/02/23 16:05	RPMS02_822773	429167
Iron, Total	ug/L	P	100	U	20	100	1	11/06/23 21:16	RPAES06_823096	429166
Lead, Total	ug/L	MS	1.0	U	0.2	1.0	1	11/02/23 16:05	RPMS02_822773	429167
Magnesium, Total	ug/L	P	13700		70	1000	1	11/06/23 21:16	RPAES06_823096	429166
Manganese, Total	ug/L	P	107		2	10	1	11/06/23 21:16	RPAES06_823096	429166
Nickel, Total	ug/L	MS	1.0	U	0.5	1.0	1	11/02/23 16:05	RPMS02_822773	429167
Potassium, Total	ug/L	P	1500	J	200	2000	1	11/06/23 21:16	RPAES06_823096	429166
Selenium, Total	ug/L	MS	2.0	U	0.6	2.0	1	11/02/23 16:05	RPMS02_822773	429167
Sodium, Total	ug/L	P	9000		200	1000	1	11/06/23 21:16	RPAES06_823096	429166
Zinc, Total	ug/L	P	11	J	7	20	1	11/06/23 21:16	RPAES06_823096	429166

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

MW18S-1023		Collected		Received		Matrix		Prep Method		
R2309891-010		10/24/23 1450		10/25/23 1714		Water		EPA 3005A/3010A		
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	P	10	U	6	10	1	11/02/23 04:39	RPAES07_822642	429178
Barium, Total	ug/L	P	32		3	20	1	11/02/23 04:39	RPAES07_822642	429178
Cadmium, Total	ug/L	P	5.0	U	0.4	5.0	1	11/02/23 04:39	RPAES07_822642	429178
Calcium, Total	ug/L	P	30200		300	1000	1	11/02/23 04:39	RPAES07_822642	429178
Chromium, Total	ug/L	P	10	U	2	10	1	11/02/23 04:39	RPAES07_822642	429178
Copper, Total	ug/L	P	20	U	4	20	1	11/02/23 04:39	RPAES07_822642	429178
Iron, Total	ug/L	P	2300		70	100	1	11/02/23 04:39	RPAES07_822642	429178
Lead, Total	ug/L	P	5.0	U	3.2	5.0	1	11/02/23 04:39	RPAES07_822642	429178
Magnesium, Total	ug/L	P	14100		30	1000	1	11/02/23 04:39	RPAES07_822642	429178
Manganese, Total	ug/L	P	387		4	10	1	11/02/23 04:39	RPAES07_822642	429178
Nickel, Total	ug/L	P	40	U	3	40	1	11/02/23 04:39	RPAES07_822642	429178
Potassium, Total	ug/L	P	1900	J	400	2000	1	11/02/23 04:39	RPAES07_822642	429178
Selenium, Total	ug/L	P	10	U	7	10	1	11/02/23 04:39	RPAES07_822642	429178
Sodium, Total	ug/L	P	3700		300	1000	1	11/03/23 19:20	RPAES07_822963	429178
Zinc, Total	ug/L	P	4	J	3	20	1	11/02/23 04:39	RPAES07_822642	429178

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

MH33-1023		Collected		Received		Matrix		Prep Method		
R2309891-011		10/25/23 0950		10/25/23 1714		Water		EPA 3005A/3010A		
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	P	10	U	6	10	1	11/02/23 04:42	RPAES07_822642	429178
Barium, Total	ug/L	P	42		3	20	1	11/02/23 04:42	RPAES07_822642	429178
Cadmium, Total	ug/L	P	5.0	U	0.4	5.0	1	11/02/23 04:42	RPAES07_822642	429178
Calcium, Total	ug/L	P	88900		300	1000	1	11/02/23 04:42	RPAES07_822642	429178
Chromium, Total	ug/L	P	10	U	2	10	1	11/02/23 04:42	RPAES07_822642	429178
Copper, Total	ug/L	P	20	U	4	20	1	11/02/23 04:42	RPAES07_822642	429178
Iron, Total	ug/L	P	600		70	100	1	11/02/23 04:42	RPAES07_822642	429178
Lead, Total	ug/L	P	5.0	U	3.2	5.0	1	11/02/23 04:42	RPAES07_822642	429178
Magnesium, Total	ug/L	P	19400		30	1000	1	11/02/23 04:42	RPAES07_822642	429178
Manganese, Total	ug/L	P	474		4	10	1	11/02/23 04:42	RPAES07_822642	429178
Nickel, Total	ug/L	P	40	U	3	40	1	11/02/23 04:42	RPAES07_822642	429178
Potassium, Total	ug/L	P	1900	J	400	2000	1	11/02/23 04:42	RPAES07_822642	429178
Selenium, Total	ug/L	P	7	J	7	10	1	11/02/23 04:42	RPAES07_822642	429178
Sodium, Total	ug/L	P	7600		300	1000	1	11/03/23 19:24	RPAES07_822963	429178
Zinc, Total	ug/L	P	20	U	3	20	1	11/02/23 04:42	RPAES07_822642	429178

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

LS-1023		Collected		Received		Matrix		Prep Method		
R2309891-012		10/25/23 1025		10/25/23 1714		Water		EPA 3005A/3010A		
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	P	6	J	6	10	1	11/02/23 04:45	RPAES07_822642	429178
Barium, Total	ug/L	P	117		3	20	1	11/02/23 04:45	RPAES07_822642	429178
Cadmium, Total	ug/L	P	5.0	U	0.4	5.0	1	11/02/23 04:45	RPAES07_822642	429178
Calcium, Total	ug/L	P	126000		300	1000	1	11/02/23 04:45	RPAES07_822642	429178
Chromium, Total	ug/L	P	10	U	2	10	1	11/02/23 04:45	RPAES07_822642	429178
Copper, Total	ug/L	P	20	U	4	20	1	11/02/23 04:45	RPAES07_822642	429178
Iron, Total	ug/L	P	5220		70	100	1	11/02/23 04:45	RPAES07_822642	429178
Lead, Total	ug/L	P	5.0	U	3.2	5.0	1	11/02/23 04:45	RPAES07_822642	429178
Magnesium, Total	ug/L	P	37400		30	1000	1	11/02/23 04:45	RPAES07_822642	429178
Manganese, Total	ug/L	P	1610		4	10	1	11/02/23 04:45	RPAES07_822642	429178
Nickel, Total	ug/L	P	6	J	3	40	1	11/02/23 04:45	RPAES07_822642	429178
Potassium, Total	ug/L	P	5200		400	2000	1	11/02/23 04:45	RPAES07_822642	429178
Selenium, Total	ug/L	P	10	U	7	10	1	11/02/23 04:45	RPAES07_822642	429178
Sodium, Total	ug/L	P	48100		300	1000	1	11/03/23 19:27	RPAES07_822963	429178
Zinc, Total	ug/L	P	21		3	20	1	11/02/23 04:45	RPAES07_822642	429178

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

MH32-1023		Collected		Received		Matrix		Prep Method		
R2309891-013		10/25/23 1105		10/25/23 1714		Water		EPA 3005A/3010A		
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	P	10	U	6	10	1	11/02/23 04:49	RPAES07_822642	429178
Barium, Total	ug/L	P	162		3	20	1	11/02/23 04:49	RPAES07_822642	429178
Cadmium, Total	ug/L	P	5.0	U	0.4	5.0	1	11/02/23 04:49	RPAES07_822642	429178
Calcium, Total	ug/L	P	138000		300	1000	1	11/02/23 04:49	RPAES07_822642	429178
Chromium, Total	ug/L	P	10	U	2	10	1	11/02/23 04:49	RPAES07_822642	429178
Copper, Total	ug/L	P	20	U	4	20	1	11/02/23 04:49	RPAES07_822642	429178
Iron, Total	ug/L	P	8520		70	100	1	11/02/23 04:49	RPAES07_822642	429178
Lead, Total	ug/L	P	5.0	U	3.2	5.0	1	11/02/23 04:49	RPAES07_822642	429178
Magnesium, Total	ug/L	P	19000		30	1000	1	11/02/23 04:49	RPAES07_822642	429178
Manganese, Total	ug/L	P	1930		4	10	1	11/02/23 04:49	RPAES07_822642	429178
Nickel, Total	ug/L	P	4	J	3	40	1	11/02/23 04:49	RPAES07_822642	429178
Potassium, Total	ug/L	P	12000		400	2000	1	11/02/23 04:49	RPAES07_822642	429178
Selenium, Total	ug/L	P	10	U	7	10	1	11/02/23 04:49	RPAES07_822642	429178
Sodium, Total	ug/L	P	19800		300	1000	1	11/03/23 19:30	RPAES07_822963	429178
Zinc, Total	ug/L	P	25		3	20	1	11/02/23 04:49	RPAES07_822642	429178

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

CW3A-1023		Collected		Received		Matrix		Prep Method		
R2309891-014		10/25/23 1320		10/25/23 1714		Water		EPA 3005A/3010A		
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	P	10	U	6	10	1	11/02/23 04:52	RPAES07_822642	429178
Barium, Total	ug/L	P	92		3	20	1	11/02/23 04:52	RPAES07_822642	429178
Cadmium, Total	ug/L	P	5.0	U	0.4	5.0	1	11/02/23 04:52	RPAES07_822642	429178
Calcium, Total	ug/L	P	119000		300	1000	1	11/02/23 04:52	RPAES07_822642	429178
Chromium, Total	ug/L	P	10	U	2	10	1	11/02/23 04:52	RPAES07_822642	429178
Copper, Total	ug/L	P	7	J	4	20	1	11/02/23 04:52	RPAES07_822642	429178
Iron, Total	ug/L	P	100	U	70	100	1	11/02/23 04:52	RPAES07_822642	429178
Lead, Total	ug/L	P	5.0	U	3.2	5.0	1	11/02/23 04:52	RPAES07_822642	429178
Magnesium, Total	ug/L	P	3800		30	1000	1	11/02/23 04:52	RPAES07_822642	429178
Manganese, Total	ug/L	P	37		4	10	1	11/02/23 04:52	RPAES07_822642	429178
Nickel, Total	ug/L	P	40	U	3	40	1	11/02/23 04:52	RPAES07_822642	429178
Potassium, Total	ug/L	P	11700		400	2000	1	11/02/23 04:52	RPAES07_822642	429178
Selenium, Total	ug/L	P	10	U	7	10	1	11/02/23 04:52	RPAES07_822642	429178
Sodium, Total	ug/L	P	39500		300	1000	1	11/03/23 19:33	RPAES07_822963	429178
Zinc, Total	ug/L	P	22		3	20	1	11/02/23 04:52	RPAES07_822642	429178

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

CW4A-1023		Collected		Received		Matrix		Prep Method		
R2309891-015		10/25/23 0845		10/25/23 1714		Water		EPA 3005A/3010A		
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	P	10	U	6	10	1	11/02/23 04:55	RPAES07_822642	429178
Barium, Total	ug/L	P	51		3	20	1	11/02/23 04:55	RPAES07_822642	429178
Cadmium, Total	ug/L	P	5.0	U	0.4	5.0	1	11/02/23 04:55	RPAES07_822642	429178
Calcium, Total	ug/L	P	29100		300	1000	1	11/02/23 04:55	RPAES07_822642	429178
Chromium, Total	ug/L	P	10	U	2	10	1	11/02/23 04:55	RPAES07_822642	429178
Copper, Total	ug/L	P	20	U	4	20	1	11/02/23 04:55	RPAES07_822642	429178
Iron, Total	ug/L	P	360		70	100	1	11/02/23 04:55	RPAES07_822642	429178
Lead, Total	ug/L	P	5.0	U	3.2	5.0	1	11/02/23 04:55	RPAES07_822642	429178
Magnesium, Total	ug/L	P	16000		30	1000	1	11/02/23 04:55	RPAES07_822642	429178
Manganese, Total	ug/L	P	199		4	10	1	11/02/23 04:55	RPAES07_822642	429178
Nickel, Total	ug/L	P	3	J	3	40	1	11/02/23 04:55	RPAES07_822642	429178
Potassium, Total	ug/L	P	1300	J	400	2000	1	11/02/23 04:55	RPAES07_822642	429178
Selenium, Total	ug/L	P	10	U	7	10	1	11/02/23 04:55	RPAES07_822642	429178
Sodium, Total	ug/L	P	13300		300	1000	1	11/03/23 19:43	RPAES07_822963	429178
Zinc, Total	ug/L	P	16	J	3	20	1	11/02/23 04:55	RPAES07_822642	429178

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

CW4B-1023		Collected		Received		Matrix		Prep Method		
R2309891-017		10/25/23 1020		10/25/23 1714		Water		EPA 3005A/3010A		
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	P	10	U	6	10	1	11/02/23 05:05	RPAES07_822642	429178
Barium, Total	ug/L	P	29		3	20	1	11/02/23 05:05	RPAES07_822642	429178
Cadmium, Total	ug/L	P	5.0	U	0.4	5.0	1	11/02/23 05:05	RPAES07_822642	429178
Calcium, Total	ug/L	P	38700		300	1000	1	11/02/23 05:05	RPAES07_822642	429178
Chromium, Total	ug/L	P	10	U	2	10	1	11/02/23 05:05	RPAES07_822642	429178
Copper, Total	ug/L	P	20	U	4	20	1	11/02/23 05:05	RPAES07_822642	429178
Iron, Total	ug/L	P	100	U	70	100	1	11/02/23 05:05	RPAES07_822642	429178
Lead, Total	ug/L	P	5.0	U	3.2	5.0	1	11/02/23 05:05	RPAES07_822642	429178
Magnesium, Total	ug/L	P	16800		30	1000	1	11/02/23 05:05	RPAES07_822642	429178
Manganese, Total	ug/L	P	214		4	10	1	11/02/23 05:05	RPAES07_822642	429178
Nickel, Total	ug/L	P	40	U	3	40	1	11/02/23 05:05	RPAES07_822642	429178
Potassium, Total	ug/L	P	1800	J	400	2000	1	11/02/23 05:05	RPAES07_822642	429178
Selenium, Total	ug/L	P	10	U	7	10	1	11/02/23 05:05	RPAES07_822642	429178
Sodium, Total	ug/L	P	14500		300	1000	1	11/03/23 19:46	RPAES07_822963	429178
Zinc, Total	ug/L	P	5	J	3	20	1	11/02/23 05:05	RPAES07_822642	429178

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

CW3B-1023		Collected		Received		Matrix		Prep Method		
R2309891-018		10/25/23 1150		10/25/23 1714		Water		EPA 3005A/3010A		
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	P	10	U	6	10	1	11/02/23 05:08	RPAES07_822642	429178
Barium, Total	ug/L	P	36		3	20	1	11/02/23 05:08	RPAES07_822642	429178
Cadmium, Total	ug/L	P	5.0	U	0.4	5.0	1	11/02/23 05:08	RPAES07_822642	429178
Calcium, Total	ug/L	P	68000		300	1000	1	11/02/23 05:08	RPAES07_822642	429178
Chromium, Total	ug/L	P	10	U	2	10	1	11/02/23 05:08	RPAES07_822642	429178
Copper, Total	ug/L	P	20	U	4	20	1	11/02/23 05:08	RPAES07_822642	429178
Iron, Total	ug/L	P	100	U	70	100	1	11/02/23 05:08	RPAES07_822642	429178
Lead, Total	ug/L	P	5.0	U	3.2	5.0	1	11/02/23 05:08	RPAES07_822642	429178
Magnesium, Total	ug/L	P	35500		30	1000	1	11/02/23 05:08	RPAES07_822642	429178
Manganese, Total	ug/L	P	27		4	10	1	11/02/23 05:08	RPAES07_822642	429178
Nickel, Total	ug/L	P	40	U	3	40	1	11/02/23 05:08	RPAES07_822642	429178
Potassium, Total	ug/L	P	2500		400	2000	1	11/02/23 05:08	RPAES07_822642	429178
Selenium, Total	ug/L	P	10	U	7	10	1	11/02/23 05:08	RPAES07_822642	429178
Sodium, Total	ug/L	P	22100		300	1000	1	11/03/23 19:50	RPAES07_822963	429178
Zinc, Total	ug/L	P	8	J	3	20	1	11/02/23 05:08	RPAES07_822642	429178

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

MW17S-1023		Collected		Received		Matrix		Prep Method		
R2309891-019		10/25/23 1440		10/25/23 1714		Water		EPA 3005A/3010A		
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	P	10	U	6	10	1	11/02/23 05:11	RPAES07_822642	429178
Barium, Total	ug/L	P	44		3	20	1	11/02/23 05:11	RPAES07_822642	429178
Cadmium, Total	ug/L	P	5.0	U	0.4	5.0	1	11/02/23 05:11	RPAES07_822642	429178
Calcium, Total	ug/L	P	93400		300	1000	1	11/02/23 05:11	RPAES07_822642	429178
Chromium, Total	ug/L	P	10	U	2	10	1	11/02/23 05:11	RPAES07_822642	429178
Copper, Total	ug/L	P	20	U	4	20	1	11/02/23 05:11	RPAES07_822642	429178
Iron, Total	ug/L	P	150		70	100	1	11/02/23 05:11	RPAES07_822642	429178
Lead, Total	ug/L	P	5.0	U	3.2	5.0	1	11/02/23 05:11	RPAES07_822642	429178
Magnesium, Total	ug/L	P	66800		30	1000	1	11/02/23 05:11	RPAES07_822642	429178
Manganese, Total	ug/L	P	44		4	10	1	11/02/23 05:11	RPAES07_822642	429178
Nickel, Total	ug/L	P	40	U	3	40	1	11/02/23 05:11	RPAES07_822642	429178
Potassium, Total	ug/L	P	3900		400	2000	1	11/02/23 05:11	RPAES07_822642	429178
Selenium, Total	ug/L	P	10	U	7	10	1	11/02/23 05:11	RPAES07_822642	429178
Sodium, Total	ug/L	P	78000		300	1000	1	11/03/23 19:53	RPAES07_822963	429178
Zinc, Total	ug/L	P	20	U	3	20	1	11/02/23 05:11	RPAES07_822642	429178

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



Form 1 - Inorganic Analysis Data Sheet

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C, EPA 200.8, EPA 200.7

Method Blank					Matrix		Prep Method			
R2309891-MB					Drinking Water		EPA 3005A/3010A, EPA 200.2			
Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Arsenic, Total	ug/L	MS	1.0	U	0.4	1.0	1	11/02/23 15:27	RPMS02_822773	429167
Arsenic, Total	ug/L	P	10	U	6	10	1	11/02/23 03:47	RPAES07_822642	429178
Barium, Total	ug/L	MS	1.0	U	0.3	1.0	1	11/02/23 15:27	RPMS02_822773	429167
Barium, Total	ug/L	P	20	U	3	20	1	11/02/23 03:47	RPAES07_822642	429178
Cadmium, Total	ug/L	MS	1.0	U	0.2	1.0	1	11/02/23 15:27	RPMS02_822773	429167
Cadmium, Total	ug/L	P	5.0	U	0.4	5.0	1	11/02/23 03:47	RPAES07_822642	429178
Calcium, Total	ug/L	P	1000	U	200	1000	1	11/06/23 20:17	RPAES06_823096	429166
Calcium, Total	ug/L	P	1000	U	300	1000	1	11/02/23 03:47	RPAES07_822642	429178
Chromium, Total	ug/L	P	10	U	1.0	10	1	11/06/23 20:17	RPAES06_823096	429166
Chromium, Total	ug/L	P	10	U	2	10	1	11/02/23 03:47	RPAES07_822642	429178
Copper, Total	ug/L	MS	1.0	U	0.7	1.0	1	11/02/23 15:27	RPMS02_822773	429167
Copper, Total	ug/L	P	20	U	4	20	1	11/02/23 03:47	RPAES07_822642	429178
Iron, Total	ug/L	P	100	U	20	100	1	11/06/23 20:17	RPAES06_823096	429166
Iron, Total	ug/L	P	100	U	70	100	1	11/02/23 03:47	RPAES07_822642	429178
Lead, Total	ug/L	MS	1.0	U	0.2	1.0	1	11/02/23 15:27	RPMS02_822773	429167
Lead, Total	ug/L	P	5.0	U	3.2	5.0	1	11/02/23 03:47	RPAES07_822642	429178
Magnesium, Total	ug/L	P	1000	U	70	1000	1	11/06/23 20:17	RPAES06_823096	429166
Magnesium, Total	ug/L	P	1000	U	30	1000	1	11/02/23 03:47	RPAES07_822642	429178
Manganese, Total	ug/L	P	10	U	2	10	1	11/06/23 20:17	RPAES06_823096	429166
Manganese, Total	ug/L	P	10	U	4	10	1	11/02/23 03:47	RPAES07_822642	429178
Nickel, Total	ug/L	MS	1.0	U	0.5	1.0	1	11/02/23 15:27	RPMS02_822773	429167
Nickel, Total	ug/L	P	40	U	3	40	1	11/02/23 03:47	RPAES07_822642	429178
Potassium, Total	ug/L	P	2000	U	200	2000	1	11/06/23 20:17	RPAES06_823096	429166
Potassium, Total	ug/L	P	2000	U	400	2000	1	11/02/23 03:47	RPAES07_822642	429178
Selenium, Total	ug/L	MS	2.0	U	0.6	2.0	1	11/02/23 15:27	RPMS02_822773	429167
Selenium, Total	ug/L	P	10	U	7	10	1	11/02/23 03:47	RPAES07_822642	429178
Sodium, Total	ug/L	P	1000	U	200	1000	1	11/06/23 20:17	RPAES06_823096	429166
Sodium, Total	ug/L	P	1000	U	300	1000	1	11/03/23 18:25	RPAES07_822963	429178
Zinc, Total	ug/L	P	20	U	7	20	1	11/06/23 20:17	RPAES06_823096	429166
Zinc, Total	ug/L	P	20	U	3	20	1	11/02/23 03:47	RPAES07_822642	429178

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS



General Chemistry

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Sample Name: MH33-1023
Lab Code: R2309891-011

Service Request: R2309891
Date Collected: 10/25/23 09:50
Date Received: 10/25/23 17:14

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	0.3 J	mg/L	1.0	0.2	10	10/26/23 00:01	
Solids, Total Dissolved (TDS)	SM 2540 C-2015	331	mg/L	10	9	1	10/30/23 10:45	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Sample Name: MH32-1023
Lab Code: R2309891-013

Service Request: R2309891
Date Collected: 10/25/23 11:05
Date Received: 10/25/23 17:14

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	0.2	10	10/26/23 00:07	
Solids, Total Dissolved (TDS)	SM 2540 C-2015	533	mg/L	13	12	1	10/30/23 10:45	



QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water

Service Request: R2309891

SURROGATE RECOVERY SUMMARY
Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Sample Name	Lab Code	1,2-Dichlorobenzene-d4	4-Bromofluorobenzene
		70 - 130	70 - 130
WAL19Post-1023	R2309891-005	91	85
WAL19Inter-1023	R2309891-006	87	84
WAL19Pre-1023	R2309891-007	85	80
WAL1-1023	R2309891-009	91	89
Lab Control Sample	RQ2314445-03	100	100
Duplicate Lab Control Sample	RQ2314445-04	92	91
Method Blank	RQ2314445-05	87	89
Method Detection Limit Verification MDLV	RQ2314445-06	92	87

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water

Sample Name: Method Blank
Lab Code: RQ2314445-05

Service Request: R2309891
Date Collected: NA
Date Received: NA

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	0.50 U	0.50	0.20	1	11/02/23 13:10	
Bromobenzene	0.50 U	0.50	0.20	1	11/02/23 13:10	
Bromochloromethane	0.50 U	0.50	0.20	1	11/02/23 13:10	
Bromodichloromethane	0.50 U	0.50	0.20	1	11/02/23 13:10	
Bromoform	0.50 U	0.50	0.24	1	11/02/23 13:10	
Bromomethane	0.50 U	0.50	0.20	1	11/02/23 13:10	
Methyl tert-Butyl Ether	0.50 U	0.50	0.20	1	11/02/23 13:10	
tert-Butylbenzene	0.50 U	0.50	0.20	1	11/02/23 13:10	
sec-Butylbenzene	0.50 U	0.50	0.20	1	11/02/23 13:10	
n-Butylbenzene	0.50 U	0.50	0.20	1	11/02/23 13:10	
Carbon Tetrachloride	0.50 U	0.50	0.20	1	11/02/23 13:10	
Chlorobenzene	0.50 U	0.50	0.20	1	11/02/23 13:10	
Chloroethane	0.50 U	0.50	0.23	1	11/02/23 13:10	
Chloroform	0.50 U	0.50	0.44	1	11/02/23 13:10	
Chloromethane	0.50 U	0.50	0.20	1	11/02/23 13:10	
2-Chlorotoluene	0.50 U	0.50	0.20	1	11/02/23 13:10	
4-Chlorotoluene	0.50 U	0.50	0.20	1	11/02/23 13:10	
Dibromochloromethane	0.50 U	0.50	0.20	1	11/02/23 13:10	
Dibromomethane	0.50 U	0.50	0.20	1	11/02/23 13:10	
1,2-Dichlorobenzene	0.50 U	0.50	0.20	1	11/02/23 13:10	
1,4-Dichlorobenzene	0.50 U	0.50	0.20	1	11/02/23 13:10	
1,3-Dichlorobenzene	0.50 U	0.50	0.20	1	11/02/23 13:10	
Dichlorodifluoromethane	0.50 U	0.50	0.20	1	11/02/23 13:10	
1,1-Dichloroethane	0.50 U	0.50	0.20	1	11/02/23 13:10	
1,2-Dichloroethane	0.50 U	0.50	0.20	1	11/02/23 13:10	
1,1-Dichloroethene	0.50 U	0.50	0.20	1	11/02/23 13:10	
trans-1,2-Dichloroethene	0.50 U	0.50	0.20	1	11/02/23 13:10	
cis-1,2-Dichloroethene	0.50 U	0.50	0.20	1	11/02/23 13:10	
2,2-Dichloropropane	0.50 U	0.50	0.20	1	11/02/23 13:10	
1,2-Dichloropropane	0.50 U	0.50	0.20	1	11/02/23 13:10	
1,3-Dichloropropane	0.50 U	0.50	0.20	1	11/02/23 13:10	
trans-1,3-Dichloropropene	0.50 U	0.50	0.20	1	11/02/23 13:10	
cis-1,3-Dichloropropene	0.50 U	0.50	0.20	1	11/02/23 13:10	
Ethylbenzene	0.50 U	0.50	0.20	1	11/02/23 13:10	
Hexachlorobutadiene	0.50 U	0.50	0.20	1	11/02/23 13:10	
Isopropylbenzene	0.50 U	0.50	0.20	1	11/02/23 13:10	
p-Isopropyltoluene	0.50 U	0.50	0.20	1	11/02/23 13:10	
Methylene Chloride	0.50 U	0.50	0.20	1	11/02/23 13:10	
Naphthalene	0.50 U	0.50	0.23	1	11/02/23 13:10	
n-Propylbenzene	0.50 U	0.50	0.20	1	11/02/23 13:10	
Styrene	0.50 U	0.50	0.20	1	11/02/23 13:10	
1,1,1,2-Tetrachloroethane	0.50 U	0.50	0.20	1	11/02/23 13:10	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	0.20	1	11/02/23 13:10	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	NA
Sample Matrix:	Drinking Water	Date Received:	NA
Sample Name:	Method Blank	Units:	ug/L
Lab Code:	RQ2314445-05	Basis:	NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Tetrachloroethene	0.50 U	0.50	0.20	1	11/02/23 13:10	
Toluene	0.50 U	0.50	0.20	1	11/02/23 13:10	
1,2,4-Trichlorobenzene	0.50 U	0.50	0.24	1	11/02/23 13:10	
1,2,3-Trichlorobenzene	0.50 U	0.50	0.22	1	11/02/23 13:10	
1,1,2-Trichloroethane	0.50 U	0.50	0.20	1	11/02/23 13:10	
Trichloroethene	0.50 U	0.50	0.20	1	11/02/23 13:10	
Trichlorofluoromethane	0.50 U	0.50	0.20	1	11/02/23 13:10	
1,2,3-Trichloropropane	0.50 U	0.50	0.20	1	11/02/23 13:10	
1,3,5-Trimethylbenzene	0.50 U	0.50	0.20	1	11/02/23 13:10	
1,2,4-Trimethylbenzene	0.50 U	0.50	0.20	1	11/02/23 13:10	
Vinyl Chloride	0.50 U	0.50	0.22	1	11/02/23 13:10	
m,p-Xylenes	1.0 U	1.0	0.20	1	11/02/23 13:10	
o-Xylene	0.50 U	0.50	0.20	1	11/02/23 13:10	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	70 - 130	11/02/23 13:10	
1,2-Dichlorobenzene-d4	87	70 - 130	11/02/23 13:10	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water

Service Request: R2309891
Date Analyzed: 11/02/23

Duplicate Lab Control Sample Summary
Purgeable Organic Compounds by GC/MS

Units: ug/L
Basis: NA

Analyte Name	Analytical Method	Lab Control Sample			Duplicate Lab Control Sample					
		RQ2314445-03	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD
Benzene	524.2	4.71	5.00	94	4.50	5.00	90	70-130	5	20
Bromobenzene	524.2	4.45	5.00	89	4.26	5.00	85	70-130	4	20
Bromochloromethane	524.2	4.61	5.00	92	4.59	5.00	92	70-130	<1	20
Bromodichloromethane	524.2	4.41	5.00	88	4.22	5.00	84	70-130	4	20
Bromoform	524.2	4.55	5.00	91	4.50	5.00	90	70-130	1	20
Bromomethane	524.2	3.52	5.00	70	3.45	5.00	69 *	70-130	2	20
Methyl tert-Butyl Ether	524.2	4.98	5.00	100	4.78	5.00	96	70-130	4	20
tert-Butylbenzene	524.2	4.47	5.00	89	4.26	5.00	85	70-130	5	20
sec-Butylbenzene	524.2	4.44	5.00	89	4.26	5.00	85	70-130	4	20
n-Butylbenzene	524.2	4.32	5.00	86	4.09	5.00	82	70-130	5	20
Carbon Tetrachloride	524.2	4.90	5.00	98	4.70	5.00	94	70-130	4	20
Chlorobenzene	524.2	4.36	5.00	87	4.17	5.00	83	70-130	4	20
Chloroethane	524.2	3.66	5.00	73	3.48	5.00	70	70-130	5	20
Chloroform	524.2	4.45	5.00	89	4.23	5.00	85	70-130	5	20
Chloromethane	524.2	4.78	5.00	96	4.47	5.00	89	70-130	7	20
2-Chlorotoluene	524.2	4.47	5.00	89	4.26	5.00	85	70-130	5	20
4-Chlorotoluene	524.2	4.38	5.00	88	4.18	5.00	84	70-130	5	20
Dibromochloromethane	524.2	4.56	5.00	91	4.27	5.00	85	70-130	7	20
Dibromomethane	524.2	4.74	5.00	95	4.37	5.00	87	70-130	8	20
1,2-Dichlorobenzene	524.2	4.48	5.00	90	4.25	5.00	85	70-130	5	20
1,4-Dichlorobenzene	524.2	4.43	5.00	89	4.27	5.00	85	70-130	4	20
1,3-Dichlorobenzene	524.2	4.52	5.00	90	4.19	5.00	84	70-130	8	20
Dichlorodifluoromethane	524.2	3.69	5.00	74	3.32	5.00	66 *	70-130	11	20
1,1-Dichloroethane	524.2	4.87	5.00	97	4.56	5.00	91	70-130	7	20
1,2-Dichloroethane	524.2	4.58	5.00	92	4.38	5.00	88	70-130	4	20
1,1-Dichloroethene	524.2	4.39	5.00	88	4.26	5.00	85	70-130	3	20
trans-1,2-Dichloroethene	524.2	4.58	5.00	92	4.44	5.00	89	70-130	3	20
cis-1,2-Dichloroethene	524.2	4.81	5.00	96	4.49	5.00	90	70-130	7	20
2,2-Dichloropropane	524.2	4.78	5.00	96	4.56	5.00	91	70-130	5	20
1,2-Dichloropropane	524.2	4.74	5.00	95	4.38	5.00	88	70-130	8	20
1,3-Dichloropropane	524.2	4.52	5.00	90	4.36	5.00	87	70-130	4	20
trans-1,3-Dichloropropene	524.2	4.39	5.00	88	4.17	5.00	83	70-130	5	20
cis-1,3-Dichloropropene	524.2	4.50	5.00	90	4.33	5.00	87	70-130	4	20

Printed 12/14/2023 11:25:22 AM

Superset Reference:23-0000679193 rev 00

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Drinking Water

Service Request: R2309891
Date Analyzed: 11/02/23

Duplicate Lab Control Sample Summary
Purgeable Organic Compounds by GC/MS

Units: ug/L
Basis: NA

Lab Control Sample	Duplicate Lab Control Sample
RQ2314445-03	RQ2314445-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Ethylbenzene	524.2	4.36	5.00	87	4.16	5.00	83	70-130	5	20
Hexachlorobutadiene	524.2	4.26	5.00	85	4.16	5.00	83	70-130	2	20
Isopropylbenzene	524.2	4.34	5.00	87	4.06	5.00	81	70-130	7	20
p-Isopropyltoluene	524.2	4.40	5.00	88	4.15	5.00	83	70-130	6	20
Methylene Chloride	524.2	4.72	5.00	94	4.54	5.00	91	70-130	4	20
Naphthalene	524.2	3.83	5.00	77	3.83	5.00	77	70-130	<1	20
n-Propylbenzene	524.2	4.39	5.00	88	4.20	5.00	84	70-130	4	20
Styrene	524.2	4.39	5.00	88	4.17	5.00	83	70-130	5	20
1,1,1,2-Tetrachloroethane	524.2	4.46	5.00	89	4.29	5.00	86	70-130	4	20
1,1,2,2-Tetrachloroethane	524.2	5.04	5.00	101	4.93	5.00	99	70-130	2	20
Tetrachloroethene	524.2	4.56	5.00	91	4.43	5.00	89	70-130	3	20
Toluene	524.2	4.35	5.00	87	4.20	5.00	84	70-130	4	20
1,2,4-Trichlorobenzene	524.2	4.33	5.00	87	4.08	5.00	82	70-130	6	20
1,2,3-Trichlorobenzene	524.2	4.47	5.00	89	4.24	5.00	85	70-130	5	20
1,1,2-Trichloroethane	524.2	4.28	5.00	86	4.24	5.00	85	70-130	<1	20
Trichloroethene	524.2	4.05	5.00	81	3.86	5.00	77	70-130	5	20
Trichlorofluoromethane	524.2	4.69	5.00	94	4.46	5.00	89	70-130	5	20
1,2,3-Trichloropropane	524.2	4.25	5.00	85	4.19	5.00	84	70-130	1	20
1,3,5-Trimethylbenzene	524.2	4.31	5.00	86	4.13	5.00	83	70-130	4	20
1,2,4-Trimethylbenzene	524.2	4.34	5.00	87	4.05	5.00	81	70-130	7	20
Vinyl Chloride	524.2	4.01	5.00	80	3.77	5.00	75	70-130	6	20
m,p-Xylenes	524.2	8.80	10.0	88	8.36	10.0	84	70-130	5	20
o-Xylene	524.2	4.37	5.00	87	4.16	5.00	83	70-130	5	20

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2309891

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85 - 122	Dibromofluoromethane 80 - 116	Toluene-d8 87 - 121
MW11S-1023	R2309891-002	94	93	95
MW3D-1023	R2309891-003	91	94	95
MW4D-1023	R2309891-004	91	93	94
MW18D-1023	R2309891-008	91	93	94
MW18S-1023	R2309891-010	92	93	94
MH33-1023	R2309891-011	92	93	94
LS-1023	R2309891-012	89	91	92
MH32-1023	R2309891-013	94	95	95
MH32-1023 DL	R2309891-013	92	96	95
CW3A-1023	R2309891-014	89	89	91
CW4A-1023	R2309891-015	90	93	94
CW4B-1023	R2309891-017	90	92	94
CW3B-1023	R2309891-018	91	94	94
MW17S-1023	R2309891-019	94	96	96
Trip Blank	R2309891-020	92	93	94
Lab Control Sample	RQ2314523-03	96	99	96
Method Blank	RQ2314523-04	92	94	94
MW11S-1023 MS	RQ2314523-05	94	97	95
MW11S-1023 DMS	RQ2314523-06	92	95	93
Lab Control Sample	RQ2314554-04	93	96	94
Method Blank	RQ2314554-06	93	94	95

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2309891
Date Collected: 10/24/23
Date Received: 10/25/23
Date Analyzed: 11/5/23
Date Extracted: NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	MW11S-1023	Units:	ug/L
Lab Code:	R2309891-002	Basis:	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

Analyte Name	Sample Result	Matrix Spike RQ2314523-05			Duplicate Matrix Spike RQ2314523-06					
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Acetone	100 U	720	1000	72	822	1000	82	35-183	13	30
Benzene	20 U	949	1000	95	1020	1000	102	76-129	8	30
Bromodichloromethane	20 U	975	1000	97	1070	1000	107	78-133	9	30
Bromoform	20 U	1130	1000	113	1250	1000	125	58-133	10	30
Bromomethane	20 U	711	1000	71	868	1000	87	10-184	20	30
2-Butanone (MEK)	100 U	661	1000	66	772	1000	77	61-137	15	30
Carbon Disulfide	20 U	750	1000	75	934	1000	93	59-140	22	30
Carbon Tetrachloride	20 U	1110	1000	111	1240	1000	124	65-135	11	30
Chlorobenzene	20 U	970	1000	97	1080	1000	108	76-125	11	30
Chloroethane	20 U	712	1000	71	782	1000	78	48-146	9	30
Chloroform	20 U	926	1000	93	1020	1000	102	75-130	10	30
Chloromethane	20 U	810	1000	81	895	1000	90	55-160	10	30
Dibromochloromethane	20 U	1100	1000	110	1240	1000	124	72-128	12	30
1,1-Dichloroethane	20 U	866	1000	87	952	1000	95	74-132	9	30
1,2-Dibromoethane	20 U	1060	1000	106	1170	1000	117	67-127	10	30
1,2-Dichloroethane	20 U	996	1000	100	1060	1000	106	68-130	6	30
1,1-Dichloroethene	20 U	883	1000	88	981	1000	98	71-118	11	30
cis-1,2-Dichloroethene	260	1190	1000	93	1270	1000	101	77-127	6	30
trans-1,2-Dichloroethene	20 U	928	1000	93	1040	1000	104	73-118	11	30
1,2-Dichloropropane	20 U	890	1000	89	950	1000	95	79-124	7	30
cis-1,3-Dichloropropene	20 U	946	1000	95	1030	1000	103	52-134	9	30
trans-1,3-Dichloropropene	20 U	999	1000	100	1080	1000	108	71-133	8	30
Ethylbenzene	20 U	973	1000	97	1080	1000	108	72-134	11	30
2-Hexanone	100 U	784	1000	78	919	1000	92	56-132	16	30
Methylene Chloride	20 U	889	1000	89	961	1000	96	73-122	8	30
4-Methyl-2-pentanone (MIBK)	100 U	785	1000	79	906	1000	91	60-141	14	30
Styrene	20 U	1080	1000	108	1190	1000	119	74-136	10	30
1,1,2,2-Tetrachloroethane	20 U	922	1000	92	1000	1000	100	72-122	9	30
Tetrachloroethene	20 U	997	1000	100	1140	1000	114	72-125	13	30
Toluene	20 U	970	1000	97	1050	1000	105	79-119	8	30
1,1,1-Trichloroethane	20 U	983	1000	98	1090	1000	109	74-127	11	30
1,1,2-Trichloroethane	20 U	1010	1000	101	1090	1000	109	82-121	7	30
Trichloroethene	2200	3400	1000	115	3440	1000	119	74-122	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	On-Site Geological Services DPC	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	10/24/23
Sample Matrix:	Water	Date Received:	10/25/23
		Date Analyzed:	11/5/23
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	MW11S-1023	Units:	ug/L
Lab Code:	R2309891-002	Basis:	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

Analyte Name	Matrix Spike RQ2314523-05				Duplicate Matrix Spike RQ2314523-06				RPD Limit	
	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits		
Vinyl Chloride	8.2 J	737	1000	73 *	819	1000	81	74-159	11	30
o-Xylene	20 U	1020	1000	102	1130	1000	113	79-123	10	30
m,p-Xylenes	40 U	2020	2000	101	2240	2000	112	80-126	10	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	NA
Sample Matrix:	Water	Date Received:	NA
Sample Name:	Method Blank	Units:	ug/L
Lab Code:	RQ2314523-04	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/04/23 16:54	
Benzene	1.0 U	1.0	0.20	1	11/04/23 16:54	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/04/23 16:54	
Bromoform	1.0 U	1.0	0.25	1	11/04/23 16:54	
Bromomethane	1.0 U	1.0	0.70	1	11/04/23 16:54	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/04/23 16:54	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/04/23 16:54	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/04/23 16:54	
Chlorobenzene	1.0 U	1.0	0.20	1	11/04/23 16:54	
Chloroethane	1.0 U	1.0	0.23	1	11/04/23 16:54	
Chloroform	1.0 U	1.0	0.51	1	11/04/23 16:54	
Chloromethane	1.0 U	1.0	0.80	1	11/04/23 16:54	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/04/23 16:54	
1,1-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 16:54	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/04/23 16:54	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/04/23 16:54	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 16:54	
cis-1,2-Dichloroethene	1.0 U	1.0	0.23	1	11/04/23 16:54	
trans-1,2-Dichloroethene	1.0 U	1.0	0.20	1	11/04/23 16:54	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/04/23 16:54	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/04/23 16:54	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/04/23 16:54	
Ethylbenzene	1.0 U	1.0	0.20	1	11/04/23 16:54	
2-Hexanone	5.0 U	5.0	0.20	1	11/04/23 16:54	
Methylene Chloride	1.0 U	1.0	0.65	1	11/04/23 16:54	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/04/23 16:54	
Styrene	1.0 U	1.0	0.20	1	11/04/23 16:54	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/04/23 16:54	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/04/23 16:54	
Toluene	1.0 U	1.0	0.20	1	11/04/23 16:54	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 16:54	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/04/23 16:54	
Trichloroethene	1.0 U	1.0	0.20	1	11/04/23 16:54	
Vinyl Chloride	1.0 U	1.0	0.20	1	11/04/23 16:54	
o-Xylene	1.0 U	1.0	0.20	1	11/04/23 16:54	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/04/23 16:54	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling **Date Collected:** NA
Sample Matrix: Water **Date Received:** NA

Sample Name: Method Blank **Units:** ug/L
Lab Code: RQ2314523-04 **Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85 - 122	11/04/23 16:54	
Toluene-d8	94	87 - 121	11/04/23 16:54	
Dibromofluoromethane	94	80 - 116	11/04/23 16:54	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	NA
Sample Matrix:	Water	Date Received:	NA
Sample Name:	Method Blank	Units:	ug/L
Lab Code:	RQ2314554-06	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/05/23 15:29	
Benzene	1.0 U	1.0	0.20	1	11/05/23 15:29	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/05/23 15:29	
Bromoform	1.0 U	1.0	0.25	1	11/05/23 15:29	
Bromomethane	1.0 U	1.0	0.70	1	11/05/23 15:29	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/05/23 15:29	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/05/23 15:29	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/05/23 15:29	
Chlorobenzene	1.0 U	1.0	0.20	1	11/05/23 15:29	
Chloroethane	1.0 U	1.0	0.23	1	11/05/23 15:29	
Chloroform	1.0 U	1.0	0.51	1	11/05/23 15:29	
Chloromethane	1.0 U	1.0	0.80	1	11/05/23 15:29	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/05/23 15:29	
1,1-Dichloroethane	1.0 U	1.0	0.20	1	11/05/23 15:29	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/05/23 15:29	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/05/23 15:29	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/05/23 15:29	
cis-1,2-Dichloroethene	1.0 U	1.0	0.23	1	11/05/23 15:29	
trans-1,2-Dichloroethene	1.0 U	1.0	0.20	1	11/05/23 15:29	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/05/23 15:29	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/05/23 15:29	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/05/23 15:29	
Ethylbenzene	1.0 U	1.0	0.20	1	11/05/23 15:29	
2-Hexanone	5.0 U	5.0	0.20	1	11/05/23 15:29	
Methylene Chloride	1.0 U	1.0	0.65	1	11/05/23 15:29	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/05/23 15:29	
Styrene	1.0 U	1.0	0.20	1	11/05/23 15:29	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/05/23 15:29	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/05/23 15:29	
Toluene	1.0 U	1.0	0.20	1	11/05/23 15:29	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/05/23 15:29	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/05/23 15:29	
Trichloroethene	1.0 U	1.0	0.20	1	11/05/23 15:29	
Vinyl Chloride	1.0 U	1.0	0.20	1	11/05/23 15:29	
o-Xylene	1.0 U	1.0	0.20	1	11/05/23 15:29	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/05/23 15:29	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling **Date Collected:** NA
Sample Matrix: Water **Date Received:** NA

Sample Name: Method Blank **Units:** ug/L
Lab Code: RQ2314554-06 **Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 122	11/05/23 15:29	
Toluene-d8	95	87 - 121	11/05/23 15:29	
Dibromofluoromethane	94	80 - 116	11/05/23 15:29	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2309891
Date Analyzed: 11/04/23

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units: ug/L
Basis: NA

Lab Control Sample
RQ2314523-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	13.7	20.0	69	40-161
Benzene	8260C	20.8	20.0	104	79-119
Bromodichloromethane	8260C	20.9	20.0	104	81-123
Bromoform	8260C	23.4	20.0	117	65-146
Bromomethane	8260C	16.8	20.0	84	42-166
2-Butanone (MEK)	8260C	13.2	20.0	66	61-137
Carbon Disulfide	8260C	17.4	20.0	87	66-128
Carbon Tetrachloride	8260C	24.3	20.0	121	70-127
Chlorobenzene	8260C	21.4	20.0	107	80-121
Chloroethane	8260C	15.5	20.0	77	62-131
Chloroform	8260C	20.0	20.0	100	79-120
Chloromethane	8260C	17.3	20.0	86	65-135
Dibromochloromethane	8260C	22.9	20.0	115	72-128
1,1-Dichloroethane	8260C	18.7	20.0	94	80-124
1,2-Dibromoethane	8260C	22.3	20.0	112	82-127
1,2-Dichloroethane	8260C	20.5	20.0	103	71-127
1,1-Dichloroethene	8260C	19.5	20.0	97	71-118
cis-1,2-Dichloroethene	8260C	20.0	20.0	100	80-121
trans-1,2-Dichloroethene	8260C	20.8	20.0	104	73-118
1,2-Dichloropropane	8260C	19.4	20.0	97	80-119
cis-1,3-Dichloropropene	8260C	21.6	20.0	108	77-122
trans-1,3-Dichloropropene	8260C	22.3	20.0	112	71-133
Ethylbenzene	8260C	21.6	20.0	108	76-120
2-Hexanone	8260C	15.6	20.0	78	63-124
Methylene Chloride	8260C	18.7	20.0	94	73-122
4-Methyl-2-pentanone (MIBK)	8260C	16.1	20.0	81	66-124
Styrene	8260C	23.4	20.0	117	80-124
1,1,2,2-Tetrachloroethane	8260C	18.8	20.0	94	78-126
Tetrachloroethene	8260C	23.5	20.0	118	72-125
Toluene	8260C	21.4	20.0	107	79-119
1,1,1-Trichloroethane	8260C	21.5	20.0	108	75-125
1,1,2-Trichloroethane	8260C	21.0	20.0	105	82-121
Trichloroethene	8260C	22.0	20.0	110	74-122

Printed 12/14/2023 11:25:38 AM

Superset Reference:23-0000679193 rev 00

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2309891
Date Analyzed: 11/04/23

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units: ug/L
Basis: NA

Lab Control Sample
RQ2314523-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	8260C	16.0	20.0	80	74-159
o-Xylene	8260C	22.4	20.0	112	79-123
m,p-Xylenes	8260C	45.1	40.0	113	80-126

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2309891
Date Analyzed: 11/05/23

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units: ug/L
Basis: NA

Lab Control Sample
RQ2314554-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	12.4	20.0	62	40-161
Benzene	8260C	20.3	20.0	101	79-119
Bromodichloromethane	8260C	20.9	20.0	104	81-123
Bromoform	8260C	23.8	20.0	119	65-146
Bromomethane	8260C	14.8	20.0	74	42-166
2-Butanone (MEK)	8260C	12.0	20.0	60 *	61-137
Carbon Disulfide	8260C	16.3	20.0	82	66-128
Carbon Tetrachloride	8260C	24.1	20.0	121	70-127
Chlorobenzene	8260C	21.7	20.0	109	80-121
Chloroethane	8260C	15.8	20.0	79	62-131
Chloroform	8260C	20.5	20.0	103	79-120
Chloromethane	8260C	18.1	20.0	91	65-135
Dibromochloromethane	8260C	23.1	20.0	116	72-128
1,1-Dichloroethane	8260C	18.9	20.0	94	80-124
1,2-Dibromoethane	8260C	22.5	20.0	113	82-127
1,2-Dichloroethane	8260C	20.3	20.0	101	71-127
1,1-Dichloroethene	8260C	19.2	20.0	96	71-118
cis-1,2-Dichloroethene	8260C	19.8	20.0	99	80-121
trans-1,2-Dichloroethene	8260C	21.1	20.0	105	73-118
1,2-Dichloropropane	8260C	18.9	20.0	94	80-119
cis-1,3-Dichloropropene	8260C	21.2	20.0	106	77-122
trans-1,3-Dichloropropene	8260C	22.2	20.0	111	71-133
Ethylbenzene	8260C	22.1	20.0	111	76-120
2-Hexanone	8260C	13.9	20.0	70	63-124
Methylene Chloride	8260C	19.4	20.0	97	73-122
4-Methyl-2-pentanone (MIBK)	8260C	13.7	20.0	69	66-124
Styrene	8260C	23.6	20.0	118	80-124
1,1,2,2-Tetrachloroethane	8260C	18.0	20.0	90	78-126
Tetrachloroethene	8260C	23.5	20.0	117	72-125
Toluene	8260C	20.8	20.0	104	79-119
1,1,1-Trichloroethane	8260C	21.3	20.0	106	75-125
1,1,2-Trichloroethane	8260C	20.7	20.0	103	82-121
Trichloroethene	8260C	21.9	20.0	109	74-122

Printed 12/14/2023 11:25:40 AM

Superset Reference:23-0000679193 rev 00

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2309891
Date Analyzed: 11/05/23

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units: ug/L
Basis: NA

Lab Control Sample
RQ2314554-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	8260C	16.0	20.0	80	74-159
o-Xylene	8260C	22.6	20.0	113	79-123
m,p-Xylenes	8260C	46.4	40.0	116	80-126



Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2309891

SURROGATE RECOVERY SUMMARY
1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Extraction Method: EPA 3535A

Tetrahydrofuran-d8 (SUR)

Sample Name	Lab Code	64 - 124
CW4A-1023	R2309891-015	107
CW4B-1023	R2309891-017	114
CW3B-1023	R2309891-018	112
MW17S-1023	R2309891-019	115
Method Blank	RQ2314108-01	106
Lab Control Sample	RQ2314108-02	105
Duplicate Lab Control Sample	RQ2314108-03	110

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309891
Project: WAL - Annual Sampling **Date Collected:** NA
Sample Matrix: Water **Date Received:** NA

Sample Name: Method Blank **Units:** ug/L
Lab Code: RQ2314108-01 **Basis:** NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	0.040 U	0.040	0.027	1	10/27/23 19:39	10/27/23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Tetrahydrofuran-d8 (SUR)	106	64 - 124	10/27/23 19:39	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2309891
Date Analyzed: 10/27/23

Duplicate Lab Control Sample Summary
1,4-Dioxane by GC/MS

Units: ug/L
Basis: NA

Lab Control Sample
RQ2314108-02 **Duplicate Lab Control Sample**
RQ2314108-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,4-Dioxane	8270D SIM	6.92	10.0	69	7.46	10.0	75	58-124	8	30



Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Form 3

Blanks

EPA 200.7, 6010C, EPA 200.8

Workorder
R2309891

Client
On-Site Technical Services, Inc.

Project
WAL - Annual Sampling

12/14/2023

ALS Environmental–Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Form 3 - Blanks

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

EPA 200.7

RPAES06_823096			ICB		CCB		CCB		MB-823096		CCB		CCB			
Analyte	DL	LOQ	Run Date	11/06/23	Run Time	16:09	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Calcium, Total	200	1000		200	U		200	U	200	U	200	U	200	U	200	U
Chromium, Total	1.0	10		1	U		1	U	1	U	1	U	1	U	1	U
Iron, Total	20	100		20	U		20	U	20	U	20	U	20	U	20	U
Magnesium, Total	70	1000		70	U		70	U	70	U	70	U	70	U	70	U
Manganese, Total	2	10		2	U		2	U	2	U	2	U	2	U	2	U
Potassium, Total	200	2000		200	U		200	U	200	U	200	U	200	U	200	U
Sodium, Total	200	1000		200	U		200	U	200	U	200	U	200	U	200	U
Zinc, Total	7	20		7	U		7	U	7	U	7	U	7	U	7	U

Q - Result Flag * - Result Outside Limits

RPAES06_823096			CCB		CCB											
Analyte	DL	LOQ	Run Date	11/06/23	Run Time	21:58	Result	Q								
Calcium, Total	200	1000		200	U		200	U								
Chromium, Total	1.0	10		1	U		1	U								
Iron, Total	20	100		20	U		20	U								
Magnesium, Total	70	1000		70	U		70	U								
Manganese, Total	2	10		2	U		2	U								
Potassium, Total	200	2000		200	U		200	U								
Sodium, Total	200	1000		200	U		200	U								
Zinc, Total	7	20		7	U		7	U								

Q - Result Flag * - Result Outside Limits



Form 3 - Blanks

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

RPAES07_822642			ICB		CCB		CCB		MB-822642		CCB		CCB	
Analyte	DL	LOQ	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
			Run Date	Run Time	11/01/23	18:15	11/02/23	03:27	11/02/23	03:44	11/02/23	03:47	11/02/23	04:23
Arsenic, Total	6	10	6	U	6	U	6	U	6	U	6	U	6	U
Barium, Total	3	20	3	U	3	U	3	U	3	U	3	U	3	U
Cadmium, Total	0.4	5.0	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Calcium, Total	300	1000	300	U	300	U	300	U	300	U	300	U	300	U
Chromium, Total	2	10	2	U	2	U	2	U	2	U	2	U	2	U
Copper, Total	4	20	4	U	4	U	4	U	4	U	4	U	4	U
Iron, Total	70	100	70	U	70	U	70	U	70	U	70	U	70	U
Lead, Total	3.2	5.0	3.2	U	3.2	U	3.2	U	3.2	U	3.2	U	3.2	U
Magnesium, Total	30	1000	30	U	30	U	30	U	30	U	30	U	30	U
Manganese, Total	4	10	4	U	4	U	4	U	4	U	4	U	4	U
Nickel, Total	3	40	3	U	3	U	3	U	3	U	3	U	3	U
Potassium, Total	400	2000	400	U	400	U	400	U	400	U	400	U	400	U
Selenium, Total	7	10	7	U	7	U	7	U	7	U	7	U	7	U
Zinc, Total	3	20	3	U	3	U	3	U	3	U	3	U	3	U

Q - Result Flag * - Result Outside Limits

RPAES07_822642			CCB		CCB									
Analyte	DL	LOQ	Result	Q	Result	Q								
			Run Date	Run Time	11/02/23	05:41	11/02/23	05:57						
Arsenic, Total	6	10	6	U	6	U								
Barium, Total	3	20	3	U	3	U								
Cadmium, Total	0.4	5.0	0.4	U	0.4	U								
Calcium, Total	300	1000	300	U	300	U								
Chromium, Total	2	10	2	U	2	U								
Copper, Total	4	20	4	U	4	U								
Iron, Total	70	100	70	U	70	U								
Lead, Total	3.2	5.0	3.2	U	3.2	U								
Magnesium, Total	30	1000	30	U	30	U								
Manganese, Total	4	10	4	U	4	U								
Nickel, Total	3	40	3	U	3	U								
Potassium, Total	400	2000	400	U	400	U								
Selenium, Total	7	10	7	U	7	U								
Zinc, Total	3	20	3	U	3	U								

Q - Result Flag * - Result Outside Limits



Form 3 - Blanks

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

6010C

RPAES07_822963			ICB		CCB		CCB		MB-822963		CCB		CCB	
Units ug/L			Run Date		11/03/23		Run Time		16:00		11/03/23		11/03/23	
					17:56				18:22		18:25		11/03/23	
Analyte	DL	LOQ	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Sodium, Total	300	1000	300	U	300	U	300	U	300	U	300	U	300	U

Q - Result Flag * - Result Outside Limits

RPAES07_822963			CCB		CCB										
Units ug/L			Run Date		11/03/23		Run Time		20:06		11/03/23				
									20:22						
Analyte	DL	LOQ	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	
Sodium, Total	300	1000	300	U	300	U	300	U	300	U	300	U	300	U	

Q - Result Flag * - Result Outside Limits



Form 3 - Blanks

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

EPA 200.8

RPMS02_822773			ICB		CCB		MB-822773		CCB		CCB		CCB	
Units ug/L			Run Date 11/02/23		Run Time 15:10		11/02/23 15:25		11/02/23 15:27		11/02/23 15:48		11/02/23 16:11	
Analyte	DL	LOQ	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Arsenic, Total	0.4	1.0	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Barium, Total	0.3	1.0	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Cadmium, Total	0.2	1.0	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Copper, Total	0.7	1.0	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
Lead, Total	0.2	1.0	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Nickel, Total	0.5	1.0	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Selenium, Total	0.6	2.0	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U

Q - Result Flag * - Result Outside Limits

RPMS02_822773			CCB													
Units ug/L			Run Date 11/02/23													
Run Time 16:32																
Analyte	DL	LOQ	Result	Q												
Arsenic, Total	0.4	1.0	0.4	U												
Barium, Total	0.3	1.0	0.3	U												
Cadmium, Total	0.2	1.0	0.2	U												
Copper, Total	0.7	1.0	0.7	U												
Lead, Total	0.2	1.0	0.2	U												
Nickel, Total	0.5	1.0	0.5	U												
Selenium, Total	0.6	2.0	0.6	U												

Q - Result Flag * - Result Outside Limits



Form 5A

Matrix Spike Sample Recovery

6010C, EPA 200.8

Workorder
R2309891

Client
On-Site Technical Services, Inc.

Project
WAL - Annual Sampling

12/14/2023

ALS Environmental–Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Form 5A - Matrix Spike Sample Recovery

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

RunID

6010C

RPAES07-822642

MW11S-1023			R2309891-002			R2309891-002MS			R2309891-002DMS							
Samp Matrix	Water	Run Date	11/02/23			11/02/23			11/02/23							
Prep Method	EPA 3005A/3010A	Units	Run Time	04:06			04:10			04:13						
Prep Batch	429178	10/31/23	ug/L	Prep Amt	50 mL			50 mL			50 mL					
Analyte	%R Limits	Spike Added	DF	Sample Result	Q	MS Result	%R	Q	MSD Result	%R	Q	RPD Limit	RPD	Q		
Arsenic, Total	75-125	40	1	6	U	39	98		38	94		20	3			
Barium, Total	75-125	2000	1	34		1980	97		1980	97		20	0			
Cadmium, Total	75-125	50.0	1	0.4	U	49.5	99		49.4	99		20	0			
Calcium, Total	75-125	2000	1	55300		56800	75		57000	86		20	0			
Chromium, Total	75-125	200	1	2	U	203	101		202	101		20	0			
Copper, Total	75-125	250	1	4	U	242	97		241	96		20	0			
Iron, Total	75-125	1000	1	440		1400	97		1410	97		20	0			
Lead, Total	75-125	500	1	3.2	U	490	98		488	98		20	0			
Magnesium, Total	75-125	2000	1	35000		36700	88		36800	93		20	0			
Manganese, Total	75-125	500	1	761		1240	96		1240	96		20	0			
Nickel, Total	75-125	500	1	3	U	498	100		498	100		20	0			
Potassium, Total	75-125	20000	1	2100		21400	97		21200	96		20	0			
Selenium, Total	75-125	1010	1	7	U	1070	106		1070	106		20	0			
Zinc, Total	75-125	500	1	6	J	540	107		536	106		20	0			

Q - %Recovery / RPD Flag

* - %Recovery / RPD Outside Limits



Form 5A - Matrix Spike Sample Recovery

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

RunID

6010C

RPAES07-822963

MW11S-1023			R2309891-002			R2309891-002MS			R2309891-002DMS							
Samp Matrix	Water	Run Date	11/02/23			11/03/23			11/03/23							
Prep Method	EPA 3005A/3010A	Units	Run Time	04:06			18:51			18:55						
Prep Batch	429178	10/31/23	ug/L	Prep Amt	50 mL			50 mL			50 mL					
Analyte	%R Limits	Spike Added	DF	Sample Result	Q	MS Result	%R	Q	MSD Result	%R	Q	RPD Limit	RPD	Q		
Sodium, Total	75-125	20000	1	20400		39700	96		39400	95		20	0			

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits



Form 5A - Matrix Spike Sample Recovery

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

RunID

EPA 200.8

RPMS02-822773

WAL1-1023			R2309891-009			R2309891-009MS			R2309891-009DMS							
Samp Matrix	Drinking Water	Run Date	11/02/23			11/02/23			11/02/23							
Prep Method	EPA 200.2	Units	Run Time	16:05			16:07			16:13						
Prep Batch	429167	10/31/23	ug/L	Prep Amt	10 mL			10 mL			10 mL					
Analyte	%R Limits	Spike Added	DF	Sample Result	Q	MS Result	%R	Q	MSD Result	%R	Q	RPD Limit	RPD	Q		
Arsenic, Total	70-130	20.0	1	2.4		25.4	115		24.7	112		20	3			
Barium, Total	70-130	20.0	1	66.3		88.7	112		84.9	93		20	4			
Cadmium, Total	70-130	20.0	1	0.2	U	20.7	103		20.2	101		20	2			
Copper, Total	70-130	20.0	1	1.2		22.0	104		21.3	101		20	3			
Lead, Total	70-130	20.0	1	0.2	U	20.1	100		19.4	97		20	4			
Nickel, Total	70-130	20.0	1	0.5	U	20.2	101		19.6	98		20	3			
Selenium, Total	70-130	20.0	1	0.6	U	21.7	109		21.8	109		20	0			

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits



Form 7

Laboratory Control Sample

6010C, EPA 200.8, EPA 200.7

Workorder
R2309891

Client
On-Site Technical Services, Inc.

Project
WAL - Annual Sampling

12/14/2023

ALS Environmental–Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Form 7 - Laboratory Control Sample

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

RunID

RPAES06-823096

EPA 200.7

RPAES06_823096			R2309891-LCS				
Spike Matrix	Drinking Water	Result Units	ug/L	Run Date	11/06/23 <td data-cs="2" data-kind="parent"></td> <td data-kind="ghost"></td>		
Prep Date	10/31/23	Analysis Batch	823096	Run Time	20:20 <td data-cs="2" data-kind="parent"></td> <td data-kind="ghost"></td>		
Prep Method	EPA 200.2	Prep Batch	429166	Prep Amt	10 mL		
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q		
Calcium, Total	85-115	2000	1920	96			
Chromium, Total	85-115	200	183	92			
Iron, Total	85-115	1000	922	92			
Magnesium, Total	85-115	2000	1850	92			
Manganese, Total	85-115	500	459	92			
Potassium, Total	85-115	20000	18300	91			
Sodium, Total	85-115	20000	19200	96			
Zinc, Total	85-115	500	463	93			



Form 7 - Laboratory Control Sample

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

RunID

6010C

RPAES07-822642

RPAES07_822642			R2309891-LCS				
Spike Matrix	Water	Result Units	ug/L	Run Date	11/02/23 <th data-cs="2" data-kind="parent"></th> <th data-kind="ghost"></th>		
Prep Date	10/31/23	Analysis Batch	822642	Run Time	03:50 <th data-cs="2" data-kind="parent"></th> <th data-kind="ghost"></th>		
Prep Method	EPA 3005A/3010A	Prep Batch	429178	Prep Amt	50 mL		
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q		
Arsenic, Total	80-120	40	38.3	96			
Barium, Total	80-120	2000	1960	98			
Cadmium, Total	80-120	50.0	50.3	101			
Calcium, Total	80-120	2000	1980	99			
Chromium, Total	80-120	200	201	101			
Copper, Total	80-120	250	245	98			
Iron, Total	80-120	1000	986	99			
Lead, Total	80-120	500	498	100			
Magnesium, Total	80-120	2000	1960	98			
Manganese, Total	80-120	500	483	97			
Nickel, Total	80-120	500	514	103			
Potassium, Total	80-120	20000	18700	94			
Selenium, Total	80-120	1010	1030	102			
Zinc, Total	80-120	500	538	108			



Form 7 - Laboratory Control Sample

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

RunID

6010C

RPAES07-822963

RPAES07_822963			R2309891-LCS				
Spike Matrix	Water	Result Units	ug/L	Run Date 11/03/23			
Prep Date	10/31/23	Analysis Batch	822963	Run Time 18:29			
Prep Method	EPA 3005A/3010A	Prep Batch	429178	Prep Amt 50 mL			
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q		
Sodium, Total	80-120	20000	19300	97			



Form 7 - Laboratory Control Sample

Client On-Site Technical Services, Inc.

Workorder

Project WAL - Annual Sampling

R2309891

EPA 200.8

RunID

RPMS02-822773

RPMS02_822773			R2309891-LCS				
Spike Matrix	Drinking Water	Result Units	ug/L	Run Date	11/02/23 <td data-cs="2" data-kind="parent"></td> <td data-kind="ghost"></td>		
Prep Date	10/31/23	Analysis Batch	822773	Run Time	15:28		
Prep Method	EPA 200.2	Prep Batch	429167	Prep Amt	10 mL		
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q		
Arsenic, Total	85-115	20.0	22.4	112			
Barium, Total	85-115	20.0	20.4	102			
Cadmium, Total	85-115	20.0	21.4	107			
Copper, Total	85-115	20.0	21.1	105			
Lead, Total	85-115	20.0	20.6	103			
Nickel, Total	85-115	20.0	20.4	102			
Selenium, Total	85-115	20.0	21.6	108			



General Chemistry

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Sample Name: Method Blank
Lab Code: R2309891-MB

Service Request: R2309891
Date Collected: NA
Date Received: NA

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	0.10 U	mg/L	0.10	0.02	1	10/25/23 22:33	
Solids, Total Dissolved (TDS)	SM 2540 C-2015	10 U	mg/L	10	9	1	10/30/23 10:45	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2309891
Date Analyzed: 10/25/23 - 10/30/23

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Lab Control Sample
R2309891-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Nitrate as Nitrogen	300.0	0.975	1.00	98	90-110
Solids, Total Dissolved (TDS)	SM 2540 C-2015	906	914	99	90-110



Subcontracted Analytical Parameters

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

December 13, 2023

Analytical Report for Service Request No: R2309891

Janice Jaeger
ALS Environmental
1565 Jefferson Rd, Building 300
Suite 360
Rochester, NY 14623

RE: WAL - Annual Sampling

Dear Janice Jaeger,

Enclosed are the results of the sample(s) submitted to our laboratory October 25, 2023
For your reference, these analyses have been assigned our service request number **R2309891**.

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 3260. You may also contact me via email at Luke.Rahn@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

A handwritten signature in black ink, appearing to read "Luke Rahn".

Luke Rahn
Project Manager



ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

Table of Contents

Acronyms

Qualifiers

State Certifications, Accreditations, And Licenses

Case Narrative

Chain of Custody

Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS Compliant with Table B-24 of DOD QSM 5.4

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdpb.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.alsglobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.



Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com



Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2309891
Date Received: 10/25/2023

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level II requested by the client.

Sample Receipt:

Five water samples were received for analysis at ALS Environmental on 10/25/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Subcontracted Analytical Parameters:

The control criteria were exceeded for several isotopes in Continuing Calibration Verifications (CCVs) KQ2321059-03/-04/-08. The recovery of the associated native analytes was within control criteria, which indicated the analysis was in control. No further corrective action was appropriate.

Method 1633, 11/28/2023: The upper control criterion was exceeded for N-Methylperfluorooctane sulfonamido ethanol (MeFOSE) in Continuing Calibration Verification (CCV) KQ2321059-08. The field samples analyzed in this sequence did not contain the analyte(s) in question. Since the apparent problem indicated a potential high bias, the data quality was not affected. No further corrective action was required.

Method 1633, 11/28/2023: The upper control criterion was exceeded for several analytes in one or both of the replicate Laboratory Control Samples (LCS/DLCS) KQ2319743-01/-02 and Low Level Lab Control Sample (LCS_LL) KQ2319743-03. The analytes in question were not detected in the associated field samples. The error associated with elevated recovery indicated a high bias. The sample data was not significantly affected. No further corrective action was appropriate.

Method 1633, 11/28/2023: The results reported for Hexafluoropropyleneoxide dimer acid (HFPO-DA) in sample MW17S-1023 may contain a bias. The ion ratio criteria were not met. The failing ratio may indicate a bias to the results in the affected sample. The results were flagged with "I" to indicate the issue.

Approved by

A handwritten signature in black ink, appearing to read 'Julie Baker'.

Date 12/13/2023



Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Intra-Network Chain of Custody

1565 Jefferson Rd, Building 300 • Rochester, NY 14623 • 585-288-5380 • FAX 585-288-8475

ALS Contact: Janice Jaeger

Project Name: WAL - Annual Sampling

Project Number:

Project Manager: Jon Brandes

Company: On-Site Technical Services, Inc.

QAP: LAB QAP

1633 TSS Screen SM 2540 D Modified	PFAS_DOD5.4 1633	PFAS SCREEN 1633
---------------------------------------	---------------------	---------------------

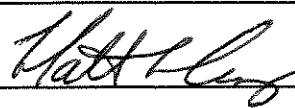
Lab Code	Client Sample ID	# of Cont.	Matrix	Sample Date	Date Time	Received	Send To			
R2309891-015	CW4A-1023	2	Water	10/25/23	0845	10/25/23	KELSO	IV	IV	IV
R2309891-016	FB1-1023	1	Water	10/25/23	0855	10/25/23	KELSO	IV	IV	IV
R2309891-017	CW4B-1023	2	Water	10/25/23	1020	10/25/23	KELSO	IV	IV	IV
R2309891-018	CW3B-1023	2	Water	10/25/23	1150	10/25/23	KELSO	IV	IV	IV
R2309891-019	MW17S-1023	2	Water	10/25/23	1440	10/25/23	KELSO	IV	IV	IV

Folder Comments:

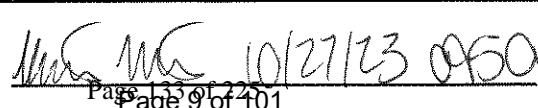
MRL U

Special Instructions/Comments NPDES pH Checked _____	Turnaround Requirements <input checked="" type="checkbox"/> RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 <input checked="" type="checkbox"/> STANDARD Requested FAX Date: _____ Requested Report Date: 11/10/23	Report Requirements <input type="checkbox"/> I. Results Only <input checked="" type="checkbox"/> II. Results + QC Summaries <input type="checkbox"/> III. Results + QC and Calibration Summaries <input checked="" type="checkbox"/> IV. Data Validation Report with Raw Data PQL/MDL/J <input checked="" type="checkbox"/> Y EDD <input checked="" type="checkbox"/> Y	Invoice Information PO# 58R2309891 Bill to _____
--------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------

Relinquished By:

 10/26/23

Received By:

 10/27/23 0850

Airbill Number:

PM

LH

Cooler Receipt and Preservation Form

Client: Rochester

Service Request K23

b23009891

Received: 10/27/23

Opened: 10/27/23

By: LM

Unloaded: 10/27/23

By: LM

1. Samples were received via? USPS FedEx UPS DHL PDX Courier Hand Delivered2. Samples were received in: (circle) Cooler Box Envelope Other _____ NA3. Were custody seals on coolers? NA Y N If yes, how many and where? FrontIf present, were custody seals intact? NA Y N If present, were they signed and dated?

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp Indicate with "X"	PM Notified If out of temp	Tracking Number	NA	Filed
	1.2	IRG6				710706531630		
	"							

4. Was a Temperature Blank present in cooler? NA Y N If yes, note the temperature in the appropriate column above:

If no, take the temperature of a representative sample bottle contained within the cooler; note in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges?

If no, were they received on ice and same day as collected? If not, note the cooler # above and notify the PM.

If applicable, tissue samples were received: Frozen Partially Thawed Thawed6. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves Pipe

7. Were custody papers properly filled out (ink, signed, etc.)?

NA N

8. Were samples received in good condition (unbroken)

NA N

9. Were all sample labels complete (ie, analysis, preservation, etc.)?

NA N

10. Did all sample labels and tags agree with custody papers?

NA N

11. Were appropriate bottles/containers and volumes received for the tests indicated?

NA N

12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below

NA Y N

13. Were VOA vials received without headspace? Indicate in the table below.

NA Y N

14. Was C12/Res negative?

NA Y N

15. Were samples received within the method specified time limit? If not, note the error below and notify the PM

NA Y N16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:



Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: CW4A-1023
Lab Code: R2309891-015

Service Request: R2309891
Date Collected: 10/25/23 08:45
Date Received: 10/25/23 17:14

Units: ng/L
Basis: NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSAs)							
Perfluorobutane sulfonic acid (PFBS)	1.4 J	4.8	0.41	1	11/28/23 21:48	11/7/23	
Perfluoropentane sulfonic acid (PFPeS)	4.8 U	4.8	0.89	1	11/28/23 21:48	11/7/23	
Perfluorohexane sulfonic acid (PFHxS)	1.3 J	4.8	0.82	1	11/28/23 21:48	11/7/23	
Perfluoroheptane sulfonic acid (PFHps)	4.8 U	4.8	0.69	1	11/28/23 21:48	11/7/23	
Perfluorooctane sulfonic acid (PFOS)	5.1	4.8	0.83	1	11/28/23 21:48	11/7/23	
Perfluorononane sulfonic acid (PFNS)	4.8 U	4.8	0.33	1	11/28/23 21:48	11/7/23	
Perfluorodecane sulfonic acid (PFDS)	4.8 U	4.8	0.67	1	11/28/23 21:48	11/7/23	
Perfluorododecane sulfonic acid (PFDoS)	4.8 U	4.8	0.56	1	11/28/23 21:48	11/7/23	
Perfluoroalkyl Carboxylic Acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	7.0	4.8	0.86	1	11/28/23 21:48	11/7/23	
Perfluoropentanoic acid (PFPeA)	0.97 J	4.8	0.64	1	11/28/23 21:48	11/7/23	
Perfluorohexanoic acid (PFHxA)	0.77 J	4.8	0.63	1	11/28/23 21:48	11/7/23	
Perfluoroheptanoic acid (PFHpA)	4.8 U	4.8	0.71	1	11/28/23 21:48	11/7/23	
Perfluorooctanoic acid (PFOA)	7.8	4.8	0.87	1	11/28/23 21:48	11/7/23	
Perfluorononanoic acid (PFNA)	4.8 U	4.8	0.75	1	11/28/23 21:48	11/7/23	
Perfluorodecanoic acid (PFDA)	4.8 U	4.8	0.60	1	11/28/23 21:48	11/7/23	
Perfluoroundecanoic acid (PFUnDA)	4.8 U	4.8	0.82	1	11/28/23 21:48	11/7/23	
Perfluorododecanoic acid (PFDOA)	4.8 U	4.8	0.61	1	11/28/23 21:48	11/7/23	
Perfluorotridecanoic acid (PFTrDA)	4.8 U	4.8	0.46	1	11/28/23 21:48	11/7/23	
Perfluorotetradecanoic acid (PFTDA)	4.8 U	4.8	1.3	1	11/28/23 21:48	11/7/23	
Perfluoroalkyl Sulfonamido Substances							
Perfluorooctane sulfonamide (PFOSAm)	4.8 U	4.8	0.72	1	11/28/23 21:48	11/7/23	
N-Methylperfluorooctane sulfonamide (MeFOSA)	4.8 U	4.8	1.2	1	11/28/23 21:48	11/7/23	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	4.8 U	4.8	0.85	1	11/28/23 21:48	11/7/23	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	4.8 U	4.8	0.82	1	11/28/23 21:48	11/7/23	*
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	4.8 U	4.8	0.92	1	11/28/23 21:48	11/7/23	*
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	4.8 U	4.8	0.91	1	11/28/23 21:48	11/7/23	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	4.8 U	4.8	0.95	1	11/28/23 21:48	11/7/23	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	10/25/23 08:45
Sample Matrix:	Water	Date Received:	10/25/23 17:14
Sample Name:	CW4A-1023	Units:	ng/L
Lab Code:	R2309891-015	Basis:	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)							
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.8 U	4.8	0.42	1	11/28/23 21:48	11/7/23	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.8 U	4.8	1.3	1	11/28/23 21:48	11/7/23	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.8 U	4.8	0.86	1	11/28/23 21:48	11/7/23	
Fluorotelomer Carboxylic Acids (FTCAs)							
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	190 U	190	6.8	1	11/28/23 21:48	11/7/23	*
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	190 U	190	4.2	1	11/28/23 21:48	11/7/23	*
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	190 U	190	6.0	1	11/28/23 21:48	11/7/23	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)							
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	4.8 U	4.8	0.43	1	11/28/23 21:48	11/7/23	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	4.8 U	4.8	0.45	1	11/28/23 21:48	11/7/23	
11-Chloroeicosafauro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	4.8 U	4.8	0.39	1	11/28/23 21:48	11/7/23	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)							
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.8 U	4.8	0.41	1	11/28/23 21:48	11/7/23	
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.8 U	4.8	0.54	1	11/28/23 21:48	11/7/23	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0.49 J	4.8	0.41	1	11/28/23 21:48	11/7/23	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.8 U	4.8	0.58	1	11/28/23 21:48	11/7/23	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	4.8 U	4.8	0.36	1	11/28/23 21:48	11/7/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	10/25/23 08:45
Sample Matrix:	Water	Date Received:	10/25/23 17:14
Sample Name:	CW4A-1023	Units:	ng/L
Lab Code:	R2309891-015	Basis:	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	79	55 - 150	11/28/23 21:48	
13C3-PFHxS	70	55 - 150	11/28/23 21:48	
13C8-PFOS	68	45 - 140	11/28/23 21:48	
13C4-PFBA	68	10 - 130	11/28/23 21:48	
13C5-PFPeA	83	35 - 150	11/28/23 21:48	
13C5-PFHxA	83	55 - 150	11/28/23 21:48	
13C4-PFHpA	81	55 - 150	11/28/23 21:48	
13C8-PFOA	84	60 - 140	11/28/23 21:48	
13C9-PFNA	77	55 - 140	11/28/23 21:48	
13C6-PFDA	73	50 - 140	11/28/23 21:48	
13C7-PFU _n DA	63	30 - 140	11/28/23 21:48	
13C2-PFD _o DA	56	10 - 150	11/28/23 21:48	
13C2-PFTeDA	62	10 - 130	11/28/23 21:48	
13C8-FOSA	74	30 - 130	11/28/23 21:48	
D3-MeFOSA	61	15 - 130	11/28/23 21:48	
D5-EtFOSA	63	10 - 130	11/28/23 21:48	
D7-MeFOSE	56	10 - 150	11/28/23 21:48	
D9-EtFOSE	68	10 - 150	11/28/23 21:48	
D3-MeFOSAA	97	45 - 200	11/28/23 21:48	
D5-EtFOSAA	81	10 - 200	11/28/23 21:48	
13C2-4:2 FTS	109	60 - 200	11/28/23 21:48	
13C2-6:2 FTS	122	60 - 200	11/28/23 21:48	
13C2-8:2 FTS	80	50 - 200	11/28/23 21:48	
13C3-HFPO-DA	79	25 - 160	11/28/23 21:48	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: FB1-1023
Lab Code: R2309891-016

Service Request: R2309891
Date Collected: 10/25/23 08:55
Date Received: 10/25/23 17:14

Units: ng/L
Basis: NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSAs)							
Perfluorobutane sulfonic acid (PFBS)	4.6 U	4.6	0.41	1	11/28/23 22:11	11/7/23	
Perfluoropentane sulfonic acid (PFPeS)	4.6 U	4.6	0.89	1	11/28/23 22:11	11/7/23	
Perfluorohexane sulfonic acid (PFHxS)	4.6 U	4.6	0.82	1	11/28/23 22:11	11/7/23	
Perfluoroheptane sulfonic acid (PFHps)	4.6 U	4.6	0.69	1	11/28/23 22:11	11/7/23	
Perfluorooctane sulfonic acid (PFOS)	4.6 U	4.6	0.83	1	11/28/23 22:11	11/7/23	
Perfluorononane sulfonic acid (PFNS)	4.6 U	4.6	0.33	1	11/28/23 22:11	11/7/23	
Perfluorodecane sulfonic acid (PFDS)	4.6 U	4.6	0.67	1	11/28/23 22:11	11/7/23	
Perfluorododecane sulfonic acid (PFDoS)	4.6 U	4.6	0.56	1	11/28/23 22:11	11/7/23	
Perfluoroalkyl Carboxylic Acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	1.0 J	4.6	0.86	1	11/28/23 22:11	11/7/23	
Perfluoropentanoic acid (PFPeA)	4.6 U	4.6	0.64	1	11/28/23 22:11	11/7/23	
Perfluorohexanoic acid (PFHxA)	4.6 U	4.6	0.63	1	11/28/23 22:11	11/7/23	
Perfluoroheptanoic acid (PFHpA)	4.6 U	4.6	0.71	1	11/28/23 22:11	11/7/23	
Perfluorooctanoic acid (PFOA)	4.6 U	4.6	0.87	1	11/28/23 22:11	11/7/23	
Perfluorononanoic acid (PFNA)	4.6 U	4.6	0.75	1	11/28/23 22:11	11/7/23	
Perfluorodecanoic acid (PFDA)	4.6 U	4.6	0.60	1	11/28/23 22:11	11/7/23	
Perfluoroundecanoic acid (PFUnDA)	4.6 U	4.6	0.82	1	11/28/23 22:11	11/7/23	
Perfluorododecanoic acid (PFDOA)	4.6 U	4.6	0.61	1	11/28/23 22:11	11/7/23	
Perfluorotridecanoic acid (PFTrDA)	4.6 U	4.6	0.46	1	11/28/23 22:11	11/7/23	
Perfluorotetradecanoic acid (PFTDA)	4.6 U	4.6	1.3	1	11/28/23 22:11	11/7/23	
Perfluoroalkyl Sulfonamido Substances							
Perfluorooctane sulfonamide (PFOSAm)	4.6 U	4.6	0.72	1	11/28/23 22:11	11/7/23	
N-Methylperfluorooctane sulfonamide (MeFOSA)	4.6 U	4.6	1.2	1	11/28/23 22:11	11/7/23	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	4.6 U	4.6	0.85	1	11/28/23 22:11	11/7/23	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	4.6 U	4.6	0.82	1	11/28/23 22:11	11/7/23	*
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	4.6 U	4.6	0.92	1	11/28/23 22:11	11/7/23	*
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	4.6 U	4.6	0.91	1	11/28/23 22:11	11/7/23	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	4.6 U	4.6	0.95	1	11/28/23 22:11	11/7/23	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	10/25/23 08:55
Sample Matrix:	Water	Date Received:	10/25/23 17:14
Sample Name:	FB1-1023	Units:	ng/L
Lab Code:	R2309891-016	Basis:	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)							
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.6 U	4.6	0.42	1	11/28/23 22:11	11/7/23	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.6 U	4.6	1.3	1	11/28/23 22:11	11/7/23	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.6 U	4.6	0.86	1	11/28/23 22:11	11/7/23	
Fluorotelomer Carboxylic Acids (FTCAs)							
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	180 U	180	6.8	1	11/28/23 22:11	11/7/23	*
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	180 U	180	4.2	1	11/28/23 22:11	11/7/23	*
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	180 U	180	6.0	1	11/28/23 22:11	11/7/23	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)							
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	4.6 U	4.6	0.43	1	11/28/23 22:11	11/7/23	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	4.6 U	4.6	0.45	1	11/28/23 22:11	11/7/23	
11-Chloroeicosafauro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	4.6 U	4.6	0.39	1	11/28/23 22:11	11/7/23	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)							
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.6 U	4.6	0.41	1	11/28/23 22:11	11/7/23	
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.6 U	4.6	0.54	1	11/28/23 22:11	11/7/23	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0.66 J	4.6	0.41	1	11/28/23 22:11	11/7/23	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.6 U	4.6	0.58	1	11/28/23 22:11	11/7/23	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	4.6 U	4.6	0.36	1	11/28/23 22:11	11/7/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	10/25/23 08:55
Sample Matrix:	Water	Date Received:	10/25/23 17:14
Sample Name:	FB1-1023	Units:	ng/L
Lab Code:	R2309891-016	Basis:	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	80	55 - 150	11/28/23 22:11	
13C3-PFHxS	69	55 - 150	11/28/23 22:11	
13C8-PFOS	68	45 - 140	11/28/23 22:11	
13C4-PFBA	70	10 - 130	11/28/23 22:11	
13C5-PFPeA	86	35 - 150	11/28/23 22:11	
13C5-PFHxA	79	55 - 150	11/28/23 22:11	
13C4-PFHpA	86	55 - 150	11/28/23 22:11	
13C8-PFOA	75	60 - 140	11/28/23 22:11	
13C9-PFNA	74	55 - 140	11/28/23 22:11	
13C6-PFDA	73	50 - 140	11/28/23 22:11	
13C7-PFU _n DA	65	30 - 140	11/28/23 22:11	
13C2-PFD _o DA	58	10 - 150	11/28/23 22:11	
13C2-PFTeDA	68	10 - 130	11/28/23 22:11	
13C8-FOSA	74	30 - 130	11/28/23 22:11	
D3-MeFOSA	58	15 - 130	11/28/23 22:11	
D5-EtFOSA	63	10 - 130	11/28/23 22:11	
D7-MeFOSE	56	10 - 150	11/28/23 22:11	
D9-EtFOSE	70	10 - 150	11/28/23 22:11	
D3-MeFOSAA	103	45 - 200	11/28/23 22:11	
D5-EtFOSAA	88	10 - 200	11/28/23 22:11	
13C2-4:2 FTS	111	60 - 200	11/28/23 22:11	
13C2-6:2 FTS	121	60 - 200	11/28/23 22:11	
13C2-8:2 FTS	90	50 - 200	11/28/23 22:11	
13C3-HFPO-DA	80	25 - 160	11/28/23 22:11	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: CW4B-1023
Lab Code: R2309891-017

Service Request: R2309891
Date Collected: 10/25/23 10:20
Date Received: 10/25/23 17:14

Units: ng/L
Basis: NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSAs)							
Perfluorobutane sulfonic acid (PFBS)	1.6 J	4.4	0.41	1	11/28/23 22:34	11/7/23	
Perfluoropentane sulfonic acid (PFPeS)	4.4 U	4.4	0.89	1	11/28/23 22:34	11/7/23	
Perfluorohexane sulfonic acid (PFHxS)	1.7 J	4.4	0.82	1	11/28/23 22:34	11/7/23	
Perfluoroheptane sulfonic acid (PFHps)	4.4 U	4.4	0.69	1	11/28/23 22:34	11/7/23	
Perfluorooctane sulfonic acid (PFOS)	6.3	4.4	0.83	1	11/28/23 22:34	11/7/23	
Perfluorononane sulfonic acid (PFNS)	4.4 U	4.4	0.33	1	11/28/23 22:34	11/7/23	
Perfluorodecane sulfonic acid (PFDS)	4.4 U	4.4	0.67	1	11/28/23 22:34	11/7/23	
Perfluorododecane sulfonic acid (PFDoS)	4.4 U	4.4	0.56	1	11/28/23 22:34	11/7/23	
Perfluoroalkyl Carboxylic Acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	8.8	4.4	0.86	1	11/28/23 22:34	11/7/23	
Perfluoropentanoic acid (PFPeA)	1.2 J	4.4	0.64	1	11/28/23 22:34	11/7/23	
Perfluorohexanoic acid (PFHxA)	4.4 U	4.4	0.63	1	11/28/23 22:34	11/7/23	
Perfluoroheptanoic acid (PFHpA)	4.4 U	4.4	0.71	1	11/28/23 22:34	11/7/23	
Perfluorooctanoic acid (PFOA)	10	4.4	0.87	1	11/28/23 22:34	11/7/23	
Perfluorononanoic acid (PFNA)	4.4 U	4.4	0.75	1	11/28/23 22:34	11/7/23	
Perfluorodecanoic acid (PFDA)	4.4 U	4.4	0.60	1	11/28/23 22:34	11/7/23	
Perfluoroundecanoic acid (PFUnDA)	4.4 U	4.4	0.82	1	11/28/23 22:34	11/7/23	
Perfluorododecanoic acid (PFDOA)	4.4 U	4.4	0.61	1	11/28/23 22:34	11/7/23	
Perfluorotridecanoic acid (PFTrDA)	4.4 U	4.4	0.46	1	11/28/23 22:34	11/7/23	
Perfluorotetradecanoic acid (PFTDA)	4.4 U	4.4	1.3	1	11/28/23 22:34	11/7/23	
Perfluoroalkyl Sulfonamido Substances							
Perfluorooctane sulfonamide (PFOSAm)	4.4 U	4.4	0.72	1	11/28/23 22:34	11/7/23	
N-Methylperfluorooctane sulfonamide (MeFOSA)	4.4 U	4.4	1.2	1	11/28/23 22:34	11/7/23	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	4.4 U	4.4	0.85	1	11/28/23 22:34	11/7/23	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	4.4 U	4.4	0.82	1	11/28/23 22:34	11/7/23	*
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	4.4 U	4.4	0.92	1	11/28/23 22:34	11/7/23	*
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	4.4 U	4.4	0.91	1	11/28/23 22:34	11/7/23	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	4.4 U	4.4	0.95	1	11/28/23 22:34	11/7/23	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	10/25/23 10:20
Sample Matrix:	Water	Date Received:	10/25/23 17:14
Sample Name:	CW4B-1023	Units:	ng/L
Lab Code:	R2309891-017	Basis:	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)							
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.4 U	4.4	0.42	1	11/28/23 22:34	11/7/23	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.4 U	4.4	1.3	1	11/28/23 22:34	11/7/23	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.4 U	4.4	0.86	1	11/28/23 22:34	11/7/23	
Fluorotelomer Carboxylic Acids (FTCAs)							
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	180 U	180	6.8	1	11/28/23 22:34	11/7/23	*
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	180 U	180	4.2	1	11/28/23 22:34	11/7/23	*
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	180 U	180	6.0	1	11/28/23 22:34	11/7/23	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)							
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	4.4 U	4.4	0.43	1	11/28/23 22:34	11/7/23	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	4.4 U	4.4	0.45	1	11/28/23 22:34	11/7/23	
11-Chloroeicosafauro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	4.4 U	4.4	0.39	1	11/28/23 22:34	11/7/23	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)							
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.4 U	4.4	0.41	1	11/28/23 22:34	11/7/23	
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.4 U	4.4	0.54	1	11/28/23 22:34	11/7/23	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0.65 J	4.4	0.41	1	11/28/23 22:34	11/7/23	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.4 U	4.4	0.58	1	11/28/23 22:34	11/7/23	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	4.4 U	4.4	0.36	1	11/28/23 22:34	11/7/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	10/25/23 10:20
Sample Matrix:	Water	Date Received:	10/25/23 17:14
Sample Name:	CW4B-1023	Units:	ng/L
Lab Code:	R2309891-017	Basis:	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	70	55 - 150	11/28/23 22:34	
13C3-PFHxS	64	55 - 150	11/28/23 22:34	
13C8-PFOS	61	45 - 140	11/28/23 22:34	
13C4-PFBA	65	10 - 130	11/28/23 22:34	
13C5-PFPeA	79	35 - 150	11/28/23 22:34	
13C5-PFHxA	76	55 - 150	11/28/23 22:34	
13C4-PFHpA	78	55 - 150	11/28/23 22:34	
13C8-PFOA	78	60 - 140	11/28/23 22:34	
13C9-PFNA	73	55 - 140	11/28/23 22:34	
13C6-PFDA	69	50 - 140	11/28/23 22:34	
13C7-PFU _n DA	59	30 - 140	11/28/23 22:34	
13C2-PFD _o DA	53	10 - 150	11/28/23 22:34	
13C2-PFTeDA	60	10 - 130	11/28/23 22:34	
13C8-FOSA	68	30 - 130	11/28/23 22:34	
D3-MeFOSA	55	15 - 130	11/28/23 22:34	
D5-EtFOSA	53	10 - 130	11/28/23 22:34	
D7-MeFOSE	47	10 - 150	11/28/23 22:34	
D9-EtFOSE	59	10 - 150	11/28/23 22:34	
D3-MeFOSAA	86	45 - 200	11/28/23 22:34	
D5-EtFOSAA	71	10 - 200	11/28/23 22:34	
13C2-4:2 FTS	100	60 - 200	11/28/23 22:34	
13C2-6:2 FTS	90	60 - 200	11/28/23 22:34	
13C2-8:2 FTS	76	50 - 200	11/28/23 22:34	
13C3-HFPO-DA	73	25 - 160	11/28/23 22:34	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: CW3B-1023
Lab Code: R2309891-018

Service Request: R2309891
Date Collected: 10/25/23 11:50
Date Received: 10/25/23 17:14

Units: ng/L
Basis: NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSAs)							
Perfluorobutane sulfonic acid (PFBS)	2.3 J	4.4	0.41	1	11/28/23 22:57	11/7/23	
Perfluoropentane sulfonic acid (PFPeS)	1.7 J	4.4	0.89	1	11/28/23 22:57	11/7/23	
Perfluorohexane sulfonic acid (PFHxS)	2.7 J	4.4	0.82	1	11/28/23 22:57	11/7/23	
Perfluoroheptane sulfonic acid (PFHps)	4.4 U	4.4	0.69	1	11/28/23 22:57	11/7/23	
Perfluorooctane sulfonic acid (PFOS)	9.9	4.4	0.83	1	11/28/23 22:57	11/7/23	
Perfluorononane sulfonic acid (PFNS)	4.4 U	4.4	0.33	1	11/28/23 22:57	11/7/23	
Perfluorodecane sulfonic acid (PFDS)	4.4 U	4.4	0.67	1	11/28/23 22:57	11/7/23	
Perfluorododecane sulfonic acid (PFDoS)	4.4 U	4.4	0.56	1	11/28/23 22:57	11/7/23	
Perfluoroalkyl Carboxylic Acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	4.0 J	4.4	0.86	1	11/28/23 22:57	11/7/23	
Perfluoropentanoic acid (PFPeA)	2.9 J	4.4	0.64	1	11/28/23 22:57	11/7/23	
Perfluorohexanoic acid (PFHxA)	6.8	4.4	0.63	1	11/28/23 22:57	11/7/23	
Perfluoroheptanoic acid (PFHpA)	2.4 J	4.4	0.71	1	11/28/23 22:57	11/7/23	
Perfluorooctanoic acid (PFOA)	7.7	4.4	0.87	1	11/28/23 22:57	11/7/23	
Perfluorononanoic acid (PFNA)	4.4 U	4.4	0.75	1	11/28/23 22:57	11/7/23	
Perfluorodecanoic acid (PFDA)	4.4 U	4.4	0.60	1	11/28/23 22:57	11/7/23	
Perfluoroundecanoic acid (PFUnDA)	4.4 U	4.4	0.82	1	11/28/23 22:57	11/7/23	
Perfluorododecanoic acid (PFDOA)	4.4 U	4.4	0.61	1	11/28/23 22:57	11/7/23	
Perfluorotridecanoic acid (PFTrDA)	4.4 U	4.4	0.46	1	11/28/23 22:57	11/7/23	
Perfluorotetradecanoic acid (PFTDA)	4.4 U	4.4	1.3	1	11/28/23 22:57	11/7/23	
Perfluoroalkyl Sulfonamido Substances							
Perfluorooctane sulfonamide (PFOSAm)	4.4 U	4.4	0.72	1	11/28/23 22:57	11/7/23	
N-Methylperfluorooctane sulfonamide (MeFOSA)	4.4 U	4.4	1.2	1	11/28/23 22:57	11/7/23	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	4.4 U	4.4	0.85	1	11/28/23 22:57	11/7/23	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	4.4 U	4.4	0.82	1	11/28/23 22:57	11/7/23	*
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	4.4 U	4.4	0.92	1	11/28/23 22:57	11/7/23	*
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	4.4 U	4.4	0.91	1	11/28/23 22:57	11/7/23	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	4.4 U	4.4	0.95	1	11/28/23 22:57	11/7/23	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	10/25/23 11:50
Sample Matrix:	Water	Date Received:	10/25/23 17:14
Sample Name:	CW3B-1023	Units:	ng/L
Lab Code:	R2309891-018	Basis:	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)							
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.4 U	4.4	0.42	1	11/28/23 22:57	11/7/23	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.4 U	4.4	1.3	1	11/28/23 22:57	11/7/23	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.4 U	4.4	0.86	1	11/28/23 22:57	11/7/23	
Fluorotelomer Carboxylic Acids (FTCAs)							
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	180 U	180	6.8	1	11/28/23 22:57	11/7/23	*
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	180 U	180	4.2	1	11/28/23 22:57	11/7/23	*
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	180 U	180	6.0	1	11/28/23 22:57	11/7/23	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)							
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	4.4 U	4.4	0.43	1	11/28/23 22:57	11/7/23	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	4.4 U	4.4	0.45	1	11/28/23 22:57	11/7/23	
11-Chloroeicosafauro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	4.4 U	4.4	0.39	1	11/28/23 22:57	11/7/23	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)							
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.4 U	4.4	0.41	1	11/28/23 22:57	11/7/23	
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.4 U	4.4	0.54	1	11/28/23 22:57	11/7/23	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0.63 J	4.4	0.41	1	11/28/23 22:57	11/7/23	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.4 U	4.4	0.58	1	11/28/23 22:57	11/7/23	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	4.4 U	4.4	0.36	1	11/28/23 22:57	11/7/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	10/25/23 11:50
Sample Matrix:	Water	Date Received:	10/25/23 17:14
Sample Name:	CW3B-1023	Units:	ng/L
Lab Code:	R2309891-018	Basis:	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	71	55 - 150	11/28/23 22:57	
13C3-PFHxS	68	55 - 150	11/28/23 22:57	
13C8-PFOS	58	45 - 140	11/28/23 22:57	
13C4-PFBA	62	10 - 130	11/28/23 22:57	
13C5-PFPeA	90	35 - 150	11/28/23 22:57	
13C5-PFHxA	78	55 - 150	11/28/23 22:57	
13C4-PFHpA	89	55 - 150	11/28/23 22:57	
13C8-PFOA	84	60 - 140	11/28/23 22:57	
13C9-PFNA	78	55 - 140	11/28/23 22:57	
13C6-PFDA	80	50 - 140	11/28/23 22:57	
13C7-PFU _n DA	71	30 - 140	11/28/23 22:57	
13C2-PFD _o DA	58	10 - 150	11/28/23 22:57	
13C2-PFTeDA	73	10 - 130	11/28/23 22:57	
13C8-FOSA	65	30 - 130	11/28/23 22:57	
D3-MeFOSA	58	15 - 130	11/28/23 22:57	
D5-EtFOSA	56	10 - 130	11/28/23 22:57	
D7-MeFOSE	47	10 - 150	11/28/23 22:57	
D9-EtFOSE	57	10 - 150	11/28/23 22:57	
D3-MeFOSAA	82	45 - 200	11/28/23 22:57	
D5-EtFOSAA	73	10 - 200	11/28/23 22:57	
13C2-4:2 FTS	100	60 - 200	11/28/23 22:57	
13C2-6:2 FTS	97	60 - 200	11/28/23 22:57	
13C2-8:2 FTS	77	50 - 200	11/28/23 22:57	
13C3-HFPO-DA	85	25 - 160	11/28/23 22:57	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: MW17S-1023
Lab Code: R2309891-019

Service Request: R2309891
Date Collected: 10/25/23 14:40
Date Received: 10/25/23 17:14

Units: ng/L
Basis: NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSAs)							
Perfluorobutane sulfonic acid (PFBS)	2.0 J	4.8	0.41	1	11/28/23 23:21	11/7/23	
Perfluoropentane sulfonic acid (PFPeS)	0.95 J	4.8	0.89	1	11/28/23 23:21	11/7/23	
Perfluorohexane sulfonic acid (PFHxS)	2.3 J	4.8	0.82	1	11/28/23 23:21	11/7/23	
Perfluoroheptane sulfonic acid (PFHps)	4.8 U	4.8	0.69	1	11/28/23 23:21	11/7/23	
Perfluorooctane sulfonic acid (PFOS)	3.2 J	4.8	0.83	1	11/28/23 23:21	11/7/23	
Perfluorononane sulfonic acid (PFNS)	4.8 U	4.8	0.33	1	11/28/23 23:21	11/7/23	
Perfluorodecane sulfonic acid (PFDS)	4.8 U	4.8	0.67	1	11/28/23 23:21	11/7/23	
Perfluorododecane sulfonic acid (PFDoS)	4.8 U	4.8	0.56	1	11/28/23 23:21	11/7/23	
Perfluoroalkyl Carboxylic Acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	8.8	4.8	0.86	1	11/28/23 23:21	11/7/23	
Perfluoropentanoic acid (PFPeA)	3.2 J	4.8	0.64	1	11/28/23 23:21	11/7/23	
Perfluorohexanoic acid (PFHxA)	5.4	4.8	0.63	1	11/28/23 23:21	11/7/23	
Perfluoroheptanoic acid (PFHpA)	4.5 J	4.8	0.71	1	11/28/23 23:21	11/7/23	
Perfluorooctanoic acid (PFOA)	28	4.8	0.87	1	11/28/23 23:21	11/7/23	
Perfluorononanoic acid (PFNA)	4.8 U	4.8	0.75	1	11/28/23 23:21	11/7/23	
Perfluorodecanoic acid (PFDA)	4.8 U	4.8	0.60	1	11/28/23 23:21	11/7/23	
Perfluoroundecanoic acid (PFUnDA)	4.8 U	4.8	0.82	1	11/28/23 23:21	11/7/23	
Perfluorododecanoic acid (PFDOA)	4.8 U	4.8	0.61	1	11/28/23 23:21	11/7/23	
Perfluorotridecanoic acid (PFTrDA)	4.8 U	4.8	0.46	1	11/28/23 23:21	11/7/23	
Perfluorotetradecanoic acid (PFTDA)	4.8 U	4.8	1.3	1	11/28/23 23:21	11/7/23	
Perfluoroalkyl Sulfonamido Substances							
Perfluorooctane sulfonamide (PFOSAm)	4.8 U	4.8	0.72	1	11/28/23 23:21	11/7/23	
N-Methylperfluorooctane sulfonamide (MeFOSA)	4.8 U	4.8	1.2	1	11/28/23 23:21	11/7/23	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	4.8 U	4.8	0.85	1	11/28/23 23:21	11/7/23	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	4.8 U	4.8	0.82	1	11/28/23 23:21	11/7/23	*
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	4.8 U	4.8	0.92	1	11/28/23 23:21	11/7/23	*
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	4.8 U	4.8	0.91	1	11/28/23 23:21	11/7/23	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	4.8 U	4.8	0.95	1	11/28/23 23:21	11/7/23	*

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	10/25/23 14:40
Sample Matrix:	Water	Date Received:	10/25/23 17:14
Sample Name:	MW17S-1023	Units:	ng/L
Lab Code:	R2309891-019	Basis:	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)							
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.8 U	4.8	0.42	1	11/28/23 23:21	11/7/23	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.8 U	4.8	1.3	1	11/28/23 23:21	11/7/23	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.8 U	4.8	0.86	1	11/28/23 23:21	11/7/23	
Fluorotelomer Carboxylic Acids (FTCAs)							
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	190 U	190	6.8	1	11/28/23 23:21	11/7/23	*
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	190 U	190	4.2	1	11/28/23 23:21	11/7/23	*
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	190 U	190	6.0	1	11/28/23 23:21	11/7/23	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)							
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	4.8 U	4.8	0.43	1	11/28/23 23:21	11/7/23	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	4.8 U	4.8	0.45	1	11/28/23 23:21	11/7/23	
11-Chloroeicosafauro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	4.8 U	4.8	0.39	1	11/28/23 23:21	11/7/23	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)							
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.8 U	4.8	0.41	1	11/28/23 23:21	11/7/23	
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.8 U	4.8	0.54	1	11/28/23 23:21	11/7/23	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0.49 IJ	4.8	0.41	1	11/28/23 23:21	11/7/23	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.8 U	4.8	0.58	1	11/28/23 23:21	11/7/23	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	4.8 U	4.8	0.36	1	11/28/23 23:21	11/7/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	10/25/23 14:40
Sample Matrix:	Water	Date Received:	10/25/23 17:14
Sample Name:	MW17S-1023	Units:	ng/L
Lab Code:	R2309891-019	Basis:	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	78	55 - 150	11/28/23 23:21	
13C3-PFHxS	65	55 - 150	11/28/23 23:21	
13C8-PFOS	58	45 - 140	11/28/23 23:21	
13C4-PFBA	54	10 - 130	11/28/23 23:21	
13C5-PFPeA	82	35 - 150	11/28/23 23:21	
13C5-PFHxA	77	55 - 150	11/28/23 23:21	
13C4-PFHpA	83	55 - 150	11/28/23 23:21	
13C8-PFOA	79	60 - 140	11/28/23 23:21	
13C9-PFNA	74	55 - 140	11/28/23 23:21	
13C6-PFDA	77	50 - 140	11/28/23 23:21	
13C7-PFUUnDA	70	30 - 140	11/28/23 23:21	
13C2-PFDDoDA	59	10 - 150	11/28/23 23:21	
13C2-PFTeDA	74	10 - 130	11/28/23 23:21	
13C8-FOSA	59	30 - 130	11/28/23 23:21	
D3-MeFOSA	54	15 - 130	11/28/23 23:21	
D5-EtFOSA	52	10 - 130	11/28/23 23:21	
D7-MeFOSE	46	10 - 150	11/28/23 23:21	
D9-EtFOSE	57	10 - 150	11/28/23 23:21	
D3-MeFOSAA	80	45 - 200	11/28/23 23:21	
D5-EtFOSAA	69	10 - 200	11/28/23 23:21	
13C2-4:2 FTS	105	60 - 200	11/28/23 23:21	
13C2-6:2 FTS	112	60 - 200	11/28/23 23:21	
13C2-8:2 FTS	87	50 - 200	11/28/23 23:21	
13C3-HFPO-DA	80	25 - 160	11/28/23 23:21	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	NA
Sample Matrix:	Water	Date Received:	NA
Sample Name:	Method Blank	Units:	ng/L
Lab Code:	KQ2319743-04	Basis:	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSAs)							
Perfluorobutane sulfonic acid (PFBS)	5.0 U	5.0	0.41	1	11/28/23 19:28	11/7/23	
Perfluoropentane sulfonic acid (PFPeS)	5.0 U	5.0	0.89	1	11/28/23 19:28	11/7/23	
Perfluorohexane sulfonic acid (PFHxS)	5.0 U	5.0	0.82	1	11/28/23 19:28	11/7/23	
Perfluoroheptane sulfonic acid (PFHps)	5.0 U	5.0	0.69	1	11/28/23 19:28	11/7/23	
Perfluorooctane sulfonic acid (PFOS)	5.0 U	5.0	0.83	1	11/28/23 19:28	11/7/23	
Perfluorononane sulfonic acid (PFNS)	5.0 U	5.0	0.33	1	11/28/23 19:28	11/7/23	
Perfluorodecane sulfonic acid (PFDS)	5.0 U	5.0	0.67	1	11/28/23 19:28	11/7/23	
Perfluorododecane sulfonic acid (PFDoS)	5.0 U	5.0	0.56	1	11/28/23 19:28	11/7/23	
Perfluoroalkyl Carboxylic Acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	1.2 J	5.0	0.86	1	11/28/23 19:28	11/7/23	
Perfluoropentanoic acid (PFPeA)	5.0 U	5.0	0.64	1	11/28/23 19:28	11/7/23	
Perfluorohexanoic acid (PFHxA)	5.0 U	5.0	0.63	1	11/28/23 19:28	11/7/23	
Perfluoroheptanoic acid (PFHpA)	5.0 U	5.0	0.71	1	11/28/23 19:28	11/7/23	
Perfluorooctanoic acid (PFOA)	5.0 U	5.0	0.87	1	11/28/23 19:28	11/7/23	
Perfluorononanoic acid (PFNA)	5.0 U	5.0	0.75	1	11/28/23 19:28	11/7/23	
Perfluorodecanoic acid (PFDA)	5.0 U	5.0	0.60	1	11/28/23 19:28	11/7/23	
Perfluoroundecanoic acid (PFUnDA)	5.0 U	5.0	0.82	1	11/28/23 19:28	11/7/23	
Perfluorododecanoic acid (PFDOA)	5.0 U	5.0	0.61	1	11/28/23 19:28	11/7/23	
Perfluorotridecanoic acid (PFTrDA)	5.0 U	5.0	0.46	1	11/28/23 19:28	11/7/23	
Perfluorotetradecanoic acid (PFTDA)	5.0 U	5.0	1.3	1	11/28/23 19:28	11/7/23	
Perfluoroalkyl Sulfonamido Substances							
Perfluorooctane sulfonamide (PFOSAm)	5.0 U	5.0	0.72	1	11/28/23 19:28	11/7/23	
N-Methylperfluorooctane sulfonamide (MeFOSA)	5.0 U	5.0	1.2	1	11/28/23 19:28	11/7/23	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	5.0 U	5.0	0.85	1	11/28/23 19:28	11/7/23	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	5.0 U	5.0	0.82	1	11/28/23 19:28	11/7/23	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	5.0 U	5.0	0.92	1	11/28/23 19:28	11/7/23	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	5.0 U	5.0	0.91	1	11/28/23 19:28	11/7/23	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	5.0 U	5.0	0.95	1	11/28/23 19:28	11/7/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	NA
Sample Matrix:	Water	Date Received:	NA
Sample Name:	Method Blank	Units:	ng/L
Lab Code:	KQ2319743-04	Basis:	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)							
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	5.0 U	5.0	0.42	1	11/28/23 19:28	11/7/23	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	5.0 U	5.0	1.3	1	11/28/23 19:28	11/7/23	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	5.0 U	5.0	0.86	1	11/28/23 19:28	11/7/23	
Fluorotelomer Carboxylic Acids (FTCAs)							
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	200 U	200	6.8	1	11/28/23 19:28	11/7/23	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	200 U	200	4.2	1	11/28/23 19:28	11/7/23	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	200 U	200	6.0	1	11/28/23 19:28	11/7/23	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)							
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	5.0 U	5.0	0.43	1	11/28/23 19:28	11/7/23	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	5.0 U	5.0	0.45	1	11/28/23 19:28	11/7/23	
11-Chloroeicosafauro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	5.0 U	5.0	0.39	1	11/28/23 19:28	11/7/23	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)							
Perfluoro-3-methoxypropanoic acid (PFMPA)	5.0 U	5.0	0.41	1	11/28/23 19:28	11/7/23	
Perfluoro-4-methoxybutanoic acid (PFMBA)	5.0 U	5.0	0.54	1	11/28/23 19:28	11/7/23	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0.46 J	5.0	0.41	1	11/28/23 19:28	11/7/23	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	5.0 U	5.0	0.58	1	11/28/23 19:28	11/7/23	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	5.0 U	5.0	0.36	1	11/28/23 19:28	11/7/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Collected:	NA
Sample Matrix:	Water	Date Received:	NA
Sample Name:	Method Blank	Units:	ng/L
Lab Code:	KQ2319743-04	Basis:	NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	80	55 - 150	11/28/23 19:28	
13C3-PFHxS	73	55 - 150	11/28/23 19:28	
13C8-PFOS	77	45 - 140	11/28/23 19:28	
13C4-PFBA	70	10 - 130	11/28/23 19:28	
13C5-PFPeA	83	35 - 150	11/28/23 19:28	
13C5-PFHxA	82	55 - 150	11/28/23 19:28	
13C4-PFHpA	86	55 - 150	11/28/23 19:28	
13C8-PFOA	79	60 - 140	11/28/23 19:28	
13C9-PFNA	76	55 - 140	11/28/23 19:28	
13C6-PFDA	71	50 - 140	11/28/23 19:28	
13C7-PFUUnDA	65	30 - 140	11/28/23 19:28	
13C2-PFDoDA	59	10 - 150	11/28/23 19:28	
13C2-PFTeDA	62	10 - 130	11/28/23 19:28	
13C8-FOSA	81	30 - 130	11/28/23 19:28	
D3-MeFOSA	65	15 - 130	11/28/23 19:28	
D5-EtFOSA	66	10 - 130	11/28/23 19:28	
D7-MeFOSE	64	10 - 150	11/28/23 19:28	
D9-EtFOSE	70	10 - 150	11/28/23 19:28	
D3-MeFOSAA	100	45 - 200	11/28/23 19:28	
D5-EtFOSAA	96	10 - 200	11/28/23 19:28	
13C2-4:2 FTS	97	60 - 200	11/28/23 19:28	
13C2-6:2 FTS	117	60 - 200	11/28/23 19:28	
13C2-8:2 FTS	91	50 - 200	11/28/23 19:28	
13C3-HFPO-DA	80	25 - 160	11/28/23 19:28	

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling/
Sample Matrix: Water

Service Request: R2309891

SURROGATE RECOVERY SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Extraction Method: Method

Surrogate	Control Limits	CW4A-1023	FB1-1023	CW4B-1023
		R2309891-015	R2309891-016	R2309891-017
13C3-PFBS	55-150	79	80	70
13C3-PFHxS	55-150	70	69	64
13C8-PFOS	45-140	68	68	61
13C4-PFBA	10-130	68	70	65
13C5-PFPeA	35-150	83	86	79
13C5-PFHxA	55-150	83	79	76
13C4-PFHpA	55-150	81	86	78
13C8-PFOA	60-140	84	75	78
13C9-PFNA	55-140	77	74	73
13C6-PFDA	50-140	73	73	69
13C7-PFUnDA	30-140	63	65	59
13C2-PFDoDA	10-150	56	58	53
13C2-PFTeDA	10-130	62	68	60
13C8-FOSA	30-130	74	74	68
D3-MeFOSA	15-130	61	58	55
D5-EtFOSA	10-130	63	63	53
D7-MeFOSE	10-150	56	56	47
D9-EtFOSE	10-150	68	70	59
D3-MeFOSAA	45-200	97	103	86
D5-EtFOSAA	10-200	81	88	71
13C2-4:2 FTS	60-200	109	111	100
13C2-6:2 FTS	60-200	122	121	90
13C2-8:2 FTS	50-200	80	90	76
13C3-HFPO-DA	25-160	79	80	73

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with an pound (#) indicate the control criteria is not acceptable.

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling/
Sample Matrix: Water

Service Request: R2309891

SURROGATE RECOVERY SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Extraction Method: Method

Surrogate	Control Limits	CW3B-1023	MW17S-1023	Method Blank
		R2309891-018	R2309891-019	KQ2319743-04
13C3-PFBS	55-150	71	78	80
13C3-PFHxS	55-150	68	65	73
13C8-PFOS	45-140	58	58	77
13C4-PFBA	10-130	62	54	70
13C5-PFPeA	35-150	90	82	83
13C5-PFHxA	55-150	78	77	82
13C4-PFHpA	55-150	89	83	86
13C8-PFOA	60-140	84	79	79
13C9-PFNA	55-140	78	74	76
13C6-PFDA	50-140	80	77	71
13C7-PFUnDA	30-140	71	70	65
13C2-PFDoDA	10-150	58	59	59
13C2-PFTeDA	10-130	73	74	62
13C8-FOSA	30-130	65	59	81
D3-MeFOSA	15-130	58	54	65
D5-EtFOSA	10-130	56	52	66
D7-MeFOSE	10-150	47	46	64
D9-EtFOSE	10-150	57	57	70
D3-MeFOSAA	45-200	82	80	100
D5-EtFOSAA	10-200	73	69	96
13C2-4:2 FTS	60-200	100	105	97
13C2-6:2 FTS	60-200	97	112	117
13C2-8:2 FTS	50-200	77	87	91
13C3-HFPO-DA	25-160	85	80	80

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with an pound (#) indicate the control criteria is not acceptable.

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling/
Sample Matrix: Water

Service Request: R2309891

SURROGATE RECOVERY SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Extraction Method: Method

Surrogate	Control Limits	Lab Control Sample	Duplicate Lab Control Sample	Low Level Lab Control Sample
		KQ2319743-01	KQ2319743-02	KQ2319743-03
13C3-PFBS	25-150	72	75	67
13C3-PFHxS	25-150	72	67	61
13C8-PFOS	20-140	77	65	61
13C4-PFBA	10-130	72	65	62
13C5-PFPeA	40-150	84	76	68
13C5-PFHxA	40-150	83	76	70
13C4-PFHpA	40-150	84	76	73
13C8-PFOA	30-140	81	62	70
13C9-PFNA	30-140	79	71	66
13C6-PFDA	20-140	77	69	67
13C7-PFUnDA	20-140	69	59	54
13C2-PFDoDA	10-150	63	51	51
13C2-PFTeDA	10-130	72	58	57
13C8-FOSA	10-130	75	69	61
D3-MeFOSA	10-130	61	58	52
D5-EtFOSA	10-130	63	59	52
D7-MeFOSE	10-150	63	58	51
D9-EtFOSE	10-150	71	65	58
D3-MeFOSAA	10-200	104	87	80
D5-EtFOSAA	10-200	90	80	72
13C2-4:2 FTS	25-200	102	112	92
13C2-6:2 FTS	25-200	106	116	95
13C2-8:2 FTS	25-200	80	90	80
13C3-HFPO-DA	25-160	83	75	67

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with an pound (#) indicate the control criteria is not acceptable.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc. **Service Request:**R2309891
Project: WAL - Annual Sampling **Date Analyzed:**11/28/23 17:55

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231128_1633_B1\231128_016 **Lab Code:**KQ2321059-03
Instrument ID: K-LCMS-08 **Analysis Lot:**825570
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

	18O2-PFHxS		13C4-PFOS		13C3-PFBA	
	Area	RT	Area	RT	Area	RT
Result ==>	286,431	6.8	200,496	8.53	818,858	1.21
Upper Limit ==>	572,862	7.20	400,992	8.93	1,637,716	1.61
Lower Limit ==>	85,929	6.40	60,149	8.13	245,657	0.81

Associated Analyses

Low Level Continuing Calibration Verification	KQ2321059-03	273816	6.806	177790	8.540	863003	1.222
-----------------------------------------------	--------------	--------	-------	--------	-------	--------	-------

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc. **Service Request:**R2309891
Project: WAL - Annual Sampling **Date Analyzed:**11/28/23 17:55

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231128_1633_B1\231128_016 **Lab Code:**KQ2321059-03
Instrument ID: K-LCMS-08 **Analysis Lot:**825570
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

	13C2-PFHxA		13C4-PFOA		13C5-PFNA	
	Area	RT	Area	RT	Area	RT
Result ==>	622,921	4.7	68,937	6.85	416,597	7.7
Upper Limit ==>	1,245,842	5.10	137,874	7.25	833,194	8.10
Lower Limit ==>	186,876	4.30	20,681	6.45	124,979	7.30

Associated Analyses

Low Level Continuing Calibration Verification	KQ2321059-03	607059	4.709	62855	6.856	412178	7.708
-----------------------------------------------	--------------	--------	-------	-------	-------	--------	-------

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891
Date Analyzed:11/28/23 17:55

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231128_1633_B1\231128_016 **Lab Code:**KQ2321059-03
Instrument ID: K-LCMS-08 **Analysis Lot:**825570
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

13C2-PFDA		
	Area	RT
Result ==>	289,957	8.46
Upper Limit ==>	579,914	8.86
Lower Limit ==>	86,987	8.06

Associated Analyses

Low Level Continuing Calibration KQ2321059-03 282371 8.472
Verification

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891
Date Analyzed:11/28/23 18:18

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231128_1633_B1\231128_017 **Lab Code:**KQ2321059-04
Instrument ID: K-LCMS-08 **Analysis Lot:**825570
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

	18O2-PFHxS		13C4-PFOS		13C3-PFBA	
	Area	RT	Area	RT	Area	RT
Result ==>	286,431	6.8	200,496	8.53	818,858	1.21
Upper Limit ==>	572,862	7.20	400,992	8.93	1,637,716	1.61
Lower Limit ==>	85,929	6.40	60,149	8.13	245,657	0.81

Associated Analyses

Continuing Calibration Verification	KQ2321059-04	259547	6.799	182187	8.536	895638	1.221
Performance Evaluation	KQ2321059-05	356162	6.798	226827	8.534	1157895	1.222
Continuing Calibration Blank	KQ2321059-06	244421	6.801	189295	8.537	842507	1.217
Method Blank	KQ2319743-04	248706	6.821	171246	8.555	823634	1.267
Lab Control Sample	KQ2319743-01	281864	6.818	189191	8.553	863883	1.281
Duplicate Lab Control Sample	KQ2319743-02	243200	6.823	176615	8.556	853787	1.276
Low Level Lab Control Sample	KQ2319743-03	277226	6.841	207213	8.572	881484	1.345
CW4A-1023	R2309891-015	245090	6.809	181306	8.543	862774	1.261
FB1-1023	R2309891-016	247608	6.812	185324	8.544	879490	1.272
CW4B-1023	R2309891-017	258869	6.819	188243	8.541	854789	1.272
CW3B-1023	R2309891-018	259192	6.817	204860	8.549	855898	1.265
MW17S-1023	R2309891-019	243874	6.823	213918	8.551	910853	1.317

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891
Date Analyzed:11/28/23 18:18

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231128_1633_B1\231128_017 **Lab Code:**KQ2321059-04
Instrument ID: K-LCMS-08 **Analysis Lot:**825570
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

	13C2-PFHxA		13C4-PFOA		13C5-PFNA	
	Area	RT	Area	RT	Area	RT
Result ==>	622,921	4.7	68,937	6.85	416,597	7.7
Upper Limit ==>	1,245,842	5.10	137,874	7.25	833,194	8.10
Lower Limit ==>	186,876	4.30	20,681	6.45	124,979	7.30

Associated Analyses

Continuing Calibration Verification	KQ2321059-04	595131	4.703	62503	6.851	425525	7.702
Performance Evaluation	KQ2321059-05	767010	4.704	81718	6.851	540503	7.702
Continuing Calibration Blank	KQ2321059-06	576575	4.703	61561	6.853	398406	7.706
Method Blank	KQ2319743-04	571523	4.729	59100	6.872	384675	7.722
Lab Control Sample	KQ2319743-01	596095	4.732	68171	6.867	400383	7.721
Duplicate Lab Control Sample	KQ2319743-02	587998	4.731	57554	6.874	393210	7.724
Low Level Lab Control Sample	KQ2319743-03	628828	4.756	65295	6.889	418109	7.739
CW4A-1023	R2309891-015	580217	4.718	54041	6.861	382288	7.711
FB1-1023	R2309891-016	588162	4.721	62133	6.863	418474	7.712
CW4B-1023	R2309891-017	587996	4.755	58343	6.868	387485	7.715
CW3B-1023	R2309891-018	534597	4.724	58998	6.867	374680	7.717
MW17S-1023	R2309891-019	574084	4.739	57704	6.871	408601	7.719

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891
Date Analyzed:11/28/23 18:18

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231128_1633_B1\231128_017 **Lab Code:**KQ2321059-04
Instrument ID: K-LCMS-08 **Analysis Lot:**825570
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

13C2-PFDA		
	Area	RT
Result ==>	289,957	8.46
Upper Limit ==>	579,914	8.86
Lower Limit ==>	86,987	8.06

Associated Analyses

Continuing Calibration Verification	KQ2321059-04	298868	8.465
Performance Evaluation	KQ2321059-05	374336	8.464
Continuing Calibration Blank	KQ2321059-06	253104	8.468
Method Blank	KQ2319743-04	291223	8.486
Lab Control Sample	KQ2319743-01	275686	8.485
Duplicate Lab Control Sample	KQ2319743-02	284595	8.487
Low Level Lab Control Sample	KQ2319743-03	305917	8.500
CW4A-1023	R2309891-015	265006	8.473
FB1-1023	R2309891-016	281377	8.474
CW4B-1023	R2309891-017	243270	8.473
CW3B-1023	R2309891-018	233412	8.479
MW17S-1023	R2309891-019	243910	8.480

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc. **Service Request:**R2309891
Project: WAL - Annual Sampling **Date Analyzed:**11/28/23 23:44

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231128_1633_B1\231128_031 **Lab Code:**KQ2321059-08
Instrument ID: K-LCMS-08 **Analysis Lot:**825570
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

	18O2-PFHxS		13C4-PFOS		13C3-PFBA	
	Area	RT	Area	RT	Area	RT
Result ==>	286,431	6.8	200,496	8.53	818,858	1.21
Upper Limit ==>	572,862	7.20	400,992	8.93	1,637,716	1.61
Lower Limit ==>	85,929	6.40	60,149	8.13	245,657	0.81

Associated Analyses

Continuing Calibration Verification	KQ2321059-08	282161	6.796	216012	8.529	914103	1.219
Continuing Calibration Blank	KQ2321059-07	259972	6.785	191052	8.519	881520	1.213

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891
Date Analyzed:11/28/23 23:44

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231128_1633_B1\231128_031 **Lab Code:**KQ2321059-08
Instrument ID: K-LCMS-08 **Analysis Lot:**825570
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

	13C2-PFHxA		13C4-PFOA		13C5-PFNA	
	Area	RT	Area	RT	Area	RT
Result ==>	622,921	4.7	68,937	6.85	416,597	7.7
Upper Limit ==>	1,245,842	5.10	137,874	7.25	833,194	8.10
Lower Limit ==>	186,876	4.30	20,681	6.45	124,979	7.30

Associated Analyses

Continuing Calibration Verification	KQ2321059-08	591410	4.703	59742	6.847	423947	7.699
Continuing Calibration Blank	KQ2321059-07	581876	4.690	57367	6.837	407955	7.688

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891
Date Analyzed:11/28/23 23:44

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231128_1633_B1\231128_031 **Lab Code:**KQ2321059-08
Instrument ID: K-LCMS-08 **Analysis Lot:**825570
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

13C2-PFDA		
	Area	RT
Result ==>	289,957	8.46
Upper Limit ==>	579,914	8.86
Lower Limit ==>	86,987	8.06

Associated Analyses

Continuing Calibration Verification	KQ2321059-08	271855	8.461
Continuing Calibration Blank	KQ2321059-07	281353	8.451

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891
Date Analyzed:12/07/23 19:05

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231207_1633_B1\231207_020 **Lab Code:**KQ2321619-03
Instrument ID: K-LCMS-08 **Analysis Lot:**826600
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

	18O2-PFHxS		13C4-PFOS		13C3-PFBA	
	Area	RT	Area	RT	Area	RT
Result ==>	219,101	7.14	275,511	8.89	534,373	1.46
Upper Limit ==>	438,202	7.54	551,022	9.29	1,068,746	1.86
Lower Limit ==>	65,730	6.74	82,653	8.49	160,312	1.06

Associated Analyses

Low Level Continuing Calibration Verification	KQ2321619-03	213898	7.124	281393	8.876	510139	1.447
-----------------------------------------------	--------------	--------	-------	--------	-------	--------	-------

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891
Date Analyzed:12/07/23 19:05

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231207_1633_B1\231207_020 **Lab Code:**KQ2321619-03
Instrument ID: K-LCMS-08 **Analysis Lot:**826600
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

	13C2-PFHxA		13C4-PFOA		13C5-PFNA	
	Area	RT	Area	RT	Area	RT
Result ==>	459,033	5.01	39,108	7.15	219,315	8.01
Upper Limit ==>	918,066	5.41	78,216	7.55	438,630	8.41
Lower Limit ==>	137,710	4.61	11,732	6.75	65,795	7.61

Associated Analyses

Low Level Continuing Calibration Verification	KQ2321619-03	469216	4.992	44562	7.140	212364	7.996
-----------------------------------------------	--------------	--------	-------	-------	-------	--------	-------

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891
Date Analyzed:12/07/23 19:05

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231207_1633_B1\231207_020

Lab Code:KQ2321619-03

Instrument ID: K-LCMS-08

Analysis Lot:826600

Analysis Method: Draft EPA Method 1633

Signal ID:1

13C2-PFDA		
	Area	RT
Result ==>	171,121	8.78
Upper Limit ==>	342,242	9.18
Lower Limit ==>	51,336	8.38

Associated Analyses

Low Level Continuing Calibration KQ2321619-03 146044 8.768
Verification

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891
Date Analyzed:12/07/23 19:29

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231207_1633_B1\231207_021 **Lab Code:**KQ2321619-04
Instrument ID: K-LCMS-08 **Analysis Lot:**826600
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

	18O2-PFHxS		13C4-PFOS		13C3-PFBA	
	Area	RT	Area	RT	Area	RT
Result ==>	219,101	7.14	275,511	8.89	534,373	1.46
Upper Limit ==>	438,202	7.54	551,022	9.29	1,068,746	1.86
Lower Limit ==>	65,730	6.74	82,653	8.49	160,312	1.06

Associated Analyses

Continuing Calibration Verification	KQ2321619-04	223778	7.126	294468	8.877	508932	1.457
Performance Evaluation	KQ2321619-05	322003	7.121	422040	8.871	827895	1.447
Continuing Calibration Blank	KQ2321619-06	228855	7.128	305579	8.877	506658	1.451
Duplicate Lab Control Sample	KQ2319743-02	269621	7.161	355557	8.904	590354	1.513

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891
Date Analyzed:12/07/23 19:29

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231207_1633_B1\231207_021 **Lab Code:**KQ2321619-04
Instrument ID: K-LCMS-08 **Analysis Lot:**826600
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

	13C2-PFHxA		13C4-PFOA		13C5-PFNA	
	Area	RT	Area	RT	Area	RT
Result ==>	459,033	5.01	39,108	7.15	219,315	8.01
Upper Limit ==>	918,066	5.41	78,216	7.55	438,630	8.41
Lower Limit ==>	137,710	4.61	11,732	6.75	65,795	7.61

Associated Analyses

Continuing Calibration Verification	KQ2321619-04	459232	4.994	43731	7.142	215304	7.998
Performance Evaluation	KQ2321619-05	745948	4.991	61726	7.138	343572	7.993
Continuing Calibration Blank	KQ2321619-06	434938	4.997	37700	7.144	209395	7.998
Duplicate Lab Control Sample	KQ2319743-02	606895	5.037	45759	7.174	249253	8.025

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891
Date Analyzed:12/07/23 19:29

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231207_1633_B1\231207_021 **Lab Code:**KQ2321619-04
Instrument ID: K-LCMS-08 **Analysis Lot:**826600
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

13C2-PFDA		
	Area	RT
Result ==>	171,121	8.78
Upper Limit ==>	342,242	9.18
Lower Limit ==>	51,336	8.38

Associated Analyses

Continuing Calibration Verification	KQ2321619-04	146115	8.771
Performance Evaluation	KQ2321619-05	272861	8.765
Continuing Calibration Blank	KQ2321619-06	145506	8.770
Duplicate Lab Control Sample	KQ2319743-02	178410	8.796

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891
Date Analyzed:12/08/23 02:51

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231207_1633_B1\231207_040 **Lab Code:**KQ2321619-08
Instrument ID: K-LCMS-08 **Analysis Lot:**826600
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

	18O2-PFHxS		13C4-PFOS		13C3-PFBA	
	Area	RT	Area	RT	Area	RT
Result ==>	219,101	7.14	275,511	8.89	534,373	1.46
Upper Limit ==>	438,202	7.54	551,022	9.29	1,068,746	1.86
Lower Limit ==>	65,730	6.74	82,653	8.49	160,312	1.06

Associated Analyses

Continuing Calibration Verification	KQ2321619-08	214921	7.136	272989	8.882	487792	1.454
Continuing Calibration Blank	KQ2321619-07	199568	7.131	313453	8.878	498325	1.452
Continuing Calibration Blank	KQ2321619-09	207247	7.124	292309	8.867	498917	1.451

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891
Date Analyzed:12/08/23 02:51

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231207_1633_B1\231207_040 **Lab Code:**KQ2321619-08
Instrument ID: K-LCMS-08 **Analysis Lot:**826600
Analysis Method: Draft EPA Method 1633 **Signal ID:**1

	13C2-PFHxA		13C4-PFOA		13C5-PFNA	
	Area	RT	Area	RT	Area	RT
Result ==>	459,033	5.01	39,108	7.15	219,315	8.01
Upper Limit ==>	918,066	5.41	78,216	7.55	438,630	8.41
Lower Limit ==>	137,710	4.61	11,732	6.75	65,795	7.61

Associated Analyses

Continuing Calibration Verification	KQ2321619-08	453175	5.006	41346	7.151	220864	8.005
Continuing Calibration Blank	KQ2321619-07	476700	5.003	34872	7.146	212608	8.001
Continuing Calibration Blank	KQ2321619-09	433319	4.997	40605	7.139	207131	7.992

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891
Date Analyzed:12/08/23 02:51

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\231207_1633_B1\231207_040

Lab Code:KQ2321619-08

Instrument ID: K-LCMS-08

Analysis Lot:826600

Analysis Method: Draft EPA Method 1633

Signal ID:1

13C2-PFDA		
	Area	RT
Result ==>	171,121	8.78
Upper Limit ==>	342,242	9.18
Lower Limit ==>	51,336	8.38

Associated Analyses

Continuing Calibration Verification	KQ2321619-08	181232	8.776
Continuing Calibration Blank	KQ2321619-07	150751	8.771
Continuing Calibration Blank	KQ2321619-09	174824	8.762

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	On-Site Technical Services, Inc.	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Analyzed:	11/28/23
Sample Matrix:	Water	Date Extracted:	11/07/23

Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method:	Draft EPA Method 1633	Units:	ng/L
Prep Method:	Method	Basis:	NA
		Analysis Lot:	825570

Low Level Lab Control Sample

KQ2319743-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	11.5	9.43	122	36-158
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	12.6	9.60	132	46-165
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	12.4	9.37	133	52-158
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	12.6	9.51	133	48-158
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	423	300	141	36-149
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	430	300	143	39-156
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	419	300	140	32-161
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	12.7	9.45	134	61-148
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	12.1	9.33	129	44-167
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	14.4	10.0	144	58-154
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	10.4	10.0	104	49-156
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	15.6	10.0	156 *	51-154
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.6	10.0	146	60-147
N-Methylperfluorooctane sulfonamide (MeFOSA)	12.6	10.0	126	54-155
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	12.0	10.0	120	32-160
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	16.8	10.0	168 *	56-151
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	13.8	10.0	138	47-160
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	11.5	8.90	129	56-144
Perfluoro-3-methoxypropanoic acid (PFMPA)	12.6	10.0	126	48-150
Perfluoro-4-methoxybutanoic acid (PFMBA)	15.2	10.0	152	49-154
Perfluorobutane sulfonic acid (PFBS)	11.8	8.87	133	63-145
Perfluorobutanoic acid (PFBA)	15.2	10.0	152	44-157
Perfluorodecane sulfonic acid (PFDS)	10.9	9.65	113	50-144
Perfluorodecanoic acid (PFDA)	12.4	10.0	124	43-158
Perfluorododecane sulfonic acid (PFDoS)	11.9	9.70	123	30-138
Perfluorododecanoic acid (PFDOA)	13.0	10.0	130	60-141
Perfluoroheptane sulfonic acid (PFHpS)	10.7	9.53	112	51-150
Perfluoroheptanoic acid (PFHpA)	12.5	10.0	125	56-150
Perfluorohexane sulfonic acid (PFHxS)	11.4	9.14	124	44-158
Perfluorohexanoic acid (PFHxA)	13.4	10.0	134	62-149
Perfluorononane sulfonic acid (PFNS)	11.5	9.62	119	46-151

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc. **Service Request:** R2309891
Project: WAL - Annual Sampling **Date Analyzed:** 11/28/23
Sample Matrix: Water **Date Extracted:** 11/07/23

Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Low Level Lab Control Sample

KQ2319743-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Perfluorononanoic acid (PFNA)	12.5	10.0	125	53-157
Perfluorooctane sulfonamide (PFOSAm)	13.1	10.0	131	47-163
Perfluorooctane sulfonic acid (PFOS)	10.9	9.28	117	43-162
Perfluorooctanoic acid (PFOA)	15.5	10.0	155	57-161
Perfluoropentane sulfonic acid (PFPeS)	12.7	9.41	135	58-144
Perfluoropentanoic acid (PFPeA)	14.5	10.0	145	57-148
Perfluorotetradecanoic acid (PFTDA)	11.8	10.0	118	52-156
Perfluorotridecanoic acid (PFTrDA)	11.9	10.0	119	52-140
Perfluoroundecanoic acid (PFUnDA)	13.4	10.0	134	50-155

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	On-Site Technical Services, Inc.	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Analyzed:	11/28/23
Sample Matrix:	Water	Date Extracted:	11/07/23

Duplicate Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method:	Draft EPA Method 1633	Units:	ng/L
Prep Method:	Method	Basis:	NA
		Analysis Lot:	825570

Analyte Name	Lab Control Sample KQ2319743-01				Duplicate Lab Control Sample KQ2319743-02				
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	20.2	18.9	107	20.7	18.9	110	46-156	2	30
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	27.9	19.2	145	27.5	19.2	143	63-152	1	30
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	22.4 I	18.7	119	21.8 I	18.7	116	67-146	3	30
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	23.7	19.0	124	23.0	19.0	121	61-151	3	30
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	482	400	121	531	400	133	50-138	10	30
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	499	400	125	550	400	138 *	63-134	10	30
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	544	400	136 *	617	400	154 *	62-129	13	30
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	21.5	18.9	114	22.6	18.9	119	68-146	5	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	21.4	18.7	115	22.6	18.7	121	56-156	5	30
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	24.5	20.0	122	26.4	20.0	132	63-144	8	30
N-Ethylperfluoroctane sulfonamide (EtFOSAm)	20.0	20.0	100	23.2	20.0	116	65-139	15	30
N-Ethylperfluoroctane sulfonamido acetic acid (NEtFOSAA)	25.5	20.0	128	30.5	20.0	153 *	59-146	18	30
N-Ethylperfluoroctane sulfonamido ethanol (EtFOSE)	27.5	20.0	137	29.6	20.0	148 *	69-137	7	30
N-Methylperfluoroctane sulfonamide (MeFOSA)	23.2	20.0	116	25.2	20.0	126	63-145	8	30
N-Methylperfluoroctane sulfonamido acetic acid (NMeFOSAA)	21.7	20.0	108	27.2	20.0	136	58-144	23	30
N-Methylperfluoroctane sulfonamido ethanol (MeFOSE)	31.2	20.0	156 *	33.9	20.0	169 *	71-136	8	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	23.6	20.0	118	26.0	20.0	130	48-161	10	30
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	20.6	17.8	116	22.1	17.8	124	56-151	7	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	21.5	20.0	107	23.8	20.0	119	51-145	10	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	24.8	20.0	124	27.2	20.0	136	55-148	9	30
Perfluorobutane sulfonic acid (PFBS)	22.8	17.7	128	24.3	17.7	137	62-144	6	30

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	On-Site Technical Services, Inc.	Service Request:	R2309891
Project:	WAL - Annual Sampling	Date Analyzed:	11/28/23
Sample Matrix:	Water	Date Extracted:	11/07/23

Duplicate Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method:	Draft EPA Method 1633	Units:	ng/L
Prep Method:	Method	Basis:	NA
		Analysis Lot:	825570

Analyte Name	Lab Control Sample KQ2319743-01				Duplicate Lab Control Sample KQ2319743-02				
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	26.3	20.0	131	29.5	20.0	147	58-148	12	30
Perfluorodecane sulfonic acid (PFDS)	19.0	19.3	98	22.1	19.3	115	51-147	15	30
Perfluorodecanoic acid (PFDA)	23.8	20.0	119	25.8	20.0	129	52-147	8	30
Perfluorododecane sulfonic acid (PFDoS)	20.4	19.4	105	22.3	19.4	115	36-145	9	30
Perfluorododecanoic acid (PFDOA)	24.8	20.0	124	27.6	20.0	138	64-142	11	30
Perfluoroheptane sulfonic acid (PFHpS)	21.0	19.1	110	25.2	19.1	132	55-152	18	30
Perfluoroheptanoic acid (PFHpA)	22.3	20.0	111	24.1	20.0	121	54-154	8	30
Perfluorohexane sulfonic acid (PFHxS)	19.4	18.3	106	24.7	18.3	135	57-146	24	30
Perfluorohexanoic acid (PFHxA)	23.5	20.0	117	26.5	20.0	133	55-152	12	30
Perfluorononane sulfonic acid (PFNS)	20.9	19.2	109	25.7	19.2	134	52-148	20	30
Perfluorononanoic acid (PFNA)	22.4	20.0	112	25.7	20.0	128	59-149	13	30
Perfluorooctane sulfonamide (PFOSAm)	25.6	20.0	128	26.7	20.0	133	61-148	4	30
Perfluorooctane sulfonic acid (PFOS)	21.4	18.6	115	24.3	18.6	131	58-149	13	30
Perfluorooctanoic acid (PFOA)	27.9	20.0	139	25.6	20.0	128	52-161	9	30
Perfluoropentane sulfonic acid (PFPeS)	21.5	18.8	114	26.0	18.8	138	59-151	19	30
Perfluoropentanoic acid (PFPeA)	26.3	20.0	131	27.7	20.0	138	54-152	5	30
Perfluorotetradecanoic acid (PFTDA)	22.0	20.0	110	24.9	20.0	125	47-161	13	30
Perfluorotridecanoic acid (PFTrDA)	22.8	20.0	114	25.1	20.0	126	49-148	10	30
Perfluoroundecanoic acid (PFUnDA)	25.1	20.0	126	25.9	20.0	129	48-159	3	30

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2309891
Date Analyzed: NA

Method Blank Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Sample Name: **Instrument ID:**

Lab Code: **File ID:**

Analysis Method: Draft EPA Method 1633 **Analysis Lot:** 825570

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Performance Evaluation	KQ2321059-01	J:\LCMS08\Data\231128_1633_B1\231128_014	11/28/23 17:08
Performance Evaluation	KQ2321059-05	J:\LCMS08\Data\231128_1633_B1\231128_018	11/28/23 18:41
Performance Evaluation	KQ2321619-01	J:\LCMS08\Data\231207_1633_B1\231207_018	12/07/23 18:19
Performance Evaluation	KQ2321619-05	J:\LCMS08\Data\231207_1633_B1\231207_022	12/07/23 19:52

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2309891
Date Analyzed: 11/28/23 19:28
Date Extracted: 11/07/23

Method Blank Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Sample Name:	Method Blank	Instrument ID: K-LCMS-08
Lab Code:	KQ2319743-04	File ID: J:\LCMS08\Data\231128_1633_B1\231128_020
Analysis Method:	Draft EPA Method 1633	Analysis Lot: 825570,826600
Prep Method:	Method	Extraction Lot: 429593

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	KQ2319743-01	J:\LCMS08\Data\231128_1633_B1\231128_021	11/28/23 19:51
Duplicate Lab Control Sample	KQ2319743-02	J:\LCMS08\Data\231128_1633_B1\231128_022	11/28/23 20:15
Low Level Lab Control Sample	KQ2319743-03	J:\LCMS08\Data\231128_1633_B1\231128_023	11/28/23 20:38
CW4A-1023	R2309891-015	J:\LCMS08\Data\231128_1633_B1\231128_026	11/28/23 21:48
FB1-1023	R2309891-016	J:\LCMS08\Data\231128_1633_B1\231128_027	11/28/23 22:11
CW4B-1023	R2309891-017	J:\LCMS08\Data\231128_1633_B1\231128_028	11/28/23 22:34
CW3B-1023	R2309891-018	J:\LCMS08\Data\231128_1633_B1\231128_029	11/28/23 22:57
MW17S-1023	R2309891-019	J:\LCMS08\Data\231128_1633_B1\231128_030	11/28/23 23:21
Duplicate Lab Control Sample	KQ2319743-02	J:\LCMS08\Data\231207_1633_B1\231207_024	12/07/23 20:38

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2309891
Date Analyzed: NA

Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Sample Name: **Instrument ID:**

Lab Code: **File ID:**

Analysis Method: Draft EPA Method 1633 **Analysis Lot:** 825570

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Performance Evaluation	KQ2321059-01	J:\LCMS08\Data\231128_1633_B1\231128_014	11/28/23 17:08
Performance Evaluation	KQ2321059-05	J:\LCMS08\Data\231128_1633_B1\231128_018	11/28/23 18:41
Performance Evaluation	KQ2321619-01	J:\LCMS08\Data\231207_1633_B1\231207_018	12/07/23 18:19
Performance Evaluation	KQ2321619-05	J:\LCMS08\Data\231207_1633_B1\231207_022	12/07/23 19:52

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2309891
Date Analyzed: 11/28/23 19:51
Date Extracted: 11/07/23

Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Sample Name:	Lab Control Sample	Instrument ID: K-LCMS-08
Lab Code:	KQ2319743-01	File ID: J:\LCMS08\Data\231128_1633_B1\231128_021
Analysis Method:	Draft EPA Method 1633	Analysis Lot: 825570,826600
Prep Method:	Method	Extraction Lot: 429593

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	KQ2319743-04	J:\LCMS08\Data\231128_1633_B1\231128_020	11/28/23 19:28
Duplicate Lab Control Sample	KQ2319743-02	J:\LCMS08\Data\231128_1633_B1\231128_022	11/28/23 20:15
Low Level Lab Control Sample	KQ2319743-03	J:\LCMS08\Data\231128_1633_B1\231128_023	11/28/23 20:38
CW4A-1023	R2309891-015	J:\LCMS08\Data\231128_1633_B1\231128_026	11/28/23 21:48
FB1-1023	R2309891-016	J:\LCMS08\Data\231128_1633_B1\231128_027	11/28/23 22:11
CW4B-1023	R2309891-017	J:\LCMS08\Data\231128_1633_B1\231128_028	11/28/23 22:34
CW3B-1023	R2309891-018	J:\LCMS08\Data\231128_1633_B1\231128_029	11/28/23 22:57
MW17S-1023	R2309891-019	J:\LCMS08\Data\231128_1633_B1\231128_030	11/28/23 23:21
Duplicate Lab Control Sample	KQ2319743-02	J:\LCMS08\Data\231207_1633_B1\231207_024	12/07/23 20:38

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 11/21/2023

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300683

Signal ID: 1

Instrument ID: K-LCMS-08

#	Lab Code	Sample Name	File Location	Acquisition Date
01	KC2300683-01	ICAL 1633 0.05 PPB	231121_006	11/21/2023 14:18
02	KC2300683-02	ICAL 1633 0.1 PPB	231121_007	11/21/2023 14:42
03	KC2300683-03	ICAL 1633 0.25 PPB	231121_008	11/21/2023 15:05
04	KC2300683-04	ICAL 1633 0.5 PPB	231121_009	11/21/2023 15:28
05	KC2300683-05	ICAL 1633 1.0PPB	231121_010	11/21/2023 15:51
06	KC2300683-06	ICAL 1633 5.0 PPB	231121_011	11/21/2023 16:15
07	KC2300683-07	ICAL 1633 10.0 PPB	231121_012	11/21/2023 16:38
08	KC2300683-08	ICAL 1633 15.0 PPB	231121_013	11/21/2023 17:01
09	KC2300683-09	ICAL 1633 20.0 PPB	231121_014	11/21/2023 17:25

Analyte

11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OuDs)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0472	6.842	02	0.0940	6.4	03	0.2360	6.344	04	0.4720	5.909
05	0.9400	5.976	06	4.7200	6.013	07	9.4000	6.097	08	14.1000	6.053
09	18.9000	6.282									

13C2-4:2 FTS

#	Amount	RF									
01	5.0000	0.2499	02	5.0000	0.2403	03	5.0000	0.2549	04	5.0000	0.2489
05	5.0000	0.2477	06	5.0000	0.2495	07	5.0000	0.2585	08	5.0000	0.2616
09	5.0000	0.2509									

13C2-6:2 FTS

#	Amount	RF									
01	5.0000	0.2825	02	5.0000	0.2973	03	5.0000	0.2494	04	5.0000	0.2935
05	5.0000	0.2586	06	5.0000	0.2313	07	5.0000	0.2314	08	5.0000	0.2649
09	5.0000	0.2679									

13C2-8:2 FTS

#	Amount	RF									
01	5.0000	0.2797	02	5.0000	0.2523	03	5.0000	0.2704	04	5.0000	0.2607
05	5.0000	0.273	06	5.0000	0.2615	07	5.0000	0.2511	08	5.0000	0.2622
09	5.0000	0.268									

13C2-PFDoDA

#	Amount	RF									
01	1.2500	1.294	02	1.2500	1.197	03	1.2500	1.334	04	1.2500	1.26
05	1.2500	1.262	06	1.2500	1.177	07	1.2500	1.184	08	1.2500	1.224
09	1.2500	1.282									

13C2-PFTeDA

#	Amount	RF									
01	1.2500	0.7753	02	1.2500	0.6758	03	1.2500	0.8221	04	1.2500	0.6946
05	1.2500	0.8013	06	1.2500	0.769	07	1.2500	0.7203	08	1.2500	0.7948
09	1.2500	0.8483									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 11/21/2023

Initial Calibration Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300683

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte

13C3-HFPO-DA

#	Amount	RF									
01	10.0000	0.2752	02	10.0000	0.2783	03	10.0000	0.2556	04	10.0000	0.3043
05	10.0000	0.279	06	10.0000	0.2797	07	10.0000	0.2639	08	10.0000	0.2795
09	10.0000	0.3059									

13C3-PFBS

#	Amount	RF									
01	2.5000	1.377	02	2.5000	1.322	03	2.5000	1.301	04	2.5000	1.336
05	2.5000	1.264	06	2.5000	1.187	07	2.5000	1.159	08	2.5000	1.234
09	2.5000	1.234									

13C3-PFHxS

#	Amount	RF									
01	2.5000	1.266	02	2.5000	1.222	03	2.5000	1.215	04	2.5000	1.29
05	2.5000	1.293	06	2.5000	1.268	07	2.5000	1.205	08	2.5000	1.257
09	2.5000	1.249									

13C4-PFBA

#	Amount	RF									
01	10.0000	0.6791	02	10.0000	0.6727	03	10.0000	0.6547	04	10.0000	0.7099
05	10.0000	0.692	06	10.0000	0.6681	07	10.0000	0.6511	08	10.0000	0.6678
09	10.0000	0.6762									

13C4-PFHxA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	1.078	02	2.5000	1.032	03	2.5000	0.9536	04	2.5000	1.097
05	2.5000	1.005	06	2.5000	0.9414	07	2.5000	0.9144	08	2.5000	0.9179
09	2.5000	1.019									

13C5-PFPeA

#	Amount	RF									
01	5.0000	0.2798	02	5.0000	0.2844	03	5.0000	0.2636	04	5.0000	0.2928
05	5.0000	0.2841	06	5.0000	0.2588	07	5.0000	0.2526	08	5.0000	0.255
09	5.0000	0.2933									

13C6-PFDA

#	Amount	RF									
01	1.2500	1.164	02	1.2500	1.237	03	1.2500	1.227	04	1.2500	1.326
05	1.2500	1.164	06	1.2500	1.138	07	1.2500	1.074	08	1.2500	1.16
09	1.2500	1.202									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 11/21/2023

Initial Calibration Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300683

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte

13C7-PFUnDA

#	Amount	RF									
01	1.2500	1.517	02	1.2500	1.368	03	1.2500	1.578	04	1.2500	1.423
05	1.2500	1.553	06	1.2500	1.482	07	1.2500	1.403	08	1.2500	1.433
09	1.2500	1.503									

13C8-FOSA

#	Amount	RF									
01	2.5000	2.268	02	2.5000	2.473	03	2.5000	2.235	04	2.5000	2.496
05	2.5000	2.417	06	2.5000	2.357	07	2.5000	2.358	08	2.5000	2.401
09	2.5000	2.253									

13C8-PFOA

#	Amount	RF									
01	2.5000	11.39	02	2.5000	12.55	03	2.5000	11.07	04	2.5000	11.67
05	2.5000	11.81	06	2.5000	11.3	07	2.5000	11.05	08	2.5000	11.56
09	2.5000	11.46									

13C8-PFOS

#	Amount	RF									
01	2.5000	0.9519	02	2.5000	0.9072	03	2.5000	0.8926	04	2.5000	0.8617
05	2.5000	0.9529	06	2.5000	0.9091	07	2.5000	0.92	08	2.5000	0.8965
09	2.5000	0.8295									

13C9-PFNA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	0.9905	02	1.2500	1.039	03	1.2500	0.9774	04	1.2500	1.084
05	1.2500	1.053	06	1.2500	1.039	07	1.2500	0.9861	08	1.2500	1.048
09	1.2500	1.082									

1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0480	1.361	02	0.0960	2.108	03	0.2400	1.717	04	0.4800	1.979
05	0.9600	1.566	06	4.8000	1.797	07	9.6000	1.777	08	14.4000	1.833
09	19.2000	1.754									

1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0469	2.689	02	0.0940	2.312	03	0.2340	2.395	04	0.4690	2.552
05	0.9400	2.259	06	4.6900	2.287	07	9.4000	2.082	08	14.1000	2.34
09	18.7000	2.323									

1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0476	2.03	02	0.0950	2.229	03	0.2380	2.086	04	0.4760	1.916
05	0.9500	2.078	06	4.7600	2.33	07	9.5000	2.32	08	14.3000	2.051
09	19.0000	1.908									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 11/21/2023

Initial Calibration Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300683

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte

2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.0000	0.1037	02	5.0000	0.1024	03	10.0000	0.08529	04	15.0000	0.09362
05	20.0000	0.08915	06	50.0000	0.09929	07	80.0000	0.09429	08	100.0000	0.09618
09	150.0000	0.1071									

2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.0000	0.06292	02	5.0000	0.07221	03	10.0000	0.0589	04	15.0000	0.06552
05	20.0000	0.0644	06	50.0000	0.07194	07	80.0000	0.06515	08	100.0000	0.06718
09	150.0000	0.074									

4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.0000	0.06238	02	5.0000	0.06745	03	10.0000	0.06027	04	15.0000	0.06251
05	20.0000	0.05961	06	50.0000	0.07167	07	80.0000	0.06613	08	100.0000	0.06987
09	150.0000	0.06809									

4,8-Dioxa-3H-perfluorononanoic acid (DONA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0473	12.43	02	0.0950	12.29	03	0.2360	11.59	04	0.4730	10.84
05	0.9500	11.19	06	4.7300	11.48	07	9.5000	11.23	08	14.2000	10.81
09	18.9000	11.13									

9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0467	8.042	02	0.0930	8.348	03	0.2340	7.693	04	0.4670	7.045
05	0.9300	7.584	06	4.6700	7.727	07	9.3000	7.716	08	14.0000	7.596
09	18.7000	7.673									

D3-MeFOSA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.3924	02	2.5000	0.4128	03	2.5000	0.4086	04	2.5000	0.465
05	2.5000	0.4237	06	2.5000	0.4061	07	2.5000	0.4196	08	2.5000	0.441
09	2.5000	0.3946									

D3-MeFOSAA

#	Amount	RF									
01	5.0000	0.6218	02	5.0000	0.6335	03	5.0000	0.581	04	5.0000	0.6385
05	5.0000	0.6584	06	5.0000	0.6452	07	5.0000	0.6729	08	5.0000	0.6812
09	5.0000	0.6411									

D5-EtFOSA

#	Amount	RF									
01	2.5000	0.5548	02	2.5000	0.5808	03	2.5000	0.5269	04	2.5000	0.6019
05	2.5000	0.5784	06	2.5000	0.5394	07	2.5000	0.5566	08	2.5000	0.5928
09	2.5000	0.5639									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 11/21/2023

Initial Calibration Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300683

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte

D5-EtFOSAA

#	Amount	RF									
01	5.0000	0.6028	02	5.0000	0.6854	03	5.0000	0.5852	04	5.0000	0.6906
05	5.0000	0.6527	06	5.0000	0.6256	07	5.0000	0.6557	08	5.0000	0.648
09	5.0000	0.622									

D7-MeFOSE

#	Amount	RF									
01	25.0000	0.6019	02	25.0000	0.6366	03	25.0000	0.5944	04	25.0000	0.6731
05	25.0000	0.6227	06	25.0000	0.6219	07	25.0000	0.6325	08	25.0000	0.6453
09	25.0000	0.6002									

D9-EtFOSE

#	Amount	RF									
01	25.0000	0.7032	02	25.0000	0.7425	03	25.0000	0.6516	04	25.0000	0.7554
05	25.0000	0.7345	06	25.0000	0.7036	07	25.0000	0.7397	08	25.0000	0.735
09	25.0000	0.692									

Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	1.204	03	0.2500	1.135	04	0.5000	0.9943	05	1.0000	1.045
06	5.0000	1.007	07	10.0000	1.057	08	15.0000	1.041	09	20.0000	1.043

N-Ethylperfluorooctane sulfonamide (EtFOSAm)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.236	02	0.1000	1.635	03	0.2500	1.533	04	0.5000	1.42
05	1.0000	1.388	06	5.0000	1.498	07	10.0000	1.39	08	15.0000	1.425
09	20.0000	1.36									

N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.8303	02	0.1000	0.8897	03	0.2500	0.7944	04	0.5000	0.8139
05	1.0000	0.878	06	5.0000	0.8993	07	10.0000	0.8769	08	15.0000	0.8991
09	20.0000	0.8819									

N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.13	02	0.1000	0.9029	03	0.2500	0.8901	04	0.5000	0.8123
05	1.0000	0.8021	06	5.0000	0.8487	07	10.0000	0.7879	08	15.0000	0.8686
09	20.0000	0.8636									

N-Methylperfluorooctane sulfonamide (MeFOSA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.511	02	0.1000	2.158	03	0.2500	1.846	04	0.5000	1.758
05	1.0000	1.691	06	5.0000	1.904	07	10.0000	1.992	08	15.0000	1.948
09	20.0000	1.919									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 11/21/2023

Initial Calibration Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300683

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte

N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.557	02	0.1000	1.448	03	0.2500	1.509	04	0.5000	1.65
05	1.0000	1.526	06	5.0000	1.453	07	10.0000	1.45	08	15.0000	1.439
09	20.0000	1.447									

N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	1.093	03	0.2500	0.8717	04	0.5000	0.8589	05	1.0000	0.9249
06	5.0000	0.8993	07	10.0000	0.9519	08	15.0000	0.9643	09	20.0000	0.9605

Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.7172	02	0.1000	0.6032	03	0.2500	0.5593	04	0.5000	0.5742
05	1.0000	0.5695	06	5.0000	0.5758	07	10.0000	0.5306	08	15.0000	0.5631
09	20.0000	0.5984									

Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0445	1.867	02	0.0890	1.712	03	0.2230	1.511	04	0.4450	1.579
05	0.8900	1.567	06	4.4500	1.592	07	8.9000	1.543	08	13.4000	1.622
09	17.8000	1.762									

Perfluoro-3-methoxypropanoic acid (PFMPA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	2.236	02	0.1000	2.032	03	0.2500	1.94	04	0.5000	1.895
05	1.0000	1.828	06	5.0000	1.998	07	10.0000	1.944	08	15.0000	2.023
09	20.0000	2									

Perfluoro-4-methoxybutanoic acid (PFMBA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	2.909	02	0.1000	2.663	03	0.2500	2.583	04	0.5000	2.466
05	1.0000	2.377	06	5.0000	2.52	07	10.0000	2.392	08	15.0000	2.484
09	20.0000	2.406									

Perfluorobutane sulfonic acid (PFBS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0444	1.383	02	0.0890	1.243	03	0.2210	1.328	04	0.4440	1.202
05	0.8900	1.271	06	4.4400	1.375	07	8.9000	1.34	08	13.3000	1.348
09	17.7000	1.318									

Perfluorobutanoic acid (PFBA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.368	02	0.1000	1.051	03	0.2500	0.8405	04	0.5000	0.7567
05	1.0000	0.7567	06	5.0000	0.7756	07	10.0000	0.7479	08	15.0000	0.7657
09	20.0000	0.7519									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 11/21/2023

Initial Calibration Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300683

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte

Perfluorodecane sulfonic acid (PFDS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0483	1.465	02	0.0970	1.499	03	0.2410	1.408	04	0.4830	1.569
05	0.9700	1.373	06	4.8300	1.413	07	9.7000	1.381	08	14.5000	1.419
09	19.3000	1.415									

Perfluorodecanoic acid (PFDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.52	02	0.1000	1.467	03	0.2500	1.309	04	0.5000	1.214
05	1.0000	1.297	06	5.0000	1.301	07	10.0000	1.327	08	15.0000	1.322
09	20.0000	1.284									

Perfluorododecane sulfonic acid (PFDoS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0485	0.4087	02	0.0970	0.5581	03	0.2430	0.498	04	0.4850	0.5212
05	0.9700	0.4	06	4.8500	0.441	07	9.7000	0.4447	08	14.6000	0.4714
09	19.4000	0.4471									

Perfluorododecanoic acid (PFDOA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.6032	02	0.1000	0.5946	03	0.2500	0.5594	04	0.5000	0.4881
05	1.0000	0.536	06	5.0000	0.5424	07	10.0000	0.5313	08	15.0000	0.5259
09	20.0000	0.5091									

Perfluoroheptane sulfonic acid (PFHpS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0477	1.703	02	0.0950	1.989	03	0.2390	1.67	04	0.4770	1.833
05	0.9500	1.609	06	4.7700	1.612	07	9.5000	1.602	08	14.3000	1.66
09	19.1000	1.658									

Perfluoroheptanoic acid (PFHpA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.421	02	0.1000	1.314	03	0.2500	1.163	04	0.5000	1.006
05	1.0000	1.084	06	5.0000	1.104	07	10.0000	1.092	08	15.0000	1.105
09	20.0000	1.137									

Perfluorohexane sulfonic acid (PFHxS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0457	1.643	02	0.0910	1.431	03	0.2290	1.319	04	0.4570	1.175
05	0.9100	1.112	06	4.5700	1.122	07	9.1000	1.176	08	13.7000	1.189
09	18.3000	1.248									

Perfluorohexanoic acid (PFHxA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.475	02	0.1000	1.147	03	0.2500	1.048	04	0.5000	0.9598
05	1.0000	1.018	06	5.0000	1.054	07	10.0000	1.025	08	15.0000	1.068
09	20.0000	1.059									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 11/21/2023

Initial Calibration Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300683

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte

Perfluorononane sulfonic acid (PFNS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0481	1.571	02	0.0960	1.539	03	0.2400	1.466	04	0.4810	1.579
05	0.9600	1.314	06	4.8100	1.41	07	9.6000	1.388	08	14.4000	1.469
09	19.2000	1.465									

Perfluorononanoic acid (PFNA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.9453	02	0.1000	0.8355	03	0.2500	0.7767	04	0.5000	0.7156
05	1.0000	0.723	06	5.0000	0.7079	07	10.0000	0.729	08	15.0000	0.7251
09	20.0000	0.7101									

Perfluorooctane sulfonamide (PFOSAm)

#	Amount	RF									
01	0.1000	0.7855	02	0.2000	0.7976	03	0.5000	0.7708	04	1.0000	0.7254
05	2.0000	0.7323	06	10.0000	0.7567	07	20.0000	0.75	08	30.0000	0.7477
09	40.0000	0.7498									

Perfluorooctane sulfonic acid (PFOS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0464	2.653	02	0.0930	2.698	03	0.2330	2.099	04	0.4640	2.305
05	0.9300	2.199	06	4.6400	2.182	07	9.3000	2.177	08	13.9000	2.318
09	18.6000	2.166									

Perfluorooctanoic acid (PFOA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.8985	02	0.1000	0.9678	03	0.2500	0.7622	04	0.5000	0.8438
05	1.0000	0.7048	06	5.0000	0.7502	07	10.0000	0.7607	08	15.0000	0.7428
09	20.0000	0.7566									

Perfluoropentane sulfonic acid (PFPeS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0471	1.328	02	0.0940	1.226	03	0.2350	1.198	04	0.4710	1.097
05	0.9400	1.063	06	4.7100	1.145	07	9.4000	1.115	08	14.1000	1.128
09	18.8000	1.163									

Perfluoropentanoic acid (PFPeA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	5.272	02	0.1000	4.738	03	0.2500	4.127	04	0.5000	3.786
05	1.0000	3.81	06	5.0000	3.88	07	10.0000	3.783	08	15.0000	3.916
09	20.0000	3.84									

Perfluorotetradecanoic acid (PFTDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.494	02	0.1000	1.467	03	0.2500	1.245	04	0.5000	1.215
05	1.0000	1.287	06	5.0000	1.239	07	10.0000	1.259	08	15.0000	1.163
09	20.0000	1.14									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 11/21/2023

Initial Calibration Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300683

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte

Perfluorotridecanoic acid (PFTrDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.682	02	0.1000	1.763	03	0.2500	1.503	04	0.5000	1.499
05	1.0000	1.382	06	5.0000	1.358	07	10.0000	1.399	08	15.0000	1.352
09	20.0000	1.287									

Perfluoroundecanoic acid (PFUnDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.8438	02	0.1000	0.763	03	0.2500	0.6775	04	0.5000	0.6815
05	1.0000	0.6424	06	5.0000	0.6734	07	10.0000	0.6464	08	15.0000	0.6799
09	20.0000	0.6589									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 11/21/2023

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300683

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte Name	Compound Type	Calibration Evaluation			Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	TRG	Average RF	% RSD	4.7	20	6.213
13C2-4:2 FTS	SURR	Average RF	% RSD	2.5	20	0.2514
13C2-6:2 FTS	SURR	Average RF	% RSD	9.2	20	0.2641
13C2-8:2 FTS	SURR	Average RF	% RSD	3.6	20	0.2643
13C2-PFDoDA	SURR	Average RF	% RSD	4.3	20	1.246
13C2-PFTeDA	SURR	Average RF	% RSD	7.6	20	0.7668
13C3-HFPO-DA	SURR	Average RF	% RSD	5.8	20	0.2801
13C3-PFBS	SURR	Average RF	% RSD	5.7	20	1.268
13C3-PFHxS	SURR	Average RF	% RSD	2.5	20	1.252
13C4-PFBa	SURR	Average RF	% RSD	2.7	20	0.6746
13C4-PFHpA	SURR	Average RF	% RSD	6.8	20	0.9954
13C5-PFHxA	SURR	Average RF	% RSD	3.1	20	1.44
13C5-PFPeA	SURR	Average RF	% RSD	6.0	20	0.2738
13C6-PFDA	SURR	Average RF	% RSD	6.0	20	1.188
13C7-PFUnDA	SURR	Average RF	% RSD	4.8	20	1.473
13C8-FOSA	SURR	Average RF	% RSD	4.0	20	2.362
13C8-PFOA	SURR	Average RF	% RSD	4.0	20	11.54
13C8-PFOS	SURR	Average RF	% RSD	4.4	20	0.9024
13C9-PFNA	SURR	Average RF	% RSD	3.9	20	1.033
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	TRG	Average RF	% RSD	12.3	20	1.766
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	TRG	Average RF	% RSD	7.4	20	2.36
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	TRG	Average RF	% RSD	7.4	20	2.105
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	TRG	Average RF	% RSD	7.3	20	0.09678
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	TRG	Average RF	% RSD	7.4	20	0.06691
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	TRG	Average RF	% RSD	6.6	20	0.06533
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	TRG	Average RF	% RSD	5.1	20	11.44
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	TRG	Average RF	% RSD	4.6	20	7.714

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 11/21/2023

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300683

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte Name	Compound Type	Calibration Evaluation			Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF
D3-MeFOSA	SURR	Average RF	% RSD	5.5	20	0.4182
D3-MeFOSAA	SURR	Average RF	% RSD	4.6	20	0.6415
D5-EtFOSA	SURR	Average RF	% RSD	4.3	20	0.5662
D5-EtFOSAA	SURR	Average RF	% RSD	5.5	20	0.6409
D7-MeFOSE	SURR	Average RF	% RSD	4.0	20	0.6254
D9-EtFOSE	SURR	Average RF	% RSD	4.6	20	0.7175
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	TRG	Average RF	% RSD	6.5	20	1.066
N-Ethylperfluoroctane sulfonamide (EtFOSAm)	TRG	Average RF	% RSD	7.9	20	1.432
N-Ethylperfluoroctane sulfonamido acetic acid (NEtFOSAA)	TRG	Average RF	% RSD	4.5	20	0.8626
N-Ethylperfluoroctane sulfonamido ethanol (EtFOSE)	TRG	Average RF	% RSD	11.6	20	0.8785
N-Methylperfluoroctane sulfonamide (MeFOSA)	TRG	Average RF	% RSD	10.1	20	1.859
N-Methylperfluoroctane sulfonamido acetic acid (NMeFOSAA)	TRG	Average RF	% RSD	4.8	20	1.498
N-Methylperfluoroctane sulfonamido ethanol (MeFOSE)	TRG	Average RF	% RSD	7.8	20	0.9405
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	TRG	Average RF	% RSD	9.0	20	0.5879
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	TRG	Average RF	% RSD	7.1	20	1.639
Perfluoro-3-methoxypropanoic acid (PFMPA)	TRG	Average RF	% RSD	5.7	20	1.988
Perfluoro-4-methoxybutanoic acid (PFMBA)	TRG	Average RF	% RSD	6.7	20	2.533
Perfluorobutane sulfonic acid (PFBS)	TRG	Average RF	% RSD	4.7	20	1.312
Perfluorobutanoic acid (PFBA)	TRG	Linear	R2	0.9998		0.8682
Perfluorodecane sulfonic acid (PFDS)	TRG	Average RF	% RSD	4.4	20	1.438
Perfluorodecanoic acid (PFDA)	TRG	Average RF	% RSD	7.1	20	1.338
Perfluorododecane sulfonic acid (PFDoS)	TRG	Average RF	% RSD	11.2	20	0.4656
Perfluorododecanoic acid (PFDOA)	TRG	Linear	R2	0.9994		0.5433
Perfluoroheptane sulfonic acid (PFHpS)	TRG	Average RF	% RSD	7.5	20	1.704
Perfluoroheptanoic acid (PFHpA)	TRG	Linear	R2	0.9995		1.158
Perfluorohexane sulfonic acid (PFHxS)	TRG	Average RF	% RSD	13.6	20	1.268
Perfluorohexanoic acid (PFHxA)	TRG	Linear	R2	0.9996		1.095

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 11/21/2023

Initial Calibration Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300683

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte Name	Compound Type	Calibration Evaluation			Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF
Perfluorononane sulfonic acid (PFNS)	TRG	Average RF	% RSD	6.0	20	1.467
Perfluorononanoic acid (PFNA)	TRG	Linear	R2	0.9998		0.7631
Perfluorooctane sulfonamide (PFOSAm)	TRG	Average RF	% RSD	3.1	20	0.7573
Perfluorooctane sulfonic acid (PFOS)	TRG	Average RF	% RSD	9.4	20	2.311
Perfluorooctanoic acid (PFOA)	TRG	Linear	R2	0.9996		0.7986
Perfluoropentane sulfonic acid (PFPeS)	TRG	Average RF	% RSD	6.9	20	1.163
Perfluoropentanoic acid (PFPeA)	TRG	Average RF	% RSD	12.7	20	4.128
Perfluorotetradecanoic acid (PFTDA)	TRG	Linear	R2	0.9982		1.279
Perfluorotridecanoic acid (PFTrDA)	TRG	Linear	R2	0.9989		1.469
Perfluoroundecanoic acid (PFUnDA)	TRG	Linear	R2	0.9996		0.6963

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 12/6/2023

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300722

Signal ID: 1

Instrument ID: K-LCMS-08

#	Lab Code	Sample Name	File Location	Acquisition Date
01	KC2300722-01	ICAL 1633 0.05 PPB	231206_028	12/06/2023 23:01
02	KC2300722-02	ICAL 1633 0.1 PPB	231206_029	12/06/2023 23:24
03	KC2300722-03	ICAL 1633 0.25 PPB	231206_030	12/06/2023 23:48
04	KC2300722-04	ICAL 1633 0.5 PPB	231206_031	12/07/2023 00:11
05	KC2300722-05	ICAL 1633 1.0PPB	231206_032	12/07/2023 00:34
06	KC2300722-06	ICAL 1633 5.0 PPB	231206_033	12/07/2023 00:57
07	KC2300722-07	ICAL 1633 10.0 PPB	231207_009	12/07/2023 14:50
08	KC2300722-08	ICAL 1633 15.0 PPB	231207_010	12/07/2023 15:13
09	KC2300722-09	ICAL 1633 20.0 PPB	231207_011	12/07/2023 15:36

Analyte

13C2-4:2 FTS

#	Amount	RF									
01	5.0000	0.3929	02	5.0000	0.4036	03	5.0000	0.3516	04	5.0000	0.3085
05	5.0000	0.3133	06	5.0000	0.3348	07	5.0000	0.358	08	5.0000	0.3569
09	5.0000	0.3361									

13C3-PFBS

#	Amount	RF									
01	2.5000	1.708	02	2.5000	1.963	03	2.5000	1.77	04	2.5000	1.672
05	2.5000	1.692	06	2.5000	1.861	07	2.5000	1.715	08	2.5000	1.746
09	2.5000	1.743									

13C3-PFHxS

#	Amount	RF									
01	2.5000	1.234	02	2.5000	1.379	03	2.5000	1.259	04	2.5000	1.351
05	2.5000	1.389	06	2.5000	1.429	07	2.5000	1.363	08	2.5000	1.448
09	2.5000	1.393									

13C4-PFBA

#	Amount	RF									
01	10.0000	1.214	02	10.0000	1.341	03	10.0000	1.251	04	10.0000	1.286
05	10.0000	1.308	06	10.0000	1.313	07	10.0000	1.346	08	10.0000	1.391
09	10.0000	1.358									

13C5-PFHxA

#	Amount	RF									
01	2.5000	1.337	02	2.5000	1.388	03	2.5000	1.36	04	2.5000	1.304
05	2.5000	1.197	06	2.5000	1.261	07	2.5000	1.305	08	2.5000	1.363
09	2.5000	1.471									

13C5-PFPeA

#	Amount	RF									
01	5.0000	0.2614	02	5.0000	0.2737	03	5.0000	0.2454	04	5.0000	0.2358
05	5.0000	0.257	06	5.0000	0.2631	07	5.0000	0.2466	08	5.0000	0.2583
09	5.0000	0.254									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 12/6/2023

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300722

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte

13C6-PFDA

#	Amount	RF									
01	1.2500	1.167	02	1.2500	1.421	03	1.2500	1.419	04	1.2500	1.337
05	1.2500	1.509	06	1.2500	1.464	07	1.2500	1.318	08	1.2500	1.365
09	1.2500	1.379									

13C8-PFOA

#	Amount	RF									
01	2.5000	13.88	02	2.5000	15.79	03	2.5000	13.5	04	2.5000	15.27
05	2.5000	15.22	06	2.5000	15.68	07	2.5000	14.19	08	2.5000	14.99
09	2.5000	14.59									

13C8-PFOS

#	Amount	RF									
01	2.5000	0.3872	02	2.5000	0.4275	03	2.5000	0.4151	04	2.5000	0.4092
05	2.5000	0.452	06	2.5000	0.4403	07	2.5000	0.4484	08	2.5000	0.4694
09	2.5000	0.4688									

13C9-PFNA

#	Amount	RF									
01	1.2500	1.372	02	1.2500	1.489	03	1.2500	1.386	04	1.2500	1.497
05	1.2500	1.474	06	1.2500	1.511	07	1.2500	1.474	08	1.2500	1.587
09	1.2500	1.542									

1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0469	1.853	02	0.0940	2.019	03	0.2340	1.978	04	0.4690	2.034
05	0.9400	1.846	06	4.6900	1.868	07	9.4000	1.804	08	14.1000	1.715
09	18.7000	1.845									

2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.0000	0.08705	02	5.0000	0.09242	03	10.0000	0.07346	04	15.0000	0.08123
05	20.0000	0.09143	06	50.0000	0.1026	07	80.0000	0.08547	08	100.0000	0.08662
09	150.0000	0.09084									

2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.0000	0.05338	02	5.0000	0.06416	03	10.0000	0.0488	04	15.0000	0.05407
05	20.0000	0.06365	06	50.0000	0.07124	07	80.0000	0.05806	08	100.0000	0.05746
09	150.0000	0.06077									

4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.0000	0.06972	02	5.0000	0.06881	03	10.0000	0.05728	04	15.0000	0.07102
05	20.0000	0.06304	06	50.0000	0.07134	07	80.0000	0.0665	08	100.0000	0.06916
09	150.0000	0.07604									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 12/6/2023

Initial Calibration Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300722

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte

Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	0.6759	03	0.2500	0.5714	04	0.5000	0.536	05	1.0000	0.6156
06	5.0000	0.6168	07	10.0000	0.4922	08	15.0000	0.4786	09	20.0000	0.4579

Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0445	3.7	02	0.0890	3.766	03	0.2230	3.476	04	0.4450	3.121
05	0.8900	3.927	06	4.4500	3.765	07	8.9000	3.175	08	13.4000	3.184
09	17.8000	3.014									

Perfluoro-3-methoxypropanoic acid (PFMPA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.613	02	0.1000	1.587	03	0.2500	1.667	04	0.5000	1.552
05	1.0000	1.547	06	5.0000	1.547	07	10.0000	1.461	08	15.0000	1.372
09	20.0000	1.444									

Perfluoro-4-methoxybutanoic acid (PFMBA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	2.897	02	0.1000	2.714	03	0.2500	2.86	04	0.5000	2.525
05	1.0000	2.577	06	5.0000	2.689	07	10.0000	2.348	08	15.0000	2.286
09	20.0000	2.626									

Perfluorobutane sulfonic acid (PFBS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0444	1.163	02	0.0890	1.052	03	0.2210	1.121	04	0.4440	1.043
05	0.8900	1.067	06	4.4400	1.089	07	8.9000	1.056	08	13.3000	1.009
09	17.7000	1.051									

Perfluorobutanoic acid (PFBA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.9557	02	0.1000	0.9233	03	0.2500	0.9163	04	0.5000	0.8298
05	1.0000	0.8209	06	5.0000	0.816	07	10.0000	0.7857	08	15.0000	0.7621
09	20.0000	0.7769									

Perfluorodecane sulfonic acid (PFDS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0483	1.728	02	0.0970	2.022	03	0.2410	2.013	04	0.4830	1.596
05	0.9700	1.642	06	4.8300	1.914	07	9.7000	1.517	08	14.5000	1.411
09	19.3000	1.536									

Perfluorodecanoic acid (PFDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.7989	02	0.1000	0.6158	03	0.2500	0.7513	04	0.5000	0.6224
05	1.0000	0.6647	06	5.0000	0.6449	07	10.0000	0.6785	08	15.0000	0.65
09	20.0000	0.6442									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 12/6/2023

Initial Calibration Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300722

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte

Perfluorododecane sulfonic acid (PFDoS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0485	1.215	02	0.0970	1.28	03	0.2430	1.205	04	0.4850	0.9625
05	0.9700	1.01	06	4.8500	1.148	07	9.7000	0.9318	08	14.6000	0.8584
09	19.4000	0.9614									

Perfluoroheptane sulfonic acid (PFHpS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0477	2.391	02	0.0950	2.959	03	0.2390	2.832	04	0.4770	2.087
05	0.9500	2.194	06	4.7700	2.553	07	9.5000	2.07	08	14.3000	1.854
09	19.1000	2.004									

Perfluorohexane sulfonic acid (PFHxS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0457	1.254	02	0.0910	1.223	03	0.2290	1.182	04	0.4570	0.8072
05	0.9100	0.8192	06	4.5700	0.9974	07	9.1000	0.8424	08	13.7000	0.7607
09	18.3000	0.8714									

Perfluorohexanoic acid (PFHxA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.9594	02	0.1000	0.7918	03	0.2500	0.7561	04	0.5000	0.7063
05	1.0000	0.7804	06	5.0000	0.7234	07	10.0000	0.7091	08	15.0000	0.7098
09	20.0000	0.6762									

Perfluorononane sulfonic acid (PFNS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0481	2.422	02	0.0960	2.56	03	0.2400	2.544	04	0.4810	1.916
05	0.9600	1.953	06	4.8100	2.105	07	9.6000	1.737	08	14.4000	1.668
09	19.2000	1.817									

Perfluorononanoic acid (PFNA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.8284	02	0.1000	0.684	03	0.2500	0.6686	04	0.5000	0.637
05	1.0000	0.6507	06	5.0000	0.5948	07	10.0000	0.5962	08	15.0000	0.5662
09	20.0000	0.6141									

Perfluorooctane sulfonic acid (PFOS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0464	2.133	02	0.0930	1.915	03	0.2330	2.19	04	0.4640	1.717
05	0.9300	1.711	06	4.6400	1.79	07	9.3000	1.721	08	13.9000	1.506
09	18.6000	1.623									

Perfluorooctanoic acid (PFOA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.161	02	0.1000	1.005	03	0.2500	1.021	04	0.5000	0.7974
05	1.0000	0.653	06	5.0000	0.6304	07	10.0000	0.8209	08	15.0000	0.7937
09	20.0000	0.8131									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 12/6/2023

Initial Calibration Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300722

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte

Perfluoropentane sulfonic acid (PFPeS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0471	1.193	02	0.0940	1.144	03	0.2350	1.247	04	0.4710	1
05	0.9400	1.008	06	4.7100	1.105	07	9.4000	1.009	08	14.1000	0.9262
09	18.8000	0.9857									

Perfluoropentanoic acid (PFPeA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	4.982	02	0.1000	4.843	03	0.2500	4.856	04	0.5000	4.343
05	1.0000	4.539	06	5.0000	4.431	07	10.0000	4.317	08	15.0000	4.235
09	20.0000	4.337									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 12/6/2023

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300722

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte Name	Compound Type	Calibration Evaluation			Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF
13C2-4:2 FTS	SURR	Average RF	% RSD	9.2	20	0.3507
13C3-PFBS	SURR	Average RF	% RSD	5.3	20	1.763
13C3-PFHxS	SURR	Average RF	% RSD	5.3	20	1.361
13C4-PFBA	SURR	Average RF	% RSD	4.2	20	1.312
13C5-PFHxA	SURR	Average RF	% RSD	5.9	20	1.332
13C5-PFPeA	SURR	Average RF	% RSD	4.4	20	0.255
13C6-PFDA	SURR	Average RF	% RSD	7.2	20	1.375
13C8-PFOA	SURR	Average RF	% RSD	5.4	20	14.79
13C8-PFOS	SURR	Average RF	% RSD	6.4	20	0.4353
13C9-PFNA	SURR	Average RF	% RSD	4.6	20	1.481
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	TRG	Average RF	% RSD	5.6	20	1.885
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	TRG	Average RF	% RSD	9.2	20	0.0879
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	TRG	Average RF	% RSD	11.4	20	0.05907
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	TRG	Average RF	% RSD	7.9	20	0.0681
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	TRG	Average RF	% RSD	13.9	20	0.5555
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	TRG	Average RF	% RSD	9.9	20	3.459
Perfluoro-3-methoxypropanoic acid (PFMPA)	TRG	Average RF	% RSD	6.0	20	1.532
Perfluoro-4-methoxybutanoic acid (PFMBA)	TRG	Average RF	% RSD	7.9	20	2.614
Perfluorobutane sulfonic acid (PFBS)	TRG	Average RF	% RSD	4.3	20	1.072
Perfluorobutanoic acid (PFBA)	TRG	Average RF	% RSD	8.4	20	0.843
Perfluorodecane sulfonic acid (PFDS)	TRG	Average RF	% RSD	13.2	20	1.709
Perfluorodecanoic acid (PFDA)	TRG	Average RF	% RSD	9.1	20	0.6745
Perfluorododecane sulfonic acid (PFDoS)	TRG	Average RF	% RSD	14.1	20	1.064
Perfluoroheptane sulfonic acid (PFHps)	TRG	Average RF	% RSD	16.5	20	2.327
Perfluorohexane sulfonic acid (PFHxS)	TRG	Linear	R2	0.9929		0.973
Perfluorohexanoic acid (PFHxA)	TRG	Linear	R2	0.9992		0.7569
Perfluorononane sulfonic acid (PFNS)	TRG	Average RF	% RSD	16.7	20	2.08

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 12/6/2023

Initial Calibration Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300722

Signal ID: 1

Instrument ID: K-LCMS-08

Analyte Name	Compound Type	Calibration Evaluation			Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF
Perfluorononanoic acid (PFNA)	TRG	Linear	R2	0.9987		0.6489
Perfluorooctane sulfonic acid (PFOS)	TRG	Average RF	% RSD	12.6	20	1.812
Perfluorooctanoic acid (PFOA)	TRG	Linear	R2	0.9941		0.855
Perfluoropentane sulfonic acid (PFPeS)	TRG	Average RF	% RSD	10.1	20	1.069
Perfluoropentanoic acid (PFPeA)	TRG	Average RF	% RSD	6.1	20	4.542

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 11/21/2023

Initial Calibration Verification Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300683
Instrument ID: K-LCMS-08

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
10	KC2300683-10	ICAL 1633 ABS ICV	231121_016	11/21/2023 18:11
11	KC2300683-11	ICAL 1633 FTCA ICV	231121_017	11/21/2023 18:34

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.890	0.971	1.312E0	1.431E0	9.08	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.940	1.07	1.163E0	1.323E0	13.79	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.910	1.04	1.268E0	1.456E0	14.81	±30	Average RF
Perfluoroheptane sulfonic acid (PFHpS)	0.950	0.963	1.704E0	1.727E0	1.36	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	0.930	0.841	2.311E0	2.089E0	-9.607	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.960	0.925	1.467E0	1.413E0	-3.680	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.970	0.955	1.438E0	1.415E0	-1.596	±30	Average RF
Perfluorododecane sulfonic acid (PFDoS)	0.970	0.832	4.656E-1	3.994E-1	-14.210	±30	Average RF
Perfluorobutanoic acid (PFBA)	1.00	0.981	8.682E-1	7.677E-1	-1.862	±30	Linear
Perfluoropentanoic acid (PFPeA)	1.00	0.883	4.128E0	3.645E0	-11.707	±30	Average RF
Perfluorohexanoic acid (PFHxA)	1.00	0.895	1.095E0	9.513E-1	-10.522	±30	Linear
Perfluoroheptanoic acid (PFHpA)	1.00	0.875	1.158E0	9.84E-1	-12.539	±30	Linear
Perfluoroctanoic acid (PFOA)	1.00	0.830	7.986E-1	6.35E-1	-16.990	±30	Linear
Perfluorononanoic acid (PFNA)	1.00	0.945	7.631E-1	6.883E-1	-5.547	±30	Linear
Perfluorodecanoic acid (PFDA)	1.00	0.912	1.338E0	1.22E0	-8.806	±30	Average RF
Perfluoroundecanoic acid (PFUnDA)	1.00	0.855	6.963E-1	5.746E-1	-14.535	±30	Linear
Perfluorododecanoic acid (PFDOA)	1.00	0.834	5.433E-1	4.398E-1	-16.647	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	1.00	0.854	1.469E0	1.172E0	-14.596	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	1.00	0.963	1.279E0	1.161E0	-3.667	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	1.00	0.967	7.573E-1	7.321E-1	-3.327	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	1.00	0.937	1.859E0	1.741E0	-6.337	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.00	0.834	1.432E0	1.194E0	-16.607	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	1.00	1.12	9.405E-1	1.052E0	11.88	±30	Average RF
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	1.00	1.01	8.785E-1	8.883E-1	1.12	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.00	0.894	1.498E0	1.339E0	-10.592	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.00	0.954	8.626E-1	8.229E-1	-4.601	±30	Average RF
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.940	0.926	2.36E0	2.325E0	-1.463	±30	Average RF
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.950	0.805	2.105E0	1.784E0	-15.284	±30	Average RF
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.960	0.902	1.766E0	1.66E0	-6.002	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	20.0	22.2	6.533E-2	7.238E-2	10.79	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	20.0	22.7	6.691E-2	7.595E-2	13.50	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	20.0	21.8	9.678E-2	1.056E-1	9.15	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 11/21/2023

Initial Calibration Verification Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300683
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.890	0.831	1.639E0	1.53E0	-6.662	±30	Average RF
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.930	0.941	7.714E0	7.803E0	1.16	±30	Average RF
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUDS)	0.940	0.932	6.213E0	6.161E0	-0.836	±30	Average RF
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.00	0.879	1.988E0	1.748E0	-12.109	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.00	0.866	2.533E0	2.194E0	-13.409	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	1.00	1.03	1.066E0	1.093E0	2.52	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.00	0.913	5.879E-1	5.367E-1	-8.716	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.950	0.936	1.144E1	1.128E1	-1.466	±30	Average RF

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
13C3-PFBS	2.50	2.72	1.268E0	1.38E0	8.84	±30	Average RF
13C3-PFBS	2.50	2.05	1.268E0	1.04E0	-17.967	±30	Average RF
13C3-PFHxS	2.50	2.53	1.252E0	1.267E0	1.27	±30	Average RF
13C3-PFHxS	2.50	1.80	1.252E0	8.993E-1	-28.141	±30	Average RF
13C8-PFOS	2.50	2.31	9.024E-1	8.349E-1	-7.479	±30	Average RF
13C4-PFBA	10.0	9.98	6.746E-1	6.732E-1	-0.213	±30	Average RF
13C4-PFBA	10.0	7.48	6.746E-1	5.049E-1	-25.162	±30	Average RF
13C5-PFPeA	5.00	5.38	2.738E-1	2.944E-1	7.52	±30	Average RF
13C5-PFPeA	5.00	4.04	2.738E-1	2.215E-1	-19.129	±30	Average RF
13C5-PFHxA	2.50	2.66	1.44E0	1.535E0	6.57	±30	Average RF
13C5-PFHxA	2.50	1.95	1.44E0	1.123E0	-22.022	±30	Average RF
13C4-PFHxA	2.50	2.66	9.954E-1	1.057E0	6.22	±30	Average RF
13C4-PFHxA	2.50	1.97	9.954E-1	7.828E-1	-21.366	±30	Average RF
13C8-PFOA	2.50	1.84	1.154E1	8.506E0	-26.290	±30	Average RF
13C8-PFOA	2.50	2.43	1.154E1	1.123E1	-2.668	±30	Average RF
13C9-PFNA	1.25	1.27	1.033E0	1.048E0	1.45	±30	Average RF
13C9-PFNA	1.25	0.965	1.033E0	7.979E-1	-22.782	±30	Average RF
13C6-PFDA	1.25	1.30	1.188E0	1.235E0	3.94	±30	Average RF
13C6-PFDA	1.25	1.01	1.188E0	9.622E-1	-19.000	±30	Average RF
13C7-PFUnDA	1.25	1.28	1.473E0	1.513E0	2.66	±30	Average RF
13C7-PFUnDA	1.25	0.941	1.473E0	1.109E0	-24.717	±30	Average RF
13C2-PFDoDA	1.25	1.25	1.246E0	1.243E0	-0.223	±30	Average RF
13C2-PFDoDA	1.25		1.246E0			±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 11/21/2023

Initial Calibration Verification Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300683
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
13C2-PFTeDA	1.25	1.35	7.668E-1	8.306E-1	8.32	±30	Average RF
13C2-PFTeDA	1.25	0.880	7.668E-1	5.401E-1	-29.566	±30	Average RF
13C8-FOSA	2.50	2.29	2.362E0	2.167E0	-8.260	±30	Average RF
13C8-FOSA	2.50	1.85	2.362E0	1.751E0	-25.889	±30	Average RF
D3-MeFOSA	2.50	1.86	4.182E-1	3.117E-1	-25.468	±30	Average RF
D3-MeFOSA	2.50	2.27	4.182E-1	3.794E-1	-9.273	±30	Average RF
D5-EtFOSA	2.50	2.37	5.662E-1	5.377E-1	-5.033	±30	Average RF
D5-EtFOSA	2.50	1.91	5.662E-1	4.326E-1	-23.585	±30	Average RF
D7-MeFOSE	25.0		6.254E-1			±30	Average RF
D7-MeFOSE	25.0	22.4	6.254E-1	5.613E-1	-10.250	±30	Average RF
D9-EtFOSE	25.0	23.3	7.175E-1	6.687E-1	-6.800	±30	Average RF
D9-EtFOSE	25.0	18.5	7.175E-1	5.305E-1	-26.064	±30	Average RF
D3-MeFOSAA	5.00	5.04	6.415E-1	6.464E-1	0.766	±30	Average RF
D3-MeFOSAA	5.00	3.69	6.415E-1	4.736E-1	-26.174	±30	Average RF
D5-EtFOSAA	5.00	4.43	6.409E-1	5.683E-1	-11.324	±30	Average RF
D5-EtFOSAA	5.00		6.409E-1			±30	Average RF
13C2-4:2 FTS	5.00	4.22	2.514E-1	2.124E-1	-15.509	±30	Average RF
13C2-4:2 FTS	5.00	6.23	2.514E-1	3.134E-1	24.69	±30	Average RF
13C2-6:2 FTS	5.00	4.03	2.641E-1	2.131E-1	-19.310	±30	Average RF
13C2-6:2 FTS	5.00	5.63	2.641E-1	2.972E-1	12.55	±30	Average RF
13C2-8:2 FTS	5.00	5.06	2.643E-1	2.675E-1	1.19	±30	Average RF
13C2-8:2 FTS	5.00	3.77	2.643E-1	1.991E-1	-24.661	±30	Average RF
13C3-HFPO-DA	10.0	9.72	2.801E-1	2.722E-1	-2.830	±30	Average RF
13C3-HFPO-DA	10.0	7.26	2.801E-1	2.033E-1	-27.425	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 12/6/2023

Initial Calibration Verification Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300722
Instrument ID: K-LCMS-08

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
10	KC2300722-10	ICAL 1633 ABS ICV	231207_013	12/07/2023 16:23
11	KC2300722-11	ICAL 1633 FTCA ICV	231207_014	12/07/2023 16:46

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.890	0.859	1.072E0	1.036E0	-3.432	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.940	0.942	1.069E0	1.071E0	0.232	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.910	0.998	9.73E-1	9.544E-1	9.65	±30	Linear
Perfluoroheptane sulfonic acid (PFHpS)	0.950	0.808	2.327E0	1.98E0	-14.929	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	0.930	0.794	1.812E0	1.548E0	-14.573	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.960	0.826	2.08E0	1.791E0	-13.926	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.970	0.872	1.709E0	1.535E0	-10.139	±30	Average RF
Perfluorododecane sulfonic acid (PFDoS)	0.970	0.850	1.064E0	9.318E-1	-12.381	±30	Average RF
Perfluorobutanoic acid (PFBA)	1.00	0.937	8.43E-1	7.898E-1	-6.314	±30	Average RF
Perfluoropentanoic acid (PFPeA)	1.00	0.930	4.542E0	4.225E0	-6.981	±30	Average RF
Perfluorohexanoic acid (PFHxA)	1.00	0.996	7.569E-1	7.09E-1	-0.397	±30	Linear
Perfluorooctanoic acid (PFOA)	1.00	0.963	8.55E-1	7.743E-1	-3.699	±30	Linear
Perfluorononanoic acid (PFNA)	1.00	1.02	6.489E-1	6.182E-1	1.82	±30	Linear
Perfluorodecanoic acid (PFDA)	1.00	1.03	6.745E-1	6.944E-1	2.94	±30	Average RF
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.940	0.909	1.885E0	1.822E0	-3.334	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	20.0	17.4	6.81E-2	5.916E-2	-13.136	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	20.0	15.7	5.907E-2	4.633E-2	-21.560	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	20.0	14.8	8.79E-2	6.512E-2	-25.916	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.890	0.882	3.459E0	3.427E0	-0.926	±30	Average RF
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.00	0.909	1.532E0	1.392E0	-9.144	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.00	0.995	2.614E0	2.599E0	-0.549	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.00	1.04	5.555E-1	5.791E-1	4.24	±30	Average RF

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
13C3-PFBS	2.50	2.36	1.763E0	1.668E0	-5.401	±30	Average RF
13C3-PFBS	2.50	2.56	1.763E0	1.808E0	2.51	±30	Average RF
13C3-PFHxS	2.50	2.61	1.361E0	1.42E0	4.33	±30	Average RF
13C3-PFHxS	2.50	2.48	1.361E0	1.347E0	-0.992	±30	Average RF
13C8-PFOS	2.50	2.59	4.353E-1	4.505E-1	3.49	±30	Average RF
13C8-PFOS	2.50	2.59	4.353E-1	4.51E-1	3.60	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Calibration Date: 12/6/2023

Initial Calibration Verification Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2300722
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
13C4-PFBA	10.0	9.92	1.312E0	1.302E0	-0.783	±30	Average RF
13C4-PFBA	10.0	10.2	1.312E0	1.335E0	1.72	±30	Average RF
13C5-PFPeA	5.00	4.63	2.55E-1	2.363E-1	-7.334	±30	Average RF
13C5-PFPeA	5.00	5.47	2.55E-1	2.79E-1	9.41	±30	Average RF
13C5-PFHxA	2.50	2.61	1.332E0	1.391E0	4.45	±30	Average RF
13C5-PFHxA	2.50	2.48	1.332E0	1.32E0	-0.899	±30	Average RF
13C8-PFOA	2.50	2.39	1.479E1	1.414E1	-4.418	±30	Average RF
13C8-PFOA	2.50	2.37	1.479E1	1.403E1	-5.140	±30	Average RF
13C9-PFNA	1.25	1.24	1.481E0	1.464E0	-1.179	±30	Average RF
13C9-PFNA	1.25	1.23	1.481E0	1.454E0	-1.823	±30	Average RF
13C6-PFDA	1.25	1.32	1.375E0	1.452E0	5.58	±30	Average RF
13C6-PFDA	1.25	1.18	1.375E0	1.294E0	-5.882	±30	Average RF
13C2-4:2 FTS	5.00	5.74	3.507E-1	4.024E-1	14.75	±30	Average RF
13C2-4:2 FTS	5.00	6.26	3.507E-1	4.389E-1	25.18	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Date Analyzed: 11/28/23 17:55

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method:	Draft EPA Method 1633	Calibration Date:	11/21/2023
File ID:	J:\LCMS08\Data\231128_1633_B1\231128_016	Calibration ID:	KC2300683
Signal ID:	1	Analysis Lot:	825570
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.222	0.212	1.3119	1.255	95.6	NA	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.235	0.221	1.1626	1.0905	93.8	NA	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.229	0.194	1.2684	1.0779	85.0	NA	±30	Average RF
Perfluoroheptane sulfonic acid (PFHpS)	0.238	0.207	1.7042	1.4784	86.8	NA	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	0.232	0.214	2.311	2.1347	92.4	NA	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.241	0.220	1.4666	1.3383	91.3	NA	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.241	0.209	1.4381	1.2462	86.7	NA	±30	Average RF
Perfluorododecane sulfonic acid (PFDoS)	0.243	0.218	0.4656	0.4194	90.1	NA	±30	Average RF
Perfluorobutanoic acid (PFBA)	0.250	0.296	0.8682	1.0023	118	18.4	±30	Linear
Perfluoropentanoic acid (PFPeA)	0.250	0.294	4.1282	4.8479	117	NA	±30	Average RF
Perfluorohexanoic acid (PFHxA)	0.250	0.234	1.0949	1.0273	93.7	-6.3	±30	Linear
Perfluoroheptanoic acid (PFHpA)	0.250	0.226	1.1583	1.0485	90.3	-9.7	±30	Linear
Perfluorooctanoic acid (PFOA)	0.250	0.294	0.7986	0.9303	118	17.8	±30	Linear
Perfluorononanoic acid (PFNA)	0.250	0.261	0.7631	0.7942	105	4.6	±30	Linear
Perfluorodecanoic acid (PFDA)	0.250	0.267	1.338	1.4301	107	NA	±30	Average RF
Perfluoroundecanoic acid (PFUnDA)	0.250	0.266	0.6963	0.7374	106	6.4	±30	Linear
Perfluorododecanoic acid (PFDOA)	0.250	0.245	0.5433	0.5329	98.2	-1.8	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	0.250	0.241	1.4693	1.4148	96.3	-3.7	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	0.250	0.277	1.2789	1.4039	111	10.9	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	0.500	0.507	0.7573	0.7684	101	NA	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	0.250	0.246	1.8586	1.8286	98.4	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0.250	0.254	1.4318	1.4517	101	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0.250	0.275	0.9405	1.0328	110	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0.250	0.261	0.8785	0.9185	105	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0.250	0.231	1.4977	1.3833	92.4	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0.250	0.225	0.8626	0.7777	90.2	NA	±30	Average RF
1H, 1H, 2H, 2H-	0.234	0.255	2.3598	2.5661	109	NA	±30	Average RF
Perfluorohexanesulfonic acid (4:2 FTS)								
1H, 1H, 2H, 2H-	0.238	0.238	2.1055	2.103	100	NA	±30	Average RF
Perfluorooctanesulfonic acid (6:2 FTS)								

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Date Analyzed: 11/28/23 17:55

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Calibration Date: 11/21/2023

File ID: J:\LCMS08\Data\231128_1633_B1\231128_016

Calibration ID: KC2300683

Signal ID: 1

Analysis Lot: 825570

Units: ng/mL

1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.240	0.228	1.7659	1.6756	94.9	NA	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	10.0	9.68	0.0653	0.0633	96.8	NA	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	10.0	9.05	0.0669	0.0605	90.5	NA	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	10.0	10.0	0.0968	0.0968	100	NA	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.223	0.211	1.6394	1.5527	94.7	NA	±30	Average RF
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.233	0.243	7.7137	8.0414	104	NA	±30	Average RF
11-Chloroeicosafauro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUDS)	0.236	0.246	6.2131	6.4847	104	NA	±30	Average RF
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.250	0.230	1.9884	1.8312	92.1	NA	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.250	0.262	2.5333	2.6493	105	NA	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0.250	0.286	1.0657	1.2184	114	NA	±30	Average RF
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	0.250	0.262	0.5879	0.6164	105	NA	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.236	0.248	11.444	11.9915	105	NA	±30	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
13C3-PFBS	2.50	2.22	1.2683	1.1281	88.9	NA	±30	Average RF
13C3-PFHxS	2.50	2.42	1.2515	1.2106	96.7	NA	±30	Average RF
13C8-PFOS	2.50	2.76	0.9024	0.9961	110	NA	±30	Average RF
13C4-PFBA	10.0	8.69	0.6746	0.5864	86.9	NA	±30	Average RF
13C5-PFPeA	5.00	4.80	0.2738	0.2627	95.9	NA	±30	Average RF
13C5-PFHxA	2.50	2.51	1.44	1.4481	101	NA	±30	Average RF
13C4-PFHxA	2.50	2.61	0.9954	1.0402	104	NA	±30	Average RF
13C8-PFOA	2.50	2.72	11.5399	12.5778	109	NA	±30	Average RF
13C9-PFNA	1.25	1.16	1.0334	0.9623	93.1	NA	±30	Average RF
13C6-PFDA	1.25	1.12	1.1879	1.0683	89.9	NA	±30	Average RF
13C7-PFUnDA	1.25	1.09	1.4734	1.287	87.4	NA	±30	Average RF
13C2-PFDoDA	1.25	1.18	1.246	1.1731	94.2	NA	±30	Average RF
13C2-PFTeDA	1.25	1.13	0.7668	0.6949	90.6	NA	±30	Average RF
13C8-FOSA	2.50	2.78	2.362	2.6285	111	NA	±30	Average RF
D3-MeFOSA	2.50	2.82	0.4182	0.4716	113	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Date Analyzed: 11/28/23 17:55

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Calibration Date: 11/21/2023

File ID: J:\LCMS08\Data\231128_1633_B1\231128_016

Calibration ID: KC2300683

Signal ID: 1

Analysis Lot: 825570

Units: ng/mL

D5-EtFOSA	2.50	2.53	0.5662	0.5732	101	NA	±30	Average RF
D7-MeFOSE	25.0	24.6	0.6254	0.6152	98.4	NA	±30	Average RF
D9-EtFOSE	25.0	25.6	0.7175	0.7345	102	NA	±30	Average RF
D3-MeFOSAA	5.00	6.47	0.6415	0.8305	129	NA	±30	Average RF
D5-EtFOSAA	5.00	6.91	0.6409	0.8859	138*	NA	±30	Average RF
13C2-4:2 FTS	5.00	5.86	0.2514	0.2946	117	NA	±30	Average RF
13C2-6:2 FTS	5.00	6.18	0.2641	0.3267	124	NA	±30	Average RF
13C2-8:2 FTS	5.00	5.54	0.2643	0.2927	111	NA	±30	Average RF
13C3-HFPO-DA	10.0	9.39	0.2801	0.263	93.9	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Date Analyzed: 11/28/23 18:18

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method:	Draft EPA Method 1633	Calibration Date:	11/21/2023
File ID:	J:\LCMS08\Data\231128_1633_B1\231128_017	Calibration ID:	KC2300683
Signal ID:	1	Analysis Lot:	825570
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.887	0.886	1.3119	1.31	99.9	NA	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.941	0.927	1.1626	1.1451	98.5	NA	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.914	0.897	1.2684	1.2452	98.2	NA	±30	Average RF
Perfluoroheptane sulfonic acid (PFHpS)	0.953	0.862	1.7042	1.5413	90.5	NA	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	0.928	0.806	2.311	2.0078	86.9	NA	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.962	0.918	1.4666	1.3998	95.4	NA	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.965	0.867	1.4381	1.2923	89.9	NA	±30	Average RF
Perfluorododecane sulfonic acid (PFDoS)	0.970	0.935	0.4656	0.4488	96.4	NA	±30	Average RF
Perfluorobutanoic acid (PFBA)	1.00	1.05	0.8682	0.8232	105	5.5	±30	Linear
Perfluoropentanoic acid (PFPeA)	1.00	1.05	4.1282	4.3541	105	NA	±30	Average RF
Perfluorohexanoic acid (PFHxA)	1.00	0.916	1.0949	0.9732	91.6	-8.5	±30	Linear
Perfluoroheptanoic acid (PFHpA)	1.00	0.840	1.1583	0.9458	84.0	-16.0	±30	Linear
Perfluorooctanoic acid (PFOA)	1.00	1.24	0.7986	0.9407	124	23.7	±30	Linear
Perfluorononanoic acid (PFNA)	1.00	0.973	0.7631	0.709	97.3	-2.7	±30	Linear
Perfluorodecanoic acid (PFDA)	1.00	0.864	1.338	1.1553	86.4	NA	±30	Average RF
Perfluoroundecanoic acid (PFUnDA)	1.00	1.02	0.6963	0.6819	102	1.7	±30	Linear
Perfluorododecanoic acid (PFDOA)	1.00	0.928	0.5433	0.4889	92.8	-7.2	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	1.00	1.01	1.4693	1.3747	101	0.6	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	1.00	1.02	1.2789	1.224	102	1.7	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	2.00	1.96	0.7573	0.743	98.1	NA	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	1.00	0.948	1.8586	1.7623	94.8	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.00	0.946	1.4318	1.3542	94.6	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	1.00	1.07	0.9405	1.0098	107	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	1.00	0.967	0.8785	0.8492	96.7	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.00	0.972	1.4977	1.4554	97.2	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.00	0.957	0.8626	0.8254	95.7	NA	±30	Average RF
1H, 1H, 2H, 2H-	0.937	0.985	2.3598	2.4795	105	NA	±30	Average RF
Perfluorohexanesulfonic acid (4:2 FTS)								
1H, 1H, 2H, 2H-	0.951	0.854	2.1055	1.8909	89.8	NA	±30	Average RF
Perfluorooctanesulfonic acid (6:2 FTS)								

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Date Analyzed: 11/28/23 18:18

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method:	Draft EPA Method 1633		Calibration Date:	11/21/2023				
File ID:	J:\LCMS08\Data\231128_1633_B1\231128_017		Calibration ID:	KC2300683				
Signal ID:	1		Analysis Lot:	825570				
			Units:	ng/mL				
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.960	0.987	1.7659	1.8163	103	NA	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	20.0	20.3	0.0653	0.0665	102	NA	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	20.0	18.3	0.0669	0.0611	91.4	NA	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	20.0	19.9	0.0968	0.0964	99.6	NA	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.890	0.834	1.6394	1.5357	93.7	NA	±30	Average RF
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.933	0.961	7.7137	7.9451	103	NA	±30	Average RF
11-Chloroeicosafauro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUDS)	0.943	0.925	6.2131	6.0968	98.1	NA	±30	Average RF
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.00	0.886	1.9884	1.7613	88.6	NA	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.00	0.996	2.5333	2.5234	99.6	NA	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	1.00	0.988	1.0657	1.0528	98.8	NA	±30	Average RF
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	1.00	0.955	0.5879	0.5612	95.5	NA	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.945	0.891	11.444	10.7899	94.3	NA	±30	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
13C3-PFBS	2.50	2.48	1.2683	1.2602	99.4	NA	±30	Average RF
13C3-PFHxS	2.50	2.41	1.2515	1.2052	96.3	NA	±30	Average RF
13C8-PFOS	2.50	2.69	0.9024	0.9698	107	NA	±30	Average RF
13C4-PFBA	10.0	9.11	0.6746	0.6144	91.1	NA	±30	Average RF
13C5-PFPeA	5.00	5.21	0.2738	0.2856	104	NA	±30	Average RF
13C5-PFHxA	2.50	2.72	1.44	1.5695	109	NA	±30	Average RF
13C4-PFHxA	2.50	2.93	0.9954	1.1683	117	NA	±30	Average RF
13C8-PFOA	2.50	2.58	11.5399	11.889	103	NA	±30	Average RF
13C9-PFNA	1.25	1.24	1.0334	1.0243	99.1	NA	±30	Average RF
13C6-PFDA	1.25	1.34	1.1879	1.2765	107	NA	±30	Average RF
13C7-PFUnDA	1.25	1.17	1.4734	1.3775	93.5	NA	±30	Average RF
13C2-PFDoDA	1.25	1.19	1.246	1.1884	95.4	NA	±30	Average RF
13C2-PFTeDA	1.25	1.11	0.7668	0.6802	88.7	NA	±30	Average RF
13C8-FOSA	2.50	2.88	2.362	2.7166	115	NA	±30	Average RF
D3-MeFOSA	2.50	2.92	0.4182	0.4887	117	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Date Analyzed: 11/28/23 18:18

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Calibration Date: 11/21/2023

File ID: J:\LCMS08\Data\231128_1633_B1\231128_017

Calibration ID: KC2300683

Signal ID: 1

Analysis Lot: 825570

Units: ng/mL

D5-EtFOSA	2.50	2.73	0.5662	0.6172	109	NA	±30	Average RF
D7-MeFOSE	25.0	25.4	0.6254	0.635	102	NA	±30	Average RF
D9-EtFOSE	25.0	27.2	0.7175	0.7807	109	NA	±30	Average RF
D3-MeFOSAA	5.00	6.82	0.6415	0.8754	136*	NA	±30	Average RF
D5-EtFOSAA	5.00	7.25	0.6409	0.9291	145*	NA	±30	Average RF
13C2-4:2 FTS	5.00	6.65	0.2514	0.3343	133*	NA	±30	Average RF
13C2-6:2 FTS	5.00	7.25	0.2641	0.3832	145*	NA	±30	Average RF
13C2-8:2 FTS	5.00	6.58	0.2643	0.3481	132*	NA	±30	Average RF
13C3-HFPO-DA	10.0	10.6	0.2801	0.2974	106	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Date Analyzed: 11/28/23 23:44

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method:	Draft EPA Method 1633	Calibration Date:	11/21/2023
File ID:	J:\LCMS08\Data\231128_1633_B1\231128_031	Calibration ID:	KC2300683
Signal ID:	1	Analysis Lot:	825570
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.887	0.869	1.3119	1.285	98.0	NA	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.941	0.911	1.1626	1.1258	96.8	NA	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.914	0.848	1.2684	1.1764	92.7	NA	±30	Average RF
Perfluoroheptane sulfonic acid (PFHpS)	0.953	0.914	1.7042	1.6351	96.0	NA	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	0.928	0.899	2.311	2.2376	96.8	NA	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.962	1.04	1.4666	1.5908	108	NA	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.965	0.939	1.4381	1.3993	97.3	NA	±30	Average RF
Perfluorododecane sulfonic acid (PFDoS)	0.970	0.915	0.4656	0.4392	94.3	NA	±30	Average RF
Perfluorobutanoic acid (PFBA)	1.00	1.06	0.8682	0.8273	106	6.0	±30	Linear
Perfluoropentanoic acid (PFPeA)	1.00	0.973	4.1282	4.0176	97.3	NA	±30	Average RF
Perfluorohexanoic acid (PFHxA)	1.00	0.869	1.0949	0.9245	86.9	-13.1	±30	Linear
Perfluoroheptanoic acid (PFHpA)	1.00	0.850	1.1583	0.9565	85.0	-15.0	±30	Linear
Perfluorooctanoic acid (PFOA)	1.00	1.20	0.7986	0.9154	120	20.3	±30	Linear
Perfluorononanoic acid (PFNA)	1.00	0.864	0.7631	0.6304	86.4	-13.6	±30	Linear
Perfluorodecanoic acid (PFDA)	1.00	0.963	1.338	1.289	96.3	NA	±30	Average RF
Perfluoroundecanoic acid (PFUnDA)	1.00	0.887	0.6963	0.5958	88.7	-11.3	±30	Linear
Perfluorododecanoic acid (PFDOA)	1.00	1.01	0.5433	0.5338	101	1.4	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	1.00	0.856	1.4693	1.175	85.6	-14.4	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	1.00	0.839	1.2789	1.0142	83.9	-16.1	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	2.00	1.84	0.7573	0.6969	92.0	NA	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	1.00	0.969	1.8586	1.8001	96.9	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.00	0.866	1.4318	1.2397	86.6	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	1.00	1.36	0.9405	1.2785	136*	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	1.00	0.979	0.8785	0.8596	97.9	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.00	0.735	1.4977	1.101	73.5	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.00	1.22	0.8626	1.0483	122	NA	±30	Average RF
1H, 1H, 2H, 2H-	0.937	0.955	2.3598	2.4047	102	NA	±30	Average RF
Perfluorohexanesulfonic acid (4:2 FTS)								
1H, 1H, 2H, 2H-	0.951	0.916	2.1055	2.0276	96.3	NA	±30	Average RF
Perfluorooctanesulfonic acid (6:2 FTS)								

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Date Analyzed: 11/28/23 23:44

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Calibration Date: 11/21/2023

File ID: J:\LCMS08\Data\231128_1633_B1\231128_031

Calibration ID: KC2300683

Signal ID: 1

Analysis Lot: 825570

Units: ng/mL

1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.960	0.898	1.7659	1.652	93.6	NA	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	20.0	18.3	0.0653	0.0597	91.4	NA	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	20.0	18.2	0.0669	0.0611	91.2	NA	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	20.0	19.2	0.0968	0.0927	95.8	NA	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.890	0.883	1.6394	1.6266	99.2	NA	±30	Average RF
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.933	1.13	7.7137	9.3042	121	NA	±30	Average RF
11-Chloroeicosafauro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUDS)	0.943	0.997	6.2131	6.5691	106	NA	±30	Average RF
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.00	0.775	1.9884	1.541	77.5	NA	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.00	0.904	2.5333	2.2896	90.4	NA	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	1.00	1.00	1.0657	1.0696	100	NA	±30	Average RF
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	1.00	0.930	0.5879	0.5469	93.0	NA	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.945	0.917	11.444	11.101	97.0	NA	±30	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
13C3-PFBS	2.50	2.41	1.2683	1.2225	96.4	NA	±30	Average RF
13C3-PFHxS	2.50	2.30	1.2515	1.1526	92.1	NA	±30	Average RF
13C8-PFOS	2.50	2.23	0.9024	0.8056	89.3	NA	±30	Average RF
13C4-PFBA	10.0	9.42	0.6746	0.6355	94.2	NA	±30	Average RF
13C5-PFPeA	5.00	5.92	0.2738	0.3241	118	NA	±30	Average RF
13C5-PFHxA	2.50	2.74	1.44	1.5774	110	NA	±30	Average RF
13C4-PFHxA	2.50	2.99	0.9954	1.1893	119	NA	±30	Average RF
13C8-PFOA	2.50	2.97	11.5399	13.6898	119	NA	±30	Average RF
13C9-PFNA	1.25	1.33	1.0334	1.1018	107	NA	±30	Average RF
13C6-PFDA	1.25	1.35	1.1879	1.2844	108	NA	±30	Average RF
13C7-PFUnDA	1.25	1.24	1.4734	1.4592	99.0	NA	±30	Average RF
13C2-PFDoDA	1.25	1.11	1.246	1.1053	88.7	NA	±30	Average RF
13C2-PFTeDA	1.25	1.44	0.7668	0.884	115	NA	±30	Average RF
13C8-FOSA	2.50	2.43	2.362	2.2942	97.1	NA	±30	Average RF
D3-MeFOSA	2.50	2.38	0.4182	0.3974	95.0	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Date Analyzed: 11/28/23 23:44

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Calibration Date: 11/21/2023

File ID: J:\LCMS08\Data\231128_1633_B1\231128_031

Calibration ID: KC2300683

Signal ID: 1

Analysis Lot: 825570

Units: ng/mL

D5-EtFOSA	2.50	2.43	0.5662	0.5503	97.2	NA	±30	Average RF
D7-MeFOSE	25.0	19.8	0.6254	0.4959	79.3	NA	±30	Average RF
D9-EtFOSE	25.0	25.2	0.7175	0.723	101	NA	±30	Average RF
D3-MeFOSAA	5.00	7.05	0.6415	0.905	141*	NA	±30	Average RF
D5-EtFOSAA	5.00	5.99	0.6409	0.7675	120	NA	±30	Average RF
13C2-4:2 FTS	5.00	6.66	0.2514	0.3346	133*	NA	±30	Average RF
13C2-6:2 FTS	5.00	7.50	0.2641	0.396	150*	NA	±30	Average RF
13C2-8:2 FTS	5.00	5.52	0.2643	0.2916	110	NA	±30	Average RF
13C3-HFPO-DA	10.0	10.6	0.2801	0.298	106	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Date Analyzed: 12/07/23 19:05

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\231207_1633_B1\231207_020
Signal ID: 1

Calibration Date: 12/6/2023
Calibration ID: KC2300722
Analysis Lot: 826600
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.222	0.237	1.0725	1.1462	107	NA	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.235	0.256	1.0687	1.1606	109	NA	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.229	0.234	0.973	0.9891	103	2.5	±30	Linear
Perfluoroheptane sulfonic acid (PFHpS)	0.238	0.229	2.3271	2.2315	95.9	NA	±30	Average RF
Perfluoroctane sulfonic acid (PFOS)	0.232	0.196	1.8119	1.5339	84.7	NA	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.241	0.226	2.0802	1.958	94.1	NA	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.241	0.242	1.7087	1.7112	100	NA	±30	Average RF
Perfluorododecane sulfonic acid (PFDoS)	0.243	0.246	1.0635	1.0796	102	NA	±30	Average RF
Perfluorobutanoic acid (PFBA)	0.250	0.269	0.843	0.9062	108	NA	±30	Average RF
Perfluoropentanoic acid (PFPeA)	0.250	0.271	4.5424	4.9273	108	NA	±30	Average RF
Perfluorohexanoic acid (PFHxA)	0.250	0.270	0.7569	0.8108	108	8.0	±30	Linear
Perfluoroctanoic acid (PFOA)	0.250	0.204	0.855	0.7077	81.6	-18.4	±30	Linear
Perfluorononanoic acid (PFNA)	0.250	0.258	0.6489	0.666	103	3.2	±30	Linear
Perfluorodecanoic acid (PFDA)	0.250	0.241	0.6745	0.6488	96.2	NA	±30	Average RF
1H, 1H, 2H, 2H-	0.234	0.255	1.8846	2.0496	109	NA	±30	Average RF
Perfluorohexanesulfonic acid (4:2 FTS)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	10.0	8.33	0.0681	0.0568	83.3	NA	±30	Average RF
2H,2H,3H,3H-Perfluoroctanoic acid (5:3 FTCA)	10.0	8.85	0.0591	0.0523	88.5	NA	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	10.0	8.95	0.0879	0.0787	89.5	NA	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.223	0.263	3.4588	4.0814	118	NA	±30	Average RF
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.250	0.245	1.5322	1.5041	98.2	NA	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.250	0.260	2.6136	2.7149	104	NA	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.250	0.273	0.5555	0.6069	109	NA	±30	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
13C3-PFBS	2.50	2.44	1.7634	1.7226	97.7	NA	±30	Average RF
13C3-PFHxS	2.50	2.49	1.3607	1.3576	99.8	NA	±30	Average RF
13C8-PFOS	2.50	2.43	0.4353	0.4238	97.4	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Date Analyzed: 12/07/23 19:05

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Calibration Date: 12/6/2023

File ID: J:\LCMS08\Data\231207_1633_B1\231207_020

Calibration ID: KC2300722

Signal ID: 1

Analysis Lot: 826600

Units: ng/mL

13C4-PFBA	10.0	9.67	1.3121	1.2684	96.7	NA	±30	Average RF
13C5-PFPeA	5.00	4.53	0.255	0.2313	90.7	NA	±30	Average RF
13C5-PFHxA	2.50	2.23	1.3317	1.1875	89.2	NA	±30	Average RF
13C8-PFOA	2.50	2.23	14.7901	13.1962	89.2	NA	±30	Average RF
13C9-PFNA	1.25	1.16	1.4814	1.3767	92.9	NA	±30	Average RF
13C6-PFDA	1.25	1.34	1.3754	1.4718	107	NA	±30	Average RF
13C2-4:2 FTS	5.00	5.61	0.3507	0.3936	112	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Date Analyzed: 12/07/23 19:29

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Calibration Date: 12/6/2023

File ID: J:\LCMS08\Data\231207_1633_B1\231207_021

Calibration ID: KC2300722

Signal ID: 1

Analysis Lot: 826600

Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.887	0.898	1.0725	1.0854	101	NA	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.941	0.872	1.0687	0.9899	92.6	NA	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.914	0.876	0.973	0.8384	95.9	-4.1	±30	Linear
Perfluoroheptane sulfonic acid (PFHpS)	0.953	0.801	2.3271	1.9554	84.0	NA	±30	Average RF
Perfluoroctane sulfonic acid (PFOS)	0.928	0.743	1.8119	1.4507	80.1	NA	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.962	0.761	2.0802	1.646	79.1	NA	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.965	0.885	1.7087	1.5665	91.7	NA	±30	Average RF
Perfluorododecane sulfonic acid (PFDoS)	0.970	0.872	1.0635	0.9564	89.9	NA	±30	Average RF
Perfluorobutanoic acid (PFBA)	1.00	0.978	0.843	0.8246	97.8	NA	±30	Average RF
Perfluoropentanoic acid (PFPeA)	1.00	0.991	4.5424	4.4991	99.1	NA	±30	Average RF
Perfluorohexanoic acid (PFHxA)	1.00	1.02	0.7569	0.7245	102	1.8	±30	Linear
Perfluoroctanoic acid (PFOA)	1.00	1.01	0.855	0.815	101	1.5	±30	Linear
Perfluorononanoic acid (PFNA)	1.00	1.04	0.6489	0.6296	104	3.8	±30	Linear
Perfluorodecanoic acid (PFDA)	1.00	0.971	0.6745	0.6552	97.1	NA	±30	Average RF
1H, 1H, 2H, 2H-	0.937	1.04	1.8846	2.093	111	NA	±30	Average RF
Perfluorohexanesulfonic acid (4:2 FTS)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	20.0	19.7	0.0681	0.067	98.4	NA	±30	Average RF
2H,2H,3H,3H-Perfluoroctanoic acid (5:3 FTCA)	20.0	17.3	0.0591	0.051	86.3	NA	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	20.0	18.1	0.0879	0.0794	90.3	NA	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.890	0.844	3.4588	3.2804	94.8	NA	±30	Average RF
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.00	0.987	1.5322	1.5128	98.7	NA	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.00	1.04	2.6136	2.7278	104	NA	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.00	0.888	0.5555	0.4935	88.8	NA	±30	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
13C3-PFBS	2.50	2.39	1.7634	1.6828	95.4	NA	±30	Average RF
13C3-PFHxS	2.50	2.62	1.3607	1.428	105	NA	±30	Average RF
13C8-PFOS	2.50	2.58	0.4353	0.4495	103	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Date Analyzed: 12/07/23 19:29

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Calibration Date: 12/6/2023

File ID: J:\LCMS08\Data\231207_1633_B1\231207_021

Calibration ID: KC2300722

Signal ID: 1

Analysis Lot: 826600

Units: ng/mL

13C4-PFBA	10.0	10.1	1.3121	1.3209	101	NA	±30	Average RF
13C5-PFPeA	5.00	4.66	0.255	0.2378	93.3	NA	±30	Average RF
13C5-PFHxA	2.50	2.55	1.3317	1.359	102	NA	±30	Average RF
13C8-PFOA	2.50	2.18	14.7901	12.8699	87.0	NA	±30	Average RF
13C9-PFNA	1.25	1.21	1.4814	1.433	96.7	NA	±30	Average RF
13C6-PFDA	1.25	1.22	1.3754	1.3458	97.9	NA	±30	Average RF
13C2-4:2 FTS	5.00	5.23	0.3507	0.3671	105	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Date Analyzed: 12/08/23 02:51

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Calibration Date: 12/6/2023

File ID: J:\LCMS08\Data\231207_1633_B1\231207_040

Calibration ID: KC2300722

Signal ID: 1

Analysis Lot: 826600

Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.887	0.880	1.0725	1.0641	99.2	NA	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.941	0.895	1.0687	1.0167	95.1	NA	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.914	0.906	0.973	0.8653	99.1	-0.9	±30	Linear
Perfluoroheptane sulfonic acid (PFHpS)	0.953	1.01	2.3271	2.4575	106	NA	±30	Average RF
Perfluoroctane sulfonic acid (PFOS)	0.928	0.854	1.8119	1.6675	92.0	NA	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.962	0.982	2.0802	2.1224	102	NA	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.965	1.00	1.7087	1.7699	104	NA	±30	Average RF
Perfluorododecane sulfonic acid (PFDoS)	0.970	0.985	1.0635	1.0799	102	NA	±30	Average RF
Perfluorobutanoic acid (PFBA)	1.00	0.977	0.843	0.8236	97.7	NA	±30	Average RF
Perfluoropentanoic acid (PFPeA)	1.00	0.945	4.5424	4.2946	94.5	NA	±30	Average RF
Perfluorohexanoic acid (PFHxA)	1.00	1.02	0.7569	0.726	102	2.0	±30	Linear
Perfluoroctanoic acid (PFOA)	1.00	0.830	0.855	0.6694	83.0	-17.0	±30	Linear
Perfluorononanoic acid (PFNA)	1.00	1.02	0.6489	0.6213	102	2.4	±30	Linear
Perfluorodecanoic acid (PFDA)	1.00	0.953	0.6745	0.6426	95.3	NA	±30	Average RF
1H, 1H, 2H, 2H-	0.937	1.01	1.8846	2.0313	108	NA	±30	Average RF
Perfluorohexanesulfonic acid (4:2 FTS)								
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	20.0	18.5	0.0681	0.063	92.6	NA	±30	Average RF
2H,2H,3H,3H-Perfluoroctanoic acid (5:3 FTCA)	20.0	18.7	0.0591	0.0552	93.4	NA	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	20.0	19.1	0.0879	0.0841	95.7	NA	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.890	0.874	3.4588	3.3951	98.2	NA	±30	Average RF
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.00	0.916	1.5322	1.4029	91.6	NA	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.00	0.979	2.6136	2.5573	97.9	NA	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.00	0.949	0.5555	0.5272	94.9	NA	±30	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
13C3-PFBS	2.50	2.56	1.7634	1.8075	103	NA	±30	Average RF
13C3-PFHxS	2.50	2.68	1.3607	1.4596	107	NA	±30	Average RF
13C8-PFOS	2.50	2.51	0.4353	0.4362	100	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request: R2309891
Date Analyzed: 12/08/23 02:51

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\231207_1633_B1\231207_040
Signal ID: 1

Calibration Date: 12/6/2023
Calibration ID: KC2300722
Analysis Lot: 826600
Units: ng/mL

13C4-PFBA	10.0	10.5	1.3121	1.382	105	NA	±30	Average RF
13C5-PFPeA	5.00	4.73	0.255	0.2415	94.7	NA	±30	Average RF
13C5-PFHxA	2.50	2.39	1.3317	1.2756	95.8	NA	±30	Average RF
13C8-PFOA	2.50	2.61	14.7901	15.4649	105	NA	±30	Average RF
13C9-PFNA	1.25	1.23	1.4814	1.459	98.5	NA	±30	Average RF
13C6-PFDA	1.25	1.30	1.3754	1.4311	104	NA	±30	Average RF
13C2-4:2 FTS	5.00	5.94	0.3507	0.4167	119	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891

Analysis Run Log

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Analysis Lot:825570

Instrument ID:K-LCMS-08

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\LCMS08\Data\231128_1633_B1\231128_014	Performance Evaluation	KQ2321059-01	11/28/2023	17:08	
J:\LCMS08\Data\231128_1633_B1\231128_015	Continuing Calibration Blank	KQ2321059-02	11/28/2023	17:31	
J:\LCMS08\Data\231128_1633_B1\231128_016	Low Level Continuing Calibration Verification	KQ2321059-03	11/28/2023	17:55	
J:\LCMS08\Data\231128_1633_B1\231128_017	Continuing Calibration Verification	KQ2321059-04	11/28/2023	18:18	
J:\LCMS08\Data\231128_1633_B1\231128_018	Performance Evaluation	KQ2321059-05	11/28/2023	18:41	
J:\LCMS08\Data\231128_1633_B1\231128_019	Continuing Calibration Blank	KQ2321059-06	11/28/2023	19:05	
J:\LCMS08\Data\231128_1633_B1\231128_020	Method Blank	KQ2319743-04	11/28/2023	19:28	
J:\LCMS08\Data\231128_1633_B1\231128_021	Lab Control Sample	KQ2319743-01	11/28/2023	19:51	
J:\LCMS08\Data\231128_1633_B1\231128_022	Duplicate Lab Control Sample	KQ2319743-02	11/28/2023	20:15	
J:\LCMS08\Data\231128_1633_B1\231128_023	Low Level Lab Control Sample	KQ2319743-03	11/28/2023	20:38	
J:\LCMS08\Data\231128_1633_B1\231128_024	ZZZZZZZ	ZZZZZZZ	11/28/2023	21:01	
J:\LCMS08\Data\231128_1633_B1\231128_025	ZZZZZZZ	ZZZZZZZ	11/28/2023	21:24	
J:\LCMS08\Data\231128_1633_B1\231128_026	CW4A-1023	R2309891-015	11/28/2023	21:48	
J:\LCMS08\Data\231128_1633_B1\231128_027	FB1-1023	R2309891-016	11/28/2023	22:11	
J:\LCMS08\Data\231128_1633_B1\231128_028	CW4B-1023	R2309891-017	11/28/2023	22:34	
J:\LCMS08\Data\231128_1633_B1\231128_029	CW3B-1023	R2309891-018	11/28/2023	22:57	
J:\LCMS08\Data\231128_1633_B1\231128_030	MW17S-1023	R2309891-019	11/28/2023	23:21	
J:\LCMS08\Data\231128_1633_B1\231128_031	Continuing Calibration Verification	KQ2321059-08	11/28/2023	23:44	
J:\LCMS08\Data\231128_1633_B1\231128_032	Continuing Calibration Blank	KQ2321059-07	11/29/2023	00:07	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891

Analysis Run Log

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Analysis Lot:826600

Instrument ID:K-LCMS-08

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\LCMS08\Data\231207_1633_B1\231207_018	Performance Evaluation	KQ2321619-01	12/7/2023	18:19	
J:\LCMS08\Data\231207_1633_B1\231207_019	Continuing Calibration Blank	KQ2321619-02	12/7/2023	18:42	
J:\LCMS08\Data\231207_1633_B1\231207_020	Low Level Continuing Calibration Verification	KQ2321619-03	12/7/2023	19:05	
J:\LCMS08\Data\231207_1633_B1\231207_021	Continuing Calibration Verification	KQ2321619-04	12/7/2023	19:29	
J:\LCMS08\Data\231207_1633_B1\231207_022	Performance Evaluation	KQ2321619-05	12/7/2023	19:52	
J:\LCMS08\Data\231207_1633_B1\231207_023	Continuing Calibration Blank	KQ2321619-06	12/7/2023	20:15	
J:\LCMS08\Data\231207_1633_B1\231207_024	Duplicate Lab Control Sample	KQ2319743-02	12/7/2023	20:38	
J:\LCMS08\Data\231207_1633_B1\231207_025	ZZZZZZZ	ZZZZZZZ	12/7/2023	21:02	
J:\LCMS08\Data\231207_1633_B1\231207_026	ZZZZZZZ	ZZZZZZZ	12/7/2023	21:25	
J:\LCMS08\Data\231207_1633_B1\231207_027	ZZZZZZZ	ZZZZZZZ	12/7/2023	21:48	
J:\LCMS08\Data\231207_1633_B1\231207_028	ZZZZZZZ	ZZZZZZZ	12/7/2023	22:11	
J:\LCMS08\Data\231207_1633_B1\231207_029	ZZZZZZZ	ZZZZZZZ	12/7/2023	22:35	
J:\LCMS08\Data\231207_1633_B1\231207_030	ZZZZZZZ	ZZZZZZZ	12/7/2023	22:58	
J:\LCMS08\Data\231207_1633_B1\231207_032	ZZZZZZZ	ZZZZZZZ	12/7/2023	23:44	
J:\LCMS08\Data\231207_1633_B1\231207_033	ZZZZZZZ	ZZZZZZZ	12/8/2023	00:08	
J:\LCMS08\Data\231207_1633_B1\231207_034	ZZZZZZZ	ZZZZZZZ	12/8/2023	00:31	
J:\LCMS08\Data\231207_1633_B1\231207_035	ZZZZZZZ	ZZZZZZZ	12/8/2023	00:54	
J:\LCMS08\Data\231207_1633_B1\231207_036	ZZZZZZZ	ZZZZZZZ	12/8/2023	01:18	
J:\LCMS08\Data\231207_1633_B1\231207_037	ZZZZZZZ	ZZZZZZZ	12/8/2023	01:41	
J:\LCMS08\Data\231207_1633_B1\231207_038	ZZZZZZZ	ZZZZZZZ	12/8/2023	02:04	
J:\LCMS08\Data\231207_1633_B1\231207_039	ZZZZZZZ	ZZZZZZZ	12/8/2023	02:27	
J:\LCMS08\Data\231207_1633_B1\231207_040	Continuing Calibration Verification	KQ2321619-08	12/8/2023	02:51	
J:\LCMS08\Data\231207_1633_B1\231207_041	Continuing Calibration Blank	KQ2321619-07	12/8/2023	03:14	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling

Service Request:R2309891

Analysis Run Log

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Analysis Lot:826600

Instrument ID:K-LCMS-08

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\LCMS08\Data\231207_1633_B1 \231207_042	ZZZZZZZ	ZZZZZZZ	12/8/2023	03:37	
J:\LCMS08\Data\231207_1633_B1 \231207_043	ZZZZZZZ	ZZZZZZZ	12/8/2023	04:00	
J:\LCMS08\Data\231207_1633_B1 \231207_044	ZZZZZZZ	ZZZZZZZ	12/8/2023	04:24	
J:\LCMS08\Data\231207_1633_B1 \231207_045	ZZZZZZZ	ZZZZZZZ	12/8/2023	04:47	
J:\LCMS08\Data\231207_1633_B1 \231207_047	ZZZZZZZ	ZZZZZZZ	12/8/2023	05:33	
J:\LCMS08\Data\231207_1633_B1 \231207_048	ZZZZZZZ	ZZZZZZZ	12/8/2023	05:57	
J:\LCMS08\Data\231207_1633_B1 \231207_049	ZZZZZZZ	ZZZZZZZ	12/8/2023	06:20	
J:\LCMS08\Data\231207_1633_B1 \231207_056	ZZZZZZZ	ZZZZZZZ	12/8/2023	09:03	
J:\LCMS08\Data\231207_1633_B1 \231207_057	Continuing Calibration Blank	KQ2321619-09	12/8/2023	09:26	

ALS Group USA, Corp.
dba ALS Environmental

Prep Summary Report

Client: On-Site Technical Services, Inc. **Service Request:** R2309891
Project: WAL - Annual Sampling
Sample Matrix: Water

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Prep Method: Method **Extraction Lot:** 429593
Analytical Method: Draft EPA Method 1633 **Extraction Date:** 11/07/23 09:23

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
Lab Control Sample	KQ2319743-01LCS	NA	NA	250 mL	5 mL	
Duplicate Lab Control Sample	KQ2319743-02DLCS	NA	NA	250 mL	5 mL	
Low Level Lab Control Sample	KQ2319743-03LCS_LL	NA	NA	250 mL	5 mL	
Method Blank	KQ2319743-04MB	NA	NA	250 mL	5 mL	
CW4A-1023	R2309891-015	10/25/23	10/25/23	258.9900 mL	5 mL	
FB1-1023	R2309891-016	10/25/23	10/25/23	274.1700 mL	5 mL	
CW4B-1023	R2309891-017	10/25/23	10/25/23	281.2500 mL	5 mL	
CW3B-1023	R2309891-018	10/25/23	10/25/23	284.4100 mL	5 mL	
MW17S-1023	R2309891-019	10/25/23	10/25/23	261.1500 mL	5 mL	



November 16, 2023

Service Request No:R2309956

Mr. Jon Brandes
On-Site Technical Services, Inc.
72 Railroad Avenue
Wellsville, NY 14895

Laboratory Results for: WAL - Semiannual Sampling

Dear Mr. Brandes,

Enclosed are the results of the sample(s) submitted to our laboratory October 26, 2023
For your reference, these analyses have been assigned our service request number **R2309956**.

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

A handwritten signature in black ink, appearing to read "Janice Jaeger".

Janice Jaeger
Project Manager



Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Client: On-Site Technical Services, Inc.
Project: WAL - Semiannual Sampling
Sample Matrix: Water

Service Request: R2309956
Date Received: 10/26/2023

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Five water samples were received for analysis at ALS Environmental on 10/26/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Semivolatiles by GC/MS:

No significant anomalies were noted with this analysis.

Metals:

No significant anomalies were noted with this analysis.

Volatiles by GC/MS:

Method 8260C, 11/06/2023: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) above the MRL in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Please note: This report has been revised to updated the sample ID of MW5S.

A handwritten signature in black ink, appearing to read "James D. S.", is placed over a horizontal line.

Approved by _____

Date _____ 11/14/2023



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW5D-1023		Lab ID: R2309956-001				
Analyte	Results	Flag	MDL	MRL	Units	Method
1,1,1-Trichloroethane	0.44	J	0.20	1.0	ug/L	8260C
1,1-Dichloroethane	0.33	J	0.20	1.0	ug/L	8260C
1,1-Dichloroethene	3.7		0.20	1.0	ug/L	8260C
1,1-Dichloroethene	3.6	DJ	1.0	5.0	ug/L	8260C
1,4-Dioxane	0.62		0.027	0.040	ug/L	8270D SIM
Barium, Total	57		3	20	ug/L	6010C
Calcium, Total	26800		300	1000	ug/L	6010C
Chloroethane	0.47	J	0.23	1.0	ug/L	8260C
cis-1,2-Dichloroethene	420	E	0.23	1.0	ug/L	8260C
cis-1,2-Dichloroethene	380	D	1.2	5.0	ug/L	8260C
Ethylbenzene	1.1		0.20	1.0	ug/L	8260C
Ethylbenzene	1.0	DJ	1.0	5.0	ug/L	8260C
Iron, Total	310		70	100	ug/L	6010C
Magnesium, Total	21100		30	1000	ug/L	6010C
Manganese, Total	844		4	10	ug/L	6010C
Potassium, Total	1600	J	400	2000	ug/L	6010C
Sodium, Total	8600		300	1000	ug/L	6010C
trans-1,2-Dichloroethene	1.5		0.20	1.0	ug/L	8260C
trans-1,2-Dichloroethene	1.7	DJ	1.0	5.0	ug/L	8260C
Trichloroethene	240	E	0.20	1.0	ug/L	8260C
Trichloroethene	210	D	1.0	5.0	ug/L	8260C
Vinyl Chloride	38		0.20	1.0	ug/L	8260C
Vinyl Chloride	33	D	1.0	5.0	ug/L	8260C

CLIENT ID: DUP1-1023		Lab ID: R2309956-002				
Analyte	Results	Flag	MDL	MRL	Units	Method
1,1,1-Trichloroethane	0.43	J	0.20	1.0	ug/L	8260C
1,1-Dichloroethane	0.41	J	0.20	1.0	ug/L	8260C
1,1-Dichloroethene	3.9		0.20	1.0	ug/L	8260C
1,1-Dichloroethene	3.5	DJ	1.0	5.0	ug/L	8260C
1,4-Dioxane	0.64		0.027	0.040	ug/L	8270D SIM
Barium, Total	57		3	20	ug/L	6010C
Calcium, Total	26900		300	1000	ug/L	6010C
Chloroethane	0.40	J	0.23	1.0	ug/L	8260C
cis-1,2-Dichloroethene	420	E	0.23	1.0	ug/L	8260C
cis-1,2-Dichloroethene	370	D	1.2	5.0	ug/L	8260C
Ethylbenzene	1.1		0.20	1.0	ug/L	8260C
Ethylbenzene	1.4	DJ	1.0	5.0	ug/L	8260C
Iron, Total	330		70	100	ug/L	6010C
Magnesium, Total	21200		30	1000	ug/L	6010C
Manganese, Total	848		4	10	ug/L	6010C



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: DUP1-1023**Lab ID: R2309956-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Potassium, Total	1700	J	400	2000	ug/L	6010C
Sodium, Total	8500		300	1000	ug/L	6010C
trans-1,2-Dichloroethene	1.7		0.20	1.0	ug/L	8260C
trans-1,2-Dichloroethene	2.0	DJ	1.0	5.0	ug/L	8260C
Trichloroethene	240	E	0.20	1.0	ug/L	8260C
Trichloroethene	200	D	1.0	5.0	ug/L	8260C
Vinyl Chloride	38		0.20	1.0	ug/L	8260C
Vinyl Chloride	31	D	1.0	5.0	ug/L	8260C

CLIENT ID: MW5S-1023**Lab ID: R2309956-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
1,1-Dichloroethane	0.35	J	0.20	1.0	ug/L	8260C
1,1-Dichloroethene	0.37	J	0.20	1.0	ug/L	8260C
Barium, Total	8	J	3	20	ug/L	6010C
Calcium, Total	13200		300	1000	ug/L	6010C
cis-1,2-Dichloroethene	160		0.23	1.0	ug/L	8260C
Iron, Total	140		70	100	ug/L	6010C
Magnesium, Total	9800		30	1000	ug/L	6010C
Manganese, Total	80		4	10	ug/L	6010C
Potassium, Total	1300	J	400	2000	ug/L	6010C
Sodium, Total	5800		300	1000	ug/L	6010C
trans-1,2-Dichloroethene	0.52	J	0.20	1.0	ug/L	8260C
Trichloroethene	24		0.20	1.0	ug/L	8260C
Vinyl Chloride	12		0.20	1.0	ug/L	8260C
Zinc, Total	5	J	3	20	ug/L	6010C

CLIENT ID: EB1-1023**Lab ID: R2309956-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
4-Methyl-2-pentanone (MIBK)	0.47	J	0.20	5.0	ug/L	8260C
Copper, Total	14	J	4	20	ug/L	6010C
Toluene	0.21	J	0.20	1.0	ug/L	8260C
Zinc, Total	6	J	3	20	ug/L	6010C

CLIENT ID: MW17D-1023**Lab ID: R2309956-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium, Total	3400		300	1000	ug/L	6010C
Iron, Total	9080		70	100	ug/L	6010C
Magnesium, Total	22200		30	1000	ug/L	6010C
Manganese, Total	111		4	10	ug/L	6010C
Nickel, Total	3	J	3	40	ug/L	6010C
Potassium, Total	4800		400	2000	ug/L	6010C
Sodium, Total	33400		300	1000	ug/L	6010C



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: MW17D-1023	Lab ID: R2309956-004					
Analyte	Results	Flag	MDL	MRL	Units	Method



Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling

Service Request: R2309956

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2309956-001	MW5D-1023	10/26/2023	0945
R2309956-002	DUP1-1023	10/26/2023	0955
R2309956-003	MW5S-1023	10/26/2023	1115
R2309956-004	MW17D-1023	10/26/2023	1305
R2309956-005	EB1-1023	10/26/2023	1430



R2309956
On-Site Technical Services, Inc.
WAL - Semimannual Sampling

5

Cooler Receipt and Preservat



Project/Client _____

Folder Number _____

Cooler received on 10/26/23 by RDJ

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	<u>Y</u> <u>N</u>
2	Custody papers properly completed (ink, signed)?	<u>Y</u> <u>N</u>
3	Did all bottles arrive in good condition (unbroken)?	<u>Y</u> <u>N</u>
4	Circle: Wet Ice Dry Ice Gel packs present?	<u>Y</u> <u>N</u>

5a	Perchlorate samples have required headspace?	<u>Y</u> <u>N</u> <u>NA</u>
5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	<u>Y</u> <u>N</u> <u>NA</u>
6	Where did the bottles originate?	<u>ALS/ROC</u> CLIENT
7	Soil VOA received as:	Bulk Encore 5035set <u>N/A</u>

8. Temperature Readings Date: 10/26/23 Time: 1715

ID: IR#12 IR#17

From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>5.3</u>						
Within 0-6°C?	<u>Y</u> <u>N</u>						
If <0°C, were samples frozen?	<u>Y</u> <u>N</u>						

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule
& Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location:	<u>Refrigerator</u>	by <u>RDJ</u>	on <u>10/26/23</u> at <u>1715</u>
5035 samples placed in storage location:	_____	by _____	on _____ at _____ within 48 hours of sampling? <u>Y</u> <u>N</u>

Cooler Breakdown/Preservation Check**: Date: 10/27/23 Time: 1536 by: RR

9. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
10. Did all bottle labels and tags agree with custody papers? YES NO
11. Were correct containers used for the tests indicated? YES NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO N/A
13. Were dissolved metals filtered in the field? YES NO N/A
14. Air Samples: Cassettes / Tubes Intact Y / N with MS Y / N Canisters Pressurized Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
≤2	206722	HNO ₃	✓		24002372	5/25				
≤2		H ₂ SO ₄								
<4		NaHSO ₄								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add Na ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃								
		ZnAcetate	-	-						
		HCl	**	**	22080183	6/25				

**VOAs and 1664 Not to be tested before analysis.
Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: Bottle labels, 051523 - 3AXH, 060622 - 1AM

Explain all Discrepancies/ Other Comments:

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: RR

PC Secondary Review: MS/11/23

*significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter



Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.	+	Correlation coefficient for MSA is <0.995.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arcloors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.	P	Concentration >40% difference between the two GC columns.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed ($\geq 100\%$ Difference between two GC columns).
#	Spike was diluted out.	X	See Case Narrative for discussion.
		MRL	Method Reporting Limit. Also known as:
		LOQ	Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
		MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
		LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
		ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Accreditations¹



NE LAP States
Florida ID # E87674
New Hampshire ID # 2941
New York ID # 10145
Pennsylvania ID# 68-786
Virginia #460167

Non-NELAP States
Connecticut ID #PH0556
Delaware Approved
Maine ID #NY01587
North Carolina #36701
North Carolina #676
Rhode Island LAO00333

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory. To verify NH accredited analytes, go to <https://www4.des.state.nh.us/CertifiedLabs/Certified-Method.aspx>.

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.
dba ALS Environmental

Client: On-Site Geological Services DPC **Service Request:** R2309956
Project: WAL - Semiannual Sampling/

Sample Name: MW5D-1023 **Date Collected:** 10/26/23
Lab Code: R2309956-001 **Date Received:** 10/26/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CKUTZER	NMANSEN
8260C		FNAEGLER
8270D SIM	JVANHEYNINGEN	AMOSES

Sample Name: MW5D-1023 **Date Collected:** 10/26/23
Lab Code: R2309956-001.R01 **Date Received:** 10/26/23
Sample Matrix: Water

Sample Name: DUP1-1023 **Date Collected:** 10/26/23
Lab Code: R2309956-002 **Date Received:** 10/26/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CKUTZER	NMANSEN
8260C		FNAEGLER
8270D SIM	JVANHEYNINGEN	AMOSES

Sample Name: DUP1-1023 **Date Collected:** 10/26/23
Lab Code: R2309956-002.R01 **Date Received:** 10/26/23
Sample Matrix: Water

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling/

Service Request: R2309956

Sample Name: MW5S-1023
Lab Code: R2309956-003
Sample Matrix: Water

Date Collected: 10/26/23
Date Received: 10/26/23**Analysis Method**6010C
8260C**Extracted/Digested By**

CKUTZER

Analyzed By
NMANSEN
FNAEGLER

Sample Name: MW17D-1023
Lab Code: R2309956-004
Sample Matrix: Water

Date Collected: 10/26/23
Date Received: 10/26/23**Analysis Method**6010C
8260C**Extracted/Digested By**

CKUTZER

Analyzed By
NMANSEN
FNAEGLER

Sample Name: EB1-1023
Lab Code: R2309956-005
Sample Matrix: Water

Date Collected: 10/26/23
Date Received: 10/26/23**Analysis Method**6010C
8260C**Extracted/Digested By**

CKUTZER

Analyzed By
NMANSEN
FNAEGLER



INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9034 Sulfide Acid Soluble	9030B
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7199	3060A
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction
For analytical methods not listed, the preparation method is the same as the analytical method reference.	

RIGHT SOLUTIONS | RIGHT PARTNER



Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water
Sample Name: MW5D-1023
Lab Code: R2309956-001

Service Request: R2309956
Date Collected: 10/26/23 09:45
Date Received: 10/26/23 17:04

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/06/23 17:05	
Benzene	1.0 U	1.0	0.20	1	11/06/23 17:05	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/06/23 17:05	
Bromoform	1.0 U	1.0	0.25	1	11/06/23 17:05	
Bromomethane	1.0 U	1.0	0.70	1	11/06/23 17:05	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/06/23 17:05	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/06/23 17:05	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/06/23 17:05	
Chlorobenzene	1.0 U	1.0	0.20	1	11/06/23 17:05	
Chloroethane	0.47 J	1.0	0.23	1	11/06/23 17:05	
Chloroform	1.0 U	1.0	0.51	1	11/06/23 17:05	
Chloromethane	1.0 U	1.0	0.80	1	11/06/23 17:05	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/06/23 17:05	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/06/23 17:05	
1,1-Dichloroethane	0.33 J	1.0	0.20	1	11/06/23 17:05	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/06/23 17:05	
1,1-Dichloroethene	3.7	1.0	0.20	1	11/06/23 17:05	
cis-1,2-Dichloroethene	420 E	1.0	0.23	1	11/06/23 17:05	
trans-1,2-Dichloroethene	1.5	1.0	0.20	1	11/06/23 17:05	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/06/23 17:05	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/06/23 17:05	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/06/23 17:05	
Ethylbenzene	1.1	1.0	0.20	1	11/06/23 17:05	
2-Hexanone	5.0 U	5.0	0.20	1	11/06/23 17:05	
Methylene Chloride	1.0 U	1.0	0.65	1	11/06/23 17:05	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/06/23 17:05	
Styrene	1.0 U	1.0	0.20	1	11/06/23 17:05	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/06/23 17:05	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/06/23 17:05	
Toluene	1.0 U	1.0	0.20	1	11/06/23 17:05	
1,1,1-Trichloroethane	0.44 J	1.0	0.20	1	11/06/23 17:05	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/06/23 17:05	
Trichloroethene	240 E	1.0	0.20	1	11/06/23 17:05	
Vinyl Chloride	38	1.0	0.20	1	11/06/23 17:05	
o-Xylene	1.0 U	1.0	0.20	1	11/06/23 17:05	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/06/23 17:05	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	87	85 - 122	11/06/23 17:05	
Toluene-d8	102	87 - 121	11/06/23 17:05	
Dibromofluoromethane	96	80 - 116	11/06/23 17:05	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water
Sample Name: MW5D-1023
Lab Code: R2309956-001

Service Request: R2309956
Date Collected: 10/26/23 09:45
Date Received: 10/26/23 17:04

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	25 U	25	25	5	11/07/23 16:56	
Benzene	5.0 U	5.0	1.0	5	11/07/23 16:56	
Bromodichloromethane	5.0 U	5.0	1.0	5	11/07/23 16:56	
Bromoform	5.0 U	5.0	1.3	5	11/07/23 16:56	
Bromomethane	5.0 U	5.0	3.5	5	11/07/23 16:56	
2-Butanone (MEK)	25 U	25	3.9	5	11/07/23 16:56	
Carbon Disulfide	5.0 U	5.0	2.1	5	11/07/23 16:56	
Carbon Tetrachloride	5.0 U	5.0	1.7	5	11/07/23 16:56	
Chlorobenzene	5.0 U	5.0	1.0	5	11/07/23 16:56	
Chloroethane	5.0 U	5.0	1.2	5	11/07/23 16:56	
Chloroform	5.0 U	5.0	2.6	5	11/07/23 16:56	
Chloromethane	5.0 U	5.0	4.0	5	11/07/23 16:56	
Dibromochloromethane	5.0 U	5.0	1.0	5	11/07/23 16:56	
1,1-Dichloroethane	5.0 U	5.0	1.0	5	11/07/23 16:56	
1,2-Dibromoethane	5.0 U	5.0	1.0	5	11/07/23 16:56	
1,2-Dichloroethane	5.0 U	5.0	1.0	5	11/07/23 16:56	
1,1-Dichloroethene	3.6 DJ	5.0	1.0	5	11/07/23 16:56	
cis-1,2-Dichloroethene	380 D	5.0	1.2	5	11/07/23 16:56	
trans-1,2-Dichloroethene	1.7 DJ	5.0	1.0	5	11/07/23 16:56	
1,2-Dichloropropane	5.0 U	5.0	1.0	5	11/07/23 16:56	
cis-1,3-Dichloropropene	5.0 U	5.0	1.0	5	11/07/23 16:56	
trans-1,3-Dichloropropene	5.0 U	5.0	1.2	5	11/07/23 16:56	
Ethylbenzene	1.0 DJ	5.0	1.0	5	11/07/23 16:56	
2-Hexanone	25 U	25	1.0	5	11/07/23 16:56	
Methylene Chloride	5.0 U	5.0	3.3	5	11/07/23 16:56	
4-Methyl-2-pentanone (MIBK)	25 U	25	1.0	5	11/07/23 16:56	
Styrene	5.0 U	5.0	1.0	5	11/07/23 16:56	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1.0	5	11/07/23 16:56	
Tetrachloroethene	5.0 U	5.0	1.1	5	11/07/23 16:56	
Toluene	5.0 U	5.0	1.0	5	11/07/23 16:56	
1,1,1-Trichloroethane	5.0 U	5.0	1.0	5	11/07/23 16:56	
1,1,2-Trichloroethane	5.0 U	5.0	1.0	5	11/07/23 16:56	
Trichloroethene	210 D	5.0	1.0	5	11/07/23 16:56	
Vinyl Chloride	33 D	5.0	1.0	5	11/07/23 16:56	
o-Xylene	5.0 U	5.0	1.0	5	11/07/23 16:56	
m,p-Xylenes	10 U	10	1.0	5	11/07/23 16:56	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85 - 122	11/07/23 16:56	
Toluene-d8	101	87 - 121	11/07/23 16:56	
Dibromofluoromethane	96	80 - 116	11/07/23 16:56	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water
Sample Name: DUP1-1023
Lab Code: R2309956-002

Service Request: R2309956
Date Collected: 10/26/23 09:55
Date Received: 10/26/23 17:04

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/06/23 16:42	
Benzene	1.0 U	1.0	0.20	1	11/06/23 16:42	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/06/23 16:42	
Bromoform	1.0 U	1.0	0.25	1	11/06/23 16:42	
Bromomethane	1.0 U	1.0	0.70	1	11/06/23 16:42	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/06/23 16:42	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/06/23 16:42	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/06/23 16:42	
Chlorobenzene	1.0 U	1.0	0.20	1	11/06/23 16:42	
Chloroethane	0.40 J	1.0	0.23	1	11/06/23 16:42	
Chloroform	1.0 U	1.0	0.51	1	11/06/23 16:42	
Chloromethane	1.0 U	1.0	0.80	1	11/06/23 16:42	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/06/23 16:42	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/06/23 16:42	
1,1-Dichloroethane	0.41 J	1.0	0.20	1	11/06/23 16:42	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/06/23 16:42	
1,1-Dichloroethene	3.9	1.0	0.20	1	11/06/23 16:42	
cis-1,2-Dichloroethene	420 E	1.0	0.23	1	11/06/23 16:42	
trans-1,2-Dichloroethene	1.7	1.0	0.20	1	11/06/23 16:42	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/06/23 16:42	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/06/23 16:42	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/06/23 16:42	
Ethylbenzene	1.1	1.0	0.20	1	11/06/23 16:42	
2-Hexanone	5.0 U	5.0	0.20	1	11/06/23 16:42	
Methylene Chloride	1.0 U	1.0	0.65	1	11/06/23 16:42	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/06/23 16:42	
Styrene	1.0 U	1.0	0.20	1	11/06/23 16:42	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/06/23 16:42	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/06/23 16:42	
Toluene	1.0 U	1.0	0.20	1	11/06/23 16:42	
1,1,1-Trichloroethane	0.43 J	1.0	0.20	1	11/06/23 16:42	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/06/23 16:42	
Trichloroethene	240 E	1.0	0.20	1	11/06/23 16:42	
Vinyl Chloride	38	1.0	0.20	1	11/06/23 16:42	
o-Xylene	1.0 U	1.0	0.20	1	11/06/23 16:42	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/06/23 16:42	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	11/06/23 16:42	
Toluene-d8	103	87 - 121	11/06/23 16:42	
Dibromofluoromethane	96	80 - 116	11/06/23 16:42	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water
Sample Name: DUP1-1023
Lab Code: R2309956-002

Service Request: R2309956
Date Collected: 10/26/23 09:55
Date Received: 10/26/23 17:04

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	25 U	25	25	5	11/07/23 17:19	
Benzene	5.0 U	5.0	1.0	5	11/07/23 17:19	
Bromodichloromethane	5.0 U	5.0	1.0	5	11/07/23 17:19	
Bromoform	5.0 U	5.0	1.3	5	11/07/23 17:19	
Bromomethane	5.0 U	5.0	3.5	5	11/07/23 17:19	
2-Butanone (MEK)	25 U	25	3.9	5	11/07/23 17:19	
Carbon Disulfide	5.0 U	5.0	2.1	5	11/07/23 17:19	
Carbon Tetrachloride	5.0 U	5.0	1.7	5	11/07/23 17:19	
Chlorobenzene	5.0 U	5.0	1.0	5	11/07/23 17:19	
Chloroethane	5.0 U	5.0	1.2	5	11/07/23 17:19	
Chloroform	5.0 U	5.0	2.6	5	11/07/23 17:19	
Chloromethane	5.0 U	5.0	4.0	5	11/07/23 17:19	
Dibromochloromethane	5.0 U	5.0	1.0	5	11/07/23 17:19	
1,2-Dibromoethane	5.0 U	5.0	1.0	5	11/07/23 17:19	
1,1-Dichloroethane	5.0 U	5.0	1.0	5	11/07/23 17:19	
1,2-Dichloroethane	5.0 U	5.0	1.0	5	11/07/23 17:19	
1,1-Dichloroethene	3.5 DJ	5.0	1.0	5	11/07/23 17:19	
cis-1,2-Dichloroethene	370 D	5.0	1.2	5	11/07/23 17:19	
trans-1,2-Dichloroethene	2.0 DJ	5.0	1.0	5	11/07/23 17:19	
1,2-Dichloropropane	5.0 U	5.0	1.0	5	11/07/23 17:19	
cis-1,3-Dichloropropene	5.0 U	5.0	1.0	5	11/07/23 17:19	
trans-1,3-Dichloropropene	5.0 U	5.0	1.2	5	11/07/23 17:19	
Ethylbenzene	1.4 DJ	5.0	1.0	5	11/07/23 17:19	
2-Hexanone	25 U	25	1.0	5	11/07/23 17:19	
Methylene Chloride	5.0 U	5.0	3.3	5	11/07/23 17:19	
4-Methyl-2-pentanone (MIBK)	25 U	25	1.0	5	11/07/23 17:19	
Styrene	5.0 U	5.0	1.0	5	11/07/23 17:19	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1.0	5	11/07/23 17:19	
Tetrachloroethene	5.0 U	5.0	1.1	5	11/07/23 17:19	
Toluene	5.0 U	5.0	1.0	5	11/07/23 17:19	
1,1,1-Trichloroethane	5.0 U	5.0	1.0	5	11/07/23 17:19	
1,1,2-Trichloroethane	5.0 U	5.0	1.0	5	11/07/23 17:19	
Trichloroethene	200 D	5.0	1.0	5	11/07/23 17:19	
Vinyl Chloride	31 D	5.0	1.0	5	11/07/23 17:19	
o-Xylene	5.0 U	5.0	1.0	5	11/07/23 17:19	
m,p-Xylenes	10 U	10	1.0	5	11/07/23 17:19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	11/07/23 17:19	
Toluene-d8	104	87 - 121	11/07/23 17:19	
Dibromofluoromethane	99	80 - 116	11/07/23 17:19	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water
Sample Name: MW5S-1023
Lab Code: R2309956-003

Service Request: R2309956
Date Collected: 10/26/23 11:15
Date Received: 10/26/23 17:04

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/06/23 17:28	
Benzene	1.0 U	1.0	0.20	1	11/06/23 17:28	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/06/23 17:28	
Bromoform	1.0 U	1.0	0.25	1	11/06/23 17:28	
Bromomethane	1.0 U	1.0	0.70	1	11/06/23 17:28	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/06/23 17:28	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/06/23 17:28	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/06/23 17:28	
Chlorobenzene	1.0 U	1.0	0.20	1	11/06/23 17:28	
Chloroethane	1.0 U	1.0	0.23	1	11/06/23 17:28	
Chloroform	1.0 U	1.0	0.51	1	11/06/23 17:28	
Chloromethane	1.0 U	1.0	0.80	1	11/06/23 17:28	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/06/23 17:28	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/06/23 17:28	
1,1-Dichloroethane	0.35 J	1.0	0.20	1	11/06/23 17:28	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/06/23 17:28	
1,1-Dichloroethene	0.37 J	1.0	0.20	1	11/06/23 17:28	
cis-1,2-Dichloroethene	160	1.0	0.23	1	11/06/23 17:28	
trans-1,2-Dichloroethene	0.52 J	1.0	0.20	1	11/06/23 17:28	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/06/23 17:28	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/06/23 17:28	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/06/23 17:28	
Ethylbenzene	1.0 U	1.0	0.20	1	11/06/23 17:28	
2-Hexanone	5.0 U	5.0	0.20	1	11/06/23 17:28	
Methylene Chloride	1.0 U	1.0	0.65	1	11/06/23 17:28	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/06/23 17:28	
Styrene	1.0 U	1.0	0.20	1	11/06/23 17:28	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/06/23 17:28	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/06/23 17:28	
Toluene	1.0 U	1.0	0.20	1	11/06/23 17:28	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/06/23 17:28	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/06/23 17:28	
Trichloroethene	24	1.0	0.20	1	11/06/23 17:28	
Vinyl Chloride	12	1.0	0.20	1	11/06/23 17:28	
o-Xylene	1.0 U	1.0	0.20	1	11/06/23 17:28	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/06/23 17:28	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water

Sample Name: MW5S-1023
Lab Code: R2309956-003

Service Request: R2309956
Date Collected: 10/26/23 11:15
Date Received: 10/26/23 17:04

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	85 - 122	11/06/23 17:28	
Toluene-d8	101	87 - 121	11/06/23 17:28	
Dibromofluoromethane	96	80 - 116	11/06/23 17:28	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water
Sample Name: MW17D-1023
Lab Code: R2309956-004

Service Request: R2309956
Date Collected: 10/26/23 13:05
Date Received: 10/26/23 17:04

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/06/23 16:19	
Benzene	1.0 U	1.0	0.20	1	11/06/23 16:19	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/06/23 16:19	
Bromoform	1.0 U	1.0	0.25	1	11/06/23 16:19	
Bromomethane	1.0 U	1.0	0.70	1	11/06/23 16:19	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/06/23 16:19	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/06/23 16:19	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/06/23 16:19	
Chlorobenzene	1.0 U	1.0	0.20	1	11/06/23 16:19	
Chloroethane	1.0 U	1.0	0.23	1	11/06/23 16:19	
Chloroform	1.0 U	1.0	0.51	1	11/06/23 16:19	
Chloromethane	1.0 U	1.0	0.80	1	11/06/23 16:19	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/06/23 16:19	
1,1-Dichloroethane	1.0 U	1.0	0.20	1	11/06/23 16:19	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/06/23 16:19	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/06/23 16:19	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/06/23 16:19	
cis-1,2-Dichloroethene	1.0 U	1.0	0.23	1	11/06/23 16:19	
trans-1,2-Dichloroethene	1.0 U	1.0	0.20	1	11/06/23 16:19	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/06/23 16:19	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/06/23 16:19	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/06/23 16:19	
Ethylbenzene	1.0 U	1.0	0.20	1	11/06/23 16:19	
2-Hexanone	5.0 U	5.0	0.20	1	11/06/23 16:19	
Methylene Chloride	1.0 U	1.0	0.65	1	11/06/23 16:19	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/06/23 16:19	
Styrene	1.0 U	1.0	0.20	1	11/06/23 16:19	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/06/23 16:19	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/06/23 16:19	
Toluene	1.0 U	1.0	0.20	1	11/06/23 16:19	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/06/23 16:19	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/06/23 16:19	
Trichloroethene	1.0 U	1.0	0.20	1	11/06/23 16:19	
Vinyl Chloride	1.0 U	1.0	0.20	1	11/06/23 16:19	
o-Xylene	1.0 U	1.0	0.20	1	11/06/23 16:19	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/06/23 16:19	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309956
Project: WAL - Semiannual Sampling **Date Collected:** 10/26/23 13:05
Sample Matrix: Water **Date Received:** 10/26/23 17:04

Sample Name: MW17D-1023 **Units:** ug/L
Lab Code: R2309956-004 **Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	11/06/23 16:19	
Toluene-d8	104	87 - 121	11/06/23 16:19	
Dibromofluoromethane	98	80 - 116	11/06/23 16:19	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water
Sample Name: EB1-1023
Lab Code: R2309956-005

Service Request: R2309956
Date Collected: 10/26/23 14:30
Date Received: 10/26/23 17:04

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/06/23 15:56	
Benzene	1.0 U	1.0	0.20	1	11/06/23 15:56	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/06/23 15:56	
Bromoform	1.0 U	1.0	0.25	1	11/06/23 15:56	
Bromomethane	1.0 U	1.0	0.70	1	11/06/23 15:56	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/06/23 15:56	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/06/23 15:56	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/06/23 15:56	
Chlorobenzene	1.0 U	1.0	0.20	1	11/06/23 15:56	
Chloroethane	1.0 U	1.0	0.23	1	11/06/23 15:56	
Chloroform	1.0 U	1.0	0.51	1	11/06/23 15:56	
Chloromethane	1.0 U	1.0	0.80	1	11/06/23 15:56	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/06/23 15:56	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/06/23 15:56	
1,1-Dichloroethane	1.0 U	1.0	0.20	1	11/06/23 15:56	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/06/23 15:56	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/06/23 15:56	
cis-1,2-Dichloroethene	1.0 U	1.0	0.23	1	11/06/23 15:56	
trans-1,2-Dichloroethene	1.0 U	1.0	0.20	1	11/06/23 15:56	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/06/23 15:56	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/06/23 15:56	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/06/23 15:56	
Ethylbenzene	1.0 U	1.0	0.20	1	11/06/23 15:56	
2-Hexanone	5.0 U	5.0	0.20	1	11/06/23 15:56	
Methylene Chloride	1.0 U	1.0	0.65	1	11/06/23 15:56	
4-Methyl-2-pentanone (MIBK)	0.47 J	5.0	0.20	1	11/06/23 15:56	
Styrene	1.0 U	1.0	0.20	1	11/06/23 15:56	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/06/23 15:56	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/06/23 15:56	
Toluene	0.21 J	1.0	0.20	1	11/06/23 15:56	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/06/23 15:56	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/06/23 15:56	
Trichloroethene	1.0 U	1.0	0.20	1	11/06/23 15:56	
Vinyl Chloride	1.0 U	1.0	0.20	1	11/06/23 15:56	
o-Xylene	1.0 U	1.0	0.20	1	11/06/23 15:56	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/06/23 15:56	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water

Sample Name: EB1-1023
Lab Code: R2309956-005

Service Request: R2309956
Date Collected: 10/26/23 14:30
Date Received: 10/26/23 17:04

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85 - 122	11/06/23 15:56	
Toluene-d8	101	87 - 121	11/06/23 15:56	
Dibromofluoromethane	94	80 - 116	11/06/23 15:56	



Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water

Sample Name: MW5D-1023
Lab Code: R2309956-001

Service Request: R2309956
Date Collected: 10/26/23 09:45
Date Received: 10/26/23 17:04

Units: ug/L
Basis: NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	0.62	0.040	0.027	1	10/31/23 14:06	10/30/23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Tetrahydrofuran-d8 (SUR)	112	64 - 124	10/31/23 14:06	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309956
Project: WAL - Semiannual Sampling **Date Collected:** 10/26/23 09:55
Sample Matrix: Water **Date Received:** 10/26/23 17:04

Sample Name: DUP1-1023 **Units:** ug/L
Lab Code: R2309956-002 **Basis:** NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	0.64	0.040	0.027	1	10/31/23 14:58	10/30/23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Tetrahydrofuran-d8 (SUR)	112	64 - 124	10/31/23 14:58	



Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309956
Project:	WAL - Semiannual Sampling	Date Collected:	10/26/23 09:45
Sample Matrix:	Water	Date Received:	10/26/23 17:04
Sample Name:	MW5D-1023	Basis:	NA
Lab Code:	R2309956-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	6	1	10/31/23 17:40	10/30/23	
Barium, Total	6010C	57	ug/L	20	3	1	10/31/23 17:40	10/30/23	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	0.4	1	10/31/23 17:40	10/30/23	
Calcium, Total	6010C	26800	ug/L	1000	300	1	10/31/23 17:40	10/30/23	
Chromium, Total	6010C	10 U	ug/L	10	2	1	10/31/23 17:40	10/30/23	
Copper, Total	6010C	20 U	ug/L	20	4	1	10/31/23 17:40	10/30/23	
Iron, Total	6010C	310	ug/L	100	70	1	10/31/23 17:40	10/30/23	
Lead, Total	6010C	5.0 U	ug/L	5.0	3.2	1	10/31/23 17:40	10/30/23	
Magnesium, Total	6010C	21100	ug/L	1000	30	1	10/31/23 17:40	10/30/23	
Manganese, Total	6010C	844	ug/L	10	4	1	10/31/23 17:40	10/30/23	
Nickel, Total	6010C	40 U	ug/L	40	3	1	10/31/23 17:40	10/30/23	
Potassium, Total	6010C	1600 J	ug/L	2000	400	1	10/31/23 17:40	10/30/23	
Selenium, Total	6010C	10 U	ug/L	10	7	1	10/31/23 17:40	10/30/23	
Sodium, Total	6010C	8600	ug/L	1000	300	1	10/31/23 17:40	10/30/23	
Zinc, Total	6010C	20 U	ug/L	20	3	1	10/31/23 17:40	10/30/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309956
Project:	WAL - Semiannual Sampling	Date Collected:	10/26/23 09:55
Sample Matrix:	Water	Date Received:	10/26/23 17:04
Sample Name:	DUP1-1023	Basis:	NA
Lab Code:	R2309956-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	6	1	10/31/23 17:53	10/30/23	
Barium, Total	6010C	57	ug/L	20	3	1	10/31/23 17:53	10/30/23	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	0.4	1	10/31/23 17:53	10/30/23	
Calcium, Total	6010C	26900	ug/L	1000	300	1	10/31/23 17:53	10/30/23	
Chromium, Total	6010C	10 U	ug/L	10	2	1	10/31/23 17:53	10/30/23	
Copper, Total	6010C	20 U	ug/L	20	4	1	10/31/23 17:53	10/30/23	
Iron, Total	6010C	330	ug/L	100	70	1	10/31/23 17:53	10/30/23	
Lead, Total	6010C	5.0 U	ug/L	5.0	3.2	1	10/31/23 17:53	10/30/23	
Magnesium, Total	6010C	21200	ug/L	1000	30	1	10/31/23 17:53	10/30/23	
Manganese, Total	6010C	848	ug/L	10	4	1	10/31/23 17:53	10/30/23	
Nickel, Total	6010C	40 U	ug/L	40	3	1	10/31/23 17:53	10/30/23	
Potassium, Total	6010C	1700 J	ug/L	2000	400	1	10/31/23 17:53	10/30/23	
Selenium, Total	6010C	10 U	ug/L	10	7	1	10/31/23 17:53	10/30/23	
Sodium, Total	6010C	8500	ug/L	1000	300	1	10/31/23 17:53	10/30/23	
Zinc, Total	6010C	20 U	ug/L	20	3	1	10/31/23 17:53	10/30/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water
Sample Name: MW5S-1023
Lab Code: R2309956-003

Service Request: R2309956
Date Collected: 10/26/23 11:15
Date Received: 10/26/23 17:04

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	6	1	10/31/23 17:30	10/30/23	
Barium, Total	6010C	8 J	ug/L	20	3	1	10/31/23 17:30	10/30/23	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	0.4	1	10/31/23 17:30	10/30/23	
Calcium, Total	6010C	13200	ug/L	1000	300	1	10/31/23 17:30	10/30/23	
Chromium, Total	6010C	10 U	ug/L	10	2	1	10/31/23 17:30	10/30/23	
Copper, Total	6010C	20 U	ug/L	20	4	1	10/31/23 17:30	10/30/23	
Iron, Total	6010C	140	ug/L	100	70	1	10/31/23 17:30	10/30/23	
Lead, Total	6010C	5.0 U	ug/L	5.0	3.2	1	10/31/23 17:30	10/30/23	
Magnesium, Total	6010C	9800	ug/L	1000	30	1	10/31/23 17:30	10/30/23	
Manganese, Total	6010C	80	ug/L	10	4	1	10/31/23 17:30	10/30/23	
Nickel, Total	6010C	40 U	ug/L	40	3	1	10/31/23 17:30	10/30/23	
Potassium, Total	6010C	1300 J	ug/L	2000	400	1	10/31/23 17:30	10/30/23	
Selenium, Total	6010C	10 U	ug/L	10	7	1	10/31/23 17:30	10/30/23	
Sodium, Total	6010C	5800	ug/L	1000	300	1	10/31/23 17:30	10/30/23	
Zinc, Total	6010C	5 J	ug/L	20	3	1	10/31/23 17:30	10/30/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309956
Project:	WAL - Semiannual Sampling	Date Collected:	10/26/23 13:05
Sample Matrix:	Water	Date Received:	10/26/23 17:04
Sample Name:	MW17D-1023	Basis:	NA
Lab Code:	R2309956-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	6	1	10/31/23 17:56	10/30/23	
Barium, Total	6010C	20 U	ug/L	20	3	1	10/31/23 17:56	10/30/23	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	0.4	1	10/31/23 17:56	10/30/23	
Calcium, Total	6010C	3400	ug/L	1000	300	1	10/31/23 17:56	10/30/23	
Chromium, Total	6010C	10 U	ug/L	10	2	1	10/31/23 17:56	10/30/23	
Copper, Total	6010C	20 U	ug/L	20	4	1	10/31/23 17:56	10/30/23	
Iron, Total	6010C	9080	ug/L	100	70	1	10/31/23 17:56	10/30/23	
Lead, Total	6010C	5.0 U	ug/L	5.0	3.2	1	10/31/23 17:56	10/30/23	
Magnesium, Total	6010C	22200	ug/L	1000	30	1	10/31/23 17:56	10/30/23	
Manganese, Total	6010C	111	ug/L	10	4	1	10/31/23 17:56	10/30/23	
Nickel, Total	6010C	3 J	ug/L	40	3	1	10/31/23 17:56	10/30/23	
Potassium, Total	6010C	4800	ug/L	2000	400	1	10/31/23 17:56	10/30/23	
Selenium, Total	6010C	10 U	ug/L	10	7	1	10/31/23 17:56	10/30/23	
Sodium, Total	6010C	33400	ug/L	1000	300	1	10/31/23 17:56	10/30/23	
Zinc, Total	6010C	20 U	ug/L	20	3	1	10/31/23 17:56	10/30/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309956
Project:	WAL - Semiannual Sampling	Date Collected:	10/26/23 14:30
Sample Matrix:	Water	Date Received:	10/26/23 17:04
Sample Name:	EB1-1023	Basis:	NA
Lab Code:	R2309956-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	6	1	10/31/23 17:59	10/30/23	
Barium, Total	6010C	20 U	ug/L	20	3	1	10/31/23 17:59	10/30/23	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	0.4	1	10/31/23 17:59	10/30/23	
Calcium, Total	6010C	1000 U	ug/L	1000	300	1	10/31/23 17:59	10/30/23	
Chromium, Total	6010C	10 U	ug/L	10	2	1	10/31/23 17:59	10/30/23	
Copper, Total	6010C	14 J	ug/L	20	4	1	10/31/23 17:59	10/30/23	
Iron, Total	6010C	100 U	ug/L	100	70	1	10/31/23 17:59	10/30/23	
Lead, Total	6010C	5.0 U	ug/L	5.0	3.2	1	10/31/23 17:59	10/30/23	
Magnesium, Total	6010C	1000 U	ug/L	1000	30	1	10/31/23 17:59	10/30/23	
Manganese, Total	6010C	10 U	ug/L	10	4	1	10/31/23 17:59	10/30/23	
Nickel, Total	6010C	40 U	ug/L	40	3	1	10/31/23 17:59	10/30/23	
Potassium, Total	6010C	2000 U	ug/L	2000	400	1	10/31/23 17:59	10/30/23	
Selenium, Total	6010C	10 U	ug/L	10	7	1	10/31/23 17:59	10/30/23	
Sodium, Total	6010C	1000 U	ug/L	1000	300	1	10/31/23 17:59	10/30/23	
Zinc, Total	6010C	6 J	ug/L	20	3	1	10/31/23 17:59	10/30/23	



QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com



Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water

Service Request: R2309956

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85 - 122	Dibromofluoromethane 80 - 116	Toluene-d8 87 - 121
MW5D-1023	R2309956-001	87	96	102
MW5D-1023 DL	R2309956-001	89	96	101
DUP1-1023	R2309956-002	94	96	103
DUP1-1023 DL	R2309956-002	91	99	104
MW5S-1023	R2309956-003	88	96	101
MW17D-1023	R2309956-004	90	98	104
EB1-1023	R2309956-005	91	94	101
Lab Control Sample	RQ2314575-03	95	99	102
Method Blank	RQ2314575-04	93	99	103
MW17D-1023 MS	RQ2314575-05	104	99	105
MW17D-1023 DMS	RQ2314575-06	99	100	102
Lab Control Sample	RQ2314649-04	93	98	100
Method Blank	RQ2314649-06	90	95	102

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water

Service Request: R2309956
Date Collected: 10/26/23
Date Received: 10/26/23
Date Analyzed: 11/6/23
Date Extracted: NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	MW17D-1023	Units:	ug/L
Lab Code:	R2309956-004	Basis:	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

Analyte Name	Sample Result	Matrix Spike RQ2314575-05			Duplicate Matrix Spike RQ2314575-06					
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Acetone	5.0 U	42.9	50.0	86	47.8	50.0	96	35-183	11	30
Benzene	1.0 U	53.9	50.0	108	54.2	50.0	108	76-129	<1	30
Bromodichloromethane	1.0 U	48.8	50.0	98	49.8	50.0	100	78-133	2	30
Bromoform	1.0 U	46.6	50.0	93	49.1	50.0	98	58-133	5	30
Bromomethane	1.0 U	57.0	50.0	114	61.6	50.0	123	10-184	8	30
2-Butanone (MEK)	5.0 U	50.5	50.0	101	49.4	50.0	99	61-137	2	30
Carbon Disulfide	1.0 U	45.2	50.0	90	47.3	50.0	95	59-140	5	30
Carbon Tetrachloride	1.0 U	47.0	50.0	94	48.8	50.0	98	65-135	4	30
Chlorobenzene	1.0 U	47.7	50.0	95	50.4	50.0	101	76-125	5	30
Chloroethane	1.0 U	56.2	50.0	112	51.8	50.0	104	48-146	8	30
Chloroform	1.0 U	54.0	50.0	108	53.7	50.0	107	75-130	<1	30
Chloromethane	1.0 U	59.6	50.0	119	61.8	50.0	124	55-160	4	30
Dibromochloromethane	1.0 U	45.3	50.0	91	49.2	50.0	98	72-128	8	30
1,1-Dichloroethane	1.0 U	56.4	50.0	113	57.0	50.0	114	74-132	1	30
1,2-Dibromoethane	1.0 U	46.7	50.0	93	50.2	50.0	100	67-127	7	30
1,2-Dichloroethane	1.0 U	52.3	50.0	105	53.4	50.0	107	68-130	2	30
1,1-Dichloroethene	1.0 U	48.6	50.0	97	49.7	50.0	99	71-118	2	30
cis-1,2-Dichloroethene	1.0 U	50.5	50.0	101	51.7	50.0	103	77-127	2	30
trans-1,2-Dichloroethene	1.0 U	51.3	50.0	103	52.1	50.0	104	73-118	1	30
1,2-Dichloropropane	1.0 U	54.2	50.0	108	54.6	50.0	109	79-124	<1	30
cis-1,3-Dichloropropene	1.0 U	52.0	50.0	104	52.7	50.0	105	52-134	1	30
trans-1,3-Dichloropropene	1.0 U	52.1	50.0	104	51.9	50.0	104	71-133	<1	30
Ethylbenzene	1.0 U	49.9	50.0	100	51.9	50.0	104	72-134	4	30
2-Hexanone	5.0 U	54.1	50.0	108	57.3	50.0	115	56-132	6	30
Methylene Chloride	1.0 U	52.9	50.0	106	54.9	50.0	110	73-122	4	30
4-Methyl-2-pentanone (MIBK)	5.0 U	58.0	50.0	116	58.8	50.0	118	60-141	1	30
Styrene	1.0 U	50.0	50.0	100	52.5	50.0	105	74-136	5	30
1,1,2,2-Tetrachloroethane	1.0 U	54.6	50.0	109	59.4	50.0	119	72-122	8	30
Tetrachloroethene	1.0 U	44.9	50.0	90	48.0	50.0	96	72-125	7	30
Toluene	1.0 U	51.1	50.0	102	52.2	50.0	104	79-119	2	30
1,1,1-Trichloroethane	1.0 U	52.2	50.0	104	53.3	50.0	107	74-127	2	30
1,1,2-Trichloroethane	1.0 U	49.1	50.0	98	50.6	50.0	101	82-121	3	30
Trichloroethene	1.0 U	49.5	50.0	99	48.9	50.0	98	74-122	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	On-Site Geological Services DPC	Service Request:	R2309956
Project:	WAL - Semiannual Sampling	Date Collected:	10/26/23
Sample Matrix:	Water	Date Received:	10/26/23
		Date Analyzed:	11/6/23
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	MW17D-1023	Units:	ug/L
Lab Code:	R2309956-004	Basis:	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

Analyte Name	Sample Result	Matrix Spike RQ2314575-05			Duplicate Matrix Spike RQ2314575-06					
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Vinyl Chloride	1.0 U	54.8	50.0	110	55.1	50.0	110	74-159	<1	30
o-Xylene	1.0 U	49.8	50.0	100	52.4	50.0	105	79-123	5	30
m,p-Xylenes	2.0 U	101	100	101	105	100	105	80-126	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309956
Project:	WAL - Semiannual Sampling	Date Collected:	NA
Sample Matrix:	Water	Date Received:	NA
Sample Name:	Method Blank	Units:	ug/L
Lab Code:	RQ2314575-04	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/06/23 13:15	
Benzene	1.0 U	1.0	0.20	1	11/06/23 13:15	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/06/23 13:15	
Bromoform	1.0 U	1.0	0.25	1	11/06/23 13:15	
Bromomethane	1.0 U	1.0	0.70	1	11/06/23 13:15	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/06/23 13:15	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/06/23 13:15	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/06/23 13:15	
Chlorobenzene	1.0 U	1.0	0.20	1	11/06/23 13:15	
Chloroethane	1.0 U	1.0	0.23	1	11/06/23 13:15	
Chloroform	1.0 U	1.0	0.51	1	11/06/23 13:15	
Chloromethane	1.0 U	1.0	0.80	1	11/06/23 13:15	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/06/23 13:15	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/06/23 13:15	
1,1-Dichloroethane	1.0 U	1.0	0.20	1	11/06/23 13:15	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/06/23 13:15	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/06/23 13:15	
cis-1,2-Dichloroethene	1.0 U	1.0	0.23	1	11/06/23 13:15	
trans-1,2-Dichloroethene	1.0 U	1.0	0.20	1	11/06/23 13:15	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/06/23 13:15	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/06/23 13:15	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/06/23 13:15	
Ethylbenzene	1.0 U	1.0	0.20	1	11/06/23 13:15	
2-Hexanone	5.0 U	5.0	0.20	1	11/06/23 13:15	
Methylene Chloride	1.0 U	1.0	0.65	1	11/06/23 13:15	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/06/23 13:15	
Styrene	1.0 U	1.0	0.20	1	11/06/23 13:15	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/06/23 13:15	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/06/23 13:15	
Toluene	1.0 U	1.0	0.20	1	11/06/23 13:15	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/06/23 13:15	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/06/23 13:15	
Trichloroethene	1.0 U	1.0	0.20	1	11/06/23 13:15	
Vinyl Chloride	1.0 U	1.0	0.20	1	11/06/23 13:15	
o-Xylene	1.0 U	1.0	0.20	1	11/06/23 13:15	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/06/23 13:15	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309956
Project: WAL - Semiannual Sampling **Date Collected:** NA
Sample Matrix: Water **Date Received:** NA

Sample Name: Method Blank **Units:** ug/L
Lab Code: RQ2314575-04 **Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 122	11/06/23 13:15	
Toluene-d8	103	87 - 121	11/06/23 13:15	
Dibromofluoromethane	99	80 - 116	11/06/23 13:15	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309956
Project:	WAL - Semiannual Sampling	Date Collected:	NA
Sample Matrix:	Water	Date Received:	NA
Sample Name:	Method Blank	Units:	ug/L
Lab Code:	RQ2314649-06	Basis:	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	5.0 U	5.0	5.0	1	11/07/23 13:52	
Benzene	1.0 U	1.0	0.20	1	11/07/23 13:52	
Bromodichloromethane	1.0 U	1.0	0.20	1	11/07/23 13:52	
Bromoform	1.0 U	1.0	0.25	1	11/07/23 13:52	
Bromomethane	1.0 U	1.0	0.70	1	11/07/23 13:52	
2-Butanone (MEK)	5.0 U	5.0	0.78	1	11/07/23 13:52	
Carbon Disulfide	1.0 U	1.0	0.42	1	11/07/23 13:52	
Carbon Tetrachloride	1.0 U	1.0	0.34	1	11/07/23 13:52	
Chlorobenzene	1.0 U	1.0	0.20	1	11/07/23 13:52	
Chloroethane	1.0 U	1.0	0.23	1	11/07/23 13:52	
Chloroform	1.0 U	1.0	0.51	1	11/07/23 13:52	
Chloromethane	1.0 U	1.0	0.80	1	11/07/23 13:52	
Dibromochloromethane	1.0 U	1.0	0.20	1	11/07/23 13:52	
1,1-Dichloroethane	1.0 U	1.0	0.20	1	11/07/23 13:52	
1,2-Dibromoethane	1.0 U	1.0	0.20	1	11/07/23 13:52	
1,2-Dichloroethane	1.0 U	1.0	0.20	1	11/07/23 13:52	
1,1-Dichloroethene	1.0 U	1.0	0.20	1	11/07/23 13:52	
cis-1,2-Dichloroethene	1.0 U	1.0	0.23	1	11/07/23 13:52	
trans-1,2-Dichloroethene	1.0 U	1.0	0.20	1	11/07/23 13:52	
1,2-Dichloropropane	1.0 U	1.0	0.20	1	11/07/23 13:52	
cis-1,3-Dichloropropene	1.0 U	1.0	0.20	1	11/07/23 13:52	
trans-1,3-Dichloropropene	1.0 U	1.0	0.23	1	11/07/23 13:52	
Ethylbenzene	1.0 U	1.0	0.20	1	11/07/23 13:52	
2-Hexanone	5.0 U	5.0	0.20	1	11/07/23 13:52	
Methylene Chloride	1.0 U	1.0	0.65	1	11/07/23 13:52	
4-Methyl-2-pentanone (MIBK)	5.0 U	5.0	0.20	1	11/07/23 13:52	
Styrene	1.0 U	1.0	0.20	1	11/07/23 13:52	
1,1,2,2-Tetrachloroethane	1.0 U	1.0	0.20	1	11/07/23 13:52	
Tetrachloroethene	1.0 U	1.0	0.21	1	11/07/23 13:52	
Toluene	1.0 U	1.0	0.20	1	11/07/23 13:52	
1,1,1-Trichloroethane	1.0 U	1.0	0.20	1	11/07/23 13:52	
1,1,2-Trichloroethane	1.0 U	1.0	0.20	1	11/07/23 13:52	
Trichloroethene	1.0 U	1.0	0.20	1	11/07/23 13:52	
Vinyl Chloride	1.0 U	1.0	0.20	1	11/07/23 13:52	
o-Xylene	1.0 U	1.0	0.20	1	11/07/23 13:52	
m,p-Xylenes	2.0 U	2.0	0.20	1	11/07/23 13:52	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309956
Project: WAL - Semiannual Sampling **Date Collected:** NA
Sample Matrix: Water **Date Received:** NA

Sample Name: Method Blank **Units:** ug/L
Lab Code: RQ2314649-06 **Basis:** NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85 - 122	11/07/23 13:52	
Toluene-d8	102	87 - 121	11/07/23 13:52	
Dibromofluoromethane	95	80 - 116	11/07/23 13:52	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water

Service Request: R2309956
Date Analyzed: 11/06/23

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units: ug/L
Basis: NA

Lab Control Sample
RQ2314575-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	17.2	20.0	86	40-161
Benzene	8260C	20.6	20.0	103	79-119
Bromodichloromethane	8260C	18.9	20.0	95	81-123
Bromoform	8260C	17.7	20.0	89	65-146
Bromomethane	8260C	21.0	20.0	105	42-166
2-Butanone (MEK)	8260C	18.4	20.0	92	61-137
Carbon Disulfide	8260C	18.1	20.0	90	66-128
Carbon Tetrachloride	8260C	17.3	20.0	87	70-127
Chlorobenzene	8260C	19.2	20.0	96	80-121
Chloroethane	8260C	19.4	20.0	97	62-131
Chloroform	8260C	20.1	20.0	100	79-120
Chloromethane	8260C	23.9	20.0	119	65-135
Dibromochloromethane	8260C	18.4	20.0	92	72-128
1,1-Dichloroethane	8260C	21.5	20.0	107	80-124
1,2-Dibromoethane	8260C	19.3	20.0	97	82-127
1,2-Dichloroethane	8260C	21.1	20.0	105	71-127
1,1-Dichloroethene	8260C	18.9	20.0	94	71-118
cis-1,2-Dichloroethene	8260C	19.2	20.0	96	80-121
trans-1,2-Dichloroethene	8260C	19.6	20.0	98	73-118
1,2-Dichloropropane	8260C	20.7	20.0	103	80-119
cis-1,3-Dichloropropene	8260C	20.5	20.0	103	77-122
trans-1,3-Dichloropropene	8260C	20.0	20.0	100	71-133
Ethylbenzene	8260C	19.2	20.0	96	76-120
2-Hexanone	8260C	21.1	20.0	106	63-124
Methylene Chloride	8260C	20.2	20.0	101	73-122
4-Methyl-2-pentanone (MIBK)	8260C	22.5	20.0	112	66-124
Styrene	8260C	20.2	20.0	101	80-124
1,1,2,2-Tetrachloroethane	8260C	21.2	20.0	106	78-126
Tetrachloroethene	8260C	17.8	20.0	89	72-125
Toluene	8260C	19.8	20.0	99	79-119
1,1,1-Trichloroethane	8260C	19.0	20.0	95	75-125
1,1,2-Trichloroethane	8260C	19.5	20.0	98	82-121
Trichloroethene	8260C	18.8	20.0	94	74-122

Printed 11/16/2023 7:41:24 AM

Superset Reference:23-0000679627 rev 00

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water

Service Request: R2309956
Date Analyzed: 11/06/23

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units: ug/L
Basis: NA

Lab Control Sample
RQ2314575-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	8260C	20.4	20.0	102	74-159
o-Xylene	8260C	19.8	20.0	99	79-123
m,p-Xylenes	8260C	39.9	40.0	100	80-126

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water

Service Request: R2309956
Date Analyzed: 11/07/23

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units: ug/L
Basis: NA

Lab Control Sample
RQ2314649-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	15.3	20.0	77	40-161
Benzene	8260C	20.0	20.0	100	79-119
Bromodichloromethane	8260C	18.0	20.0	90	81-123
Bromoform	8260C	17.1	20.0	85	65-146
Bromomethane	8260C	17.4	20.0	87	42-166
2-Butanone (MEK)	8260C	17.9	20.0	89	61-137
Carbon Disulfide	8260C	15.3	20.0	77	66-128
Carbon Tetrachloride	8260C	16.1	20.0	80	70-127
Chlorobenzene	8260C	18.2	20.0	91	80-121
Chloroethane	8260C	15.4	20.0	77	62-131
Chloroform	8260C	19.0	20.0	95	79-120
Chloromethane	8260C	22.1	20.0	110	65-135
Dibromochloromethane	8260C	17.6	20.0	88	72-128
1,1-Dichloroethane	8260C	20.3	20.0	102	80-124
1,2-Dibromoethane	8260C	18.8	20.0	94	82-127
1,2-Dichloroethane	8260C	20.5	20.0	102	71-127
1,1-Dichloroethene	8260C	17.4	20.0	87	71-118
cis-1,2-Dichloroethene	8260C	18.3	20.0	91	80-121
trans-1,2-Dichloroethene	8260C	18.7	20.0	93	73-118
1,2-Dichloropropane	8260C	20.6	20.0	103	80-119
cis-1,3-Dichloropropene	8260C	19.8	20.0	99	77-122
trans-1,3-Dichloropropene	8260C	19.4	20.0	97	71-133
Ethylbenzene	8260C	18.3	20.0	91	76-120
2-Hexanone	8260C	20.3	20.0	102	63-124
Methylene Chloride	8260C	20.1	20.0	100	73-122
4-Methyl-2-pentanone (MIBK)	8260C	21.4	20.0	107	66-124
Styrene	8260C	18.4	20.0	92	80-124
1,1,2,2-Tetrachloroethane	8260C	21.2	20.0	106	78-126
Tetrachloroethene	8260C	16.7	20.0	83	72-125
Toluene	8260C	18.8	20.0	94	79-119
1,1,1-Trichloroethane	8260C	18.9	20.0	94	75-125
1,1,2-Trichloroethane	8260C	19.0	20.0	95	82-121
Trichloroethene	8260C	17.9	20.0	89	74-122

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water

Service Request: R2309956
Date Analyzed: 11/07/23

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units: ug/L
Basis: NA

Lab Control Sample
RQ2314649-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	8260C	18.1	20.0	90	74-159
o-Xylene	8260C	18.5	20.0	93	79-123
m,p-Xylenes	8260C	37.5	40.0	94	80-126



Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water

Service Request: R2309956

SURROGATE RECOVERY SUMMARY
1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Extraction Method: EPA 3535A

Tetrahydrofuran-d8 (SUR)

Sample Name	Lab Code	64 - 124
MW5D-1023	R2309956-001	112
DUP1-1023	R2309956-002	112
Method Blank	RQ2314198-01	109
Lab Control Sample	RQ2314198-02	111
Duplicate Lab Control Sample	RQ2314198-03	112
MW5D-1023 MS	RQ2314198-04	120
MW5D-1023 DMS	RQ2314198-05	115

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	On-Site Geological Services DPC	Service Request:	R2309956
Project:	WAL - Semiannual Sampling	Date Collected:	10/26/23
Sample Matrix:	Water	Date Received:	10/26/23
		Date Analyzed:	10/31/23
		Date Extracted:	10/30/23

Duplicate Matrix Spike Summary
1,4-Dioxane by GC/MS

Sample Name:	MW5D-1023	Units:	ug/L
Lab Code:	R2309956-001	Basis:	NA
Analysis Method:	8270D SIM		
Prep Method:	EPA 3535A		

Analyte Name	Matrix Spike RQ2314198-04				Duplicate Matrix Spike RQ2314198-05				RPD	RPD Limit
	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits		
1,4-Dioxane	0.62	7.83	10.0	72	7.58	10.0	70	33-146	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: On-Site Geological Services DPC **Service Request:** R2309956
Project: WAL - Semiannual Sampling **Date Collected:** NA
Sample Matrix: Water **Date Received:** NA

Sample Name: Method Blank **Units:** ug/L
Lab Code: RQ2314198-01 **Basis:** NA

1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,4-Dioxane	0.040 U	0.040	0.027	1	10/31/23 11:12	10/30/23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Tetrahydrofuran-d8 (SUR)	109	64 - 124	10/31/23 11:12	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water

Service Request: R2309956
Date Analyzed: 10/31/23

Duplicate Lab Control Sample Summary
1,4-Dioxane by GC/MS

Units: ug/L
Basis: NA

Lab Control Sample
RQ2314198-02 **Duplicate Lab Control Sample**
RQ2314198-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,4-Dioxane	8270D SIM	6.70	10.0	67	6.84	10.0	68	58-124	2	30



Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Geological Services DPC	Service Request:	R2309956
Project:	WAL - Semiannual Sampling	Date Collected:	NA
Sample Matrix:	Water	Date Received:	NA
Sample Name:	Method Blank	Basis:	NA
Lab Code:	R2309956-MB		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	6	1	10/31/23 16:32	10/30/23	
Barium, Total	6010C	20 U	ug/L	20	3	1	10/31/23 16:32	10/30/23	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	0.4	1	10/31/23 16:32	10/30/23	
Calcium, Total	6010C	1000 U	ug/L	1000	300	1	10/31/23 16:32	10/30/23	
Chromium, Total	6010C	10 U	ug/L	10	2	1	10/31/23 16:32	10/30/23	
Copper, Total	6010C	20 U	ug/L	20	4	1	10/31/23 16:32	10/30/23	
Iron, Total	6010C	100 U	ug/L	100	70	1	10/31/23 16:32	10/30/23	
Lead, Total	6010C	5.0 U	ug/L	5.0	3.2	1	10/31/23 16:32	10/30/23	
Magnesium, Total	6010C	1000 U	ug/L	1000	30	1	10/31/23 16:32	10/30/23	
Manganese, Total	6010C	10 U	ug/L	10	4	1	10/31/23 16:32	10/30/23	
Nickel, Total	6010C	40 U	ug/L	40	3	1	10/31/23 16:32	10/30/23	
Potassium, Total	6010C	2000 U	ug/L	2000	400	1	10/31/23 16:32	10/30/23	
Selenium, Total	6010C	10 U	ug/L	10	7	1	10/31/23 16:32	10/30/23	
Sodium, Total	6010C	1000 U	ug/L	1000	300	1	10/31/23 16:32	10/30/23	
Zinc, Total	6010C	20 U	ug/L	20	3	1	10/31/23 16:32	10/30/23	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: On-Site Geological Services DPC
Project: WAL - Semiannual Sampling
Sample Matrix: Water

Service Request: R2309956
Date Analyzed: 10/31/23

Duplicate Lab Control Sample Summary
Inorganic Parameters

Units: ug/L
Basis: NA

Analyte Name	Analytical Method	Lab Control Sample			Duplicate Lab Control Sample				
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD
Arsenic, Total	6010C	38.3	40	96	37.4	40	94	80-120	2
Barium, Total	6010C	2010	2000	100	2030	2000	101	80-120	1
Cadmium, Total	6010C	51.0	50.0	102	51.9	50.0	104	80-120	2
Calcium, Total	6010C	1980	2000	99	2010	2000	100	80-120	1
Chromium, Total	6010C	201	200	100	203	200	102	80-120	1
Copper, Total	6010C	246	250	98	251	250	100	80-120	2
Iron, Total	6010C	998	1000	100	1010	1000	101	80-120	1
Lead, Total	6010C	504	500	101	512	500	102	80-120	2
Magnesium, Total	6010C	1960	2000	98	1980	2000	99	80-120	<1
Manganese, Total	6010C	487	500	97	493	500	99	80-120	1
Nickel, Total	6010C	523	500	105	531	500	106	80-120	2
Potassium, Total	6010C	18400	20000	92	18700	20000	93	80-120	2
Selenium, Total	6010C	1000	1010	99	1020	1010	101	80-120	2
Sodium, Total	6010C	18900	20000	95	19200	20000	96	80-120	1
Zinc, Total	6010C	512	500	102	522	500	104	80-120	2

Appendix E

2023 Quarterly Inspection & Maintenance Checklists

QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST

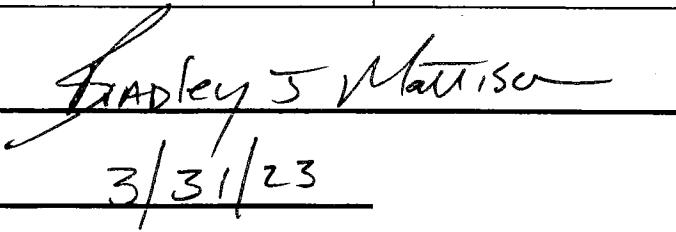
WELLSVILLE/ANDOVER LANDFILL SITE

NYSDEC SITE NO. 9-02-004

INSPECTOR:	Bradley J. Marison		DATE: 3/31/23
WEATHER:	Cloudy		TEMPERATURE: 38°
AREA	ITEM	ACTION	COMMENTS
Cover System	Seeps	Delineate, sample, evaluate	OK
	Subsidence/ponding	Delineate, fill, & revegetate	OK
	Erosion/Gullies	Determine cause, grade & vegetate	OK
	Slope Stability	Check for erosion, slippage, slope failure	OK
	Vegetation	Check for areas of weak/no vegetation, revegetate	OK
		Mow semiannually	OCT 2022
		Remove scrubs & trees from cover system & drain ways	OK
Leachate collection and storage system	Vectors	Check for burrows & backfill with clean soil	OK
	UST'S	Check leachate levels, check/test leak detection system and auto dialer, check for sediment in bottom of tanks	January, February, & March
		Pump stations	Check pump operation
	Forcemain	Check float operation. Perform manufacturer's recommended maintenance. Operate/cycle valves. Check sump for floating debris and sediments	OK
		Check for leaks	OK
	Laterals and truck line	Check for and record VOCs at each manhole and cleanout; check for line blockage visually; lubricate locks.	Performed by On-Site
		Groundwater cutoff manholes	Performed by On-Site
Gas venting system	Odors	Check for and record VOCs and methane (explosimeter) upwind, at each vent, and at perimeter of property. Check physical condition of vent and screen.	Performed by On-Site

QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST WELLSVILLE/ANDOVER LANDFILL SITE NYSDEC SITE NO. 9-02-004			
INSPECTOR:	Bradley J. Mattison		
WEATHER:	Cloudy		
AREA	ITEM	ACTION	COMMENTS
Stormwater system	Ditches and swales	Check for pooling, erosion, excessive vegetation, and weak vegetation	OK
	Cover system drainage	Check for cover soils that are excessively wet, slope failure without evidence of fill subsidence. Check condition of geocomposite drainage layer at cover perimeter.	OK
	Culverts	Check condition and for blockage and erosion	OK
	Detention ponds	Check outlet structure for blockage and general condition.	OK
		Check for situation/silt buildup. Erosion, condition of vegetation and embankment	OK
Groundwater monitoring	Sampling wells	See Section 4	
		Check condition of caps, locks, surface seals, and markings. Lubricate locks.	Performed by On-Site
Facility access system	Roads	Check condition. Check for erosion, potholes.	OK
	Access gate	Check condition. Lubricate lock	OK
Other	Comments:		

Signed:



Date:

3/31/23

QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST			
WELLSVILLE/ANDOVER LANDFILL SITE			
NYSDEC SITE NO. 9-02-004			
INSPECTOR:	Brentley S. Marston	DATE:	6/30/23
WEATHER:	Sunny	TEMPERATURE:	72°
AREA	ITEM	ACTION	COMMENTS
Cover System	Seeps	Delineate, sample, evaluate	OK
	Subsidence/ponding	Delineate, fill, & revegetate	OK
	Erosion/Gullies	Determine cause, grade & vegetate	OK
	Slope Stability	Check for erosion, slippage, slope failure	OK
	Vegetation	Check for areas of weak/no vegetation, revegetate	OK
		Mow semiannually	OCT 22
		Remove scrubs & trees from cover system & drain ways	OK
Leachate collection and storage system	Vectors	Check for burrows & backfill with clean soil	OK
	UST'S	Check leachate levels, check/test leak detection system and auto dialer, check for sediment in bottom of tanks	April, May, & June
		Pump stations	Check pump operation
	Forcemain	Check float operation. Perform manufacturer's recommended maintenance. Operate/cycle valves. Check sump for floating debris and sediments	OK
		Check for leaks	
	Laterals and truck line	Check for and record VOCs at each manhole and cleanout; check for line blockage visually; lubricate locks.	Performed by On-Site
		Groundwater cutoff manholes	Performed by On-Site
Gas venting system		Check for and record VOCs and methane (explosimeter) upwind, at each vent, and at perimeter of property.	
	Odors	Check physical condition of vent and screen.	Performed by On-Site

QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST			
WELLSVILLE/ANDOVER LANDFILL SITE			
NYSDEC SITE NO. 9-02-004			
INSPECTOR:	Bradley J. Marrison	DATE:	6/30/23
WEATHER:	Sunny	TEMPERATURE:	72°
AREA	ITEM	ACTION	COMMENTS
Stormwater system	Ditches and swales	Check for pooling, erosion, excessive vegetation, and weak vegetation	OK
	Cover system drainage	Check for cover soils that are excessively wet, slope failure without evidence of fill subsidence. Check condition of geocomposite drainage layer at cover perimeter.	OK
	Culverts	Check condition and for blockage and erosion	OK
	Detention ponds	Check outlet structure for blockage and general condition.	OK
		Check for situation/silt buildup. Erosion, condition of vegetation and embankment	OK
Groundwater monitoring	Sampling wells	See Section 4	
		Check condition of caps, locks, surface seals, and markings. Lubricate locks.	Performed by On-Site
Facility access system	Roads	Check condition. Check for erosion, potholes.	OK
	Access gate	Check condition. Lubricate lock	OK
Other	Comments:	Collection Lateral water settled & cleaned by JSH	

Signed:

Bradley J. Marrison

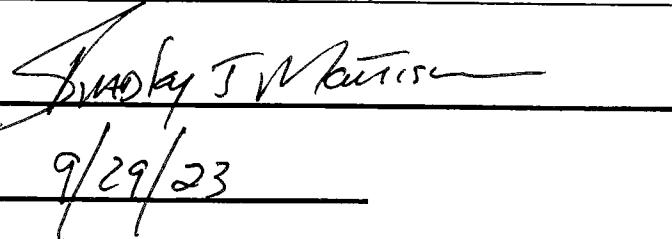
Date:

6/30/23

QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST			
WELLSVILLE/ANDOVER LANDFILL SITE			
NYSDEC SITE NO. 9-02-004			
INSPECTOR:	Bradley S. Whitis	DATE:	9/29/23
WEATHER:	Sunny	TEMPERATURE:	55°F
AREA	ITEM	ACTION	COMMENTS
Cover System	Seeps	Delineate, sample, evaluate	OK
	Subsidence/ponding	Delineate, fill, & revegetate	
	Erosion/Gullies	Determine cause, grade & vegetate	OK
	Slope Stability	Check for erosion, slippage, slope failure	OK
	Vegetation	Check for areas of weak/no vegetation, revegetate	OK
		Mow semiannually	OCT 22
		Remove scrubs & trees from cover system & drain ways	OK
Leachate collection and storage system	Vectors	Check for burrows & backfill with clean soil	OK
	UST'S	Check leachate levels, check/test leak detection system and auto dialer, check for sediment in bottom of tanks	July, August & September
		Pump stations	OK
	Forcemain	Check float operation. Perform manufacturer's recommended maintenance. Operate/cycle valves. Check sump for floating debris and sediments	OK
		Check for leaks	
	Laterals and truck line	Check for and record VOCs at each manhole and cleanout; check for line blockage visually; lubricate locks.	Performed by On-Site
		Groundwater cutoff manholes	Performed by On-Site
Gas venting system		Check for and record VOCs and methane (explosimeter) upwind, at each vent, and at perimeter of property.	
	Odors	Check physical condition of vent and screen.	Performed by On-Site

QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST			
WELLSVILLE/ANDOVER LANDFILL SITE			
NYSDEC SITE NO. 9-02-004			
INSPECTOR:	Brad Maurer	DATE:	9/29/23
WEATHER:	Sunny	TEMPERATURE:	55°F
AREA	ITEM	ACTION	COMMENTS
Stormwater system	Ditches and swales	Check for pooling, erosion, excessive vegetation, and weak vegetation	OK
	Cover system drainage	Check for cover soils that are excessively wet, slope failure without evidence of fill subsidence. Check condition of geocomposite drainage layer at cover perimeter.	OK
	Culverts	Check condition and for blockage and erosion	OK
	Detention ponds	Check outlet structure for blockage and general condition.	OK
		Check for situation/silt buildup. Erosion, condition of vegetation and embankment	OK
Groundwater monitoring	Sampling wells	See Section 4	
		Check condition of caps, locks, surface seals, and markings. Lubricate locks.	Performed by On-Site
Facility access system	Roads	Check condition. Check for erosion, potholes.	OK
	Access gate	Check condition. Lubricate lock	OK
Other		Comments:	

Signed:



Date:

9/29/23

QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST			
WELLSVILLE/ANDOVER LANDFILL SITE			
NYSDEC SITE NO. 9-02-004			
INSPECTOR:	Bradley Mattison	DATE:	12/29/2023
WEATHER:	CLOUDY	TEMPERATURE:	32°
AREA	ITEM	ACTION	COMMENTS
Cover System	Seeps	Delineate, sample, evaluate	OK
	Subsidence/ponding	Delineate, fill, & revegetate	OK
	Erosion/Gullies	Determine cause, grade & vegetate	OK
	Slope Stability	Check for erosion, slippage, slope failure	OK
	Vegetation	Check for areas of weak/no vegetation, revegetate	OK
		Mow semiannually	OCT 2023
		Remove scrubs & trees from cover system & drain ways	OK - OCT removed brush 2023
Leachate collection and storage system	Vectors	Check for burrows & backfill with clean soil	
	UST'S	Check leachate levels, check/test leak detection system and auto dialer, check for sediment in bottom of tanks	October, November & December
		Pump stations	
	Forcemain	Check float operation. Perform manufacturer's recommended maintenance. Operate/cycle valves. Check sump for floating debris and sediments	OK
		Check for leaks	OK
	Laterals and truck line	Check for and record VOCs at each manhole and cleanout; check for line blockage visually; lubricate locks.	Performed by On-Site
		Groundwater cutoff manholes	Performed by On-Site
Gas venting system		Check for and record VOCs and methane (explosimeter) upwind, at each vent, and at perimeter of property.	
	Odors	Check physical condition of vent and screen.	Performed by On-Site

QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST			
WELLSVILLE/ANDOVER LANDFILL SITE			
NYSDEC SITE NO. 9-02-004			
INSPECTOR:	Bradley J Manson	DATE:	12/29/2023
WEATHER:	Cloudy	TEMPERATURE:	32°
AREA	ITEM	ACTION	COMMENTS
Stormwater system	Ditches and swales	Check for pooling, erosion, excessive vegetation, and weak vegetation	OK
	Cover system drainage	Check for cover soils that are excessively wet, slope failure without evidence of fill subsidence. Check condition of geocomposite drainage layer at cover perimeter.	OK
	Culverts	Check condition and for blockage and erosion	OK
	Detention ponds	Check outlet structure for blockage and general condition.	OK
		Check for silt buildup. Erosion, condition of vegetation and embankment	OK
Groundwater monitoring	Sampling wells	See Section 4	
		Check condition of caps, locks, surface seals, and markings. Lubricate locks.	Performed by On-Site
Facility access system	Roads	Check condition. Check for erosion, potholes.	
	Access gate	Check condition. Lubricate lock	OK
Other	Comments:	① Mowed cap & removed woody growth from ditches. ② Installed #1 pump in leach sump manhole.	

Signed:

Bradley J Manson

Date:

12/29/23

LEACHATE HAULING 2023			
MONTH		Loads	Sludge from
			monthly report TONS
January	285,000	57	40
February	220,000	44	40
March	315,000	63	23
April	175,000	35	26
May	25,000	5	82
June	25,000	5	87
July	45,000	9	47
August	20,000	4	10
September	15,000	3	78
October	15,000	3	50
November	50,000	10	68
December	295,000	59	66
Total	1,485,000	297	617

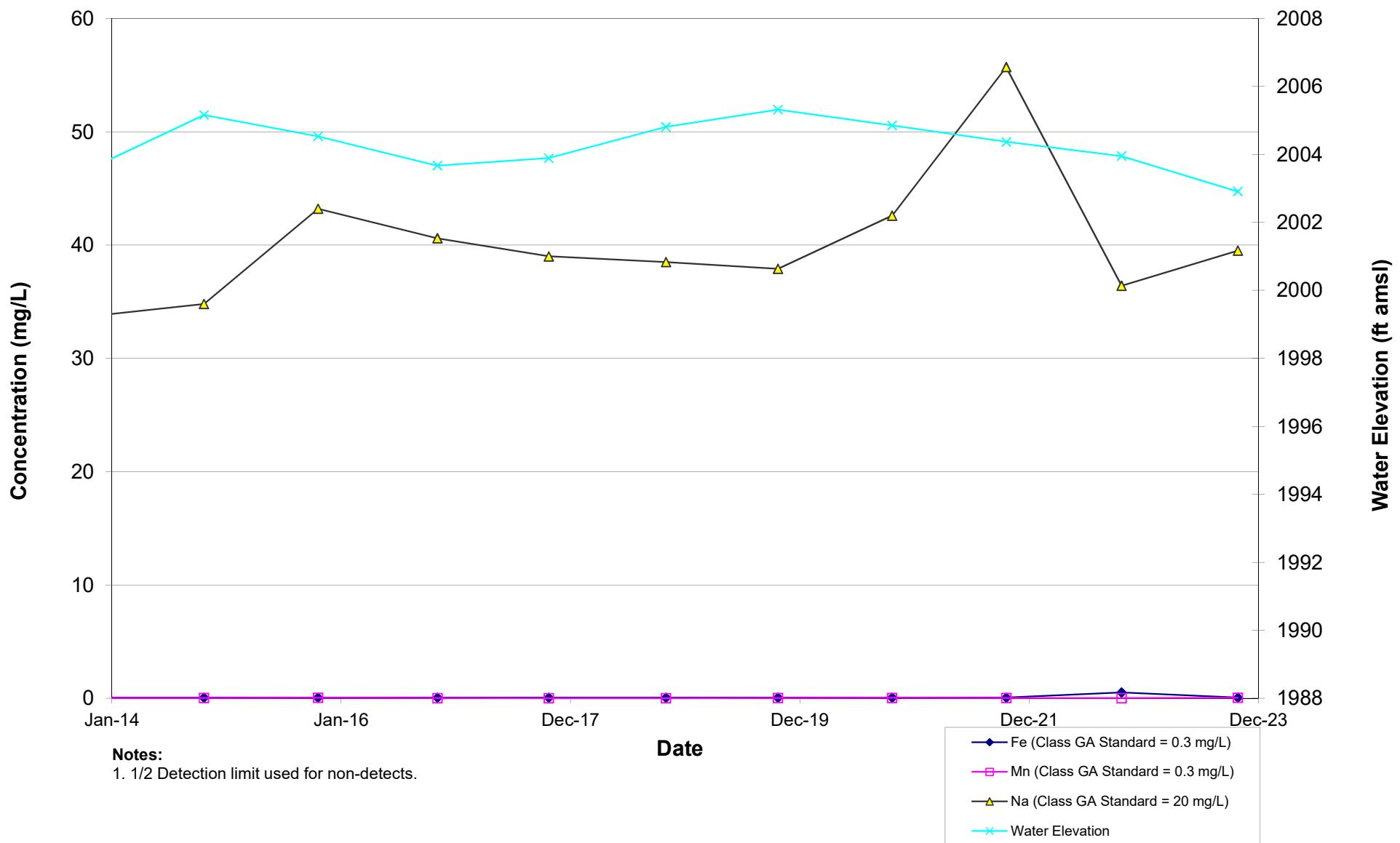
Appendix F

Concentration Time-Trend Graphs

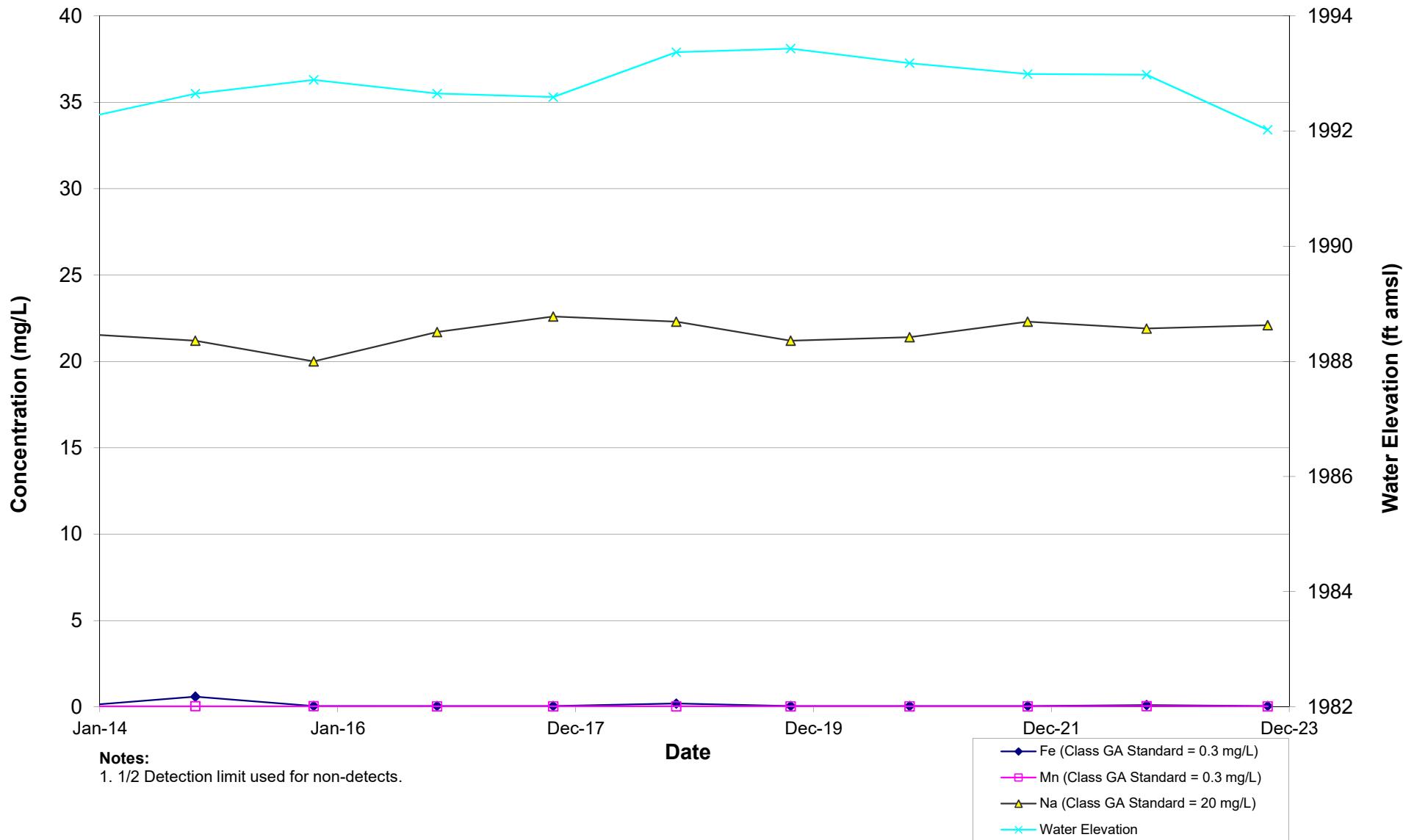
Metals

**Groundwater Concentration
Time Trend Plots**

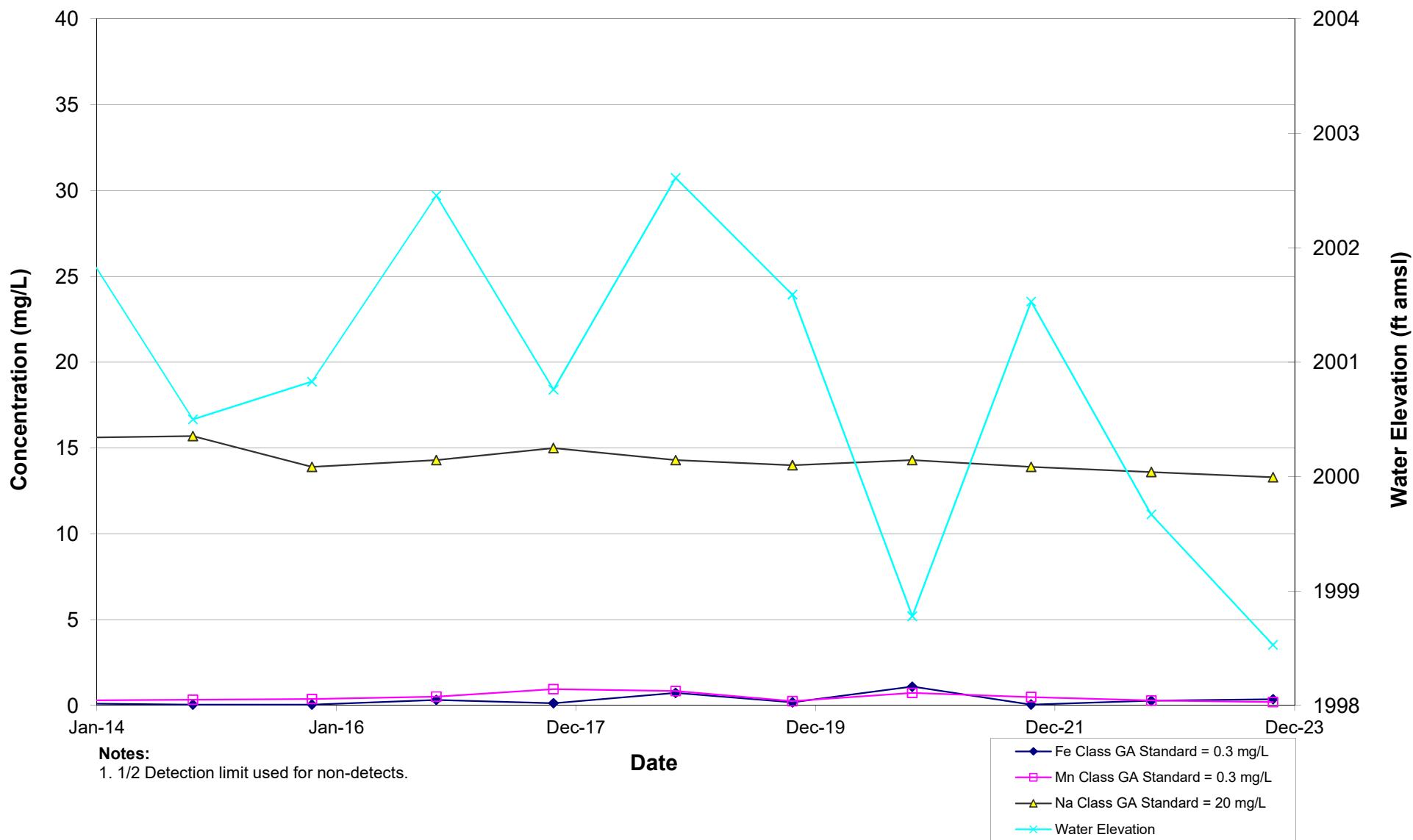
CW-3A Metals



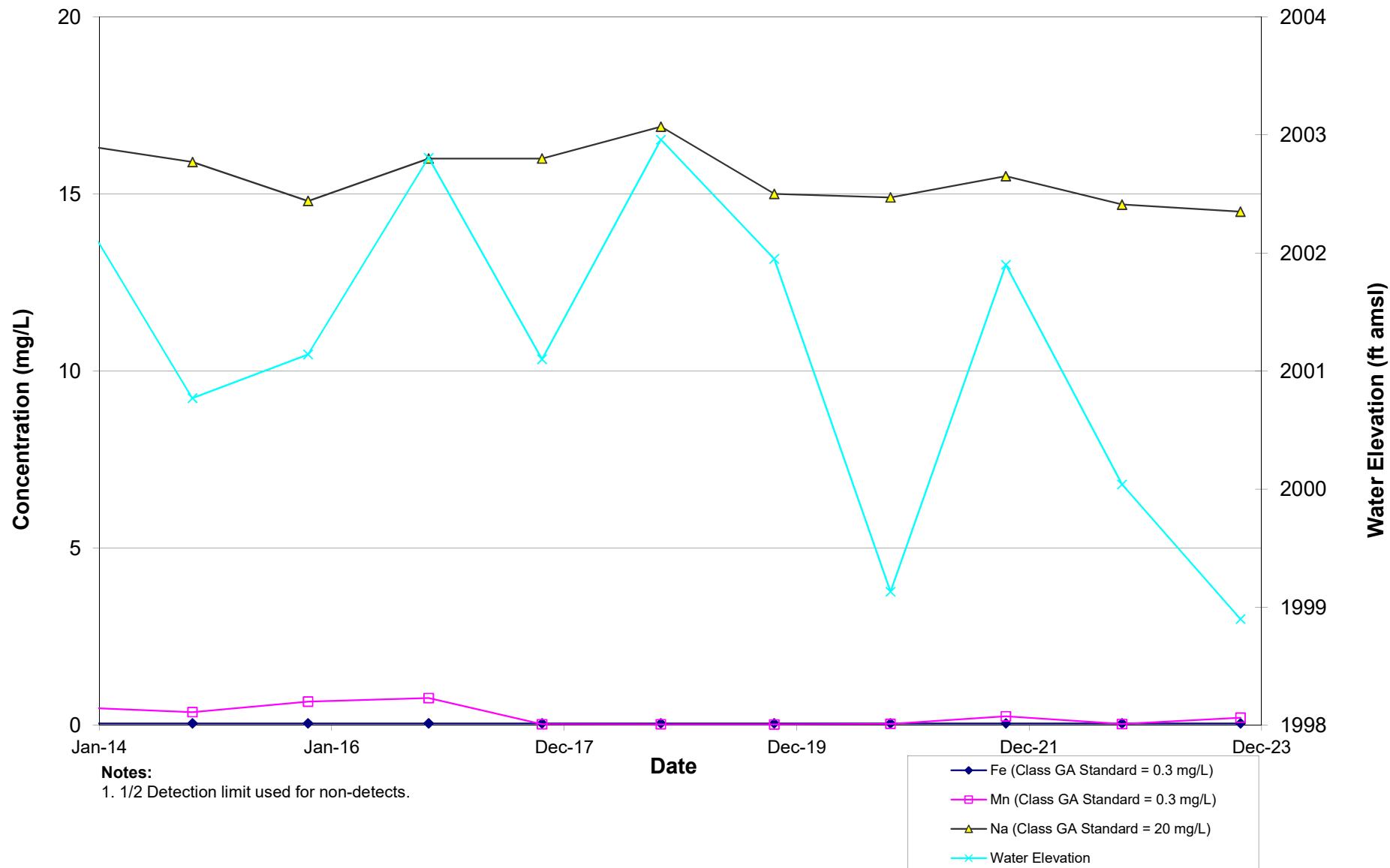
CW-3B Metals



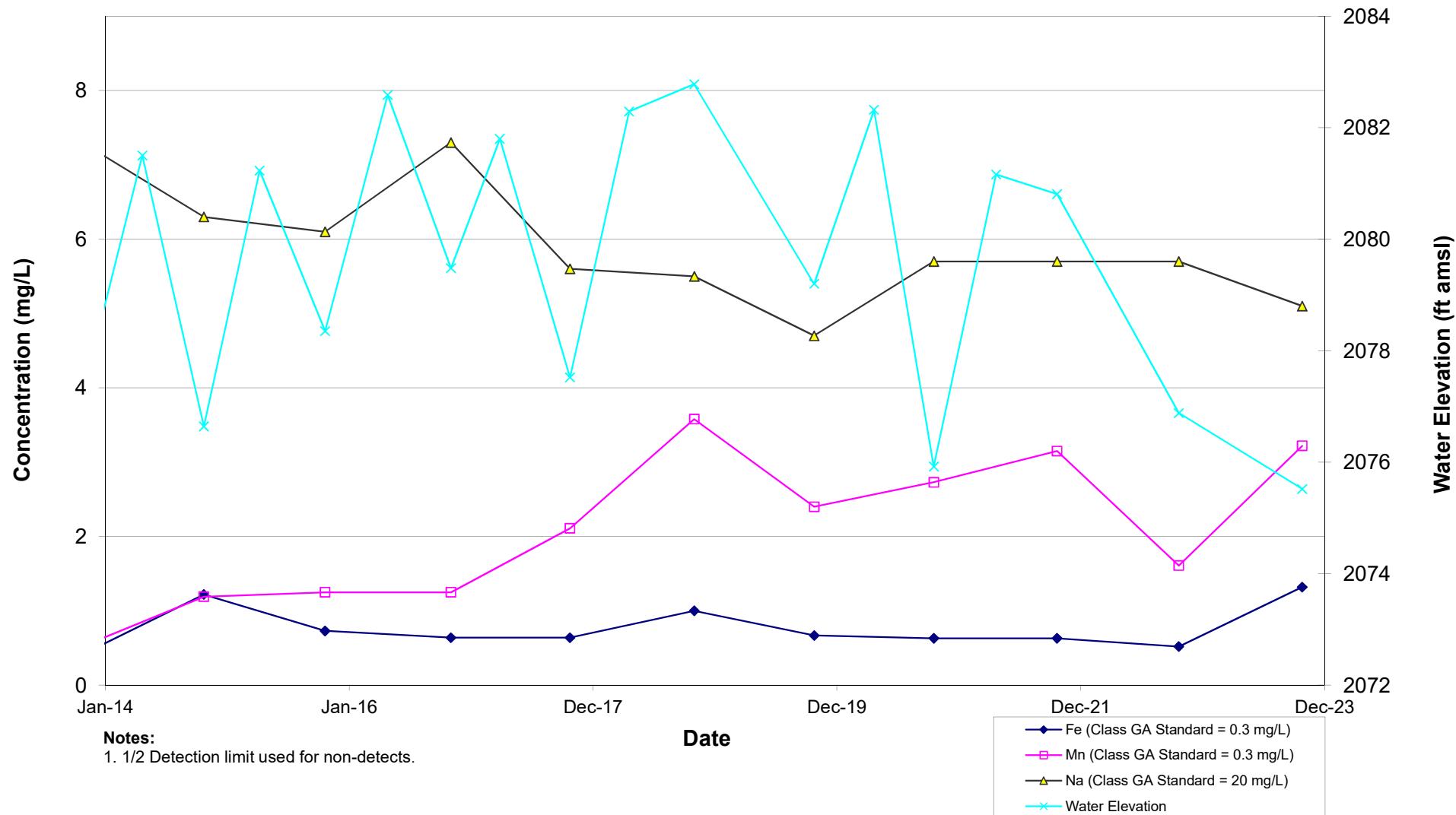
CW-4A Metals



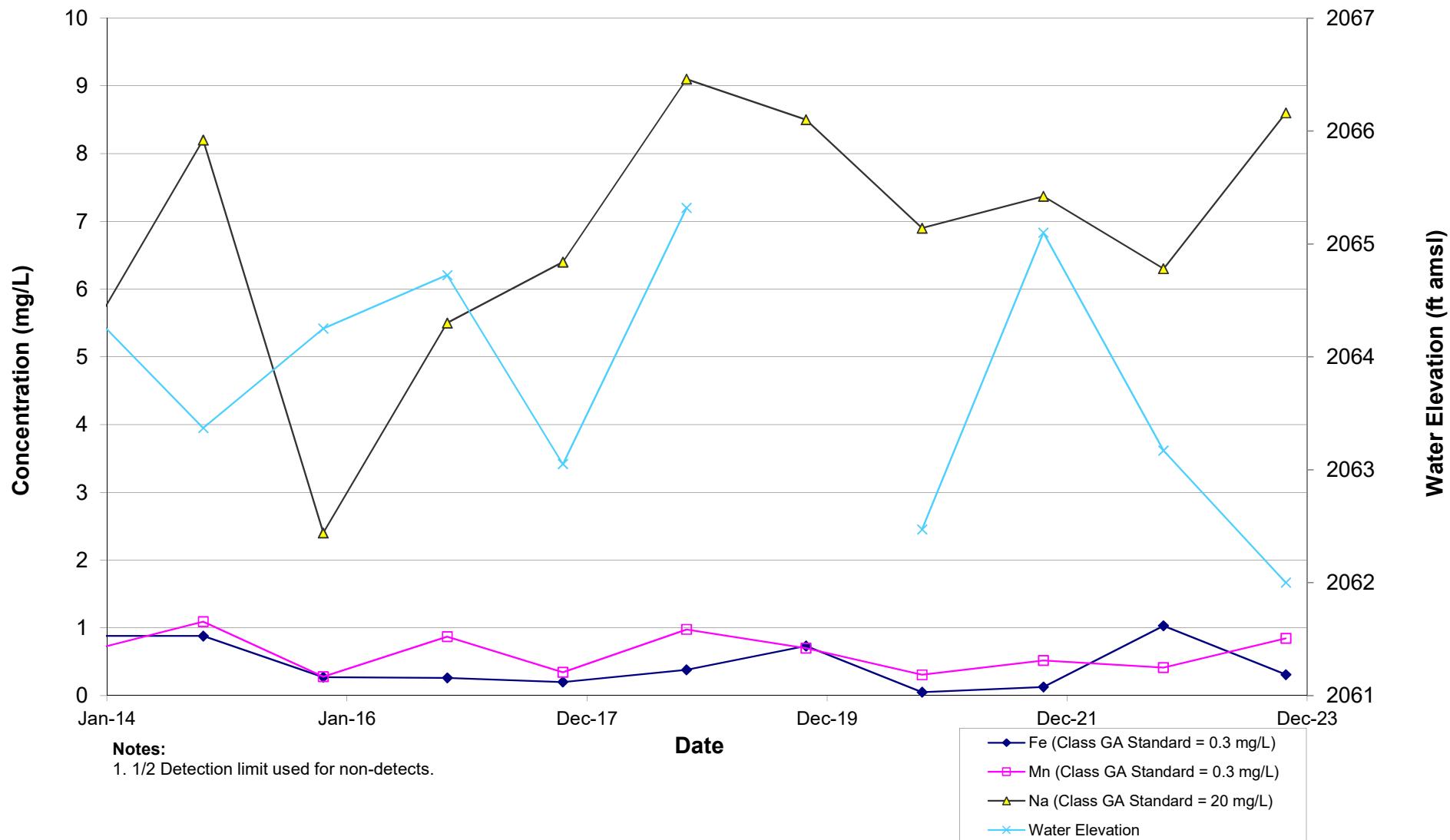
CW-4B Metals



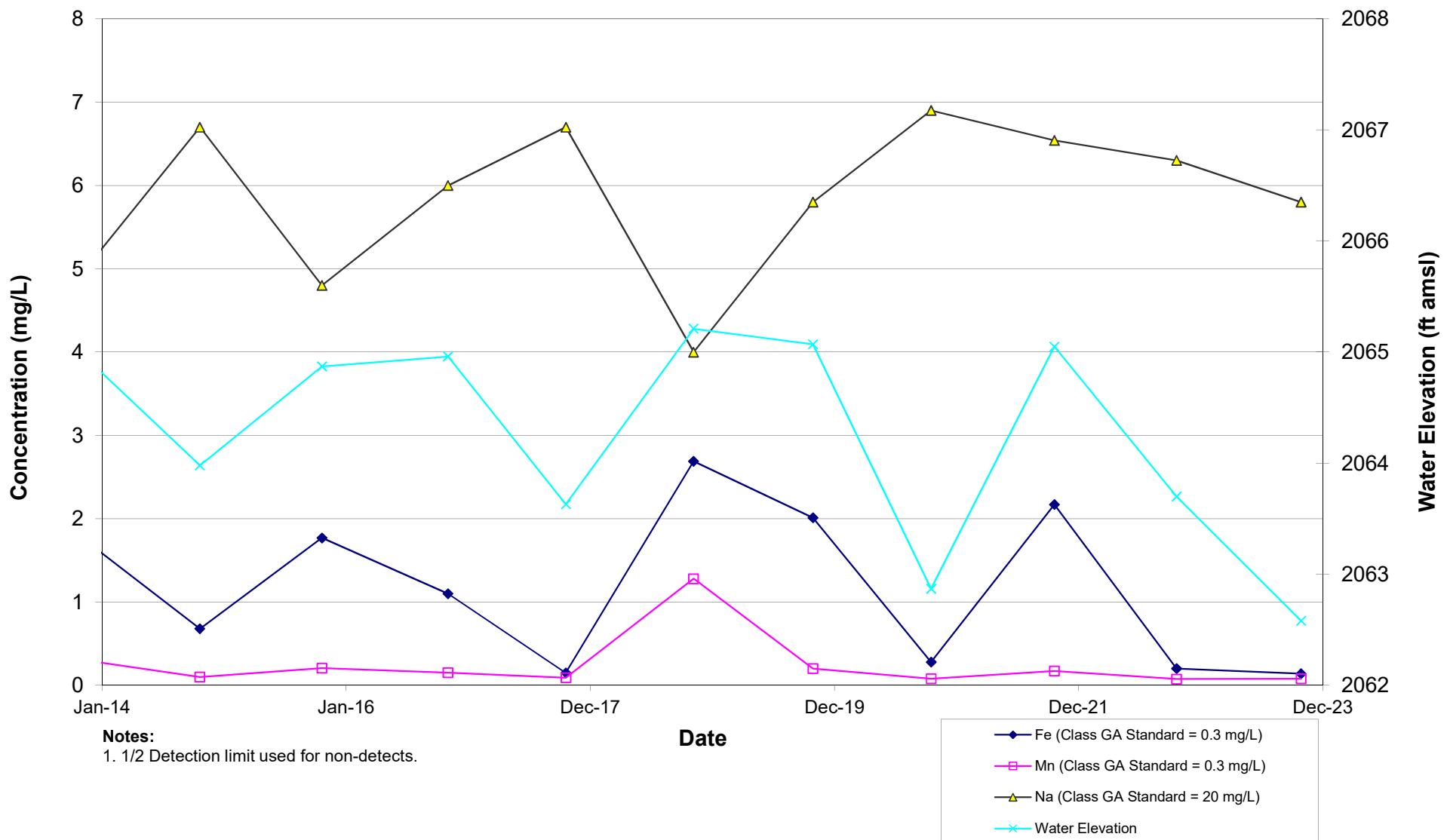
MW-4D Metals



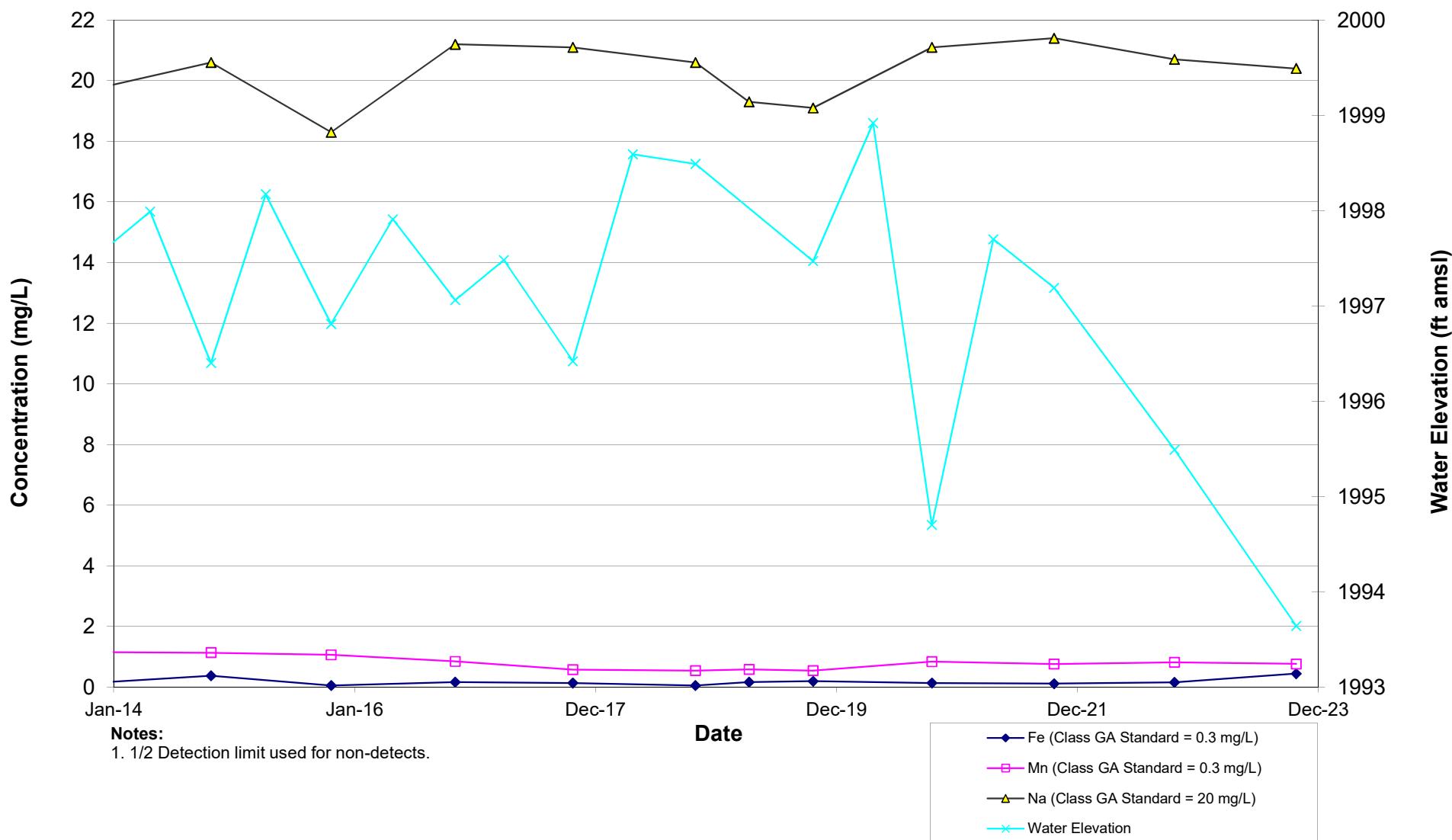
MW-5D Metals



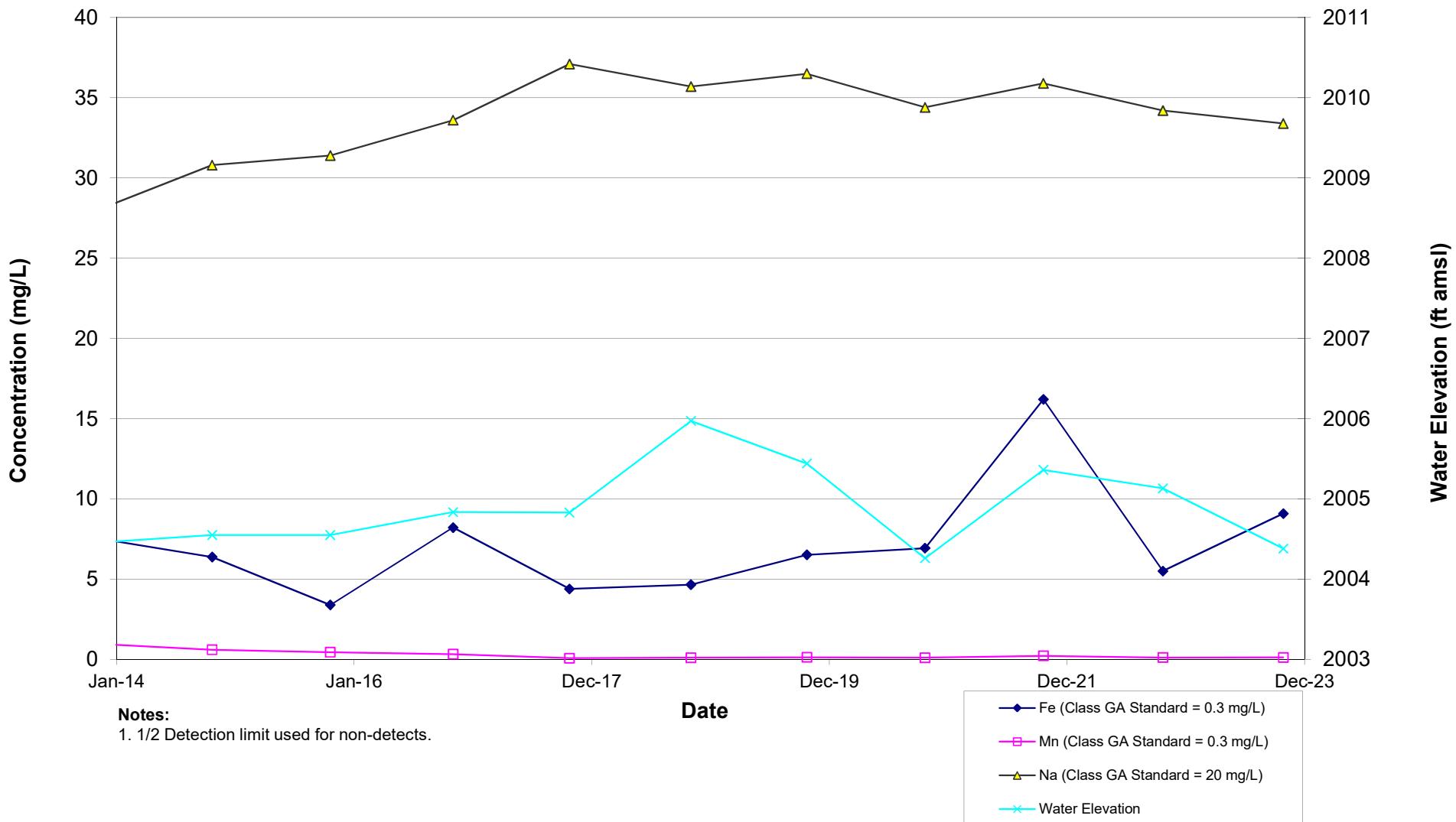
MW-5S Metals



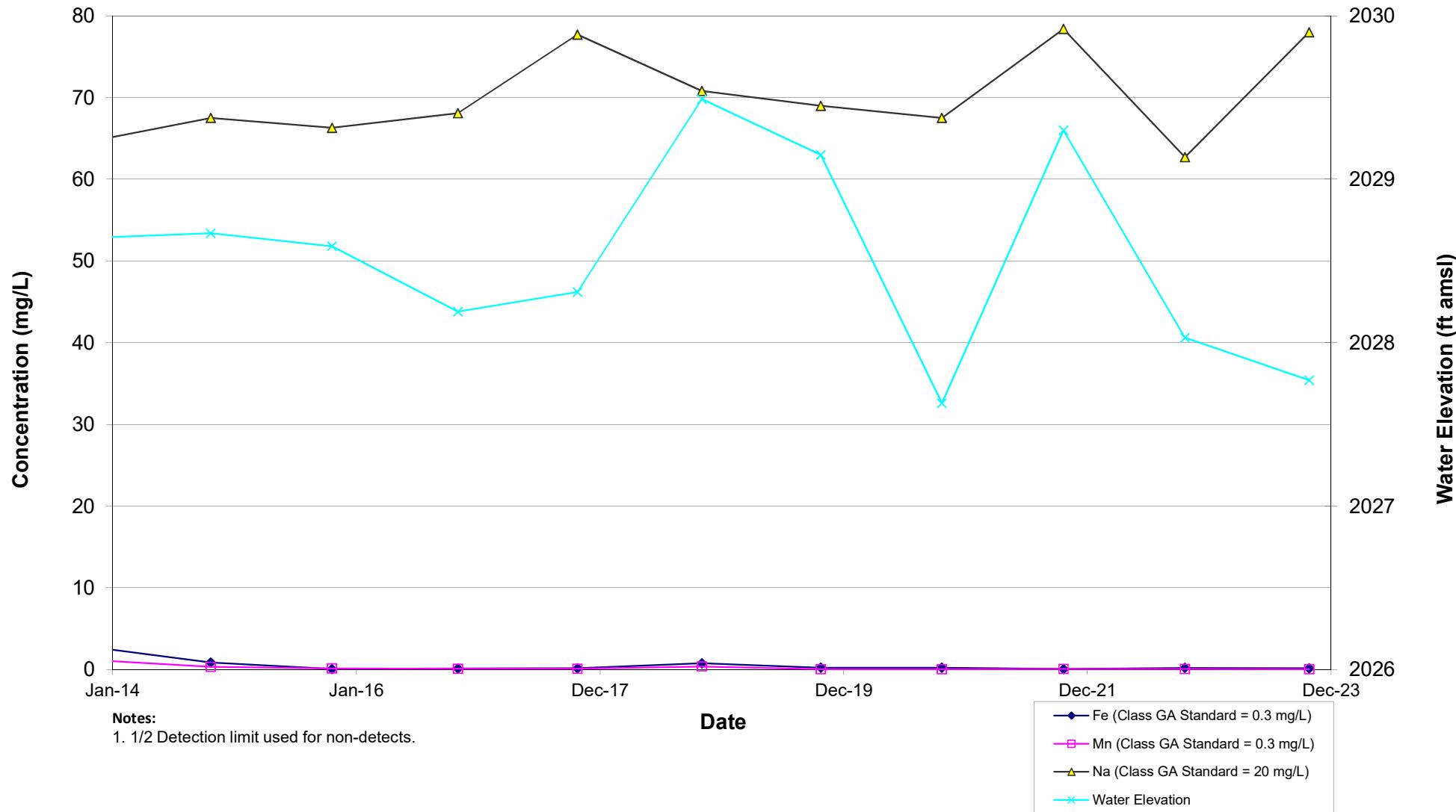
MW-11S Metals



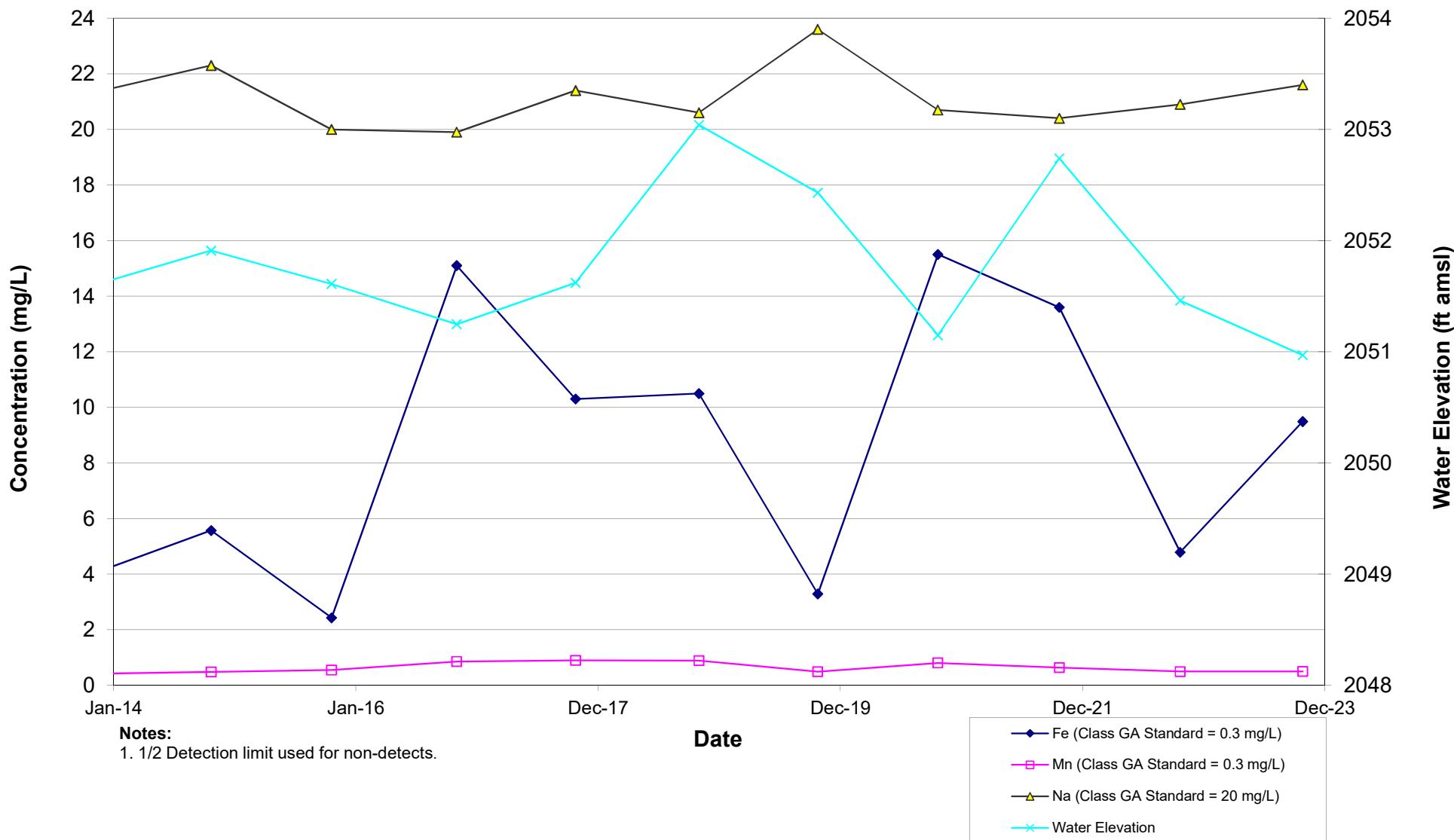
MW-17D Metals



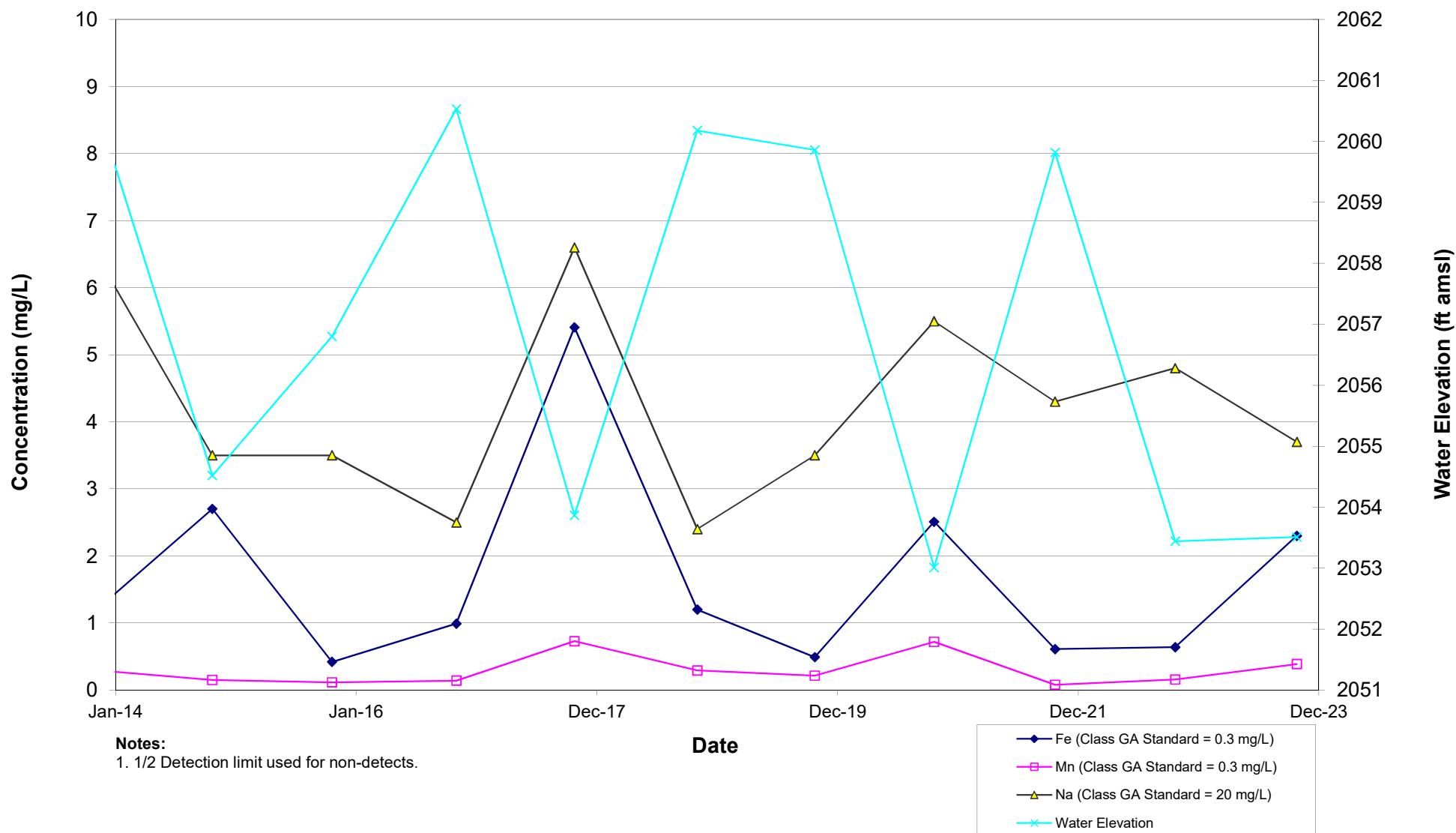
MW-17S Metals



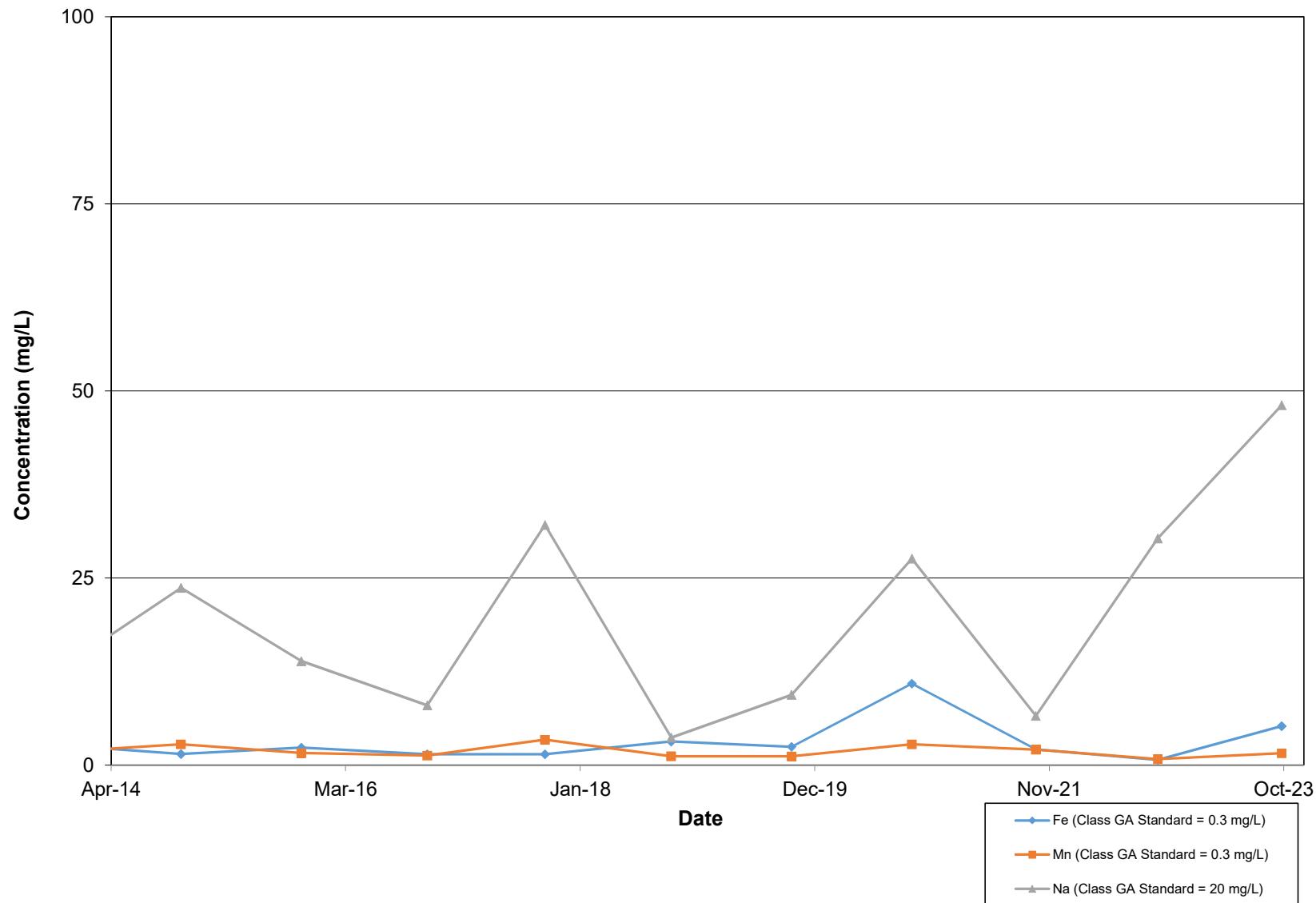
MW-18D Metals



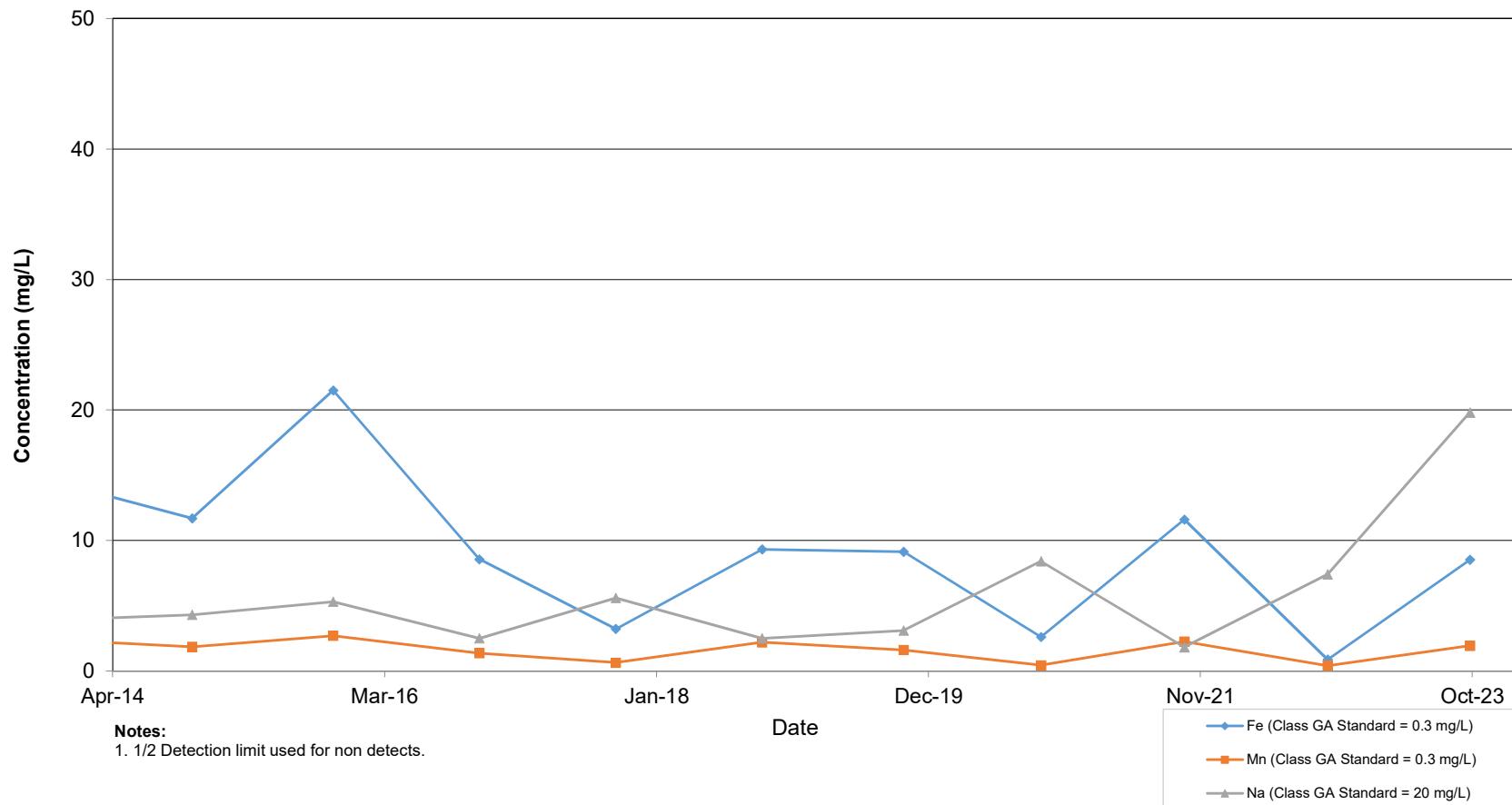
MW-18S Metals



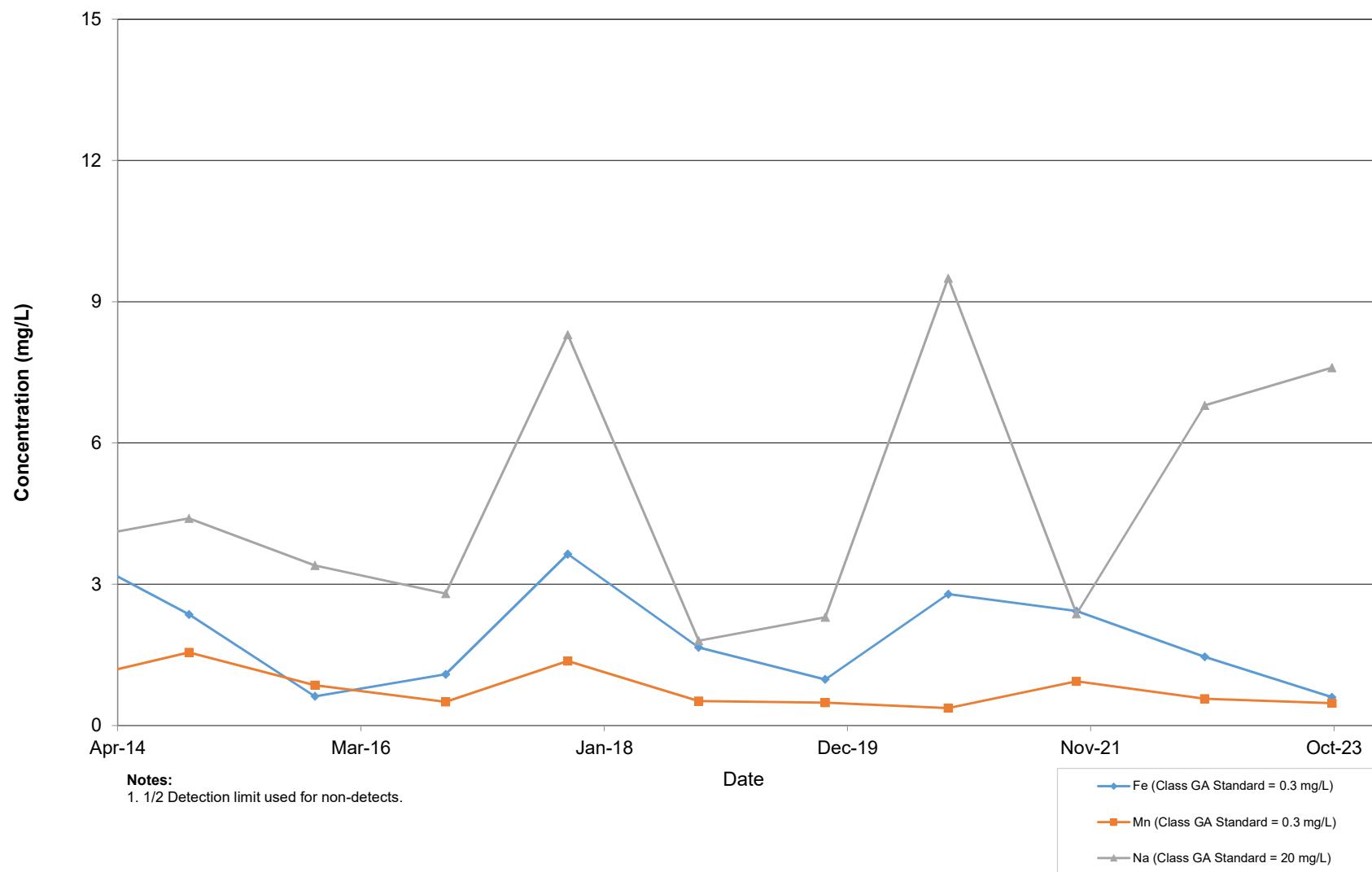
LS-1 Metals



MH-32 Metals



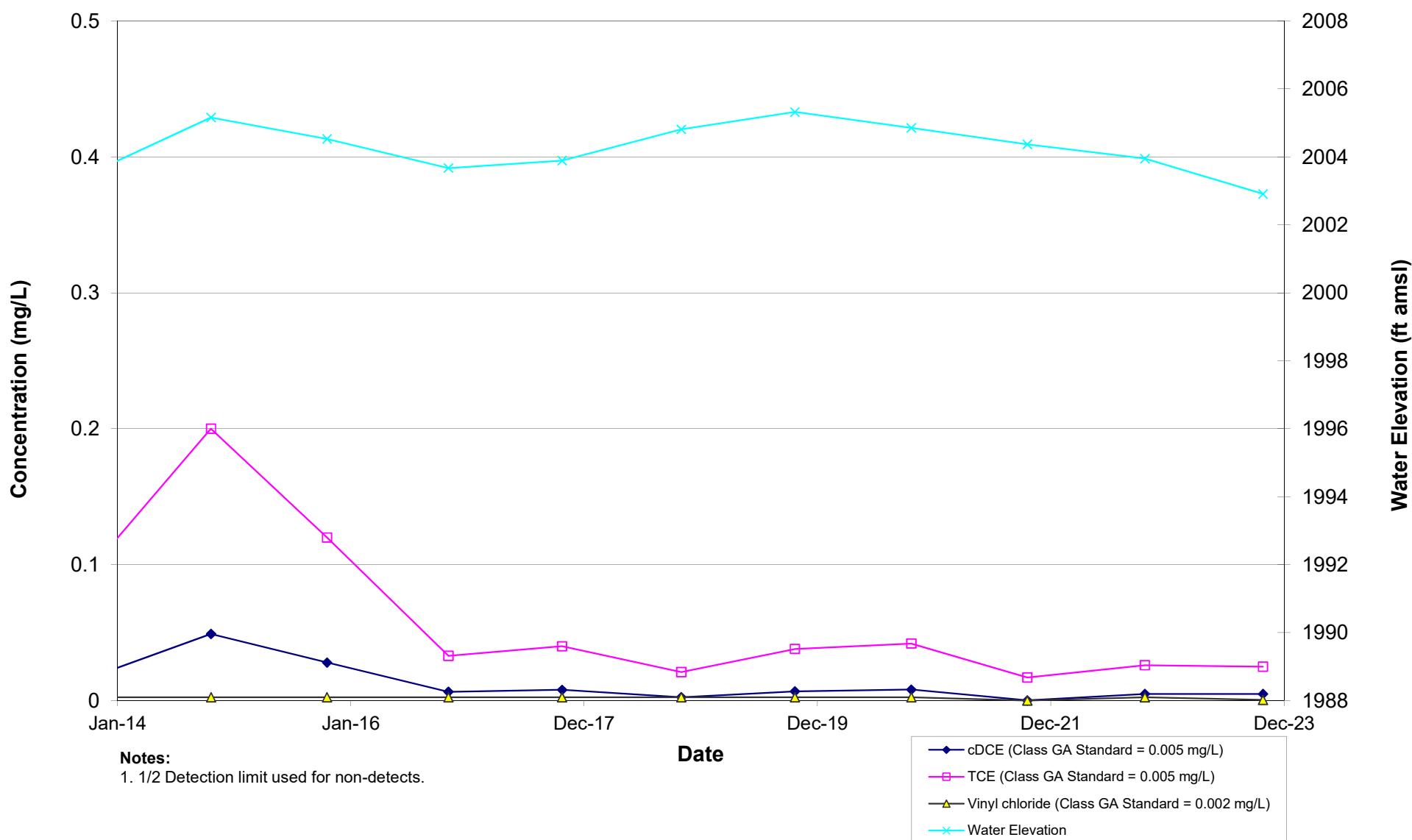
MH-33 Metals



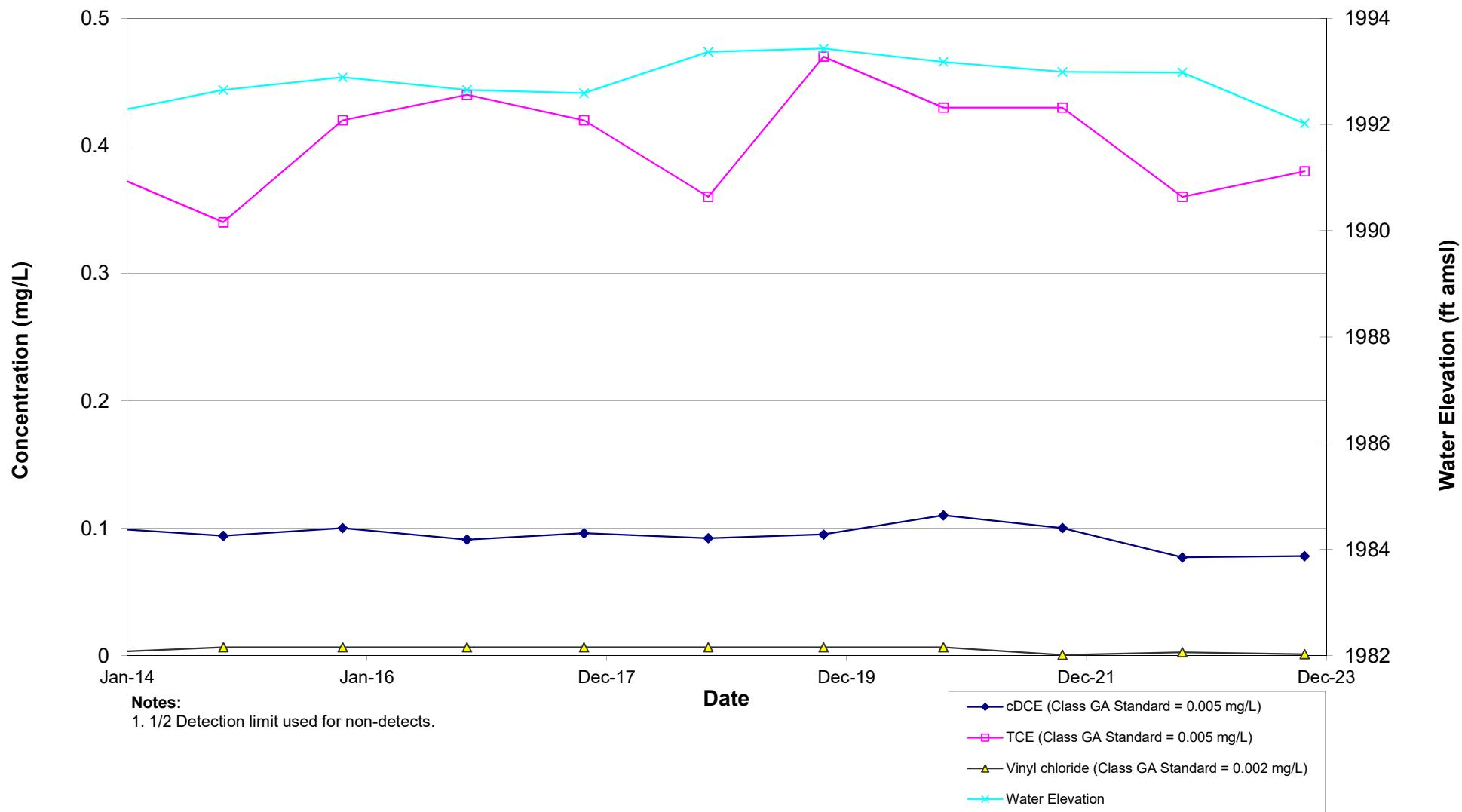
VOC's

Groundwater Concentration Time Trend Plots

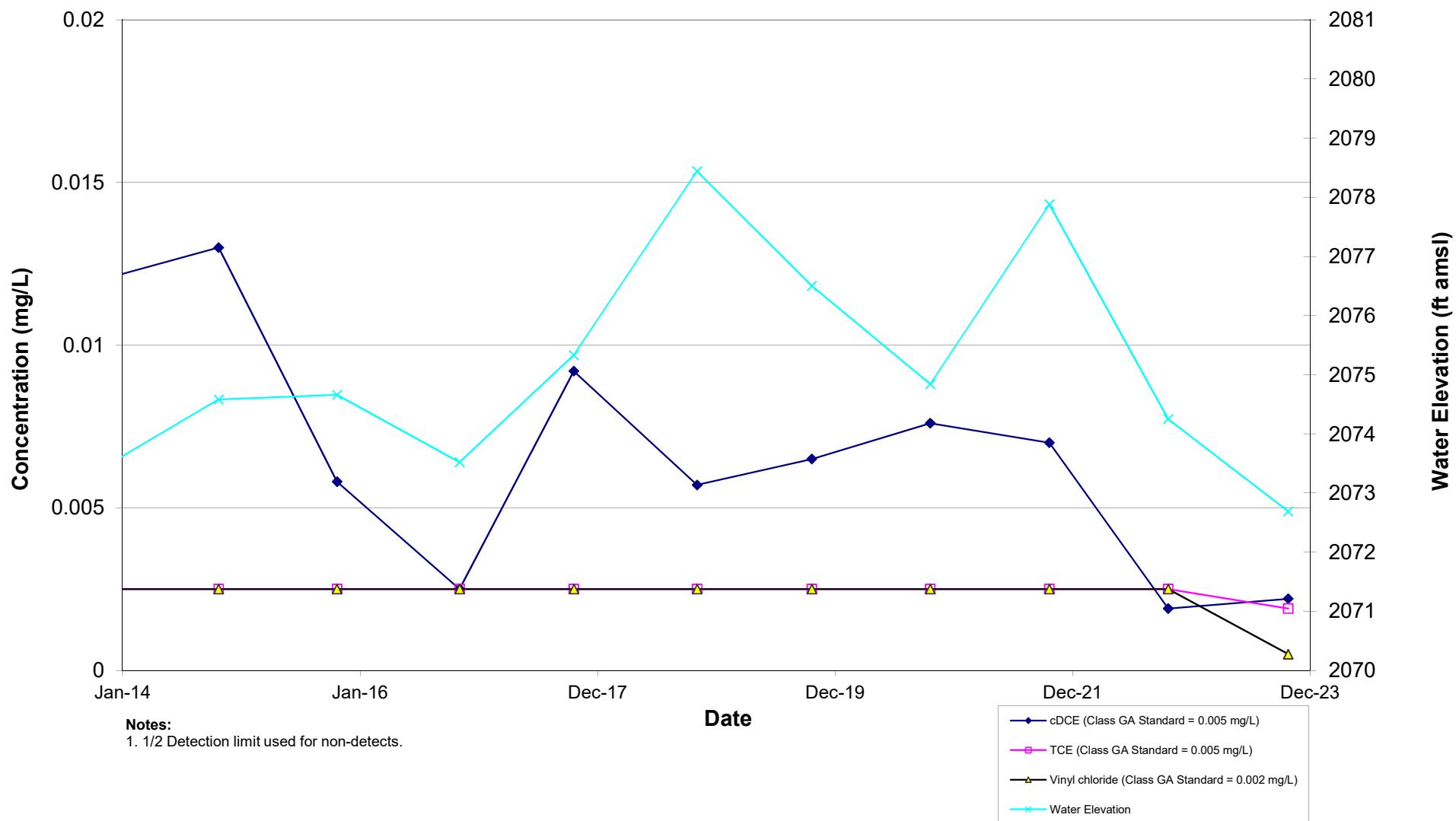
CW-3A VOCs



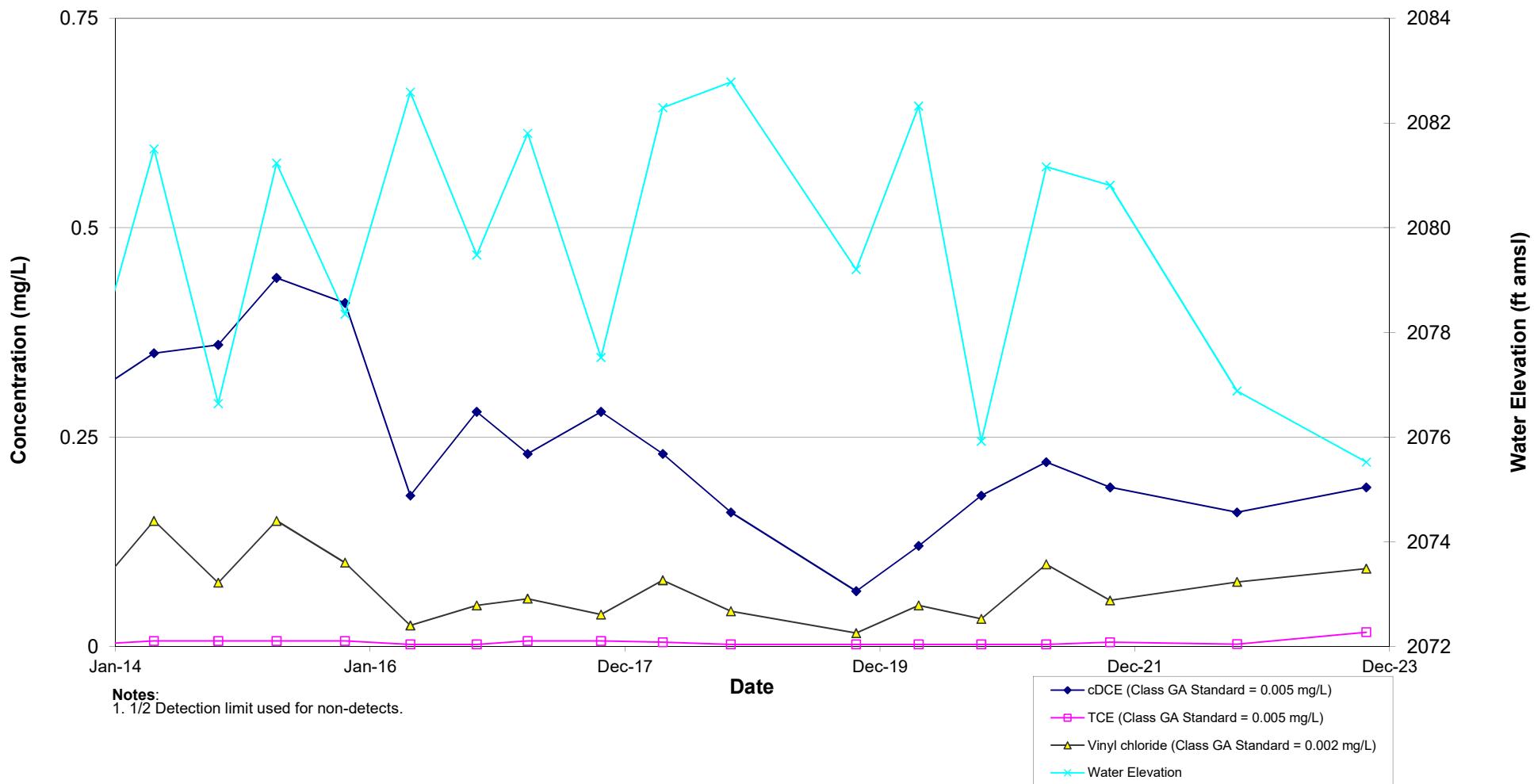
CW-3B VOCs



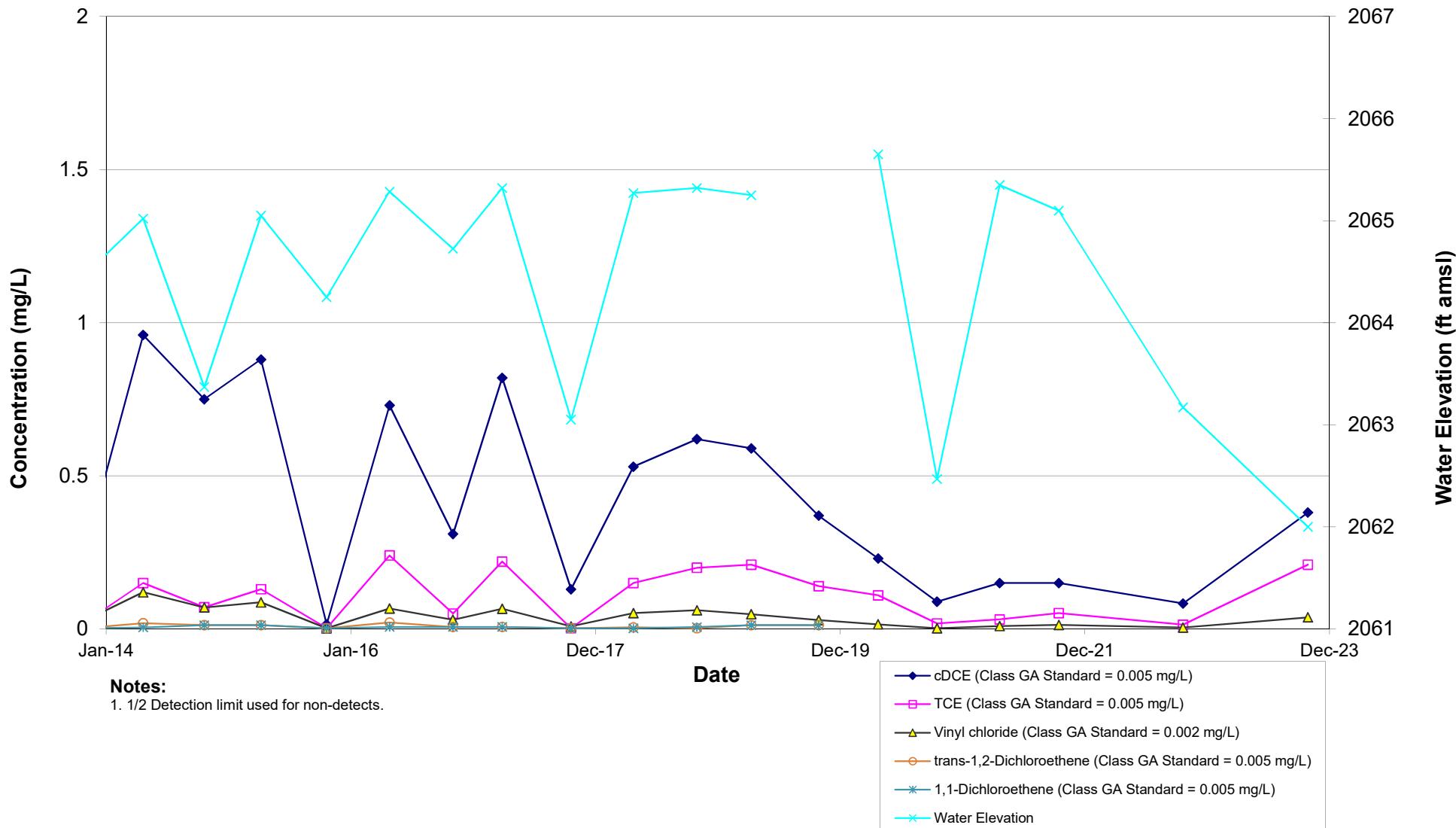
MW-3D VOCs



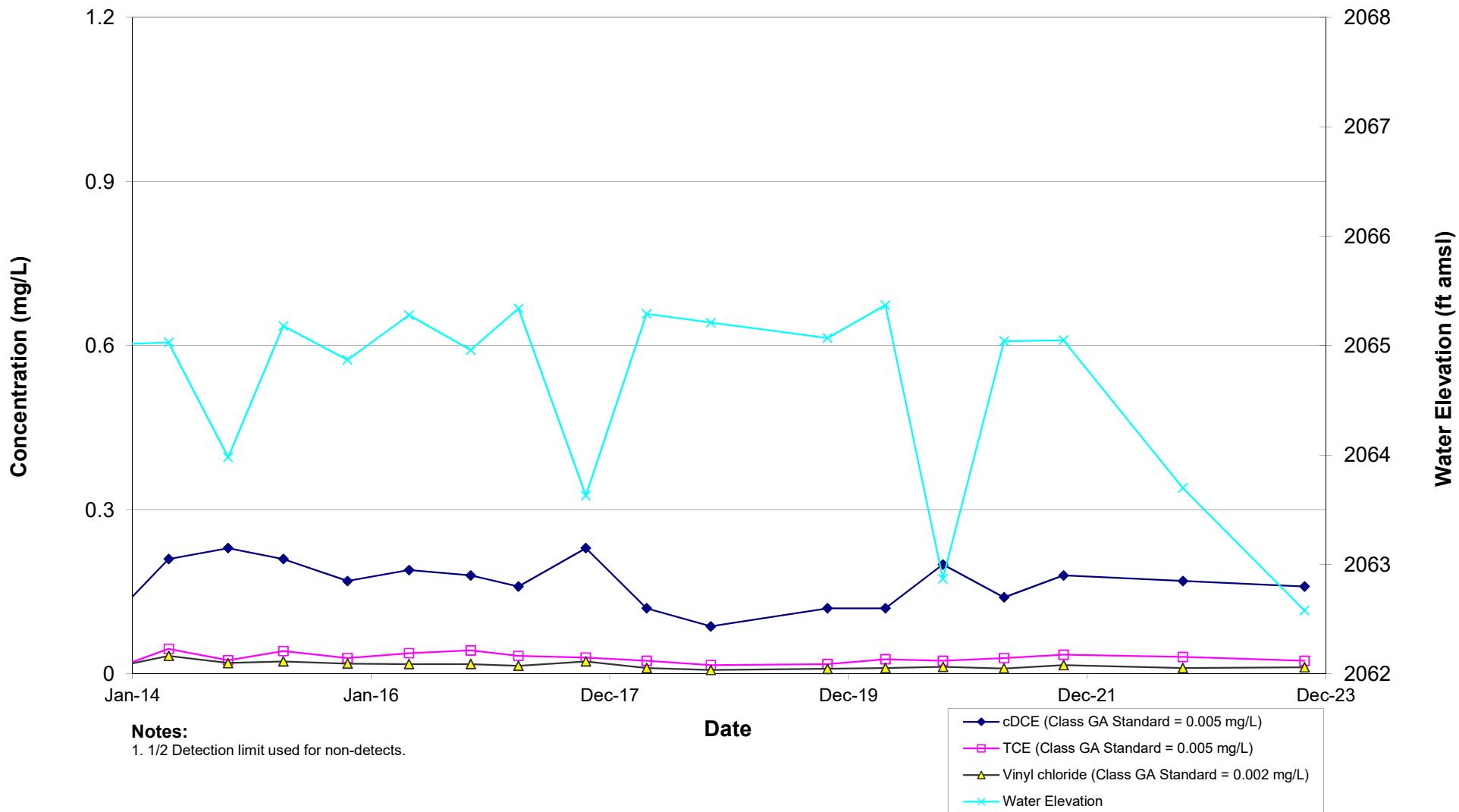
MW-4D VOCs



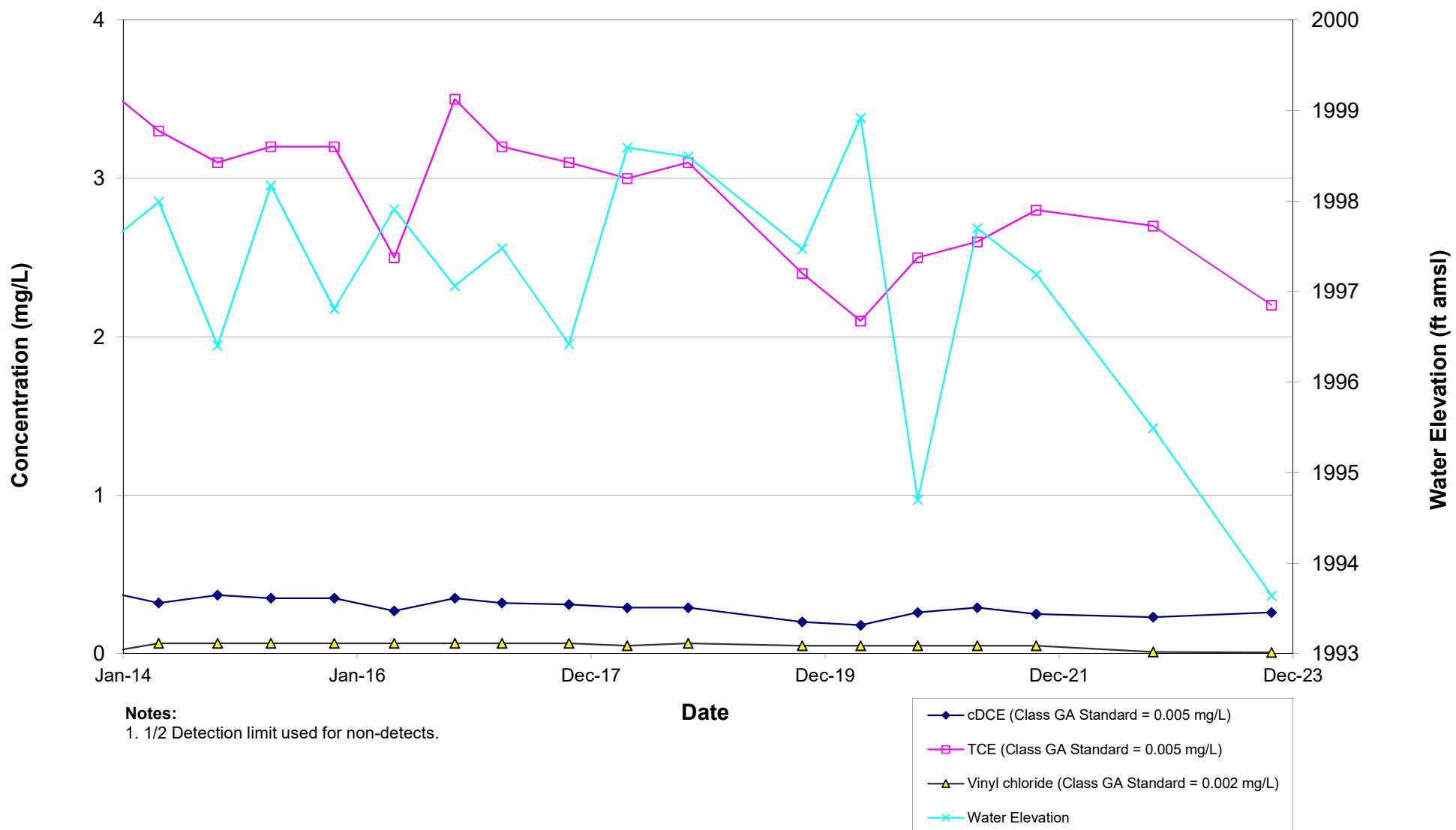
MW-5D VOCs



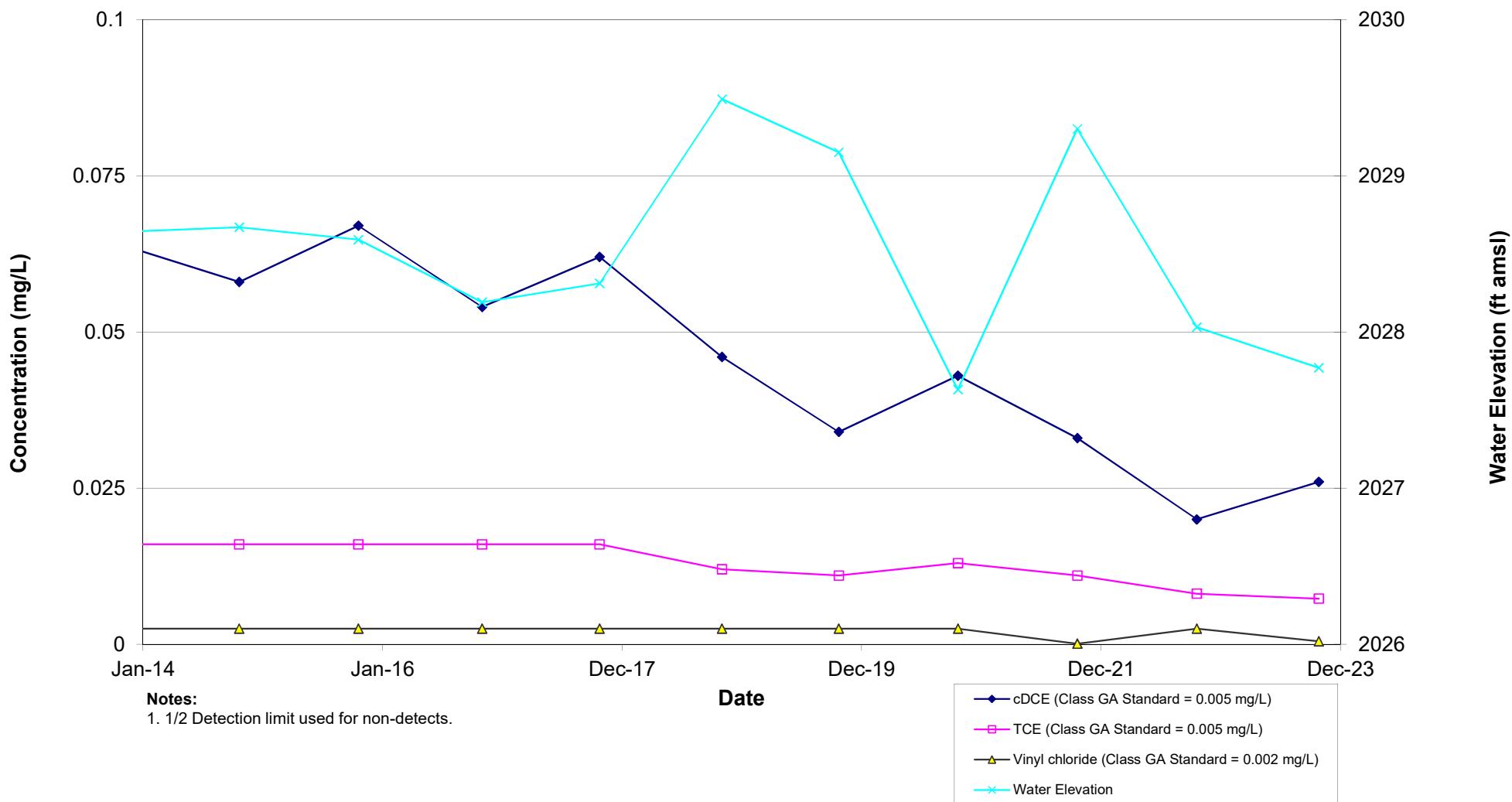
MW-5S VOCs



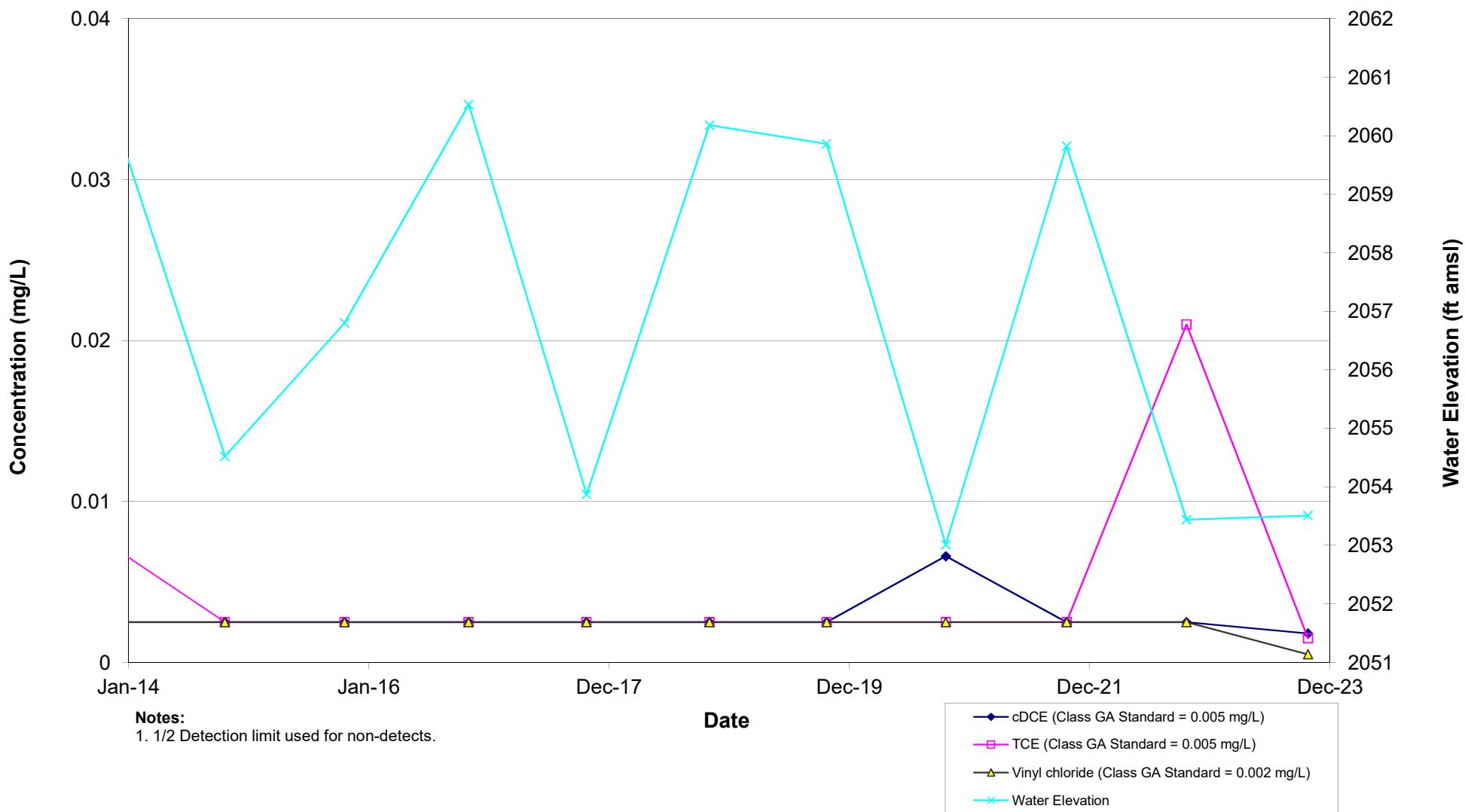
MW-11S VOCs



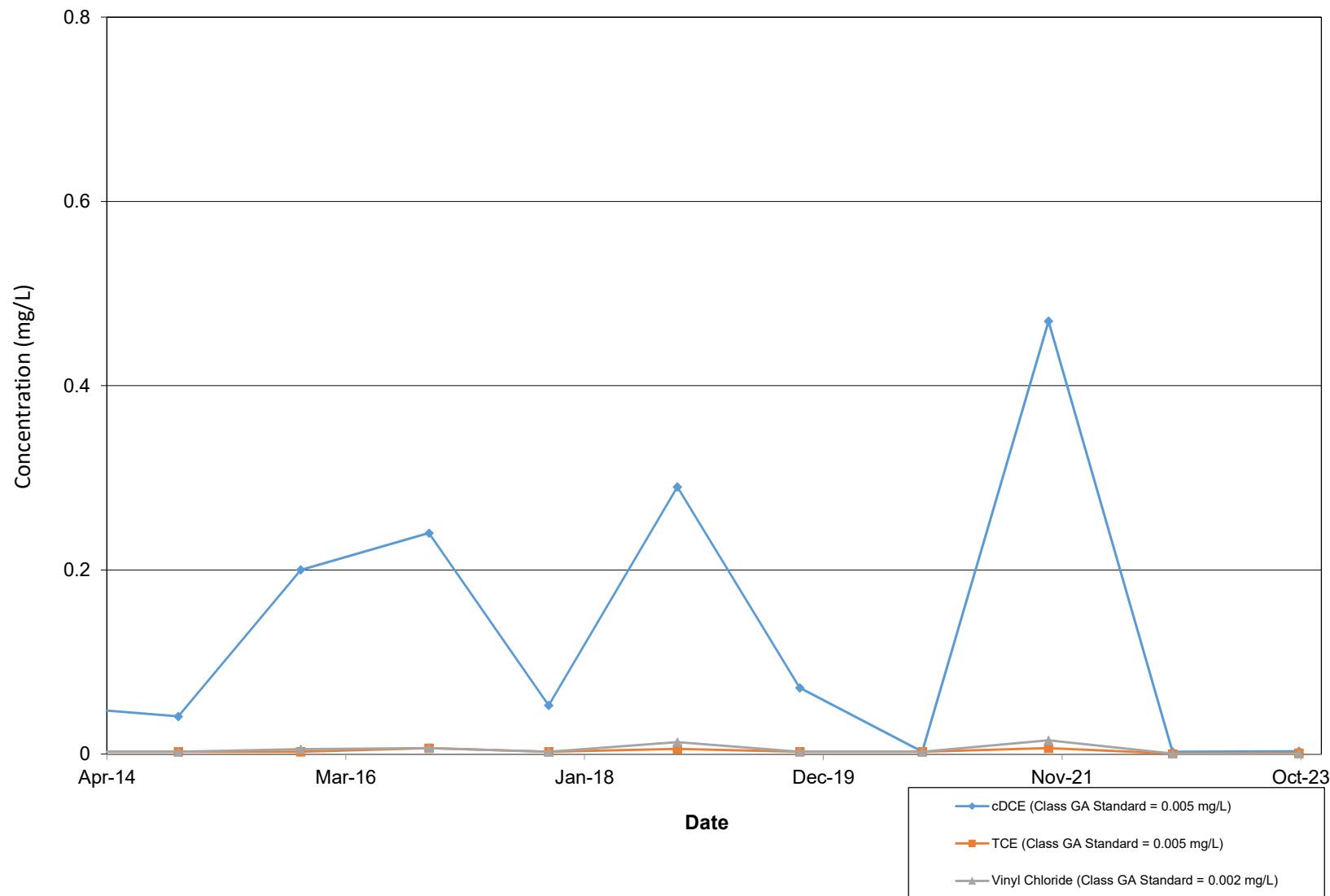
MW-17S VOCs



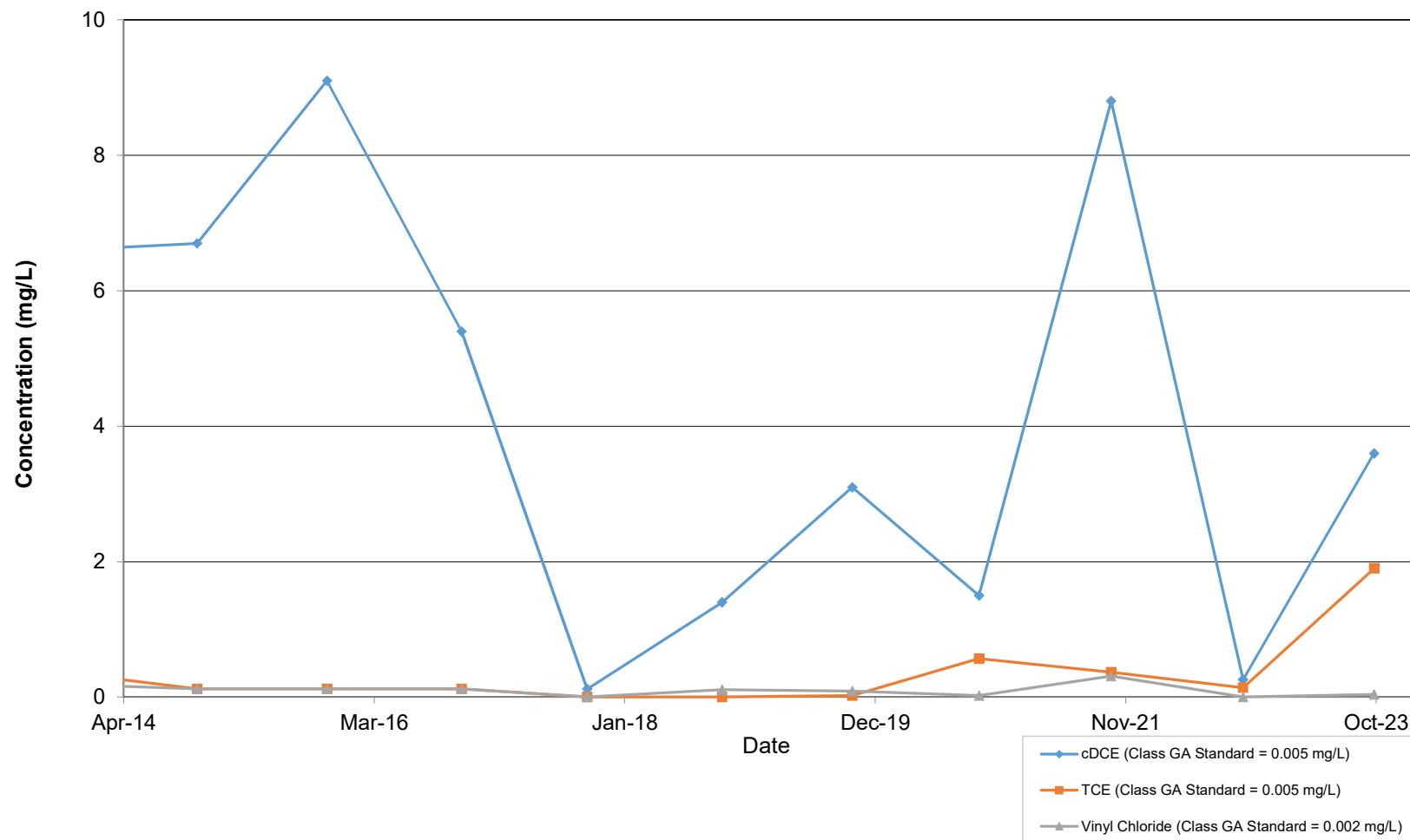
MW-18S VOCs



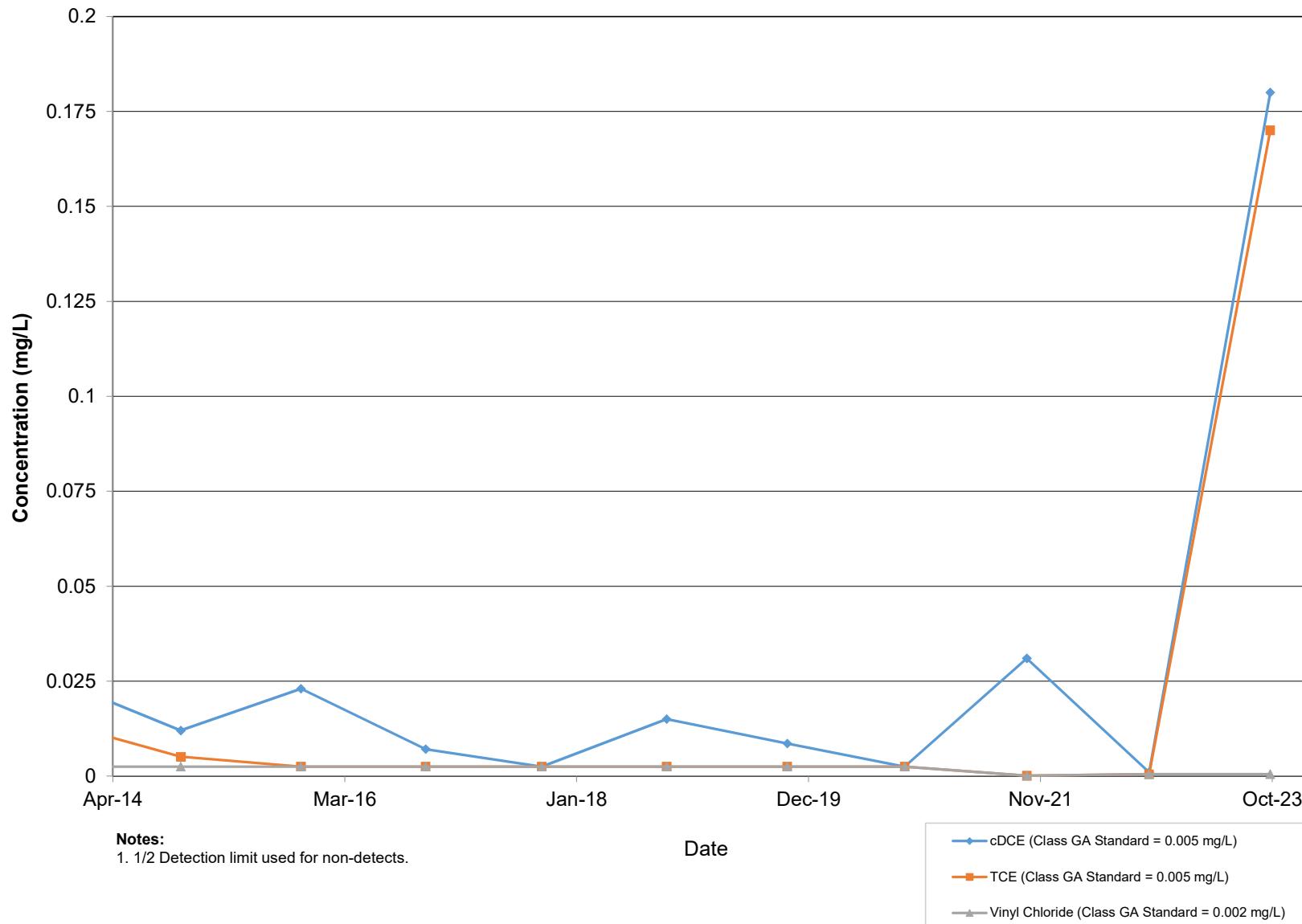
LS-1 VOCs



MH-32 VOCs



MH-33 VOCs



Appendix G

Residential Sampling Result Letters



ON-SITE GEOLOGICAL SERVICES, D.P.C.

72 Railroad Avenue
Wellsville, New York 14895

Phone: (585) 593-1824
Fax: (585) 593-7471

May 23, 2023

Ms. LaDue
3914 Snyder Road
Wellsville, New York 14895

Dear Ms. LaDue:

On behalf of the Village of Wellsville, we are pleased to provide you with the attached laboratory analytical results from the April 28, 2023 sampling of your water supply located at 3914 Snyder Road in Wellsville, New York. For the purposes of sampling identification, your water supply is designated as WAL-19. As you are aware, your water supply is equipped with a two-stage granulated activated carbon filtration unit. Sampling is conducted before the filters, between the two filters and after the filters. The results from the April 28, 2023 water samples are compared to the previous two sample results (October 20, 2022 and May 18, 2022) on the attached table. When comparing results from different samples collected over time, some variations in the data are normal. Comparison of the results from the three samples shows consistent data with expected minor variations.

The attached data table is organized as follows. The left most column includes the names of the parameters tested. Each column with a date header includes the test results for a sample collected on that date. The designations "Pre", "Inter" and "Post" indicates the sample was collected pre-filtration, between the two carbon filters or post-filtration, respectively. Test results are reported in micrograms per liter (mcg/L). A test result followed by a "U" qualifier indicates the parameter was not detected in the sample above the listed detection limit (example 0.5 U indicates that the parameter was not detected above the detection limit of 0.5 mcg/L). The two right most columns present state water quality standards as follows. The column with header "NYSDOH MCL" is the New York State Department of Health (NYSDOH) Maximum Contaminant Levels (MCLs). The "Class GA Standard" column is NYSDEC Class GA Groundwater Standards. These standards have been established by the NYSDOH and NYSDEC for drinking water and groundwater, respectively.

The April 28, 2023 sample results from your water supply are within the above referenced standards. The only detected compounds are cis-1,2-Dichlorothene and Trichloroethene in the sample collected prior to filtration.

If you have any questions or concerns regarding your water, you may contact Jim Sullivan (NYSDOH) at 518-402-7500, Taylor Monnin (NYSDEC) at 716-851-7220, the Village of Wellsville at 585-593-1850 or On-Site at 585-593-1824. Thank you for your cooperation.

Sincerely,



Jonathan Brandes, PG

Senior Geologist

cc: Dean Arnold (Village of Wellsville)

Taylor Monnin (NYSDEC)

Charlotte Bethoney (NYSDOH)

Jim Sullivan (NYSDOH)

Attachment

Table 1

WAL-19 (Last 3 Samplings)
Residential Water Supply
Analytical Results (mcg/L)
Wellsville/Andover Landfill
Wellsville, New York

Parameter	WAL-19 Pre 5/18/2022	WAL-19 Inter 5/18/2022	WAL-19 Post 5/18/2022	WAL-19 Pre 10/20/2022	WAL-19 Inter 10/20/2022	WAL-19 Post 10/20/2022	WAL-19 Pre 4/28/2023	WAL-19 Inter 4/28/2023	WAL-19 Post 4/28/2023	Class GA Standard	NYSDOH MCL
-----------	-------------------------	---------------------------	--------------------------	--------------------------	----------------------------	---------------------------	-------------------------	---------------------------	--------------------------	----------------------	---------------

Volatile Organic Compounds (VOCs)

1,1,1,2-Tetrachloroethane	0.5 U	5	5								
1,1,2,2-Tetrachloroethane	0.5 U	5	5								
1,1,2-Trichloroethane	0.5 U	1	5								
1,1-Dichloroethane	0.5 U	5	5								
1,1-Dichloroethene	0.5 U	5	5								
1,2,3-Trichloropropane	0.5 U	0.04	5								
1,2,4-Trimethylbenzene	0.5 U	5	5								
1,2-Dichlorobenzene	0.5 U	3	5								
1,2-Dichloroethane	0.5 U	0.6	5								
1,2-Dichloropropane	0.5 U	1	5								
1,3,5-Trimethylbenzene	0.5 U	5	5								
1,3-Dichlorobenzene	0.5 U	3	5								
1,3-Dichloropropane	0.5 U	5	5								
1,4-Dichlorobenzene	0.5 U	3	5								
2,2-Dichloropropane	0.5 U	5	5								
2-Chlorotoluene	0.5 U	5	5								
4-Chlorotoluene	0.5 U	5	5								
Benzene	0.5 U	1	5								
Bromobenzene	0.5 U	5	5								
Bromochloromethane	0.5 U	5	5								
Bromodichloromethane	0.5 U	5	80								
Bromoform	0.5 U	5	80								
Bromomethane	0.5 U	5	5								
Carbon tetrachloride	0.5 U	5	5								
Chlorobenzene	0.5 U	5	5								
Chloroethane	0.5 U	5	5								
Chloroform	0.5 U	7	80								
Chloromethane	0.5 U	5	5								
cis-1,2-Dichloroethene	1.9	0.5 U	0.5 U	1.6	0.5 U	0.5 U	1.7	0.5 U	0.5 U	5	5
cis-1,3-Dichloropropene	0.5 U	0.4	5								
Dibromochloromethane	0.5 U	5	80								
Dibromomethane	0.5 U	5	5								
Dichlorodifluoromethane	0.5 U	5	5								

Table 1

WAL-19 (Last 3 Samplings)
Residential Water Supply
Analytical Results (mcg/L)
Wellsville/Andover Landfill
Wellsville, New York

Parameter	WAL-19 Pre 5/18/2022	WAL-19 Inter 5/18/2022	WAL-19 Post 5/18/2022	WAL-19 Pre 10/20/2022	WAL-19 Inter 10/20/2022	WAL-19 Post 10/20/2022	WAL-19 Pre 4/28/2023	WAL-19 Inter 4/28/2023	WAL-19 Post 4/28/2023	Class GA Standard	NYSDOH MCL
-----------	-------------------------	---------------------------	--------------------------	--------------------------	----------------------------	---------------------------	-------------------------	---------------------------	--------------------------	----------------------	---------------

Volatile Organic Compounds (con't)

Dichloromethane (Methylene chloride)	0.5 U	5	5								
Ethyl benzene	0.5 U	5	5								
Isopropylbenzene	0.5 U	5	5								
m&p-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5	5
Methyl tert-butyl ether (MTBE)	0.5 U	5	10								
n-Butylbenzene	0.5 U	5	5								
n-Propylbenzene	0.5 U	5	5								
o-Xylene	0.5 U	5	5								
p-Isopropyltoluene	0.5 U	5	5								
sec-Butylbenzene	0.5 U	5	5								
Styrene	0.5 U	5	5								
tert-Butylbenzene	0.5 U	5	5								
Tetrachloroethene	0.5 U	5	5								
Toluene	0.5 U	5	5								
trans-1,2-Dichloroethene	0.5 U	5	5								
trans-1,3-Dichloropropene	0.5 U	0.4	5								
Trichloroethene	2.8	0.5 U	0.5 U	2.6	0.5 U	0.5 U	2.2	0.5 U	0.5 U	5	5
Trichlorofluoromethane	0.5 U	5	5								
Vinyl chloride	0.5 U	2	2								
1,2,3-Trichlorobenzene	0.5 U	5	5								
1,2,4-Trichlorobenzene	0.5 U	5	5								
Hexachlorobutadiene	0.5 U	0.5	5								
Naphthalene	0.5 U	5	50								

Notes:

mcg/L - micrograms per liter (parts per billion)

NYSDOH MCL - New York State Department of Health Maximum Contaminant Level

Class GA Standard - New York State DEC Class GA Groundwater Standards

Concentrations do not exceed NYSDOH MCL or Class GA Standards

U - Compound not detected at specified detection limit

Pre - Indicates sample collected pre-filtration

Inter - Indicates sample collected between first and second carbon filter

Post - Indicated sample collect post-filtration



ON-SITE GEOLOGICAL SERVICES, D.P.C.

72 Railroad Avenue
Wellsville, New York 14895

Phone: (585) 593-1824
Fax: (585) 593-7471

February 27, 2024

Mr. John Carl
3987 Snyder Rd
Wellsville, NY 14895

Dear Mr. Carl:

On behalf of the Village of Wellsville, we are pleased to provide you with the attached laboratory analytical results from the October 24, 2023 sampling of your water supply located on Snyder Road in Wellsville, New York. For the purposes of sampling identification, your water supply is designated as WAL-1. The results from the October 24, 2023 water sample are compared to the previous two sample results (October 21, 2022 and October 22, 2021) on the attached table. When comparing results from different samples collected over time, some variations in the data are normal. Comparison of the results from the three samples shows consistent data with expected minor variations.

The attached data table is organized as follows. The left most column includes the names of the parameters tested. Each column with a date header includes the test results for the sample collected on that date. Test results are reported in micrograms per liter (mcg/L). A test result followed by a "U" qualifier indicates the parameter was not detected in the sample above the listed detection limit (example 10 U indicates that the parameter was not detected above the detection limit of 10 mcg/L). The two right most columns present state water quality standards as follows. The column with header "NYSDOH MCL" is the New York State Department of Health (NYSDOH) Maximum Contaminant Levels (MCLs). The "Class GA Standard" column is NYSDEC Class GA Groundwater Standards. These standards have been established by the NYSDOH and NYSDEC for drinking water and groundwater, respectively.

The October 24, 2023 sample results are within New York State drinking water and groundwater standards.

If you have any questions or concerns regarding your water, you may contact Jim Sullivan (NYSDOH) at 518-402-7500, Taylor Monnin (NYSDEC) at 716-851-7220, the Village of Wellsville at 585-593-1850 or On-Site at 585-593-1824. Thank you for your cooperation.

Sincerely,



Jonathan Brandes, P.G.
Senior Geologist

cc: Dean Arnold (Village of Wellsville)
Taylor Monnin (NYSDEC)
Charlotte Bethoney (NYSDOH)
Jim Sullivan (NYSDOH)

Attachment

Table 1

WAL-1 (Last 3 Samplings)
Residential Water Supply Analytical
Results (mcg/L)
Wellsville/Andover Landfill
Wellsville, New York

Parameter	WAL1-1021 10/22/2021	WAL1-1022 10/21/2022	WAL1-1023 10/24/2023	Class GA Standard	NYSDOH MCL
-----------	-------------------------	-------------------------	-------------------------	----------------------	---------------

Inorganic Compounds

Arsenic	10 U	2.5	2.4	25	10
Barium	70	62.7	66.3	1000	2000
Cadmium	5 U	1 U	1 U	5	5
Calcium	41600	42300	41900		
Chromium	10 U	10 U	10 U	50	100
Copper	20 U	1.9	1.2	200	1300
Iron	100 U	100 U	100 U	300	300
Lead	50 U	1 U	1 U	25	15
Magnesium	13700	14000	13700		
Manganese	84	99	107	300	300
Nickel	40 U	1 U	1 U	100	100
Potassium	2000 U	2000 U	1500 J		
Selenium	10 U	2 U	2 U	10	50
Sodium	8700	9400	9000	20000	
Zinc	22	37	11 J		5000

Volatile Organic Compounds

1,1,1,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	5	5
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	5	5
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	1	5
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	5	5
1,1-Dichloroethene	0.5 U	0.5 U	0.5 U	5	5
1,2,3-Trichloropropane	0.5 U	0.5 U	0.5 U	0.04	5
1,2,4-Trimethylbenzene	0.5 U	0.5 U	0.5 U	5	5
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	3	5
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.6	5
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	1	5
1,3,5-Trimethylbenzene	0.5 U	0.5 U	0.5 U	5	5
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	3	5
1,3-Dichloropropane	0.5 U	0.5 U	0.5 U	5	5
1,4-Dichlorobenzene	0.5 U	0.5 U	0.5 U	3	5
2,2-Dichloropropane	0.5 U	0.5 U	0.5 U	5	5
2-Chlorotoluene	0.5 U	0.5 U	0.5 U	5	5
4-Chlorotoluene	0.5 U	0.5 U	0.5 U	5	5
Benzene	0.5 U	0.5 U	0.5 U	1	5
Bromobenzene	0.5 U	0.5 U	0.5 U	5	5
Bromoform	0.5 U	0.5 U	0.5 U	5	80
Bromomethane	0.5 U	0.5 U	0.5 U	5	80

Table 1

WAL-1 (Last 3 Samplings)
Residential Water Supply Analytical
Results (mcg/L)
Wellsville/Andover Landfill
Wellsville, New York

Parameter	WAL1-1021 10/22/2021	WAL1-1022 10/21/2022	WAL1-1023 10/24/2023	Class GA Standard	NYSDOH MCL
-----------	-------------------------	-------------------------	-------------------------	----------------------	---------------

Volatile Organic Compounds (con't)

Carbon tetrachloride	0.5 U	0.5 U	0.5 U	5	5
Chlorobenzene	0.5 U	0.5 U	0.5 U	5	5
Chloroethane	0.5 U		0.5 U	5	5
Chloroform	0.5 U	0.5 U	0.5 U	7	80
Chloromethane	0.5 U	0.5 U	0.5 U	5	5
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	5	5
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.4	5
Dibromochloromethane	0.5 U	0.5 U	0.5 U	5	80
Dibromomethane	0.5 U	0.5 U	0.5 U	5	5
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	5	5
Dichloromethane (Methylene chloride)	0.5 U	0.5 U	0.5 U	5	5
Ethyl benzene	0.5 U	0.5 U	0.5 U	5	5
Isopropylbenzene	0.5 U	0.5 U	0.5 U	5	5
m&p-Xylene	1 U	1 U	1 U	5	5
Methyl tert-butyl ether (MTBE)	0.5 U	0.5 U	0.5 U	5	10
n-Butylbenzene	0.5 U	0.5 U	0.5 U	5	5
n-Propylbenzene	0.5 U	0.5 U	0.5 U	5	5
o-Xylene	0.5 U	0.5 U	0.5 U	5	5
p-Isopropyltoluene	0.5 U	0.5 U	0.5 U	5	5
sec-Butylbenzene	0.5 U	0.5 U	0.5 U	5	5
Styrene	0.5 U	0.5 U	0.5 U	5	5
tert-Butylbenzene	0.5 U	0.5 U	0.5 U	5	5
Tetrachloroethene	0.5 U	0.5 U	0.5 U	5	5
Toluene	0.5 U	0.5 U	0.5 U	5	5
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	5	5
trans-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.4	5
Trichloroethene	0.5 U	0.5 U	0.5 U	5	5
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	5	5
Vinyl chloride	0.5 U	0.5 U	0.5 U	2	2
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	5	5
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	5	5
Hexachlorobutadiene	0.5 U	0.5 U	0.5 U	0.5	5
Naphthalene	0.5 U	0.5 U	0.5 U	5	50

Notes:

mcg/L - micrograms per liter (parts per billion)

NYSDOH MCL - New York State Department of Health Maximum Contaminant Level

Class GA Standard - New York State DEC Class GA Groundwater Standards

Concentrations do not exceed NYSDOH MCL or Class GA Standards

U - Compound not detected at specified detection limit



ON-SITE GEOLOGICAL SERVICES, D.P.C.

72 Railroad Avenue
Wellsville, New York 14895

Phone: (585) 593-1824
Fax: (585) 593-7471

February 27, 2024

Mr. Phil Rosini
72 Havenshire Rd
Rochester, NY 14625

Dear Mr. Rosini:

On behalf of the Village of Wellsville, we are pleased to provide you with the attached laboratory analytical results for the October 23, 2023 sampling of your camp water supply located on Snyder Road in Wellsville, New York. For the purposes of sampling identification, your water supply is designated as WAL-2. The results from the October 23, 2023 water sample are compared to the previous two sample results (November 21, 2022 and October 23, 2021) on the attached table. When comparing results from different samples collected over time, some variations in the data are normal. Comparison of the results from the three samples shows consistent data with expected minor variations.

The attached data table is organized as follows. The left most column includes the names of the parameters tested. Each column with a date header includes the test results for the sample collected on that date. Test results are reported in micrograms per liter (mcg/L). A test result followed by a "U" qualifier indicates the parameter was not detected in the sample above the listed detection limit (example 10 U indicates that the parameter was not detected above the detection limit of 10 mcg/L). The two right most columns present state water quality standards as follows. The column with header "NYSDOH MCL" is the New York State Department of Health (NYSDOH) Maximum Contaminant Levels (MCLs). The "Class GA Standard" column is NYSDEC Class GA Groundwater Standards. These standards have been established by the NYSDOH and NYSDEC for drinking water and groundwater, respectively. Any sample result exceeding either or both standard is printed in **BOLD** on the attached table.

The October 23, 2023 results show Iron at 620 mcg/L and Manganese at 784 mcg/L are above both NYSDOH MCL and Class GA Standards. Sodium was also detected at 47400 mcg/L, which exceeds the Class GA Standard. These are naturally occurring inorganic compounds and sample results are consistent with historical samplings and ambient groundwater quality.

If you have any questions or concerns regarding your water, you may contact Jim Sullivan (NYSDOH) at 518-402-7500, Taylor Monnin (NYSDEC) at 716-851-7220, the Village of Wellsville at 585-593-1850 or On-Site at 585-593-1824. Thank you for your cooperation.

Sincerely,



Jonathan Brandes, PG
Senior Geologist

cc: Dean Arnold (Village of Wellsville)

Taylor Monnin (NYSDEC)

Charlotte Bethoney (NYSDOH)

Jim Sullivan (NYSDOH)

Attachment

Table 1

WAL-2 (Last 3 Samplings)
Residential Water Supply
Analytical Results (mcg/L)
Wellsville/Andover Landfill
Wellsville, New York

Parameter	WAL2-1021 10/23/2021	WAL2-1122 11/21/2022	WAL2-1023 10/23/2023	Class GA Standard	NYSDOH MCL
-----------	-------------------------	-------------------------	-------------------------	----------------------	---------------

Inorganic Compounds

Arsenic	10 U	1 U	10 U	25	10
Barium	33	32	32	1000	2000
Cadmium	5 U	1 U	5 U	5	5
Calcium	44800	41200	47200		
Chromium	10 U	10 U	10 U	50	100
Copper	20 U	2.8	20 U	200	1300
Iron	530	480	620	300	300
Lead	50 U	1 U	5 U	25	15
Magnesium	14300	13300	16000		
Manganese	669	569	784	300	300
Nickel	40 U	1 U	40 U	100	100
Potassium	2000 U	2000 U	2500		
Selenium	10 U	2 U	10 U	10	50
Sodium	53500	56100	47400	20000	
Zinc	20 U	20 U	7 J		5000

Notes:

mcg/L - micrograms per liter (parts per billion)

NYSDOH MCL - New York State Department of Health Maximum Contaminant Level

Class GA Standard - New York State DEC Class GA Groundwater Standards

Concentrations in **bold** exceed either or both the NYSDOH MCL and Class GA Standards

U - Compound not detected at specified detection limit

J - Estimated Value



ON-SITE GEOLOGICAL SERVICES, D.P.C.

72 Railroad Avenue
Wellsville, New York 14895

Phone: (585) 593-1824
Fax: (585) 593-7471

February 27, 2024

Ms. LaDue
3914 Snyder Road
Wellsville, New York 14895

Dear Ms. LaDue:

On behalf of the Village of Wellsville, we are pleased to provide you with the attached laboratory analytical results from the October 24, 2023 sampling of your water supply located at 3914 Snyder Road in Wellsville, New York. For the purposes of sampling identification, your water supply is designated as WAL-19. As you are aware, your water supply is equipped with a two-stage granulated activated carbon filtration unit. Sampling is conducted before the filters, between the two filters and after the filters. The results from the October 24, 2023 water samples are compared to the previous two sample results (April 28, 2023 and October 20, 2022) on the attached table. When comparing results from different samples collected over time, some variations in the data are normal. Comparison of the results from the three samples shows consistent data with expected minor variations.

The attached data table is organized as follows. The left most column includes the names of the parameters tested. Each column with a date header includes the test results for a sample collected on that date. The designations "Pre", "Inter" and "Post" indicates the sample was collected pre-filtration, between the two carbon filters or post-filtration, respectively. Test results are reported in micrograms per liter (mcg/L). A test result followed by a "U" qualifier indicates the parameter was not detected in the sample above the listed detection limit (example 0.5 U indicates that the parameter was not detected above the detection limit of 0.5 mcg/L). The two right most columns present state water quality standards as follows. The column with header "NYSDOH MCL" is the New York State Department of Health (NYSDOH) Maximum Contaminant Levels (MCLs). The "Class GA Standard" column is NYSDEC Class GA Groundwater Standards. These standards have been established by the NYSDOH and NYSDEC for drinking water and groundwater, respectively.

The October 24, 2023 sample results from your water supply are within the above referenced standards. The only detected compounds are cis-1,2-Dichlorothene and Trichloroethene in the sample collected prior to filtration.

If you have any questions or concerns regarding your water, you may contact Jim Sullivan (NYSDOH) at 518-402-7500, Taylor Monnin (NYSDEC) at 716-851-7220, the Village of Wellsville at 585-593-1850 or On-Site at 585-593-1824. Thank you for your cooperation.

Sincerely,



Jonathan Brandes, PG

Senior Geologist

cc: Dean Arnold (Village of Wellsville)

Taylor Monnin (NYSDEC)

Charlotte Bethoney (NYSDOH)

Jim Sullivan (NYSDOH)

Attachment

Table 1

WAL-19 (Last 3 Samplings)
Residential Water Supply
Analytical Results (mcg/L)
Wellsville/Andover Landfill
Wellsville, New York

Parameter	WAL19Pre 10/20/2022	WAL19Inter 10/20/2022	WAL19Post 10/20/2022	WAL19Pre 4/28/2023	WAL19Inter 4/28/2023	WAL19Post 4/28/2023	WAL19Pre 10/24/2023	WAL19Inter 10/24/2023	WAL19Post 10/24/2023	Class GA Standard	NYSDOH MCL
-----------	------------------------	--------------------------	-------------------------	-----------------------	-------------------------	------------------------	------------------------	--------------------------	-------------------------	----------------------	---------------

Volatile Organic Compounds

1,1,1,2-Tetrachloroethane	0.5 U	5	5								
1,1,2,2-Tetrachloroethane	0.5 U	5	5								
1,1,2-Trichloroethane	0.5 U	1	5								
1,1-Dichloroethane	0.5 U	5	5								
1,1-Dichloroethene	0.5 U	5	5								
1,2,3-Trichloropropane	0.5 U	0.04	5								
1,2,4-Trimethylbenzene	0.5 U	5	5								
1,2-Dichlorobenzene	0.5 U	3	5								
1,2-Dichloroethane	0.5 U	0.6	5								
1,2-Dichloropropane	0.5 U	1	5								
1,3,5-Trimethylbenzene	0.5 U	5	5								
1,3-Dichlorobenzene	0.5 U	3	5								
1,3-Dichloropropane	0.5 U	5	5								
1,4-Dichlorobenzene	0.5 U	3	5								
2,2-Dichloropropane	0.5 U	5	5								
2-Chlorotoluene	0.5 U	5	5								
4-Chlorotoluene	0.5 U	5	5								
Benzene	0.5 U	1	5								
Bromobenzene	0.5 U	5	5								
Bromo(chloromethane)	0.5 U	5	5								
Bromodichloromethane	0.5 U	5	80								
Bromoform	0.5 U	5	80								
Bromomethane	0.5 U	5	5								
Carbon tetrachloride	0.5 U	5	5								
Chlorobenzene	0.5 U	5	5								
Chloroethane	0.5 U	5	5								
Chloroform	0.5 U	7	80								
Chloromethane	0.5 U	5	5								
cis-1,2-Dichloroethene	1.6	0.5 U	0.5 U	1.7	0.5 U	0.5 U	1.7	0.5 U	0.5 U	5	5
cis-1,3-Dichloropropene	0.5 U	0.4	5								
Dibromochloromethane	0.5 U	5	80								
Dibromomethane	0.5 U	5	5								
Dichlorodifluoromethane	0.5 U	5	5								

Table 1

WAL-19 (Last 3 Samplings)
Residential Water Supply
Analytical Results (mcg/L)
Wellsville/Andover Landfill
Wellsville, New York

Parameter	WAL19Pre 10/20/2022	WAL19Inter 10/20/2022	WAL19Post 10/20/2022	WAL19Pre 4/28/2023	WAL19Inter 4/28/2023	WAL19Post 4/28/2023	WAL19Pre 10/24/2023	WAL19Inter 10/24/2023	WAL19Post 10/24/2023	Class GA Standard	NYSDOH MCL
-----------	------------------------	--------------------------	-------------------------	-----------------------	-------------------------	------------------------	------------------------	--------------------------	-------------------------	----------------------	---------------

Volatile Organic Compounds (con't)

Dichloromethane (Methylene chloride)	0.5 U	5	5								
Ethyl benzene	0.5 U	5	5								
Isopropylbenzene	0.5 U	5	5								
m&p-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5	5
Methyl tert-butyl ether (MTBE)	0.5 U	5	10								
n-Butylbenzene	0.5 U	5	5								
n-Propylbenzene	0.5 U	5	5								
o-Xylene	0.5 U	5	5								
p-Isopropyltoluene	0.5 U	5	5								
sec-Butylbenzene	0.5 U	5	5								
Styrene	0.5 U	5	5								
tert-Butylbenzene	0.5 U	5	5								
Tetrachloroethene	0.5 U	5	5								
Toluene	0.5 U	5	5								
trans-1,2-Dichloroethene	0.5 U	5	5								
trans-1,3-Dichloropropene	0.5 U	0.4	5								
Trichloroethene	2.6	0.5 U	0.5 U	2.2	0.5 U	0.5 U	2.2	0.5 U	0.5 U	5	5
Trichlorofluoromethane	0.5 U	5	5								
Vinyl chloride	0.5 U	2	2								
1,2,3-Trichlorobenzene	0.5 U	5	5								
1,2,4-Trichlorobenzene	0.5 U	5	5								
Hexachlorobutadiene	0.5 U	0.5	5								
Naphthalene	0.5 U	5	50								

Notes:

mcg/L - micrograms per liter (parts per billion)

NYSDOH MCL - New York State Department of Health Maximum Contaminant Level

Class GA Standard - New York State DEC Class GA Groundwater Standards

Concentrations do not exceed NYSDOH MCL or Class GA Standards

U - Compound not detected at specified detection limit

Pre - Indicates sample collected pre-filtration

Inter - Indicates sample collected between first and second carbon filter

Post - Indicated sample collect post-filtration