

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

PERIODIC REVIEW REPORT

February 15, 2021 to February 15, 2022

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

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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, 2021 to February 15, 2022 and is being submitted as part of the New York State Department of Environmental Conservation (NYSDEC) Periodic Review Report (PRR) process. The PRR certification is included as Appendix A of this report.

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 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.

1.3 Summary of 2021 Monitoring, Inspection and Maintenance Activities

This section provides an overview of the monitoring, inspection and maintenance activities completed in 2021.

The required 2021 monitoring events were completed by On-Site Geological Services, D.P.C. (On-Site) in accordance with the current O&M Plan. Semi-annual groundwater and residential water supply monitoring events were conducted in April and October/November 2021. The fall 2021 groundwater monitoring event included Per-and Polyfluoroalkyl Substances (PFAS) sampling and analysis of select monitoring wells as directed by NYSDEC. Field sampling forms are included in Appendix C. Laboratory analysis was conducted by ALS Environmental (ALS), located in Rochester, New York. The 2021 monitoring events show consistent results as compared to historic monitoring indicating the site remedy is operating as designed. Details of these monitoring activities are provided in Section 3 through 7 and the 2021 laboratory analytical reports are included in Appendix F.

Quarterly inspections are conducted and documented on Inspection and Maintenance Checklist by Village of Wellsville personnel (Appendix D). 2021 Quarterly inspections resulted with no unresolved problems. 2021 maintenance activities included the following:

- annual mowing of landfill cap vegetation;
- leachate management and disposal;
- leachate sump pump replacement;
- monitoring well protective casing painting; 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 a May 19, 2021 letter from the NYSDEC included in Appendix B, which took effect starting fall 2021. These updates include conducting annual groundwater sampling each fall and removing monitoring wells MW-3S, MW-15S and MW-16S from the monitoring program.

Table 2-1 presents the currently 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. 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 7.
- 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

The inspection and maintenance requirements for the site 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

Two groundwater monitoring events were completed during 2021. The spring event includes five monitoring wells for VOC analysis, while the fall event is a Site wide monitoring event which includes 13 monitoring wells for metals and VOCs analysis. Table 3-1 lists the 2021 Class GA Standard, NYSDOH Maximum Contaminant Level (MCL) and NYSDEC Class GA Guidance Value exceedances by individual monitoring well. Table 3-2 is a tabular listing of groundwater analytical results from the two sampling events completed in 2021. 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 2021 are presented in Appendix E. Each monitoring well scheduled for sampling in 2021 was sampled as these wells did not exhibit insufficient groundwater during the 2021 monitoring events.

3.1 Spring Monitoring Event Results

Spring 2021 groundwater sampling was conducted between April 19 and 20, 2021 following the monitoring schedule prior to the May 19, 2021 monitoring requirements revisions. Monitoring wells MW-4D, MW-5D, MW-5S, MW-11S and MW-16S were sampled and analyzed for VOCs.

April 2021 groundwater results are typical of historical data with several monitoring wells exceeding Class GA Standards for cis-1,2-Dichloroethene (cDCE), Trichloroethene (TCE)

and Vinyl chloride. Monitoring well MW-16S is the furthest downgradient well. April 2021 MW-16S VOC concentrations are reported as non-detect. April 2021 groundwater results did not exceed NYSDEC Class GA Guidance Values.

3.2 Fall Monitoring Event Results

Groundwater samples were collected from the 13 monitoring wells scheduled for sampling during the fall 2021 monitoring event. A discussion of the analytical results is provided below.

Inorganic Compounds (metals)

Groundwater samples were analyzed for fifteen metals during the fall 2021 sampling event (Table 2-2). Iron, Manganese and Sodium exceeded Class GA standards in 2021 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 E 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-3S, MW-4D, MW-5D, MW-5S, MW-11S, MW-16S, 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. Additionally Magnesium is above NYSDEC Class GA Guidance Value at CW-3B, CW-4A, MW-17S and MW-3D. 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 both the spring and fall 2021 sampling events were analyzed for VOCs, which include 36 compounds (Table 2-2). Consistent with historic monitoring data, 2021 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 the Class GA Standards. Therefore concentration time trend plots for these three VOCs have been created. The plots include data from 2012 through 2021 and are included in Appendix E 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 well CW-3A TCE and cDCE concentrations appear to be generally stable or slightly decreasing, while Vinyl chloride has been non-detect during this 10 year monitoring period.
- TCE at downgradient well CW-3B has varied between 0.18 mg/L and 0.47 mg/L and has been primarily stable since 2013. cDCE concentrations have been stable at approximately 0.1 mg/L and Vinyl chloride has been non-detect.
- Upgradient well MW-3D has shown cDCE generally stable between approximately 0.005 mg/L and 0.013 mg/L over this 10 year monitoring period. TCE and Vinyl chloride are non-detect.
- Cross-gradient well MW-4D has shown cDCE and Vinyl chloride on a decreasing trend, while TCE has been non-detect.
- Cross-gradient 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 0.089 mg/L and 0.98 mg/L with apparent seasonal fluctuations. NYSDEC has requested 1,1-Dichloroethene and Trans-1,2-Dichloroethene also be included on the MW-5D plot. The graph shows these two parameters at or near detection limits the last 10 years.
- Cross-gradient well MW-5S exhibits generally stable cDCE, TCE and Vinyl chloride since 2012.
- Downgradient well MW-11S has shown Vinyl chloride at near detection limits and cDCE has been stable at approximately 0.3 mg/L. TCE appears generally stable between 2.1 mg/L and 3.6 mg/L.
- Cross-gradient well MW-17S shows stable cDCE concentrations with a slight decreasing trend starting in 2013. TCE and Vinyl chloride concentrations have been at or near detection limits.
- Cross-gradient well MW-18S has generally exhibited cDCE and TCE concentration at or near detection limits from 2012 to 2021. Vinyl chloride has not been detected during the last 10 years.

PFAS

As required by NYSDEC letter dated May 19, 2021, one additional sampling round of site monitoring wells CW-3A, CW-3B, CW-4A, CW-4B, MW-5S, MW-5D, MW-17S and MW-17D for Per-and Polyfluoroalkyl Substances (PFAS) is required to further characterize the site. This sampling was conducted between October 18 and 19, 2021. The laboratory results of this sampling are presented in Table 3-2 and the laboratory analytical report is included in Appendix F. The table below provides the detected PFAS compounds in ng/L (nanograms per liter or parts per trillion).

Parameter ¹ (ng/L)	CW-3A 10/18/2021	CW-3B 10/18/2021	CW-4A 10/18/2021	CW-4B 10/18/2021	MW-17D 10/19/2021	MW-17S 10/19/2021	MW-5D 10/19/2021	MW-5S 10/19/2021
FtS 6:2						1.2 J	0.93 J	
PFBS		2.2 J	1.4 J	1.7 J		2 J		0.47 J
PFDA					1.8 J			
PFOS	1.3 J	11	6.5	6.2		4.2		2.3
PFOA		8.5	7.2 J	8.9		27		
PFTTrDA			0.74 J					
PFUnA							0.84 J	

¹ see Table 3-2 for full parameter name

As observed in the table above there is one or more PFAS identified in each of the eight groundwater samples. The majority 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 two compounds with regulatory standards are PFOS and PFOA. These two PFAS each have a NYSDOH MCL of 10 ng/L. Results above MCL include CW-3B PFOS at 11 ng/L and MW-17S PFOA at 27 ng/L. Additionally PFOS and PFOA groundwater concentrations at CW-3B, CW-4A, CW-4B and MW-17S are greater than NYSDEC guidance values (Table 3-1).

The October 2021 sampling and analysis, along with the previous PFAS sampling conducted in 2018, adequately characterizes PFAS at the site and illustrate only trace-level concentrations are present in groundwater immediately adjacent to the landfill. Additionally, October 2020 Emerging Contaminant sampling of Site adjacent, NYSDOH designated, residential water supplies indicates non-detect PFAS results.

3.3 **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 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 F. Additionally the fall 2021 laboratory results were validated by Environmental Data Usability with the Data Usability Summary Report (DUSR) included as Appendix G. Data validation

resulted with 100% of the data usable with certain results flagged estimated. Refer to Appendix G for data validation details. The results presented in this report reflect data validation and should be considered technically correct and usable.

Field Duplicate Samples

Field duplicate samples were collected during both the spring and fall sampling events. A field duplicated sample (DUP1-0421) was collected from monitoring well MW-5D on April 20, 2021 while a field duplicate (DUP1-1021) was collected at MW-5S on October 19, 2021. Results from the MW-5D and MW-5S samples compare favorably with the associated duplicate samples, 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 (EB1-1021). The field equipment blank sample was collected by pumping laboratory provided deionized water through the sampling pump and tubing. Sample EB1-1021 was collected from the bladder pump and tubing used to sample monitoring wells CW-3A, CW-3B, CW-4A, CW-4B, MW-5D, MW-5S, MW-17D and MW-17S. 2021 equipment blank results show mainly non-detect results, indicative of proper sampling equipment cleaning. Equipment blank results are provided in Table 3-4.

3.4 Potentiometric Mapping

Prior to monitoring well purging and groundwater sample collection, static groundwater levels were measured at monitoring wells and piezometers. The spring and fall 2021 groundwater elevations are utilized to develop separate potentiometric maps for wells screened in overburden and wells screened in bedrock. The potentiometric maps for 2021 are included as Figures 3 through 6. 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 2021 potentiometric maps are consistent with historic 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 2021 SWS-1 was sampled on April 20, 2021. Sediment was not observed within the surface water ditch in 2021 and therefore

not sampled. Surface water results from the last three samplings are presented in Table 4-1. The 2021 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 2021.

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 2021 Class GA and MCL exceedances at LS-1, MH-32 and MH-33. Table 5-2 is a tabular listing of the last three analytical results. 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 2021. Metals detected in 2021 include Barium, Calcium, Iron, Magnesium, Manganese, Potassium and Sodium. 2021 Metals results are consistent with historic data and show Iron and Manganese exceeding Class GA Standard. A concentration time trend plot for Iron, Manganese and Sodium is included in Appendix E. With the exception of an Iron spike observed in 2012, this plot illustrates LS-1 Iron, Manganese and Sodium concentrations generally stable the last 10 years.

VOCs

VOCs were analyzed in one leachate sample during 2021 with results consistent with historic data. VOCs detected in 2021 include cDCE and Vinyl chloride, which also exceed Class GA Standards. A concentration time trend plot for cDCE, TCE and Vinyl Chloride is included in Appendix E. This plot shows a cDCE ranging between 0.077 mg/L and 0.47 mg/L with TCE and Vinyl chloride at or near detect limits the last 10 years.

5.2 Manhole Monitoring Results

Metals

Metals were analyzed in two manhole water samples in fall 2021. Metals detected in 2021 at MH-32 and MH-33 include Arsenic, Barium, Calcium, Iron, Magnesium, Manganese, and Sodium. 2021 Manhole Metals results are consistent with historic data and show Class GA exceedances for Iron and Manganese. Concentration time trend plots for Iron,

Manganese and Sodium have been created as presented in Appendix E. 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 2021. MH-32 shows detections of cDCE (8.8 D mg/L), Dichloromethane (0.51 mg/L), Ethyl benzene (0.072 mg/L), Toluene (0.15 mg/L), TCE (0.37 mg/L) and Vinyl chloride (0.31 mg/L), which are generally typical for this location. With the exception of cDCE at 0.031 mg/L, MH-33 2021 VOC results are non-detect. Concentration time trend plots for cDCE, TCE and Vinyl chloride are included in Appendix E. MH-32 cDCE concentrations have fluctuated from near detection limit to 9.1 mg/L while TCE and Vinyl chloride have been at or near detection limit the last 10 years. MH-33 has shown cDCE, TCE and Vinyl chloride at or near detection limits the last 10 years.

General Chemistry

Manholes MH-32 and MH-33 were sampled for Nitrate Nitrogen and Total Dissolved Solids (TDS) in 2021. Nitrate Nitrogen results are non-detect. MH-32 and MH-33 2021 TDS results are 258 mg/L and 216 mg/L, respectively. These TDS results are below Class GA and Class C Standards of 500 mg/L.

6.0 AIR QUALITY MONITORING RESULTS

Air monitoring at the landfill perimeter, gas vents and LCS locations was conducted during the fall 2021 event utilizing a QRAE Mini RAE 3000 Photo Ionization Detector (PID) for VOCs and a QRAE3 four-gas meter for Oxygen (O₂) and Lower Explosive Limit (LEL). Please see Figure 7 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 59.8 ppm. Oxygen levels ranged from 3.0% to 20.9%. 2021 LEL readings range from 0% to 100%. 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 2021. Residential location WAL-19 was sampled in the spring and fall 2021 while residential locations WAL-1 and WAL-2 were

sampled in fall 2021. WAL-5 was not sampled as it remains vacant. Table 7-1 presents an overview of 2021 residential contact information. Table 7-2 lists 2021 residential water supply detected parameters. Table 7-3 is a tabular listing of 2021 residential water analytical results. Figure 2 presents the approximate sampling locations. A discussion of analytical results is provided below.

Metals

WAL-1 2021 metals results are below NYSDOH MCLs and Class GA Standards. WAL-2 shows Iron at 0.53 mg/L and Manganese at 0.669 mg/L, exceeding the NYSDOH MCLs and Class GA Standards. Additionally, Sodium at 53.5 mg/L exceeds Class GA Standard. The WAL-2 2021 metals results are consistent with historic results and ambient groundwater quality. The Class GA 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 2021 as typical. VOC analysis is not required at WAL-2. WAL-19 was sampled for VOC before filters, between filters, and after filters on April 27, 2021 and again on November 16, 2021. WAL-19 results are typical of historic data with detected compounds cDCE and TCE before filters at concentrations below Class GA standards and NYSDOH MCLs and non-detect after filtration. Additionally Methylene chloride was reported at trace levels below the Class GA Standard and NYSDOH MCL in each of the three April 27, 2021 WAL-19 samples. Methylene chloride is a common laboratory contaminant and the detections of this compound are likely laboratory artifacts.

8.0 INSPECTIONS AND MAINTENANCE ACTIVITIES

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 27 and December 30, 2021. No unresolved problems were noted on the inspection forms. The 2021 completed inspection forms are included in Appendix D. A description of maintenance activities performed by Village of Wellsville during 2021 is provided below.

- Summer 2021: monitoring well clusters MW-6, MW-10, MW-12, MW-13, MW-14, MW-15 and MW-16 protective casings were cleaned, painted and high visibility markers added. Appendix D includes a map depicting the well locations and photographs of the painted wells.
- The landfill cap vegetative cover was mowed in October 2021.

- The Village of Wellsville continues to contract maintenance of the water treatment unit at WAL-19 residence.
- Fall 2021: three walk bridges from Synder Road to monitoring well clusters MW-17 and MW-18 and the leachate sump were replaced.
- Fall 2021: one of two leachate sump pumps was replaced.
- Approximately 2,128,000 gallons of leachate was hauled from the Site to the Village of Wellsville POTW during 2021. The table below lists the total leachate gallons by year for the previous six years.

Year/Gallons	2016	2017	2018	2019	2020	2021
	1,777,155	2,521,185	2,891,240	2,480,000	1,990,000	2,128,000

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. NYSDEC requested Site monitoring well PFAS sampling and analysis was completed in October 2021. The October 2021 PFAS sampling complements previous PFAS monitoring and adequately characterizes the Site. Twenty-four years of post-remedial action 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 2022 include:

- annual mowing of landfill cap vegetation;
- leachate management and disposal;
- replace leachate sump pump two (pump one replaced 2021);
- 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

Groundwater⁸

CW-3A	Annual - Fall	Field, VOCs, Metals
CW-3B	Annual - Fall	Field, VOCs, Metals
CW-4A	Annual - Fall	Field, VOCs, Metals
CW-4B	Annual - Fall	Field, VOCs, Metals
MW-17D	Annual - Fall	Field, VOCs, Metals
MW-17S	Annual - Fall	Field, VOCs, Metals
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
MW-5S	Annual - Fall	Field, VOCs, Metals
MW-11S	Annual - Fall	Field, VOCs, Metals

Leachate

LS-1	Annual - Fall	Field, VOCs, Metals

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

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 years 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 2021, only annual groundwater sampling required in Fall. Additionally, MW-3S, MW-15S and MW-16S removed from sampling program.

Location	Sampling Frequency	Analyte List ¹

Residential Water Supply

WAL-1 ⁷	Annual - Fall	VOCs ⁵ , Metals
WAL-2	Annual - Fall	Metals
WAL-5	Annual - Fall	VOCs ⁵ , Metals
WAL-19	Semiannual - Spring/Fall	VOCs ^{2,5}

Landfill Gas Monitoring

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

Surface Water⁶

SWS-1	Annual - Spring	Field, VOCs, Metals, Wet Chem ³

Sediment⁶

SWS-1	Annual - Spring	Field, VOCs, Metals, Wet Chem ³

Groundwater Cut-Off System

MH-32	Annual - Fall	Field, VOCs, Metals, NO ₃ , TDS
MH-33	Annual - Fall	Field, VOCs, Metals, NO ₃ , TDS

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
Inorganic Compounds	
Arsenic	
Barium	
Cadmium	
Calcium	
Chromium	
Copper	
Iron	
Lead	
Manganese	
Magnesium	
Nickel	
Potassium	
Selenium	
Sodium	
Zinc	
Groundwater Cut-Off System Wet Chemistry	
Nitrate Nitrogen	
Total Dissolved Solids	
Surface Water and Sediment Wet 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

**2021 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	4/19/2021 DTW From TOC (ft)	4/19/2021 Static Water Elevation (ft amsl)	10/13/2021 DTW From TOC (ft)	10/13/2021 Static Water Elevation (ft amsl)
MW-1D	2	2193.32	2193.75	2190.6	77.39	64 - 74	Bedrock	69.30	2124.02	69.40	2123.92
MW-3D	2	2095.80	2096.07	2092.4	46.75	30 - 40	Bedrock	20.13	2075.67	17.92	2077.88
MW-3S	2	2095.70	2095.96	2093.1	25.92	9 - 19	Overburden	12.87	2082.83	11.73	2083.97
MW-4D	2	2092.22	2092.39	2090.3	24.63	12 - 22	Bedrock	11.06	2081.16	11.41	2080.81
MW-5D*	2	2067.58	2067.78	2065.4	37.74	26.5 - 36.5	Bedrock	2.23	2065.35	2.48	2065.10
MW-5S	2	2067.30	2067.59	2065.5	21.20	10 - 20	Overburden	2.26	2065.04	2.25	2065.05
MW-7D	2	2012.13	2012.69	2009.6	47.97	35 - 45	Bedrock	37.10	1975.03	36.70	1975.43
MW-11S	2	2003.52	2003.86	2001.6	20.40	8 - 18	Overburden	5.82	1997.70	6.33	1997.19
MW-15S	2	2022.88	2023.05	2020.2	22.10	9 - 19	Overburden	19.71	2003.17	20.21	2002.67
MW-15DA	2	2022.67	2023.08	2020.4	56.28	43 - 53	Bedrock	56.13	1966.54	56.13	1966.54
MW-16D	2	1924.73	1925.25	1922.0	53.00	40 - 50	Bedrock	28.51	1896.22	29.05	1895.68
MW-16S	2	1924.98	1925.15	1922.2	18.67	6 - 16	Overburden	10.45	1914.53	11.34	1913.64
MW-17D	4	2037.36	NA	2034.9	65.1	48 - 63 (open hole)	Bedrock	32.62	2004.74	32.00	2005.36
MW-17S	2	2037.59	2037.68	2034.6	26.94	9 - 24	Overburden	8.91	2028.68	8.29	2029.30
MW-18D	4	2066.19	NA	2062.6	28.50	24.5 - 39.5 (open hole)	Bedrock	14.93	2051.26	13.45	2052.74
MW-18S	2	2064.60	2065.72	2063.0	20.49	4 - 19	Overburden	3.98	2060.62	4.78	2059.82
CW-3A	2	2013.75	2013.90	2012.9	27.47	21 - 26	Overburden	12.56	2001.19	9.38	2004.37
CW-3B	2	2013.90	2014.10	2012.9	37.70	33.5 - 38.5	Overburden	22.00	1991.90	20.91	1992.99
CW-4A	2	2006.11	2006.35	2004.7	19.12	13 - 18	Overburden	3.60	2002.51	4.58	2001.53
CW-4B	2	2005.84	2005.93	2004.7	30.16	25.5 - 30.5	Overburden	2.88	2002.96	3.94	2001.90
PZ-1	2	2095.11	2095.27	2092.2	NM	6 - 13	Overburden/ Refuse	15.80	2079.31	14.60	2080.51
PZ-2	2	2095.83	2096.13	2092.9	NM	14 - 24	Overburden/ Refuse	15.20	2080.63	16.21	2079.62
PZ-4	2	2067.13	2067.38	2064.4	NM	12 - 22	Overburden/ Refuse	26.06	2041.07	26.16	2040.97
PZ-5	2	2059.71	2059.71	2056.7	NM	8 - 18	Overburden/ Refuse	12.46	2047.25	12.32	2047.39
PZ-6	2	2042.18	2042.31	2039.2	NM	8 - 18	Overburden/ Refuse	DRY	<2019.46	22.72	2019.46

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

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

Table 3-1

2021 Groundwater NYSDEC and NYSDOH Standards/Guidance Values Exceedances
Wellsville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Location	Date Sampled	Parameter	Result	Class GA Standard	NYSDOH MCL	Guidance Value Class GA
CW-3A	18-Oct-21	Field pH (std. units)	11.68	6.5 - 8.5		
CW-3A	18-Oct-21	Turbidity (NTU)	9.37	5	5	
CW-3A	18-Oct-21	Sodium	55.7	20		
CW-3A	18-Oct-21	Trichloroethene	0.017	0.005	0.005	
CW-3B	18-Oct-21	Magnesium	35.5			35
CW-3B	18-Oct-21	Sodium	22.3	20		
CW-3B	18-Oct-21	Perfluorooctanesulfonic Acid (PFOS)	0.000011		0.00001	0.0000027
CW-3B	18-Oct-21	Perfluorooctanoic Acid (PFOA)	0.0000085		0.00001	0.0000067
CW-3B	18-Oct-21	1,4-Dioxane	0.0009		0.001	0.00035
CW-3B	18-Oct-21	cis-1,2-Dichloroethene	0.1	0.005	0.005	
CW-3B	18-Oct-21	Trichloroethene	0.43	0.005	0.005	
CW-4A	18-Oct-21	Field pH (std. units)	6.16	6.5 - 8.5		
CW-4A	18-Oct-21	Manganese	0.491	0.3	0.3	
CW-4A	18-Oct-21	Perfluorooctanesulfonic Acid (PFOS)	0.0000065		0.00001	0.0000027
CW-4A	18-Oct-21	Perfluorooctanoic Acid (PFOA)	0.0000072		0.00001	0.0000067
CW-4A	18-Oct-21	1,4-Dioxane	0.00039		0.001	0.00035
CW-4B	18-Oct-21	Perfluorooctanesulfonic Acid (PFOS)	0.0000062		0.00001	0.0000027
CW-4B	18-Oct-21	Perfluorooctanoic Acid (PFOA)	0.0000089		0.00001	0.0000067
CW-4B	18-Oct-21	1,4-Dioxane	0.0004		0.001	0.00035
MW-11S	19-Apr-21	cis-1,2-Dichloroethene	0.29	0.005	0.005	
MW-11S	19-Apr-21	Trichloroethene	2.6	0.005	0.005	
MW-11S	20-Oct-21	Manganese	0.758	0.3	0.3	
MW-11S	20-Oct-21	Sodium	21.4	20		
MW-11S	20-Oct-21	cis-1,2-Dichloroethene	0.25	0.005	0.005	
MW-11S	20-Oct-21	Trichloroethene	2.8	0.005	0.005	
MW-16S	19-Apr-21	Turbidity (NTU)	10	5	5	
MW-17D	19-Oct-21	Field pH (std. units)	9.38	6.5 - 8.5		
MW-17D	19-Oct-21	Turbidity (NTU)	59.9	5	5	
MW-17D	19-Oct-21	Iron	16.2	0.3	0.3	
MW-17D	19-Oct-21	Sodium	35.9	20		
MW-17S	19-Oct-21	Magnesium	64.1			35
MW-17S	19-Oct-21	Sodium	78.4	20		
MW-17S	19-Oct-21	Perfluorooctanesulfonic Acid (PFOS)	0.0000042		0.00001	0.0000027
MW-17S	19-Oct-21	Perfluorooctanoic Acid (PFOA)	0.000027		0.00001	0.0000067
MW-17S	19-Oct-21	1,4-Dioxane	0.00041		0.001	0.00035
MW-17S	19-Oct-21	cis-1,2-Dichloroethene	0.033	0.005	0.005	
MW-17S	19-Oct-21	Trichloroethene	0.011	0.005	0.005	
MW-18D	21-Oct-21	Turbidity (NTU)	25.4	5	5	
MW-18D	21-Oct-21	Iron	13.6	0.3	0.3	
MW-18D	21-Oct-21	Manganese	0.635	0.3	0.3	
MW-18D	21-Oct-21	Sodium	20.4	20		

Table 3-1

2021 Groundwater NYSDEC and NYSDOH Standards/Guidance Values Exceedances
Wellsville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Location	Date Sampled	Parameter	Result	Class GA Standard	NYSDOH MCL	Guidance Value Class GA
MW-18S	21-Oct-21	Field pH (std. units)	6.03	6.5 - 8.5		
MW-18S	21-Oct-21	Iron	0.61	0.3	0.3	
MW-3D	20-Oct-21	Magnesium	36.3			35
MW-3D	20-Oct-21	cis-1,2-Dichloroethene	0.007	0.005	0.005	
MW-4D	20-Apr-21	Field pH (std. units)	6.17	6.5 - 8.5		
MW-4D	20-Apr-21	Turbidity (NTU)	48.8	5	5	
MW-4D	20-Apr-21	cis-1,2-Dichloroethene	0.22 D	0.005	0.005	
MW-4D	20-Apr-21	Vinyl chloride	0.098	0.002	0.002	
MW-4D	20-Oct-21	Field pH (std. units)	6.32	6.5 - 8.5		
MW-4D	20-Oct-21	Iron	0.63	0.3	0.3	
MW-4D	20-Oct-21	Manganese	3.15	0.3	0.3	
MW-4D	20-Oct-21	cis-1,2-Dichloroethene	0.19	0.005	0.005	
MW-4D	20-Oct-21	Vinyl chloride	0.055	0.002	0.002	
MW-5D	20-Apr-21	cis-1,2-Dichloroethene	0.15	0.005	0.005	
MW-5D	20-Apr-21	Trichloroethene	0.031	0.005	0.005	
MW-5D	20-Apr-21	Vinyl chloride	0.0097	0.002	0.002	
MW-5D	19-Oct-21	Manganese	0.519	0.3	0.3	
MW-5D	19-Oct-21	1,4-Dioxane	0.00066		0.001	0.00035
MW-5D	19-Oct-21	cis-1,2-Dichloroethene	0.15	0.005	0.005	
MW-5D	19-Oct-21	Trichloroethene	0.052	0.005	0.005	
MW-5D	19-Oct-21	Vinyl chloride	0.013	0.002	0.002	
MW-5S	20-Apr-21	Field pH (std. units)	6.22	6.5 - 8.5		
MW-5S	20-Apr-21	Turbidity (NTU)	8.43	5	5	
MW-5S	20-Apr-21	cis-1,2-Dichloroethene	0.14	0.005	0.005	
MW-5S	20-Apr-21	Trichloroethene	0.029	0.005	0.005	
MW-5S	20-Apr-21	Vinyl chloride	0.01	0.002	0.002	
MW-5S	19-Oct-21	Field pH (std. units)	6.1	6.5 - 8.5		
MW-5S	19-Oct-21	Turbidity (NTU)	9.09	5	5	
MW-5S	19-Oct-21	Iron	2.17	0.3	0.3	
MW-5S	19-Oct-21	cis-1,2-Dichloroethene	0.18	0.005	0.005	
MW-5S	19-Oct-21	Trichloroethene	0.035	0.005	0.005	
MW-5S	19-Oct-21	Vinyl chloride	0.016	0.002	0.002	

Notes:

Class GA Standard - NYSDEC Class GA Groundwater Standard

NYSDOH MCL - New York State Department of Health Maximum Containment Level

Guidance Value Class GA - NYSDEC Class GA Guidance Value

2021 Groundwater Analytical Results
Wellville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	Spring 2021					Fall 2021												
	MW-4D 4/20/2021	MW-5D 4/20/2021	MW-5S 4/20/2021	MW-11S 4/19/2021	MW-16S 4/19/2021	CW-3A 10/18/2021	CW-3B 10/18/2021	CW-4A 10/18/2021	CW-4B 10/18/2021	MW-11S 10/20/2021	MW-17D 10/19/2021	MW-17S 10/19/2021	MW-18D 10/21/2021	MW-18S 10/21/2021	MW-3D 10/20/2021	MW-4D 10/20/2021	MW-5D 10/19/2021	MW-5S 10/19/2021
Field Parameters																		
Depth to Groundwater (ft)	11.08	2.23	2.26	5.82	10.45	9.3	20.84	3.34	5.09	6.13	31.86	8.61	13.43	4.29	17.93	10.92	1.94	1.98
Dissolved Oxygen	1.74	0.3	0.48	0.34	7.63	6.16	1.75	2.85	3.12	2.32	8.67	5.61	1.11	0.67	1.47	1.6	1.33	0.76
Field pH (std. units)	6.17	6.68	6.22	6.88	7.03	11.68	6.73	6.16	6.73	6.64	9.38	7.13	7.34	6.03	6.57	6.32	6.6	6.1
ORP (mV)	31.8	157.3	66.9	150.5	158	113.2	272	229.4	265	82.5	132.9	163.4	-170.8	145.6	136.9	16.4	174.4	39.9
Specific Conductivity (us/cm)	279.1	180.1	153.4	554.1	153.8	639.9	595.7	319.2	348.9	550.9	298.4	1149	382.7	276.9	658	270.6	167.3	162.2
Temperature (deg. C)	7.1	6.6	6.9	12.9	10.3	10.5	8.8	10.9	11.7	17.2	10.7	13.9	12.3	13.1	16.5	18.9	16.2	16.2
Turbidity (NTU)	48.8	1.2	8.43	1.85	10	9.37	0.25	1.68	0.34	1.4	59.9	3.08	25.4	3.17	0.34	0.91	0.35	9.09
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
Barium						0.0628	0.0384	0.0609	0.0316	0.027	0.02 U	0.0404	0.067	0.048	0.11	0.021	0.0379	0.02 U
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
Calcium						36.9	69.9	33.4	40.7	55.3	5.26	91.2	43	40.1	70.1	23.9	20.1	14.7
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
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
Iron						0.1 U	0.1 U	0.1 U	0.1 U	0.11	16.2	0.1 U	13.6	0.61	0.1 U	0.63	0.125	2.17
Lead						0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Magnesium						2.86	35.5	17.1	17.1	33.7	19.4	64.1	16.5	14.4	36.3	19.7	14.1	9.97
Manganese						0.0183	0.0298	0.491	0.249	0.758	0.214	0.055	0.635	0.079	0.022	3.15	0.519	0.172
Nickel						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	0.04 U	0.04 U	0.04 U	0.04 U
Potassium						12	2.46	2 U	2 U	2 U	5.26	3.65	2.7	2	2.4	2.4	2 U	2 U
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
Sodium						55.7	22.3	13.9	15.5	21.4	35.9	78.4	20.4	4.3	16.9	5.7	7.37	6.54
Zinc						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
Per- and Polyfluoralkyl Substances (PFAS)																		
6:2 Fluorotelomer sulfonate (FtS 6:2)						0.0000042 U	0.0000042 U	0.0000041 U	0.0000043 U		0.0000043 U	0.0000012 J					0.00000093 J	0.0000044 U
8:2 Fluorotelomer sulfonic acid (FtS 8:2)						0.0000042 U	0.0000042 U	0.0000041 U	0.0000043 U		0.0000043 U	0.0000043 U					0.0000042 U	0.0000044 U
N-ethylperfluoro-1-octanesulfonamidoacetic acid						0.0000042 U	0.0000042 U	0.0000041 U	0.0000043 U		0.0000043 U	0.0000043 U					0.0000042 U	0.0000044 U
N-methylperfluoro-1-octanesulfonamidoacetic acid						0.0000042 U	0.0000042 U	0.0000041 U	0.0000043 U		0.0000043 U	0.0000043 U					0.0000042 U	0.0000044 U
Perfluorobutanesulfonic Acid (PFBS)						0.0000042 U	0.0000022 J	0.0000014 J	0.0000017 J		0.0000043 U	0.000002 J					0.0000042 U	0.00000047 J
Perfluorobutanoic Acid (PFBA)						0.0000044 U	0.0000043 U	0.0000061 U	0.0000068 U		0.0000043 UH	0.000007 U					0.0000043 U	0.0000043 U
Perfluorodecane Sulfonate (PFDS)						0.0000042 U	0.0000042 U	0.0000041 U	0.0000043 U		0.0000043 U	0.0000043 U					0.0000042 U	0.0000044 U
Perfluorodecanoic Acid (PFDA)						0.0000042 U	0.0000042 U	0.0000041 U	0.0000043 U		0.0000018 J	0.0000043 U					0.0000042 U	0.0000044 U
Perfluorododecanoic Acid (PFDoA)						0.0000042 U	0.0000042 U	0.0000041 U	0.0000043 U		0.0000043 U	0.0000043 U					0.0000042 U	0.0000044 U
Perfluoroheptane sulfonate (PFHpS)						0.0000042 U	0.0000042 U	0.0000041 U	0.0000043 U		0.0000043 U	0.0000043 U					0.0000042 U	0.0000044 U
Perfluoroheptanoic Acid (PFHpA)						0.0000042 U	0.0000047 U	0.0000041 U	0.0000043 U		0.0000043 U	0.0000064 U					0.0000042 U	0.0000044 U
Perfluorohexanesulfonic Acid (PFHxS)						0.0000042 U	0.0000042 U	0.0000041 U	0.0000043 U		0.0000043 U	0.0000043 U					0.0000042 U	0.0000044 U
Perfluorohexanoic Acid (PFHxA)						0.0000042 U	0.000011 U	0.0000041 U	0.0000043 U		0.0000043 U	0.0000086 U					0.0000042 U	0.0000044 U
Perfluorononanoic Acid (PFNA)						0.0000042 U	0.0000042 U	0.0000041 U	0.0000043 U		0.0000043 U	0.0000043 U					0.0000042 U	0.0000044 U
Perfluorooctanesulfonamide (PFOSA)						0.0000042 U	0.0000042 U	0.0000041 U	0.0000043 U		0.0000043 U	0.0000043 U					0.0000042 U	0.0000044 U
Perfluorooctanesulfonic Acid (PFOS)						0.0000013 J	0.000011	0.0000065	0.0000062		0.0000017 U	0.0000042					0.0000017 U	0.0000023
Perfluorooctanoic Acid (PFOA)						0.0000021 U	0.0000085	0.0000072 J	0.0000089		0.000002 U	0.000027					0.0000017 U	0.0000029 U
Perfluoropentanoic Acid (PFPeA)						0.0000044 UH	0.0000043 U	0.0000045 UH	0.0000043 UH		0.0000043 UH	0.0000043 U					0.0000043 UH	0.0000043 UH
Perfluorotetradecanoic acid (PFTeDA)						0.0000042 U	0.0000042 U	0.0000041 U	0.0000043 U		0.0000043 U	0.0000043 U					0.0000042 U	0.0000044 U
Perfluorotridecanoic acid (PFTrDA)						0.0000042 U	0.0000042 U	0.00000074 J	0.0000043 U		0.0000043 U	0.0000043 U					0.0000042 U	0.0000044 U
Perfluoroundecanoic Acid (PFUnA)						0.0000042 U	0.0000042 U	0.0000041 U	0.0000043 U		0.0000043 U	0.0000043 U					0.00000084 J	0.0000044 U

2021 Groundwater Analytical Results
Wellville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	Spring 2021					Fall 2021												
	MW-4D 4/20/2021	MW-5D 4/20/2021	MW-5S 4/20/2021	MW-11S 4/19/2021	MW-16S 4/19/2021	CW-3A 10/18/2021	CW-3B 10/18/2021	CW-4A 10/18/2021	CW-4B 10/18/2021	MW-11S 10/20/2021	MW-17D 10/19/2021	MW-17S 10/19/2021	MW-18D 10/21/2021	MW-18S 10/21/2021	MW-3D 10/20/2021	MW-4D 10/20/2021	MW-5D 10/19/2021	MW-5S 10/19/2021
Semi Volatile Organic Compounds																		
1,4-Dioxane						0.00013	0.0009	0.00039	0.0004		0.00004 U	0.00041					0.00066	0.00017
Volatile Organic Compounds																		
1,1,1-Trichloroethane	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
1,1,2,2-Tetrachloroethane	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
1,1,2-Trichloroethane	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
1,1-Dichloroethane	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
1,1-Dichloroethene	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
1,2-Dibromoethane	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
1,2-Dichloroethane	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
1,2-Dichloropropane	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
2-Butanone (MEK)	0.01 U	0.01 U	0.02 U	0.2 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.2 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.01 U
2-Hexanone	0.01 U	0.01 U	0.02 U	0.2 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.2 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.01 U
4-Methyl-2-pentanone	0.01 U	0.01 U	0.02 U	0.2 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.2 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.01 U
Acetone	0.01 U	0.01 U	0.02 U	0.2 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.2 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.01 U
Benzene	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
Bromodichloromethane	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
Bromoform	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
Bromomethane	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
Carbon disulfide	0.01 U	0.01 U	0.02 U	0.2 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.2 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.01 U	0.01 U
Carbon tetrachloride	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
Chlorobenzene	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
Chloroethane	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
Chloroform	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
Chloromethane	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	0.22 D	0.15	0.14	0.29	0.005 U	0.005 U	0.1	0.005 U	0.005 U	0.25	0.005 U	0.033	0.005 U	0.005 U	0.007	0.19	0.15	0.18
cis-1,3-Dichloropropene	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
Dibromochloromethane	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
Dichloromethane (Methylene chloride)	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
Ethyl benzene	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
m&p-Xylene	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
o-Xylene	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
Styrene	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
Tetrachloroethene	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
Toluene	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
trans-1,2-Dichloroethene	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
trans-1,3-Dichloropropene	0.005 U	0.005 U	0.01 U	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U
Trichloroethene	0.005 U	0.031	0.029	2.6	0.005 U	0.017	0.43	0.005 U	0.005 U	2.8	0.005 U	0.011	0.005 U	0.005 U	0.005 U	0.01 U	0.052	0.035
Vinyl chloride	0.098	0.0097	0.01	0.1 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U	0.1 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.055	0.013	0.016

Notes :
U - Concentration not detected at specified limit
H - Analysis was performed out of hold time for tests that have an "immediate" hold time criteria
J - Estimated Value

Table 3-3

2021 Field Duplicate Sample Comparisons
Analytical Results
Wellville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	MW5D-0421	DUP1-0421	MW5S-1021	DUP1-1021

Inorganic Compounds

Arsenic			0.01 U	0.01 U
Barium			0.02 U	0.02 U
Cadmium			0.005 U	0.005 U
Calcium			14.7	14.7
Chromium			0.01 U	0.01 U
Copper			0.02 U	0.02 U
Iron			2.17	1.86
Lead			0.05 U	0.05 U
Magnesium			9.97	9.91
Manganese			0.172	0.171
Nickel			0.04 U	0.04 U
Potassium			2 U	2 U
Selenium			0.01 U	0.01 U
Sodium			6.54	6.5
Zinc			0.02 U	0.02 U

Per- and Polyfluoralkyl Substances (PFAS)

6:2 Fluorotelomer sulfonate (FtS 6:2)			0.0000044 U	0.0000042 U
8:2 Fluorotelomer sulfonic acid (FtS 8:2)			0.0000044 U	0.0000042 U
N-ethylperfluoro-1-octanesulfonamidoacetic acid			0.0000044 U	0.0000042 U
N-methylperfluoro-1-octanesulfonamidoacetic acid			0.0000044 U	0.0000042 U
Perfluorobutanesulfonic Acid (PFBS)			0.00000047 J	0.0000004 J
Perfluorobutanoic Acid (PFBA)			0.0000043 U	0.0000043 U
Perfluorodecane Sulfonate (PFDS)			0.0000044 U	0.0000042 U
Perfluorodecanoic Acid (PFDA)			0.0000044 U	0.0000042 U
Perfluorododecanoic Acid (PFDoA)			0.0000044 U	0.0000042 U
Perfluoroheptane sulfonate (PFHpS)			0.0000044 U	0.0000042 U
Perfluoroheptanoic Acid (PFHpA)			0.0000044 U	0.0000042 U
Perfluorohexanesulfonic Acid (PFHxS)			0.0000044 U	0.0000042 U
Perfluorohexanoic Acid (PFHxA)			0.0000044 U	0.0000042 U
Perfluorononanoic Acid (PFNA)			0.0000044 U	0.0000042 U
Perfluorooctanesulfonamide (PFOSA)			0.0000044 U	0.0000042 U
Perfluorooctanesulfonic Acid (PFOS)			0.0000023	0.0000023
Perfluorooctanoic Acid (PFOA)			0.0000029 U	0.0000035 U
Perfluoropentanoic Acid (PFPeA)			0.0000043 UH	0.0000043 UH
Perfluorotetradecanoic acid (PFTeDA)			0.0000044 U	0.0000042 U
Perfluorotridecanoic acid (PFTrDA)			0.0000044 U	0.00000091 J
Perfluoroundecanoic Acid (PFUnA)			0.0000044 U	0.0000042 U

Semi-Volatile Organic Compounds (SVOCs)

1,4-Dioxane			0.00017	0.00017

Table 3-3

2021 Field Duplicate Sample Comparisons
Analytical Results
Wellville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	MW5D-0421	DUP1-0421	MW5S-1021	DUP1-1021
Volatile Organic Compounds (VOCs)				
1,1,1-Trichloroethane	0.005 U	0.005 U	0.005 U	0.005 U
1,1,2,2-Tetrachloroethane	0.005 U	0.005 U	0.005 U	0.005 U
1,1,2-Trichloroethane	0.005 U	0.005 U	0.005 U	0.005 U
1,1-Dichloroethane	0.005 U	0.005 U	0.005 U	0.005 U
1,1-Dichloroethene	0.005 U	0.005 U	0.005 U	0.005 U
1,2-Dibromoethane	0.005 U	0.005 U	0.005 U	0.005 U
1,2-Dichloroethane	0.005 U	0.005 U	0.005 U	0.005 U
1,2-Dichloropropane	0.005 U	0.005 U	0.005 U	0.005 U
2-Butanone (MEK)	0.01 U	0.01 U	0.01 U	0.01 U
2-Hexanone	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	0.01 U	0.01 U	0.01 U	0.01 U
Benzene	0.005 U	0.005 U	0.005 U	0.005 U
Bromodichloromethane	0.005 U	0.005 U	0.005 U	0.005 U
Bromoform	0.005 U	0.005 U	0.005 U	0.005 U
Bromomethane	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	0.01 U	0.01 U	0.01 U	0.01 U
Carbon tetrachloride	0.005 U	0.005 U	0.005 U	0.005 U
Chlorobenzene	0.005 U	0.005 U	0.005 U	0.005 U
Chloroethane	0.005 U	0.005 U	0.005 U	0.005 U
Chloroform	0.005 U	0.005 U	0.005 U	0.005 U
Chloromethane	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	0.15	0.15	0.18	0.18
cis-1,3-Dichloropropene	0.005 U	0.005 U	0.005 U	0.005 U
Dibromochloromethane	0.005 U	0.005 U	0.005 U	0.005 U
Dichloromethane (Methylene chloride)	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl benzene	0.005 U	0.005 U	0.005 U	0.005 U
m&p-Xylene	0.005 U	0.005 U	0.005 U	0.005 U
o-Xylene	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	0.005 U	0.005 U	0.005 U	0.005 U
Tetrachloroethene	0.005 U	0.005 U	0.005 U	0.005 U
Toluene	0.005 U	0.005 U	0.005 U	0.005 U
trans-1,2-Dichloroethene	0.005 U	0.005 U	0.005 U	0.005 U
trans-1,3-Dichloropropene	0.005 U	0.005 U	0.005 U	0.005 U
Trichloroethene	0.031	0.033	0.035	0.035
Vinyl chloride	0.0097	0.011	0.016	0.016

Notes:

U - Concentration not detected at specified detection limit.

H - Analysis was performed out of hold time for tests that have an "immediate" hold time criteria

Table 3-4

2021 Equipment Blank Analytical Results
Wellville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	EB1-1021

Inorganic Compounds

Arsenic	0.01 U
Barium	0.02 U
Cadmium	0.005 U
Calcium	1 U
Chromium	0.01 U
Copper	0.02 U
Iron	0.1 U
Lead	0.05 U
Magnesium	1 U
Manganese	0.01 U
Nickel	0.04 U
Potassium	2 U
Selenium	0.01 U
Sodium	1 U
Zinc	0.02 U

Per- and Polyfluoralkyl Substances (PFAS)

6:2 Fluorotelomer sulfonate (FtS 6:2)	0.0000046 U
8:2 Fluorotelomer sulfonic acid (FtS 8:2)	0.0000046 U
N-ethylperfluoro-1-octanesulfonamidoacetic acid	0.0000046 U
N-methylperfluoro-1-octanesulfonamidoacetic acid	0.0000046 U
Perfluorobutanesulfonic Acid (PFBS)	0.0000046 U
Perfluorobutanoic Acid (PFBA)	0.0000046 UH
Perfluorodecane Sulfonate (PFDS)	0.0000046 U
Perfluorodecanoic Acid (PFDA)	0.0000046 U
Perfluorododecanoic Acid (PFDoA)	0.0000046 U
Perfluoroheptane sulfonate (PFHpS)	0.0000046 U
Perfluoroheptanoic Acid (PFHpA)	0.0000046 U
Perfluorohexanesulfonic Acid (PFHxS)	0.0000046 U
Perfluorohexanoic Acid (PFHxA)	0.0000031 J
Perfluorononanoic Acid (PFNA)	0.0000046 U
Perfluorooctanesulfonamide (PFOSA)	0.0000046 U
Perfluorooctanesulfonic Acid (PFOS)	0.0000018 U
Perfluorooctanoic Acid (PFOA)	0.0000018 U
Perfluoropentanoic Acid (PFPeA)	0.0000046 UH
Perfluorotetradecanoic acid (PFTeDA)	0.0000046 U
Perfluorotridecanoic acid (PFTrDA)	0.0000046 U
Perfluoroundecanoic Acid (PFUnA)	0.0000046 U

Semi-Volatile Organic Compounds (SVOCs)

1,4-Dioxane	0.00004 U

Table 3-4

2021 Equipment Blank Analytical Results
Wellville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	EB1-1021

Volatile Organic Compounds (VOCs)

1,1,1-Trichloroethane	0.005 U
1,1,2,2-Tetrachloroethane	0.005 U
1,1,2-Trichloroethane	0.005 U
1,1-Dichloroethane	0.005 U
1,1-Dichloroethene	0.005 U
1,2-Dibromoethane	0.005 U
1,2-Dichloroethane	0.005 U
1,2-Dichloropropane	0.005 U
2-Butanone (MEK)	0.01 U
2-Hexanone	0.01 U
4-Methyl-2-pentanone	0.01 U
Acetone	0.01 U
Benzene	0.005 U
Bromodichloromethane	0.005 U
Bromoform	0.005 U
Bromomethane	0.005 U
Carbon disulfide	0.01 U
Carbon tetrachloride	0.005 U
Chlorobenzene	0.005 U
Chloroethane	0.005 U
Chloroform	0.005 U
Chloromethane	0.005 U
cis-1,2-Dichloroethene	0.005 U
cis-1,3-Dichloropropene	0.005 U
Dibromochloromethane	0.005 U
Dichloromethane (Methylene chloride)	0.005 U
Ethyl benzene	0.005 U
m&p-Xylene	0.005 U
o-Xylene	0.005 U
Styrene	0.005 U
Tetrachloroethene	0.005 U
Toluene	0.005 U
trans-1,2-Dichloroethene	0.005 U
trans-1,3-Dichloropropene	0.005 U
Trichloroethene	0.005 U
Vinyl chloride	0.005 U

Notes :

U - Concentration not detected at specified limit

H - Analysis was performed out of hold time for tests that have an "immediate" hold time criteria

J - Estimated Value

Table 4-1

Current and Historic Surface Water Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	SWS-1 4/10/2019	SWS-1 4/22/2020	SWS-1 4/20/2021	Class C Standard

Field Parameters

Dissolved Oxygen	9.65	12.33	8.97	Not < 5
Field pH (std. units)	7.79	7.95	7.71	6.5 - 8.5
ORP (mV)	30.5	75.4	197.9	
Specific Conductivity (us/cm)	339.9	311.5	270.5	
Temperature (deg. C)	8.7	7.2	8.3	
Turbidity (NTU)	2.91	2.3	3.36	

Inorganic Compounds

Arsenic	0.01 U	0.01 U	0.01 U	
Barium	0.025	0.022	0.02 U	
Cadmium	0.005 U	0.005 U	0.005 U	
Calcium	37.1	35.8	28.4	
Chromium	0.01 U	0.01 U	0.01 U	
Copper	0.02 U	0.02 U	0.02 U	
Iron	0.23	0.13	0.22	
Lead	0.05 U	0.05 U	0.05 U	0.008
Magnesium	13.8	13	9.2	
Manganese	0.06	0.04	0.017	
Nickel	0.04 U	0.04 U	0.04 U	0.0082
Potassium	2.6	2 U	2 U	
Selenium	0.01 U	0.01 U	0.01 U	
Sodium	19.3	16	16.4	
Zinc	0.035	0.02 U	0.02 U	

Volatile Organic Compounds

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

Table 4-1

Current and Historic Surface Water Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	SWS-1 4/10/2019	SWS-1 4/22/2020	SWS-1 4/20/2021	Class C Standard

Volatile Organic Compounds (con't)

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

General Chemistry

Alkalinity	127	131	103	
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	15.6	17.5	20.6	
Chloride	39.1	29	32.4	
Color (True) (C.U.)	34 *	35	48	
Nitrate Nitrogen	1 U	1 U	1 U	
pH of Color Analysis	8.07 *	7.57 *	8.05	
Sulfate	2 U	2 U	2 U	
Total Dissolved Solids	207	197	169	500
Total Kjeldahl Nitrogen	0.43	0.35	0.45	
Total Organic Carbon (TOC)	6.2	5.7	7.9	
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

***** - Analysis was performed out of hold time

Table 5-1

**2021 Leachate Sump and Manhole
NYSDEC and NYSDOH Standards Exceedances
Wellsville/Andover Landfill
Wellsville, New York
(mg/L except where noted)**

Location	Date Sampled	Parameter	Result	Class GA Standard	NYSDOH MCL

LS-1	21-Oct-21	Turbidity (NTU)	5.58	5	5
LS-1	21-Oct-21	Iron	2.13	0.3	0.3
LS-1	21-Oct-21	cis-1,2-Dichloroethene	0.47	0.005	0.005
LS-1	21-Oct-21	Manganese	2.08	0.3	0.3
LS-1	21-Oct-21	Vinyl chloride	0.015	0.002	0.002

MH-32	20-Oct-21	Turbidity (NTU)	13	5	5
MH-32	20-Oct-21	Arsenic	0.0108	0.025	0.01
MH-32	20-Oct-21	Iron	11.6	0.3	0.3
MH-32	20-Oct-21	Manganese	2.25	0.3	0.3
MH-32	20-Oct-21	cis-1,2-Dichloroethene	8.8 D	0.005	0.005
MH-32	20-Oct-21	Dichloromethane (Methylene chloride)	0.51	0.005	0.005
MH-32	20-Oct-21	Ethyl benzene	0.072	0.005	0.005
MH-32	20-Oct-21	Toluene	0.15	0.005	0.005
MH-32	20-Oct-21	Trichloroethene	0.37	0.005	0.005
MH-32	20-Oct-21	Vinyl chloride	0.31	0.002	0.002

MH-33	20-Oct-21	Turbidity (NTU)	9.77	5	5
MH-33	20-Oct-21	Field pH (std. units)	6.36	6.5 - 8.5	
MH-33	20-Oct-21	Iron	2.43	0.3	0.3
MH-33	20-Oct-21	Manganese	0.939	0.3	0.3
MH-33	20-Oct-21	cis-1,2-Dichloroethene	0.031	0.005	0.005

Notes:

Class GA Standard - NYSDEC Class GA Groundwater Standard

NYSDOH MCL - New York State Department of Health Maximum Containment Level

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

Table 5-2

Current and Historic Leachate Sump Manhole Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	LS-1 10/23/2019	LS-1 10/21/2020	LS-1 10/21/2021	MH-32 10/28/2019	MH-32 10/16/2020	MH-32 10/20/2021	MH-33 10/28/2019	MH-33 10/16/2020	MH-33 10/20/2021	Class GA Standard

Field Parameter

Field pH (std. units)	6.86	7.55	6.58	6.48	7.25	6.17	6.6	7.45	6.36	6.5 - 8.5
ORP (mV)	84.2	122.8	256.4	-51.9	108.9	44.1	74.7	39.2	152.9	
Specific Conductivity (us/cm)	510.2	901	487	517	593.3	417.5	323.4	549	341.1	
Temperature (deg. C)	13.3	14.8	14.3	13	11.8	13.8	13.5	11.2	14.1	
Turbidity (NTU)	14.1	49.5	5.58	10.9	24.7	13	10.3	26.8	9.77	5

Inorganic Compounds

Arsenic	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0108	0.01 U	0.01 U	0.01 U	0.025
Barium	0.072	0.117	0.066	0.08	0.081	0.076	0.04	0.048	0.0481	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	85.3	122	81.1	89.4	96.9	76	48.4	99	54.6	
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	2.47	10.9	2.13	9.13	2.6	11.6	0.98	2.79	2.43	0.3
Lead	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.025
Magnesium	20.4	33.8	18.2	14.3	11.5	13.2	14.1	20.8	15.5	
Manganese	1.18	2.8	2.08	1.61	0.438	2.25	0.486	0.368	0.939	0.3
Nickel	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
Potassium	2.6	4.7	2.3	2.1	11.4	2 U	2 U	2 U	2 U	
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
Sodium	9.4	27.6	6.6	3.1	8.4	1.83	2.3	9.5	2.37	20
Zinc	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0251	0.02 U	0.02 U	0.02 U	

Volatile Organic Compounds

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

Table 5-2

Current and Historic Leachate Sump Manhole Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	LS-1 10/23/2019	LS-1 10/21/2020	LS-1 10/21/2021	MH-32 10/28/2019	MH-32 10/16/2020	MH-32 10/20/2021	MH-33 10/28/2019	MH-33 10/16/2020	MH-33 10/20/2021	Class GA Standard

Volatile Organic Compounds (con't)

Acetone	0.01 U	0.01 U	0.025 U	0.1 U	0.1 U	0.1 U	0.01 U	0.01 U	0.01 U	0.005
Benzene	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.001
Bromodichloromethane	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005
Bromoform	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005
Bromomethane	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005
Carbon disulfide	0.01 U	0.01 U	0.025 U	0.1 U	0.1 U	0.1 U	0.01 U	0.01 U	0.01 U	0.005
Carbon tetrachloride	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005
Chlorobenzene	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005
Chloroethane	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005
Chloroform	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.007
Chloromethane	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005
cis-1,2-Dichloroethene	0.072	0.005 U	0.47	3.1 D	1.5	8.8 D	0.0086	0.005 U	0.031	0.005
cis-1,3-Dichloropropene	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.0004
Dibromochloromethane	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005
Dichloromethane (Methylene chloride)	0.005 U	0.005 U	0.013 U	0.05 U	0.21	0.51	0.005 U	0.005 U	0.005 U	0.005
Ethyl benzene	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.072	0.005 U	0.005 U	0.005 U	0.005
m&p-Xylene	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005
o-Xylene	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005
Styrene	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005
Tetrachloroethene	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005
Toluene	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.15	0.005 U	0.005 U	0.005 U	0.005
trans-1,2-Dichloroethene	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.005
trans-1,3-Dichloropropene	0.005 U	0.005 U	0.013 U	0.05 U	0.05 U	0.05 U	0.005 U	0.005 U	0.005 U	0.0004
Trichloroethene	0.005 U	0.005 U	0.013 U	0.05 U	0.57	0.37	0.005 U	0.005 U	0.005 U	0.005
Vinyl chloride	0.005 U	0.005 U	0.015	0.091	0.05 U	0.31	0.005 U	0.005 U	0.005 U	0.002

General Chemistry

Nitrate Nitrogen				1 U	1 U	1 U	1 U	1 U	1 U	10
Total Dissolved Solids				329	353	258	215	372	216	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

Table 6-1

**Fall 2021 Air Monitoring Results
Wellsville/Andover Landfill
Wellsville, New York**

Monitoring Point	Date	PID (ppm)	O ₂ %	LEL %
V-1	10/13/2021	0.0	20.9	0
V-2	10/13/2021	0.3	20.9	11
V-3	10/13/2021	0.0	20.9	0
V-4	10/13/2021	3.7	20.4	39
V-5	10/13/2021	0.2	20.9	7
V-6	10/13/2021	4.8	20.9	7
V-7	10/13/2021	0.0	20.9	0
V-8	10/13/2021	11.7	19.9	76
V-9	10/13/2021	18.3	19.2	>99
V-10	10/13/2021	0.0	20.9	0
V-11	10/13/2021	6.0	20.9	22
V-12	10/13/2021	0.0	20.9	0
V-13	10/13/2021	0.0	20.9	0
V-14	10/13/2021	1.1	20.3	38
V-15	10/13/2021	0.0	20.9	0
V-16	10/13/2021	0.0	20.9	0
V-17	10/13/2021	0.8	20.9	16
V-18	10/13/2021	2.1	18.5	>99
V-19	10/13/2021	0.0	20.9	0
V-20	10/13/2021	0.0	20.9	0
V-21	10/13/2021	0.0	20.9	0
L-16	10/13/2021	0.7	14.1	80
L-17	10/13/2021	2.3	10.2	>99
L-19	10/13/2021	3.0	8.7	>99
L-21	10/13/2021	1.9	8.3	>99
L-23	10/13/2021	5.3	17.3	>99
L-25	10/13/2021	7.2	3.0	>99
L-27	10/13/2021	3.2	16.0	>99
L-29	10/13/2021	59.8	18.2	>99
L-31	10/13/2021	21.3	5.4	>99
MH-6	10/13/2021	15.6	16.6	54
MH-7	10/13/2021	0.0	20.9	0
MH-8	10/13/2021	3.7	17.1	67
MH-9	10/13/2021	0.0	20.9	0
MH-10	10/13/2021	8.5	16.0	>99
MH-11	10/13/2021	0.0	20.9	0
MH-12	10/13/2021	0.0	20.9	0
MH-13	10/13/2021	0.8	20.9	0
MH-32	10/13/2021	0.0	20.9	0
MH-33	10/13/2021	0.2	20.9	0
Upwind	10/13/2021	0.0	20.9	0
Downwind-1	10/13/2021	0.0	20.9	0
Downwind-2	10/13/2021	0.0	20.9	0
Downwind-3	10/13/2021	0.0	20.9	0

	BG PID:	0.0
BG - Background	BG LEL:	0
	BG O ₂ :	20.9
Weather: 63 deg F, Cloudy		
Winds: 0-5 mph from south		
Meter(s): Q-RAE 3, Mini-RAE 3000		
Monitored By: K Dye		

Table 7-1

**Spring and Fall 2021
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	10/20/2020	1430	Yes	Kitchen Sink	10/28/2020	1010
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	10/13/2020	1110	Yes	Kitchen Sink	11/14/2020	1310
Adam Fantrazzo	4011 Duffy Hollow Rd Wellsville, NY 14895	4011 Duffy Hollow Rd Wellsville, NY 14895	585-296-0007	WAL-5	Spring ³	10/13/2020	1115	No Contact ⁴	Kitchen Sink	NA	NA
Mr. Daniel & 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	6/1/2020	845	Yes	Post - Kitchen Sink	6/1/2020	1115
									Inter - Between Filters		1125
									Pre - Before Filters		1130
						10/20/2020	1425	Yes	Post - Kitchen Sink	10/21/2020	910
									Inter - Between Filters		935
									Pre - Before Filters		945

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 Presumed owner did not return phone calls, property appears vacant

NA - Not applicable

Table 7-2

2021 Residential Water Supply Detections
Wellville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Date Sampled	Parameter	Result	NYSDOH MCL	Class GA Standard	Class GA Guidance Value

WAL-1	22-Oct-21	Barium	0.07	2	1	
WAL-1	22-Oct-21	Calcium	41.6			
WAL-1	22-Oct-21	Magnesium	13.7			35
WAL-1	22-Oct-21	Manganese	0.084	0.3	0.3	
WAL-1	22-Oct-21	Sodium	8.7		20	
WAL-1	22-Oct-21	Zinc	0.022	5		2

WAL-2	23-Oct-21	Barium	0.033	2	1	
WAL-2	23-Oct-21	Calcium	44.8			
WAL-2	23-Oct-21	Iron	0.53	0.3	0.3	
WAL-2	23-Oct-21	Magnesium	14.3			35
WAL-2	23-Oct-21	Manganese	0.669	0.3	0.3	
WAL-2	23-Oct-21	Sodium	53.5		20	

WAL19-INTER	27-Apr-21	Dichloromethane (Methylene chloride)	0.00095	0.005	0.005	
WAL19-POST	27-Apr-21	Dichloromethane (Methylene chloride)	0.0011	0.005	0.005	
WAL19-PRE	27-Apr-21	cis-1,2-Dichloroethene	0.0025	0.005	0.005	
WAL19-PRE	27-Apr-21	Dichloromethane (Methylene chloride)	0.00056	0.005	0.005	
WAL19-PRE	27-Apr-21	Trichloroethene	0.003	0.005	0.005	
WAL19-PRE	16-Nov-21	cis-1,2-Dichloroethene	0.0019	0.005	0.005	
WAL19-PRE	16-Nov-21	Trichloroethene	0.0025	0.005	0.005	

Notes:

NYSDOH MCL - NYSDOH Maximum Containment Level

Class GA Standard - NYSDEC Class GA Groundwater Standard

Class GA Guidance Value - NYSDEC Class GA Groundwater Guidance Value

Concentrations in **bold** exceed NYSDOH MCL and/or Class GA Standard

Table 7-3

2021 Residential Water Supply Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	WAL1-1021 10/22/2021	WAL2-1021 10/23/2021	WAL19Pre-0421 4/27/2021	WAL19Inter-0421 4/27/2021	WAL19Post-0421 4/27/2021	WAL19Pre-1121 11/16/2021	WAL19Inter-1121 11/16/2021	WAL19Post-1121 11/16/2021

Inorganic Compounds

Arsenic	0.01 U	0.01 U						
Barium	0.07	0.033						
Cadmium	0.005 U	0.005 U						
Calcium	41.6	44.8						
Chromium	0.01 U	0.01 U						
Copper	0.02 U	0.02 U						
Iron	0.1 U	0.53						
Lead	0.05 U	0.05 U						
Magnesium	13.7	14.3						
Manganese	0.084	0.669						
Nickel	0.04 U	0.04 U						
Potassium	2 U	2 U						
Selenium	0.01 U	0.01 U						
Sodium	8.7	53.5						
Zinc	0.022	0.02 U						

Volatile Organic Compounds

1,1,1,2-Tetrachloroethane	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,1,1-Trichloroethane			0.0005 U	0.0005 U	0.0005 U			
1,1,2,2-Tetrachloroethane	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,1,2-Trichloroethane	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,1-Dichloroethane	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,1-Dichloroethene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,1-Dichloropropene			0.0005 U	0.0005 U	0.0005 U			
1,2,3-Trichloropropane	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,2,4-Trimethylbenzene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,2-Dichlorobenzene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,2-Dichloroethane	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,2-Dichloropropane	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,3,5-Trimethylbenzene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,3-Dichlorobenzene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,3-Dichloropropane	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,4-Dichlorobenzene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
2,2-Dichloropropane	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
2-Chlorotoluene	0.0005 U					0.0005 U	0.0005 U	0.0005 U
4-Chlorotoluene	0.0005 U					0.0005 U	0.0005 U	0.0005 U
Benzene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Bromobenzene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Bromochloromethane	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Bromodichloromethane	0.0005 U					0.0005 U	0.0005 U	0.0005 U

Table 7-3

2021 Residential Water Supply Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	WAL1-1021 10/22/2021	WAL2-1021 10/23/2021	WAL19Pre-0421 4/27/2021	WAL19Inter-0421 4/27/2021	WAL19Post-0421 4/27/2021	WAL19Pre-1121 11/16/2021	WAL19Inter-1121 11/16/2021	WAL19Post-1121 11/16/2021

Volatile Organic Compounds (con't)

Bromoform	0.0005 U					0.0005 U	0.0005 U	0.0005 U
Bromomethane	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Carbon tetrachloride	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Chlorobenzene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Chloroethane	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Chloroform	0.0005 U					0.0005 U	0.0005 U	0.0005 U
Chloromethane	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
cis-1,2-Dichloroethene	0.0005 U		0.0025	0.0005 U	0.0005 U	0.0019	0.0005 U	0.0005 U
cis-1,3-Dichloropropene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Dibromochloromethane	0.0005 U					0.0005 U	0.0005 U	0.0005 U
Dibromomethane	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Dichlorodifluoromethane	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Dichloromethane (Methylene chloride)	0.0005 U		0.00056	0.00095	0.0011	0.0005 U	0.0005 U	0.0005 U
Ethyl benzene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Isopropylbenzene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
m&p-Xylene	0.001 U		0.00025 U	0.00025 U	0.00025 U	0.001 U	0.001 U	0.001 U
Methyl tert-butyl ether (MTBE)	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
n-Butylbenzene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
n-Propylbenzene	0.0005 U	n-Propylbenzene	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
o-Chlorotoluene			0.0005 U	0.0005 U	0.0005 U			
o-Xylene	0.0005 U	o-Xylene	0.00025 U	0.00025 U	0.00025 U	0.0005 U	0.0005 U	0.0005 U
p-Chlorotoluene			0.0005 U	0.0005 U	0.0005 U			
p-Isopropyltoluene	0.0005 U	p-Isopropyltoluene	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
sec-Butylbenzene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Styrene	0.0005 U	Styrene	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
tert-Butylbenzene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Tetrachloroethene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Toluene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
trans-1,2-Dichloroethene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
trans-1,3-Dichloropropene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Trichloroethene	0.0005 U		0.003	0.0005 U	0.0005 U	0.0025	0.0005 U	0.0005 U
Trichlorofluoromethane	0.0005 U	Trichlorofluoromethane	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Vinyl chloride	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,2,3-Trichlorobenzene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,2,4-Trichlorobenzene	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Hexachlorobutadiene	0.0005 U	Hexachlorobutadiene	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Naphthalene	0.0005 U					0.0005 U	0.0005 U	0.0005 U

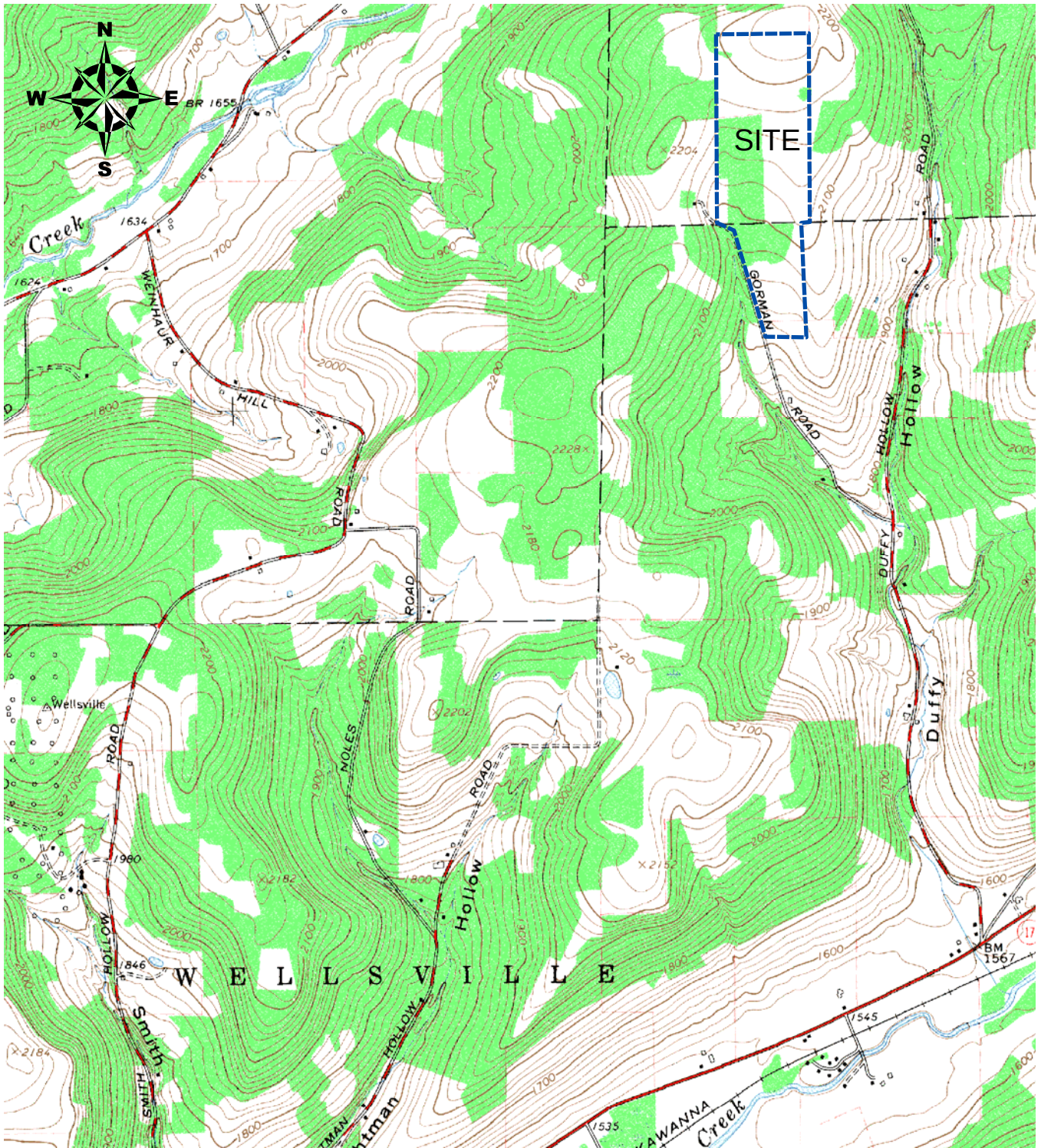
Notes:

Concentrations in **bold** exceed Class GA Standards

U - Concentrations not detected at specified limit

Figures

SITE LOCATION



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

Legend

--- Approximate Site Boundary

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

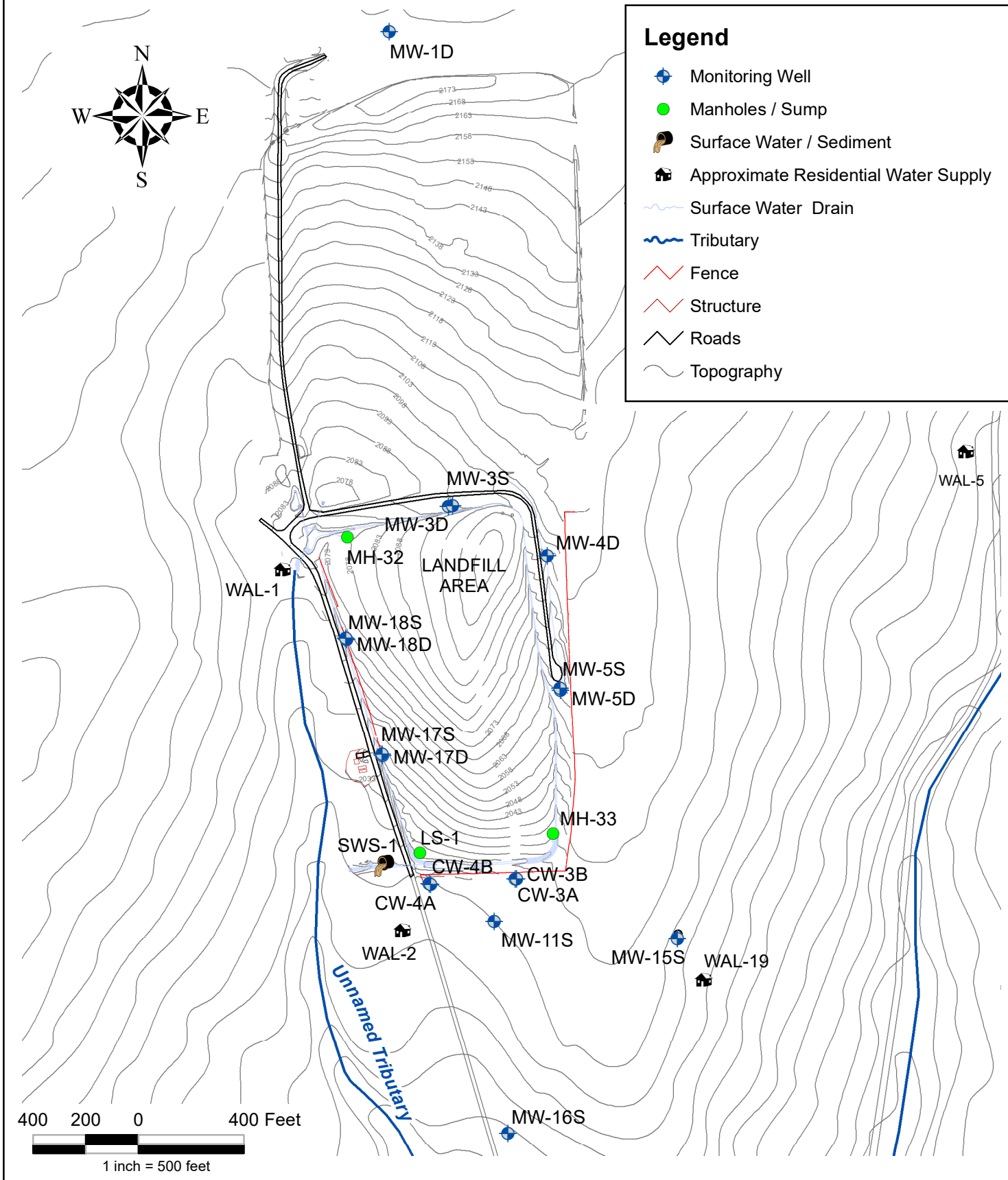


ON-SITE GEOLOGICAL SERVICES, D.P.C.

72 Railroad Avenue Wellsville, NY14895

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

2021 MONITORING LOCATIONS

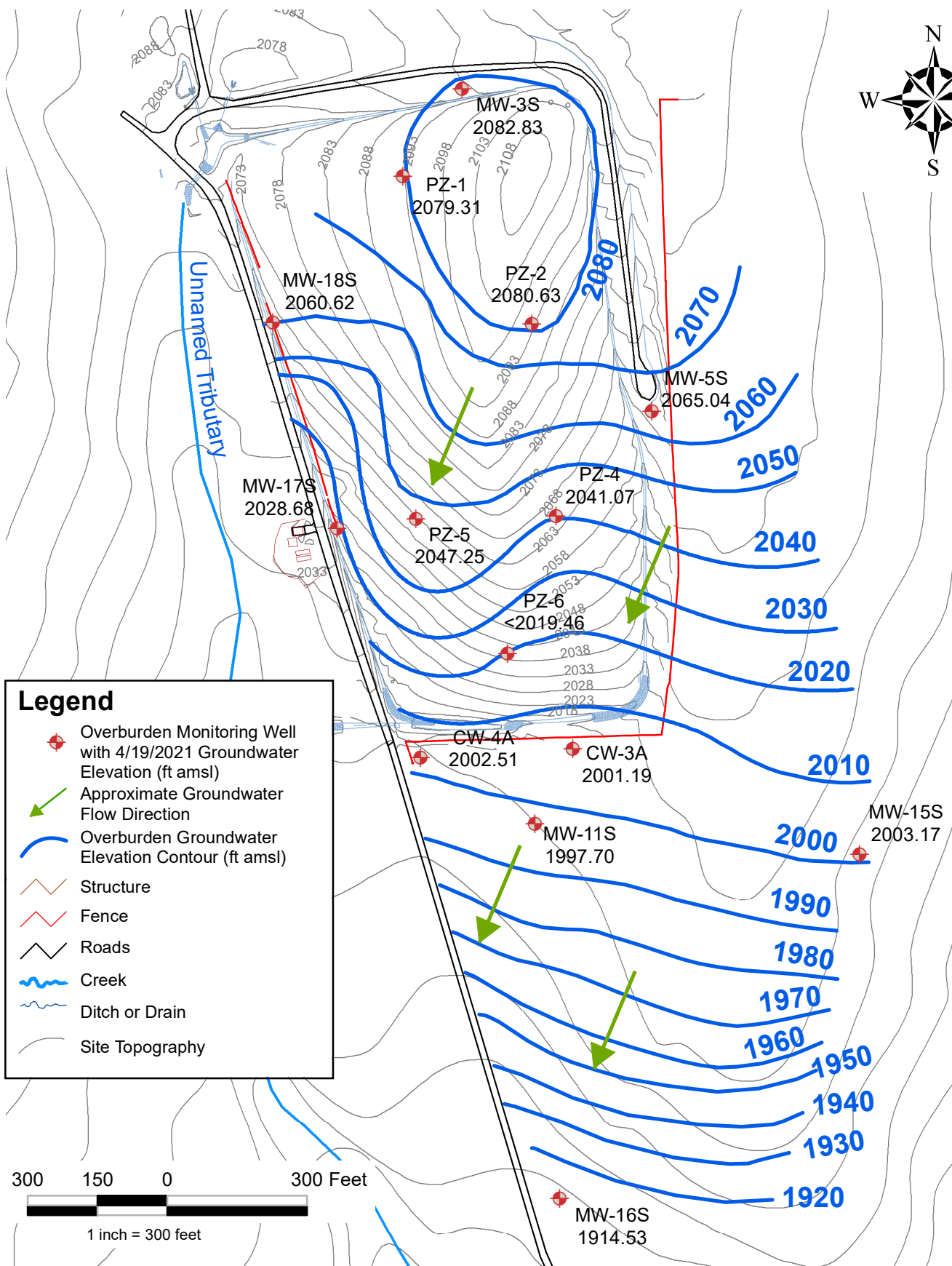
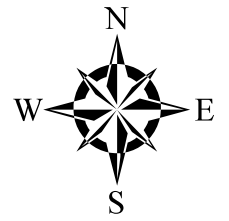


ON-SITE GEOLOGICAL SERVICES, D.P.C.

72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	2
PROJECT	WAL
DOCUMENT	2021 Annual Report
FILE NO.	Fig 2.mxd

APRIL 19, 2021 OVERBURDEN MONITORING WELL POTENTIOMETRIC MAP

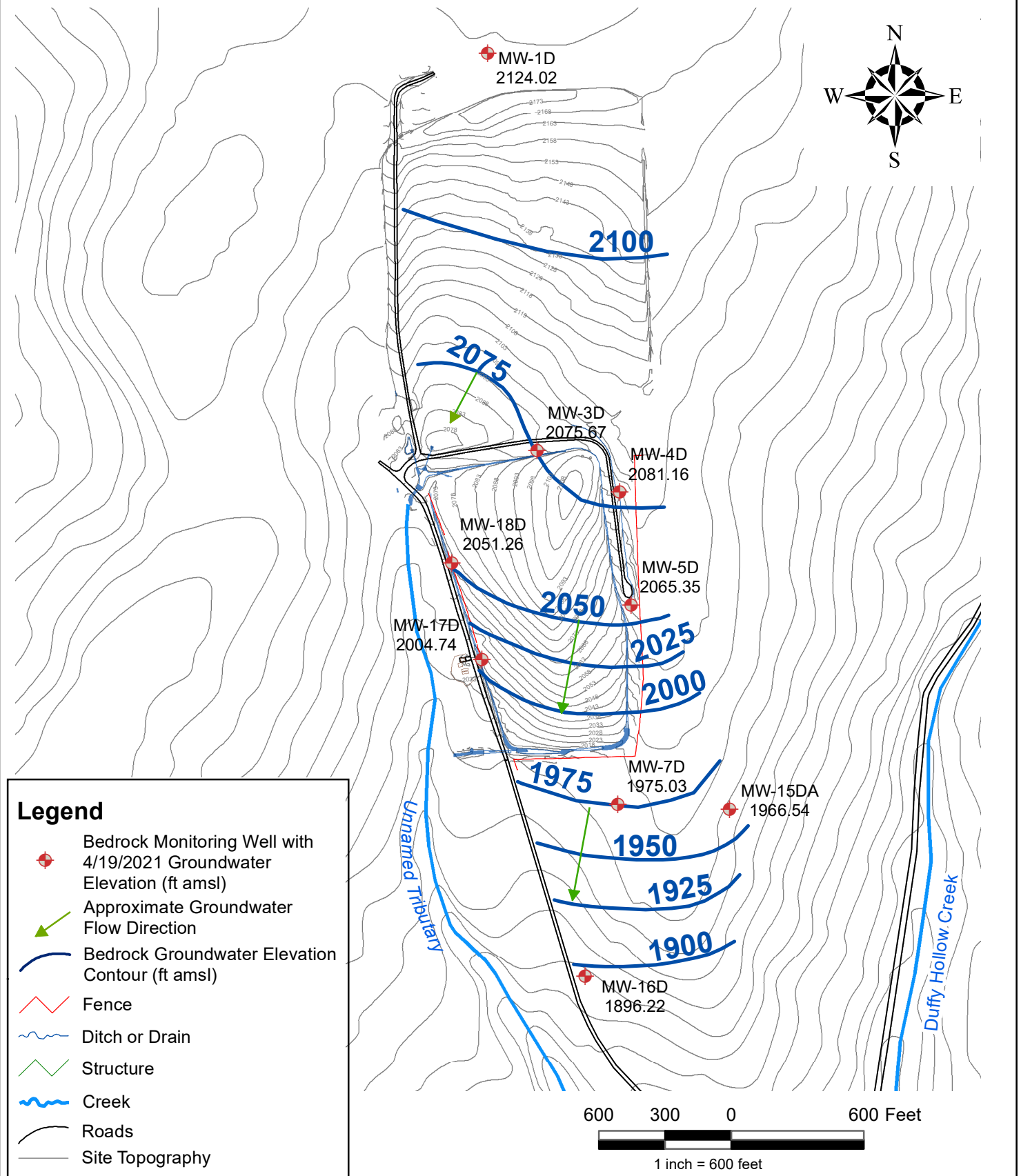


ON-SITE GEOLOGICAL SERVICES, D.P.C.

72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	3
PROJECT	WAL
DOCUMENT	2021 Annual Report
FILE NO	Fig 3 0421 OB.mxd

APRIL 19, 2021 BEDROCK MONITORING WELL POTENTIOMETRIC MAP

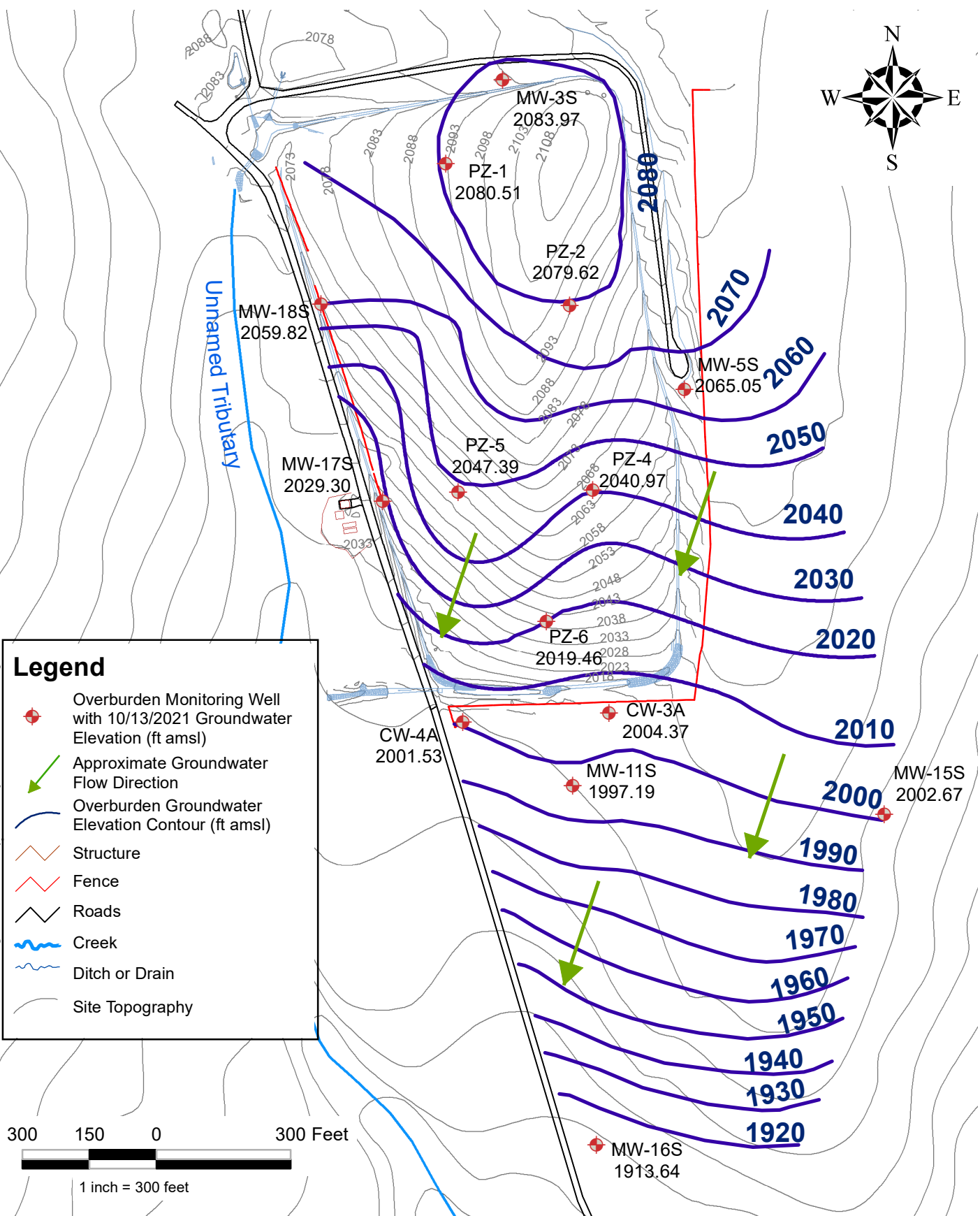


ON-SITE GEOLOGICAL SERVICES, D.P.C.

72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	4
PROJECT	WAL
DOCUMENT	2021 Annual Report
FILE NO	Fig 4 0421 BR.mxd

OCTOBER 13, 2021 OVERBURDEN MONITORING WELL POTENTIOMETRIC MAP

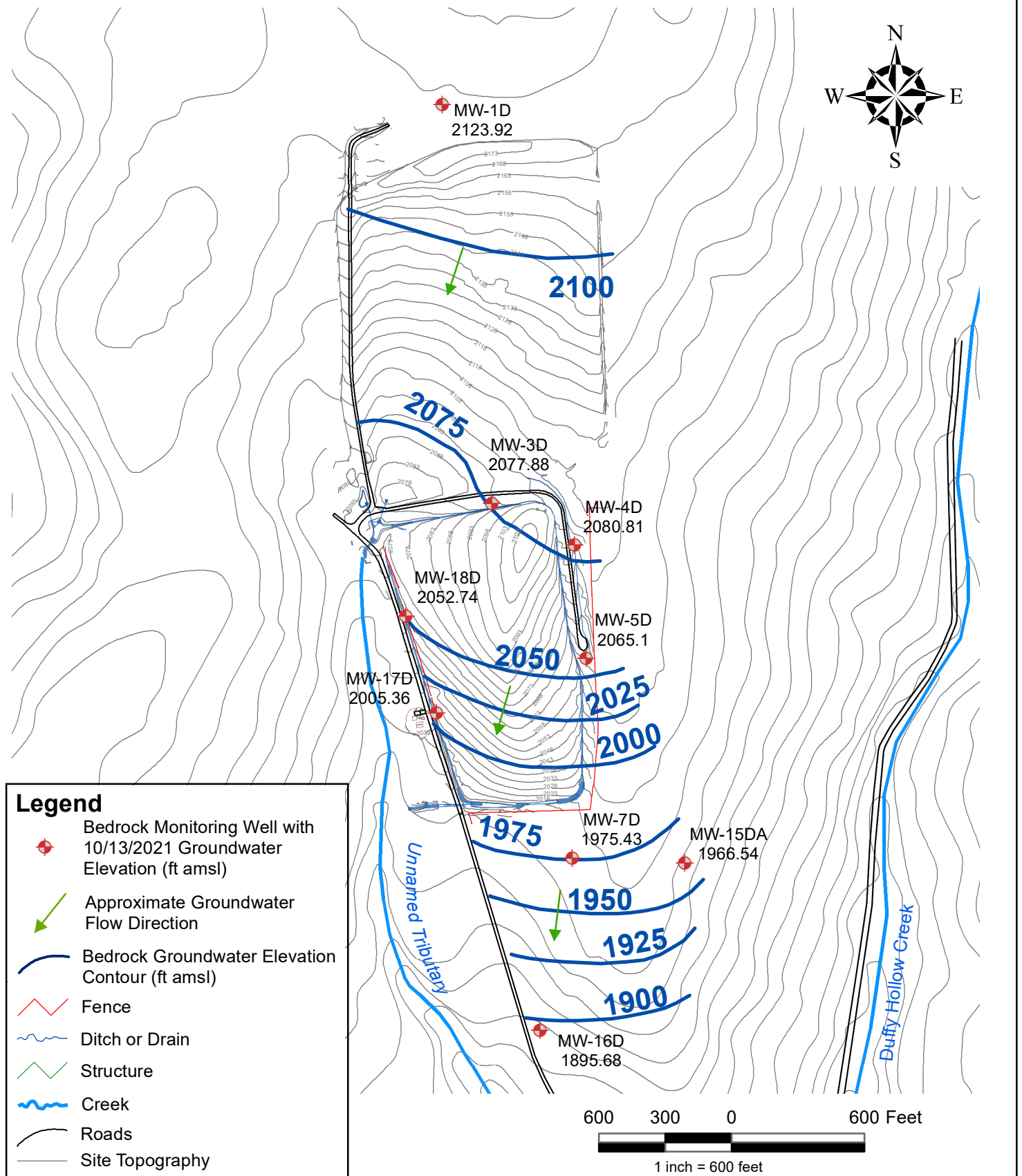


ON-SITE GEOLOGICAL SERVICES, D.P.C

72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	5
PROJECT	WAL
DOCUMENT	2021 Annual Report
FILE NO	Fig 5 1021 OB.mxd

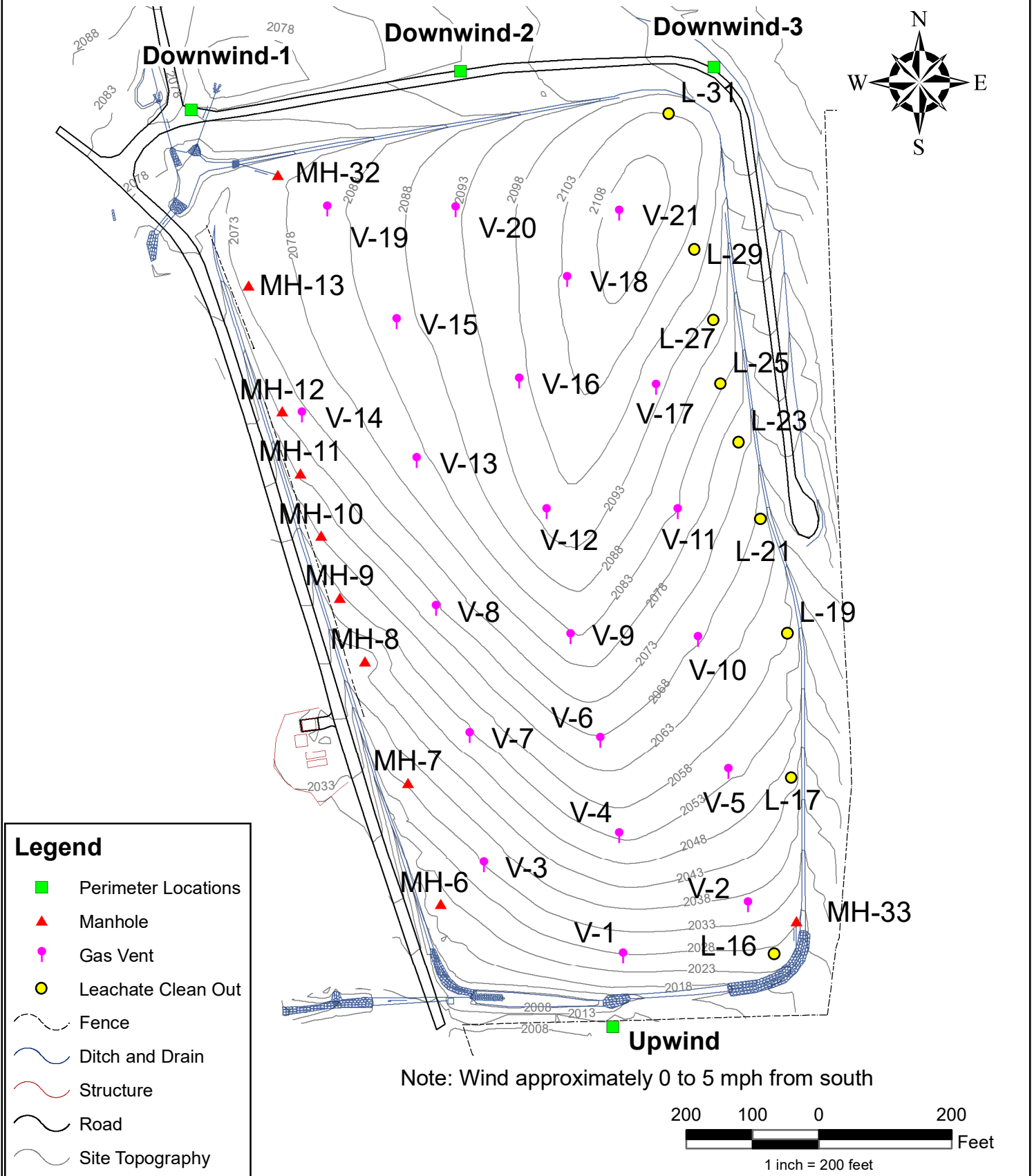
OCTOBER 13, 2021 BEDROCK MONITORING WELL POTENTIOMETRIC MAP



ON-SITE GEOLOGICAL SERVICES, D.P.C.
72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	6
PROJECT	WAL
DOCUMENT	2021 Annual Report
FILE NO	Fig 6 1021 BR.mxd

OCTOBER 13, 2021 AIR MONITORING LOCATIONS



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

72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	7
PROJECT	WAL
DOCUMENT	2021 ANNUAL RPT
FILE NO.	FIG 7.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, 2021 to February 15, 2022

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 ControlsParcelOwnerInstitutional Control

214.-1-2.1

VILLAGE OF WELLSVILLE

Ground Water Use Restriction
Monitoring Plan
O&M Plan

Description of Engineering ControlsParcelEngineering Control

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 complete.

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

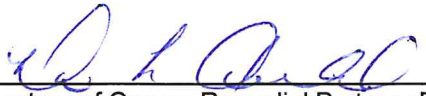
SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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 Dean Arnold at 200 Bolivar Road Wellsville, NY 14895,
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

3/9/2022
Date

EC CERTIFICATIONS

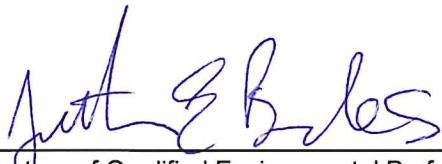
Box 7

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 Brandes, P.G. at 72 Railroad Avenue Wellsville, NY 14895,
print name print business address

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


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

Stamp
(Required for PE)

3/4/22
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 contaminants 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.

Field Parameters

Specific Conductance
 Temperature
 pH
 Oxygen Reduction Potential
 Dissolved Oxygen
 Turbidity

Inorganic Compounds

Arsenic
 Barium
 Cadmium
 Calcium
 Chromium
 Copper
 Iron
 Lead
 Magnesium
 Manganese
 Nickel
 Potassium
 Selenium
 Sodium
 Zinc

Volatile Organic Compounds

1,1,1-Trichloroethane
 1,1,2,2-Tetrachloroethane
 1,1,2-Trichloroethane
 1,1-Dichloroethane
 1,1-Dichloroethene
 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

Wet Chemistry

Alkalinity
 Ammonia
 Biochemical Oxygen Demand
 Bromide
 Chemical Oxygen Demand
 Chloride
 Color (True)
 Hardness
 Sulfate
 Total Dissolved Solids
 Total Kjeldahl Nitrogen
 Total Organic Carbon (TOC)
 Total Phenolics
 Turbidity

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 contaminate 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

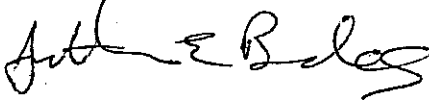
Landfill gas has been adequately characterized and has not been detected at the landfill perimeter; therefore landfill gas monitoring will be discontinued.

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,

A handwritten signature in black ink, appearing to read 'Jonathan E. Brandes', written in a cursive style.

Jonathan E. Brandes, P.G.

Senior Geologist

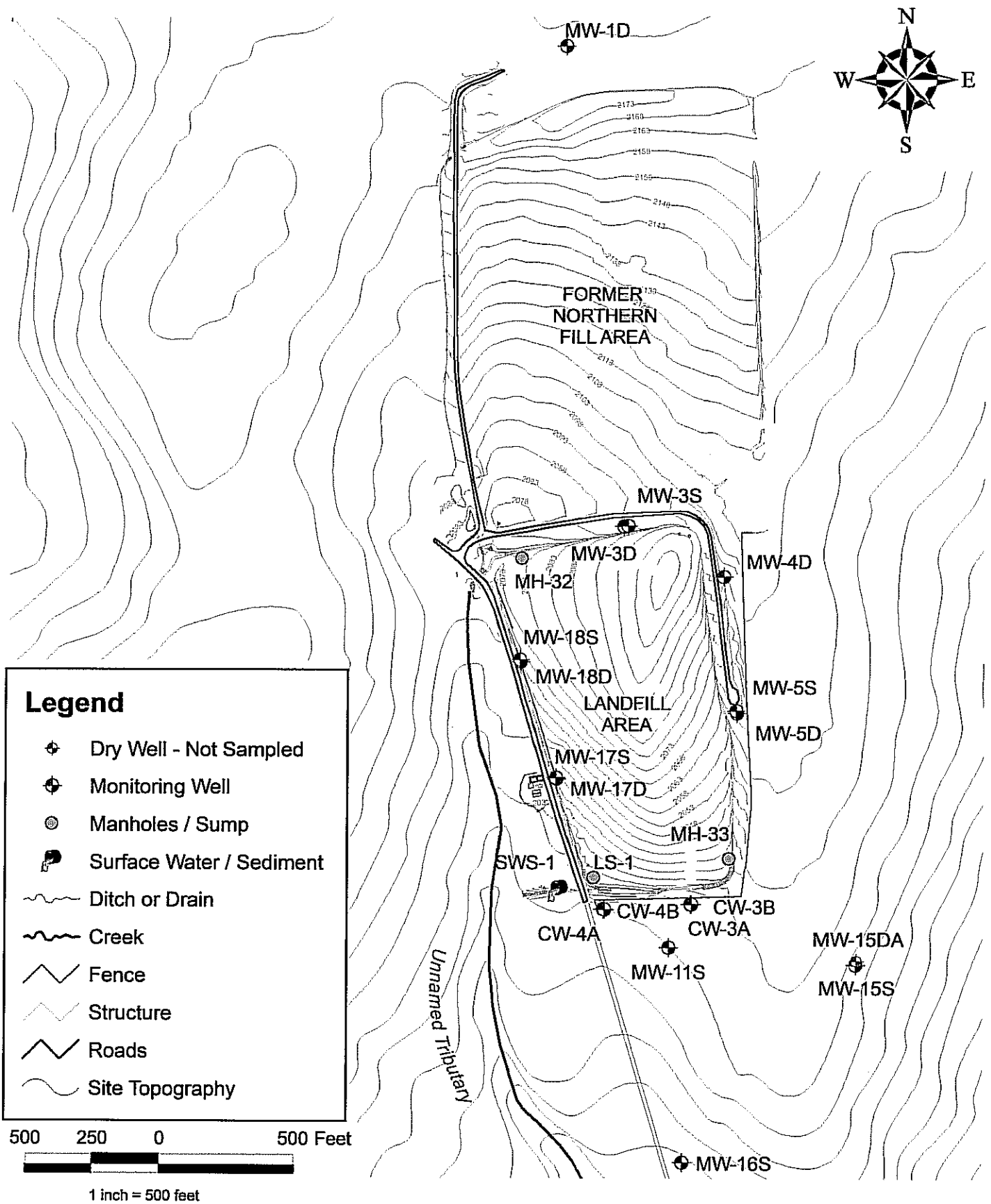
cc: Bill Whitfield, Village of Wellsville

Judy Lynch, Village Trustee, Liaison to Landfill

Tamara S. Girard, NYSDOH

Attachments

SAMPLING LOCATIONS

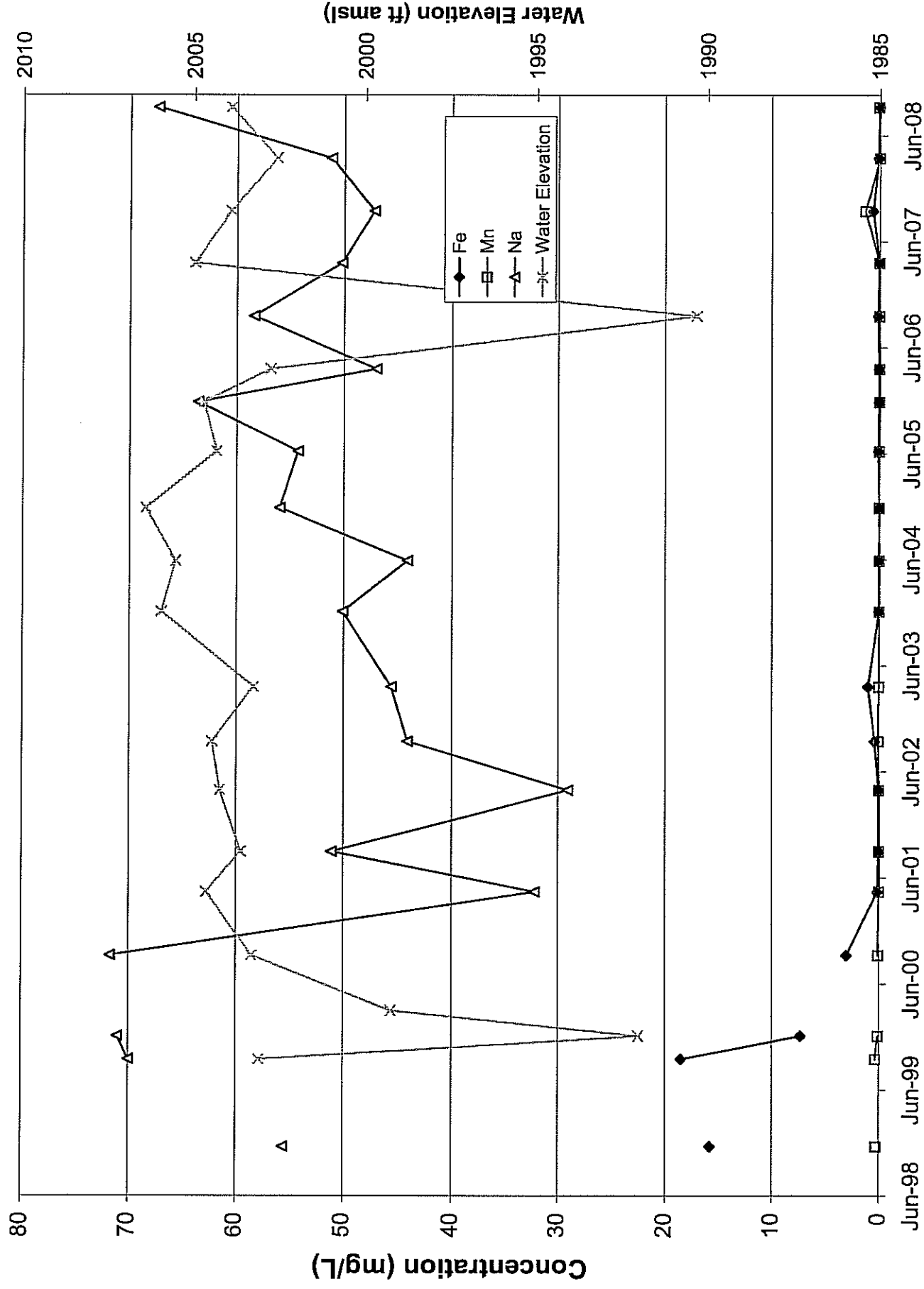


ON-SITE TECHNICAL SERVICES, INC.

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

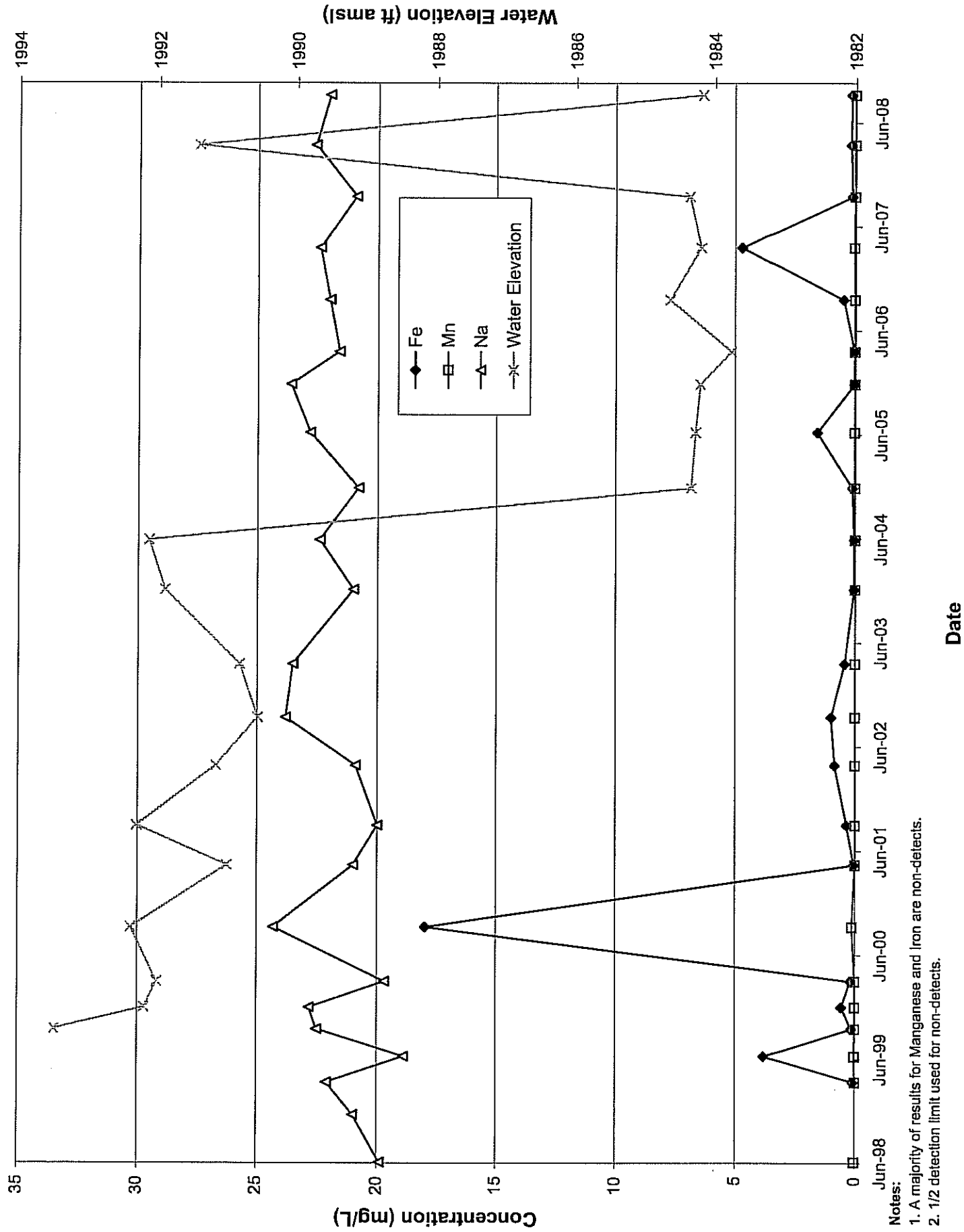


Notes:

1. The majority of results for Manganese and Iron are non detect.
2. 1/2 Detection limit used for non-detects.

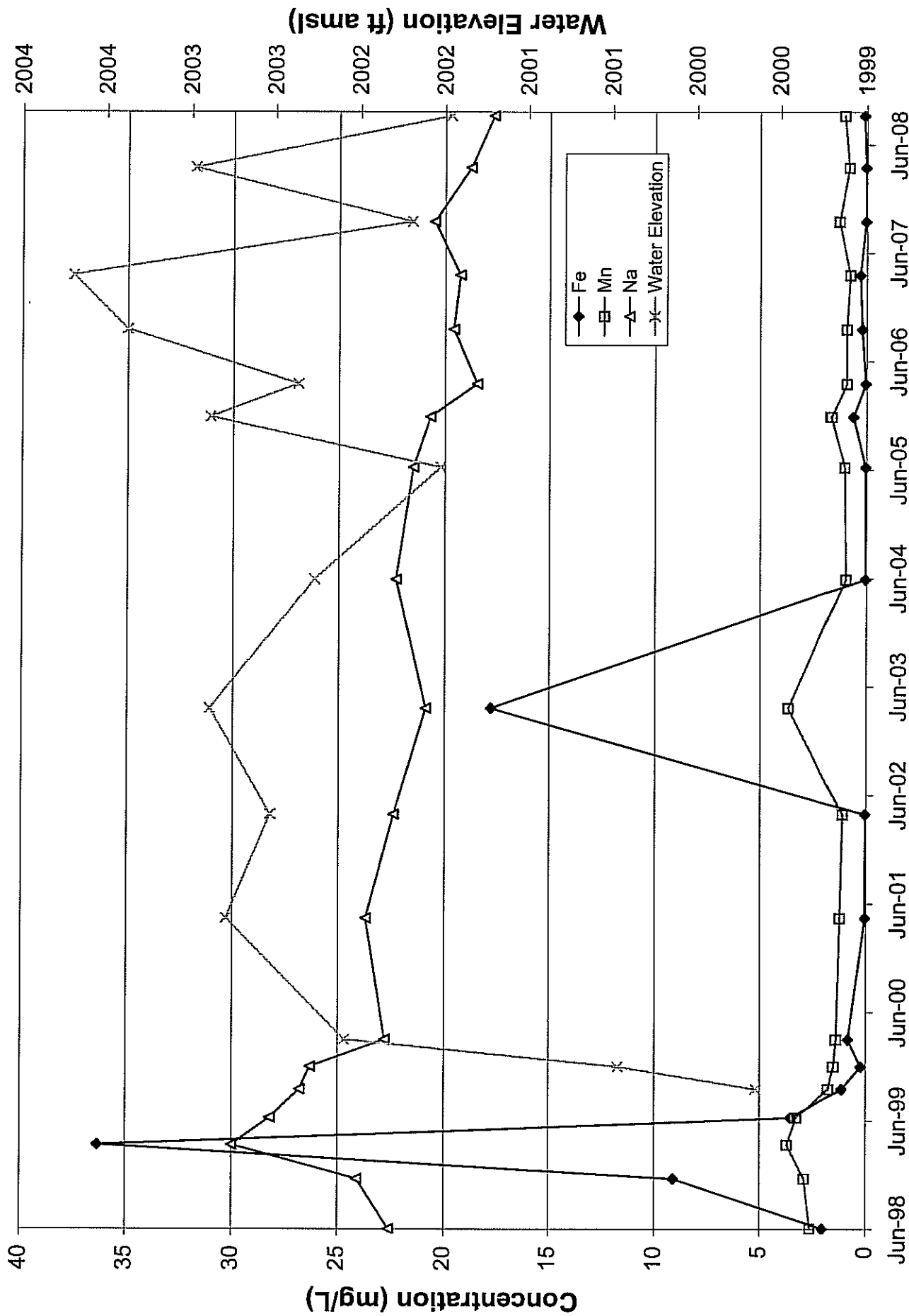
Date

CW-3B Metals



- Notes:
1. A majority of results for Manganese and Iron are non-detects.
 2. 1/2 detection limit used for non-detects.

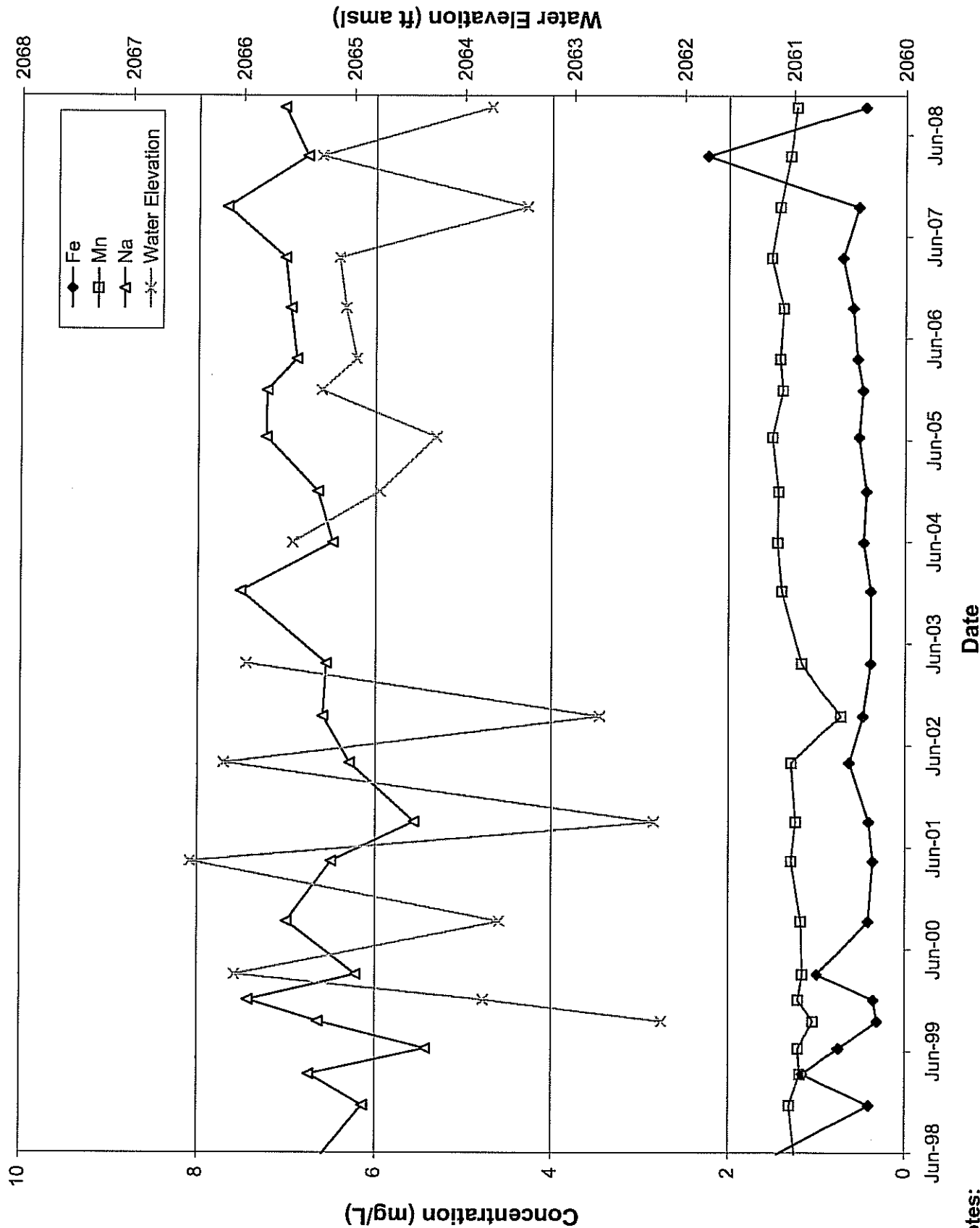
CW-4B Metals



Notes:

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

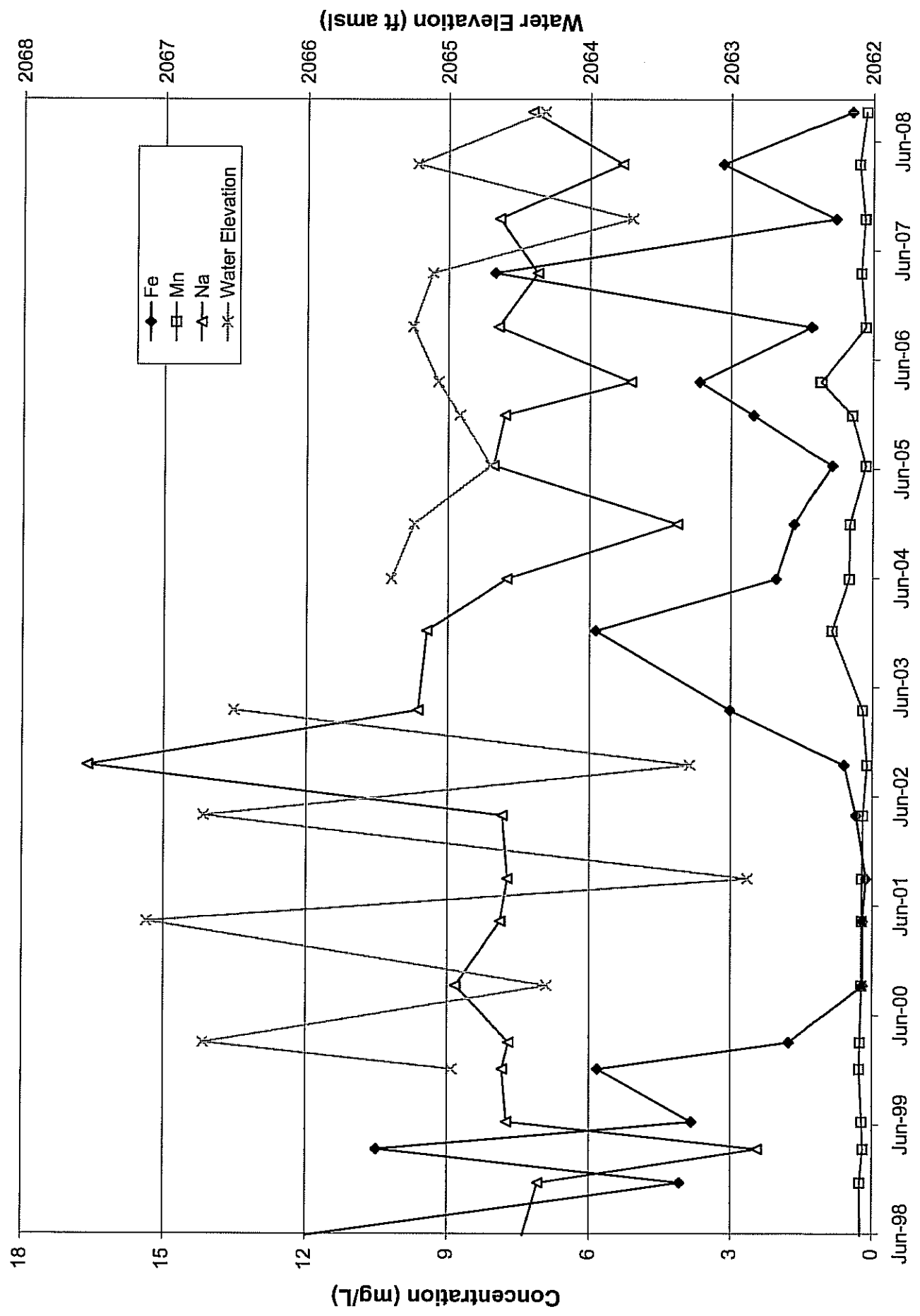
MW-5D Metals



Notes:

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

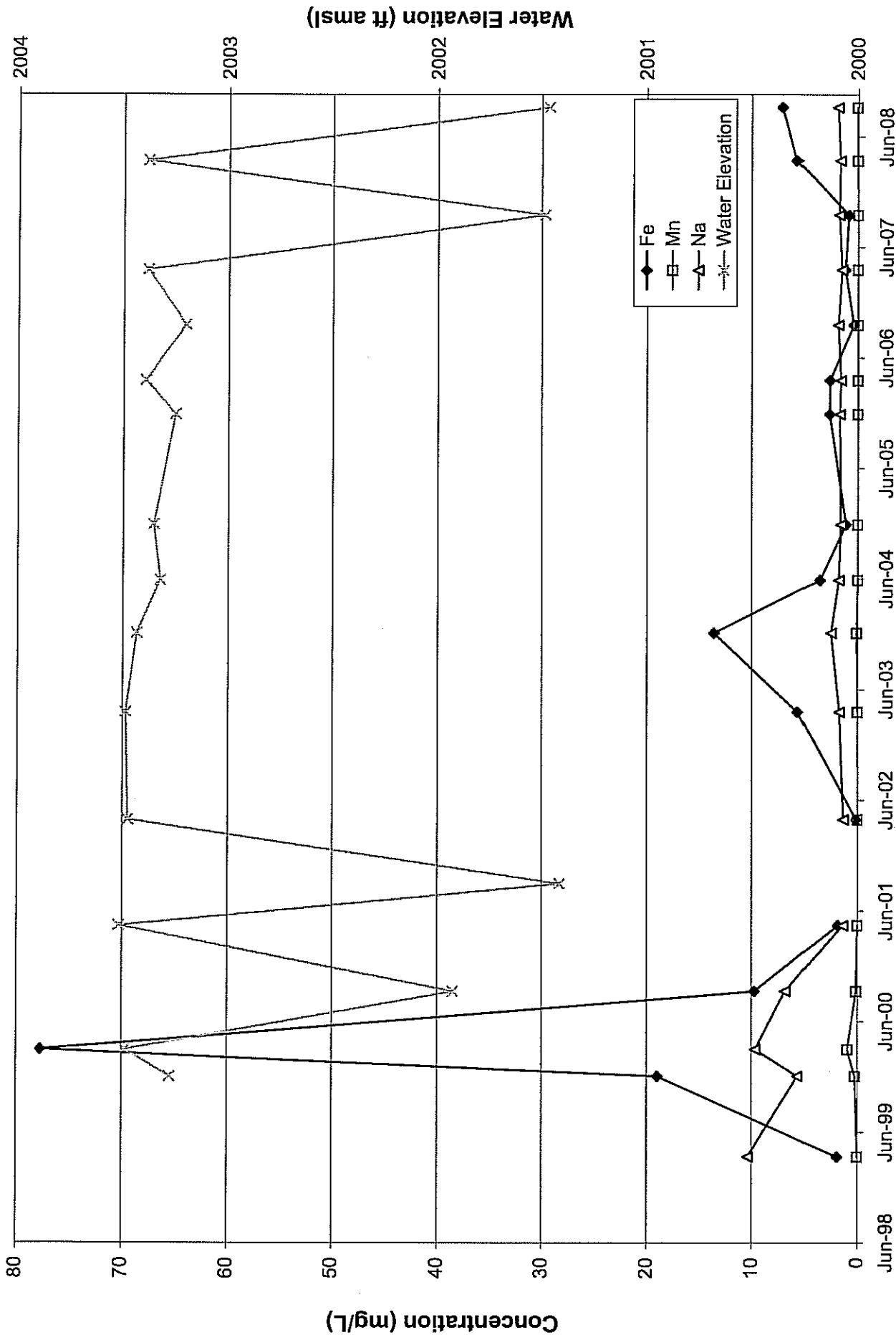
MW-5S Metals



Note:

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

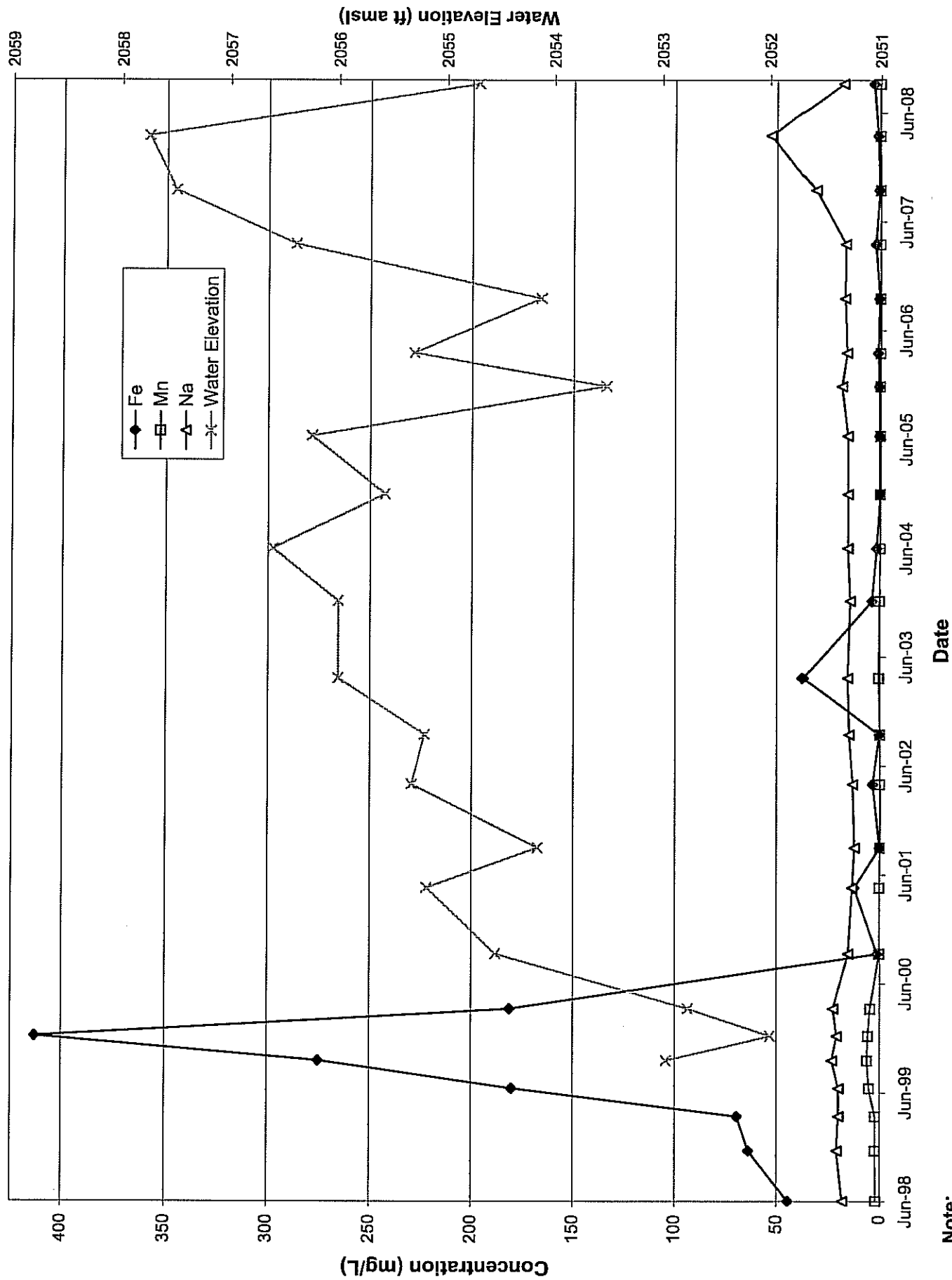
MW-15S Metals



Notes:

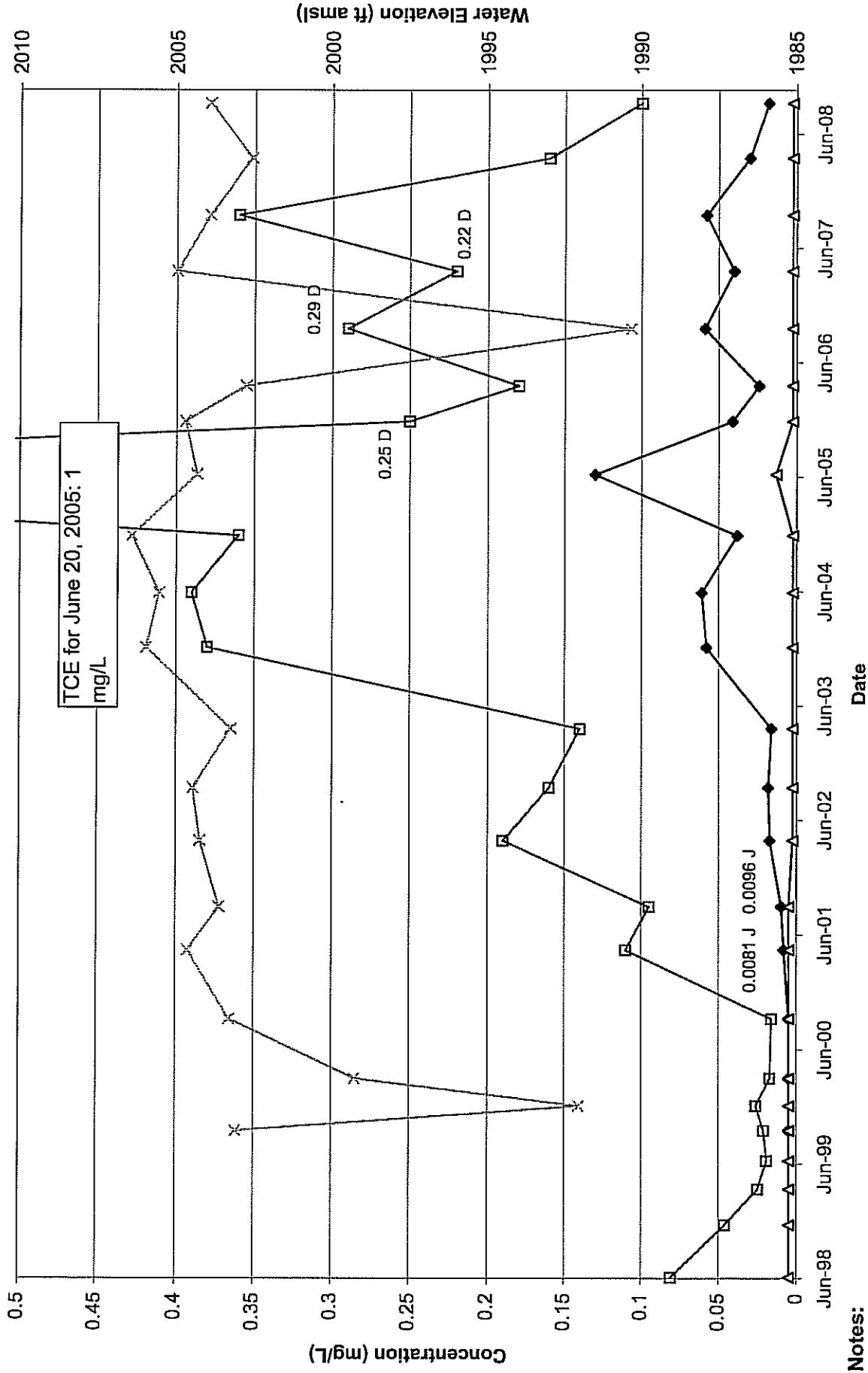
- 1/2 detection limit used for non-detects
- Manganese is non-detect on 4/10/2002 and 9/28/2006.
- VOCs only collected on 9/1/2001 due to insufficient water volume.

MW-18S Metals



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

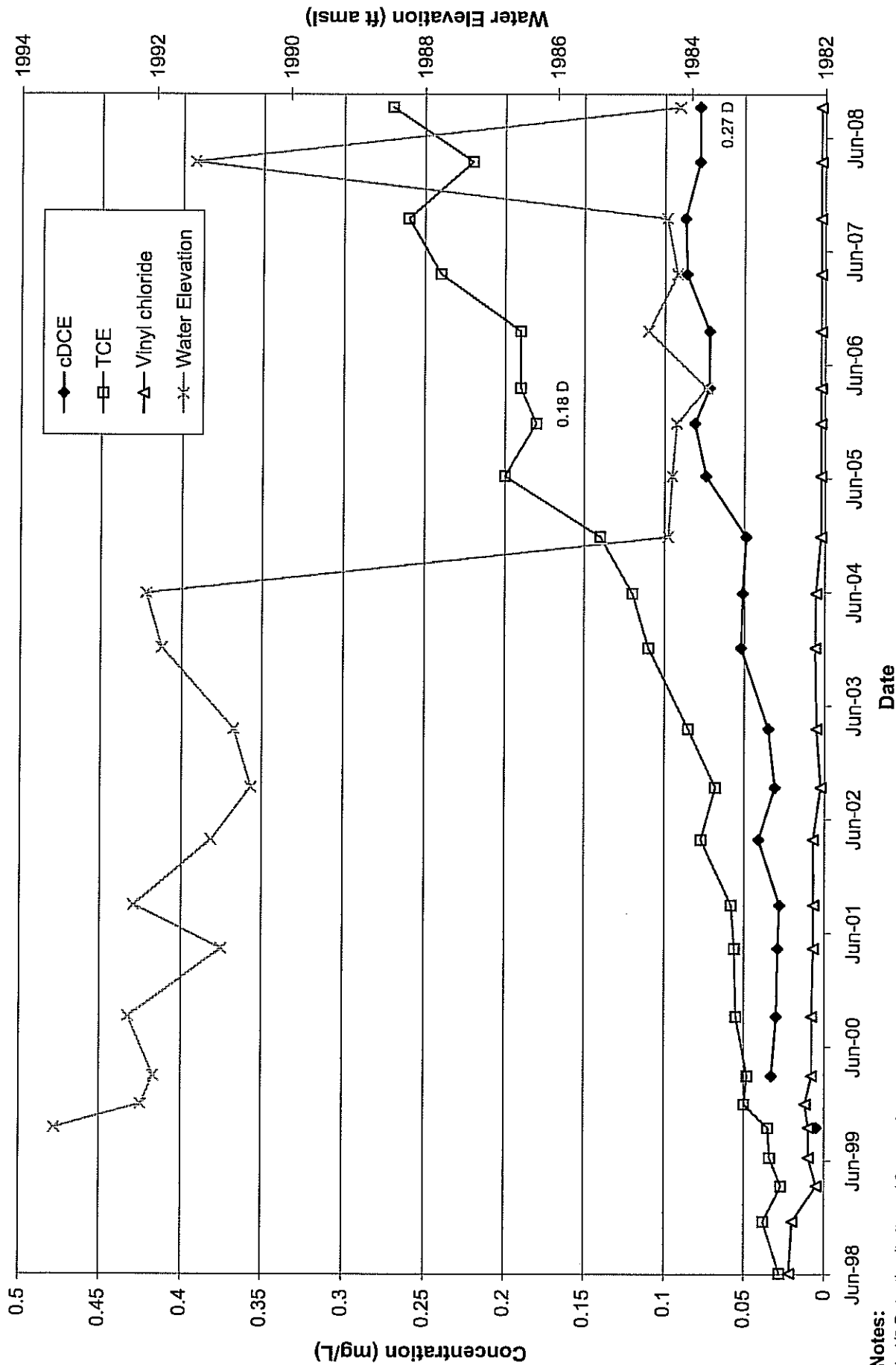
CW-3A VOCs



Notes:

- 1/2 Detection limit used for non-detects.
- Refer to Table B-1 (following graphs) for analytical results used in graphs.
- Vinyl chloride results are non-detected except in June 2005.
- Results for cis-1,2-Dichloroethene on 3/13/2000 and 9/19/2000 are non-detect and estimated on 4/26/2001 and 9/11/2001.
- D - This flag indicates a result from a diluted sample.
- Data with flag labeled on graph as appropriate.

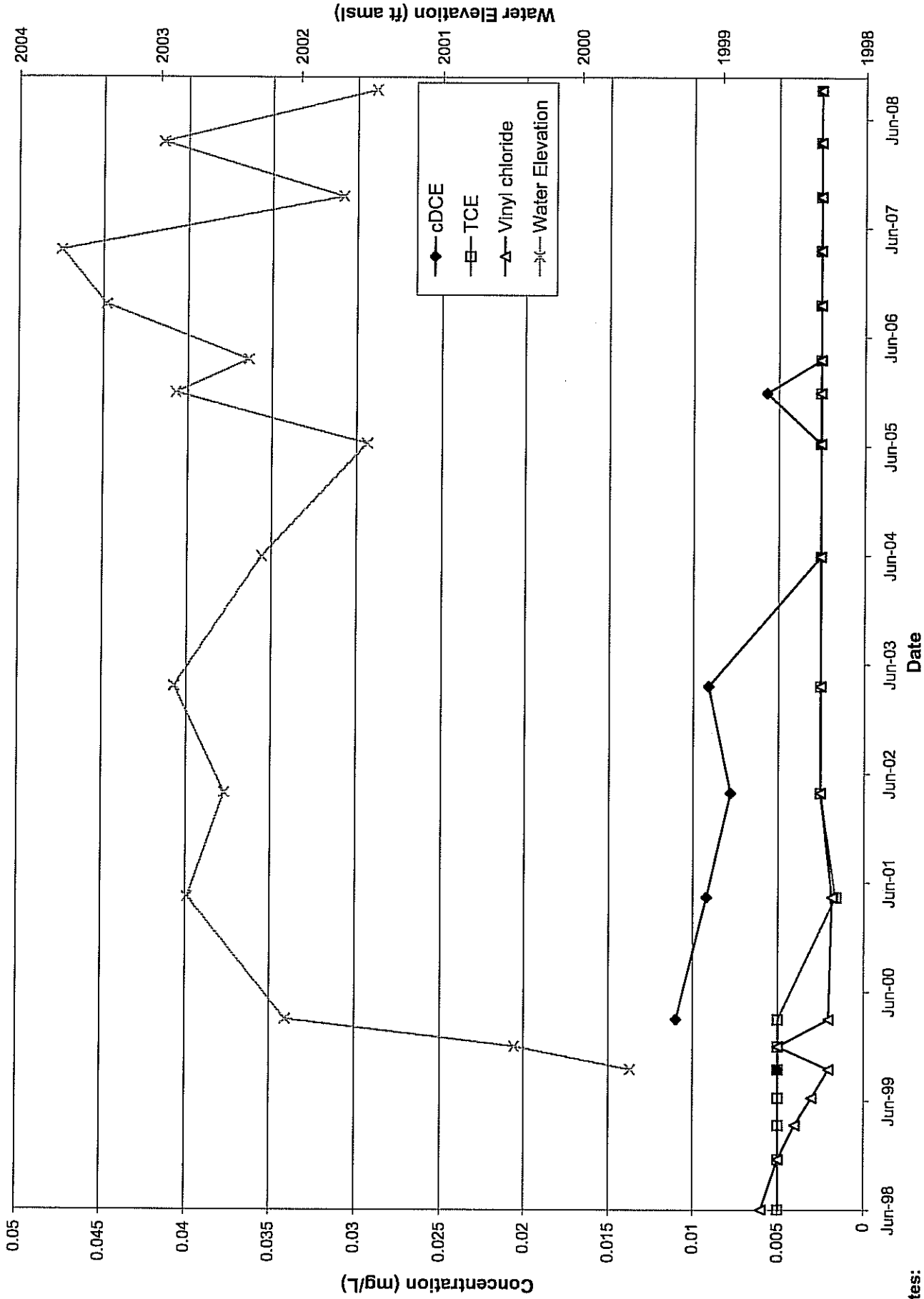
CW-3B VOCs



Notes:

- 1/2 Detection limit used for non-detects.
- Refer to Table B-1 (following graphs) for analytical results used in graphs.
- 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.
- Results for cDCE on 9/28/1999 are non-detect.
- D - This flag indicates a result from a diluted sample.
- Data with flag labeled on graph as appropriate.

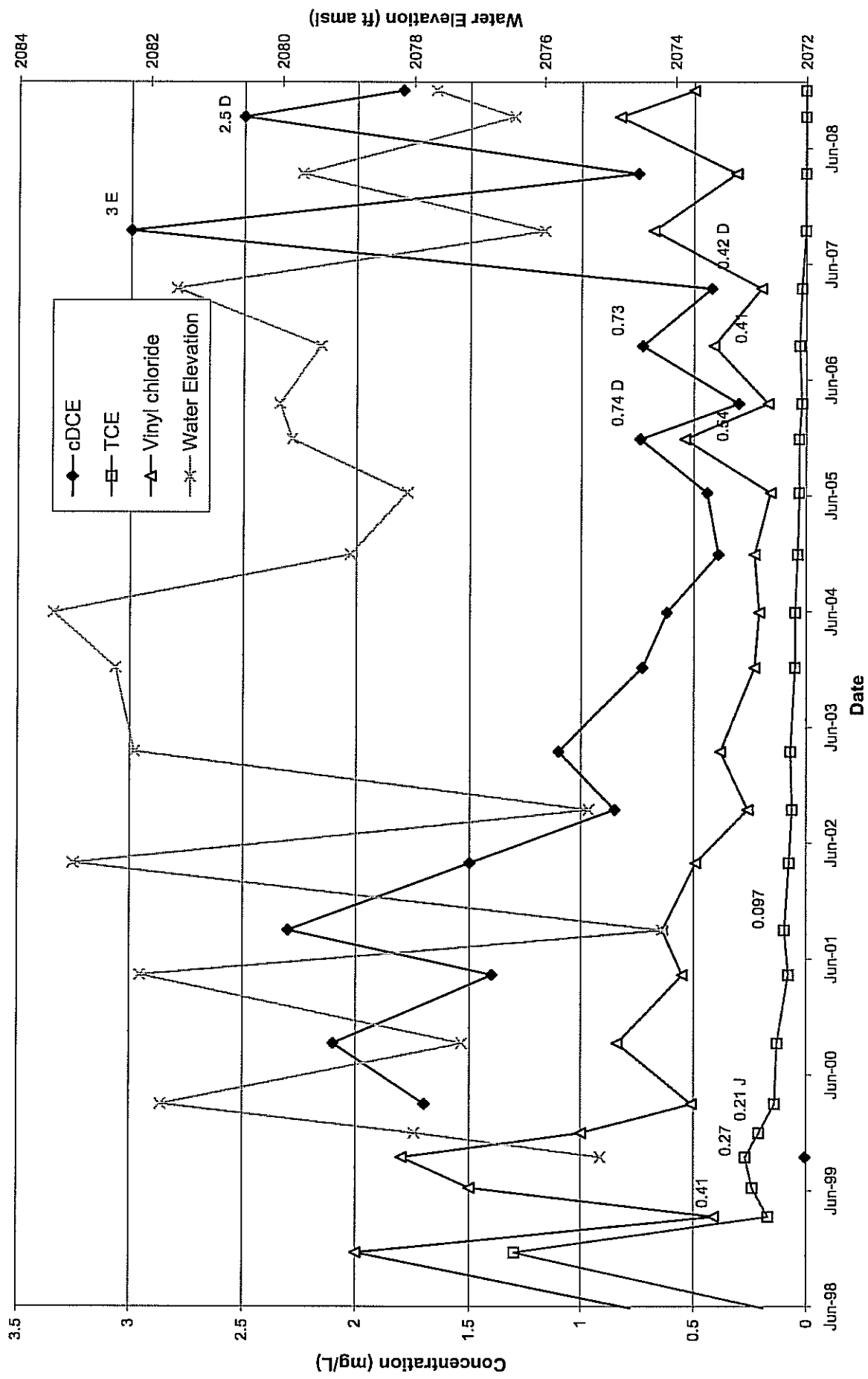
CW-4B VOCs



Notes:

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

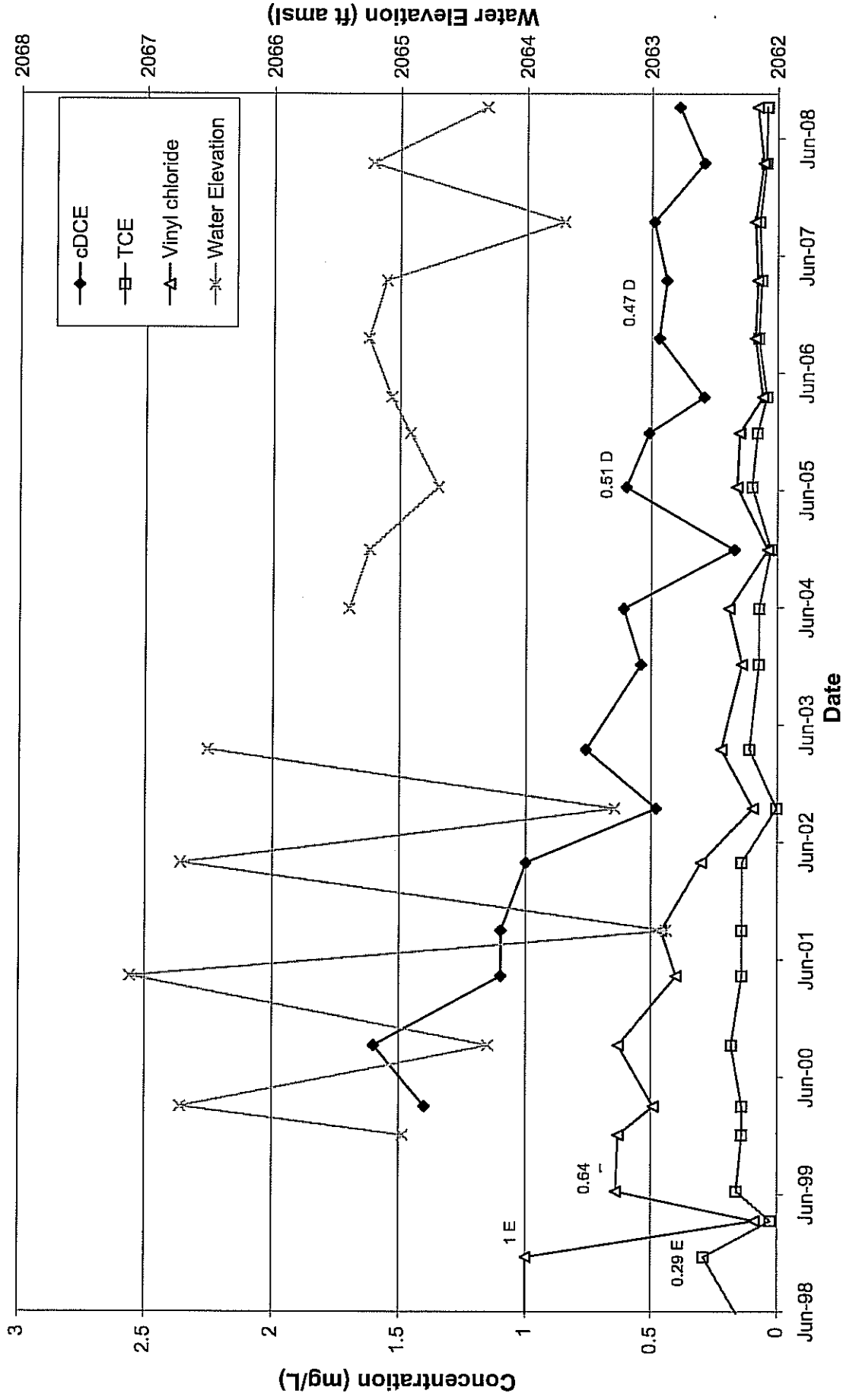
MW-4D VOCs



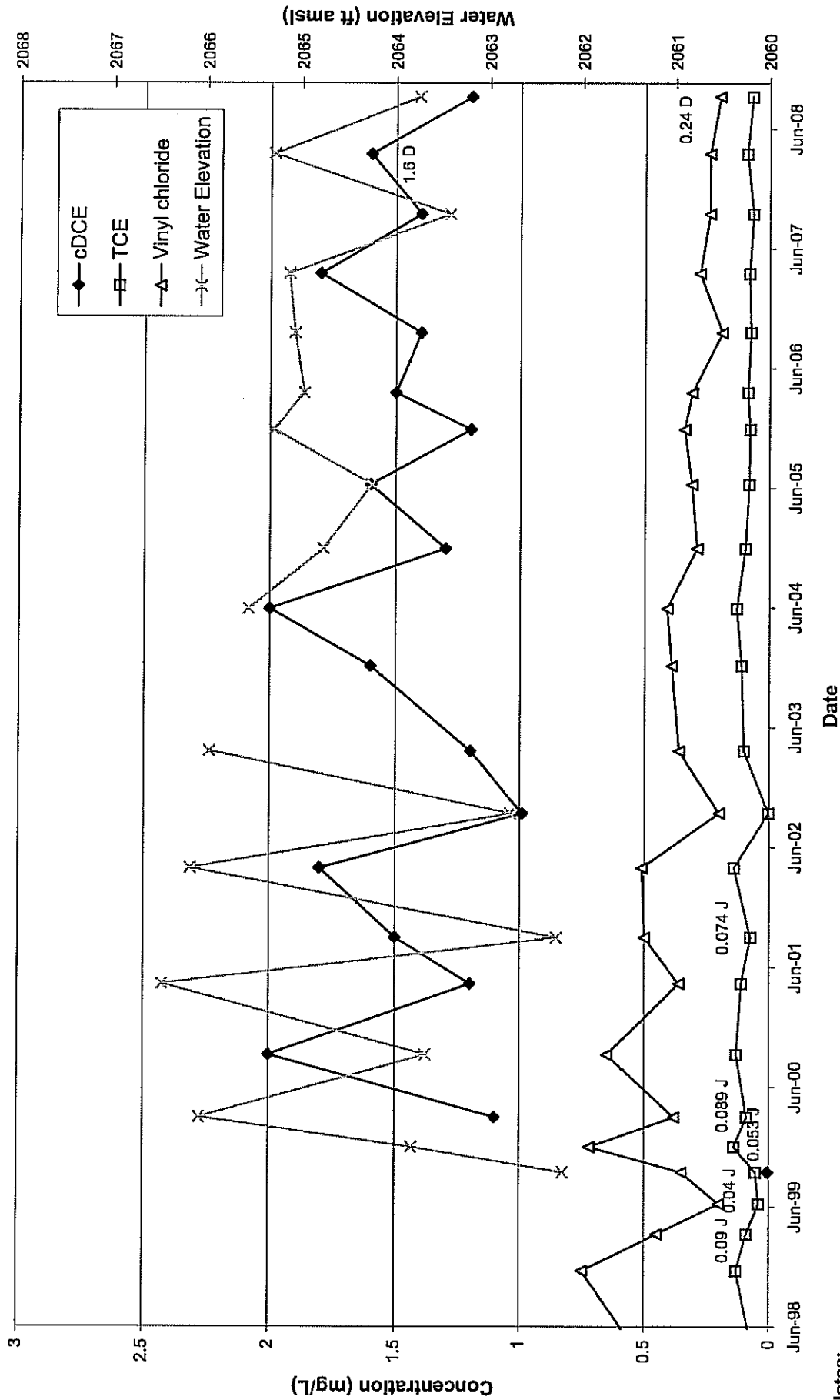
NOTES:

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



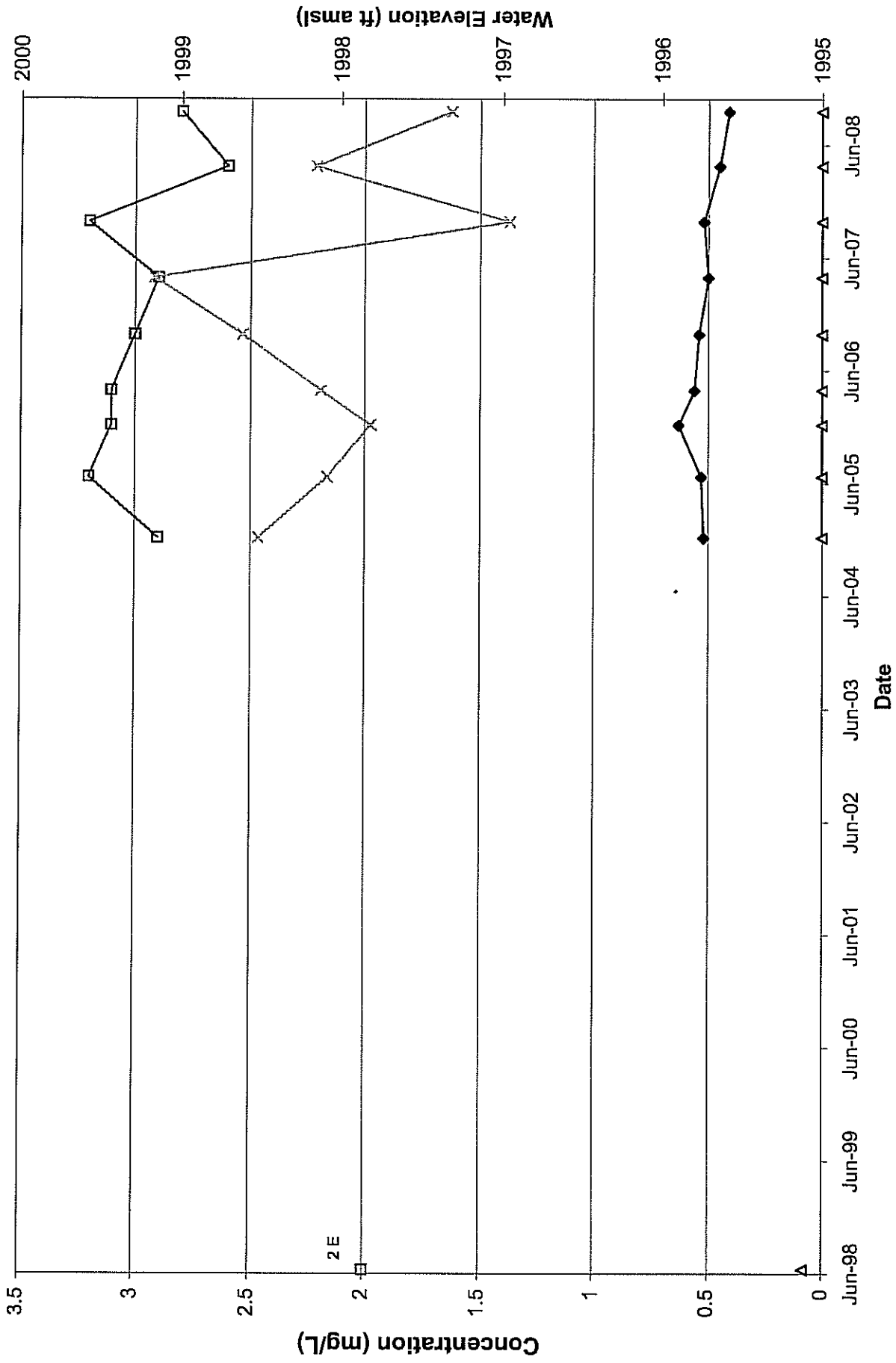
MW-5D VOCs



Notes:

- 1/2 Detection limit used for non-detects.
- Refer to Table B-1 (following graphs) for analytical results used in graphs.
- 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.
- Result for cDCE on 9/28/1999 is non-detect.
- J - Estimated values.
- D - This flag indicates a result from a diluted sample.
- Data with flag labeled on graph as appropriate.
- No water elevation available December 2003.

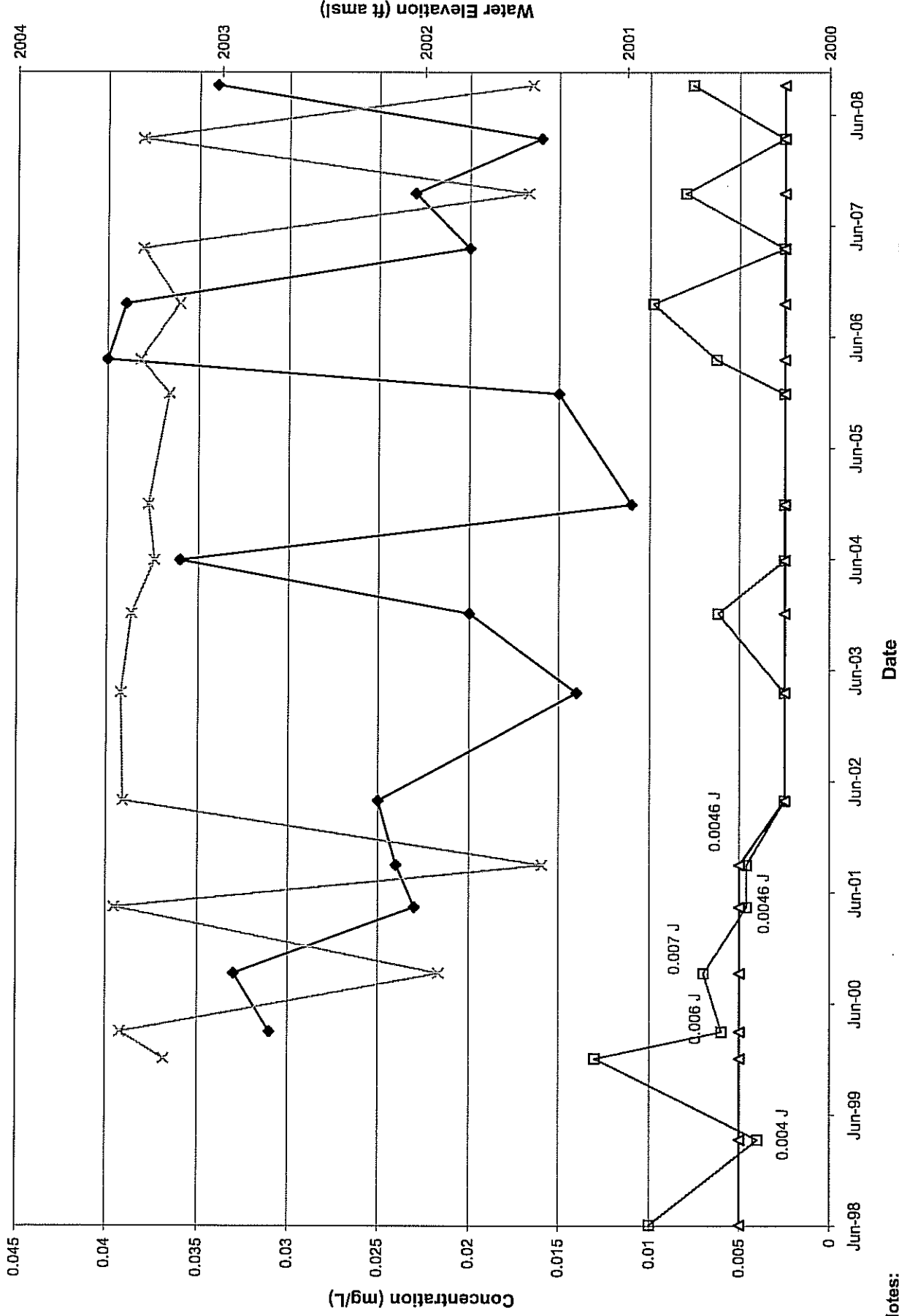
MW-11S VOCs



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 to the instrument used for analysis.
4. Vinyl chloride results are non-detect with an exception of result on 6/17/1998.
5. Data with flag labeled on graph as appropriate.

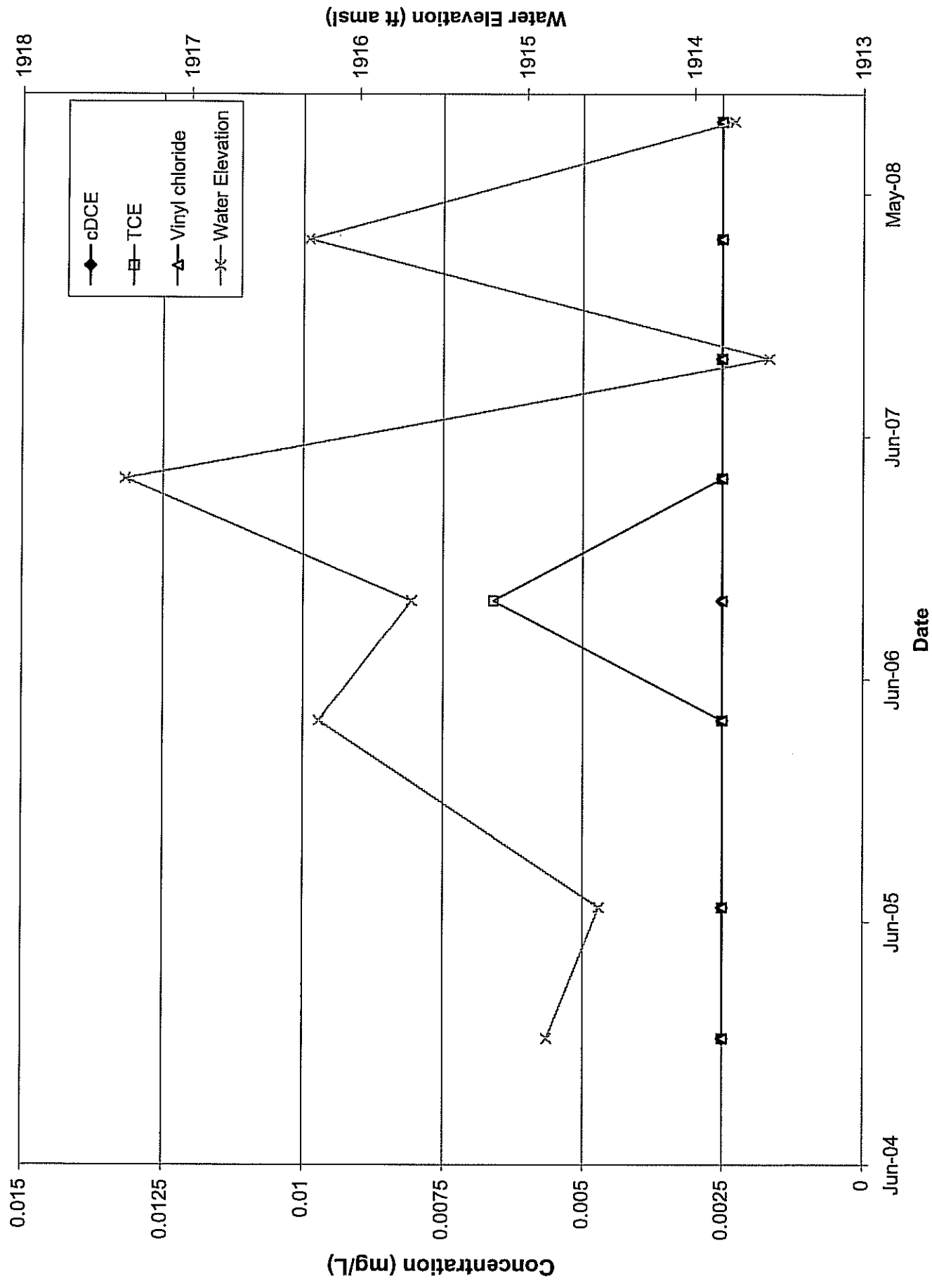
MW-15S VOCs



Notes:

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

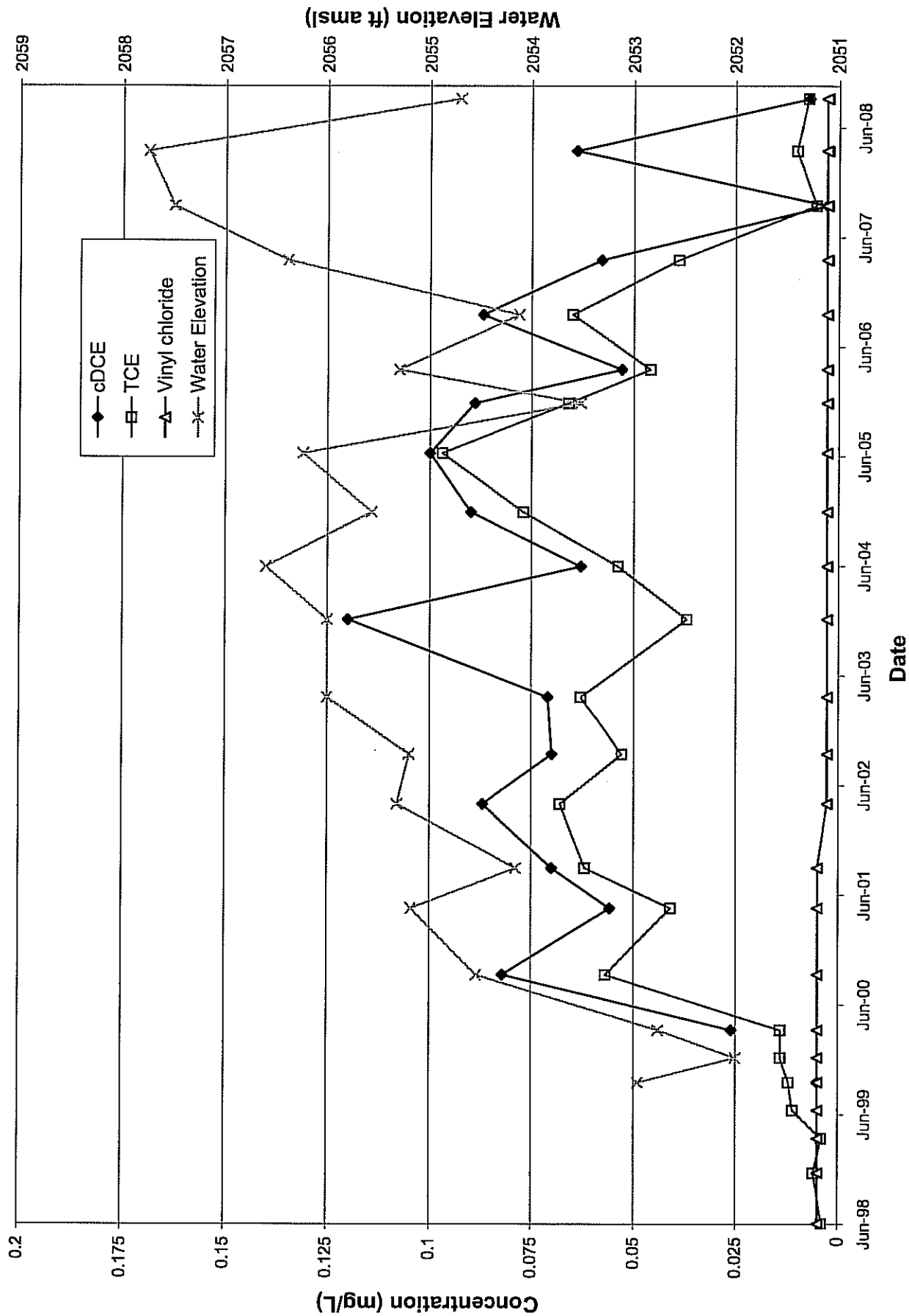
MW-16S VOCs



Notes:

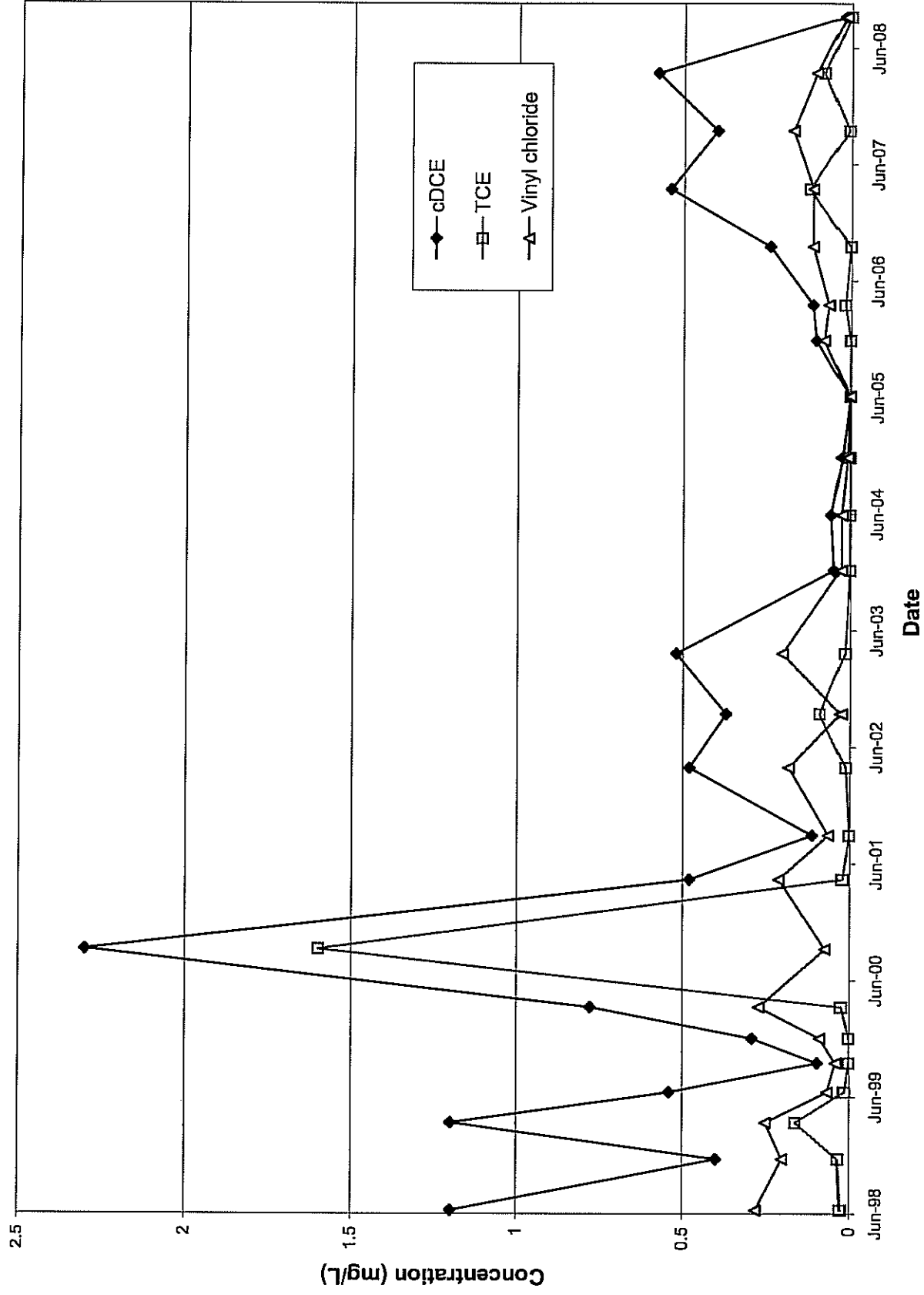
1. All values for cDCE, TCE and Vinyl chloride are non-detect with the exception of TCE on 9/27/2006.
2. There is no data available for MW-16S prior to December 2004.

MW-18S VOCs

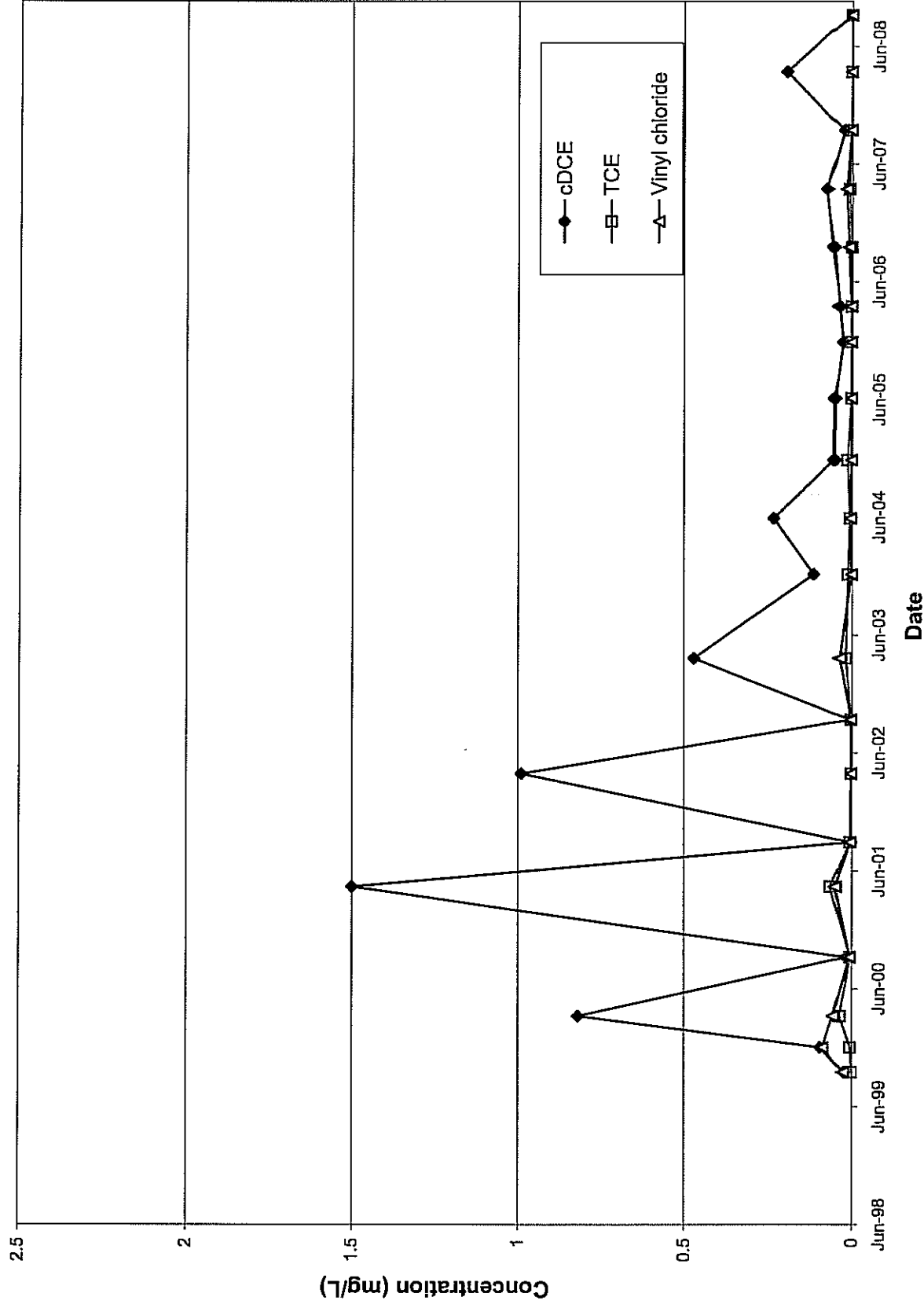


Notes:

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 6/15/1998, 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.



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



Notes:
1. 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-3A Total VOCs

COMPUTATIONS: Compute Statistic (S).

Date	6/17/98	12/1/98	3/25/99	6/24/99	9/29/99	12/16/99	3/13/00	9/19/00	4/26/01	9/11/01	4/10/02	9/25/02	4/7/03	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		
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	0.204	0.349	0.26	0.418	0.19	0.118	Count "u"	Count "u"
	0.086	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	16	7
	0.048	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	16	6
	0.03	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	17	4
	0.021	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	17	4
	0.024	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	19	1
	0.027	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	18	1
	0.017	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	17	1
	0.032	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	17	0
	0.1301	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	16	0
	0.113	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	13	2
	0.207	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	14	0
	0.178	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	8	5
	0.156	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10	2
	0.438	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10	1
	0.451	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2	8
	0.398	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2	6
	1.143	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2	7
	0.291	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	5
	0.204	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10	2
	0.349	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10	1
	0.26	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2	8
	0.418	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2	7
	0.19	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	1
																									203	73
																									Total "u"	Total "u"

S = Total Number of "u" minus Total Number of "n" = 130 STEP 4. a) Critical Value: From Table A-2, $z_{\alpha/2}$ (critical value at 5% significance level) = 1.645

STEP 1. Null Hypothesis: H_0 : There is no trend. STEP 4. b) Probability Value: p-value = $(P(Z > z_0) = 1 - z_p)$ where z_p from Table A-1 = 0.9993

p-value = 0.0007

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 $> z_{\alpha/2}$

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 = 0.0007 < 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).

$V(S) = 1625.33$

$z_0 = 3.1998$

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 CW-3B Total VOCs

COMPUTATIONS: Compute Statistic (S).

Date	6/17/98	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	4/9/02	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	
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)	0.104	0.094	0.054	0.085	0.08	0.116	0.091	0.093	0.0939	0.0947	0.1251	0.099	0.1251	0.168	0.1765	0.189	0.274	0.537	0.262	0.262	0.326	0.347	0.298	0.348	Count "+"
0.104	-	-	-	-	-	+	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	14
0.094	-	-	-	-	-	+	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	16
0.054	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	21
0.085	-	-	-	-	-	+	0.085	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	19
0.08	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	19
0.116	-	-	-	-	-	+	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	13
0.091	-	-	-	-	-	+	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	17
0.093	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	16
0.0939	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	15
0.0947	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	14
0.1251	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	11
0.099	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	12
0.168	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	11
0.1765	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10
0.189	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	9
0.274	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	8
0.537	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	5
0.262	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2
0.298	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0
0.326	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	4
0.347	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	4
0.298	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0

S = Total Number of "+" minus Total Number of "-" =	210	STEP 4. a) Critical Value:	From Table A-2, z _{α/2} (critical value at 5% significance level) = 1.645	Total "+" =	242	Total "-" =	32

S = 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 1. Null Hypothesis: H_0 : There is no trend. STEP 4. b) Probability Value: p-value = $(P(Z > z_0) = 1 - z_p)$, where z_p from Table A-1 = 0.9999 (off scale)

p-value = 0.0001

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 $z_0 = 5.1873 > 1.645$

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-9S, dated February 2006

1/2 detection limit used for non-detects.

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

Monitoring Well CW-4B Total VOCs

COMPUTATIONS: Compute Statistic (S).

[illegible]

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

STEP 1. Null Hypothesis:

STEP 2. Alternative Hypothesis:

STEP 3. Test Statistics:

$$z_0 = S - \text{sign}(S) / V(S)^{0.5} \quad \text{Where: } \text{sign}(S) = 1 \text{ if } S > 0, 0 \text{ if } S = 0, \text{ and } -1 \text{ if } S < 0$$

$$\text{and } V(S) = 1/18[n(n-1)(2n+5) - \{t_1(t_1-1)(2t_1+5) + [t_2(t_2-1)(2t_2+5) + \dots \text{ up to } t_p]\}]$$

Where: n (number of samples) = 19

 t_1 = number of tied samples in the first group = 9 t_2 = number of tied samples in second group = 0

q = the number of tied sample groups

$$V(S) = 725.00$$
$$z_0 = -3.4911$$

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-4D Total VOCs

COMPUTATIONS: Compute Statistic (S).

Date	6/9/98	12/1/98	3/24/99	6/23/99	9/28/99	12/13/99	3/14/00	9/21/00	4/24/01	9/12/01	4/11/02	9/26/02	3/28/03	12/18/03	6/9/04	12/9/04	5/21/05	12/7/05	3/29/06	9/27/06	3/27/07	9/25/07	3/24/08	9/16/08	12/11/08	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	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	3.68	1.05	3.33	2.3	13	11
	1.83	15.3	-	-	+	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-	+	+	-	+	+	0	23
	1.784	1.784	-	+	+	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-	+	+	-	+	+	12	10
	6.774	6.774	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	19
	11.25	11.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	20
	6.81	6.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	19
	2.35	2.35	-	-	-	-	-	+	-	+	-	-	+	-	-	-	-	-	-	-	+	+	-	+	-	5	13
	3.07	3.07	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	2	15
	2.0401	2.0401	-	-	-	-	-	-	-	+	-	-	+	-	-	-	-	-	-	-	+	+	-	+	-	8	10
	3.037	3.037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	2	13
	2.067	2.067	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	4	10
	1.173	1.173	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	+	-	-	+	+	-	+	+	6	7
	3.012	3.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	2	10
	1.011	1.011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	7	4
	0.88	0.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	7	3
	0.659	0.659	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	7	2
	1.317	1.317	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	3	5
	1.312	1.312	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	3	4
	0.503	0.503	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	6	0
	1.17	1.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	3	2
	0.651	0.651	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	4	0
	3.68	3.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	3	2
	1.06	1.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	4	0
	3.33	3.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	0	3
																										2	0
																										0	1
																										75	189
																										Total "+"	Total "-"

S = 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) = 1.645STEP 1. Null Hypothesis: H_0 : There is no trend. p-value = $P(Z > z_0) = 1 - z_0$, where z_0 from Table A-1 = 0.0041
STEP 2. Alternate Hypothesis: H_A : There is a downward trend. p-value = 0.9959STEP 3. Test Statistics: $z_0 = S - \text{sign}(S) / \sqrt{V(S)}$ Where: $\text{sign}(S) = 1$ if $S > 0$, 0 if $S = 0$, and -1 if $S < 0$
and $V(S) = 1/(18(n-1)(2n+5)) - [t_1(t_1-1)(2t_1+5) + t_2(t_2-1)(2t_2+5) + \dots + t_g(t_g-1)(2t_g+5)]$
Where: n (number of samples) = 25
 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 groupsSTEP 4. b) Probability Value: p-value = $P(Z > z_0) = 1 - z_0$, where z_0 from Table A-1 = 0.0041
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 $z_0 = 2.6391 > 1.645$
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 = 0.9959 > 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-9S, dated February 2006

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

Monitoring Well MW-5D Total VOCs

COMPUTATIONS: Compute Statistic (S).

[illegible]

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 = 0.165
 $p\text{-value} = 0.8350$

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

STEP 3. Test Statistics:

$$\epsilon_0 = S - \text{sign}(S) / V(S)^{0.5} \quad \text{Where: } \text{sign}(S) = 1 \text{ if } S > 0, 0 \text{ if } S = 0, \text{ and } -1 \text{ if } S < 0$$

where:

 t_i = number of tied samples in the first group = 0 $t = \text{number of samples per } j \text{ frequency} = 4$ q = the number of tied cases/a sample

1575-33

3) = 1023.33
3) = 0.0574

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-GS, dated February 2006

Table 1

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

Monitoring Well MW-5S Total VOCs

COMPUTATIONS: Compute Statistic (S).

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	9/26/02	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	9/25/07	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	Count "+"	Count "-"
Result (mg/L)	3.06	4.796	0.116	2.413	5.14	2.03	2.41	1.6543	1.7	1.44	0.575	1.09	0.753	0.872	0.233	0.86	0.74	0.391	0.634	1.118	0.651	0.391	0.512		
3.06		+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	20
4.796			-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	20
0.116			-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	0
2.413					+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	18
5.14						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	18
2.03						-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	16
2.41								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	16
1.6543									+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	14
1.7										-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	14
1.44											-	-	-	-	-	-	-	-	-	-	-	-	-	0	13
0.575											-	-	-	+	-	+	+	-	+	+	+	-	-	8	4
1.09												+			-	-	-	-	-	+	-	-	-	1	10
0.753														+	-	+	-	-	-	+	-	-	-	3	7
0.872															-	-	-	-	-	+	-	-	-	1	8
0.233																+	+	+	+	+	+	+	+	8	0
0.86																	-	-	-	+	-	-	-	1	6
0.74																		-	-	+	-	-	-	1	5
0.391																			+	+	+	+	+	2	2
0.634																				+	-	-	-	0	3
1.118																								0	2
0.651																								1	0
0.391																								1	0
S = Total Number of "+" minus Total Number of "-" =																								56	196
STEP 4. a) Critical Value:																								From Table A-2, z _{0.05} (critical value at 5% significance level) = 1.645	

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. p-value = $(P(Z > z_a) = 1 - z_p)$, where z_p from Table A-1 = 0.0001 (off scale)

p-value = 0.9999

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

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

and $V(S) = 1/18(n(n-1)(2n+5) - (t_1(1-1)(2t_1+5) + t_2(1-1)(2t_2+5) + \dots \text{up to } t_g))$

Where: n (number of samples) = 23

t_1 = number of tied samples in the first group = 2

t_2 = number of tied samples in second group = 0

g = the number of tied sample groups

$V(S) = 1432.67$

$Z_a = -3.6723$

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

Since absolute value $Z_a = -3.6723 > 1.645$

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 = 0.9999 > 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 Event	6/17/98	12/8/04	12/23/05	12/8/05	3/31/06	9/27/06	3/30/07	9/26/07	3/24/08	9/17/08	
Result (mg/L)	2.752	3.42	3.73	3.73	3.66	3.54	3.4	3.72	3.05	3.21	Count "+"
2.752	+	+	+	+	+	+	+	+	+	+	Count "-"
3.42		+	+	+	+	+	-	+	-	-	9
3.73				0	-	-	-	-	-	-	5
3.73					-	-	-	-	-	-	0
3.66					-	-	-	-	-	-	0
3.54						-	-	+	-	-	1
3.4							-	+	-	-	1
3.72								+	-	-	1
3.05									-	+	0
											Total "+"
											18
											Total "-"
											26

S = Total Number of "+" minus Total Number of "-" = -8

STEP 4. a) Critical Value:

From Table A-2, $z_{0.95}$ (critical value at 5% significance level) = 1.645

STEP 1. Null Hypothesis:

H_0 : There is no trend.

STEP 4. b) Probability Value:

p-value = $(P(Z > z_0)) = 1 - z_{0.95}$ where z_0 from Table A-1 = 0.2648

STEP 2. Alternative Hypothesis:

H_A : There is a downward trend.

STEP 3. Test Statistics:

$z_0 = S - \text{sign}(S) / V(S)^{0.5}$ Where: $\text{sign}(S) = 1$ if $S > 0$, 0 if $S = 0$, and -1 if $S < 0$
and $V(S) = 1/18(n(n-1)(2n+5) - [t_1(t_1-1)(2t_1+5) + t_2(t_2-1)(2t_2+5)] + \dots \text{up to } t_g\})$

Where:

n (number of samples) = 10

t_1 = number of tied samples in the first group = 2

t_2 = number of tied samples in second group = 0

g = the number of tied sample groups

$V(S) = 124.00$

$z_0 = -0.6286$

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 $> z_{0.95}$

Since absolute value $z_0 = 0.6286 < 1.645$

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 = 0.7352 > 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-15S Total VOCs

COMPUTATIONS: Compute Statistic (S).

Date	6/17/98	3/25/99	12/16/99	3/13/00	4/26/01	9/11/01	4/10/02	3/31/03	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	9/17/08		
Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
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 "+"	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Count "-"	19	7	11	17	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Total "+"	0	11	17	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Total "-"	19	7	11	17	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Total Count	19	18	28	28	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22

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

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:

$Z_a = S - \text{sign}(S) / \sqrt{V(S)}$ Where: $\text{sign}(S) = 1$ if $S > 0$, 0 if $S = 0$, and -1 if $S < 0$
and $V(S) = 1/18(n-1)(2n+5) - [(t_1-1)(2t_1+5) + (t_2-1)(2t_2+5) + \dots \text{up to } t_q]$

Where: n (number of samples) = 20

t_1 = number of tied samples in the first group = 2

t_2 = number of tied samples in second group = 0

g = the number of tied sample groups

$V(S) = 949.00$

$Z_a = -0.7142$

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	12/1/98	3/26/99	6/28/99	9/29/99	12/20/99	3/21/00	6/21/00	9/21/00	12/1/01	4/12/02	9/25/02	4/3/03	12/17/03	6/11/04	12/9/04	6/23/05	12/6/05	3/28/06	9/27/06	3/28/07	9/25/07	3/26/08	9/16/08		
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)	0.024	0.026	0.018	0.038	0.04	0.049	0.087	0.139	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	0.0052	0.074	0.0141	Count "+"	Count "-"
	0.024	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	3
	0.026			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	19	3
	0.018			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	19	2
	0.038				+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	18	2
	0.04					+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	17	2
	0.049						+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	16	2
	0.087							+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	14	3
	0.139								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	6	10
	0.097									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	11	3
	0.132										+	+	+	+	+	+	+	+	+	+	+	+	+	+	7	7
	0.155											+	+	+	+	+	+	+	+	+	+	+	+	+	3	9
	0.123												+	+	+	+	+	+	+	+	+	+	+	+	6	6
	0.134													+	+	+	+	+	+	+	+	+	+	+	5	6
	0.157														+	+	+	+	+	+	+	+	+	+	2	8
	0.117															+	+	+	+	+	+	+	+	+	4	5
	0.167																+	+	+	+	+	+	+	+	1	7
	0.197																	+	+	+	+	+	+	+	0	7
	0.155																		+	+	+	+	+	+	0	6
	0.099																			+	+	+	+	+	1	4
	0.152																				+	+	+	+	0	3
	0.097																					+	+	+	0	0
	0.0052																						+	+	2	0
	0.074																							+	0	1
																									171	103
																									Total "+"	Total "-"

S = Total Number of "+" minus Total Number of "-" = 68 STEP 4. a) Critical Value: From Table A-2, $z_{0.95}$ (critical value at 5% significance level) = 1.645STEP 1. Null Hypothesis: H_0 : There is no trend. STEP 4. b) Probability Value: p -value = $(P(Z > z_0)) = 1 - z_{p_0}$ where z_p from Table A-1 = 0.9518
 p -value = 0.0482STEP 2. Alternative Hypothesis: H_A : There is an upward trend.STEP 3. Test Statistics: $z_0 = S - \text{sign}(S) / V(S)^{0.5}$ Where: $\text{sign}(S) = 1$ if $S > 0$, 0 if $S = 0$, and -1 if $S < 0$
and $V(S) = 1/18(n(n-1)(2n+5) - \{t_1(t_1-1)(2t_1+5) + t_2(t_2-1)(2t_2+5) + \dots \text{up to } t_g\})$
Where: n (number of samples) = 24
 t_1 = number of tied samples in the first group = 2
 t_2 = number of tied samples in second group = 2
 g = the number of tied sample groups $V(S) = 1623.33$
 $z_0 = 1.6629$
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 $> z_{0.95}$
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 = 0.0482 < 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

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

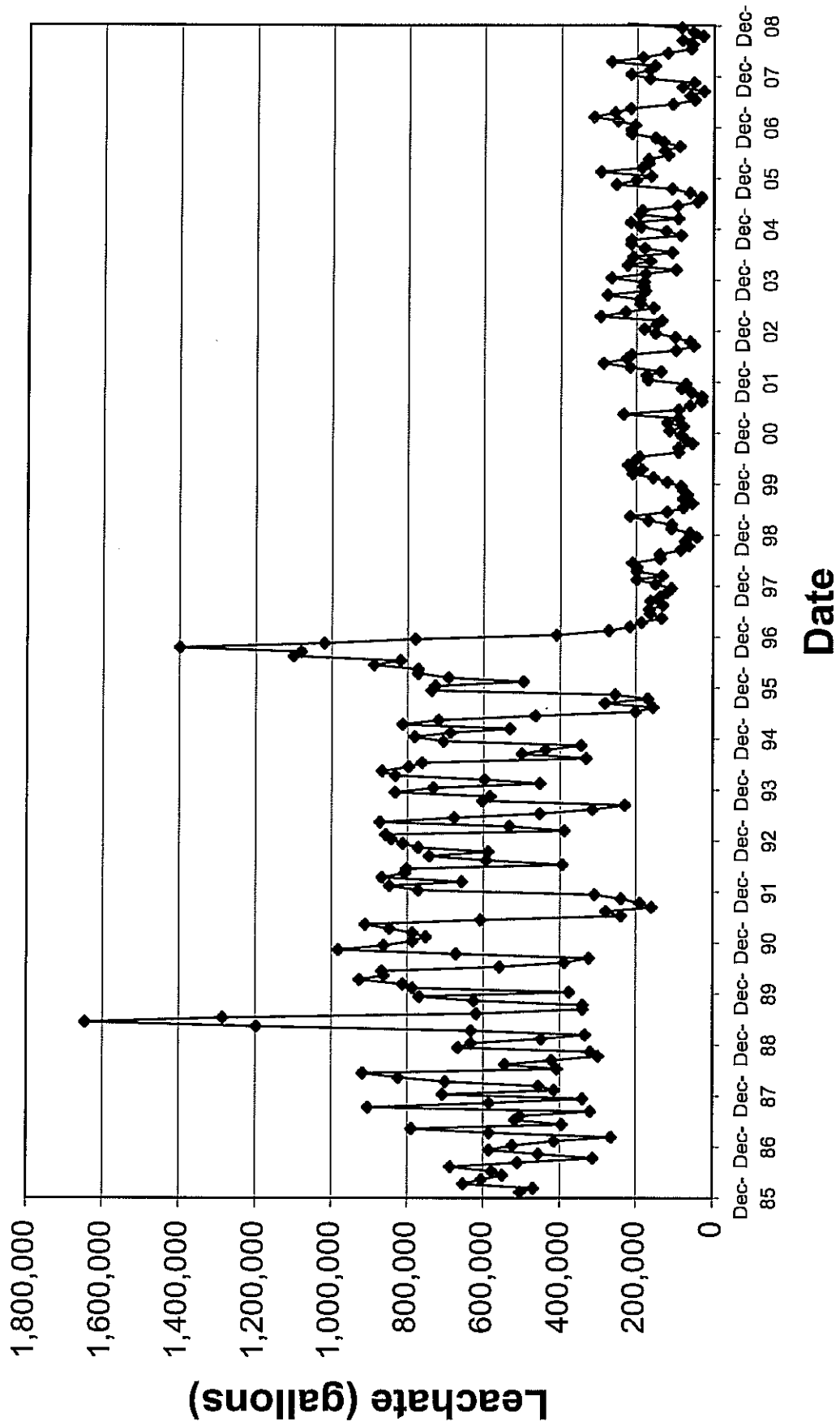
² WAL-19 tested for VOCs prior to filters, between filters and after filters

Location	Current Sampling Frequency	Proposed Sampling Frequency	Proposed Analyte List ¹

Residential Water Supply

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, Alleghany 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.

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 it 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 sporadically 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.

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.

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.:

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



Department of
Environmental
Conservation

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation

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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

Appendix C

Spring/Fall
Field Forms

Spring 2021

Field Forms

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

Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 4-20-21

Monitoring Well: MW-4D Sample ID: MW4D-0421 Arrival Time: 0830

Weather Conditions

Temp. 45 ° F () Sunny () Partly Cloudy (X) Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-5mph

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: 24.63 ft – SWL: 11.08 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 2.0 gals Purge Vol: 2.1 gals.

Start Purge: 0840 Pumping Rate: 109 sec 7500 mL Purge Duration: 1hr Start Sampling: 0940

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

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 001656) Measured in: (X) Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>1.3</u>	<u>0915</u>	<u>6.11</u>	<u>280.7</u>	<u>14.8</u>	<u>1.78</u>	<u>7.0</u>	<u>40.4</u>	<u>16.08</u>
<u>1.5</u>	<u>0920</u>	<u>6.12</u>	<u>280.6</u>	<u>15.8</u>	<u>1.69</u>	<u>7.0</u>	<u>38.9</u>	<u>16.56</u>
<u>1.6</u>	<u>0925</u>	<u>6.10</u>	<u>280.3</u>	<u>29.9</u>	<u>1.73</u>	<u>7.0</u>	<u>37.7</u>	<u>17.09</u>
<u>1.8</u>	<u>0930</u>	<u>6.11</u>	<u>279.8</u>	<u>29.8</u>	<u>1.77</u>	<u>7.0</u>	<u>34.7</u>	<u>17.38</u>
<u>1.9</u>	<u>0935</u>	<u>6.14</u>	<u>279.6</u>	<u>24.2</u>	<u>1.73</u>	<u>7.1</u>	<u>33.1</u>	<u>17.83</u>
<u>2.1</u>	<u>0940</u>	<u>6.17</u>	<u>279.1</u>	<u>48.8</u>	<u>1.74</u>	<u>7.1</u>	<u>31.8</u>	<u>18.18</u>

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

Sample Collection Method: Bladder Pump Sample clarity/color: Slightly Cloudy ^{Slight yellow tint} Sample Odor: No odor

Other Observations/Comments: _____

Analysis Requested: VOC's Number of Containers: 3

Well Sampling Completion: Date 4-20-21 Time 1016 Samplers KDye

Dupl
1135

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

Project: Wellsville/Andover Landfill

Date: 4-20-21

Monitoring Well: MW-5D Sample ID: MW5D-0421 Arrival Time: 1020

Weather Conditions

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

Wind Conditions: 0-5mph w/gusts

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: 37.65 ft - SWL: 2.23 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 5.6 gals Purge Vol: 4.25 gals.

Start Purge: 1030 Pumping Rate: 82 gpm /500 mL Purge Duration: 1hr Start Sampling: 1130

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

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 101656) Measured in: (X) Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>2.5</u>	<u>1105</u>	<u>6.68</u>	<u>178.4</u>	<u>3.33</u>	<u>1.34</u>	<u>6.6</u>	<u>167.6</u>	<u>4.27</u>
<u>2.8</u>	<u>1110</u>	<u>6.67</u>	<u>178.5</u>	<u>2.27</u>	<u>1.29</u>	<u>6.7</u>	<u>164.6</u>	<u>4.40</u>
<u>3.1</u>	<u>1115</u>	<u>6.68</u>	<u>178.5</u>	<u>1.65</u>	<u>1.29</u>	<u>6.7</u>	<u>161.8</u>	<u>4.46</u>
<u>3.4</u>	<u>1120</u>	<u>6.69</u>	<u>179.3</u>	<u>2.67</u>	<u>1.31</u>	<u>6.6</u>	<u>160.5</u>	<u>4.65</u>
<u>3.8</u>	<u>1125</u>	<u>6.68</u>	<u>180.7</u>	<u>2.21</u>	<u>1.31</u>	<u>6.6</u>	<u>158.0</u>	<u>4.72</u>
<u>4.25</u>	<u>1130</u>	<u>6.68</u>	<u>180.1</u>	<u>1.20</u>	<u>1.30</u>	<u>6.6</u>	<u>157.3</u>	<u>4.68</u>

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 No Sample Odor: No odor

Other Observations/Comments: Color

Analysis Requested: VOCs Number of Containers: 3+Dupl

Well Sampling Completion: Date 4-20-21 Time 1200 Samplers KD/E

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

Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 4-20-21

Monitoring Well: MW-55 Sample ID: MW55-0421 Arrival Time: 1210

Weather Conditions

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

Wind Conditions: 0-5mph w/gusts

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: 2.26 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 3.03 gals Purge Vol: 3.3 gals.

Start Purge: 1215 Pumping Rate: 118 ^{sec} /500 mL Purge Duration: 1hr Start Sampling: 1315

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

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 001656) Measured in: (X) Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>3.25</u>	<u>1255</u>	<u>6.25</u>	<u>153.8</u>	<u>6.75</u>	<u>.47</u>	<u>6.8</u>	<u>61.6</u>	<u>4.31</u>
<u>3.6</u>	<u>1300</u>	<u>6.24</u>	<u>153.7</u>	<u>4.56</u>	<u>.47</u>	<u>7.0</u>	<u>63.3</u>	<u>4.33</u>
<u>3.8</u>	<u>1305</u>	<u>6.23</u>	<u>153.6</u>	<u>6.48</u>	<u>.49</u>	<u>6.8</u>	<u>65.7</u>	<u>4.30</u>
<u>3.0</u>	<u>1310</u>	<u>6.23</u>	<u>153.6</u>	<u>3.48</u>	<u>.47</u>	<u>6.7</u>	<u>66.1</u>	<u>4.34</u>
<u>3.3</u>	<u>1315</u>	<u>6.22</u>	<u>153.4</u>	<u>8.43</u>	<u>.48</u>	<u>6.7</u>	<u>66.9</u>	<u>4.37</u>

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

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

Other Observations/Comments: _____

Analysis Requested: Voc's Number of Containers: 3

Well Sampling Completion: Date 4-20-21 Time 1326 Samplers K Dye

MS/MST

On-Site Technical Services, Inc.

Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover LandfillDate: 4-19-21Monitoring Well: MW-115 Sample ID: MW115-0421 Arrival Time: 1240

Weather Conditions

Temp. 48° F () Sunny (X) Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () SnowWind Conditions: 0-5mph

Well Condition Checklist

Bump posts: NA Pro. Casing/lock: OK Surface pad: OKWell Visibility (paint): OK Well Label: OK Comment: _____

Depth & Purging Information

TD: 20.40 ft – SWL: 5.82 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 2.3 gals Purge Vol: 3.0 gals.Start Purge: 1245 Pumping Rate: 89 sec /500 mL Purge Duration: 1hr.5min Start Sampling: 1350Purging Method: (X) Bladder Pump # 3 () Grundfos Pump () Bail () Peristaltic () Pencil Bladder

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 001656) Measured in: (X) Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>1.75</u>	<u>1325</u>	<u>6.75</u>	<u>549.3</u>	<u>3.82</u>	<u>.40</u>	<u>10.4</u>	<u>166.0</u>	<u>6.90</u>
<u>2.0</u>	<u>1330</u>	<u>6.77</u>	<u>551.1</u>	<u>3.12</u>	<u>.38</u>	<u>10.4</u>	<u>162.5</u>	<u>7.02</u>
<u>2.25</u>	<u>1335</u>	<u>6.78</u>	<u>548.8</u>	<u>2.19</u>	<u>.35</u>	<u>11.4</u>	<u>158.3</u>	<u>7.12</u>
<u>2.5</u>	<u>1340</u>	<u>6.83</u>	<u>549.8</u>	<u>2.35</u>	<u>.35</u>	<u>12.3</u>	<u>154.4</u>	<u>7.11</u>
<u>2.75</u>	<u>1345</u>	<u>6.86</u>	<u>552.0</u>	<u>2.03</u>	<u>.35</u>	<u>12.7</u>	<u>152.6</u>	<u>7.16</u>
<u>3.0</u>	<u>1350</u>	<u>6.88</u>	<u>554.1</u>	<u>1.85</u>	<u>.34</u>	<u>12.9</u>	<u>150.5</u>	<u>7.14</u>

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

Sample Collection Method: Bladder Pump Sample clarity/color: Clear No Color Sample Odor: No odor

Other Observations/Comments: _____

Analysis Requested: VOC's Number of Containers: 6Well Sampling Completion: Date 4-19-21 Time 1418 Samplers K Dye

On-Site Technical Services, Inc.

Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 4-19-21

Monitoring Well: MW-16S Sample ID: MW16S-0421 Arrival Time: 1100

Weather Conditions

Temp. 46 ° 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: OK

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

Depth & Purging Information

TD: 18.67 ft – SWL: 10.45 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 1.3 gals Purge Vol: 1.8 gals.

Start Purge: 1105 Pumping Rate: 96 ^{sec} / 500 mL Purge Duration: 55 min Start Sampling: 1200

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

Field Parameters

Meters: YSI (sn: 170108273), Hach 2100P (sn: 001654) Measured in: ☒ Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>1.1</u>	<u>1040</u>	<u>7.10</u>	<u>149.8</u>	<u>10.6</u>	<u>7.61</u>	<u>11.5</u>	<u>154.9</u>	<u>13.67</u>
<u>1.3</u>	<u>1045</u>	<u>7.11</u>	<u>151.8</u>	<u>7.37</u>	<u>7.47</u>	<u>11.8</u>	<u>153.5</u>	<u>13.93</u>
<u>1.5</u>	<u>1150</u>	<u>7.10</u>	<u>153.2</u>	<u>5.97</u>	<u>7.53</u>	<u>11.8</u>	<u>155.7</u>	<u>14.27</u>
<u>1.6</u>	<u>1155</u>	<u>7.09</u>	<u>153.5</u>	<u>5.67</u>	<u>7.70</u>	<u>10.7</u>	<u>156.4</u>	<u>14.55</u>
<u>1.8</u>	<u>1200</u>	<u>7.03</u>	<u>153.8</u>	<u>10.0</u>	<u>7.63</u>	<u>10.3</u>	<u>158.0</u>	<u>14.89</u>

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

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

Other Observations/Comments: _____

Analysis Requested: Voc's Number of Containers: 3

Well Sampling Completion: Date 12/19 Time 4-19-21 Samplers KD/E

On-Site Technical Services, Inc.
Groundwater Cutoff, Leachate, Surface Water, Sediment,
Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 4/20/21

Sampling Location: GWS-1 Sample ID: GWS1-0421 Arrival Time: 1346

Weather Conditions

Temp. 46° F () Sunny () Partly Cloudy ☒ Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-5mph

Location Type

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

Flow and Depth Information (as appropriate)

Depth: Approx 4' Estimated Flow: 1-2 GPM Comments: No SED Hard Pack

Field Parameters (as appropriate)

Meter: YSI (sn: 17D108273), Hach 2100P (sn: 001656)
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>1400</u>	<u>7.71</u>	<u>220.5</u>	<u>3.36</u>	<u>8.97</u>	<u>8.3</u>	<u>197.9</u>

Sample Information

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

Location Description/Condition: Collected West of LSL across the road

Sample Collection Equipment/Method: dipper Sample Description (clarity/color): Clear slight yellow tint
Sample Odor: No odor Other Observations/Comments: _____

Analysis Requested: Voc's + Metals + Wet chem Sample Time: 1400 Number of Containers: 10

Sampling Completion: Time 1430 Date 4-20-21 Samplers KDJE

On-Site Technical Services, Inc.
Residential Water Supply Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 4/27/21

~~WAL 19 Post - 0421~~
WAL 19 Inter - 0421
WAL 19 Pre - 0421

Sampling Location: WAL-19 Sample ID: _____ Arrival Time: 0830

Weather Conditions

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

Wind Conditions: light

Sample Information

Sample Type: (☒) Grab (☐) Composite

Sample Location: Post - Kitchen Sink, Inter = between
Sinks, Pre = Before Filter

Location Description/Condition: good

Sample Collection Equipment/Method: direct grab Sample Description (clarity/color): 0840 = Post
0850 = Inter
0900 = Pre
Clear, no color

Sample Odor: none Other Observations/Comments: _____

Analysis Requested: VOCs Sample Time: 0840/0850/0900 Number of Containers: 3 each Sample

Comment:

Sampling Completion: Time 0920 Date 4/27/21 Samplers J. Brando

Fall 2021

Field Forms

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

Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-18-21

Monitoring Well: CW-3A Sample ID: CW3A-1021 Arrival Time: 1424

Weather Conditions

Temp. 54° F () Sunny () Partly Cloudy ☒ Cloudy ☒ Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-15 mph

Well Condition Checklist

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

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

Depth & Purging Information

TD: 27.47 ft – SWL: 9.30 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 2.9 gals Purge Vol: 2.75 gals.

Start Purge: 1440 Pumping Rate: 1.4 ^{sec} / 500 mL Purge Duration: 55 min Start Sampling: 1535

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

Field Parameters

Meters: YSI (sn: 17D108223), Hach 2100P (sn: 18410) Measured in: ☒ Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>1.25</u>	<u>1510</u>	<u>11.69</u>	<u>639.8</u>	<u>12.6</u>	<u>5.90</u>	<u>10.6</u>	<u>126.3</u>	<u>15.51</u>
<u>1.5</u>	<u>1515</u>	<u>11.68</u>	<u>637.8</u>	<u>11.8</u>	<u>6.09</u>	<u>10.6</u>	<u>121.8</u>	<u>16.32</u>
<u>1.8</u>	<u>1520</u>	<u>11.69</u>	<u>637.9</u>	<u>12.8</u>	<u>5.85</u>	<u>10.6</u>	<u>119.0</u>	<u>17.45</u>
<u>2.1</u>	<u>1525</u>	<u>11.68</u>	<u>637.7</u>	<u>9.73</u>	<u>6.04</u>	<u>10.6</u>	<u>117.5</u>	<u>18.60</u>
<u>2.4</u>	<u>1530</u>	<u>11.68</u>	<u>638.4</u>	<u>8.65</u>	<u>5.92</u>	<u>10.5</u>	<u>115.7</u>	<u>19.52</u>
<u>2.75</u>	<u>1530</u>	<u>11.68</u>	<u>639.9</u>	<u>9.37</u>	<u>6.16</u>	<u>10.5</u>	<u>113.2</u>	<u>20.12</u>

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

Sample Collection Method: PFAS Pump Sample clarity/color: Clear No Color Sample Odor: No odor

Other Observations/Comments: _____

Analysis Requested: VOC's + Metals + PFAS + Dioxane Number of Containers: 8

Well Sampling Completion: Date 10-18-21 Time 1550 Samplers KR/E

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

Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/18/21

Monitoring Well: CW-3B Sample ID: CW3B-1021 Arrival Time: 1250

Weather Conditions

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

Wind Conditions: 0-15 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: 37.70 ft – SWL: 20.84 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 2.6 gals Purge Vol: 2.1 gals.

Start Purge: 1300 Pumping Rate: 161 ^{sec} / 500 mL Purge Duration: 55 min Start Sampling: 1355

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

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 12410) Measured in: ☒ Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>1.25</u>	<u>1335</u>	<u>6.72</u>	<u>596.5</u>	<u>0.33</u>	<u>2.10</u>	<u>9.0</u>	<u>279.2</u>	<u>22.46</u>
<u>1.4</u>	<u>1340</u>	<u>6.73</u>	<u>597.5</u>	<u>0.41</u>	<u>2.05</u>	<u>8.7</u>	<u>276.3</u>	<u>22.54</u>
<u>1.6</u>	<u>1345</u>	<u>6.73</u>	<u>597.7</u>	<u>0.32</u>	<u>1.92</u>	<u>8.5</u>	<u>274.5</u>	<u>22.64</u>
<u>1.8</u>	<u>1350</u>	<u>6.72</u>	<u>596.4</u>	<u>0.30</u>	<u>1.84</u>	<u>8.7</u>	<u>272.7</u>	<u>22.77</u>
<u>2.1</u>	<u>1355</u>	<u>6.73</u>	<u>595.7</u>	<u>0.25</u>	<u>1.75</u>	<u>8.8</u>	<u>273.0</u>	<u>22.73</u>

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

Sample Collection Method: PFAS Pump Sample clarity/color: Clear No Color Sample Odor: No odor

Other Observations/Comments: _____

Analysis Requested: VOC's + Metals + PFAS - Dioxane Number of Containers: 8

Well Sampling Completion: Date 10-18-21 Time 1423 Samplers KIFE

MS/MSD

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

Project: Wellsville/Andover Landfill

Date: 10/18/21

Monitoring Well: CW-4A Sample ID: CW4A-1021 Arrival Time: 0833

Weather Conditions

Temp. 46 F () Sunny () Partly Cloudy ☒ Cloudy ☒ Light Rain () Hvy. Rain () Snow

Wind Conditions: light breeze

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: 19.12 ft - SWL: 3.34 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 2.5 gals Purge Vol: 2.5 gals.

Start Purge: 0900 Pumping Rate: 133 ^{sec} /500 mL Purge Duration: 55 min Start Sampling: 0955

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

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 12410) Measured in: ☒ Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>1.3</u>	<u>0930</u>	<u>6.07</u>	<u>313.5</u>	<u>6.49</u>	<u>2.89</u>	<u>10.6</u>	<u>229.6</u>	<u>6.18</u>
<u>1.5</u>	<u>0935</u>	<u>6.07</u>	<u>316.9</u>	<u>5.01</u>	<u>2.78</u>	<u>10.5</u>	<u>230.6</u>	<u>6.49</u>
<u>1.75</u>	<u>0940</u>	<u>6.12</u>	<u>319.2</u>	<u>3.74</u>	<u>2.92</u>	<u>10.7</u>	<u>229.2</u>	<u>6.78</u>
<u>2.0</u>	<u>0945</u>	<u>6.13</u>	<u>320.3</u>	<u>3.34</u>	<u>2.95</u>	<u>10.6</u>	<u>229.6</u>	<u>6.97</u>
<u>2.25</u>	<u>0950</u>	<u>6.14</u>	<u>317.5</u>	<u>2.81</u>	<u>3.07</u>	<u>10.7</u>	<u>229.6</u>	<u>7.10</u>
<u>2.5</u>	<u>0955</u>	<u>6.16</u>	<u>319.2</u>	<u>1.68</u>	<u>2.85</u>	<u>10.9</u>	<u>229.9</u>	<u>7.24</u>

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: PFAS Pump Sample clarity/color: Clear No Color Sample Odor: No odor

Other Observations/Comments: _____

Analysis Requested: VOC's + Metals + Dioxane Number of Containers: 16

Well Sampling Completion: Date 10-18-21 Time 1042 Samplers K Dye

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

Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-18-21

Monitoring Well: CW-4B Sample ID: CW4B-1021 Arrival Time: 1045

Weather Conditions

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

Wind Conditions: 0-15 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: 30.16 ft – SWL: 5.09 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 4.0 gals Purge Vol: 3.25 gals.

Start Purge: 1100 Pumping Rate: 130^{sec} /500 mL Purge Duration: 1 hr Start Sampling: 1200

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

Field Parameters

Meters: YSI (sn: 7D108273), Hach 2100P (sn: 12410) Measured in: ☒ Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>2.0</u>	<u>1140</u>	<u>6.84</u>	<u>347.6</u>	<u>0.87</u>	<u>3.64</u>	<u>11.9</u>	<u>265.5</u>	<u>9.90</u>
<u>2.3</u>	<u>1145</u>	<u>6.82</u>	<u>348.4</u>	<u>0.57</u>	<u>3.22</u>	<u>11.7</u>	<u>265.1</u>	<u>10.49</u>
<u>2.6</u>	<u>1150</u>	<u>6.79</u>	<u>348.1</u>	<u>0.43</u>	<u>3.06</u>	<u>11.5</u>	<u>265.4</u>	<u>10.83</u>
<u>2.9</u>	<u>1155</u>	<u>6.76</u>	<u>347.8</u>	<u>0.36</u>	<u>3.28</u>	<u>11.8</u>	<u>265.0</u>	<u>11.0</u>
<u>3.25</u>	<u>1200</u>	<u>6.73</u>	<u>348.9</u>	<u>0.34</u>	<u>3.12</u>	<u>11.7</u>	<u>265.0</u>	<u>11.18</u>

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

Sample Collection Method: PFAS Pump Sample clarity/color: Clear No color Sample Odor: No odor

Other Observations/Comments: _____

Analysis Requested: Voc's + Metals + PFAS + Dioxane Number of Containers: 8

Well Sampling Completion: Date 10-18-21 Time 1224 Samplers K Dye

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

Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/20/21

Monitoring Well: MW-3D Sample ID: MW3D-1021 Arrival Time: 1210

Weather Conditions

Temp 69 °F ☒ Sunny () Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: light Breeze

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: 46.75 ft – SWL: 17.93 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 4.6 gals Purge Vol: 1.5 gals.

Start Purge: 1220 Pumping Rate: 404 ^{sec}/500 mL Purge Duration: 50 min Start Sampling: 1310

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

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 12410) Measured in: ☒ Flow Cell ☒ Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>1.1</u>	<u>1250</u>	<u>6.54</u>	<u>661</u>	<u>0.55</u>	<u>1.35</u>	<u>16.4</u>	<u>136.5</u>	<u>21.45</u>
<u>1.25</u>	<u>1255</u>	<u>6.56</u>	<u>660</u>	<u>0.35</u>	<u>1.38</u>	<u>16.4</u>	<u>136.9</u>	<u>21.90</u>
<u>1.3</u>	<u>1300</u>	<u>6.56</u>	<u>659</u>	<u>0.33</u>	<u>1.42</u>	<u>16.5</u>	<u>136.7</u>	<u>22.36</u>
<u>1.4</u>	<u>1305</u>	<u>6.57</u>	<u>658</u>	<u>0.41</u>	<u>1.41</u>	<u>16.6</u>	<u>136.7</u>	<u>22.70</u>
<u>1.5</u>	<u>1310</u>	<u>6.57</u>	<u>658</u>	<u>0.34</u>	<u>1.47</u>	<u>16.5</u>	<u>136.9</u>	<u>23.08</u>

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

Sample Collection Method: Pencil Pump Sample clarity/color: No Color ^{Clear} Sample Odor: No odor

Other Observations/Comments: _____

Analysis Requested: Voc's + Metals Number of Containers: 4

Well Sampling Completion: Date 10-20-21 Time 1318 Samplers RQE

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

Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/20/21

Monitoring Well: MW-4D Sample ID: MW4D-1021

Arrival Time: ~~10:15~~ 10:50

Weather Conditions

Temp. 62° F ☒ Sunny () Partly Cloudy () 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): OK Well Label: OK Comment: _____

Depth & Purging Information

TD: 24.63 ft – SWL: 10.92 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 2.1 gals Purge Vol: 2.3 gals.

Start Purge: 10:30 Pumping Rate: 127 ^{sec} / 500 mL Purge Duration: 50 min Start Sampling: 11:50

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

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 12410) Measured in: ☒ Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>1.50</u>	<u>11:30</u>	<u>6.34</u>	<u>269.4</u>	<u>0.93</u>	<u>1.48</u>	<u>18.8</u>	<u>22.9</u>	<u>16.49</u>
<u>1.75</u>	<u>11:35</u>	<u>6.33</u>	<u>270.3</u>	<u>1.46</u>	<u>1.56</u>	<u>18.8</u>	<u>20.7</u>	<u>16.80</u>
<u>1.9</u>	<u>11:40</u>	<u>6.33</u>	<u>270.5</u>	<u>0.97</u>	<u>1.51</u>	<u>18.9</u>	<u>19.2</u>	<u>17.20</u>
<u>2.1</u>	<u>11:45</u>	<u>6.32</u>	<u>270.6</u>	<u>0.68</u>	<u>1.41</u>	<u>19.0</u>	<u>17.9</u>	<u>17.66</u>
<u>2.3</u>	<u>11:50</u>	<u>6.32</u>	<u>270.6</u>	<u>0.91</u>	<u>1.60</u>	<u>18.9</u>	<u>16.4</u>	<u>17.97</u>

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 No color Sample Odor: No odor

Other Observations/Comments: _____

Analysis Requested: Vols + Metals Number of Containers: 5

Well Sampling Completion: Date 12/5 Time 10/20/21 Samplers K Dye

PFAS
EPA 537
Dioxane
1.4

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

Project: Wellsville/Andover Landfill

Date: 10/19/21

Monitoring Well: MW-5D Sample ID: MW5D-1021 Arrival Time: 1226

Weather Conditions

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

Wind Conditions: light Breeze

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: 37.65 ft - SWL: 1.94 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 5.7 gals Purge Vol: 4.6 gals.

Start Purge: 1240 Pumping Rate: 86 sec / 500 mL Purge Duration: 1 hr 15 min Start Sampling: 1355

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

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 12410) Measured in: ☒ Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>3.0</u>	<u>1335</u>	<u>6.65</u>	<u>162.9</u>	<u>0.53</u>	<u>1.30</u>	<u>16.2</u>	<u>180.9</u>	<u>4.28</u>
<u>3.4</u>	<u>1340</u>	<u>6.64</u>	<u>163.5</u>	<u>0.26</u>	<u>1.22</u>	<u>16.4</u>	<u>179.6</u>	<u>4.26</u>
<u>3.8</u>	<u>1345</u>	<u>6.61</u>	<u>163.7</u>	<u>0.20</u>	<u>1.41</u>	<u>16.2</u>	<u>177.1</u>	<u>4.30</u>
<u>4.25</u>	<u>1350</u>	<u>6.62</u>	<u>165.8</u>	<u>0.17</u>	<u>1.19</u>	<u>16.2</u>	<u>175.8</u>	<u>4.28</u>
<u>4.6</u>	<u>1355</u>	<u>6.60</u>	<u>167.3</u>	<u>0.35</u>	<u>1.33</u>	<u>16.2</u>	<u>174.4</u>	<u>4.24</u>

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: PFAS Pump Sample clarity/color: Clear No color Sample Odor: No odor

Other Observations/Comments: _____

Analysis Requested: VOC's + Metals + PFAS + Dioxane Number of Containers: 8

Well Sampling Completion: Date 10-19-21 Time 1412 Samplers KDE

Dup 1
1515

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

Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/19/21

Monitoring Well: MW-5S Sample ID: MW5S-1021 Arrival Time: 1415

Weather Conditions

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

Wind Conditions: Med Breeze

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: 1.98 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 3.0 gals Purge Vol: 3.1 gals.

Start Purge: 1420 Pumping Rate: 72 ^{SEC} /500 mL Purge Duration: 50 min Start Sampling: 1510

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

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 12410) Measured in: ☒ Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>2.0</u>	<u>1450</u>	<u>6.08</u>	<u>160.5</u>	<u>17.2</u>	<u>0.79</u>	<u>16.3</u>	<u>45.2</u>	<u>2.00</u>
<u>2.3</u>	<u>1455</u>	<u>6.08</u>	<u>161.5</u>	<u>15.6</u>	<u>0.75</u>	<u>16.3</u>	<u>41.4</u>	<u>2.04</u>
<u>2.6</u>	<u>1500</u>	<u>6.09</u>	<u>161.7</u>	<u>13.8</u>	<u>0.78</u>	<u>16.3</u>	<u>41.0</u>	<u>2.02</u>
<u>2.9</u>	<u>1505</u>	<u>6.09</u>	<u>161.9</u>	<u>14.5</u>	<u>0.72</u>	<u>16.3</u>	<u>40.4</u>	<u>2.00</u>
<u>3.1</u>	<u>1510</u>	<u>6.10</u>	<u>162.2</u>	<u>9.09</u>	<u>0.76</u>	<u>16.2</u>	<u>39.9</u>	<u>2.01</u>

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: PFAS Pump Sample clarity/color: Clear Slight Red ^{list} Sample Odor: No odor

Other Observations/Comments: _____

Analysis Requested: Voc's + Metals + PFAS + Dioxane Number of Containers: 16

Well Sampling Completion: Date 10-19-21 Time 1541 Samplers K Dye

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

Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10-20-21

Monitoring Well: MW-118 Sample ID: MW118-1021 Arrival Time: 1327

Weather Conditions

Temp. 69 ° F ☒ Sunny () Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: light Breeze

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: 6.13 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 2.2 gals Purge Vol: 3.25 gals.

Start Purge: 1335 Pumping Rate: 85 ^{sec} /500 mL Purge Duration: 1 hr Start Sampling: 1435

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

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 12410) Measured in: ☒ Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>2.0</u>	<u>1415</u>	<u>6.78</u>	<u>552.6</u>	<u>2.30</u>	<u>2.31</u>	<u>19.1</u>	<u>86.3</u>	<u>7.13</u>
<u>2.3</u>	<u>1420</u>	<u>6.75</u>	<u>553.0</u>	<u>1.85</u>	<u>2.24</u>	<u>18.3</u>	<u>83.4</u>	<u>7.14</u>
<u>2.6</u>	<u>1425</u>	<u>6.72</u>	<u>552.1</u>	<u>1.21</u>	<u>2.31</u>	<u>17.9</u>	<u>83.5</u>	<u>7.13</u>
<u>2.9</u>	<u>1430</u>	<u>6.67</u>	<u>551.4</u>	<u>1.67</u>	<u>2.36</u>	<u>17.4</u>	<u>83.2</u>	<u>7.13</u>
<u>3.25</u>	<u>1435</u>	<u>6.64</u>	<u>550.7</u>	<u>1.40</u>	<u>2.32</u>	<u>17.2</u>	<u>82.5</u>	<u>7.15</u>

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

Sample Collection Method: Bladder Pump Sample clarity/color: clear No color Sample Odor: No odor

Other Observations/Comments: _____

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

Well Sampling Completion: Date 10-20-21 Time 1444 Samplers KDYE

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

Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/19/21

Monitoring Well: MW-17D Sample ID: MW17D-1021 Arrival Time: 0825

Weather Conditions

Temp. 37 °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: OK

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

Depth & Purging Information

TD: 65.10 ft – SWL: 31.86 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 20.6 gals Purge Vol: 3.3 gals.

Start Purge: 0850 Pumping Rate: 166 ^{sec}/500 mL Purge Duration: 1hr 15min Start Sampling: 1005

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

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 12410) Measured in: ☒ Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (µs/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>2.1</u>	<u>0940</u>	<u>9.19</u>	<u>297.6</u>	<u>84.9</u>	<u>8.57</u>	<u>9.9</u>	<u>145.7</u>	<u>34.40</u>
<u>2.3</u>	<u>0945</u>	<u>9.24</u>	<u>297.9</u>	<u>67.7</u>	<u>8.73</u>	<u>10.2</u>	<u>143.7</u>	<u>34.67</u>
<u>2.5</u>	<u>0950</u>	<u>9.28</u>	<u>298.0</u>	<u>72.6</u>	<u>8.48</u>	<u>10.3</u>	<u>140.2</u>	<u>34.88</u>
<u>2.75</u>	<u>0955</u>	<u>9.30</u>	<u>297.7</u>	<u>66.2</u>	<u>8.77</u>	<u>10.6</u>	<u>136.0</u>	<u>35.10</u>
<u>3.0</u>	<u>1000</u>	<u>9.34</u>	<u>298.2</u>	<u>64.5</u>	<u>8.72</u>	<u>10.7</u>	<u>134.5</u>	<u>35.31</u>
<u>3.3</u>	<u>1005</u>	<u>9.38</u>	<u>298.4</u>	<u>59.9</u>	<u>8.67</u>	<u>10.7</u>	<u>132.9</u>	<u>35.50</u>

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

Sample Collection Method: PFAS Pump Sample clarity/color: lightly cloudy Sample Odor: No odor
Other Observations/Comments: light Amber tint

Analysis Requested: VOC's + Metals + PFAS + Dioxane Number of Containers: 8

Well Sampling Completion: Date 10-19-21 Time 1027 Samplers RNJE

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

Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/19/21

Monitoring Well: MW-175 Sample ID: MW175-1021 Arrival Time: 1030

Weather Conditions

Temp. 61 ° F ☒ Sunny () Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: light Breeze

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: 26.94 ft – SWL: 8.61 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 2.9 gals Purge Vol: 3.0 gals.

Start Purge: 1055 Pumping Rate: 1500 mL Purge Duration: 1 hr Start Sampling: 1155

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

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 12410) Measured in: ☒ Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>1.75</u>	<u>1130</u>	<u>7.15</u>	<u>1171</u>	<u>23.4</u>	<u>4.87</u>	<u>13.6</u>	<u>175.6</u>	<u>11.78</u>
<u>2.0</u>	<u>1135</u>	<u>7.14</u>	<u>1163</u>	<u>10.8</u>	<u>5.02</u>	<u>13.7</u>	<u>166.3</u>	<u>12.13</u>
<u>2.25</u>	<u>1140</u>	<u>7.13</u>	<u>1161</u>	<u>4.67</u>	<u>5.34</u>	<u>13.6</u>	<u>165.1</u>	<u>12.46</u>
<u>2.5</u>	<u>1145</u>	<u>7.13</u>	<u>1158</u>	<u>3.42</u>	<u>5.50</u>	<u>13.5</u>	<u>163.7</u>	
<u>2.75</u>	<u>1150</u>	<u>7.13</u>	<u>1152</u>	<u>3.37</u>	<u>5.32</u>	<u>13.6</u>	<u>164.0</u>	
<u>3.0</u>	<u>1155</u>	<u>7.13</u>	<u>1149</u>	<u>3.08</u>	<u>5.61</u>	<u>13.9</u>	<u>163.4</u>	<u>13.64</u>

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

Sample Collection Method: PFAS Pum P Sample clarity/color: Clear No Color Sample Odor: No odor

Other Observations/Comments: _____

Analysis Requested: VOC's + Metals + PFAS + Dioxane Number of Containers: 8

Well Sampling Completion: Date 10-19-21 Time 1215 Samplers K Dye

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

Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/21/21

Monitoring Well: MW-18D Sample ID: MW18D-1021 Arrival Time: 0806

Weather Conditions

Temp. 52 ° 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: 28.54 ft – SWL: 13.43 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 9.7 gals Purge Vol: 2.75 gals

Start Purge: 0815 Pumping Rate: 114 ^{sec} / 500 mL Purge Duration: 1 hr Start Sampling: 0915

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

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 12410) Measured in: (X) Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>1.5</u>	<u>0850</u>	<u>7.24</u>	<u>382.6</u>	<u>30.8</u>	<u>1.58</u>	<u>12.3</u>	<u>-156.7</u>	<u>15.51</u>
<u>1.75</u>	<u>0855</u>	<u>7.26</u>	<u>382.5</u>	<u>32.5</u>	<u>1.43</u>	<u>12.4</u>	<u>-161.3</u>	
<u>2.0</u>	<u>0900</u>	<u>7.29</u>	<u>382.7</u>	<u>37.1</u>	<u>1.30</u>	<u>12.4</u>	<u>-166.3</u>	
<u>2.25</u>	<u>0905</u>	<u>7.31</u>	<u>382.6</u>	<u>31.2</u>	<u>1.21</u>	<u>12.3</u>	<u>-167.7</u>	
<u>2.5</u>	<u>0910</u>	<u>7.33</u>	<u>382.5</u>	<u>27.7</u>	<u>1.14</u>	<u>12.3</u>	<u>-169.4</u>	
<u>2.75</u>	<u>0915</u>	<u>7.34</u>	<u>382.7</u>	<u>25.4</u>	<u>1.11</u>	<u>12.3</u>	<u>-170.8</u>	<u>16.78</u>

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

Sample Collection Method: Bladder Pump Sample clarity/color: Clear with slight orange tint Sample Odor: No odor

Other Observations/Comments: Bridge removed only got Begin and end DTW Treacherous terrain

Analysis Requested: Voc's + Metals Number of Containers: 41

Well Sampling Completion: Date 10-21-21 Time 0926 Samplers K 146

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

Groundwater Purging and Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/21/21

Monitoring Well: MW-18S Sample ID: MW18S-1021 Arrival Time: 0930

Weather Conditions

Temp. 60 ° 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: outer casing

Depth & Purging Information

TD: 20.49 ft – SWL: 4.29 ft x 0.16 if 2" or 0.65 if 4" = 1 Well Volume: 2.5 gals Purge Vol: 3.25 gals.

Start Purge: 0935 Pumping Rate: 87 ^{sec.} / 500 mL Purge Duration: 1 hr Start Sampling: 1035

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

Field Parameters

Meters: YSI (sn: 17D108273), Hach 2100P (sn: 12410) Measured in: (X) Flow Cell () Cup

Purge (gal)	Time	pH	Conductivity (us/cm)	Turbidity (ntu)	D.O. (mg/L)	Temp. (°C)	ORP (mV)	DTW (ft)
<u>2.4</u>	<u>1015</u>	<u>6.06</u>	<u>282.1</u>	<u>5.87</u>	<u>0.95</u>	<u>13.0</u>	<u>150.2</u>	<u>7.95</u>
<u>2.6</u>	<u>1020</u>	<u>6.03</u>	<u>279.5</u>	<u>3.14</u>	<u>0.78</u>	<u>13.1</u>	<u>148.4</u>	
<u>2.8</u>	<u>1025</u>	<u>6.03</u>	<u>277.0</u>	<u>2.26</u>	<u>0.74</u>	<u>13.1</u>	<u>147.3</u>	
<u>3.0</u>	<u>1030</u>	<u>6.03</u>	<u>276.3</u>	<u>2.28</u>	<u>0.72</u>	<u>13.1</u>	<u>146.4</u>	
<u>3.25</u>	<u>1035</u>	<u>6.03</u>	<u>276.9</u>	<u>3.17</u>	<u>0.67</u>	<u>13.1</u>	<u>145.6</u>	

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

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

Other Observations/Comments: Bridge removed only. Begin + End DTW Treacherous terrain.

Analysis Requested: Voc's + Metals Number of Containers: 4

Well Sampling Completion: Date 10/21/21 Time 1047 Samplers K D/E

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

Project: Wellsville/Andover Landfill

Date: 10/21/21

Sampling Location: LS-1 Sample ID: LS1-1021 Arrival Time: 1100

Weather Conditions

Temp. 59 ° F () Sunny () Partly Cloudy ☒ Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: 0-5 mph

Location Type

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

Flow and Depth Information (as appropriate)

Depth: 23 ft Estimated Flow: _____ Comments: _____

Field Parameters (as appropriate)

Meter: YSI (sn: 17D108273), Hach 2100P (sn: 12410)
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>1115</u>	<u>6.58</u>	<u>487.0</u>	<u>5.58</u>	<u>NA</u>	<u>19.3</u>	<u>256.4</u>

Sample Information

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

Location Description/Condition: Sump at S.W. corner of Land Fill

Sample Collection Equipment/Method: Bailer Sample Description (clarity/color): Clear w/ slight yellow tint

Sample Odor: Slight leach odor Other Observations/Comments: _____

Analysis Requested: Voc's + Metals Sample Time: 1115 Number of Containers: 4

Sampling Completion: Time 1126 Date 10-21-21 Samplers K Dye

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

Project: Wellsville/Andover Landfill

Date: 11-20-21

Sampling Location: MH-32 Sample ID: MH32-1021 Arrival Time: 0858

Weather Conditions

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

Wind Conditions: 0-5 mph

Location Type

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

Flow and Depth Information (as appropriate)

Depth: >1ft Estimated Flow: No Visible Flow Comments: From pipe

Field Parameters (as appropriate)

Meter: YSI (sn: 170108273), Hach 2100P (sn: 12410)
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>0910</u>	<u>6.17</u>	<u>417.5</u>	<u>13.0</u>	<u>NA</u>	<u>13.8</u>	<u>44.1</u>

Sample Information

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

Location Description/Condition: MH'

Sample Collection Equipment/Method: dipper Sample Description (clarity/color): Clear light Amber tint
Sample Odor: No odor Other Observations/Comments: _____

Analysis Requested: VOC + Metals + TDS + NO₃ Sample Time: 0910 Number of Containers: 5

Sampling Completion: Time 0923 Date 10-20-21 Samplers K Dye

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

Project: Wellsville/Andover Landfill

Date: 10/20/21

Sampling Location: MH-33 Sample ID: MH33-1021 Arrival Time: 0818

Weather Conditions

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

Wind Conditions: 0-5 mph

Location Type

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

Flow and Depth Information (as appropriate)

Depth: 71 ft Estimated Flow: → Comments: minimal flow from R/c

Field Parameters (as appropriate)

Meter: YSI (sn: 17D108273), Hach 2100P (sn: 12410)
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>0840</u>	<u>6.36</u>	<u>341.1</u>	<u>9.77</u>	<u>NA</u>	<u>14.1</u>	<u>152.9</u>

Sample Information

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

Location Description/Condition: Man Hole

Sample Collection Equipment/Method: dipper Sample Description (clarity/color): clear light yellow tint
Sample Odor: Slight leach odor Other Observations/Comments: _____

Analysis Requested: Voc's + Metals + TDS + NO₃ Sample Time: 0840 Number of Containers: 5

Sampling Completion: Time 0849 Date 10-20-21 Samplers K Dyk

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

Residential Water Supply Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/22/21

Sampling Location: WAL-1 Sample ID: WAL-1021 Arrival Time: 1305

Weather Conditions

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

Wind Conditions: light

Sample Information

Sample Type: ☒ Grab () Composite Sample Location: Kitchen Sink

Location Description/Condition: Cold water tap w/ Filter bypass

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

Sample Odor: No Other Observations/Comments: _____

Analysis Requested: metals & VOC Sample Time: 1315 Number of Containers: 4

Comment:

Sampling Completion: Time 1325 Date 10/22/21 Samplers J. Brantles

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

Residential Water Supply Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 10/23/21

Sampling Location: WAL-2 Sample ID: WAL2-1021 Arrival Time: 1155

Weather Conditions

Temp. 45 ° F () Sunny () Partly Cloudy () Cloudy (X) Light Rain () Hvy. Rain () Snow

Wind Conditions: light

Sample Information

Sample Type: (X) Grab () Composite Sample Location: Kitchen Sink

Location Description/Condition: Kitchen sink cwt

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

Sample Odor: no Other Observations/Comments: _____

Analysis Requested: metals Sample Time: 1205 Number of Containers: 1

Comment: Owner has let water run for approx 1 hr.

Sampling Completion: Time 1215 Date 10/23/21 Samplers J. Broder

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

Residential Water Supply Sampling Field Form

Project: Wellsville/Andover Landfill

Date: 11/16/21

Sampling Location: WAL-19

WAL19 Post-1121
WAL19 Inter-1121
Sample ID: WAL19 Pre-1121 Arrival Time: 0958

Weather Conditions

Temp. 34 ° F () Sunny (X) Partly Cloudy () Cloudy () Light Rain () Hvy. Rain () Snow

Wind Conditions: light

Sample Information

Sample Type: (X) Grab () Composite

Sample Location: Post = Kitchen Sink, Inter = between Filters
Pre - prior to filters

Location Description/Condition: _____

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

Sample Odor: none Other Observations/Comments: _____

Analysis Requested: VOCs Sample Time: Post = 1010 Number of Containers: 3/3/3

Inter = 1025

Pre = 1030

Comment: _____

Sampling Completion: Time 1040 Date 11/16/21 Samplers J. Budej

Appendix D

2021 Quarterly Inspections & Maintenance Checklist

Figure 5-3

QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST
WELLSVILLE/ANDOVER LANDFILL SITE
NYSDEC SITE NO. 9-02-004

Inspector: <u>Bradley J. Matison</u>		Date: <u>12/30/21</u>	
Weather: <u>Cloudy</u>		Temperature: <u>34°</u>	
Area	Item	Action	Comments
Cover system	Seeps	Delineate, sample, evaluate.	OK
	Subsidence/ponding	Delineate, fill, and revegetate.	OK
	Erosion/gullies	Determine cause, grade, and vegetate.	OK
	Slope stability	Check for erosion, slippage, slope failure.	OK
	Vegetation	Check for areas of weak/no vegetation, revegetate.	OK
		Mow semiannually.	Oct 2021
		Remove scrubs and trees from cover system and drainage ways.	OK
	Vectors	Check for burrows and backfill with clean soil.	OK
Leachate collection and storage system	USTs	Check leachate levels, check/test leak detection system and auto dialer; check for sediment in bottom of tanks.	Oct, Nov, Dec 855,000 gal
	Pump stations	Check pump operation.	OK
		Check float operation. Perform manufacturer's recommended maintenance. Operate/cycle valves. Check sump for floating debris and sediments.	OK
	Forcemain	Check for leaks.	OK
	Laterals and trunk 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	Collect and analyze sample of liquid in cutoff trench. Note which line (surface drainage or LCS) is plugged.	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

Figure 5-3

**QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST
WELLSVILLE/ANDOVER LANDFILL SITE
NYSDEC SITE NO. 9-02-004**

Inspector: <u>Bradley J. Matison</u>		Date: <u>12/30/21</u>	
Weather: <u>Cloudy</u>		Temperature: <u>34°</u>	
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 siltation/silt buildup, erosion, condition of vegetation and embankments.	OK
Groundwater monitoring system	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: 12/30/21

Figure 5-3

QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST
WELLSVILLE/ANDOVER LANDFILL SITE
NYSDEC SITE NO. 9-02-004

Inspector: <u>BRADLEY J. WATSON</u>		Date: <u>9/27/21</u>	
Weather: <u>Sunny</u>		Temperature: <u>71°F</u>	
Area	Item	Action	Comments
Cover system	Seeps	Define, sample, evaluate.	OK
	Subsidence/ponding	Define, fill, and revegetate.	OK
	Erosion/gullies	Determine cause, grade, and vegetate.	OK
	Slope stability	Check for erosion, slippage, slope failure.	OK
	Vegetation	Check for areas of weak/no vegetation, revegetate.	OK
		Mow semiannually.	OCT. 2020
		Remove scrubs and trees from cover system and drainage ways.	OK
	Vectors	Check for burrows and backfill with clean soil.	OK
Leachate collection and storage system	USTs	Check leachate levels, check/test leak detection system and auto dialer; check for sediment in bottom of tanks.	July, Aug. Sept 405,000 gal
	Pump stations	Check pump operation.	OK
		Check float operation. Perform manufacturer's recommended maintenance. Operate/cycle valves. Check sump for floating debris and sediments.	OK
	Forcemain	Check for leaks.	
	Laterals and trunk 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	Collect and analyze sample of liquid in cutoff trench. Note which line (surface drainage or LCS) is plugged.	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

Figure 5-3

QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST
WELLSVILLE/ANDOVER LANDFILL SITE
NYSDEC SITE NO. 9-02-004

Inspector: <u>Brianley J. MATTHEW</u>		Date: <u>7/27/21</u>	
Weather: <u>Sunny</u>		Temperature: <u>71°F</u>	
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 siltation/silt buildup, erosion, condition of vegetation and embankments.	OK
Groundwater monitoring system	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: _____

Figure 5-3

QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST
WELLSVILLE/ANDOVER LANDFILL SITE
NYSDEC SITE NO. 9-02-004

Inspector: <u>Bruce J. McEwen</u>		Date: <u>6/30/2021</u>	
Weather: <u>Partly Sunny</u>		Temperature: <u>76°</u>	
Area	Item	Action	Comments
Cover system	Seeps	Delineate, sample, evaluate.	OK
	Subsidence/ponding	Delineate, fill, and revegetate.	OK
	Erosion/gullies	Determine cause, grade, and vegetate.	OK
	Slope stability	Check for erosion, slippage, slope failure.	OK
	Vegetation	Check for areas of weak/no vegetation, revegetate.	OK
		Mow semiannually.	OK
		Remove scrubs and trees from cover system and drainage ways.	OK
	Vectors	Check for burrows and backfill with clean soil.	OK
Leachate collection and storage system	USTs	Check leachate levels, check/test leak detection system and auto dialer; check for sediment in bottom of tanks.	April, May, June 478,000 gal
	Pump stations	Check pump operation.	OK
		Check float operation. Perform manufacturer's recommended maintenance. Operate/cycle valves. Check sump for floating debris and sediments.	OK
	Forcemain	Check for leaks.	
	Laterals and trunk 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	Collect and analyze sample of liquid in cutoff trench. Note which line (surface drainage or LCS) is plugged.	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

Figure 5-3

**QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST
WELLSVILLE/ANDOVER LANDFILL SITE
NYSDEC SITE NO. 9-02-004**

Inspector: <u>Bradley J. Matulis</u>		Date: <u>6/30/2021</u>	
Weather: <u>Partly Sunny</u>		Temperature: <u>76°</u>	
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 siltation/silt buildup, erosion, condition of vegetation and embankments.	OK
Groundwater monitoring system	Sampling wells	See Section 4.	OK
		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: 6/30/2021

Figure 5-3

**QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST
WELLSVILLE/ANDOVER LANDFILL SITE
NYSDEC SITE NO. 9-02-004**

Inspector: <u>Gregory Maurer</u>		Date: <u>3/31/2021</u>	
Weather: <u>Partly Cloudy</u>		Temperature: <u>5.5°</u>	
Area	Item	Action	Comments
Cover system	Seeps	Delineate, sample, evaluate.	OK
	Subsidence/ponding	Delineate, fill, and revegetate.	OK
	Erosion/gullies	Determine cause, grade, and vegetate.	OK
	Slope stability	Check for erosion, slippage, slope failure.	OK
	Vegetation	Check for areas of weak/no vegetation, revegetate.	OK
		Mow semiannually.	OCT. 2020
		Remove scrubs and trees from cover system and drainage ways.	OK
	Vectors	Check for burrows and backfill with clean soil.	OK
Leachate collection and storage system	USTs	Check leachate levels, check/test leak detection system and auto dialer; check for sediment in bottom of tanks.	Jan, Feb, March 390,000 gal
	Pump stations	Check pump operation.	OK
		Check float operation. Perform manufacturer's recommended maintenance. Operate/cycle valves. Check sump for floating debris and sediments.	OK
	Forcemain	Check for leaks.	
	Laterals and trunk 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	Collect and analyze sample of liquid in cutoff trench. Note which line (surface drainage or LCS) is plugged.	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

Figure 5-3

QUARTERLY INSPECTION AND MAINTENANCE CHECKLIST
WELLSVILLE/ANDOVER LANDFILL SITE
NYSDEC SITE NO. 9-02-004

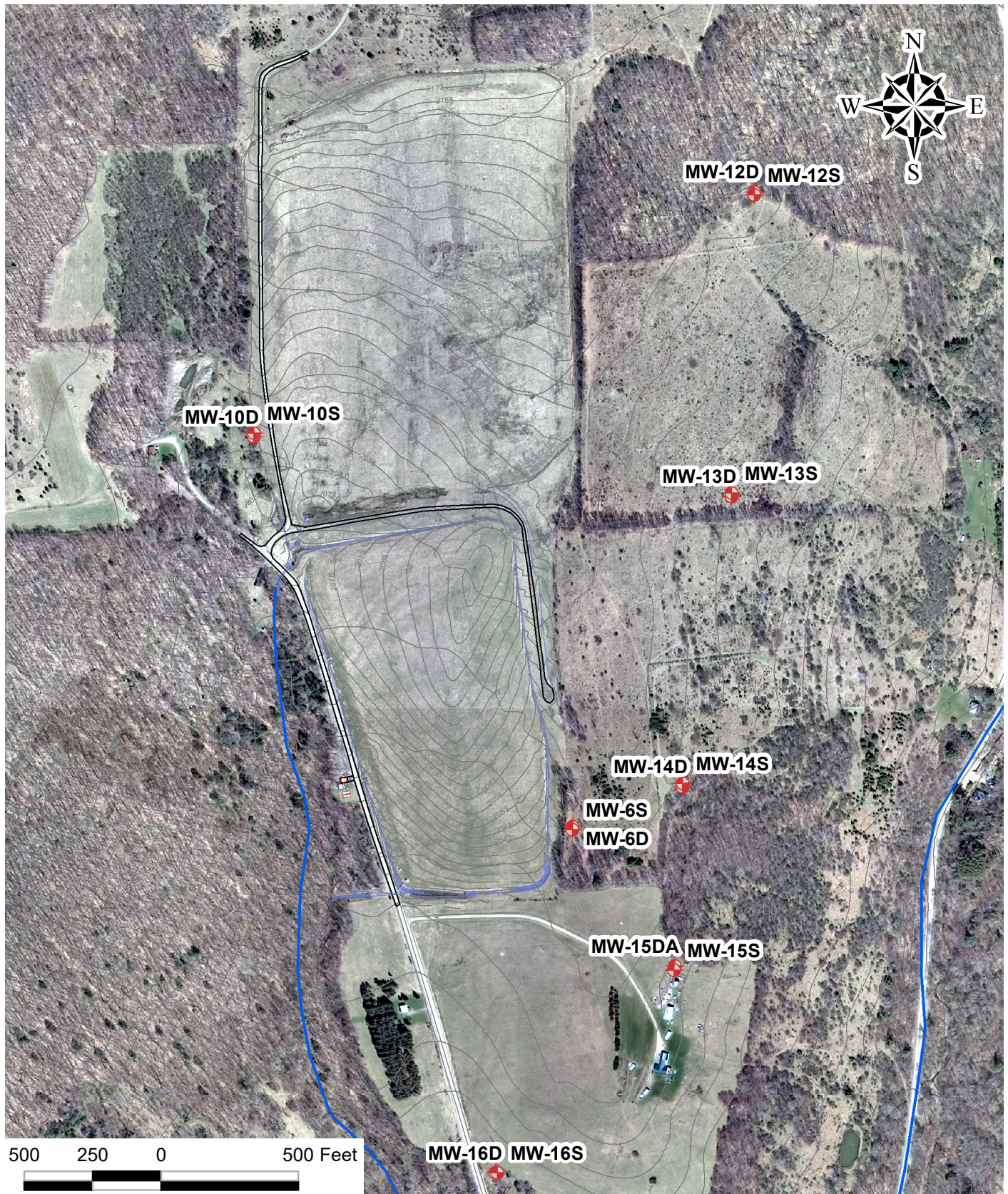
Inspector: <u>Bransley Mauriso</u>		Date: <u>3/31/21</u>	
Weather: <u>Partly Sunny</u>		Temperature: <u>55°</u>	
Area	Item	Action	Comments
Stormwater system	Ditches and swales	Check for pooling, erosion, excessive vegetation, and weak vegetation.	OK
	Cover system drainage	Check for cover soils that are 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 siltation/silt buildup, erosion, condition of vegetation and embankments.	OK
Groundwater monitoring system	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:

Bransley J Mauriso
3/31/21

2021 MONITORING WELL MAINTENANCE LOCATIONS



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

72 Railroad Avenue Wellsville, NY 14895

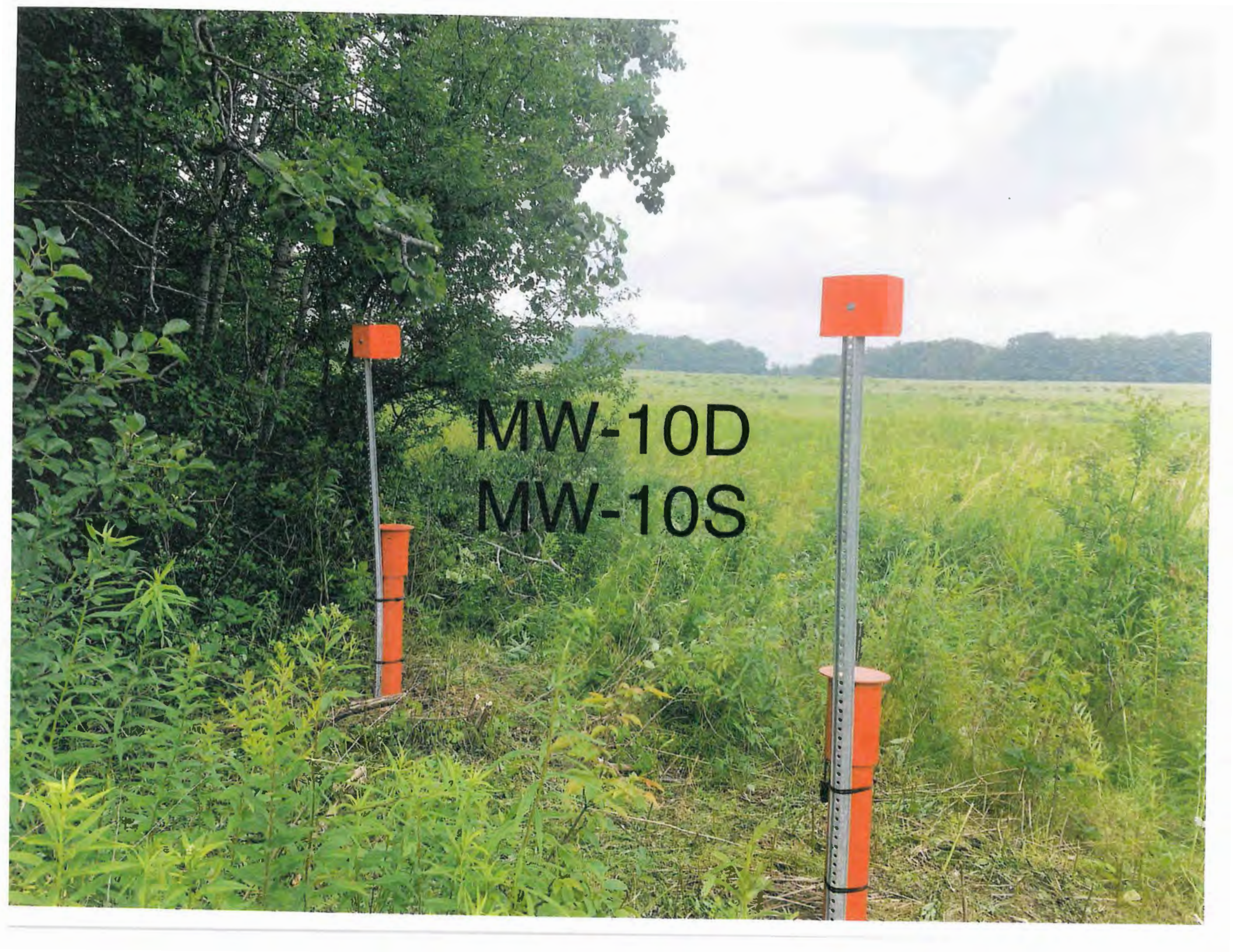
FIGURE NO.

PROJECT WAL

DOCUMENT

FILE NO. 2021 Well Maint.MXD



A photograph of two survey markers in a field. The markers consist of orange cylindrical bases and silver metal poles topped with orange rectangular caps. The marker on the left is partially obscured by dense green foliage and trees. The marker on the right stands in a grassy field. In the background, there is a line of trees under a cloudy sky. The text 'MW-10D' and 'MW-10S' is overlaid in the center of the image.

MW-10D
MW-10S

MW-12D
MW-12S



MW-13D
MW-13S



MW-14S
MW-14D





MW-15S
MW-15DA

A photograph of a grassy field with a survey marker. The field is covered in tall, dry grass with some green patches. In the center-left, there is a survey marker consisting of a metal pole with an orange square flag on top and two wooden stakes at the base. A large, dark green tree is on the left side of the frame. The background shows a line of trees under a hazy sky.

MW-16D
MW-16S

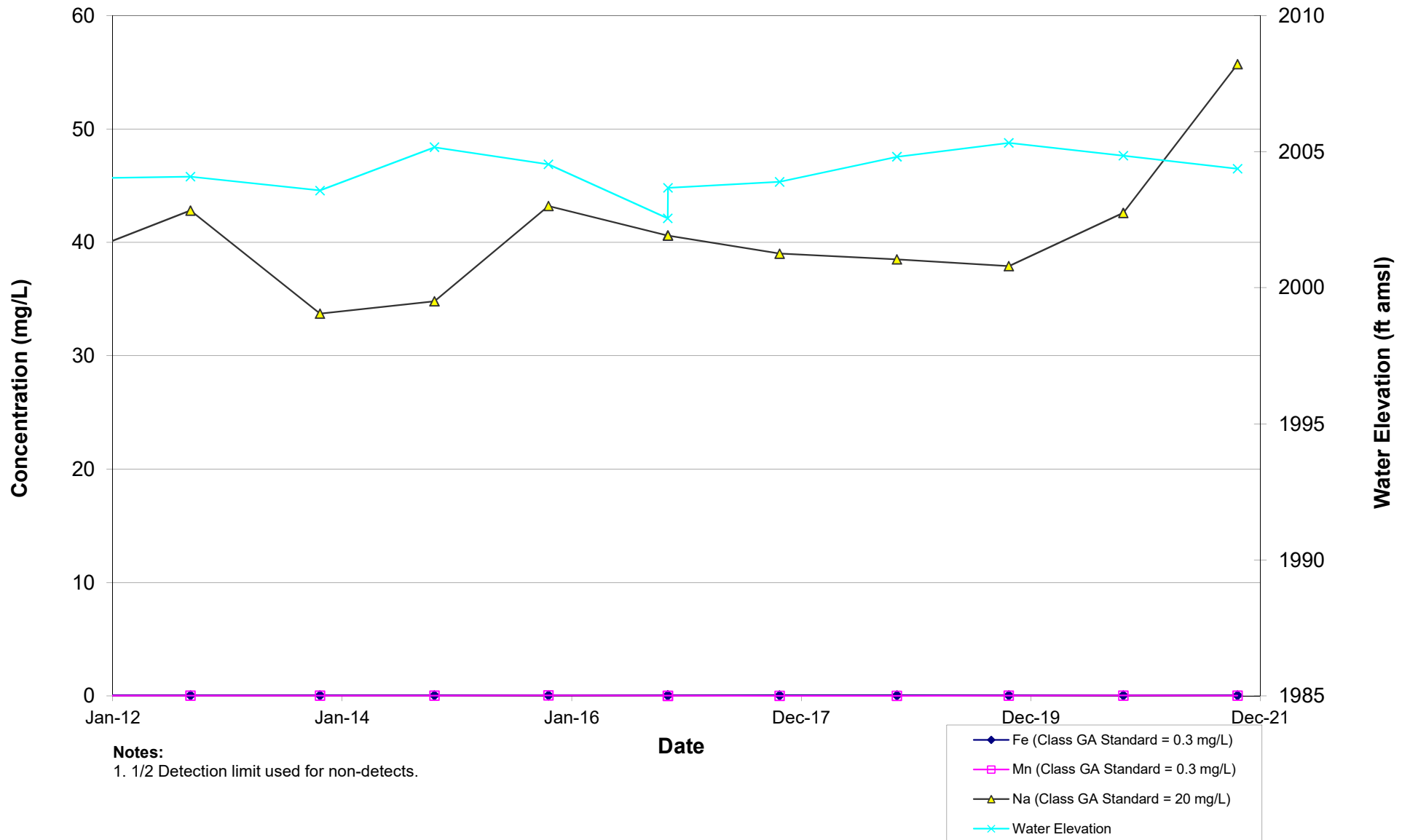
Appendix E

Groundwater Concentration Time Trend Plots

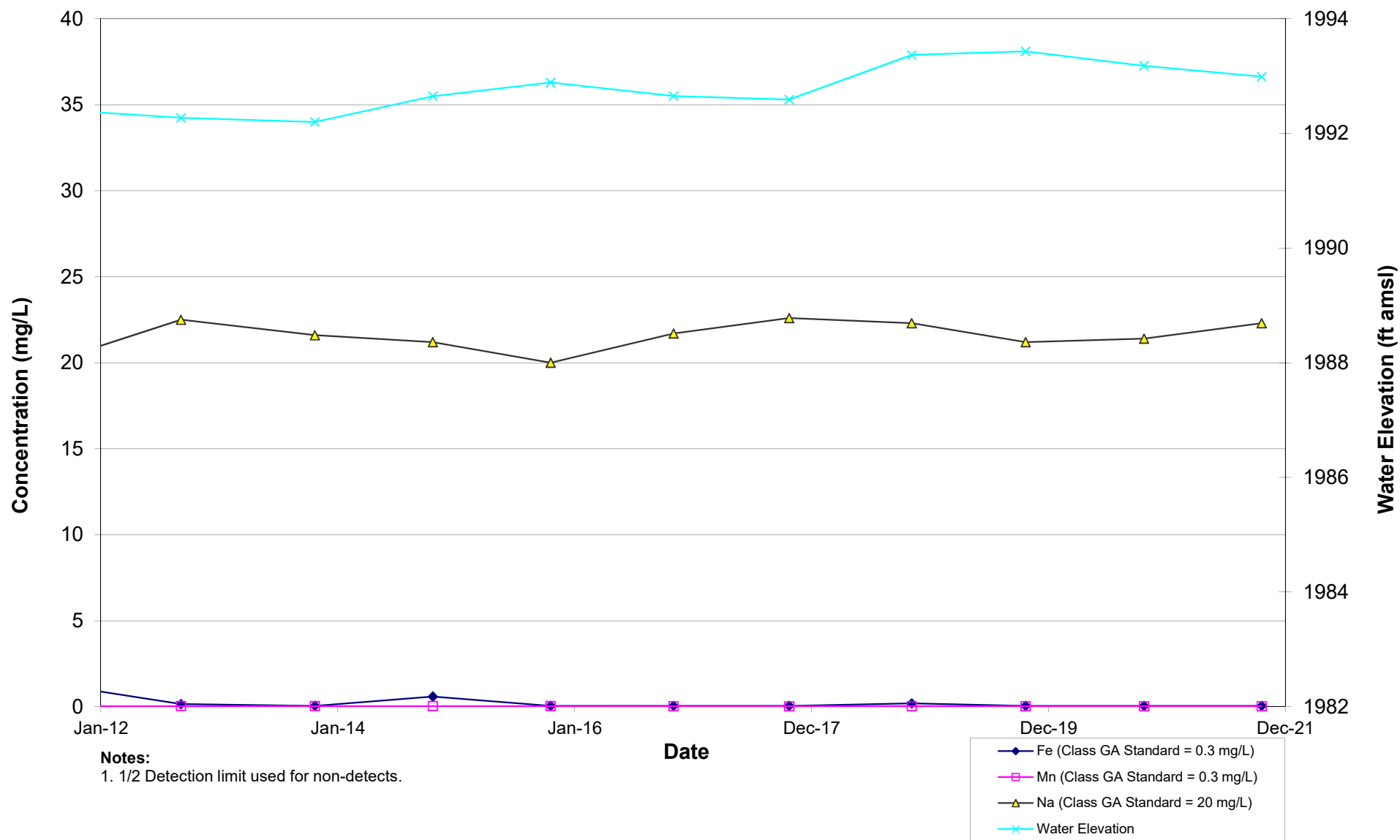
Metals

Groundwater Concentration
Time Trend Plots

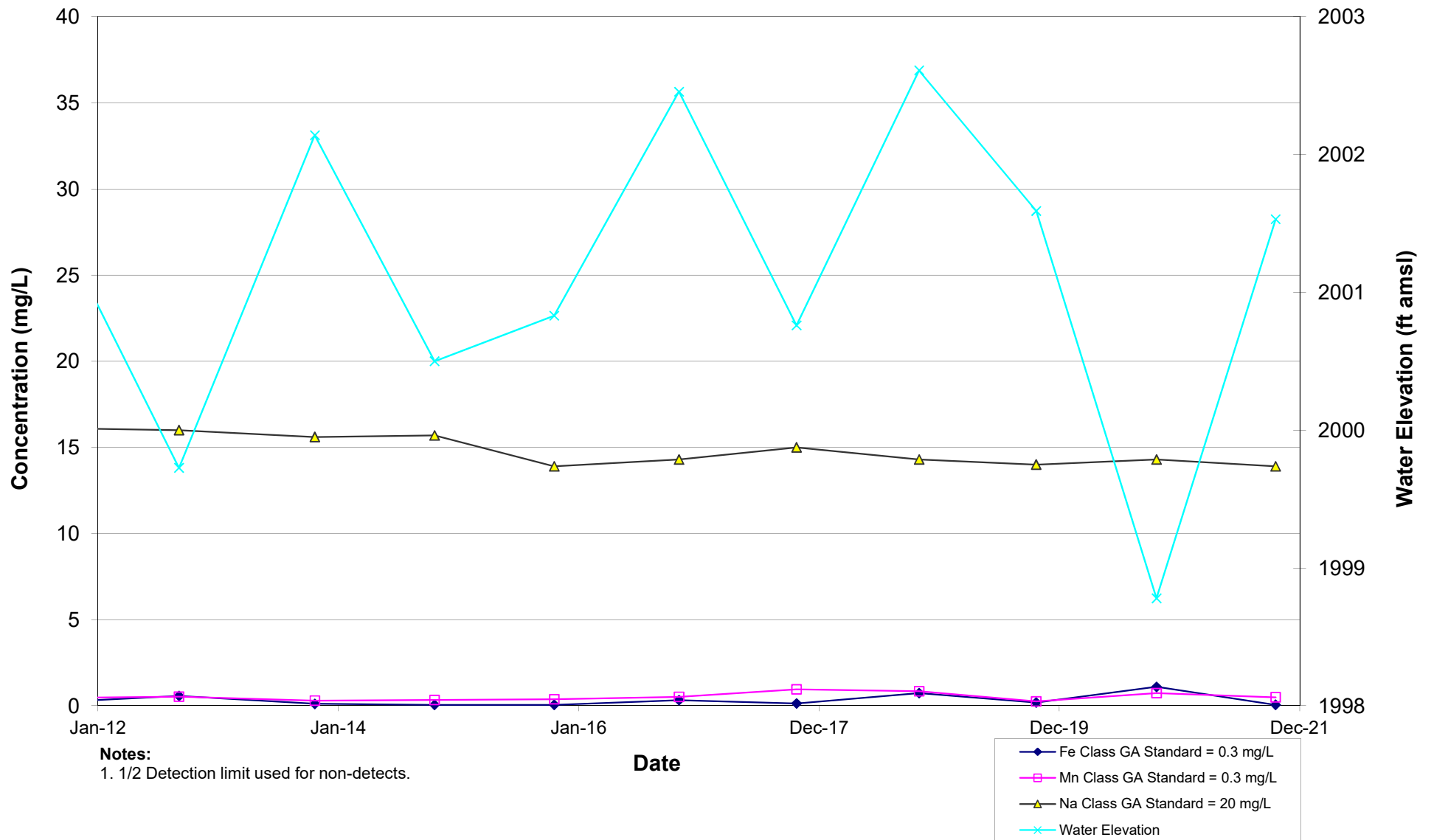
CW-3A Metals



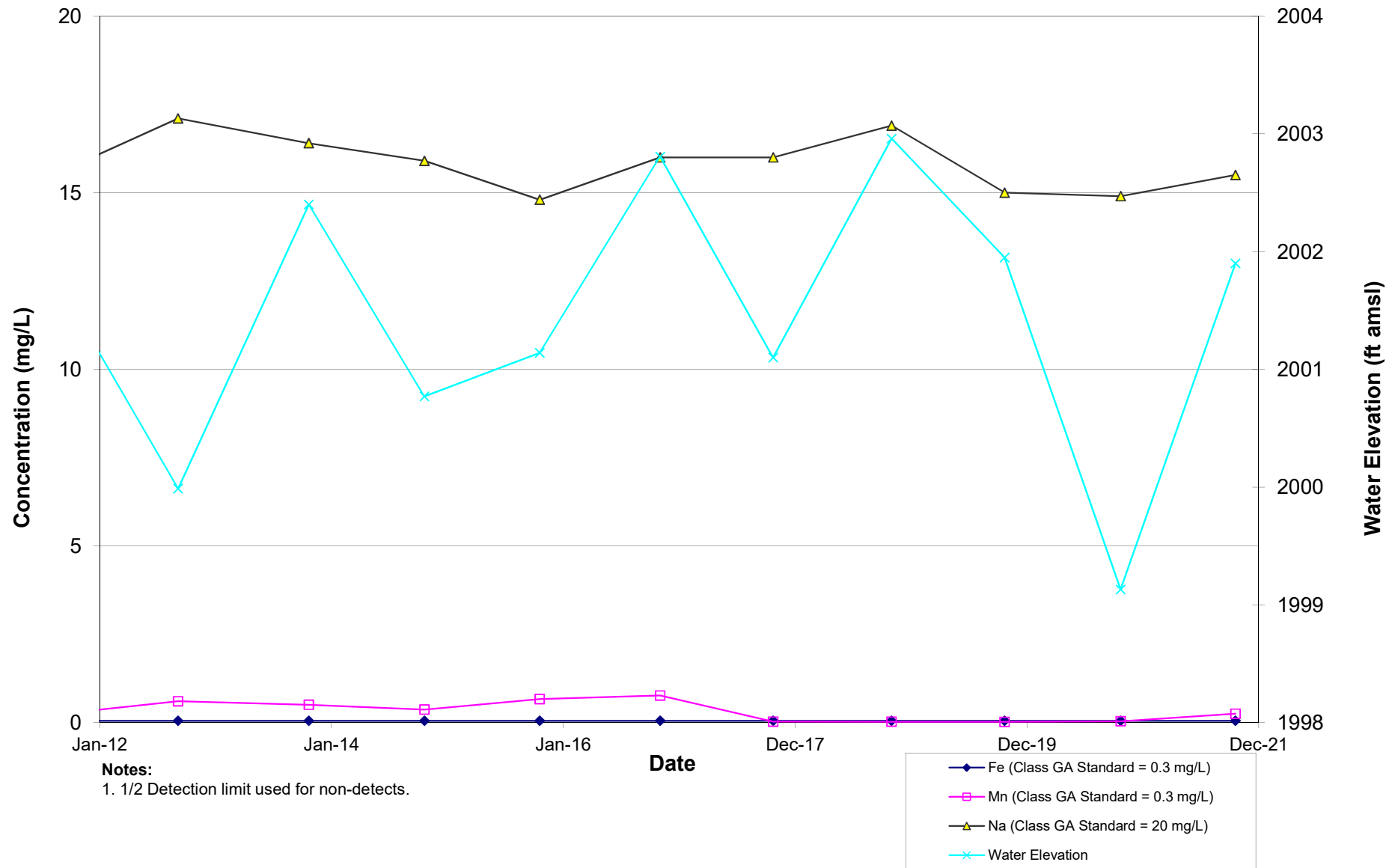
CW-3B Metals



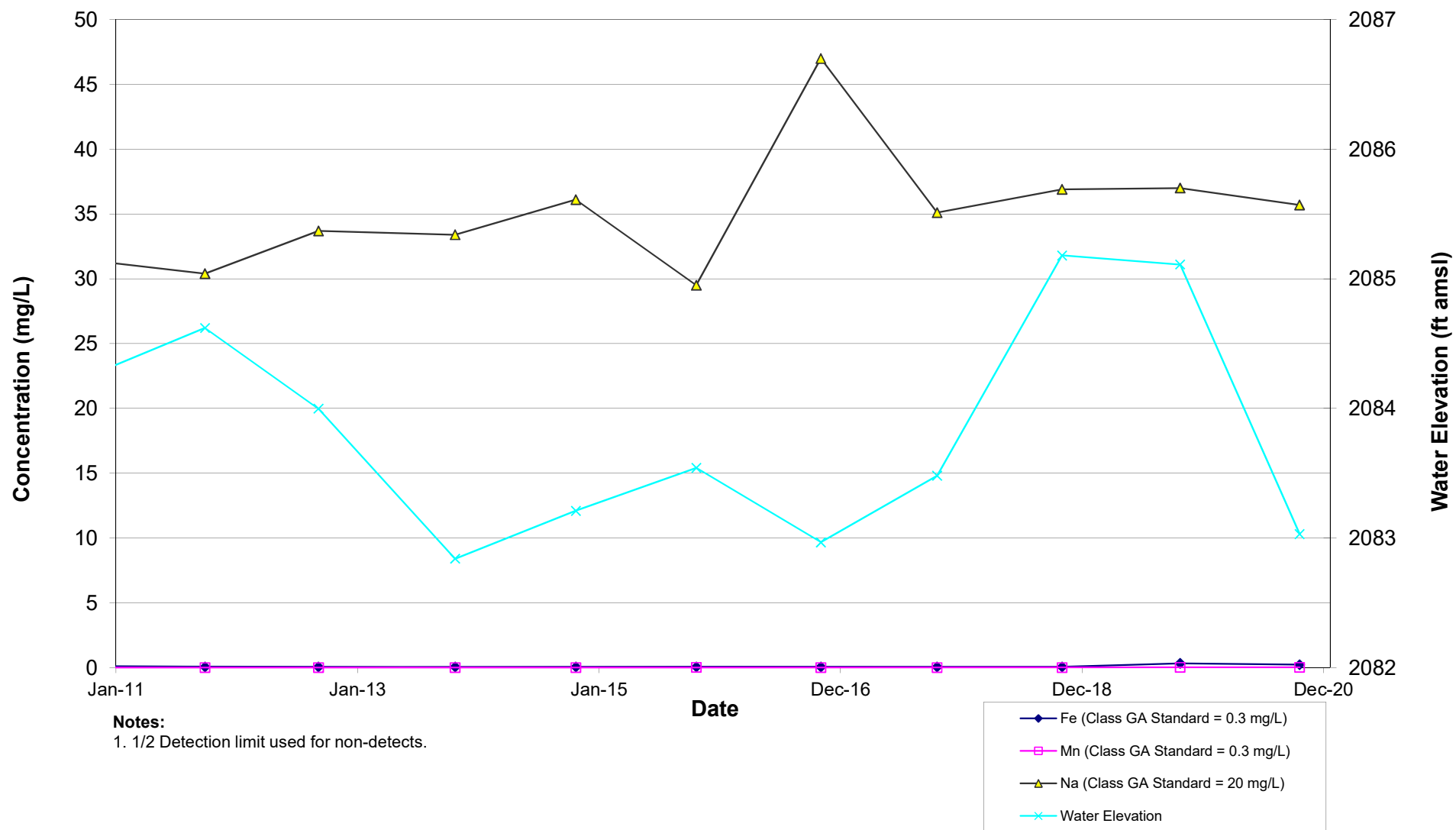
CW-4A Metals



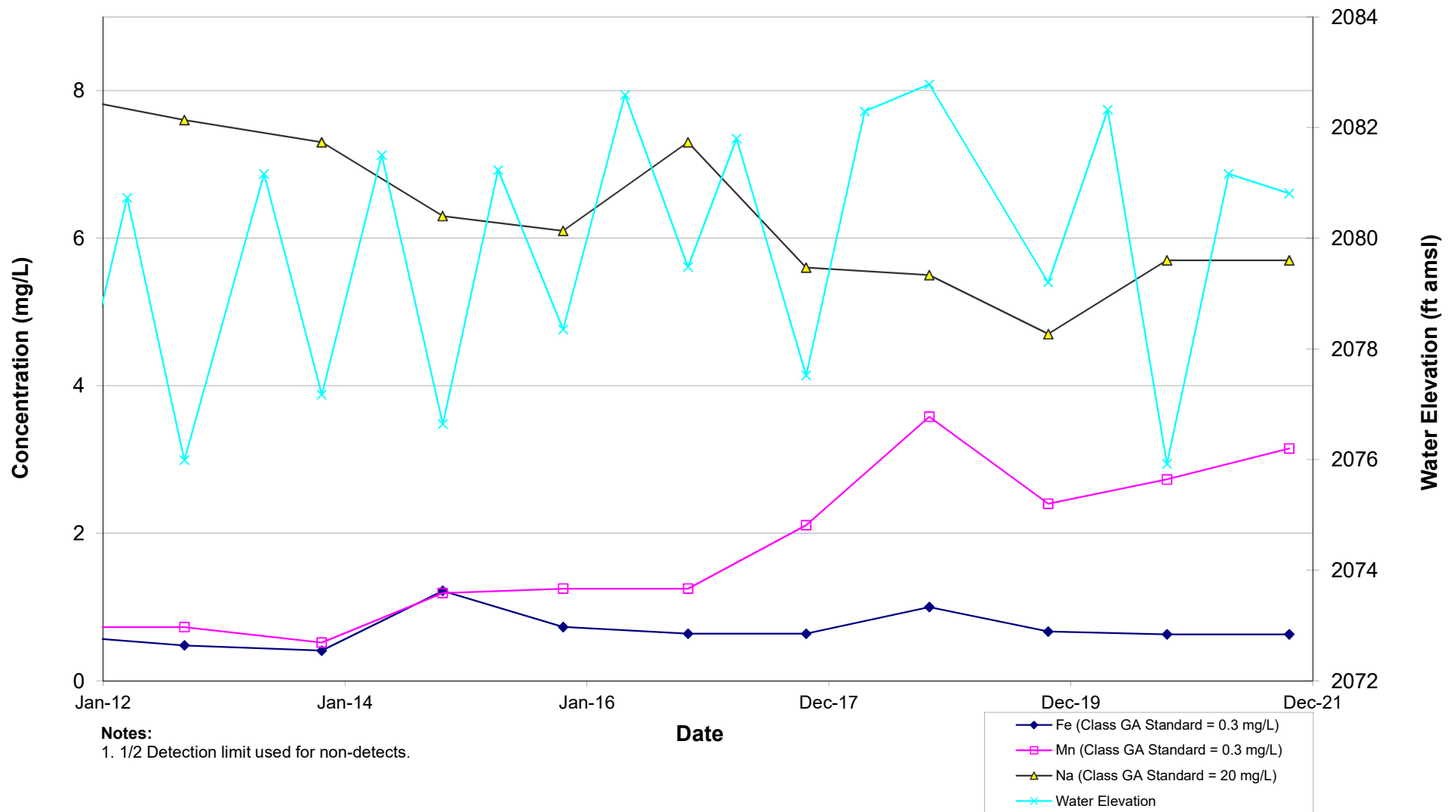
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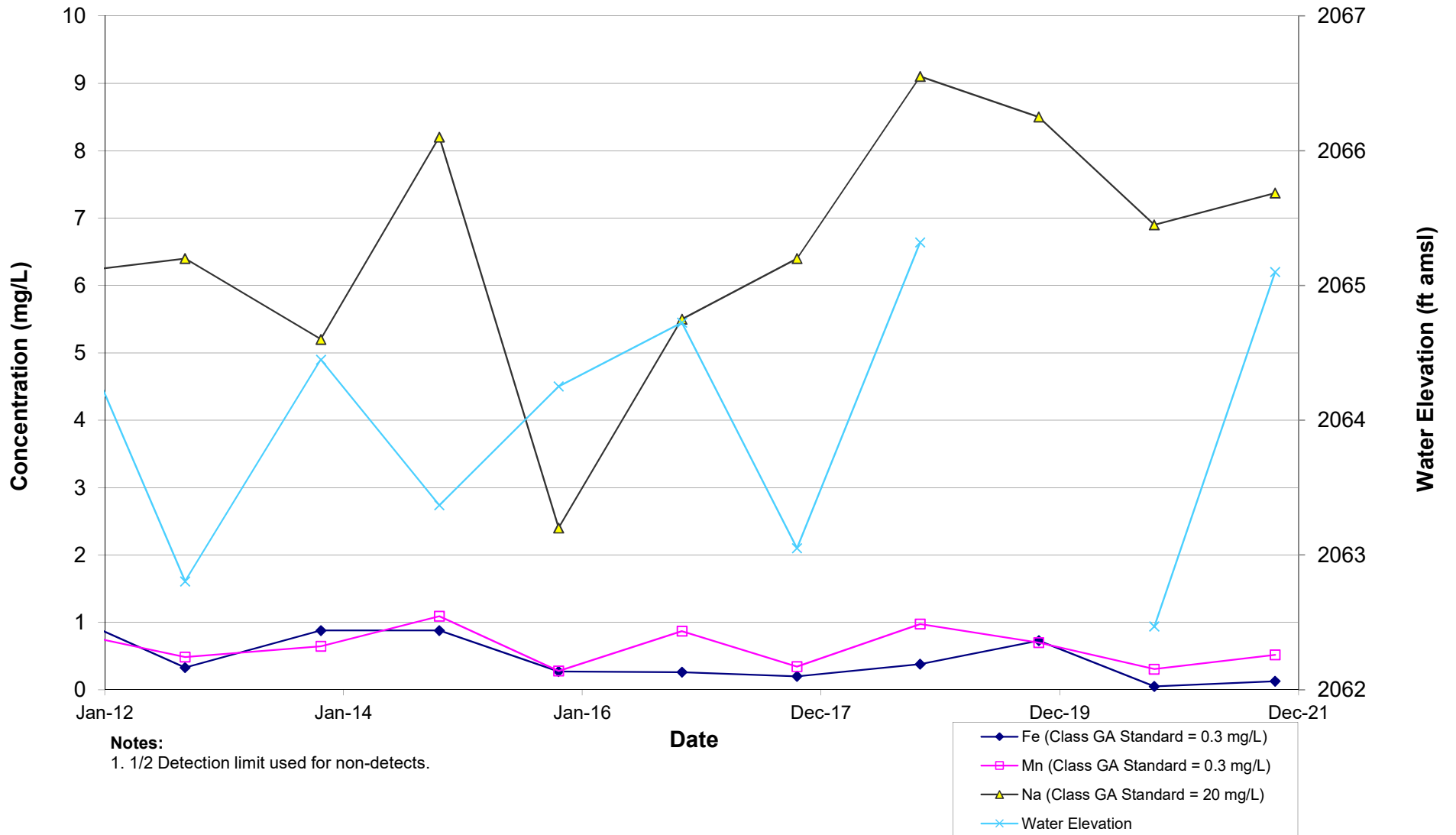
MW-3S Metals



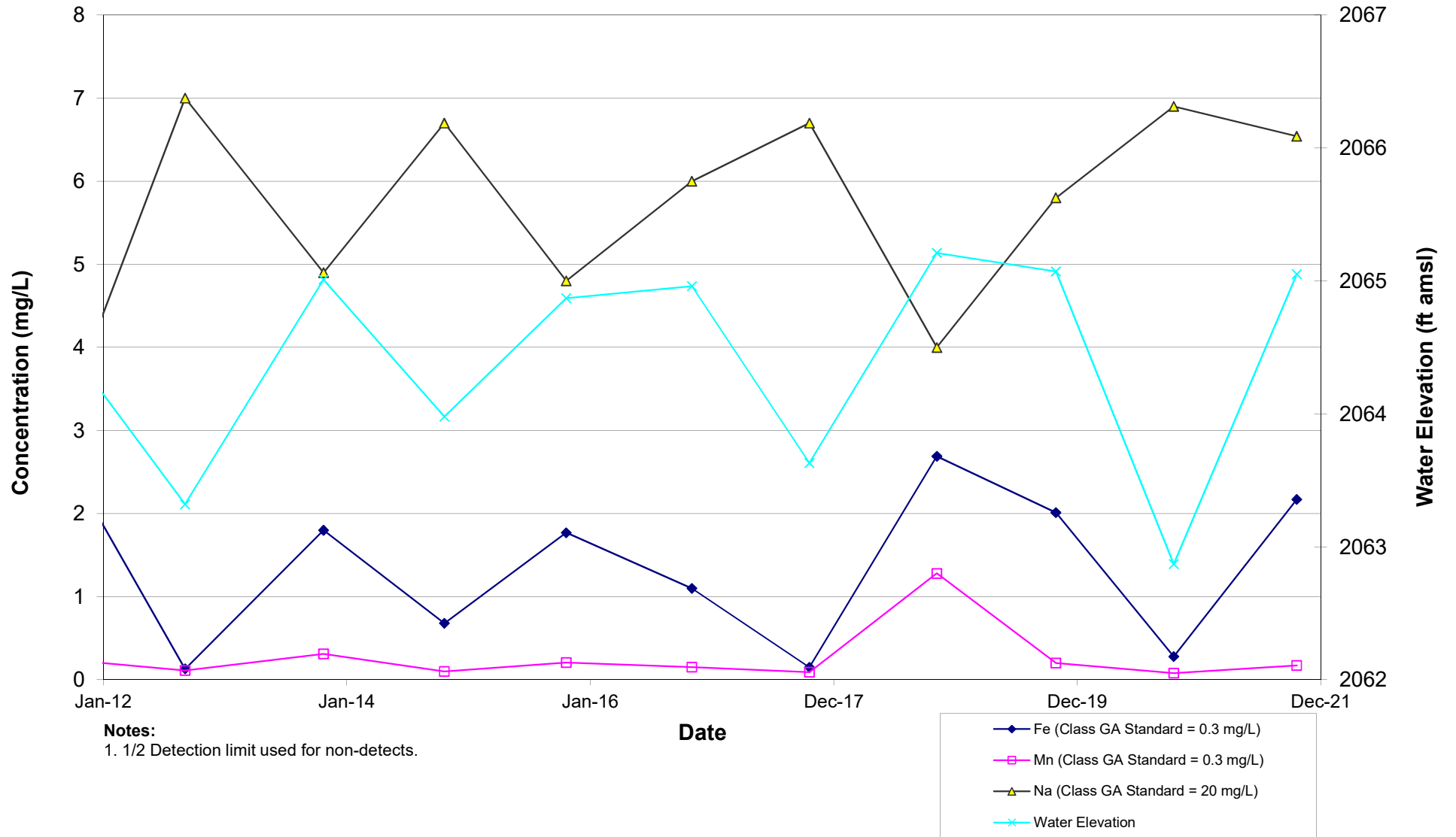
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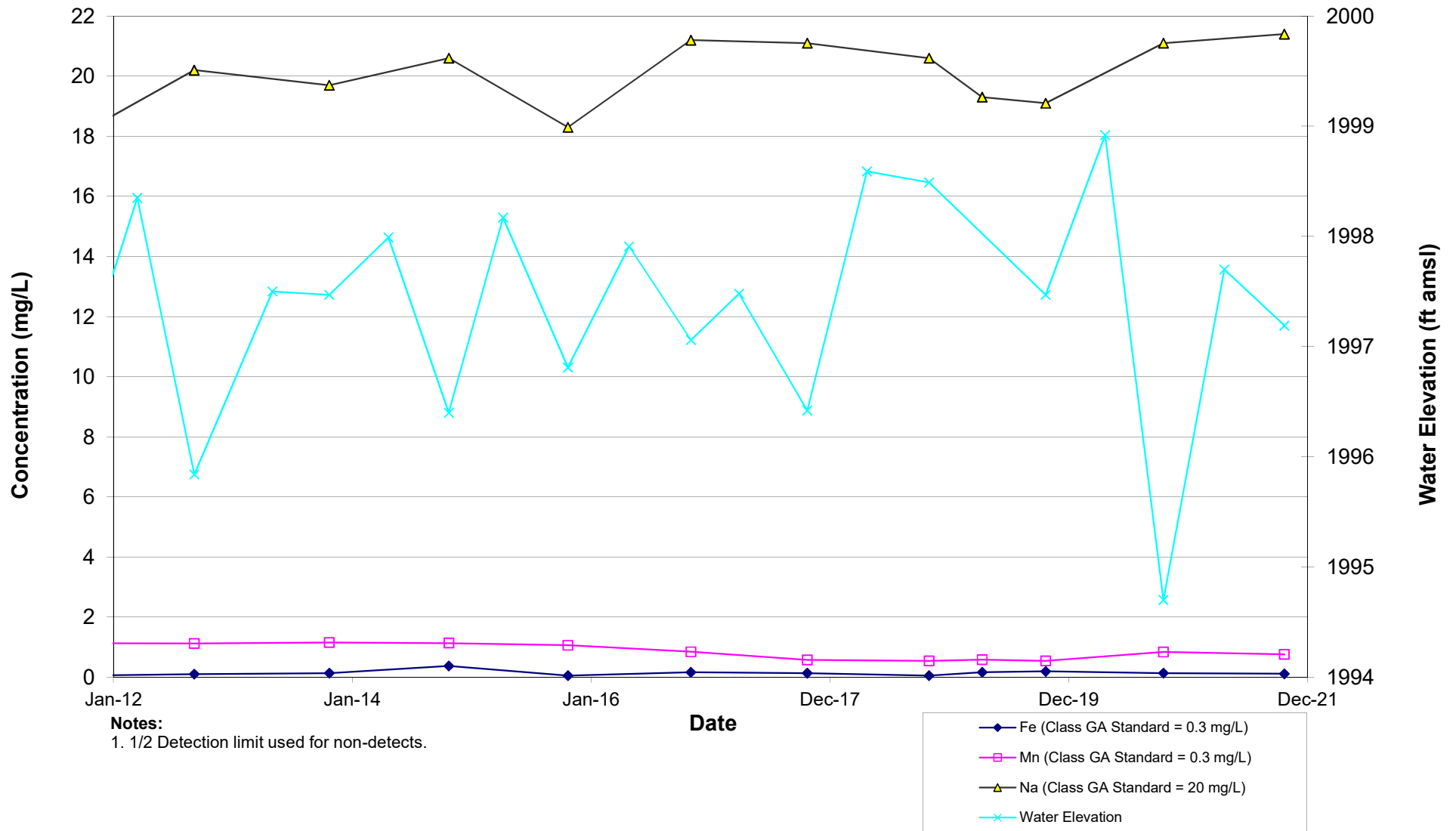
MW-5D Metals



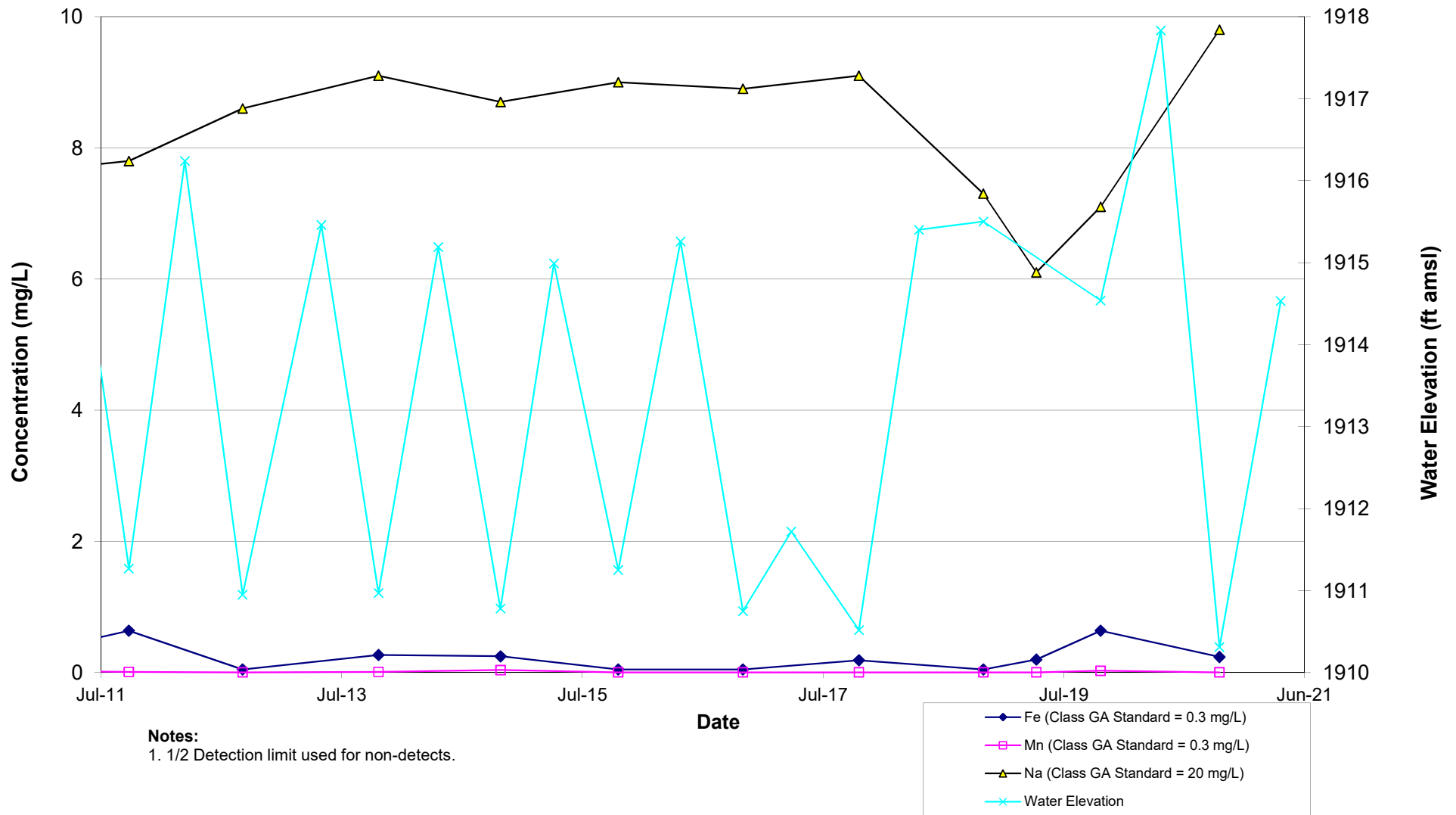
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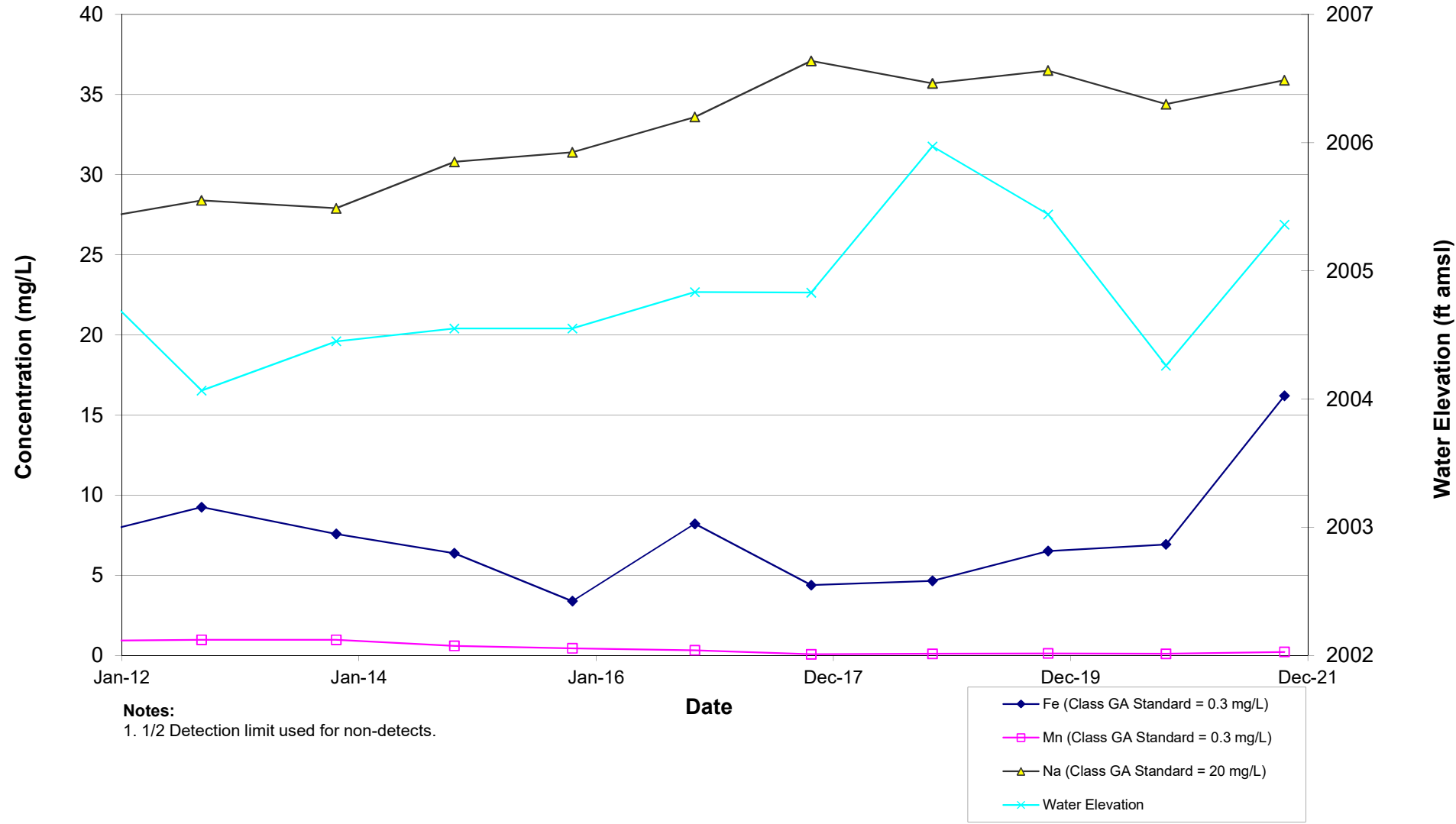
MW-11S Metals



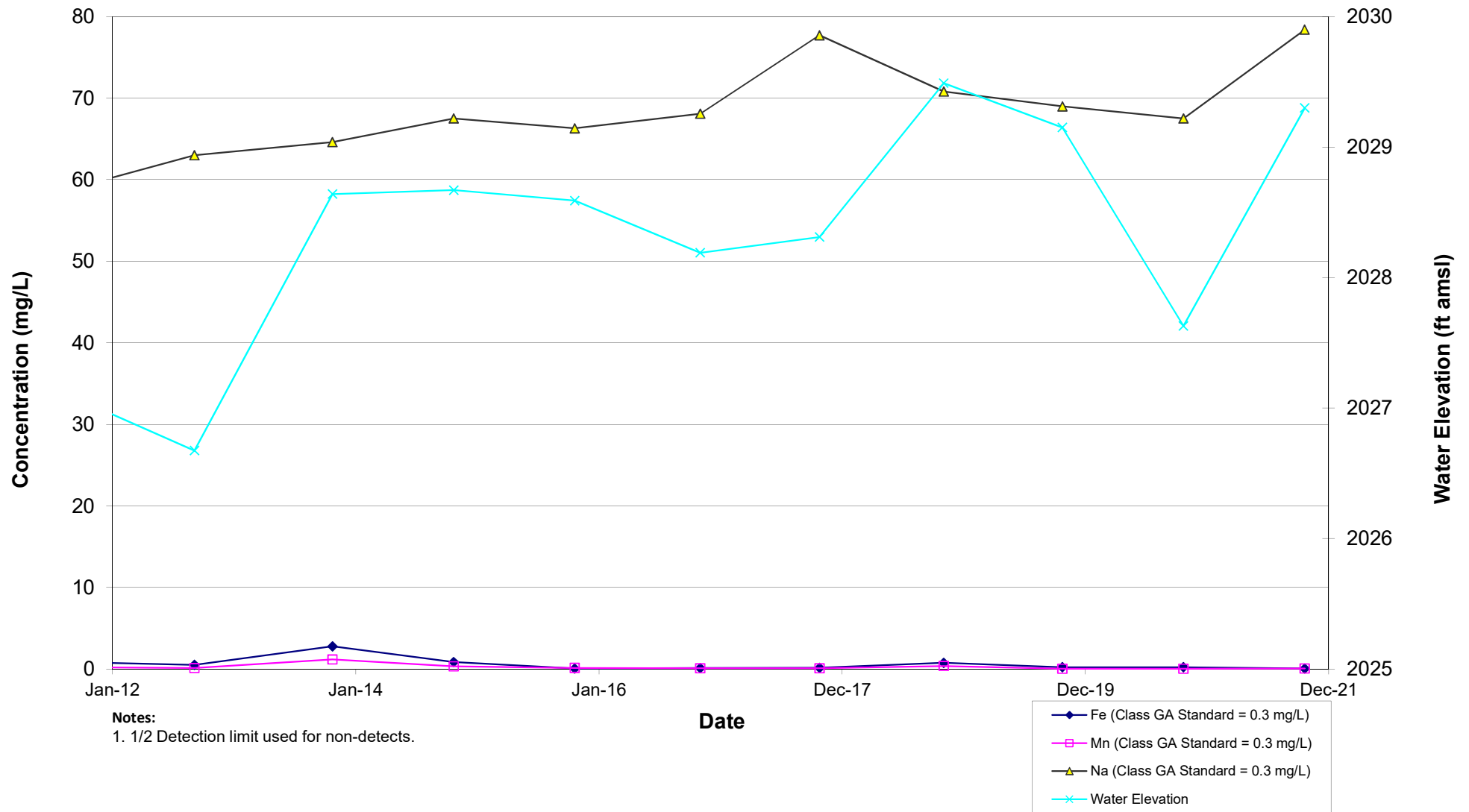
MW-16S Metals



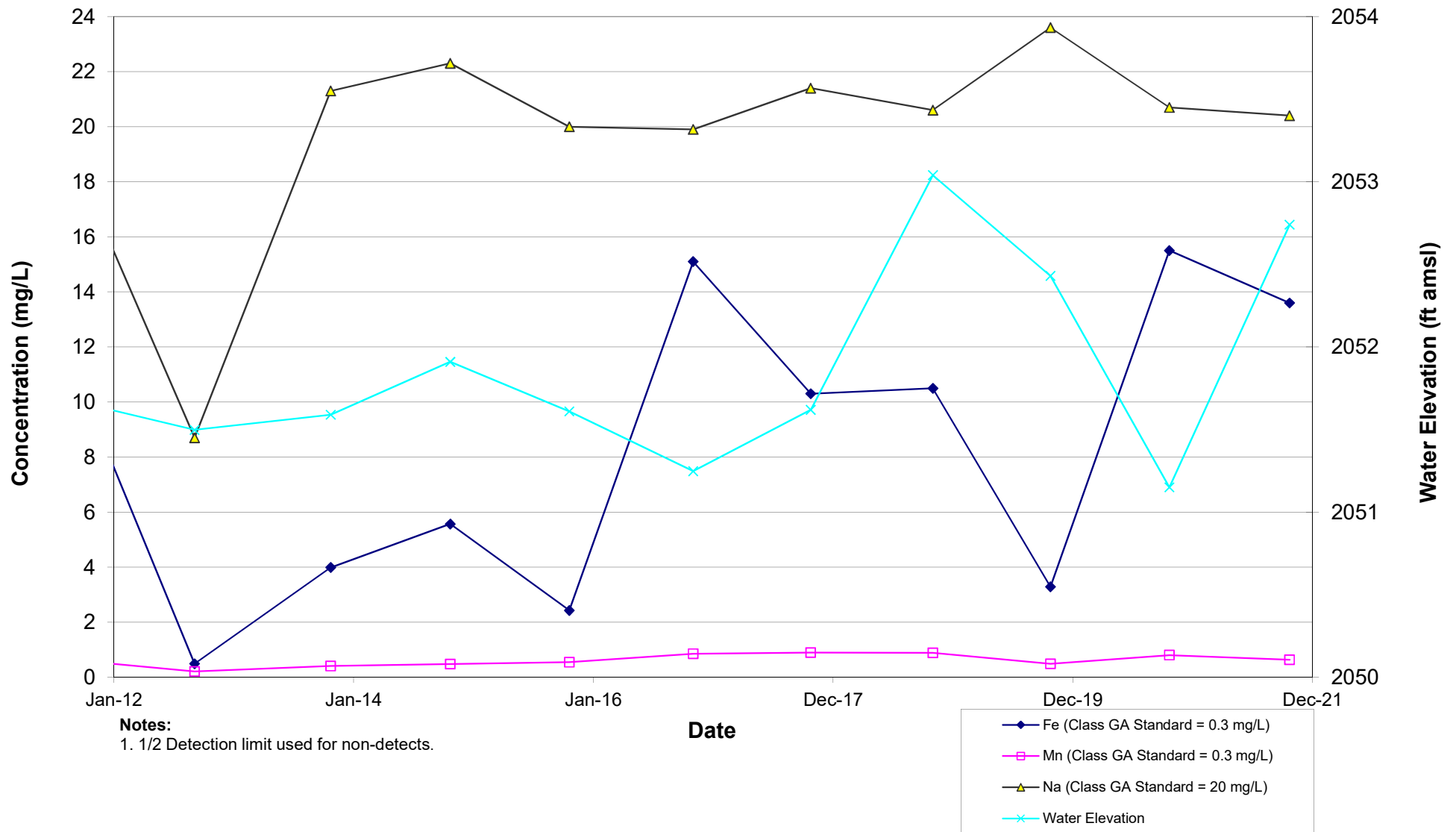
MW-17D Metals



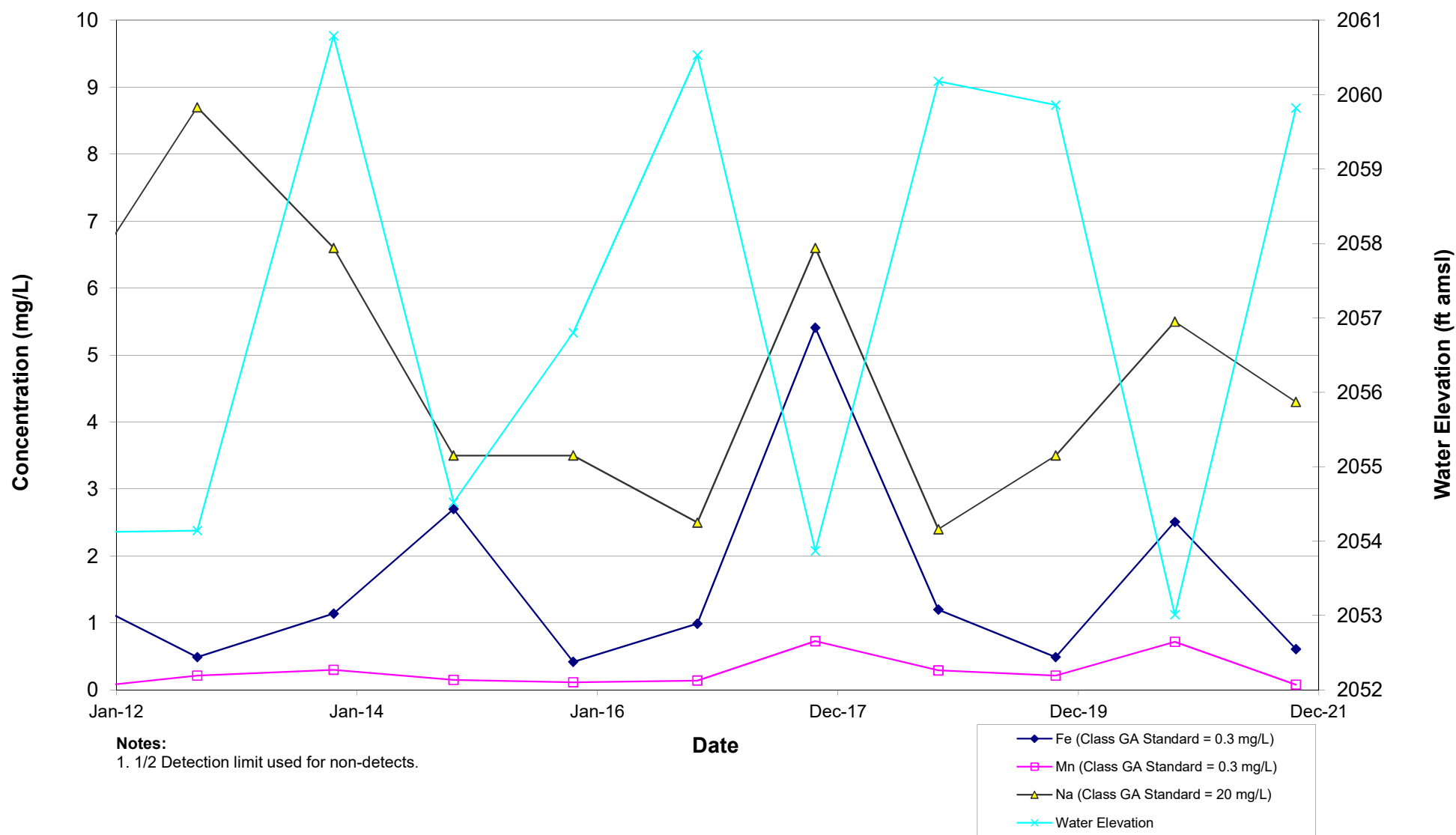
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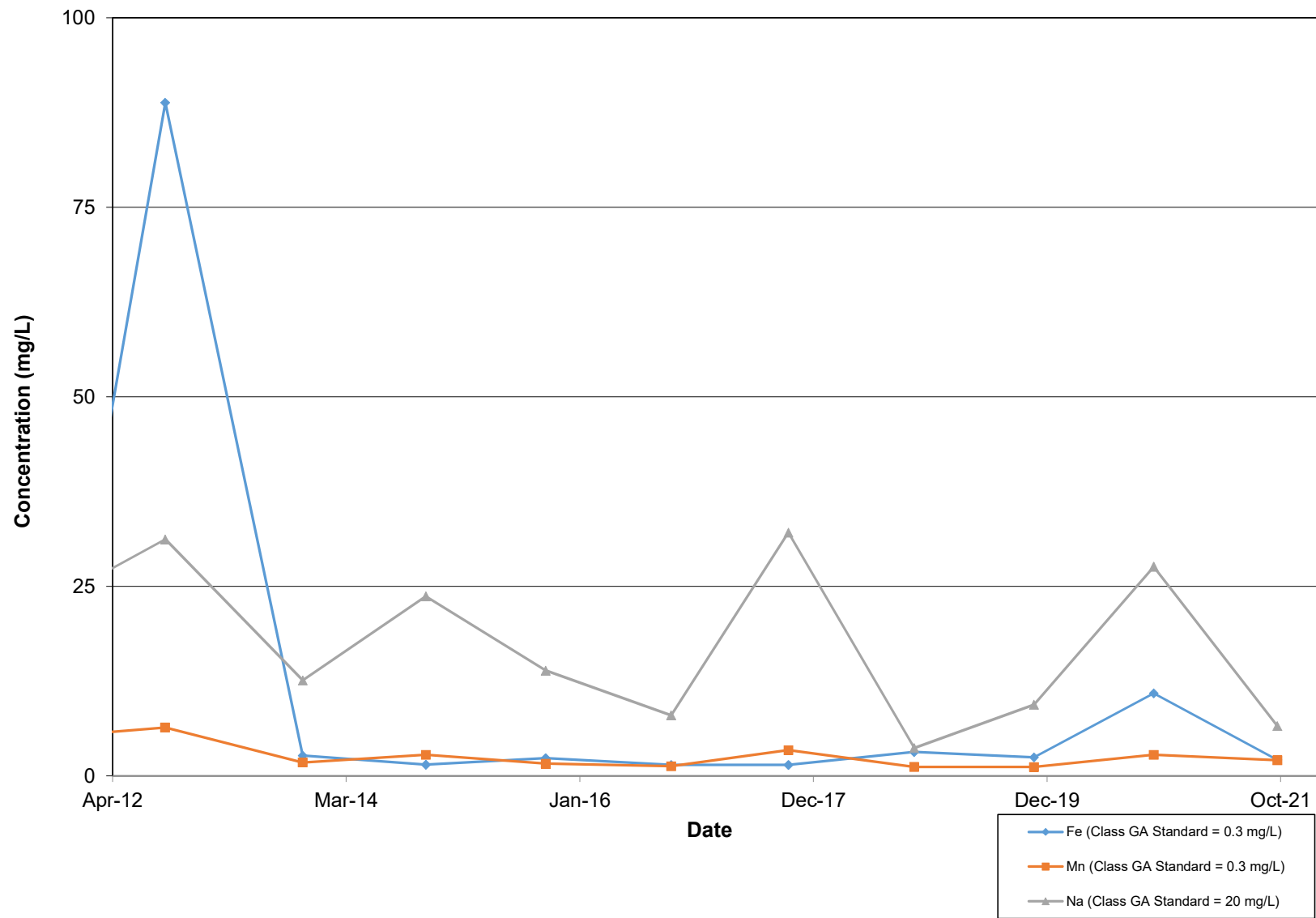
MW-18D Metals



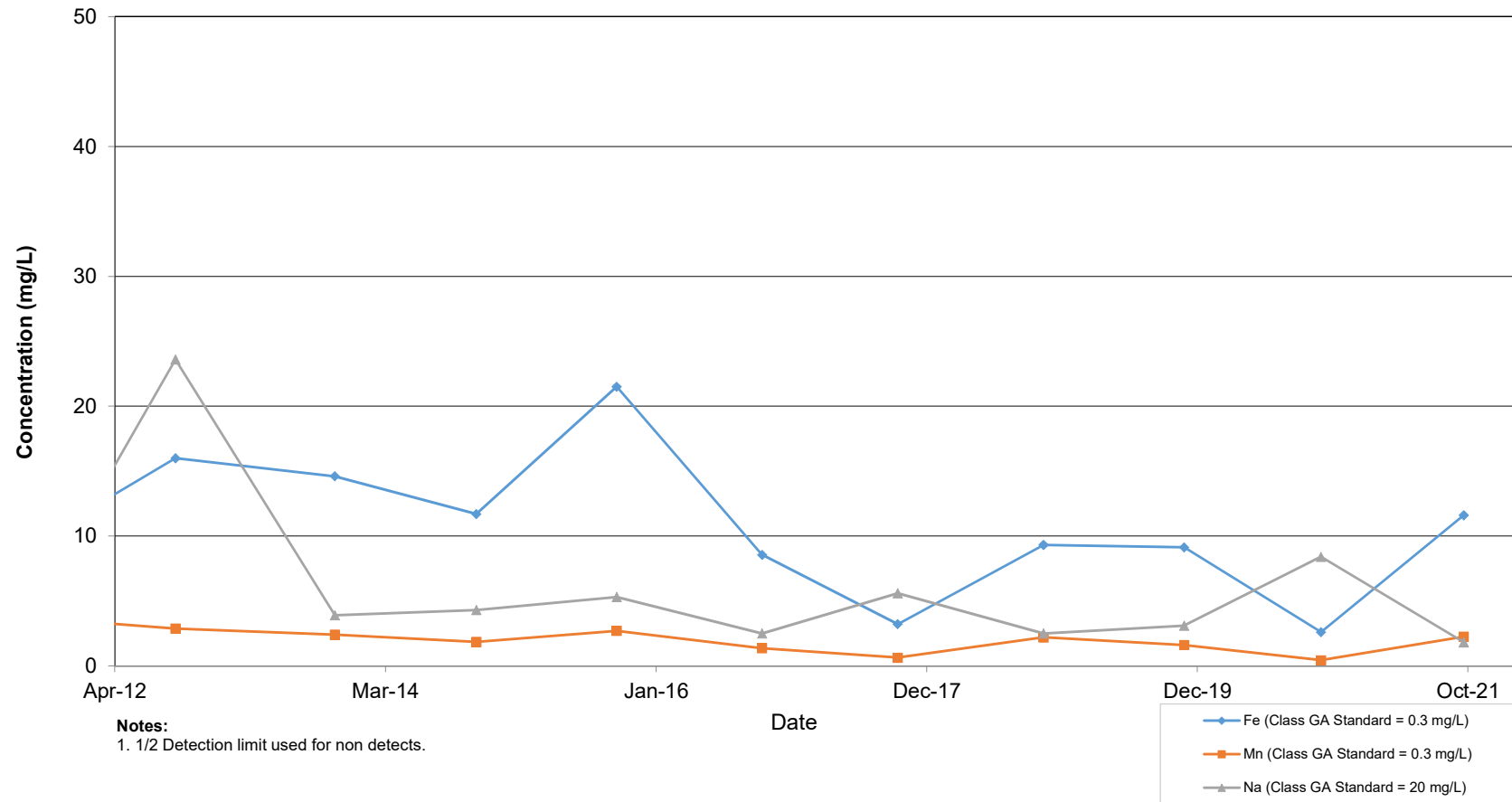
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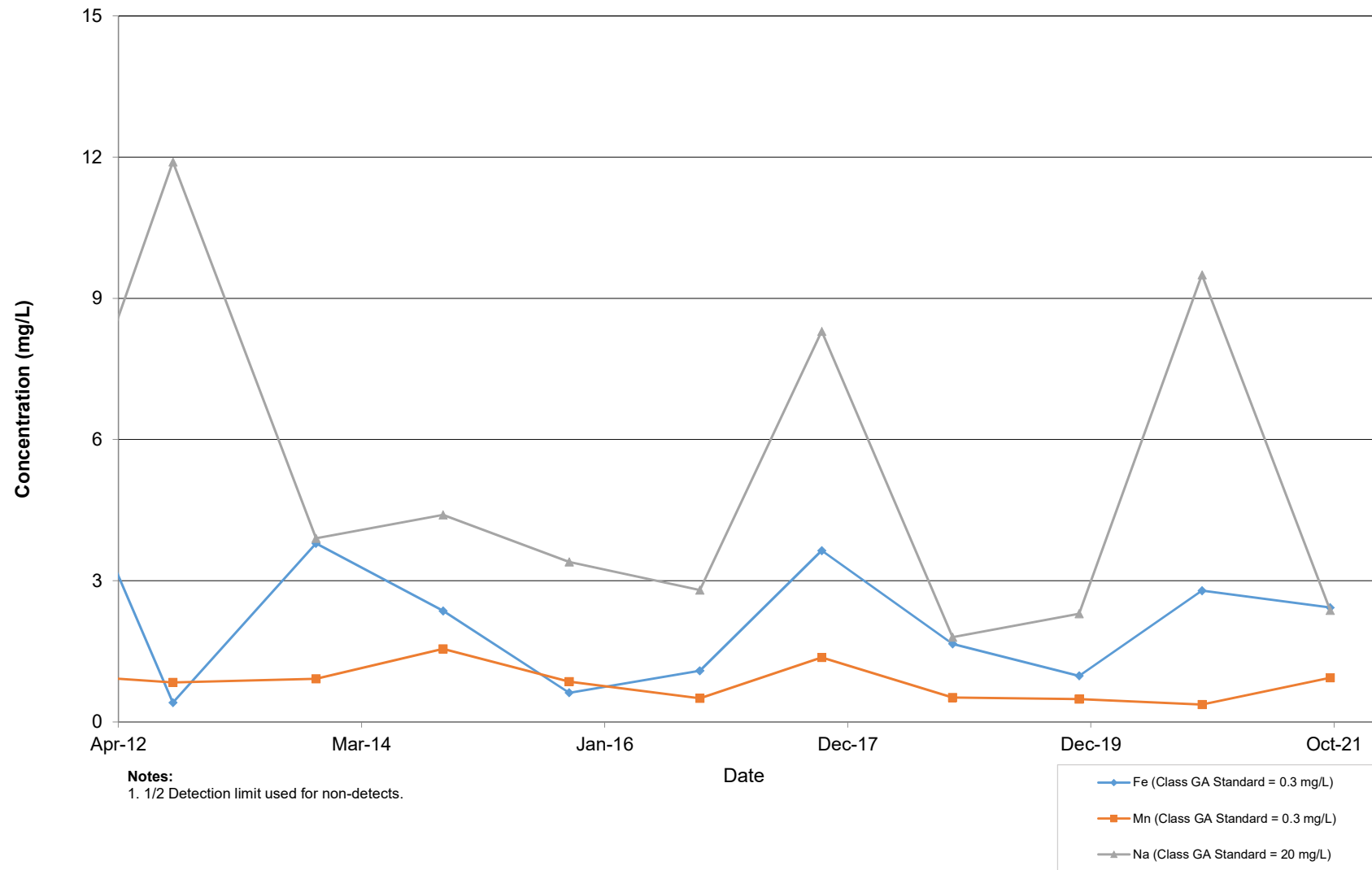
LS-1 Metals



MH-32 Metals



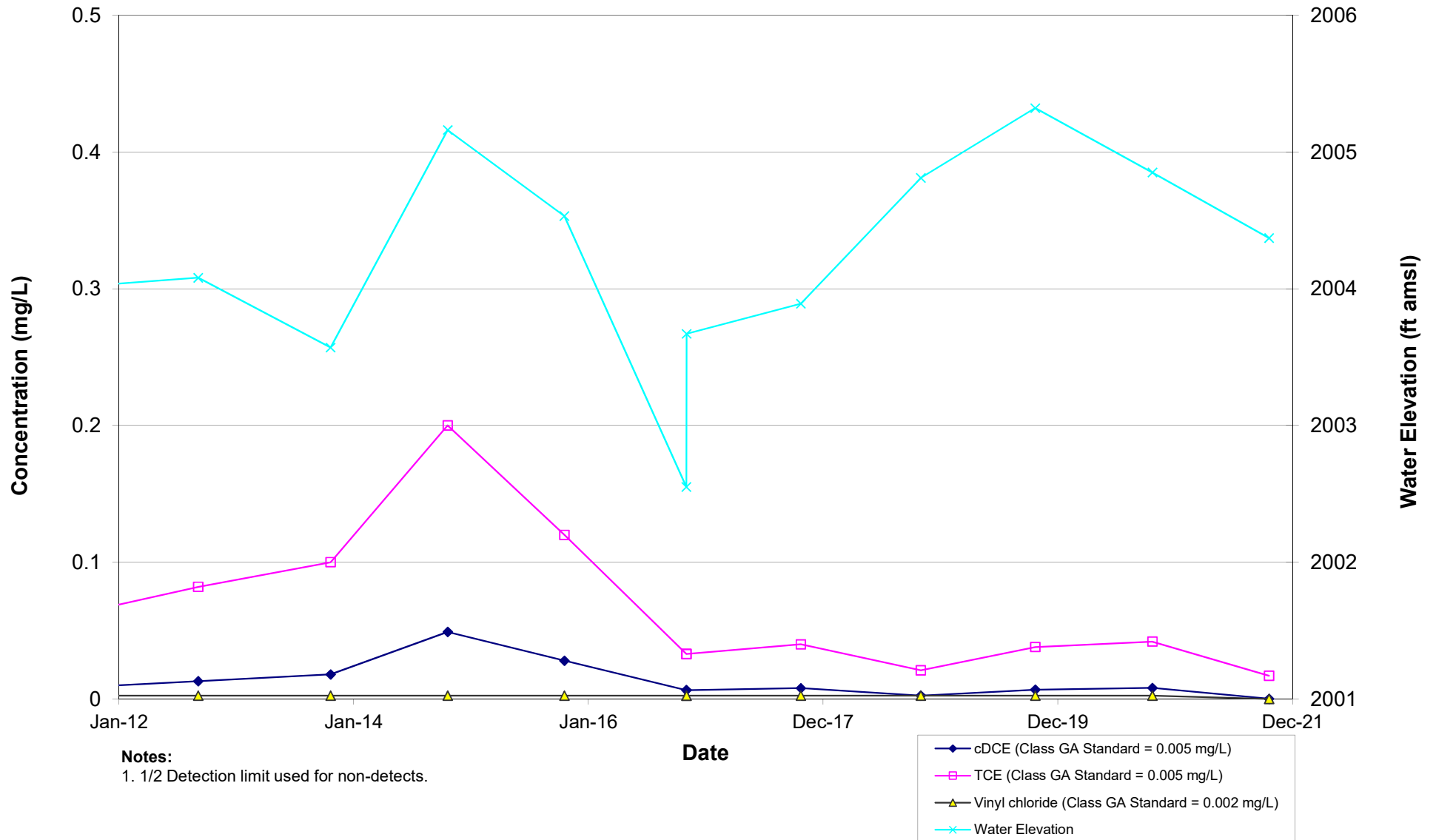
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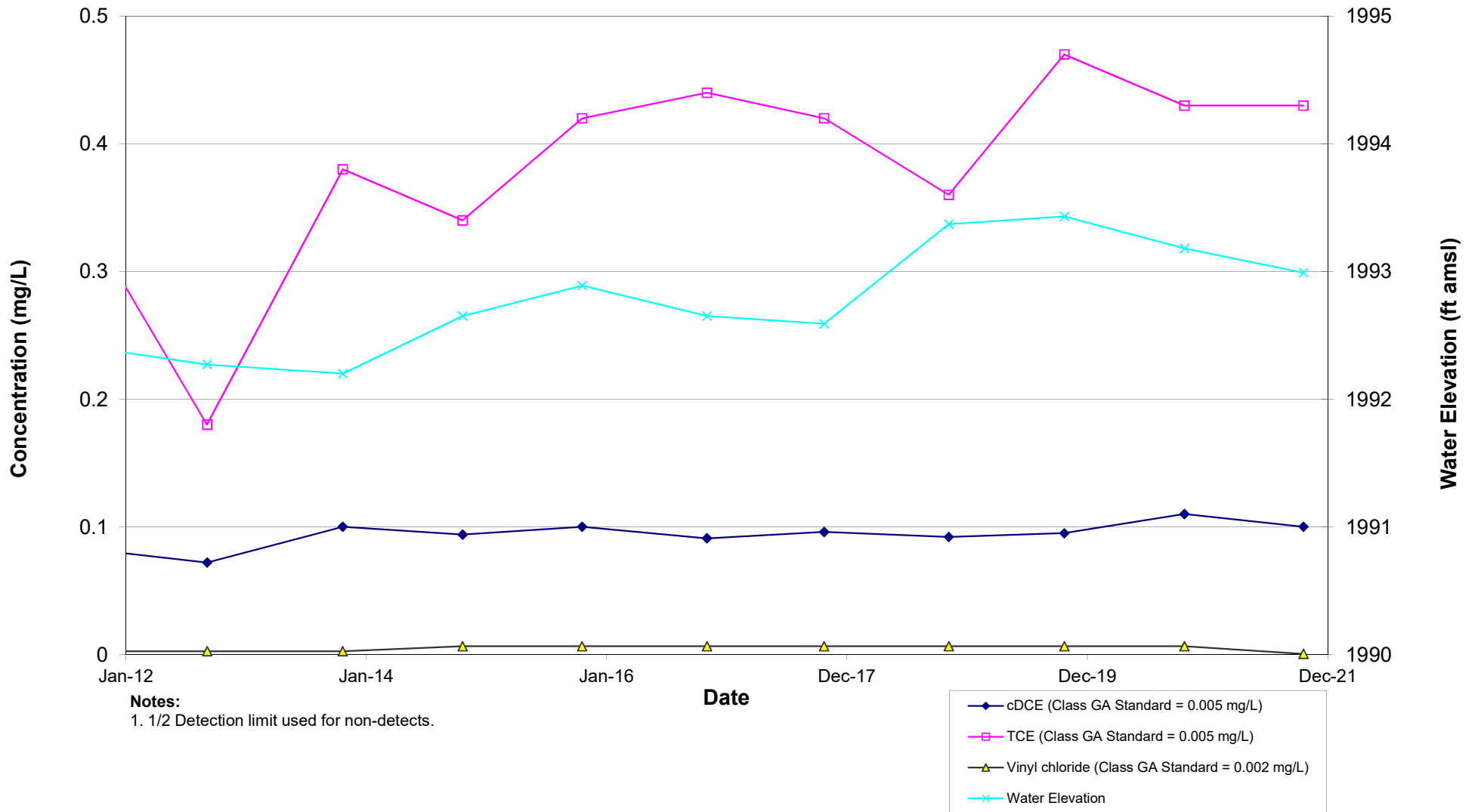
VOC's

Groundwater Concentration
Time Trend Plots

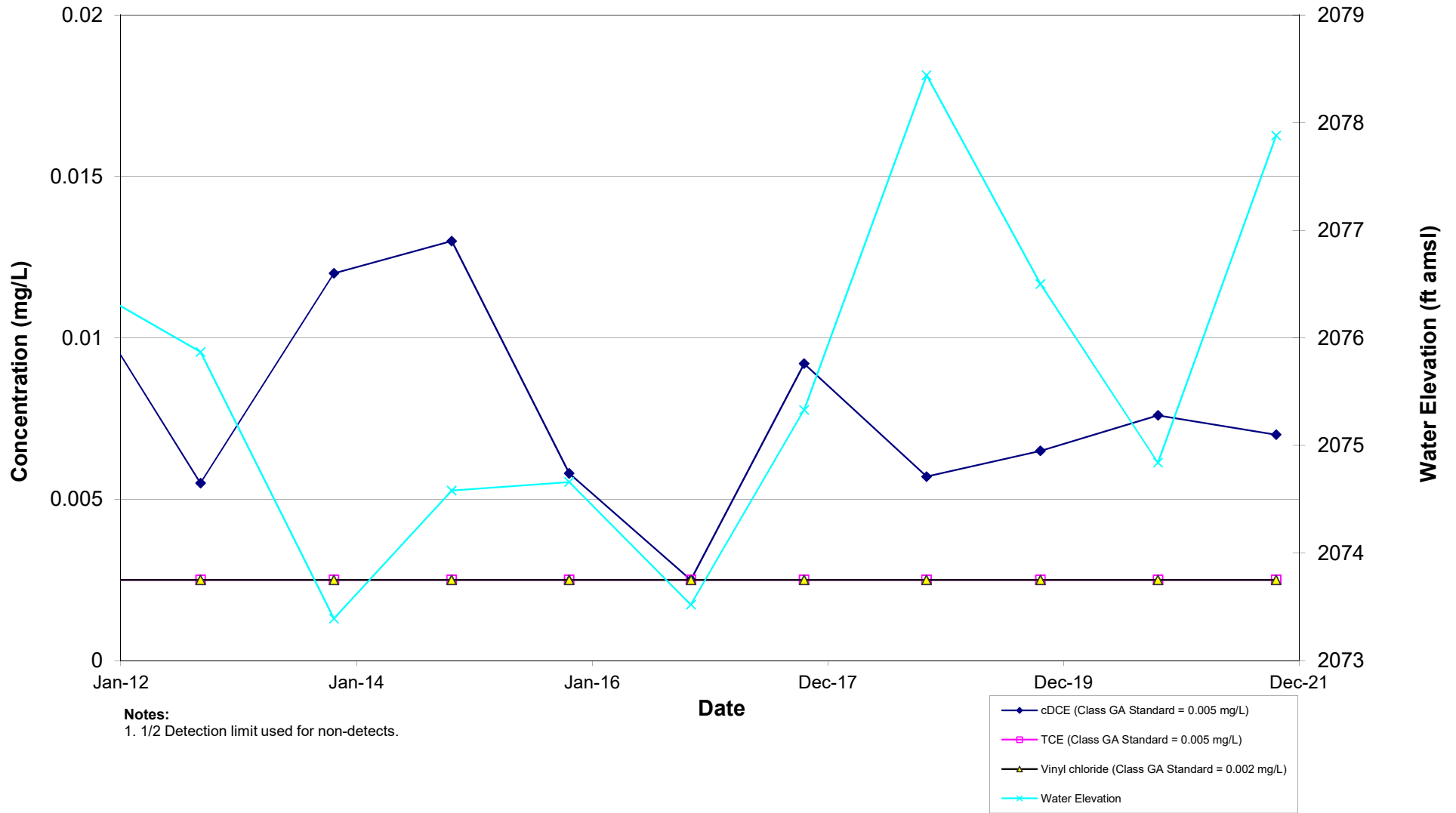
CW-3A VOCs



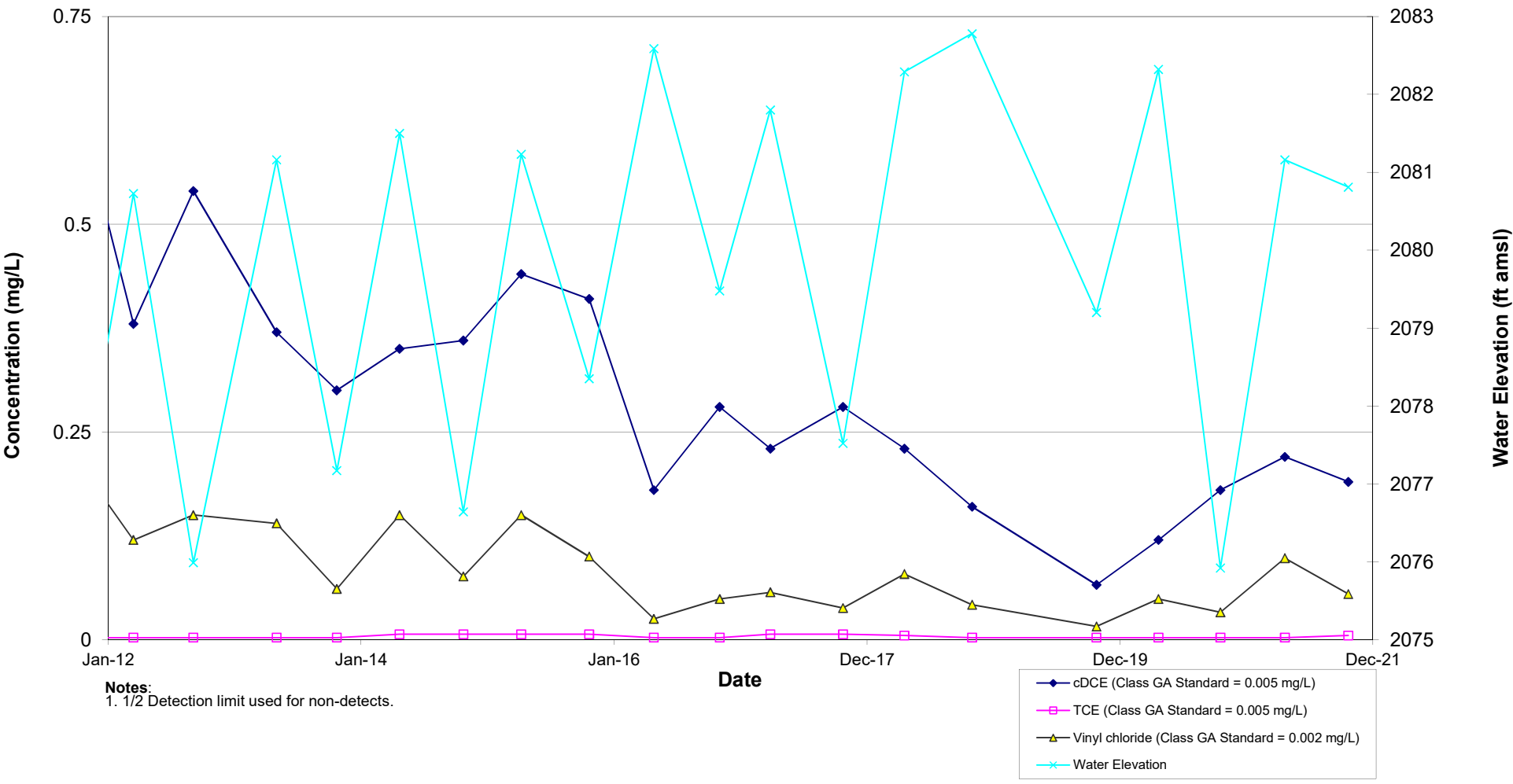
CW-3B VOCs



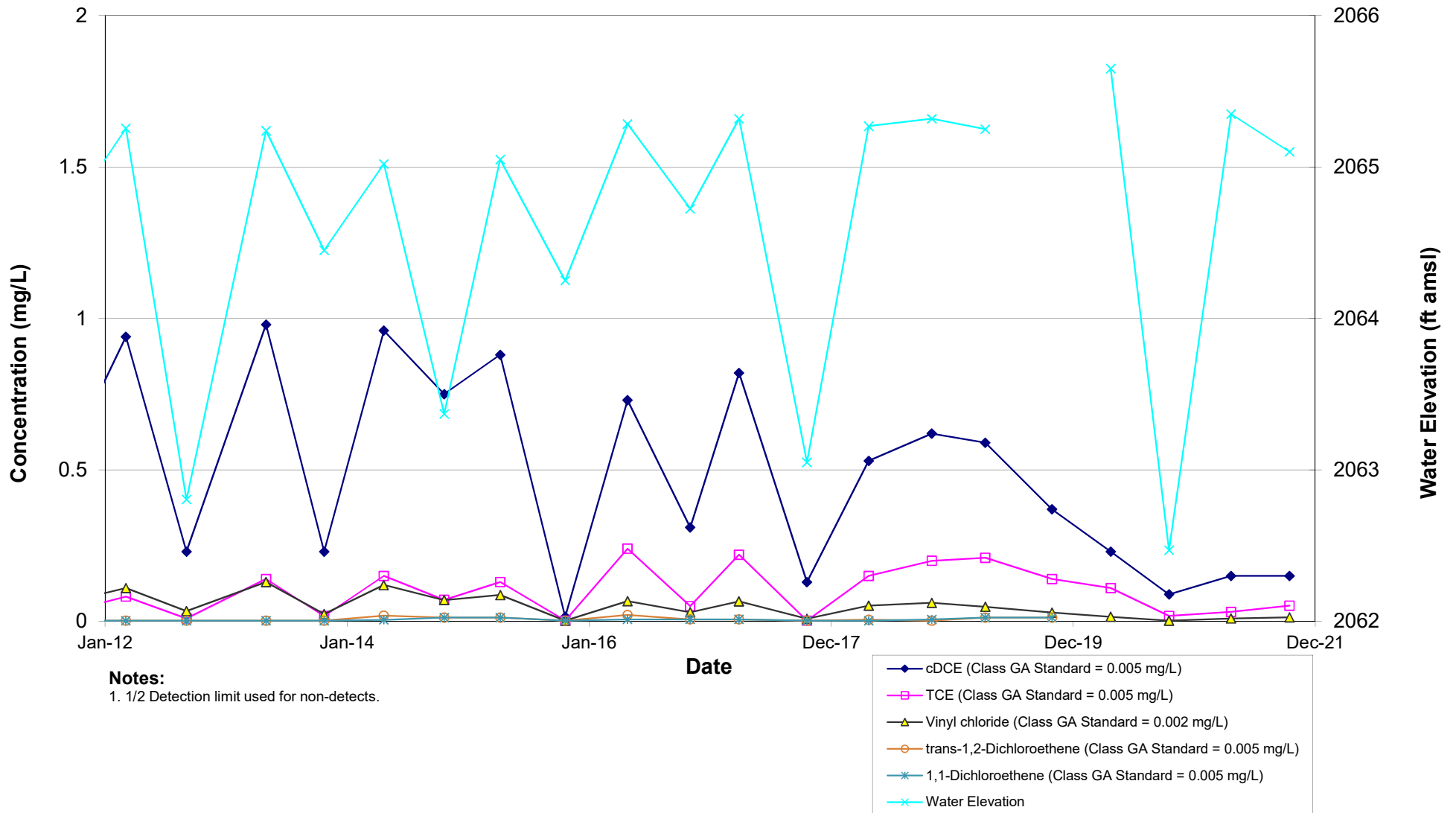
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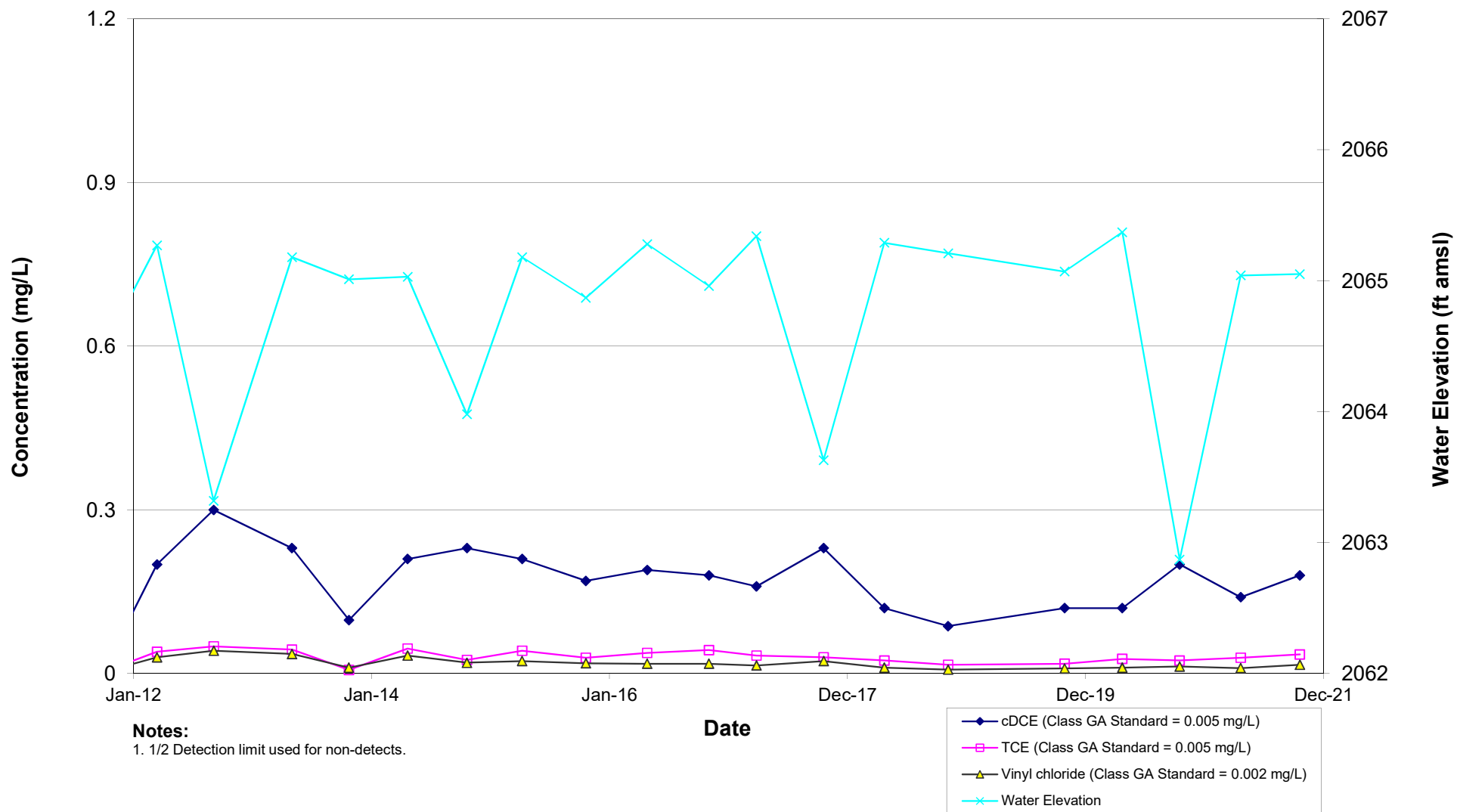
MW-4D VOCs



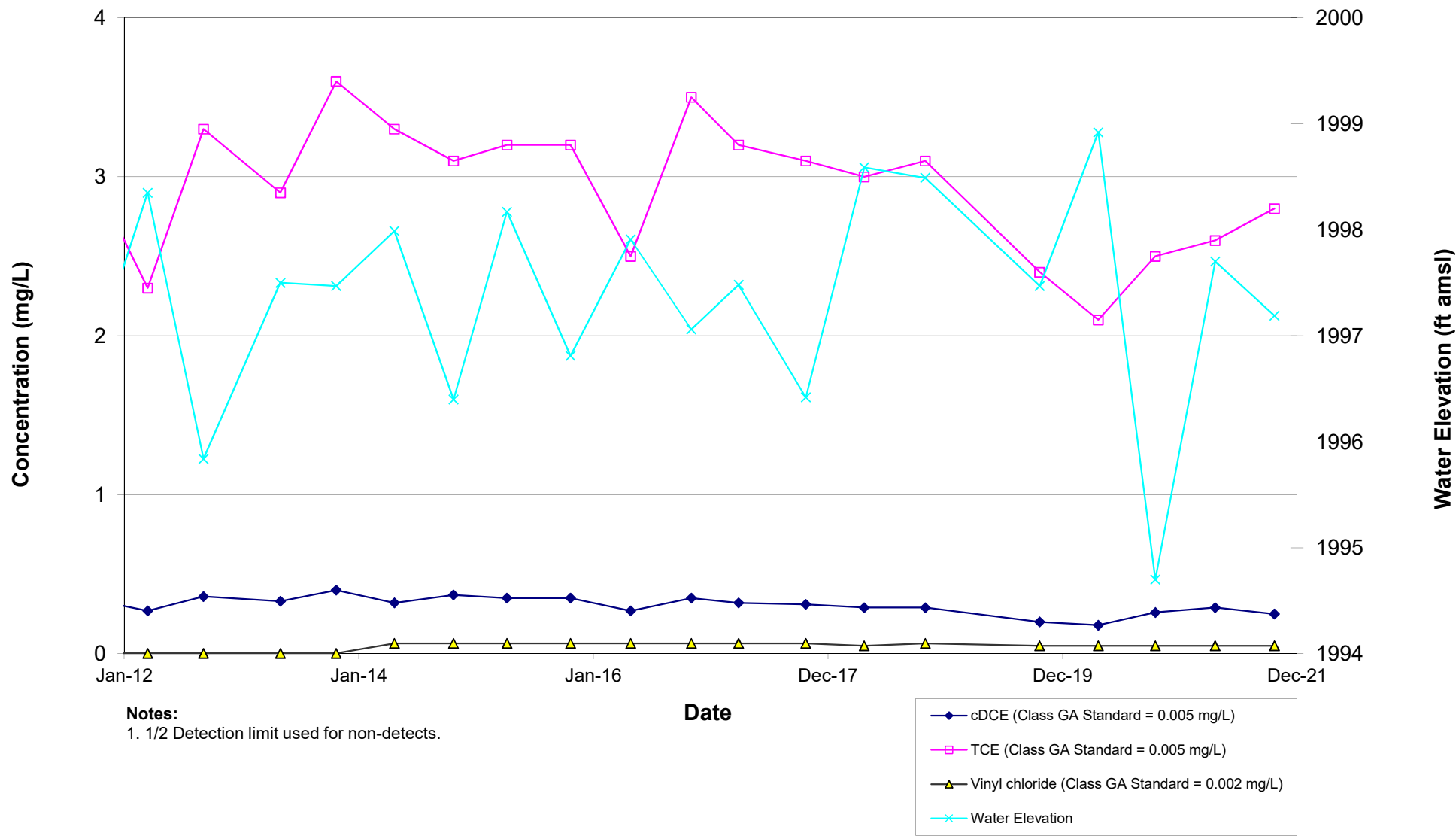
MW-5D VOCs



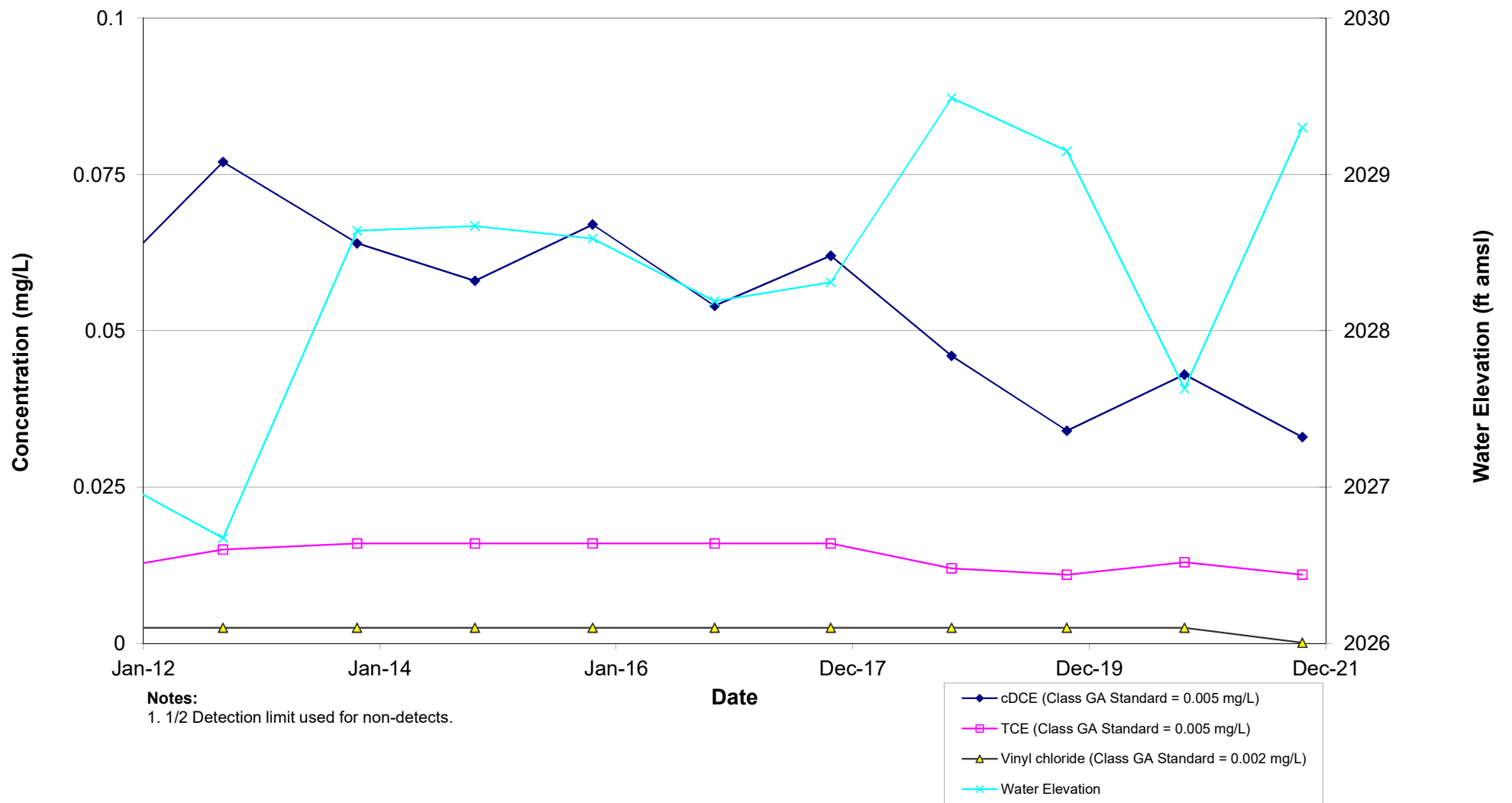
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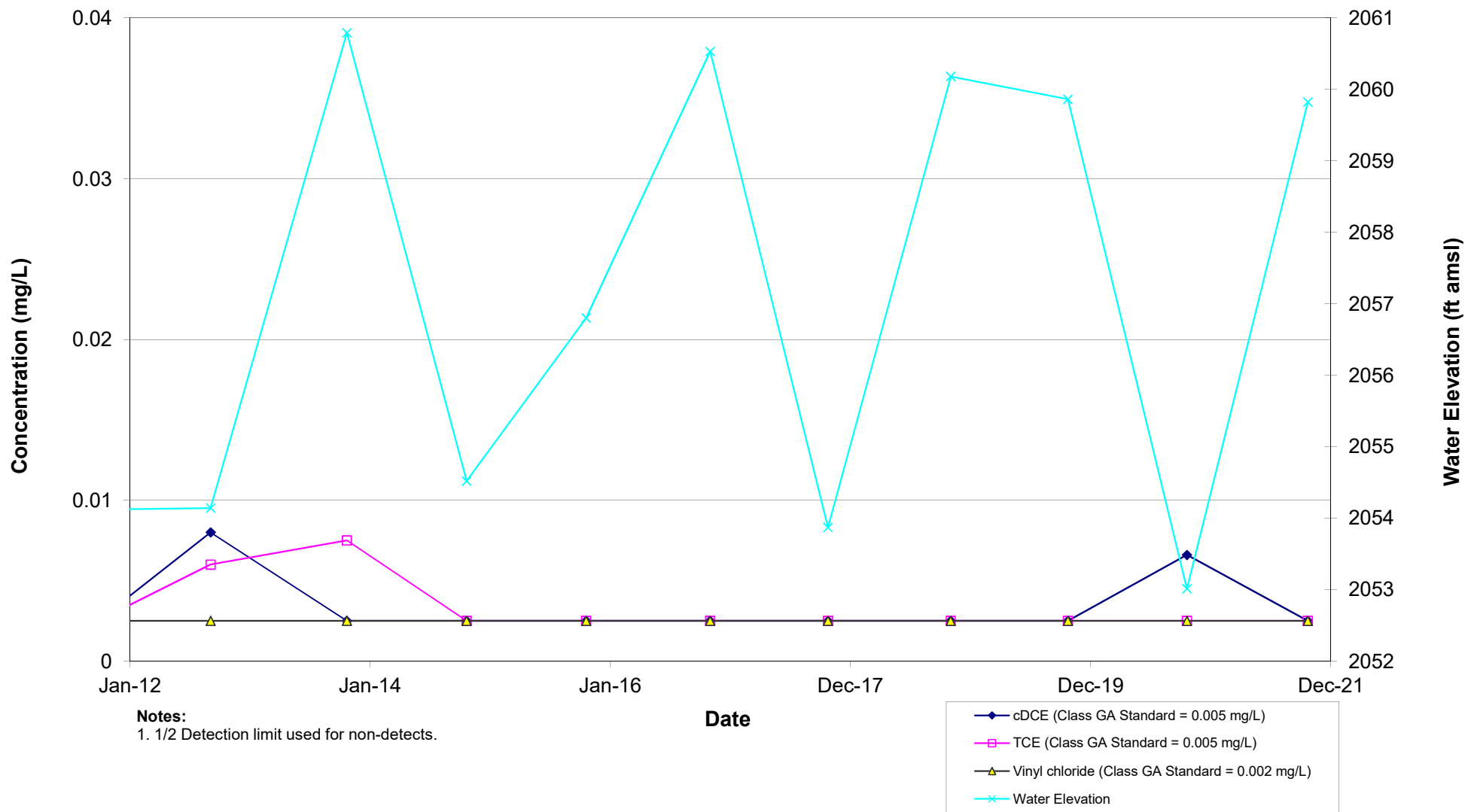
MW-11S VOCs



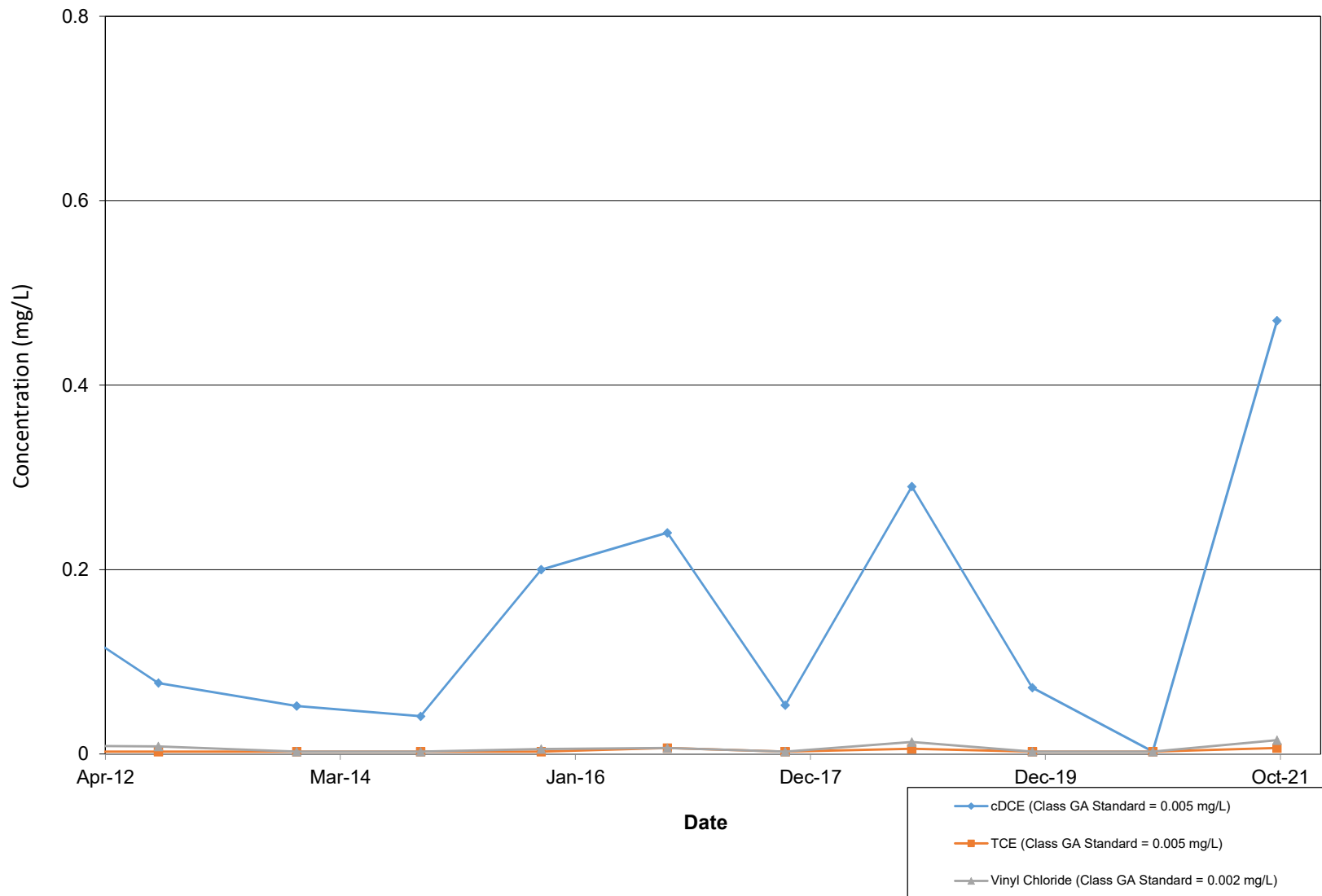
MW-17S VOCs



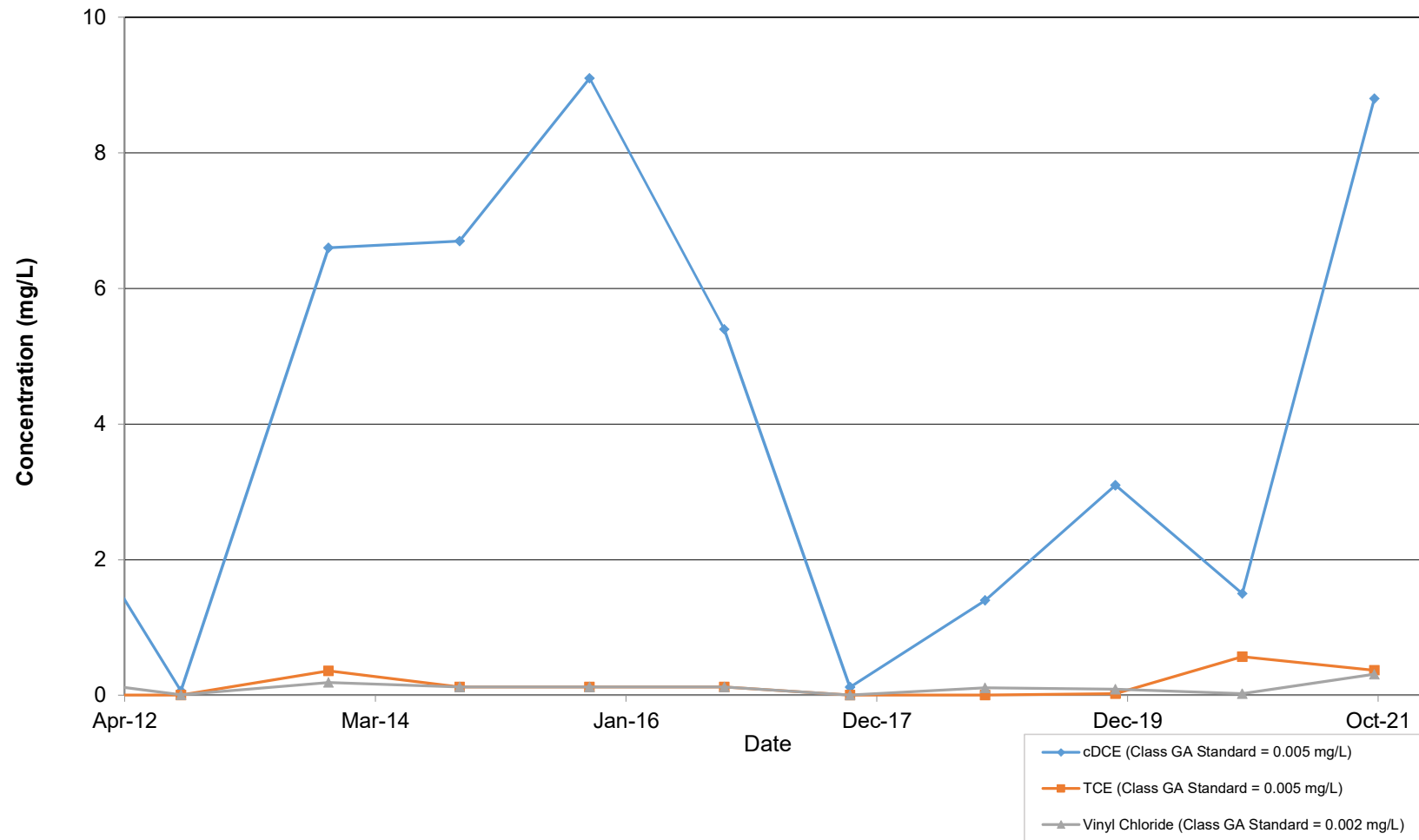
MW-18S VOCs



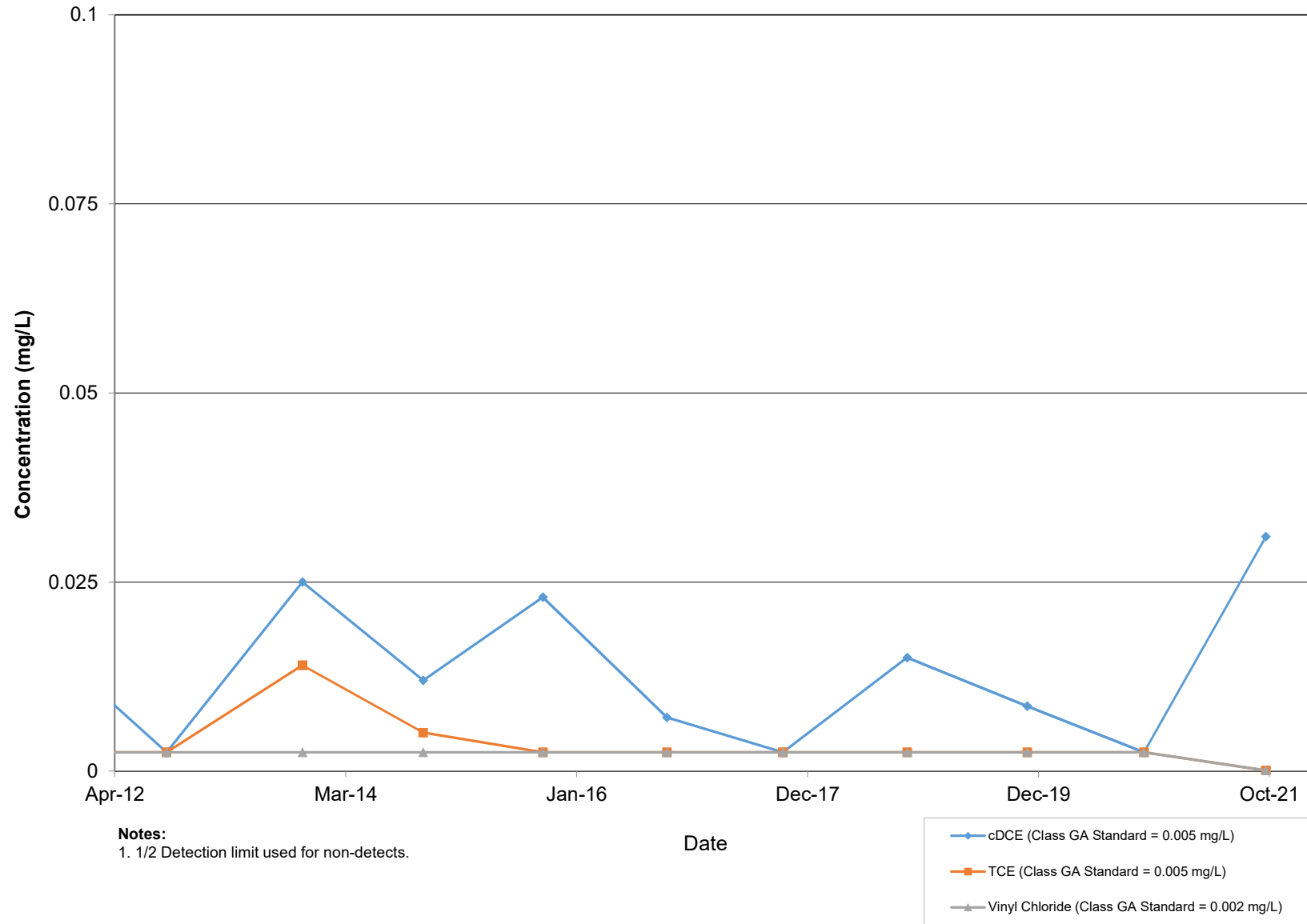
LS-1 VOCs



MH-32 VOCs



MH-33 VOCs



Appendix F

2021 Laboratory Analytical Reports



May 04, 2021

Service Request No:R2103987

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

Laboratory Results for: WAL - Spring Residential

Dear Mr.Brandes,

Enclosed are the results of the sample(s) submitted to our laboratory April 27, 2021
For your reference, these analyses have been assigned our service request number **R2103987**.

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

Janice Jaeger
Project Manager

ADDRESS

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

PHONE +1 585 288 5380 | **FAX** +1 585 288 8475

ALS Group USA, Corp.
dba ALS Environmental



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 - Spring Residential
Sample Matrix: Drinking Water

Service Request: R2103987
Date Received: 04/27/2021

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 04/27/2021. 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:

One or more samples were subcontracted to another laboratory for testing. The certified analytical report from the subcontractor has been included in its entirety at the end of this report and includes the name and address of the subcontracted laboratory.

Approved by 

Date 05/04/2021



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 (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 Certifications¹

Connecticut ID # PH0556	Maine ID #NY0032	Pennsylvania ID# 68-786
Delaware Approved	New Hampshire ID # 2941	Rhode Island ID # 158
DoD ELAP #65817	New York ID # 10145	Virginia #460167
Florida ID # E87674	North Carolina #676	

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.



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.	



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

May 3, 2021

Reports and Invoices
ALS Environmental
1565 Jefferson Road
Building 300, Suite 360
Rochester, NY 14623

Certificate of Analysis

Project Name:	Custom EDD & QC, No MDL	Workorder:	3172593
Purchase Order:	58-R2103987	Workorder ID:	R2103987

Dear Reports Invoices:

Enclosed are the analytical results for samples received by the laboratory on Thursday, April 29, 2021.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Ms. Sarah S Leung (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

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ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Mr. Michael Chevalier , Mr. Brady Kalkman , Ms. Janice Jaeger

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.



Ms. Sarah S Leung
Project Coordinator

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SAMPLE SUMMARY

Workorder: 3172593 R2103987

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3172593001	WAL19Post-0421	NY Potable Water	4/27/2021 08:40	4/29/2021 09:20	Collected by Client
3172593002	WAL19Inter-0421	NY Potable Water	4/27/2021 08:50	4/29/2021 09:20	Collected by Client
3172593003	WAL19Pre-0421	NY Potable Water	4/27/2021 09:00	4/29/2021 09:20	Collected by Client

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SAMPLE SUMMARY

Workorder: 3172593 R2103987

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are performed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

Standard Acronyms/Flags

C	Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

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PROJECT SUMMARY

Workorder: 3172593 R2103987

Workorder Comments

Temperature of sample taken at time of sample receipt in the laboratory. See chain of custody for actual temperature.

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ANALYTICAL RESULTS

Workorder: 3172593 R2103987

Lab ID: **3172593001**
Sample ID: **WAL19Post-0421**

Date Collected: 4/27/2021 08:40 Matrix: NY Potable Water
Date Received: 4/29/2021 09:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Bromobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Bromochloromethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Bromomethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
n-Butylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
tert-Butylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
sec-Butylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Carbon Tetrachloride	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Chlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Chloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Chloromethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
o-Chlorotoluene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
p-Chlorotoluene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Dibromomethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,2-Dichlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,3-Dichlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,4-Dichlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Dichlorodifluoromethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,1-Dichloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,2-Dichloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,1-Dichloroethene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
cis-1,2-Dichloroethene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
trans-1,2-Dichloroethene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,3-Dichloropropane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
2,2-Dichloropropane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,2-Dichloropropane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,1-Dichloropropene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
cis-1,3-Dichloropropene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
trans-1,3-Dichloropropene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Ethylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Hexachlorobutadiene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Isopropylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
p-Isopropyltoluene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Methyl t-Butyl Ether	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Methylene Chloride	1.1	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
n-Propylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Styrene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A

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ANALYTICAL RESULTS

Workorder: 3172593 R2103987

Lab ID: **3172593001**
Sample ID: **WAL19Post-0421**

Date Collected: 4/27/2021 08:40 Matrix: NY Potable Water
Date Received: 4/29/2021 09:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,1,2-Tetrachloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,1,2,2-Tetrachloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Tetrachloroethene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Toluene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,2,3-Trichlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,2,4-Trichlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,1,1-Trichloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,1,2-Trichloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Trichloroethene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Trichlorofluoromethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,2,3-Trichloropropane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,2,4-Trimethylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
1,3,5-Trimethylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
Vinyl Chloride	ND	C	ug/L	0.50	EPA 524.2			5/3/21 03:53	PDK	A
o-Xylene	ND	C	ug/L	0.25	EPA 524.2			5/3/21 03:53	PDK	A
mp-Xylene	ND	C	ug/L	0.25	EPA 524.2			5/3/21 03:53	PDK	A
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichlorobenzene-d4 (S)	110	C	%	70 - 130	EPA 524.2			5/3/21 03:53	PDK	A
4-Bromofluorobenzene (S)	103	C	%	70 - 130	EPA 524.2			5/3/21 03:53	PDK	A



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ANALYTICAL RESULTS

Workorder: 3172593 R2103987

Lab ID: **3172593002**
Sample ID: **WAL19Inter-0421**

Date Collected: 4/27/2021 08:50 Matrix: NY Potable Water
Date Received: 4/29/2021 09:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Bromobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Bromochloromethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Bromomethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
n-Butylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
tert-Butylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
sec-Butylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Carbon Tetrachloride	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Chlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Chloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Chloromethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
o-Chlorotoluene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
p-Chlorotoluene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Dibromomethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,2-Dichlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,3-Dichlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,4-Dichlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Dichlorodifluoromethane	ND	C,1, 2	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,1-Dichloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,2-Dichloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,1-Dichloroethene	ND	C,5, 6	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
cis-1,2-Dichloroethene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
trans-1,2-Dichloroethene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,3-Dichloropropane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
2,2-Dichloropropane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,2-Dichloropropane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,1-Dichloropropene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
cis-1,3-Dichloropropene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
trans-1,3-Dichloropropene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Ethylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Hexachlorobutadiene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Isopropylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
p-Isopropyltoluene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Methyl t-Butyl Ether	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Methylene Chloride	0.95	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
n-Propylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A

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ANALYTICAL RESULTS

Workorder: 3172593 R2103987

Lab ID: **3172593002**
Sample ID: **WAL19Inter-0421**

Date Collected: 4/27/2021 08:50 Matrix: NY Potable Water
Date Received: 4/29/2021 09:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Styrene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,1,1,2-Tetrachloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,1,2,2-Tetrachloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Tetrachloroethene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Toluene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,2,3-Trichlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,2,4-Trichlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,1,1-Trichloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,1,2-Trichloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Trichloroethene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Trichlorofluoromethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,2,3-Trichloropropane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,2,4-Trimethylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
1,3,5-Trimethylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
Vinyl Chloride	ND	C,3,4	ug/L	0.50	EPA 524.2			5/3/21 04:19	PDK	A
o-Xylene	ND	C	ug/L	0.25	EPA 524.2			5/3/21 04:19	PDK	A
mp-Xylene	ND	C	ug/L	0.25	EPA 524.2			5/3/21 04:19	PDK	A
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichlorobenzene-d4 (S)	109	C	%	70 - 130	EPA 524.2			5/3/21 04:19	PDK	A
4-Bromofluorobenzene (S)	106	C	%	70 - 130	EPA 524.2			5/3/21 04:19	PDK	A



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ANALYTICAL RESULTS

Workorder: 3172593 R2103987

Lab ID: **3172593003**
Sample ID: **WAL19Pre-0421**

Date Collected: 4/27/2021 09:00 Matrix: NY Potable Water
Date Received: 4/29/2021 09:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Benzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Bromobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Bromochloromethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Bromomethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
n-Butylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
tert-Butylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
sec-Butylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Carbon Tetrachloride	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Chlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Chloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Chloromethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
o-Chlorotoluene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
p-Chlorotoluene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Dibromomethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,2-Dichlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,3-Dichlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,4-Dichlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Dichlorodifluoromethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,1-Dichloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,2-Dichloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,1-Dichloroethene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
cis-1,2-Dichloroethene	2.5	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
trans-1,2-Dichloroethene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,3-Dichloropropane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
2,2-Dichloropropane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,2-Dichloropropane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,1-Dichloropropene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
cis-1,3-Dichloropropene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
trans-1,3-Dichloropropene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Ethylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Hexachlorobutadiene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Isopropylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
p-Isopropyltoluene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Methyl t-Butyl Ether	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Methylene Chloride	0.56	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
n-Propylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Styrene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A

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ANALYTICAL RESULTS

Workorder: 3172593 R2103987

Lab ID: **3172593003**
Sample ID: **WAL19Pre-0421**

Date Collected: 4/27/2021 09:00 Matrix: NY Potable Water
Date Received: 4/29/2021 09:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
1,1,1,2-Tetrachloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,1,2,2-Tetrachloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Tetrachloroethene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Toluene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,2,3-Trichlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,2,4-Trichlorobenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,1,1-Trichloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,1,2-Trichloroethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Trichloroethene	3.0	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Trichlorofluoromethane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,2,3-Trichloropropane	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,2,4-Trimethylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
1,3,5-Trimethylbenzene	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
Vinyl Chloride	ND	C	ug/L	0.50	EPA 524.2			5/3/21 04:46	PDK	A
o-Xylene	ND	C	ug/L	0.25	EPA 524.2			5/3/21 04:46	PDK	A
mp-Xylene	ND	C	ug/L	0.25	EPA 524.2			5/3/21 04:46	PDK	A
<i>Surrogate Recoveries</i>	<i>Results</i>	<i>Flag</i>	<i>Units</i>	<i>Limits</i>	<i>Method</i>	<i>Prepared</i>	<i>By</i>	<i>Analyzed</i>	<i>By</i>	<i>Cntr</i>
1,2-Dichlorobenzene-d4 (S)	112	C	%	70 - 130	EPA 524.2			5/3/21 04:46	PDK	A
4-Bromofluorobenzene (S)	106	C	%	70 - 130	EPA 524.2			5/3/21 04:46	PDK	A



Ms. Sarah S Leung
Project Coordinator

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ANALYTICAL RESULTS

Workorder: 3172593 R2103987

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3172593002	1	WAL19Inter-0421	EPA 524.2	Dichlorodifluoromethane
The QC sample type MS for method EPA 524.2 was outside the control limits for the analyte Dichlorodifluoromethane. The % Recovery was reported as 140 and the control limits were 70 to 130.				
3172593002	2	WAL19Inter-0421	EPA 524.2	Dichlorodifluoromethane
The QC sample type MSD for method EPA 524.2 was outside the control limits for the analyte Dichlorodifluoromethane. The % Recovery was reported as 131 and the control limits were 70 to 130.				
3172593002	3	WAL19Inter-0421	EPA 524.2	Vinyl Chloride
The QC sample type MS for method EPA 524.2 was outside the control limits for the analyte Vinyl Chloride. The % Recovery was reported as 142 and the control limits were 70 to 130.				
3172593002	4	WAL19Inter-0421	EPA 524.2	Vinyl Chloride
The QC sample type MSD for method EPA 524.2 was outside the control limits for the analyte Vinyl Chloride. The % Recovery was reported as 132 and the control limits were 70 to 130.				
3172593002	5	WAL19Inter-0421	EPA 524.2	1,1-Dichloroethene
The QC sample type MS for method EPA 524.2 was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 147 and the control limits were 70 to 130.				
3172593002	6	WAL19Inter-0421	EPA 524.2	1,1-Dichloroethene
The QC sample type MSD for method EPA 524.2 was outside the control limits for the analyte 1,1-Dichloroethene. The % Recovery was reported as 140 and the control limits were 70 to 130.				

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3172593 R2103987

Lab ID	Sample ID	Analysis Method	Prep Method	Leachate Method
3172593001	WAL19Post-0421	EPA 524.2		
3172593002	WAL19Inter-0421	EPA 524.2		
3172593003	WAL19Pre-0421	EPA 524.2		

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QUALITY CONTROL DATA

Workorder: 3172593 R2103987

QC Batch: VOMS/59337 **Analysis Method:** EPA 524.2

QC Batch Method: EPA 524.2

Associated Lab Samples: 3172593001, 3172593002, 3172593003

METHOD BLANK: 3320138

Parameter	Blank Result	Units	Reporting Limit
Benzene	ND	ug/L	0.50
Bromobenzene	ND	ug/L	0.50
Bromochloromethane	ND	ug/L	0.50
Bromomethane	ND	ug/L	0.50
n-Butylbenzene	ND	ug/L	0.50
tert-Butylbenzene	ND	ug/L	0.50
sec-Butylbenzene	ND	ug/L	0.50
Carbon Tetrachloride	ND	ug/L	0.50
Chlorobenzene	ND	ug/L	0.50
Chloroethane	ND	ug/L	0.50
Chloromethane	ND	ug/L	0.50
o-Chlorotoluene	ND	ug/L	0.50
p-Chlorotoluene	ND	ug/L	0.50
Dibromomethane	ND	ug/L	0.50
1,2-Dichlorobenzene	ND	ug/L	0.50
1,3-Dichlorobenzene	ND	ug/L	0.50
1,4-Dichlorobenzene	ND	ug/L	0.50
Dichlorodifluoromethane	ND	ug/L	0.50
1,1-Dichloroethane	ND	ug/L	0.50
1,2-Dichloroethane	ND	ug/L	0.50
1,1-Dichloroethene	ND	ug/L	0.50
cis-1,2-Dichloroethene	ND	ug/L	0.50
trans-1,2-Dichloroethene	ND	ug/L	0.50
1,3-Dichloropropane	ND	ug/L	0.50
2,2-Dichloropropane	ND	ug/L	0.50
1,2-Dichloropropane	ND	ug/L	0.50
1,1-Dichloropropene	ND	ug/L	0.50
cis-1,3-Dichloropropene	ND	ug/L	0.50
trans-1,3-Dichloropropene	ND	ug/L	0.50
Ethylbenzene	ND	ug/L	0.50
Hexachlorobutadiene	ND	ug/L	0.50
Isopropylbenzene	ND	ug/L	0.50
p-Isopropyltoluene	ND	ug/L	0.50
Methyl t-Butyl Ether	ND	ug/L	0.50
Methylene Chloride	ND	ug/L	0.50
n-Propylbenzene	ND	ug/L	0.50
Styrene	ND	ug/L	0.50
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50

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QUALITY CONTROL DATA

Workorder: 3172593 R2103987

1,1,2,2-Tetrachloroethane	ND	ug/L	0.50
Tetrachloroethene	ND	ug/L	0.50
Toluene	ND	ug/L	0.50
1,2,3-Trichlorobenzene	ND	ug/L	0.50
1,2,4-Trichlorobenzene	ND	ug/L	0.50
1,1,1-Trichloroethane	ND	ug/L	0.50
1,1,2-Trichloroethane	ND	ug/L	0.50
Trichloroethene	ND	ug/L	0.50
Trichlorofluoromethane	ND	ug/L	0.50
1,2,3-Trichloropropane	ND	ug/L	0.50
1,2,4-Trimethylbenzene	ND	ug/L	0.50
1,3,5-Trimethylbenzene	ND	ug/L	0.50
Vinyl Chloride	ND	ug/L	0.50
o-Xylene	ND	ug/L	0.25
mp-Xylene	ND	ug/L	0.25
1,2-Dichlorobenzene-d4 (S)	109	%	70 - 130
4-Bromofluorobenzene (S)	106	%	70 - 130

LABORATORY CONTROL SAMPLE: 3320139

Parameter	LCS % Rec	Units	Spike Conc.	LCS Result	% Rec Limit
Vinyl Chloride	119	ug/L	2	2.4	70 - 130
1,2-Dichlorobenzene-d4 (S)	109	%			70 - 130
4-Bromofluorobenzene (S)	103	%			70 - 130

LABORATORY CONTROL SAMPLE: 3320140

Parameter	LCS % Rec	Units	Spike Conc.	LCS Result	% Rec Limit
Benzene	110	ug/L	5	5.5	70 - 130
Bromobenzene	99.5	ug/L	5	5.0	70 - 130
Bromochloromethane	100	ug/L	5	5.0	70 - 130
Bromomethane	95.7	ug/L	5	4.8	70 - 130
n-Butylbenzene	94	ug/L	5	4.7	70 - 130
tert-Butylbenzene	93	ug/L	5	4.7	70 - 130
sec-Butylbenzene	97.7	ug/L	5	4.9	70 - 130
Carbon Tetrachloride	94.3	ug/L	5	4.7	70 - 130
Chlorobenzene	97.7	ug/L	5	4.9	70 - 130
Chloroethane	103	ug/L	5	5.2	70 - 130
Chloromethane	107	ug/L	5	5.3	70 - 130
o-Chlorotoluene	98.9	ug/L	5	4.9	70 - 130
p-Chlorotoluene	102	ug/L	5	5.1	70 - 130
Dibromomethane	110	ug/L	5	5.5	70 - 130

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QUALITY CONTROL DATA

Workorder: 3172593 R2103987

1,2-Dichlorobenzene	102	ug/L	5	5.1	70 - 130
1,3-Dichlorobenzene	96.6	ug/L	5	4.8	70 - 130
1,4-Dichlorobenzene	99.5	ug/L	5	5.0	70 - 130
Dichlorodifluoromethane	113	ug/L	5	5.7	70 - 130
1,1-Dichloroethane	107	ug/L	5	5.4	70 - 130
1,2-Dichloroethane	114	ug/L	5	5.7	70 - 130
1,1-Dichloroethene	118	ug/L	5	5.9	70 - 130
cis-1,2-Dichloroethene	113	ug/L	5	5.7	70 - 130
trans-1,2-Dichloroethene	107	ug/L	5	5.4	70 - 130
1,3-Dichloropropane	106	ug/L	5	5.3	70 - 130
2,2-Dichloropropane	96.3	ug/L	5	4.8	70 - 130
1,2-Dichloropropane	109	ug/L	5	5.5	70 - 130
1,1-Dichloropropene	105	ug/L	5	5.2	70 - 130
cis-1,3-Dichloropropene	107	ug/L	5	5.3	70 - 130
trans-1,3-Dichloropropene	113	ug/L	5	5.6	70 - 130
Ethylbenzene	99.8	ug/L	5	5.0	70 - 130
Hexachlorobutadiene	94.5	ug/L	5	4.7	70 - 130
Isopropylbenzene	98.5	ug/L	5	4.9	70 - 130
p-Isopropyltoluene	94.2	ug/L	5	4.7	70 - 130
Methyl t-Butyl Ether	107	ug/L	5	5.4	70 - 130
Methylene Chloride	105	ug/L	5	5.2	70 - 130
n-Propylbenzene	99.1	ug/L	5	5.0	70 - 130
Styrene	102	ug/L	5	5.1	70 - 130
1,1,1,2-Tetrachloroethane	93.1	ug/L	5	4.7	70 - 130
1,1,2,2-Tetrachloroethane	116	ug/L	5	5.8	70 - 130
Tetrachloroethene	99.3	ug/L	5	5.0	70 - 130
Toluene	105	ug/L	5	5.2	70 - 130
1,2,3-Trichlorobenzene	93.3	ug/L	5	4.7	70 - 130
1,2,4-Trichlorobenzene	90.6	ug/L	5	4.5	70 - 130
1,1,1-Trichloroethane	99.5	ug/L	5	5.0	70 - 130
1,1,2-Trichloroethane	106	ug/L	5	5.3	70 - 130
Trichloroethene	103	ug/L	5	5.1	70 - 130
Trichlorofluoromethane	103	ug/L	5	5.1	70 - 130
1,2,3-Trichloropropane	106	ug/L	5	5.3	70 - 130
1,2,4-Trimethylbenzene	97.1	ug/L	5	4.9	70 - 130
1,3,5-Trimethylbenzene	99.8	ug/L	5	5.0	70 - 130
Vinyl Chloride	112	ug/L	5	5.6	70 - 130
o-Xylene	102	ug/L	5	5.1	70 - 130
mp-Xylene	99.7	ug/L	10	10	70 - 130
1,2-Dichlorobenzene-d4 (S)	108	%			70 - 130
4-Bromofluorobenzene (S)	103	%			70 - 130

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QUALITY CONTROL DATA

Workorder: 3172593 R2103987

MATRIX SPIKE: 3320194 DUPLICATE: 3320195 ORIGINAL: 3172593002

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Parameter	Original Result	Units	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
Benzene	0	ug/L	5	5.93152	5.91644	119	118	70 - 130	.25	40
Bromobenzene	0	ug/L	5	4.92971	4.84292	98.6	96.9	70 - 130	1.78	40
Bromochloromethane	0	ug/L	5	5.22662	5.11711	105	102	70 - 130	2.12	40
Bromomethane	0	ug/L	5	5.91187	5.86256	118	117	70 - 130	.84	40
n-Butylbenzene	0	ug/L	5	5.0351	5.22862	101	105	70 - 130	3.77	40
tert-Butylbenzene	0	ug/L	5	4.96819	5.17581	99.4	104	70 - 130	4.09	40
sec-Butylbenzene	0	ug/L	5	5.62904	5.82923	113	117	70 - 130	3.49	40
Carbon Tetrachloride	0	ug/L	5	5.49699	5.35638	110	107	70 - 130	2.59	40
Chlorobenzene	0	ug/L	5	5.12432	5.03765	102	101	70 - 130	1.71	40
Chloroethane	0	ug/L	5	6.46281	5.90155	129	118	70 - 130	9.08	40
Chloromethane	0	ug/L	5	6.3275	5.97943	127	120	70 - 130	5.66	40
o-Chlorotoluene	0	ug/L	5	5.32267	5.26814	106	105	70 - 130	1.03	40
p-Chlorotoluene	0	ug/L	5	5.33026	5.1852	107	104	70 - 130	2.76	40
Dibromomethane	0	ug/L	5	5.77016	5.76659	115	115	70 - 130	.06	40
1,2-Dichlorobenzene	0	ug/L	5	5.23782	5.09591	105	102	70 - 130	2.75	40
1,3-Dichlorobenzene	0	ug/L	5	5.06911	4.9198	101	98.4	70 - 130	2.99	40
1,4-Dichlorobenzene	0	ug/L	5	5.18011	5.00502	104	100	70 - 130	3.44	40
Dichlorodifluoromethane	0	ug/L	5	7.01444	6.5552	140*	131*	70 - 130	6.77	40
1,1-Dichloroethane	0	ug/L	5	6.08163	6.12046	122	122	70 - 130	.64	40
1,2-Dichloroethane	0	ug/L	5	5.74975	5.62834	115	113	70 - 130	2.13	40
1,1-Dichloroethene	0	ug/L	5	7.33653	6.99444	147*	140*	70 - 130	4.77	40
cis-1,2-Dichloroethene	0	ug/L	5	6.05015	6.07439	121	121	70 - 130	.4	40
trans-1,2-Dichloroethene	0	ug/L	5	6.51981	5.8334	130	117	70 - 130	11.1	40
1,3-Dichloropropane	0	ug/L	5	5.45309	5.31356	109	106	70 - 130	2.59	40
2,2-Dichloropropane	0	ug/L	5	5.62494	5.41389	112	108	70 - 130	3.82	40
1,2-Dichloropropane	0	ug/L	5	5.85429	5.82764	117	117	70 - 130	.46	40
1,1-Dichloropropene	0	ug/L	5	6.26592	6.08245	125	122	70 - 130	2.97	40
cis-1,3-Dichloropropene	0	ug/L	5	5.48198	5.28435	110	106	70 - 130	3.67	40
trans-1,3-Dichloropropene	0	ug/L	5	5.83103	5.64882	117	113	70 - 130	3.17	40
Ethylbenzene	0	ug/L	5	5.34718	5.32454	107	106	70 - 130	.42	40
Hexachlorobutadiene	0	ug/L	5	4.57598	4.41922	91.5	88.4	70 - 130	3.49	40
Isopropylbenzene	0	ug/L	5	5.59301	5.62069	112	112	70 - 130	.49	40
p-Isopropyltoluene	0	ug/L	5	5.2038	5.43539	104	109	70 - 130	4.35	40
Methyl t-Butyl Ether	0	ug/L	5	5.44761	5.48507	109	110	70 - 130	.69	40
Methylene Chloride	.94595	ug/L	5	6.4854	6.38528	111	109	70 - 130	1.56	40
n-Propylbenzene	0	ug/L	5	5.58644	5.70576	112	114	70 - 130	2.11	40
Styrene	0	ug/L	5	5.38333	5.33306	108	107	70 - 130	.94	40
1,1,1,2-Tetrachloroethane	0	ug/L	5	4.70869	4.63914	94.2	92.8	70 - 130	1.49	40
1,1,2,2-Tetrachloroethane	0	ug/L	5	5.9165	5.94042	118	119	70 - 130	.4	40
Tetrachloroethene	0	ug/L	5	5.09658	4.91505	102	98.3	70 - 130	3.63	40
Toluene	0	ug/L	5	5.67348	5.6988	113	114	70 - 130	.45	40

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QUALITY CONTROL DATA

Workorder: 3172593 R2103987

1,2,3-Trichlorobenzene	0	ug/L	5	4.40409	4.84103	88.1	96.8	70 - 130	9.45	40
1,2,4-Trichlorobenzene	0	ug/L	5	4.2967	4.46748	85.9	89.3	70 - 130	3.9	40
1,1,1-Trichloroethane	0	ug/L	5	5.97901	5.52031	120	110	70 - 130	7.98	40
1,1,2-Trichloroethane	0	ug/L	5	5.41348	5.36388	108	107	70 - 130	.92	40
Trichloroethene	0	ug/L	5	5.3029	5.06027	106	101	70 - 130	4.68	40
Trichlorofluoromethane	0	ug/L	5	6.39632	6.2029	128	124	70 - 130	3.07	40
1,2,3-Trichloropropane	0	ug/L	5	5.17939	5.48898	104	110	70 - 130	5.8	40
1,2,4-Trimethylbenzene	0	ug/L	5	5.40206	5.52055	108	110	70 - 130	2.17	40
1,3,5-Trimethylbenzene	0	ug/L	5	5.56351	5.58714	111	112	70 - 130	.42	40
Vinyl Chloride	0	ug/L	5	7.07727	6.59906	142*	132*	70 - 130	6.99	40
o-Xylene	0	ug/L	5	5.57212	5.51087	111	110	70 - 130	1.11	40
mp-Xylene	0	ug/L	10	11.1589	10.987	112	110	70 - 130	1.55	40
1,2-Dichlorobenzene-d4 (S)	115	%				115	116	70 - 130		
4-Bromofluorobenzene (S)	108	%				108	109	70 - 130		

ALS Environmental Laboratory Locations Across North America

Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver Waterloo · Winnipeg · Yellowknife **United States:** Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York **Mexico:** Monterrey

**QUALITY CONTROL DATA CROSS REFERENCE TABLE**Workorder: 3172593 R2103987

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
3172593001	WAL19Post-0421			EPA 524.2	VOMS/59337
3172593002	WAL19Inter-0421			EPA 524.2	VOMS/59337
3172593003	WAL19Pre-0421			EPA 524.2	VOMS/59337

ALS Environmental Laboratory Locations Across North America

Canada: Burlington · Calgary · Centre of Excellence · Edmonton · Fort McMurray · Fort St. John · Grande Prairie · London · Mississauga · Richmond Hill · Saskatoon · Thunder Bay
Vancouver Waterloo · Winnipeg · Yellowknife **United States:** Cincinnati · Everett · Fort Collins · Holland · Houston · Middletown · Salt Lake City · Spring City · York **Mexico:** Monterrey

ALS Environmental Chain of Custody

1565 Jefferson Rd, Building 300 • Rochester, NY 14623 • 585-288-5380 • FAX 585-288-8475

ALS Contact: Janice Jaeger



Project Number: R2103987
Project Manager: Janice Jaeger
QAP: LAB QAP

Lab Code	Sample ID	# of Cont.	Matrix	Sample			Lab ID
				Date	Time		
R2103987-001	WAL19Post-0421	3	Drinking Water	4/27/21	0840	Middletown ALS	X
R2103987-002	WAL19Inter-0421	3	Drinking Water	4/27/21	0850	Middletown ALS	X
R2103987-003	WAL19Pre-0421	3	Drinking Water	4/27/21	0900	Middletown ALS	X

VOC
5242

Folder Comments:
MRL U

6
577

Special Instructions/Comments <i>excel add nysdec.equis v4 eed1</i> NPDES H - Test is On Hold P - Test is Authorized for Prep Only	Turnaround Requirements <u>RUSH</u> (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 <u>STANDARD</u> Requested FAX Date: _____ Requested Report Date: <u>05/07/21</u>	Report Requirements <u>1.</u> Results Only <u>X</u> <u>II.</u> Results + QC Summaries <u>III.</u> Results + QC and Calibration Summaries <u>IV.</u> Data Validation Report with Raw Data PQL/MDL/J <u>N</u> EDD <u>Y</u>	Invoice Information PO# 58R2103987 Bill to

Relinquished By: *Shirah* 4/28/21 1425 Received By: *Pat* 5 42941 920 Airbill Number: _____

R2103987

X Ship To: Middletown ALS
ALS Environmental - Middletown
301 Fulling Mill Rd.
Middletown, PA 17057

PC AMS Date 4/28/21
SMO _____ Date _____

Instructions:	Shipping:
Ice _____	Overnight _____
Dry Ice _____	2nd Day _____
No Ice _____	Ground _____
Bill to Client Account _____	

Comments:

ALS Group USA, Corp.
www.alsglobal.com
An ALS Limited Company

ALS



301 Fulling Mill Road
Middletown, PA 17057

P: (717) 944-5541

F: (717) 944-1430

Condition of Sample Receipt Form

3172593

Client: _____ Work Order: **ALS Environmental - Rochester** Initials: TS Date: 4/29/21

1. Were airbills / tracking numbers present and recorded?..... NONE ☒ YES ☐ NO
Tracking number: 9889 5093 1554
2. Are Custody Seals on shipping containers intact?..... NONE ☒ YES ☐ NO
3. Are Custody Seals on sample containers intact?..... ☒ NONE ☐ YES ☐ NO
4. Is there a COC (Chain-of-Custody) present?..... ☒ YES ☐ NO
5. Are the COC and bottle labels complete, legible and in agreement?..... YES ☒ NO ☐
 - 5a. Does the COC contain sample locations?..... ☒ YES ☐ NO
 - 5b. Does the COC contain date and time of sample collection for all samples?..... ☒ YES ☐ NO
 - 5c. Does the COC contain sample collectors name?..... C. Liect YES ☒ NO ☐
 - 5d. Does the COC note the type(s) of preservation for all bottles?..... -1 YES ☒ NO ☐
 - 5e. Does the COC note the number of bottles submitted for each sample?..... 1 YES ☒ NO ☐
 - 5f. Does the COC note the type of sample, composite or grab?..... -1 YES ☒ NO ☐
 - 5g. Does the COC note the matrix of the sample(s)?..... ☒ YES ☐ NO
6. Are all aqueous samples requiring preservation preserved correctly?..... N/A ☒ YES ☐ NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?..... ☒ YES ☐ NO
8. Are all samples within holding times for the requested analyses?..... ☒ YES ☐ NO
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)..... ☒ YES ☐ NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631 E (LL Hg)?..... N/A YES ☒ NO ☐
11. Were the samples received on ice?..... ☒ YES ☐ NO
12. Were sample temperatures measured at 0.0-6.0°C..... ☒ YES ☐ NO
13. Are the samples DW matrix? If YES, fill out Reportable Drinking Water questions below..... ☒ YES ☐ NO
 - 13a. Are the samples required for SDWA compliance reporting?..... N/A YES ☒ NO ☐
 - 13b. Did the client provide a SDWA PWS ID#?..... N/A YES ☐ NO ☐
 - 13c. Are all aqueous unpreserved SDWA samples pH 5-9?..... N/A YES ☐ NO ☐
 - 13d. Did the client provide the SDWA sample location ID/Description?..... N/A YES ☐ NO ☐
 - 13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?..... N/A YES ☐ NO ☐

Cooler #: _____

Temperature (°C): 6 _____

Thermometer ID: 573 _____

Radiological (µCi): _____

COMMENTS (Required for all NO responses above and any sample non-conformance):

¹Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease is made in the analytical department at the time of or following the analysis

Rev 1/20/2020



May 07, 2021

Service Request No:R2103777

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 21, 2021
For your reference, these analyses have been assigned our service request number **R2103777**.

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

Janice Jaeger
Project Manager

ADDRESS

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

PHONE +1 585 288 5380 | **FAX** +1 585 288 8475

ALS Group USA, Corp.
dba ALS Environmental



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: R2103777
Date Received: 04/21/2021

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:

Seven water samples were received for analysis at ALS Environmental on 04/21/2021. 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.

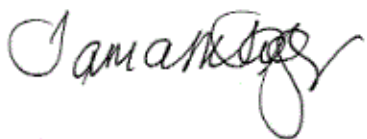
General Chemistry:

No significant anomalies were noted with this analysis.

Volatiles by GC/MS:

Method 8260C, 04/26/2021: 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, 04/27/2021: 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.



Approved by _____

Date 05/07/2021

SAMPLE DETECTION SUMMARY

CLIENT ID: MW11S-0421	Lab ID: R2103777-002

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	290			100	ug/L	8260C
Trichloroethene	2600			100	ug/L	8260C

CLIENT ID: MW4D-0421	Lab ID: R2103777-003

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	220	D		10	ug/L	8260C
Vinyl Chloride	98			5.0	ug/L	8260C

CLIENT ID: MW5D-0421	Lab ID: R2103777-004

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	150			5.0	ug/L	8260C
Trichloroethene	31			5.0	ug/L	8260C
Vinyl Chloride	9.7			5.0	ug/L	8260C

CLIENT ID: DUP1-0421	Lab ID: R2103777-005

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	150			5.0	ug/L	8260C
Trichloroethene	33			5.0	ug/L	8260C
Vinyl Chloride	11			5.0	ug/L	8260C

CLIENT ID: MW5S-0421	Lab ID: R2103777-006

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	140			10	ug/L	8260C
Trichloroethene	29			10	ug/L	8260C
Vinyl Chloride	10			10	ug/L	8260C

CLIENT ID: SWS1-0421	Lab ID: R2103777-007

Analyte	Results	Flag	MDL	MRL	Units	Method
Alkalinity, Total as CaCO ₃	103			2.0	mg/L	SM 2320 B-1997 (2011)
Carbon, Total Organic (TOC)	7.9			1.0	mg/L	SM 5310 C-2000 (2011)
Chemical Oxygen Demand, Total	20.6			5.0	mg/L	410.4
Chloride	32.4			2.0	mg/L	300.0
Color, True	48.0			1.0	ColorUnits	SM 2120 B-2001 (2011)
Nitrogen, Total Kjeldahl (TKN)	0.45			0.20	mg/L	351.2
pH of Color Analysis	8.05				pH Units	SM 2120 B-2001 (2011)
Solids, Total Dissolved (TDS)	169			10	mg/L	SM 2540 C-1997 (2011)
Calcium, Total	28400			1000	ug/L	6010C
Iron, Total	220			100	ug/L	6010C
Magnesium, Total	9200			1000	ug/L	6010C
Manganese, Total	17			10	ug/L	6010C
Sodium, Total	16400			1000	ug/L	6010C

SAMPLE DETECTION SUMMARY**CLIENT ID: SWS1-0421****Lab ID: R2103777-007**



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

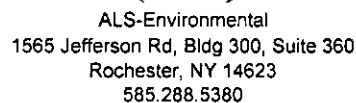
www.alsglobal.com

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

Service Request:R2103777

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2103777-001	MW16S-0421	4/20/2021	1200
R2103777-002	MW11S-0421	4/20/2021	1350
R2103777-003	MW4D-0421	4/20/2021	0940
R2103777-004	MW5D-0421	4/20/2021	1130
R2103777-005	DUP1-0421	4/20/2021	1135
R2103777-006	MW5S-0421	4/20/2021	1315
R2103777-007	SWS1-0421	4/20/2021	1400



Client:	On-Site
	72 Railroad Ave.
	Wellsville, NY 14895

Project Manager	Jon Brandes

Project:	WAL - Annual Sampling

Telephone No.	585-593-1824

Email: jonb@on-sitehs.com

Page 1 of 1

Method of Shipment	

On-Site
KID

Special Detection	
Limit/Reporting	

[illegible] $-m_s/m_{SD}$

REMARKS
TOC & phenol
added to
wast as
per Lon
Brades
ms 5/3/71

Sample Received Intact:	Yes	No

Temperature received:

Ice

No ice

Relinq. by sampler (Sign & Print Name),

Date	Time

Received by (Sign & Print Name)

Relinquished by

Date	Time

Received by

Relinquished by

Date	Time

Received by

Relinquished by

Date	Time

Received by laboratory	

Date	/	/	Time

Lab Work No. _____

R2103777

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

WAL - Annual Sampling


2

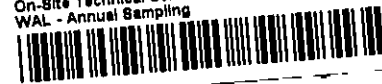


Cooler Receipt and Preservation Check Form

R2103777

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

5

Project/Client On-Site - WAL Folder Number _____Cooler received on 4/21/21 by: Q COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	Y <u>(N)</u>
2	Custody papers properly completed (ink, signed)?	Y <u>(N)</u>
3	Did all bottles arrive in good condition (unbroken)?	Y <u>(N)</u>
4	Circle: <u>(Wet Ice)</u> Dry Ice Gel packs present?	Y <u>(N)</u>
5a	Perchlorate samples have required headspace?	Y N <u>(NA)</u>
5b	Did <u>(VOA vials)</u> Alk or Sulfide have sig* bubbles?	Y <u>(N)</u> NA
6	Where did the bottles originate?	<u>(ALS/ROC)</u> CLIENT
7	Soil VOA received as:	Bulk Encore 5035set <u>(NA)</u>

8. Temperature Readings Date: 4/21/21 Time: 1155 ID: IR#7 (IR#11) From: (Temp Blank) Sample Bottle

Observed Temp (°C)	<u>2.3</u>						
Within 0-6°C?	<u>(Y)</u> N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y 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: 202 by Q on 4/21/21 at 1156
 5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 4/21/21 Time: 1355 by: Q

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
 13. 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
≥12		NaOH								
≤2	<u>2234.9</u>	HNO ₃	✓		<u>1120082</u>					
≤2		H ₂ SO ₄	✓		<u>16121-25, 211297</u>		<u>1/02</u>			
<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: 2103-15, 2583, 90121-06, 80221-03, 110920-2AAO

Explain all Discrepancies/ Other Comments:

*Rec'd TCC, phenol not in CEC
 for "SW51-0421"*

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: Q
 PC Secondary Review: MS 5/3/21

*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 (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 Certifications¹

Connecticut ID # PH0556	Maine ID #NY0032	Pennsylvania ID# 68-786
Delaware Approved	New Hampshire ID # 2941	Rhode Island ID # 158
DoD ELAP #65817	New York ID # 10145	Virginia #460167
Florida ID # E87674	North Carolina #676	

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: R2103777

Sample Name: MW16S-0421
Lab Code: R2103777-001
Sample Matrix: Water

Date Collected: 04/19/21
Date Received: 04/21/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
NMANSEN

Sample Name: MW11S-0421
Lab Code: R2103777-002
Sample Matrix: Water

Date Collected: 04/19/21
Date Received: 04/21/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
NMANSEN

Sample Name: MW4D-0421
Lab Code: R2103777-003
Sample Matrix: Water

Date Collected: 04/20/21
Date Received: 04/21/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
NMANSEN

Sample Name: MW4D-0421
Lab Code: R2103777-003.R01
Sample Matrix: Water

Date Collected: 04/20/21
Date Received: 04/21/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
NMANSEN

Sample Name: MW5D-0421
Lab Code: R2103777-004
Sample Matrix: Water

Date Collected: 04/20/21
Date Received: 04/21/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
NMANSEN

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

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

Service Request: R2103777

Sample Name: DUP1-0421
Lab Code: R2103777-005
Sample Matrix: Water

Date Collected: 04/20/21
Date Received: 04/21/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
NMANSEN

Sample Name: MW5S-0421
Lab Code: R2103777-006
Sample Matrix: Water

Date Collected: 04/20/21
Date Received: 04/21/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
NMANSEN

Sample Name: SWS1-0421
Lab Code: R2103777-007
Sample Matrix: Water

Date Collected: 04/20/21
Date Received: 04/21/21

Analysis Method

Extracted/Digested By

Analyzed By
KWONG
MROGERSON
GNITAJOUPPI
GNITAJOUPPI
GNITAJOUPPI
BBOWE
KMCLAEN
NMANSEN
MROGERSON
KAWONG
BBOWE
NSMITH
SMEDBURY

300.0
350.1
351.2
410.4
420.4
6010C
8260C
SM 2120 B-2001(2011)
SM 2320 B-1997(2011)
SM 2540 C-1997(2011)
SM 5210 B-2001(2011)
SM 5310 C-2000(2011)

GNITAJOUPPI

AKONZEL



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.	



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

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 12:00
Date Received: 04/21/21 11:55

Sample Name: MW16S-0421
Lab Code: R2103777-001

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	10 U	10	1	04/26/21 18:47	
Benzene	5.0 U	5.0	1	04/26/21 18:47	
Bromodichloromethane	5.0 U	5.0	1	04/26/21 18:47	
Bromoform	5.0 U	5.0	1	04/26/21 18:47	
Bromomethane	5.0 U	5.0	1	04/26/21 18:47	
2-Butanone (MEK)	10 U	10	1	04/26/21 18:47	
Carbon Disulfide	10 U	10	1	04/26/21 18:47	
Carbon Tetrachloride	5.0 U	5.0	1	04/26/21 18:47	
Chlorobenzene	5.0 U	5.0	1	04/26/21 18:47	
Chloroethane	5.0 U	5.0	1	04/26/21 18:47	
Chloroform	5.0 U	5.0	1	04/26/21 18:47	
Chloromethane	5.0 U	5.0	1	04/26/21 18:47	
Dibromochloromethane	5.0 U	5.0	1	04/26/21 18:47	
1,2-Dibromoethane	5.0 U	5.0	1	04/26/21 18:47	
1,1-Dichloroethane	5.0 U	5.0	1	04/26/21 18:47	
1,2-Dichloroethane	5.0 U	5.0	1	04/26/21 18:47	
1,1-Dichloroethene	5.0 U	5.0	1	04/26/21 18:47	
cis-1,2-Dichloroethene	5.0 U	5.0	1	04/26/21 18:47	
trans-1,2-Dichloroethene	5.0 U	5.0	1	04/26/21 18:47	
1,2-Dichloropropane	5.0 U	5.0	1	04/26/21 18:47	
cis-1,3-Dichloropropene	5.0 U	5.0	1	04/26/21 18:47	
trans-1,3-Dichloropropene	5.0 U	5.0	1	04/26/21 18:47	
Ethylbenzene	5.0 U	5.0	1	04/26/21 18:47	
2-Hexanone	10 U	10	1	04/26/21 18:47	
Methylene Chloride	5.0 U	5.0	1	04/26/21 18:47	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	04/26/21 18:47	
Styrene	5.0 U	5.0	1	04/26/21 18:47	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	04/26/21 18:47	
Tetrachloroethene	5.0 U	5.0	1	04/26/21 18:47	
Toluene	5.0 U	5.0	1	04/26/21 18:47	
1,1,1-Trichloroethane	5.0 U	5.0	1	04/26/21 18:47	
1,1,2-Trichloroethane	5.0 U	5.0	1	04/26/21 18:47	
Trichloroethene	5.0 U	5.0	1	04/26/21 18:47	
Vinyl Chloride	5.0 U	5.0	1	04/26/21 18:47	
o-Xylene	5.0 U	5.0	1	04/26/21 18:47	
m,p-Xylenes	5.0 U	5.0	1	04/26/21 18:47	

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Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 12:00
Date Received: 04/21/21 11:55

Sample Name: MW16S-0421
Lab Code: R2103777-001

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	04/26/21 18:47	
Toluene-d8	100	87 - 121	04/26/21 18:47	
Dibromofluoromethane	97	80 - 116	04/26/21 18:47	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 13:50
Date Received: 04/21/21 11:55

Sample Name: MW11S-0421
Lab Code: R2103777-002

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	200 U	200	20	04/26/21 19:30	
Benzene	100 U	100	20	04/26/21 19:30	
Bromodichloromethane	100 U	100	20	04/26/21 19:30	
Bromoform	100 U	100	20	04/26/21 19:30	
Bromomethane	100 U	100	20	04/26/21 19:30	
2-Butanone (MEK)	200 U	200	20	04/26/21 19:30	
Carbon Disulfide	200 U	200	20	04/26/21 19:30	
Carbon Tetrachloride	100 U	100	20	04/26/21 19:30	
Chlorobenzene	100 U	100	20	04/26/21 19:30	
Chloroethane	100 U	100	20	04/26/21 19:30	
Chloroform	100 U	100	20	04/26/21 19:30	
Chloromethane	100 U	100	20	04/26/21 19:30	
Dibromochloromethane	100 U	100	20	04/26/21 19:30	
1,2-Dibromoethane	100 U	100	20	04/26/21 19:30	
1,1-Dichloroethane	100 U	100	20	04/26/21 19:30	
1,2-Dichloroethane	100 U	100	20	04/26/21 19:30	
1,1-Dichloroethene	100 U	100	20	04/26/21 19:30	
cis-1,2-Dichloroethene	290	100	20	04/26/21 19:30	
trans-1,2-Dichloroethene	100 U	100	20	04/26/21 19:30	
1,2-Dichloropropane	100 U	100	20	04/26/21 19:30	
cis-1,3-Dichloropropene	100 U	100	20	04/26/21 19:30	
trans-1,3-Dichloropropene	100 U	100	20	04/26/21 19:30	
Ethylbenzene	100 U	100	20	04/26/21 19:30	
2-Hexanone	200 U	200	20	04/26/21 19:30	
Methylene Chloride	100 U	100	20	04/26/21 19:30	
4-Methyl-2-pentanone (MIBK)	200 U	200	20	04/26/21 19:30	
Styrene	100 U	100	20	04/26/21 19:30	
1,1,2,2-Tetrachloroethane	100 U	100	20	04/26/21 19:30	
Tetrachloroethene	100 U	100	20	04/26/21 19:30	
Toluene	100 U	100	20	04/26/21 19:30	
1,1,1-Trichloroethane	100 U	100	20	04/26/21 19:30	
1,1,2-Trichloroethane	100 U	100	20	04/26/21 19:30	
Trichloroethene	2600	100	20	04/26/21 19:30	
Vinyl Chloride	100 U	100	20	04/26/21 19:30	
o-Xylene	100 U	100	20	04/26/21 19:30	
m,p-Xylenes	100 U	100	20	04/26/21 19:30	

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Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 13:50
Date Received: 04/21/21 11:55

Sample Name: MW11S-0421
Lab Code: R2103777-002

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	04/26/21 19:30	
Toluene-d8	101	87 - 121	04/26/21 19:30	
Dibromofluoromethane	96	80 - 116	04/26/21 19:30	

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Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 09:40
Date Received: 04/21/21 11:55

Sample Name: MW4D-0421
Lab Code: R2103777-003

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	10 U	10	1	04/26/21 19:08	
Benzene	5.0 U	5.0	1	04/26/21 19:08	
Bromodichloromethane	5.0 U	5.0	1	04/26/21 19:08	
Bromoform	5.0 U	5.0	1	04/26/21 19:08	
Bromomethane	5.0 U	5.0	1	04/26/21 19:08	
2-Butanone (MEK)	10 U	10	1	04/26/21 19:08	
Carbon Disulfide	10 U	10	1	04/26/21 19:08	
Carbon Tetrachloride	5.0 U	5.0	1	04/26/21 19:08	
Chlorobenzene	5.0 U	5.0	1	04/26/21 19:08	
Chloroethane	5.0 U	5.0	1	04/26/21 19:08	
Chloroform	5.0 U	5.0	1	04/26/21 19:08	
Chloromethane	5.0 U	5.0	1	04/26/21 19:08	
Dibromochloromethane	5.0 U	5.0	1	04/26/21 19:08	
1,2-Dibromoethane	5.0 U	5.0	1	04/26/21 19:08	
1,1-Dichloroethane	5.0 U	5.0	1	04/26/21 19:08	
1,2-Dichloroethane	5.0 U	5.0	1	04/26/21 19:08	
1,1-Dichloroethene	5.0 U	5.0	1	04/26/21 19:08	
cis-1,2-Dichloroethene	220 D	10	2	04/27/21 18:29	
trans-1,2-Dichloroethene	5.0 U	5.0	1	04/26/21 19:08	
1,2-Dichloropropane	5.0 U	5.0	1	04/26/21 19:08	
cis-1,3-Dichloropropene	5.0 U	5.0	1	04/26/21 19:08	
trans-1,3-Dichloropropene	5.0 U	5.0	1	04/26/21 19:08	
Ethylbenzene	5.0 U	5.0	1	04/26/21 19:08	
2-Hexanone	10 U	10	1	04/26/21 19:08	
Methylene Chloride	5.0 U	5.0	1	04/26/21 19:08	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	04/26/21 19:08	
Styrene	5.0 U	5.0	1	04/26/21 19:08	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	04/26/21 19:08	
Tetrachloroethene	5.0 U	5.0	1	04/26/21 19:08	
Toluene	5.0 U	5.0	1	04/26/21 19:08	
1,1,1-Trichloroethane	5.0 U	5.0	1	04/26/21 19:08	
1,1,2-Trichloroethane	5.0 U	5.0	1	04/26/21 19:08	
Trichloroethene	5.0 U	5.0	1	04/26/21 19:08	
Vinyl Chloride	98	5.0	1	04/26/21 19:08	
o-Xylene	5.0 U	5.0	1	04/26/21 19:08	
m,p-Xylenes	5.0 U	5.0	1	04/26/21 19:08	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 09:40
Date Received: 04/21/21 11:55

Sample Name: MW4D-0421
Lab Code: R2103777-003

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	04/26/21 19:08	
Toluene-d8	101	87 - 121	04/26/21 19:08	
Dibromofluoromethane	100	80 - 116	04/26/21 19:08	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 11:30
Date Received: 04/21/21 11:55

Sample Name: MW5D-0421
Lab Code: R2103777-004

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	10 U	10	1	04/27/21 17:25	
Benzene	5.0 U	5.0	1	04/27/21 17:25	
Bromodichloromethane	5.0 U	5.0	1	04/27/21 17:25	
Bromoform	5.0 U	5.0	1	04/27/21 17:25	
Bromomethane	5.0 U	5.0	1	04/27/21 17:25	
2-Butanone (MEK)	10 U	10	1	04/27/21 17:25	
Carbon Disulfide	10 U	10	1	04/27/21 17:25	
Carbon Tetrachloride	5.0 U	5.0	1	04/27/21 17:25	
Chlorobenzene	5.0 U	5.0	1	04/27/21 17:25	
Chloroethane	5.0 U	5.0	1	04/27/21 17:25	
Chloroform	5.0 U	5.0	1	04/27/21 17:25	
Chloromethane	5.0 U	5.0	1	04/27/21 17:25	
Dibromochloromethane	5.0 U	5.0	1	04/27/21 17:25	
1,2-Dibromoethane	5.0 U	5.0	1	04/27/21 17:25	
1,1-Dichloroethane	5.0 U	5.0	1	04/27/21 17:25	
1,2-Dichloroethane	5.0 U	5.0	1	04/27/21 17:25	
1,1-Dichloroethene	5.0 U	5.0	1	04/27/21 17:25	
cis-1,2-Dichloroethene	150	5.0	1	04/27/21 17:25	
trans-1,2-Dichloroethene	5.0 U	5.0	1	04/27/21 17:25	
1,2-Dichloropropane	5.0 U	5.0	1	04/27/21 17:25	
cis-1,3-Dichloropropene	5.0 U	5.0	1	04/27/21 17:25	
trans-1,3-Dichloropropene	5.0 U	5.0	1	04/27/21 17:25	
Ethylbenzene	5.0 U	5.0	1	04/27/21 17:25	
2-Hexanone	10 U	10	1	04/27/21 17:25	
Methylene Chloride	5.0 U	5.0	1	04/27/21 17:25	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	04/27/21 17:25	
Styrene	5.0 U	5.0	1	04/27/21 17:25	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	04/27/21 17:25	
Tetrachloroethene	5.0 U	5.0	1	04/27/21 17:25	
Toluene	5.0 U	5.0	1	04/27/21 17:25	
1,1,1-Trichloroethane	5.0 U	5.0	1	04/27/21 17:25	
1,1,2-Trichloroethane	5.0 U	5.0	1	04/27/21 17:25	
Trichloroethene	31	5.0	1	04/27/21 17:25	
Vinyl Chloride	9.7	5.0	1	04/27/21 17:25	
o-Xylene	5.0 U	5.0	1	04/27/21 17:25	
m,p-Xylenes	5.0 U	5.0	1	04/27/21 17:25	

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Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 11:30
Date Received: 04/21/21 11:55

Sample Name: MW5D-0421
Lab Code: R2103777-004

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	93	85 - 122	04/27/21 17:25	
Toluene-d8	101	87 - 121	04/27/21 17:25	
Dibromofluoromethane	100	80 - 116	04/27/21 17:25	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 11:35
Date Received: 04/21/21 11:55

Sample Name: DUP1-0421
Lab Code: R2103777-005

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	10 U	10	1	04/27/21 17:46	
Benzene	5.0 U	5.0	1	04/27/21 17:46	
Bromodichloromethane	5.0 U	5.0	1	04/27/21 17:46	
Bromoform	5.0 U	5.0	1	04/27/21 17:46	
Bromomethane	5.0 U	5.0	1	04/27/21 17:46	
2-Butanone (MEK)	10 U	10	1	04/27/21 17:46	
Carbon Disulfide	10 U	10	1	04/27/21 17:46	
Carbon Tetrachloride	5.0 U	5.0	1	04/27/21 17:46	
Chlorobenzene	5.0 U	5.0	1	04/27/21 17:46	
Chloroethane	5.0 U	5.0	1	04/27/21 17:46	
Chloroform	5.0 U	5.0	1	04/27/21 17:46	
Chloromethane	5.0 U	5.0	1	04/27/21 17:46	
Dibromochloromethane	5.0 U	5.0	1	04/27/21 17:46	
1,1-Dichloroethane	5.0 U	5.0	1	04/27/21 17:46	
1,2-Dibromoethane	5.0 U	5.0	1	04/27/21 17:46	
1,2-Dichloroethane	5.0 U	5.0	1	04/27/21 17:46	
1,1-Dichloroethene	5.0 U	5.0	1	04/27/21 17:46	
cis-1,2-Dichloroethene	150	5.0	1	04/27/21 17:46	
trans-1,2-Dichloroethene	5.0 U	5.0	1	04/27/21 17:46	
1,2-Dichloropropane	5.0 U	5.0	1	04/27/21 17:46	
cis-1,3-Dichloropropene	5.0 U	5.0	1	04/27/21 17:46	
trans-1,3-Dichloropropene	5.0 U	5.0	1	04/27/21 17:46	
Ethylbenzene	5.0 U	5.0	1	04/27/21 17:46	
2-Hexanone	10 U	10	1	04/27/21 17:46	
Methylene Chloride	5.0 U	5.0	1	04/27/21 17:46	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	04/27/21 17:46	
Styrene	5.0 U	5.0	1	04/27/21 17:46	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	04/27/21 17:46	
Tetrachloroethene	5.0 U	5.0	1	04/27/21 17:46	
Toluene	5.0 U	5.0	1	04/27/21 17:46	
1,1,1-Trichloroethane	5.0 U	5.0	1	04/27/21 17:46	
1,1,2-Trichloroethane	5.0 U	5.0	1	04/27/21 17:46	
Trichloroethene	33	5.0	1	04/27/21 17:46	
Vinyl Chloride	11	5.0	1	04/27/21 17:46	
o-Xylene	5.0 U	5.0	1	04/27/21 17:46	
m,p-Xylenes	5.0 U	5.0	1	04/27/21 17:46	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 11:35
Date Received: 04/21/21 11:55

Sample Name: DUP1-0421
Lab Code: R2103777-005

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	04/27/21 17:46	
Toluene-d8	100	87 - 121	04/27/21 17:46	
Dibromofluoromethane	98	80 - 116	04/27/21 17:46	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 13:15
Date Received: 04/21/21 11:55

Sample Name: MW5S-0421
Lab Code: R2103777-006

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	20 U	20	2	04/27/21 18:51	
Benzene	10 U	10	2	04/27/21 18:51	
Bromodichloromethane	10 U	10	2	04/27/21 18:51	
Bromoform	10 U	10	2	04/27/21 18:51	
Bromomethane	10 U	10	2	04/27/21 18:51	
2-Butanone (MEK)	20 U	20	2	04/27/21 18:51	
Carbon Disulfide	20 U	20	2	04/27/21 18:51	
Carbon Tetrachloride	10 U	10	2	04/27/21 18:51	
Chlorobenzene	10 U	10	2	04/27/21 18:51	
Chloroethane	10 U	10	2	04/27/21 18:51	
Chloroform	10 U	10	2	04/27/21 18:51	
Chloromethane	10 U	10	2	04/27/21 18:51	
Dibromochloromethane	10 U	10	2	04/27/21 18:51	
1,2-Dibromoethane	10 U	10	2	04/27/21 18:51	
1,1-Dichloroethane	10 U	10	2	04/27/21 18:51	
1,2-Dichloroethane	10 U	10	2	04/27/21 18:51	
1,1-Dichloroethene	10 U	10	2	04/27/21 18:51	
cis-1,2-Dichloroethene	140	10	2	04/27/21 18:51	
trans-1,2-Dichloroethene	10 U	10	2	04/27/21 18:51	
1,2-Dichloropropane	10 U	10	2	04/27/21 18:51	
cis-1,3-Dichloropropene	10 U	10	2	04/27/21 18:51	
trans-1,3-Dichloropropene	10 U	10	2	04/27/21 18:51	
Ethylbenzene	10 U	10	2	04/27/21 18:51	
2-Hexanone	20 U	20	2	04/27/21 18:51	
Methylene Chloride	10 U	10	2	04/27/21 18:51	
4-Methyl-2-pentanone (MIBK)	20 U	20	2	04/27/21 18:51	
Styrene	10 U	10	2	04/27/21 18:51	
1,1,2,2-Tetrachloroethane	10 U	10	2	04/27/21 18:51	
Tetrachloroethene	10 U	10	2	04/27/21 18:51	
Toluene	10 U	10	2	04/27/21 18:51	
1,1,1-Trichloroethane	10 U	10	2	04/27/21 18:51	
1,1,2-Trichloroethane	10 U	10	2	04/27/21 18:51	
Trichloroethene	29	10	2	04/27/21 18:51	
Vinyl Chloride	10	10	2	04/27/21 18:51	
o-Xylene	10 U	10	2	04/27/21 18:51	
m,p-Xylenes	10 U	10	2	04/27/21 18:51	

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Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 13:15
Date Received: 04/21/21 11:55

Sample Name: MW5S-0421
Lab Code: R2103777-006

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	87	85 - 122	04/27/21 18:51	
Toluene-d8	95	87 - 121	04/27/21 18:51	
Dibromofluoromethane	93	80 - 116	04/27/21 18:51	

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Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 14:00
Date Received: 04/21/21 11:55

Sample Name: SWS1-0421
Lab Code: R2103777-007

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	10 U	10	1	04/27/21 18:08	
Benzene	5.0 U	5.0	1	04/27/21 18:08	
Bromodichloromethane	5.0 U	5.0	1	04/27/21 18:08	
Bromoform	5.0 U	5.0	1	04/27/21 18:08	
Bromomethane	5.0 U	5.0	1	04/27/21 18:08	
2-Butanone (MEK)	10 U	10	1	04/27/21 18:08	
Carbon Disulfide	10 U	10	1	04/27/21 18:08	
Carbon Tetrachloride	5.0 U	5.0	1	04/27/21 18:08	
Chlorobenzene	5.0 U	5.0	1	04/27/21 18:08	
Chloroethane	5.0 U	5.0	1	04/27/21 18:08	
Chloroform	5.0 U	5.0	1	04/27/21 18:08	
Chloromethane	5.0 U	5.0	1	04/27/21 18:08	
Dibromochloromethane	5.0 U	5.0	1	04/27/21 18:08	
1,2-Dibromoethane	5.0 U	5.0	1	04/27/21 18:08	
1,1-Dichloroethane	5.0 U	5.0	1	04/27/21 18:08	
1,2-Dichloroethane	5.0 U	5.0	1	04/27/21 18:08	
1,1-Dichloroethene	5.0 U	5.0	1	04/27/21 18:08	
cis-1,2-Dichloroethene	5.0 U	5.0	1	04/27/21 18:08	
trans-1,2-Dichloroethene	5.0 U	5.0	1	04/27/21 18:08	
1,2-Dichloropropane	5.0 U	5.0	1	04/27/21 18:08	
cis-1,3-Dichloropropene	5.0 U	5.0	1	04/27/21 18:08	
trans-1,3-Dichloropropene	5.0 U	5.0	1	04/27/21 18:08	
Ethylbenzene	5.0 U	5.0	1	04/27/21 18:08	
2-Hexanone	10 U	10	1	04/27/21 18:08	
Methylene Chloride	5.0 U	5.0	1	04/27/21 18:08	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	04/27/21 18:08	
Styrene	5.0 U	5.0	1	04/27/21 18:08	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	04/27/21 18:08	
Tetrachloroethene	5.0 U	5.0	1	04/27/21 18:08	
Toluene	5.0 U	5.0	1	04/27/21 18:08	
1,1,1-Trichloroethane	5.0 U	5.0	1	04/27/21 18:08	
1,1,2-Trichloroethane	5.0 U	5.0	1	04/27/21 18:08	
Trichloroethene	5.0 U	5.0	1	04/27/21 18:08	
Vinyl Chloride	5.0 U	5.0	1	04/27/21 18:08	
o-Xylene	5.0 U	5.0	1	04/27/21 18:08	
m,p-Xylenes	5.0 U	5.0	1	04/27/21 18:08	

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Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 14:00
Date Received: 04/21/21 11:55

Sample Name: SWS1-0421
Lab Code: R2103777-007

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	04/27/21 18:08	
Toluene-d8	99	87 - 121	04/27/21 18:08	
Dibromofluoromethane	98	80 - 116	04/27/21 18:08	



Metals

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Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 14:00
Date Received: 04/21/21 11:55

Sample Name: SWS1-0421
Lab Code: R2103777-007

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	04/27/21 19:40	04/26/21	
Barium, Total	6010C	20 U	ug/L	20	1	04/27/21 19:40	04/26/21	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	04/27/21 19:40	04/26/21	
Calcium, Total	6010C	28400	ug/L	1000	1	04/27/21 19:40	04/26/21	
Chromium, Total	6010C	10 U	ug/L	10	1	04/27/21 19:40	04/26/21	
Copper, Total	6010C	20 U	ug/L	20	1	04/27/21 19:40	04/26/21	
Iron, Total	6010C	220	ug/L	100	1	04/27/21 19:40	04/26/21	
Lead, Total	6010C	50 U	ug/L	50	1	04/27/21 19:40	04/26/21	
Magnesium, Total	6010C	9200	ug/L	1000	1	04/27/21 19:40	04/26/21	
Manganese, Total	6010C	17	ug/L	10	1	04/27/21 19:40	04/26/21	
Nickel, Total	6010C	40 U	ug/L	40	1	04/27/21 19:40	04/26/21	
Potassium, Total	6010C	2000 U	ug/L	2000	1	04/27/21 19:40	04/26/21	
Selenium, Total	6010C	10 U	ug/L	10	1	04/27/21 19:40	04/26/21	
Sodium, Total	6010C	16400	ug/L	1000	1	04/27/21 19:40	04/26/21	
Zinc, Total	6010C	20 U	ug/L	20	1	04/27/21 19:40	04/26/21	



General Chemistry

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Analytical Report

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

Service Request: R2103777
Date Collected: 04/20/21 14:00
Date Received: 04/21/21 11:55

Sample Name: SWS1-0421
Lab Code: R2103777-007

Basis: NA

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)	103	mg/L	2.0	1	04/22/21 17:09	NA	
Ammonia as Nitrogen, undistilled	350.1	0.050 U	mg/L	0.050	1	04/27/21 20:50	NA	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	2.0 U	mg/L	2.0	1	04/22/21 07:29	NA	
Bromide	300.0	1.0 U	mg/L	1.0	10	04/21/21 16:18	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	7.9	mg/L	1.0	1	05/05/21 22:02	NA	
Chemical Oxygen Demand, Total	410.4	20.6	mg/L	5.0	1	04/28/21 10:00	NA	
Chloride	300.0	32.4	mg/L	2.0	10	04/21/21 16:18	NA	
Color, True	SM 2120 B-2001(2011)	48.0	ColorUnits	1.0	1	04/21/21 21:21	NA	
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	04/21/21 16:18	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.45	mg/L	0.20	1	04/29/21 11:54	04/28/21	
pH of Color Analysis	SM 2120 B-2001(2011)	8.05	pH Units	-	1	04/21/21 21:21	NA	
Phenolics, Total Recoverable	420.4	0.0050 U	mg/L	0.0050	1	05/04/21 14:38	NA	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	169	mg/L	10	1	04/26/21 10:20	NA	
Sulfate	300.0	2.0 U	mg/L	2.0	10	04/21/21 16:18	NA	



QC Summary Forms

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Volatile Organic Compounds by GC/MS

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QA/QC Report

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

Service Request: R2103777

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene	Toluene-d8	Dibromofluoromethane
		85-122	87-121	80-116
MW16S-0421	R2103777-001	94	100	97
MW11S-0421	R2103777-002	92	101	96
MW4D-0421	R2103777-003	94	101	100
MW5D-0421	R2103777-004	93	101	100
DUP1-0421	R2103777-005	91	100	98
MW5S-0421	R2103777-006	87	95	93
SWS1-0421	R2103777-007	92	99	98
Method Blank	RQ2104549-06	96	100	96
Method Blank	RQ2104610-06	89	97	97
Lab Control Sample	RQ2104549-05	91	94	96
Lab Control Sample	RQ2104610-05	97	97	98
MW11S-0421 MS	RQ2104549-01	104	105	102
MW11S-0421 DMS	RQ2104549-02	101	101	100

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QA/QC Report

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

Service Request: R2103777
Date Collected: 04/20/21
Date Received: 04/21/21
Date Analyzed: 04/26/21
Date Extracted: NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: MW11S-0421
Lab Code: R2103777-002
Analysis Method: 8260C
Prep Method: EPA 5030C

Units: ug/L
Basis: NA

Analyte Name	Matrix Spike RQ2104549-01				Duplicate Matrix Spike RQ2104549-02				% Rec Limits	RPD	RPD Limit
	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec				
Acetone	200 U	878	1000	88	849	1000	85	35-183	3	30	
Benzene	100 U	995	1000	100	975	1000	97	76-129	2	30	
Bromodichloromethane	100 U	925	1000	93	918	1000	92	78-133	<1	30	
Bromoform	100 U	939	1000	94	927	1000	93	58-133	1	30	
Bromomethane	100 U	926	1000	93	893	1000	89	10-184	4	30	
2-Butanone (MEK)	200 U	838	1000	84	799	1000	80	61-137	5	30	
Carbon Disulfide	200 U	941	1000	94	922	1000	92	59-140	2	30	
Carbon Tetrachloride	100 U	943	1000	94	897	1000	90	65-135	5	30	
Chlorobenzene	100 U	971	1000	97	923	1000	92	76-125	5	30	
Chloroethane	100 U	1120	1000	112	1080	1000	108	48-146	4	30	
Chloroform	100 U	935	1000	94	910	1000	91	75-130	3	30	
Chloromethane	100 U	1050	1000	105	985	1000	99	55-160	7	30	
Dibromochloromethane	100 U	936	1000	94	886	1000	89	72-128	5	30	
1,1-Dichloroethane	100 U	928	1000	93	913	1000	91	74-132	2	30	
1,2-Dibromoethane	100 U	924	1000	92	879	1000	88	67-127	5	30	
1,2-Dichloroethane	100 U	924	1000	92	919	1000	92	68-130	<1	30	
1,1-Dichloroethene	100 U	1180	1000	118	1130	1000	113	71-118	5	30	
cis-1,2-Dichloroethene	290	1280	1000	99	1250	1000	97	77-127	2	30	
trans-1,2-Dichloroethene	100 U	1010	1000	101	1010	1000	101	73-118	<1	30	
1,2-Dichloropropane	100 U	931	1000	93	936	1000	94	79-124	<1	30	
cis-1,3-Dichloropropene	100 U	940	1000	94	924	1000	92	52-134	2	30	
trans-1,3-Dichloropropene	100 U	943	1000	94	925	1000	92	71-133	2	30	
Ethylbenzene	100 U	1010	1000	101	942	1000	94	72-134	7	30	
2-Hexanone	200 U	853	1000	85	807	1000	81	56-132	6	30	
Methylene Chloride	100 U	883	1000	88	886	1000	89	73-122	<1	30	
4-Methyl-2-pentanone (MIBK)	200 U	882	1000	88	849	1000	85	60-141	4	30	
Styrene	100 U	1040	1000	104	960	1000	96	74-136	8	30	
1,1,2,2-Tetrachloroethane	100 U	914	1000	91	982	1000	98	72-122	7	30	
Tetrachloroethene	100 U	1010	1000	101	974	1000	97	72-125	4	30	
Toluene	100 U	993	1000	99	958	1000	96	79-119	4	30	
1,1,1-Trichloroethane	100 U	969	1000	97	956	1000	96	74-127	1	30	
1,1,2-Trichloroethane	100 U	950	1000	95	932	1000	93	82-121	2	30	
Trichloroethene	2600	3620	1000	102	3520	1000	92	74-122	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.
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QA/QC Report

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

Service Request: R2103777
Date Collected: 04/20/21
Date Received: 04/21/21
Date Analyzed: 04/26/21
Date Extracted: NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: MW11S-0421
Lab Code: R2103777-002
Analysis Method: 8260C
Prep Method: EPA 5030C

Units: ug/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike RQ2104549-01			Duplicate Matrix Spike RQ2104549-02			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Vinyl Chloride	100 U	999	1000	100	961	1000	96	74-159	4	30
o-Xylene	100 U	1040	1000	104	963	1000	96	79-123	8	30
m,p-Xylenes	100 U	2070	2000	103	1960	2000	98	80-126	6	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.

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Analytical Report

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

Service Request: R2103777
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2104549-06

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	10 U	10	1	04/26/21 12:19	
Benzene	5.0 U	5.0	1	04/26/21 12:19	
Bromodichloromethane	5.0 U	5.0	1	04/26/21 12:19	
Bromoform	5.0 U	5.0	1	04/26/21 12:19	
Bromomethane	5.0 U	5.0	1	04/26/21 12:19	
2-Butanone (MEK)	10 U	10	1	04/26/21 12:19	
Carbon Disulfide	10 U	10	1	04/26/21 12:19	
Carbon Tetrachloride	5.0 U	5.0	1	04/26/21 12:19	
Chlorobenzene	5.0 U	5.0	1	04/26/21 12:19	
Chloroethane	5.0 U	5.0	1	04/26/21 12:19	
Chloroform	5.0 U	5.0	1	04/26/21 12:19	
Chloromethane	5.0 U	5.0	1	04/26/21 12:19	
Dibromochloromethane	5.0 U	5.0	1	04/26/21 12:19	
1,1-Dichloroethane	5.0 U	5.0	1	04/26/21 12:19	
1,2-Dibromoethane	5.0 U	5.0	1	04/26/21 12:19	
1,2-Dichloroethane	5.0 U	5.0	1	04/26/21 12:19	
1,1-Dichloroethene	5.0 U	5.0	1	04/26/21 12:19	
cis-1,2-Dichloroethene	5.0 U	5.0	1	04/26/21 12:19	
trans-1,2-Dichloroethene	5.0 U	5.0	1	04/26/21 12:19	
1,2-Dichloropropane	5.0 U	5.0	1	04/26/21 12:19	
cis-1,3-Dichloropropene	5.0 U	5.0	1	04/26/21 12:19	
trans-1,3-Dichloropropene	5.0 U	5.0	1	04/26/21 12:19	
Ethylbenzene	5.0 U	5.0	1	04/26/21 12:19	
2-Hexanone	10 U	10	1	04/26/21 12:19	
Methylene Chloride	5.0 U	5.0	1	04/26/21 12:19	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	04/26/21 12:19	
Styrene	5.0 U	5.0	1	04/26/21 12:19	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	04/26/21 12:19	
Tetrachloroethene	5.0 U	5.0	1	04/26/21 12:19	
Toluene	5.0 U	5.0	1	04/26/21 12:19	
1,1,1-Trichloroethane	5.0 U	5.0	1	04/26/21 12:19	
1,1,2-Trichloroethane	5.0 U	5.0	1	04/26/21 12:19	
Trichloroethene	5.0 U	5.0	1	04/26/21 12:19	
Vinyl Chloride	5.0 U	5.0	1	04/26/21 12:19	
o-Xylene	5.0 U	5.0	1	04/26/21 12:19	
m,p-Xylenes	5.0 U	5.0	1	04/26/21 12:19	

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Analytical Report

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

Service Request: R2103777
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2104549-06

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	96	85 - 122	04/26/21 12:19	
Toluene-d8	100	87 - 121	04/26/21 12:19	
Dibromofluoromethane	96	80 - 116	04/26/21 12:19	

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Analytical Report

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

Service Request: R2103777
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2104610-06

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	10 U	10	1	04/27/21 12:44	
Benzene	5.0 U	5.0	1	04/27/21 12:44	
Bromodichloromethane	5.0 U	5.0	1	04/27/21 12:44	
Bromoform	5.0 U	5.0	1	04/27/21 12:44	
Bromomethane	5.0 U	5.0	1	04/27/21 12:44	
2-Butanone (MEK)	10 U	10	1	04/27/21 12:44	
Carbon Disulfide	10 U	10	1	04/27/21 12:44	
Carbon Tetrachloride	5.0 U	5.0	1	04/27/21 12:44	
Chlorobenzene	5.0 U	5.0	1	04/27/21 12:44	
Chloroethane	5.0 U	5.0	1	04/27/21 12:44	
Chloroform	5.0 U	5.0	1	04/27/21 12:44	
Chloromethane	5.0 U	5.0	1	04/27/21 12:44	
Dibromochloromethane	5.0 U	5.0	1	04/27/21 12:44	
1,1-Dichloroethane	5.0 U	5.0	1	04/27/21 12:44	
1,2-Dibromoethane	5.0 U	5.0	1	04/27/21 12:44	
1,2-Dichloroethane	5.0 U	5.0	1	04/27/21 12:44	
1,1-Dichloroethene	5.0 U	5.0	1	04/27/21 12:44	
cis-1,2-Dichloroethene	5.0 U	5.0	1	04/27/21 12:44	
trans-1,2-Dichloroethene	5.0 U	5.0	1	04/27/21 12:44	
1,2-Dichloropropane	5.0 U	5.0	1	04/27/21 12:44	
cis-1,3-Dichloropropene	5.0 U	5.0	1	04/27/21 12:44	
trans-1,3-Dichloropropene	5.0 U	5.0	1	04/27/21 12:44	
Ethylbenzene	5.0 U	5.0	1	04/27/21 12:44	
2-Hexanone	10 U	10	1	04/27/21 12:44	
Methylene Chloride	5.0 U	5.0	1	04/27/21 12:44	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	04/27/21 12:44	
Styrene	5.0 U	5.0	1	04/27/21 12:44	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	04/27/21 12:44	
Tetrachloroethene	5.0 U	5.0	1	04/27/21 12:44	
Toluene	5.0 U	5.0	1	04/27/21 12:44	
1,1,1-Trichloroethane	5.0 U	5.0	1	04/27/21 12:44	
1,1,2-Trichloroethane	5.0 U	5.0	1	04/27/21 12:44	
Trichloroethene	5.0 U	5.0	1	04/27/21 12:44	
Vinyl Chloride	5.0 U	5.0	1	04/27/21 12:44	
o-Xylene	5.0 U	5.0	1	04/27/21 12:44	
m,p-Xylenes	5.0 U	5.0	1	04/27/21 12:44	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2103777
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2104610-06

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	04/27/21 12:44	
Toluene-d8	97	87 - 121	04/27/21 12:44	
Dibromofluoromethane	97	80 - 116	04/27/21 12:44	

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QA/QC Report

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

Service Request: R2103777
Date Analyzed: 04/26/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2104549-05

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	14.7	20.0	74	40-161
Benzene	8260C	18.3	20.0	91	79-119
Bromodichloromethane	8260C	17.7	20.0	88	81-123
Bromoform	8260C	19.3	20.0	97	65-146
Bromomethane	8260C	17.4	20.0	87	42-166
2-Butanone (MEK)	8260C	15.5	20.0	78	61-137
Carbon Disulfide	8260C	17.0	20.0	85	66-128
Carbon Tetrachloride	8260C	16.4	20.0	82	70-127
Chlorobenzene	8260C	17.7	20.0	89	80-121
Chloroethane	8260C	19.2	20.0	96	62-131
Chloroform	8260C	17.0	20.0	85	79-120
Chloromethane	8260C	20.4	20.0	102	65-135
Dibromochloromethane	8260C	17.5	20.0	88	72-128
1,1-Dichloroethane	8260C	17.4	20.0	87	80-124
1,2-Dibromoethane	8260C	17.4	20.0	87	82-127
1,2-Dichloroethane	8260C	18.0	20.0	90	71-127
1,1-Dichloroethene	8260C	20.8	20.0	104	71-118
cis-1,2-Dichloroethene	8260C	19.0	20.0	95	80-121
trans-1,2-Dichloroethene	8260C	19.0	20.0	95	73-118
1,2-Dichloropropane	8260C	17.9	20.0	89	80-119
cis-1,3-Dichloropropene	8260C	18.3	20.0	92	77-122
trans-1,3-Dichloropropene	8260C	18.2	20.0	91	71-133
Ethylbenzene	8260C	18.4	20.0	92	76-120
2-Hexanone	8260C	15.2	20.0	76	63-124
Methylene Chloride	8260C	17.6	20.0	88	73-122
4-Methyl-2-pentanone (MIBK)	8260C	15.5	20.0	77	66-124
Styrene	8260C	18.8	20.0	94	80-124
1,1,2,2-Tetrachloroethane	8260C	18.0	20.0	90	78-126
Tetrachloroethene	8260C	18.0	20.0	90	72-125
Toluene	8260C	18.0	20.0	90	79-119
1,1,1-Trichloroethane	8260C	17.3	20.0	87	75-125
1,1,2-Trichloroethane	8260C	18.4	20.0	92	82-121
Trichloroethene	8260C	17.3	20.0	86	74-122

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QA/QC Report

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

Service Request: R2103777
Date Analyzed: 04/26/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L**Basis:**NA**Lab Control Sample**

RQ2104549-05

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	8260C	17.2	20.0	86	74-159
o-Xylene	8260C	18.5	20.0	92	79-123
m,p-Xylenes	8260C	36.5	40.0	91	80-126

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QA/QC Report

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

Service Request: R2103777
Date Analyzed: 04/27/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2104610-05

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	14.8	20.0	74	40-161
Benzene	8260C	19.7	20.0	99	79-119
Bromodichloromethane	8260C	18.5	20.0	92	81-123
Bromoform	8260C	19.2	20.0	96	65-146
Bromomethane	8260C	18.8	20.0	94	42-166
2-Butanone (MEK)	8260C	15.6	20.0	78	61-137
Carbon Disulfide	8260C	19.0	20.0	95	66-128
Carbon Tetrachloride	8260C	17.8	20.0	89	70-127
Chlorobenzene	8260C	19.0	20.0	95	80-121
Chloroethane	8260C	21.7	20.0	108	62-131
Chloroform	8260C	18.5	20.0	92	79-120
Chloromethane	8260C	21.3	20.0	107	65-135
Dibromochloromethane	8260C	17.6	20.0	88	72-128
1,1-Dichloroethane	8260C	18.7	20.0	94	80-124
1,2-Dibromoethane	8260C	18.5	20.0	92	82-127
1,2-Dichloroethane	8260C	18.5	20.0	93	71-127
1,1-Dichloroethene	8260C	22.6	20.0	113	71-118
cis-1,2-Dichloroethene	8260C	20.6	20.0	103	80-121
trans-1,2-Dichloroethene	8260C	21.1	20.0	105	73-118
1,2-Dichloropropane	8260C	18.8	20.0	94	80-119
cis-1,3-Dichloropropene	8260C	19.1	20.0	95	77-122
trans-1,3-Dichloropropene	8260C	18.6	20.0	93	71-133
Ethylbenzene	8260C	19.1	20.0	96	76-120
2-Hexanone	8260C	16.0	20.0	80	63-124
Methylene Chloride	8260C	18.7	20.0	94	73-122
4-Methyl-2-pentanone (MIBK)	8260C	16.8	20.0	84	66-124
Styrene	8260C	19.8	20.0	99	80-124
1,1,2,2-Tetrachloroethane	8260C	18.5	20.0	93	78-126
Tetrachloroethene	8260C	20.3	20.0	101	72-125
Toluene	8260C	19.4	20.0	97	79-119
1,1,1-Trichloroethane	8260C	18.5	20.0	92	75-125
1,1,2-Trichloroethane	8260C	19.4	20.0	97	82-121
Trichloroethene	8260C	18.2	20.0	91	74-122

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QA/QC Report

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

Service Request: R2103777
Date Analyzed: 04/27/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L**Basis:**NA**Lab Control Sample**

RQ2104610-05

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	8260C	19.5	20.0	98	74-159
o-Xylene	8260C	20.0	20.0	100	79-123
m,p-Xylenes	8260C	39.3	40.0	98	80-126



Metals

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Analytical Report

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

Sample Name: Method Blank
Lab Code: R2103777-MB

Service Request: R2103777
Date Collected: NA
Date Received: NA

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	04/27/21 19:30	04/26/21	
Barium, Total	6010C	20 U	ug/L	20	1	04/27/21 19:30	04/26/21	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	04/27/21 19:30	04/26/21	
Calcium, Total	6010C	1000 U	ug/L	1000	1	04/27/21 19:30	04/26/21	
Chromium, Total	6010C	10 U	ug/L	10	1	04/27/21 19:30	04/26/21	
Copper, Total	6010C	20 U	ug/L	20	1	04/27/21 19:30	04/26/21	
Iron, Total	6010C	100 U	ug/L	100	1	04/27/21 19:30	04/26/21	
Lead, Total	6010C	50 U	ug/L	50	1	04/27/21 19:30	04/26/21	
Magnesium, Total	6010C	1000 U	ug/L	1000	1	04/27/21 19:30	04/26/21	
Manganese, Total	6010C	10 U	ug/L	10	1	04/27/21 19:30	04/26/21	
Nickel, Total	6010C	40 U	ug/L	40	1	04/27/21 19:30	04/26/21	
Potassium, Total	6010C	2000 U	ug/L	2000	1	04/27/21 19:30	04/26/21	
Selenium, Total	6010C	10 U	ug/L	10	1	04/27/21 19:30	04/26/21	
Sodium, Total	6010C	1000 U	ug/L	1000	1	04/27/21 19:30	04/26/21	
Zinc, Total	6010C	20 U	ug/L	20	1	04/27/21 19:30	04/26/21	

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QA/QC Report

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

Service Request: R2103777
Date Analyzed: 04/27/21

Duplicate Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample R2103777-LCS					Duplicate Lab Control Sample R2103777-DLCS					
Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Arsenic, Total	6010C	39.5	40	99	39.3	40	98	80-120	<1	20
Barium, Total	6010C	2070	2000	103	2050	2000	102	80-120	<1	20
Cadmium, Total	6010C	51.7	50.0	103	51.1	50.0	102	80-120	1	20
Calcium, Total	6010C	2070	2000	103	2050	2000	102	80-120	<1	20
Chromium, Total	6010C	208	200	104	206	200	103	80-120	<1	20
Copper, Total	6010C	252	250	101	249	250	100	80-120	<1	20
Iron, Total	6010C	1040	1000	104	1020	1000	102	80-120	2	20
Lead, Total	6010C	510	500	102	502	500	100	80-120	1	20
Magnesium, Total	6010C	2000	2000	100	1990	2000	99	80-120	<1	20
Manganese, Total	6010C	507	500	101	503	500	101	80-120	<1	20
Nickel, Total	6010C	514	500	103	509	500	102	80-120	<1	20
Potassium, Total	6010C	19300	20000	97	19100	20000	96	80-120	1	20
Selenium, Total	6010C	1000	1010	99	985	1010	97	80-120	2	20
Sodium, Total	6010C	19700	20000	99	19600	20000	98	80-120	<1	20
Zinc, Total	6010C	507	500	101	504	500	101	80-120	<1	20



General Chemistry

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Analytical Report

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

Sample Name: Method Blank
Lab Code: R2103777-MB

Service Request: R2103777
Date Collected: NA
Date Received: NA

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	2.0 U	mg/L	2.0	1	04/22/21 15:02	NA	
Ammonia as Nitrogen, undistilled	350.1	0.050 U	mg/L	0.050	1	04/27/21 20:28	NA	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	2.0 U	mg/L	2.0	1	04/22/21 13:58	NA	
Bromide	300.0	0.10 U	mg/L	0.10	1	04/21/21 11:45	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	05/05/21 21:20	NA	
Chemical Oxygen Demand, Total	410.4	5.0 U	mg/L	5.0	1	04/28/21 10:00	NA	
Chloride	300.0	0.20 U	mg/L	0.20	1	04/21/21 11:45	NA	
Color, True	SM 2120 B-2001(2011)	1.0	ColorUnits	1.0	1	04/21/21 21:21	NA	
Nitrate as Nitrogen	300.0	0.10 U	mg/L	0.10	1	04/21/21 11:45	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.20 U	mg/L	0.20	1	04/29/21 11:47	04/28/21	
Phenolics, Total Recoverable	420.4	0.0050 U	mg/L	0.0050	1	05/04/21 12:28	NA	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	10 U	mg/L	10	1	04/26/21 10:20	NA	
Sulfate	300.0	0.20 U	mg/L	0.20	1	04/21/21 11:45	NA	

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QA/QC Report

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

Service Request: R2103777
Date Collected: 04/20/21
Date Received: 04/21/21
Date Analyzed: 04/22/21

Replicate Sample Summary
General Chemistry Parameters

Sample Name: SWS1-0421
Lab Code: R2103777-007

Units: mg/L
Basis: NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R2103777-007DUP Result	Average	RPD	RPD Limit
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	2.0	2.0 U	2.0 U	NC	NC	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.

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QA/QC Report

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

Service Request: R2103777
Date Collected: 04/20/21
Date Received: 04/21/21
Date Analyzed: 04/21/21

Replicate Sample Summary
General Chemistry Parameters

Sample Name: SWS1-0421
Lab Code: R2103777-007

Units: ColorUnits
Basis: NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R2103777-007DUP Result	Average	RPD	RPD Limit
Color, True	SM 2120 B-2001(2011)	1.0	48.0	48.0	48.0	<1	5

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.
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QA/QC Report

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

Service Request: R2103777
Date Analyzed: 04/21/21 - 05/05/21

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R2103777-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	21.6	20.0	108	80-120
Ammonia as Nitrogen, undistilled	350.1	0.253	0.250	101	90-110
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	175	198	88	85-115
Bromide	300.0	0.915	1.00	92	90-110
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	10.6	10.0	106	80-121
Chemical Oxygen Demand, Total	410.4	54.3	50.0	109	90-110
Chloride	300.0	1.96	2.00	98	90-110
Nitrate as Nitrogen	300.0	0.991	1.00	99	90-110
Nitrogen, Total Kjeldahl (TKN)	351.2	2.26	2.50	90	90-110
Phenolics, Total Recoverable	420.4	0.0406	0.0400	101	90-110
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	915	914	100	90-110
Sulfate	300.0	2.08	2.00	104	90-110



December 01, 2021

Service Request No:R2112138

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 November 17, 2021
For your reference, these analyses have been assigned our service request number **R2112138**.

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

Janice Jaeger
Project Manager

ADDRESS

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

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ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Rochester Laboratory

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

Service Request: R2112138
Date Received: 11/17/2021

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 11/17/2021. 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.

Approved by 

Date 12/01/2021

SAMPLE DETECTION SUMMARY**CLIENT ID: WAL19Pre-1121****Lab ID: R2112138-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	1.9			0.50	ug/L	524.2
Trichloroethene	2.5			0.50	ug/L	524.2



Sample Receipt Information

ALS Environmental—Rochester Laboratory

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

Service Request:R2112138

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2112138-001	WAL19Post-1121	11/16/2021	1010
R2112138-002	WAL19Inter-1121	11/16/2021	1025
R2112138-003	WAL19Pre-1121	11/16/2021	1030



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

Client: **On-Site**

72 Railroad Ave.
Wellsville, NY 14895

CHAIN of CUSTODY

Project:

WAL - Annual Sampling

Page 1 of 1

Method of Shipment

UPS

Project
Manager

Jon Brandes

Telephone No.

585-593-1824

Email:

jonb@on-sitehs.com

Special Detection
Limit/Reporting

Sample I.D.

Lab Sample No.

No. of Containers

Soil

Water

Air

Other

Yes

No

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)

WAL19 Post-1121

3

X

X

11/16/21

1010

3

WAL19 Inter-1121

3

X

X

↓

1025

3

WAL19 Pre-1121

3

X

X

↓

1030

3

R E M A R K S

Sample Received Intact:

Yes

No

Temperature received:

Ice

No ice

Relinquished by (Sign & Print Name)

Jonathan E Brandes / Jonathan E Brandes 11/16/21 1230

Received by (Sign & Print Name)

Gregory O. Emerman / Gregory O. Emerman 11/17/21 10:25

Lab Work No.

Relinquished by

Date

Time

Received by

Relinquished by

Date

Time

Received by

Relinquished by

Date

Time

Received by laboratory

Date

Time

R2112138

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

5





R2112138
On-Site Technical Services, Inc.
WAL - Annual Sampling

5



Cooler Receipt and Preservation Check Form

Project/Client On-site Folder Number _____

Cooler received on 11/17/21 by: ME

COURIER: ALS UPS FEDEX VELOCITY CLIENT

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

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

8. Temperature Readings Date: 11/17/21 Time: 11:00 ID: IR#7 IR#11 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>7.2</u>							
Within 0-6°C?	<u>Y</u> N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y 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: R-002 by ME on 11/17/21 at 11:03
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 11/18/21 Time: 6:14 by: ME

- Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
- Did all bottle labels and tags agree with custody papers? YES NO
- Were correct containers used for the tests indicated? YES NO
- Were 5035 vials acceptable (no extra labels, not leaking)? YES NO
- 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? Yes No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥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	** **	No lot info					

**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: 0-356-005
Explain all Discrepancies/ Other Comments: _____

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: ME
PC Secondary Review: ME 11/18/21

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



Miscellaneous Forms

ALS Environmental—Rochester Laboratory

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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.

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

Service Request: R2112138

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

Service Request: R2112138

Sample Name: WAL19Post-1121
Lab Code: R2112138-001
Sample Matrix: Drinking Water

Date Collected: 11/16/21**Date Received:** 11/17/21

Analysis Method
524.2

Extracted/Digested By

Analyzed By
BALLGEIER

Sample Name: WAL19Inter-1121
Lab Code: R2112138-002
Sample Matrix: Drinking Water

Date Collected: 11/16/21**Date Received:** 11/17/21

Analysis Method
524.2

Extracted/Digested By

Analyzed By
BALLGEIER

Sample Name: WAL19Pre-1121
Lab Code: R2112138-003
Sample Matrix: Drinking Water

Date Collected: 11/16/21**Date Received:** 11/17/21

Analysis Method
524.2

Extracted/Digested By

Analyzed By
BALLGEIER



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.	



Sample Results

ALS Environmental—Rochester Laboratory

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Volatile Organic Compounds by GC/MS

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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: R2112138
Date Collected: 11/16/21 10:10
Date Received: 11/17/21 10:25

Sample Name: WAL19Post-1121
Lab Code: R2112138-001

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	11/29/21 14:32	
Bromobenzene	0.50 U	0.50	1	11/29/21 14:32	
Bromochloromethane	0.50 U	0.50	1	11/29/21 14:32	
Bromodichloromethane	0.50 U	0.50	1	11/29/21 14:32	
Bromoform	0.50 U	0.50	1	11/29/21 14:32	
Bromomethane	0.50 U	0.50	1	11/29/21 14:32	
Methyl tert-Butyl Ether	0.50 U	0.50	1	11/29/21 14:32	
tert-Butylbenzene	0.50 U	0.50	1	11/29/21 14:32	
sec-Butylbenzene	0.50 U	0.50	1	11/29/21 14:32	
n-Butylbenzene	0.50 U	0.50	1	11/29/21 14:32	
Carbon Tetrachloride	0.50 U	0.50	1	11/29/21 14:32	
Chlorobenzene	0.50 U	0.50	1	11/29/21 14:32	
Chloroethane	0.50 U	0.50	1	11/29/21 14:32	
Chloroform	0.50 U	0.50	1	11/29/21 14:32	
Chloromethane	0.50 U	0.50	1	11/29/21 14:32	
2-Chlorotoluene	0.50 U	0.50	1	11/29/21 14:32	
4-Chlorotoluene	0.50 U	0.50	1	11/29/21 14:32	
Dibromochloromethane	0.50 U	0.50	1	11/29/21 14:32	
Dibromomethane	0.50 U	0.50	1	11/29/21 14:32	
1,2-Dichlorobenzene	0.50 U	0.50	1	11/29/21 14:32	
1,4-Dichlorobenzene	0.50 U	0.50	1	11/29/21 14:32	
1,3-Dichlorobenzene	0.50 U	0.50	1	11/29/21 14:32	
Dichlorodifluoromethane	0.50 U	0.50	1	11/29/21 14:32	
1,1-Dichloroethane	0.50 U	0.50	1	11/29/21 14:32	
1,2-Dichloroethane	0.50 U	0.50	1	11/29/21 14:32	
1,1-Dichloroethene	0.50 U	0.50	1	11/29/21 14:32	
trans-1,2-Dichloroethene	0.50 U	0.50	1	11/29/21 14:32	
cis-1,2-Dichloroethene	0.50 U	0.50	1	11/29/21 14:32	
2,2-Dichloropropane	0.50 U	0.50	1	11/29/21 14:32	
1,2-Dichloropropane	0.50 U	0.50	1	11/29/21 14:32	
1,3-Dichloropropane	0.50 U	0.50	1	11/29/21 14:32	
trans-1,3-Dichloropropene	0.50 U	0.50	1	11/29/21 14:32	
cis-1,3-Dichloropropene	0.50 U	0.50	1	11/29/21 14:32	
Ethylbenzene	0.50 U	0.50	1	11/29/21 14:32	
Hexachlorobutadiene	0.50 U	0.50	1	11/29/21 14:32	
Isopropylbenzene	0.50 U	0.50	1	11/29/21 14:32	
p-Isopropyltoluene	0.50 U	0.50	1	11/29/21 14:32	
Methylene Chloride	0.50 U	0.50	1	11/29/21 14:32	
Naphthalene	0.50 U	0.50	1	11/29/21 14:32	
n-Propylbenzene	0.50 U	0.50	1	11/29/21 14:32	
Styrene	0.50 U	0.50	1	11/29/21 14:32	

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: R2112138
Date Collected: 11/16/21 10:10
Date Received: 11/17/21 10:25

Sample Name: WAL19Post-1121
Lab Code: R2112138-001

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.50 U	0.50	1	11/29/21 14:32	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	1	11/29/21 14:32	
Tetrachloroethene	0.50 U	0.50	1	11/29/21 14:32	
Toluene	0.50 U	0.50	1	11/29/21 14:32	
1,2,4-Trichlorobenzene	0.50 U	0.50	1	11/29/21 14:32	
1,2,3-Trichlorobenzene	0.50 U	0.50	1	11/29/21 14:32	
1,1,2-Trichloroethane	0.50 U	0.50	1	11/29/21 14:32	
Trichloroethene	0.50 U	0.50	1	11/29/21 14:32	
Trichlorofluoromethane	0.50 U	0.50	1	11/29/21 14:32	
1,2,3-Trichloropropane	0.50 U	0.50	1	11/29/21 14:32	
1,3,5-Trimethylbenzene	0.50 U	0.50	1	11/29/21 14:32	
1,2,4-Trimethylbenzene	0.50 U	0.50	1	11/29/21 14:32	
Vinyl Chloride	0.50 U	0.50	1	11/29/21 14:32	
m,p-Xylenes	1.0 U	1.0	1	11/29/21 14:32	
o-Xylene	0.50 U	0.50	1	11/29/21 14:32	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	70 - 130	11/29/21 14:32	
1,2-Dichlorobenzene-d4	89	70 - 130	11/29/21 14:32	

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: R2112138
Date Collected: 11/16/21 10:25
Date Received: 11/17/21 10:25

Sample Name: WAL19Inter-1121
Lab Code: R2112138-002

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	11/29/21 14:58	
Bromobenzene	0.50 U	0.50	1	11/29/21 14:58	
Bromochloromethane	0.50 U	0.50	1	11/29/21 14:58	
Bromodichloromethane	0.50 U	0.50	1	11/29/21 14:58	
Bromoform	0.50 U	0.50	1	11/29/21 14:58	
Bromomethane	0.50 U	0.50	1	11/29/21 14:58	
Methyl tert-Butyl Ether	0.50 U	0.50	1	11/29/21 14:58	
tert-Butylbenzene	0.50 U	0.50	1	11/29/21 14:58	
sec-Butylbenzene	0.50 U	0.50	1	11/29/21 14:58	
n-Butylbenzene	0.50 U	0.50	1	11/29/21 14:58	
Carbon Tetrachloride	0.50 U	0.50	1	11/29/21 14:58	
Chlorobenzene	0.50 U	0.50	1	11/29/21 14:58	
Chloroethane	0.50 U	0.50	1	11/29/21 14:58	
Chloroform	0.50 U	0.50	1	11/29/21 14:58	
Chloromethane	0.50 U	0.50	1	11/29/21 14:58	
2-Chlorotoluene	0.50 U	0.50	1	11/29/21 14:58	
4-Chlorotoluene	0.50 U	0.50	1	11/29/21 14:58	
Dibromochloromethane	0.50 U	0.50	1	11/29/21 14:58	
Dibromomethane	0.50 U	0.50	1	11/29/21 14:58	
1,2-Dichlorobenzene	0.50 U	0.50	1	11/29/21 14:58	
1,4-Dichlorobenzene	0.50 U	0.50	1	11/29/21 14:58	
1,3-Dichlorobenzene	0.50 U	0.50	1	11/29/21 14:58	
Dichlorodifluoromethane	0.50 U	0.50	1	11/29/21 14:58	
1,1-Dichloroethane	0.50 U	0.50	1	11/29/21 14:58	
1,2-Dichloroethane	0.50 U	0.50	1	11/29/21 14:58	
1,1-Dichloroethene	0.50 U	0.50	1	11/29/21 14:58	
trans-1,2-Dichloroethene	0.50 U	0.50	1	11/29/21 14:58	
cis-1,2-Dichloroethene	0.50 U	0.50	1	11/29/21 14:58	
2,2-Dichloropropane	0.50 U	0.50	1	11/29/21 14:58	
1,2-Dichloropropane	0.50 U	0.50	1	11/29/21 14:58	
1,3-Dichloropropane	0.50 U	0.50	1	11/29/21 14:58	
trans-1,3-Dichloropropene	0.50 U	0.50	1	11/29/21 14:58	
cis-1,3-Dichloropropene	0.50 U	0.50	1	11/29/21 14:58	
Ethylbenzene	0.50 U	0.50	1	11/29/21 14:58	
Hexachlorobutadiene	0.50 U	0.50	1	11/29/21 14:58	
Isopropylbenzene	0.50 U	0.50	1	11/29/21 14:58	
p-Isopropyltoluene	0.50 U	0.50	1	11/29/21 14:58	
Methylene Chloride	0.50 U	0.50	1	11/29/21 14:58	
Naphthalene	0.50 U	0.50	1	11/29/21 14:58	
n-Propylbenzene	0.50 U	0.50	1	11/29/21 14:58	
Styrene	0.50 U	0.50	1	11/29/21 14:58	

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: R2112138
Date Collected: 11/16/21 10:25
Date Received: 11/17/21 10:25

Sample Name: WAL19Inter-1121
Lab Code: R2112138-002

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.50 U	0.50	1	11/29/21 14:58	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	1	11/29/21 14:58	
Tetrachloroethene	0.50 U	0.50	1	11/29/21 14:58	
Toluene	0.50 U	0.50	1	11/29/21 14:58	
1,2,4-Trichlorobenzene	0.50 U	0.50	1	11/29/21 14:58	
1,2,3-Trichlorobenzene	0.50 U	0.50	1	11/29/21 14:58	
1,1,2-Trichloroethane	0.50 U	0.50	1	11/29/21 14:58	
Trichloroethene	0.50 U	0.50	1	11/29/21 14:58	
Trichlorofluoromethane	0.50 U	0.50	1	11/29/21 14:58	
1,2,3-Trichloropropane	0.50 U	0.50	1	11/29/21 14:58	
1,3,5-Trimethylbenzene	0.50 U	0.50	1	11/29/21 14:58	
1,2,4-Trimethylbenzene	0.50 U	0.50	1	11/29/21 14:58	
Vinyl Chloride	0.50 U	0.50	1	11/29/21 14:58	
m,p-Xylenes	1.0 U	1.0	1	11/29/21 14:58	
o-Xylene	0.50 U	0.50	1	11/29/21 14:58	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	70 - 130	11/29/21 14:58	
1,2-Dichlorobenzene-d4	92	70 - 130	11/29/21 14:58	

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: R2112138
Date Collected: 11/16/21 10:30
Date Received: 11/17/21 10:25

Sample Name: WAL19Pre-1121
Lab Code: R2112138-003

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	11/29/21 15:24	
Bromobenzene	0.50 U	0.50	1	11/29/21 15:24	
Bromochloromethane	0.50 U	0.50	1	11/29/21 15:24	
Bromodichloromethane	0.50 U	0.50	1	11/29/21 15:24	
Bromoform	0.50 U	0.50	1	11/29/21 15:24	
Bromomethane	0.50 U	0.50	1	11/29/21 15:24	
Methyl tert-Butyl Ether	0.50 U	0.50	1	11/29/21 15:24	
tert-Butylbenzene	0.50 U	0.50	1	11/29/21 15:24	
sec-Butylbenzene	0.50 U	0.50	1	11/29/21 15:24	
n-Butylbenzene	0.50 U	0.50	1	11/29/21 15:24	
Carbon Tetrachloride	0.50 U	0.50	1	11/29/21 15:24	
Chlorobenzene	0.50 U	0.50	1	11/29/21 15:24	
Chloroethane	0.50 U	0.50	1	11/29/21 15:24	
Chloroform	0.50 U	0.50	1	11/29/21 15:24	
Chloromethane	0.50 U	0.50	1	11/29/21 15:24	
2-Chlorotoluene	0.50 U	0.50	1	11/29/21 15:24	
4-Chlorotoluene	0.50 U	0.50	1	11/29/21 15:24	
Dibromochloromethane	0.50 U	0.50	1	11/29/21 15:24	
Dibromomethane	0.50 U	0.50	1	11/29/21 15:24	
1,2-Dichlorobenzene	0.50 U	0.50	1	11/29/21 15:24	
1,4-Dichlorobenzene	0.50 U	0.50	1	11/29/21 15:24	
1,3-Dichlorobenzene	0.50 U	0.50	1	11/29/21 15:24	
Dichlorodifluoromethane	0.50 U	0.50	1	11/29/21 15:24	
1,1-Dichloroethane	0.50 U	0.50	1	11/29/21 15:24	
1,2-Dichloroethane	0.50 U	0.50	1	11/29/21 15:24	
1,1-Dichloroethene	0.50 U	0.50	1	11/29/21 15:24	
trans-1,2-Dichloroethene	0.50 U	0.50	1	11/29/21 15:24	
cis-1,2-Dichloroethene	1.9	0.50	1	11/29/21 15:24	
2,2-Dichloropropane	0.50 U	0.50	1	11/29/21 15:24	
1,2-Dichloropropane	0.50 U	0.50	1	11/29/21 15:24	
1,3-Dichloropropane	0.50 U	0.50	1	11/29/21 15:24	
trans-1,3-Dichloropropene	0.50 U	0.50	1	11/29/21 15:24	
cis-1,3-Dichloropropene	0.50 U	0.50	1	11/29/21 15:24	
Ethylbenzene	0.50 U	0.50	1	11/29/21 15:24	
Hexachlorobutadiene	0.50 U	0.50	1	11/29/21 15:24	
Isopropylbenzene	0.50 U	0.50	1	11/29/21 15:24	
p-Isopropyltoluene	0.50 U	0.50	1	11/29/21 15:24	
Methylene Chloride	0.50 U	0.50	1	11/29/21 15:24	
Naphthalene	0.50 U	0.50	1	11/29/21 15:24	
n-Propylbenzene	0.50 U	0.50	1	11/29/21 15:24	
Styrene	0.50 U	0.50	1	11/29/21 15:24	

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Analytical Report

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

Service Request: R2112138
Date Collected: 11/16/21 10:30
Date Received: 11/17/21 10:25

Sample Name: WAL19Pre-1121
Lab Code: R2112138-003

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.50 U	0.50	1	11/29/21 15:24	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	1	11/29/21 15:24	
Tetrachloroethene	0.50 U	0.50	1	11/29/21 15:24	
Toluene	0.50 U	0.50	1	11/29/21 15:24	
1,2,4-Trichlorobenzene	0.50 U	0.50	1	11/29/21 15:24	
1,2,3-Trichlorobenzene	0.50 U	0.50	1	11/29/21 15:24	
1,1,2-Trichloroethane	0.50 U	0.50	1	11/29/21 15:24	
Trichloroethene	2.5	0.50	1	11/29/21 15:24	
Trichlorofluoromethane	0.50 U	0.50	1	11/29/21 15:24	
1,2,3-Trichloropropane	0.50 U	0.50	1	11/29/21 15:24	
1,3,5-Trimethylbenzene	0.50 U	0.50	1	11/29/21 15:24	
1,2,4-Trimethylbenzene	0.50 U	0.50	1	11/29/21 15:24	
Vinyl Chloride	0.50 U	0.50	1	11/29/21 15:24	
m,p-Xylenes	1.0 U	1.0	1	11/29/21 15:24	
o-Xylene	0.50 U	0.50	1	11/29/21 15:24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	70 - 130	11/29/21 15:24	
1,2-Dichlorobenzene-d4	88	70 - 130	11/29/21 15:24	



QC Summary Forms

ALS Environmental—Rochester Laboratory

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Volatile Organic Compounds by GC/MS

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QA/QC Report

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

Service Request: R2112138

SURROGATE RECOVERY SUMMARY
Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Sample Name	Lab Code	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
		70-130	70-130
WAL19Post-1121	R2112138-001	95	89
WAL19Inter-1121	R2112138-002	94	92
WAL19Pre-1121	R2112138-003	93	88
Method Blank	RQ2115347-05	95	90
Lab Control Sample	RQ2115347-03	110	99
Duplicate Lab Control Sample	RQ2115347-04	111	105

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Analytical Report

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

Service Request: R2112138
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2115347-05

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	11/29/21 13:41	
Bromobenzene	0.50 U	0.50	1	11/29/21 13:41	
Bromochloromethane	0.50 U	0.50	1	11/29/21 13:41	
Bromodichloromethane	0.50 U	0.50	1	11/29/21 13:41	
Bromoform	0.50 U	0.50	1	11/29/21 13:41	
Bromomethane	0.50 U	0.50	1	11/29/21 13:41	
Methyl tert-Butyl Ether	0.50 U	0.50	1	11/29/21 13:41	
tert-Butylbenzene	0.50 U	0.50	1	11/29/21 13:41	
sec-Butylbenzene	0.50 U	0.50	1	11/29/21 13:41	
n-Butylbenzene	0.50 U	0.50	1	11/29/21 13:41	
Carbon Tetrachloride	0.50 U	0.50	1	11/29/21 13:41	
Chlorobenzene	0.50 U	0.50	1	11/29/21 13:41	
Chloroethane	0.50 U	0.50	1	11/29/21 13:41	
Chloroform	0.50 U	0.50	1	11/29/21 13:41	
Chloromethane	0.50 U	0.50	1	11/29/21 13:41	
2-Chlorotoluene	0.50 U	0.50	1	11/29/21 13:41	
4-Chlorotoluene	0.50 U	0.50	1	11/29/21 13:41	
Dibromochloromethane	0.50 U	0.50	1	11/29/21 13:41	
Dibromomethane	0.50 U	0.50	1	11/29/21 13:41	
1,2-Dichlorobenzene	0.50 U	0.50	1	11/29/21 13:41	
1,4-Dichlorobenzene	0.50 U	0.50	1	11/29/21 13:41	
1,3-Dichlorobenzene	0.50 U	0.50	1	11/29/21 13:41	
Dichlorodifluoromethane	0.50 U	0.50	1	11/29/21 13:41	
1,1-Dichloroethane	0.50 U	0.50	1	11/29/21 13:41	
1,2-Dichloroethane	0.50 U	0.50	1	11/29/21 13:41	
1,1-Dichloroethene	0.50 U	0.50	1	11/29/21 13:41	
trans-1,2-Dichloroethene	0.50 U	0.50	1	11/29/21 13:41	
cis-1,2-Dichloroethene	0.50 U	0.50	1	11/29/21 13:41	
2,2-Dichloropropane	0.50 U	0.50	1	11/29/21 13:41	
1,2-Dichloropropane	0.50 U	0.50	1	11/29/21 13:41	
1,3-Dichloropropane	0.50 U	0.50	1	11/29/21 13:41	
trans-1,3-Dichloropropene	0.50 U	0.50	1	11/29/21 13:41	
cis-1,3-Dichloropropene	0.50 U	0.50	1	11/29/21 13:41	
Ethylbenzene	0.50 U	0.50	1	11/29/21 13:41	
Hexachlorobutadiene	0.50 U	0.50	1	11/29/21 13:41	
Isopropylbenzene	0.50 U	0.50	1	11/29/21 13:41	
p-Isopropyltoluene	0.50 U	0.50	1	11/29/21 13:41	
Methylene Chloride	0.50 U	0.50	1	11/29/21 13:41	
Naphthalene	0.50 U	0.50	1	11/29/21 13:41	
n-Propylbenzene	0.50 U	0.50	1	11/29/21 13:41	
Styrene	0.50 U	0.50	1	11/29/21 13:41	

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Analytical Report

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

Service Request: R2112138
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2115347-05

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.50 U	0.50	1	11/29/21 13:41	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	1	11/29/21 13:41	
Tetrachloroethene	0.50 U	0.50	1	11/29/21 13:41	
Toluene	0.50 U	0.50	1	11/29/21 13:41	
1,2,4-Trichlorobenzene	0.50 U	0.50	1	11/29/21 13:41	
1,2,3-Trichlorobenzene	0.50 U	0.50	1	11/29/21 13:41	
1,1,2-Trichloroethane	0.50 U	0.50	1	11/29/21 13:41	
Trichloroethene	0.50 U	0.50	1	11/29/21 13:41	
Trichlorofluoromethane	0.50 U	0.50	1	11/29/21 13:41	
1,2,3-Trichloropropane	0.50 U	0.50	1	11/29/21 13:41	
1,3,5-Trimethylbenzene	0.50 U	0.50	1	11/29/21 13:41	
1,2,4-Trimethylbenzene	0.50 U	0.50	1	11/29/21 13:41	
Vinyl Chloride	0.50 U	0.50	1	11/29/21 13:41	
m,p-Xylenes	1.0 U	1.0	1	11/29/21 13:41	
o-Xylene	0.50 U	0.50	1	11/29/21 13:41	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	70 - 130	11/29/21 13:41	
1,2-Dichlorobenzene-d4	90	70 - 130	11/29/21 13:41	

ALS Group USA, Corp.
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QA/QC Report

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

Service Request: R2112138
Date Analyzed: 11/29/21

Duplicate Lab Control Sample Summary
Purgeable Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample RQ2115347-03					Duplicate Lab Control Sample RQ2115347-04					
Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Benzene	524.2	5.65	5.00	113	5.36	5.00	107	70-130	5	20
Bromobenzene	524.2	5.86	5.00	117	5.48	5.00	110	70-130	7	20
Bromochloromethane	524.2	5.63	5.00	113	5.46	5.00	109	70-130	3	20
Bromodichloromethane	524.2	5.78	5.00	116	5.43	5.00	109	70-130	6	20
Bromoform	524.2	5.64	5.00	113	5.41	5.00	108	70-130	4	20
Bromomethane	524.2	4.87	5.00	97	4.69	5.00	94	70-130	4	20
Methyl tert-Butyl Ether	524.2	5.47	5.00	109	5.14	5.00	103	70-130	6	20
tert-Butylbenzene	524.2	5.97	5.00	119	5.52	5.00	110	70-130	8	20
sec-Butylbenzene	524.2	5.98	5.00	120	5.62	5.00	112	70-130	6	20
n-Butylbenzene	524.2	5.92	5.00	118	5.69	5.00	114	70-130	4	20
Carbon Tetrachloride	524.2	5.89	5.00	118	5.49	5.00	110	70-130	7	20
Chlorobenzene	524.2	5.77	5.00	115	5.30	5.00	106	70-130	8	20
Chloroethane	524.2	6.73	5.00	135 *	6.48	5.00	130	70-130	4	20
Chloroform	524.2	5.24	5.00	105	5.20	5.00	104	70-130	<1	20
Chloromethane	524.2	7.61	5.00	152 *	7.49	5.00	150 *	70-130	2	20
2-Chlorotoluene	524.2	5.92	5.00	118	5.41	5.00	108	70-130	9	20
4-Chlorotoluene	524.2	6.04	5.00	121	5.66	5.00	113	70-130	6	20
Dibromochloromethane	524.2	5.58	5.00	112	5.40	5.00	108	70-130	3	20
Dibromomethane	524.2	5.75	5.00	115	5.46	5.00	109	70-130	5	20
1,2-Dichlorobenzene	524.2	5.82	5.00	116	5.58	5.00	112	70-130	4	20
1,4-Dichlorobenzene	524.2	5.71	5.00	114	5.46	5.00	109	70-130	4	20
1,3-Dichlorobenzene	524.2	5.82	5.00	116	5.60	5.00	112	70-130	4	20
Dichlorodifluoromethane	524.2	6.54	5.00	131 *	5.73	5.00	115	70-130	13	20
1,1-Dichloroethane	524.2	5.81	5.00	116	5.51	5.00	110	70-130	5	20
1,2-Dichloroethane	524.2	5.78	5.00	116	5.46	5.00	109	70-130	6	20
1,1-Dichloroethene	524.2	5.80	5.00	116	5.43	5.00	109	70-130	7	20
trans-1,2-Dichloroethene	524.2	5.70	5.00	114	5.20	5.00	104	70-130	9	20
cis-1,2-Dichloroethene	524.2	5.92	5.00	118	5.31	5.00	106	70-130	11	20
2,2-Dichloropropane	524.2	6.40	5.00	128	6.27	5.00	125	70-130	2	20
1,2-Dichloropropane	524.2	5.91	5.00	118	5.47	5.00	109	70-130	8	20
1,3-Dichloropropane	524.2	5.79	5.00	116	5.45	5.00	109	70-130	6	20
trans-1,3-Dichloropropene	524.2	6.16	5.00	123	5.78	5.00	116	70-130	6	20
cis-1,3-Dichloropropene	524.2	6.04	5.00	121	5.86	5.00	117	70-130	3	20

Printed 12/1/2021 11:37:19 AM

Superset Reference:21-0000611492 rev 00

ALS Group USA, Corp.
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QA/QC Report

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

Service Request: R2112138
Date Analyzed: 11/29/21

Duplicate Lab Control Sample Summary
Purgeable Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample RQ2115347-03					Duplicate Lab Control Sample RQ2115347-04					
Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Ethylbenzene	524.2	5.86	5.00	117	5.71	5.00	114	70-130	3	20
Hexachlorobutadiene	524.2	6.26	5.00	125	5.98	5.00	120	70-130	5	20
Isopropylbenzene	524.2	5.94	5.00	119	5.65	5.00	113	70-130	5	20
p-Isopropyltoluene	524.2	5.88	5.00	118	5.52	5.00	110	70-130	6	20
Methylene Chloride	524.2	5.32	5.00	106	5.21	5.00	104	70-130	2	20
Naphthalene	524.2	5.34	5.00	107	5.30	5.00	106	70-130	<1	20
n-Propylbenzene	524.2	6.05	5.00	121	5.60	5.00	112	70-130	8	20
Styrene	524.2	5.74	5.00	115	5.36	5.00	107	70-130	7	20
1,1,1,2-Tetrachloroethane	524.2	5.83	5.00	117	5.48	5.00	110	70-130	6	20
1,1,2,2-Tetrachloroethane	524.2	5.72	5.00	114	5.59	5.00	112	70-130	2	20
Tetrachloroethene	524.2	5.70	5.00	114	5.58	5.00	112	70-130	2	20
Toluene	524.2	5.72	5.00	114	5.44	5.00	109	70-130	5	20
1,2,4-Trichlorobenzene	524.2	5.97	5.00	119	5.88	5.00	118	70-130	2	20
1,2,3-Trichlorobenzene	524.2	5.81	5.00	116	5.80	5.00	116	70-130	<1	20
1,1,2-Trichloroethane	524.2	5.63	5.00	113	5.55	5.00	111	70-130	1	20
Trichloroethene	524.2	5.62	5.00	112	5.33	5.00	107	70-130	5	20
Trichlorofluoromethane	524.2	5.89	5.00	118	5.54	5.00	111	70-130	6	20
1,2,3-Trichloropropane	524.2	5.65	5.00	113	5.27	5.00	105	70-130	7	20
1,3,5-Trimethylbenzene	524.2	5.84	5.00	117	5.54	5.00	111	70-130	5	20
1,2,4-Trimethylbenzene	524.2	5.72	5.00	114	5.62	5.00	112	70-130	2	20
Vinyl Chloride	524.2	6.72	5.00	134 *	6.46	5.00	129	70-130	4	20
m,p-Xylenes	524.2	11.9	10.0	119	11.1	10.0	111	70-130	6	20
o-Xylene	524.2	5.90	5.00	118	5.54	5.00	111	70-130	6	20



October 28, 2021

Service Request No:R2111061

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 21, 2021
For your reference, these analyses have been assigned our service request number **R2111061**.

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

Janice Jaeger
Project Manager

ADDRESS

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

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ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Rochester Laboratory

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

Service Request: R2111061
Date Received: 10/21/2021

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:

Six water samples were received for analysis at ALS Environmental on 10/21/2021. 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.

Volatiles by GC/MS:

Method 8260C, 10/26/2021: 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, 10/26/2021: The lower control limit for the spike recovery of the Laboratory Control Sample (LCS) was exceeded for one or more analyte, but passed in DLCS. There were no detections of the analyte(s) in the associated field samples. The analytes affected are flagged in the LCS Summary.

A handwritten signature in black ink, appearing to read "J. Amato".

Approved by _____

Date 10/28/2021

SAMPLE DETECTION SUMMARY

CLIENT ID: MW4D-1021	Lab ID: R2111061-001

Analyte	Results	Flag	MDL	MRL	Units	Method
Barium, Total	21			20	ug/L	6010C
Calcium, Total	23900			1000	ug/L	6010C
Iron, Total	630			100	ug/L	6010C
Magnesium, Total	19700			1000	ug/L	6010C
Manganese, Total	3150			10	ug/L	6010C
Potassium, Total	2400			2000	ug/L	6010C
Sodium, Total	5700			1000	ug/L	6010C
cis-1,2-Dichloroethene	190			10	ug/L	8260C
Vinyl Chloride	55			10	ug/L	8260C

CLIENT ID: MW3D-1021	Lab ID: R2111061-002

Analyte	Results	Flag	MDL	MRL	Units	Method
Barium, Total	110			20	ug/L	6010C
Calcium, Total	70100			1000	ug/L	6010C
Magnesium, Total	36300			1000	ug/L	6010C
Manganese, Total	22			10	ug/L	6010C
Potassium, Total	2400			2000	ug/L	6010C
Sodium, Total	16900			1000	ug/L	6010C
cis-1,2-Dichloroethene	7.0			5.0	ug/L	8260C

CLIENT ID: MW11S-1021	Lab ID: R2111061-003

Analyte	Results	Flag	MDL	MRL	Units	Method
Barium, Total	27			20	ug/L	6010C
Calcium, Total	55300			1000	ug/L	6010C
Iron, Total	110			100	ug/L	6010C
Magnesium, Total	33700			1000	ug/L	6010C
Manganese, Total	758			10	ug/L	6010C
Sodium, Total	21400			1000	ug/L	6010C
cis-1,2-Dichloroethene	250			100	ug/L	8260C
Trichloroethene	2800			100	ug/L	8260C

CLIENT ID: MW18D-1021	Lab ID: R2111061-004

Analyte	Results	Flag	MDL	MRL	Units	Method
Barium, Total	67			20	ug/L	6010C
Calcium, Total	43000			1000	ug/L	6010C
Iron, Total	13600			100	ug/L	6010C
Magnesium, Total	16500			1000	ug/L	6010C
Manganese, Total	635			10	ug/L	6010C
Potassium, Total	2700			2000	ug/L	6010C
Sodium, Total	20400			1000	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: MW18S-1021	Lab ID: R2111061-005

Analyte	Results	Flag	MDL	MRL	Units	Method
Barium, Total	48			20	ug/L	6010C
Calcium, Total	40100			1000	ug/L	6010C
Iron, Total	610			100	ug/L	6010C
Magnesium, Total	14400			1000	ug/L	6010C
Manganese, Total	79			10	ug/L	6010C
Potassium, Total	2000			2000	ug/L	6010C
Sodium, Total	4300			1000	ug/L	6010C

CLIENT ID: LS1-1021	Lab ID: R2111061-006

Analyte	Results	Flag	MDL	MRL	Units	Method
Barium, Total	66			20	ug/L	6010C
Calcium, Total	81100			1000	ug/L	6010C
Iron, Total	2130			100	ug/L	6010C
Magnesium, Total	18200			1000	ug/L	6010C
Manganese, Total	2080			10	ug/L	6010C
Potassium, Total	2300			2000	ug/L	6010C
Sodium, Total	6600			1000	ug/L	6010C
cis-1,2-Dichloroethene	470			13	ug/L	8260C
Vinyl Chloride	15			13	ug/L	8260C



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:R2111061

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2111061-001	MW4D-1021	10/20/2021	1150
R2111061-002	MW3D-1021	10/20/2021	1310
R2111061-003	MW11S-1021	10/20/2021	1435
R2111061-004	MW18D-1021	10/21/2021	0915
R2111061-005	MW18S-1021	10/21/2021	1035
R2111061-006	LS1-1021	10/21/2021	1115



Cooler Receipt and Preservation Check

R2111061
On-Site Technical Services, Inc.
WAL - Annual Sampling

5

Project/Client On-site

Folder Number _____

Cooler received on 10/21/21by: MMCOURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	Y <u>N</u>	5a	Perchlorate samples have required headspace?	Y <u>N</u> <u>NA</u>
2	Custody papers properly completed (ink, signed)?	<u>Y</u> <u>N</u>	5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	Y <u>N</u> <u>NA</u>
3	Did all bottles arrive in good condition (unbroken)?	<u>Y</u> <u>N</u>	6	Where did the bottles originate?	<u>ALS/ROC</u> <u>CLIENT</u>
4	Circle: <u>Wet Ice</u> Dry Ice Gel packs present?	<u>Y</u> <u>N</u>	7	Soil VOA received as: Bulk Encore 5035set	<u>NA</u>

8. Temperature Readings Date 10/21/21 Time: 13:08 ID: IR#7 IR#11 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>4.8</u>						
Within 0-6°C?	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>
If <0°C, were samples frozen?	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>	<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: R1002 by MM on 10/21/21 at 13:15
 5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 10/22/21 Time: 12:30 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
 13. 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>223419</u>	HNO ₃	<u>X</u>		<u>11d0121</u>	<u>07/22</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>No let info</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: 21-08-19 2596
 Explain all Discrepancies/ Other Comments: _____

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: MEPC Secondary Review: MM 10/25/21 *significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter



Miscellaneous Forms

ALS Environmental—Rochester Laboratory

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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: R2111061

Sample Name: MW4D-1021
Lab Code: R2111061-001
Sample Matrix: Water

Date Collected: 10/20/21
Date Received: 10/21/21

Analysis Method
6010C
8260C

Extracted/Digested By
BDIAMOND

Analyzed By
KMCLAEN
AMOSEs

Sample Name: MW3D-1021
Lab Code: R2111061-002
Sample Matrix: Water

Date Collected: 10/20/21
Date Received: 10/21/21

Analysis Method
6010C
8260C

Extracted/Digested By
BDIAMOND

Analyzed By
KMCLAEN
AMOSEs

Sample Name: MW11S-1021
Lab Code: R2111061-003
Sample Matrix: Water

Date Collected: 10/20/21
Date Received: 10/21/21

Analysis Method
6010C
8260C

Extracted/Digested By
BDIAMOND

Analyzed By
KMCLAEN
AMOSEs

Sample Name: MW18D-1021
Lab Code: R2111061-004
Sample Matrix: Water

Date Collected: 10/21/21
Date Received: 10/21/21

Analysis Method
6010C
8260C

Extracted/Digested By
BDIAMOND

Analyzed By
KMCLAEN
AMOSEs

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

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

Service Request: R2111061

Sample Name: MW18S-1021
Lab Code: R2111061-005
Sample Matrix: Water

Date Collected: 10/21/21
Date Received: 10/21/21

Analysis Method
6010C
8260C

Extracted/Digested By
BDIAMOND

Analyzed By
KMCLAEN
AMOSSES

Sample Name: LS1-1021
Lab Code: R2111061-006
Sample Matrix: Water

Date Collected: 10/21/21
Date Received: 10/21/21

Analysis Method
6010C
8260C

Extracted/Digested By
BDIAMOND

Analyzed By
KMCLAEN
AMOSSES



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.	



Sample Results

ALS Environmental—Rochester Laboratory

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Volatile Organic Compounds by GC/MS

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111061
Date Collected: 10/20/21 11:50
Date Received: 10/21/21 13:05

Sample Name: MW4D-1021
Lab Code: R2111061-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	20 U	20	2	10/26/21 19:45	
Benzene	10 U	10	2	10/26/21 19:45	
Bromodichloromethane	10 U	10	2	10/26/21 19:45	
Bromoform	10 U	10	2	10/26/21 19:45	
Bromomethane	10 U	10	2	10/26/21 19:45	
2-Butanone (MEK)	20 U	20	2	10/26/21 19:45	
Carbon Disulfide	20 U	20	2	10/26/21 19:45	
Carbon Tetrachloride	10 U	10	2	10/26/21 19:45	
Chlorobenzene	10 U	10	2	10/26/21 19:45	
Chloroethane	10 U	10	2	10/26/21 19:45	
Chloroform	10 U	10	2	10/26/21 19:45	
Chloromethane	10 U	10	2	10/26/21 19:45	
Dibromochloromethane	10 U	10	2	10/26/21 19:45	
1,1-Dichloroethane	10 U	10	2	10/26/21 19:45	
1,2-Dibromoethane	10 U	10	2	10/26/21 19:45	
1,2-Dichloroethane	10 U	10	2	10/26/21 19:45	
1,1-Dichloroethene	10 U	10	2	10/26/21 19:45	
cis-1,2-Dichloroethene	190	10	2	10/26/21 19:45	
trans-1,2-Dichloroethene	10 U	10	2	10/26/21 19:45	
1,2-Dichloropropane	10 U	10	2	10/26/21 19:45	
cis-1,3-Dichloropropene	10 U	10	2	10/26/21 19:45	
trans-1,3-Dichloropropene	10 U	10	2	10/26/21 19:45	
Ethylbenzene	10 U	10	2	10/26/21 19:45	
2-Hexanone	20 U	20	2	10/26/21 19:45	
Methylene Chloride	10 U	10	2	10/26/21 19:45	
4-Methyl-2-pentanone (MIBK)	20 U	20	2	10/26/21 19:45	
Styrene	10 U	10	2	10/26/21 19:45	
1,1,2,2-Tetrachloroethane	10 U	10	2	10/26/21 19:45	
Tetrachloroethene	10 U	10	2	10/26/21 19:45	
Toluene	10 U	10	2	10/26/21 19:45	
1,1,1-Trichloroethane	10 U	10	2	10/26/21 19:45	
1,1,2-Trichloroethane	10 U	10	2	10/26/21 19:45	
Trichloroethene	10 U	10	2	10/26/21 19:45	
Vinyl Chloride	55	10	2	10/26/21 19:45	
o-Xylene	10 U	10	2	10/26/21 19:45	
m,p-Xylenes	10 U	10	2	10/26/21 19:45	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111061
Date Collected: 10/20/21 11:50
Date Received: 10/21/21 13:05

Sample Name: MW4D-1021
Lab Code: R2111061-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	10/26/21 19:45	
Toluene-d8	104	87 - 121	10/26/21 19:45	
Dibromofluoromethane	106	80 - 116	10/26/21 19:45	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111061
Date Collected: 10/20/21 13:10
Date Received: 10/21/21 13:05

Sample Name: MW3D-1021
Lab Code: R2111061-002

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	10 U	10	1	10/26/21 18:39	
Benzene	5.0 U	5.0	1	10/26/21 18:39	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 18:39	
Bromoform	5.0 U	5.0	1	10/26/21 18:39	
Bromomethane	5.0 U	5.0	1	10/26/21 18:39	
2-Butanone (MEK)	10 U	10	1	10/26/21 18:39	
Carbon Disulfide	10 U	10	1	10/26/21 18:39	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 18:39	
Chlorobenzene	5.0 U	5.0	1	10/26/21 18:39	
Chloroethane	5.0 U	5.0	1	10/26/21 18:39	
Chloroform	5.0 U	5.0	1	10/26/21 18:39	
Chloromethane	5.0 U	5.0	1	10/26/21 18:39	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 18:39	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 18:39	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 18:39	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 18:39	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 18:39	
cis-1,2-Dichloroethene	7.0	5.0	1	10/26/21 18:39	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 18:39	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 18:39	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 18:39	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 18:39	
Ethylbenzene	5.0 U	5.0	1	10/26/21 18:39	
2-Hexanone	10 U	10	1	10/26/21 18:39	
Methylene Chloride	5.0 U	5.0	1	10/26/21 18:39	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 18:39	
Styrene	5.0 U	5.0	1	10/26/21 18:39	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 18:39	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 18:39	
Toluene	5.0 U	5.0	1	10/26/21 18:39	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 18:39	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 18:39	
Trichloroethene	5.0 U	5.0	1	10/26/21 18:39	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 18:39	
o-Xylene	5.0 U	5.0	1	10/26/21 18:39	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 18:39	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111061
Date Collected: 10/20/21 13:10
Date Received: 10/21/21 13:05

Sample Name: MW3D-1021
Lab Code: R2111061-002

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	10/26/21 18:39	
Toluene-d8	103	87 - 121	10/26/21 18:39	
Dibromofluoromethane	103	80 - 116	10/26/21 18:39	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111061
Date Collected: 10/20/21 14:35
Date Received: 10/21/21 13:05

Sample Name: MW11S-1021
Lab Code: R2111061-003

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	200 U	200	20	10/26/21 20:07	
Benzene	100 U	100	20	10/26/21 20:07	
Bromodichloromethane	100 U	100	20	10/26/21 20:07	
Bromoform	100 U	100	20	10/26/21 20:07	
Bromomethane	100 U	100	20	10/26/21 20:07	
2-Butanone (MEK)	200 U	200	20	10/26/21 20:07	
Carbon Disulfide	200 U	200	20	10/26/21 20:07	
Carbon Tetrachloride	100 U	100	20	10/26/21 20:07	
Chlorobenzene	100 U	100	20	10/26/21 20:07	
Chloroethane	100 U	100	20	10/26/21 20:07	
Chloroform	100 U	100	20	10/26/21 20:07	
Chloromethane	100 U	100	20	10/26/21 20:07	
Dibromochloromethane	100 U	100	20	10/26/21 20:07	
1,1-Dichloroethane	100 U	100	20	10/26/21 20:07	
1,2-Dibromoethane	100 U	100	20	10/26/21 20:07	
1,2-Dichloroethane	100 U	100	20	10/26/21 20:07	
1,1-Dichloroethene	100 U	100	20	10/26/21 20:07	
cis-1,2-Dichloroethene	250	100	20	10/26/21 20:07	
trans-1,2-Dichloroethene	100 U	100	20	10/26/21 20:07	
1,2-Dichloropropane	100 U	100	20	10/26/21 20:07	
cis-1,3-Dichloropropene	100 U	100	20	10/26/21 20:07	
trans-1,3-Dichloropropene	100 U	100	20	10/26/21 20:07	
Ethylbenzene	100 U	100	20	10/26/21 20:07	
2-Hexanone	200 U	200	20	10/26/21 20:07	
Methylene Chloride	100 U	100	20	10/26/21 20:07	
4-Methyl-2-pentanone (MIBK)	200 U	200	20	10/26/21 20:07	
Styrene	100 U	100	20	10/26/21 20:07	
1,1,2,2-Tetrachloroethane	100 U	100	20	10/26/21 20:07	
Tetrachloroethene	100 U	100	20	10/26/21 20:07	
Toluene	100 U	100	20	10/26/21 20:07	
1,1,1-Trichloroethane	100 U	100	20	10/26/21 20:07	
1,1,2-Trichloroethane	100 U	100	20	10/26/21 20:07	
Trichloroethene	2800	100	20	10/26/21 20:07	
Vinyl Chloride	100 U	100	20	10/26/21 20:07	
o-Xylene	100 U	100	20	10/26/21 20:07	
m,p-Xylenes	100 U	100	20	10/26/21 20:07	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111061
Date Collected: 10/20/21 14:35
Date Received: 10/21/21 13:05

Sample Name: MW11S-1021
Lab Code: R2111061-003

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	10/26/21 20:07	
Toluene-d8	103	87 - 121	10/26/21 20:07	
Dibromofluoromethane	104	80 - 116	10/26/21 20:07	

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Analytical Report

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

Service Request: R2111061
Date Collected: 10/21/21 09:15
Date Received: 10/21/21 13:05

Sample Name: MW18D-1021
Lab Code: R2111061-004

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	10 U	10	1	10/26/21 19:01	
Benzene	5.0 U	5.0	1	10/26/21 19:01	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 19:01	
Bromoform	5.0 U	5.0	1	10/26/21 19:01	
Bromomethane	5.0 U	5.0	1	10/26/21 19:01	
2-Butanone (MEK)	10 U	10	1	10/26/21 19:01	
Carbon Disulfide	10 U	10	1	10/26/21 19:01	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 19:01	
Chlorobenzene	5.0 U	5.0	1	10/26/21 19:01	
Chloroethane	5.0 U	5.0	1	10/26/21 19:01	
Chloroform	5.0 U	5.0	1	10/26/21 19:01	
Chloromethane	5.0 U	5.0	1	10/26/21 19:01	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 19:01	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 19:01	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 19:01	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 19:01	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 19:01	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 19:01	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 19:01	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 19:01	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 19:01	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 19:01	
Ethylbenzene	5.0 U	5.0	1	10/26/21 19:01	
2-Hexanone	10 U	10	1	10/26/21 19:01	
Methylene Chloride	5.0 U	5.0	1	10/26/21 19:01	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 19:01	
Styrene	5.0 U	5.0	1	10/26/21 19:01	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 19:01	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 19:01	
Toluene	5.0 U	5.0	1	10/26/21 19:01	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 19:01	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 19:01	
Trichloroethene	5.0 U	5.0	1	10/26/21 19:01	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 19:01	
o-Xylene	5.0 U	5.0	1	10/26/21 19:01	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 19:01	

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Analytical Report

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

Service Request: R2111061
Date Collected: 10/21/21 09:15
Date Received: 10/21/21 13:05

Sample Name: MW18D-1021
Lab Code: R2111061-004

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	10/26/21 19:01	
Toluene-d8	100	87 - 121	10/26/21 19:01	
Dibromofluoromethane	101	80 - 116	10/26/21 19:01	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111061
Date Collected: 10/21/21 10:35
Date Received: 10/21/21 13:05

Sample Name: MW18S-1021
Lab Code: R2111061-005

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	10 U	10	1	10/26/21 19:23	
Benzene	5.0 U	5.0	1	10/26/21 19:23	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 19:23	
Bromoform	5.0 U	5.0	1	10/26/21 19:23	
Bromomethane	5.0 U	5.0	1	10/26/21 19:23	
2-Butanone (MEK)	10 U	10	1	10/26/21 19:23	
Carbon Disulfide	10 U	10	1	10/26/21 19:23	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 19:23	
Chlorobenzene	5.0 U	5.0	1	10/26/21 19:23	
Chloroethane	5.0 U	5.0	1	10/26/21 19:23	
Chloroform	5.0 U	5.0	1	10/26/21 19:23	
Chloromethane	5.0 U	5.0	1	10/26/21 19:23	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 19:23	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 19:23	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 19:23	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 19:23	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 19:23	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 19:23	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 19:23	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 19:23	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 19:23	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 19:23	
Ethylbenzene	5.0 U	5.0	1	10/26/21 19:23	
2-Hexanone	10 U	10	1	10/26/21 19:23	
Methylene Chloride	5.0 U	5.0	1	10/26/21 19:23	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 19:23	
Styrene	5.0 U	5.0	1	10/26/21 19:23	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 19:23	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 19:23	
Toluene	5.0 U	5.0	1	10/26/21 19:23	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 19:23	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 19:23	
Trichloroethene	5.0 U	5.0	1	10/26/21 19:23	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 19:23	
o-Xylene	5.0 U	5.0	1	10/26/21 19:23	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 19:23	

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Analytical Report

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

Service Request: R2111061
Date Collected: 10/21/21 10:35
Date Received: 10/21/21 13:05

Sample Name: MW18S-1021
Lab Code: R2111061-005

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	10/26/21 19:23	
Toluene-d8	102	87 - 121	10/26/21 19:23	
Dibromofluoromethane	100	80 - 116	10/26/21 19:23	

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Analytical Report

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

Service Request: R2111061
Date Collected: 10/21/21 11:15
Date Received: 10/21/21 13:05

Sample Name: LS1-1021
Lab Code: R2111061-006

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	25 U	25	2.5	10/26/21 20:29	
Benzene	13 U	13	2.5	10/26/21 20:29	
Bromodichloromethane	13 U	13	2.5	10/26/21 20:29	
Bromoform	13 U	13	2.5	10/26/21 20:29	
Bromomethane	13 U	13	2.5	10/26/21 20:29	
2-Butanone (MEK)	25 U	25	2.5	10/26/21 20:29	
Carbon Disulfide	25 U	25	2.5	10/26/21 20:29	
Carbon Tetrachloride	13 U	13	2.5	10/26/21 20:29	
Chlorobenzene	13 U	13	2.5	10/26/21 20:29	
Chloroethane	13 U	13	2.5	10/26/21 20:29	
Chloroform	13 U	13	2.5	10/26/21 20:29	
Chloromethane	13 U	13	2.5	10/26/21 20:29	
Dibromochloromethane	13 U	13	2.5	10/26/21 20:29	
1,1-Dichloroethane	13 U	13	2.5	10/26/21 20:29	
1,2-Dibromoethane	13 U	13	2.5	10/26/21 20:29	
1,2-Dichloroethane	13 U	13	2.5	10/26/21 20:29	
1,1-Dichloroethene	13 U	13	2.5	10/26/21 20:29	
cis-1,2-Dichloroethene	470	13	2.5	10/26/21 20:29	
trans-1,2-Dichloroethene	13 U	13	2.5	10/26/21 20:29	
1,2-Dichloropropane	13 U	13	2.5	10/26/21 20:29	
cis-1,3-Dichloropropene	13 U	13	2.5	10/26/21 20:29	
trans-1,3-Dichloropropene	13 U	13	2.5	10/26/21 20:29	
Ethylbenzene	13 U	13	2.5	10/26/21 20:29	
2-Hexanone	25 U	25	2.5	10/26/21 20:29	
Methylene Chloride	13 U	13	2.5	10/26/21 20:29	
4-Methyl-2-pentanone (MIBK)	25 U	25	2.5	10/26/21 20:29	
Styrene	13 U	13	2.5	10/26/21 20:29	
1,1,2,2-Tetrachloroethane	13 U	13	2.5	10/26/21 20:29	
Tetrachloroethene	13 U	13	2.5	10/26/21 20:29	
Toluene	13 U	13	2.5	10/26/21 20:29	
1,1,1-Trichloroethane	13 U	13	2.5	10/26/21 20:29	
1,1,2-Trichloroethane	13 U	13	2.5	10/26/21 20:29	
Trichloroethene	13 U	13	2.5	10/26/21 20:29	
Vinyl Chloride	15	13	2.5	10/26/21 20:29	
o-Xylene	13 U	13	2.5	10/26/21 20:29	
m,p-Xylenes	13 U	13	2.5	10/26/21 20:29	

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Analytical Report

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

Service Request: R2111061
Date Collected: 10/21/21 11:15
Date Received: 10/21/21 13:05

Sample Name: LS1-1021
Lab Code: R2111061-006

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	85 - 122	10/26/21 20:29	
Toluene-d8	105	87 - 121	10/26/21 20:29	
Dibromofluoromethane	105	80 - 116	10/26/21 20:29	



Metals

ALS Environmental—Rochester Laboratory

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Analytical Report

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

Service Request: R2111061
Date Collected: 10/20/21 11:50
Date Received: 10/21/21 13:05

Sample Name: MW4D-1021
Lab Code: R2111061-001

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	10/27/21 01:42	10/25/21	
Barium, Total	6010C	21	ug/L	20	1	10/27/21 01:42	10/25/21	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	10/27/21 01:42	10/25/21	
Calcium, Total	6010C	23900	ug/L	1000	1	10/27/21 01:42	10/25/21	
Chromium, Total	6010C	10 U	ug/L	10	1	10/27/21 01:42	10/25/21	
Copper, Total	6010C	20 U	ug/L	20	1	10/27/21 01:42	10/25/21	
Iron, Total	6010C	630	ug/L	100	1	10/27/21 01:42	10/25/21	
Lead, Total	6010C	50 U	ug/L	50	1	10/27/21 01:42	10/25/21	
Magnesium, Total	6010C	19700	ug/L	1000	1	10/27/21 01:42	10/25/21	
Manganese, Total	6010C	3150	ug/L	10	1	10/27/21 01:42	10/25/21	
Nickel, Total	6010C	40 U	ug/L	40	1	10/27/21 01:42	10/25/21	
Potassium, Total	6010C	2400	ug/L	2000	1	10/27/21 01:42	10/25/21	
Selenium, Total	6010C	10 U	ug/L	10	1	10/27/21 01:42	10/25/21	
Sodium, Total	6010C	5700	ug/L	1000	1	10/27/21 01:42	10/25/21	
Zinc, Total	6010C	20 U	ug/L	20	1	10/27/21 01:42	10/25/21	

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Analytical Report

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

Service Request: R2111061
Date Collected: 10/20/21 13:10
Date Received: 10/21/21 13:05

Sample Name: MW3D-1021
Lab Code: R2111061-002

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	10/27/21 01:45	10/25/21	
Barium, Total	6010C	110	ug/L	20	1	10/27/21 01:45	10/25/21	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	10/27/21 01:45	10/25/21	
Calcium, Total	6010C	70100	ug/L	1000	1	10/27/21 01:45	10/25/21	
Chromium, Total	6010C	10 U	ug/L	10	1	10/27/21 01:45	10/25/21	
Copper, Total	6010C	20 U	ug/L	20	1	10/27/21 01:45	10/25/21	
Iron, Total	6010C	100 U	ug/L	100	1	10/27/21 01:45	10/25/21	
Lead, Total	6010C	50 U	ug/L	50	1	10/27/21 01:45	10/25/21	
Magnesium, Total	6010C	36300	ug/L	1000	1	10/27/21 01:45	10/25/21	
Manganese, Total	6010C	22	ug/L	10	1	10/27/21 01:45	10/25/21	
Nickel, Total	6010C	40 U	ug/L	40	1	10/27/21 01:45	10/25/21	
Potassium, Total	6010C	2400	ug/L	2000	1	10/27/21 01:45	10/25/21	
Selenium, Total	6010C	10 U	ug/L	10	1	10/27/21 01:45	10/25/21	
Sodium, Total	6010C	16900	ug/L	1000	1	10/27/21 01:45	10/25/21	
Zinc, Total	6010C	20 U	ug/L	20	1	10/27/21 01:45	10/25/21	

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Analytical Report

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

Service Request: R2111061
Date Collected: 10/20/21 14:35
Date Received: 10/21/21 13:05

Sample Name: MW11S-1021
Lab Code: R2111061-003

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	10/27/21 01:48	10/25/21	
Barium, Total	6010C	27	ug/L	20	1	10/27/21 01:48	10/25/21	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	10/27/21 01:48	10/25/21	
Calcium, Total	6010C	55300	ug/L	1000	1	10/27/21 01:48	10/25/21	
Chromium, Total	6010C	10 U	ug/L	10	1	10/27/21 01:48	10/25/21	
Copper, Total	6010C	20 U	ug/L	20	1	10/27/21 01:48	10/25/21	
Iron, Total	6010C	110	ug/L	100	1	10/27/21 01:48	10/25/21	
Lead, Total	6010C	50 U	ug/L	50	1	10/27/21 01:48	10/25/21	
Magnesium, Total	6010C	33700	ug/L	1000	1	10/27/21 01:48	10/25/21	
Manganese, Total	6010C	758	ug/L	10	1	10/27/21 01:48	10/25/21	
Nickel, Total	6010C	40 U	ug/L	40	1	10/27/21 01:48	10/25/21	
Potassium, Total	6010C	2000 U	ug/L	2000	1	10/27/21 01:48	10/25/21	
Selenium, Total	6010C	10 U	ug/L	10	1	10/27/21 01:48	10/25/21	
Sodium, Total	6010C	21400	ug/L	1000	1	10/27/21 01:48	10/25/21	
Zinc, Total	6010C	20 U	ug/L	20	1	10/27/21 01:48	10/25/21	

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Analytical Report

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

Service Request: R2111061
Date Collected: 10/21/21 09:15
Date Received: 10/21/21 13:05

Sample Name: MW18D-1021
Lab Code: R2111061-004

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	10/27/21 01:51	10/25/21	
Barium, Total	6010C	67	ug/L	20	1	10/27/21 01:51	10/25/21	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	10/27/21 01:51	10/25/21	
Calcium, Total	6010C	43000	ug/L	1000	1	10/27/21 01:51	10/25/21	
Chromium, Total	6010C	10 U	ug/L	10	1	10/27/21 01:51	10/25/21	
Copper, Total	6010C	20 U	ug/L	20	1	10/27/21 01:51	10/25/21	
Iron, Total	6010C	13600	ug/L	100	1	10/27/21 01:51	10/25/21	
Lead, Total	6010C	50 U	ug/L	50	1	10/27/21 01:51	10/25/21	
Magnesium, Total	6010C	16500	ug/L	1000	1	10/27/21 01:51	10/25/21	
Manganese, Total	6010C	635	ug/L	10	1	10/27/21 01:51	10/25/21	
Nickel, Total	6010C	40 U	ug/L	40	1	10/27/21 01:51	10/25/21	
Potassium, Total	6010C	2700	ug/L	2000	1	10/27/21 01:51	10/25/21	
Selenium, Total	6010C	10 U	ug/L	10	1	10/27/21 01:51	10/25/21	
Sodium, Total	6010C	20400	ug/L	1000	1	10/27/21 01:51	10/25/21	
Zinc, Total	6010C	20 U	ug/L	20	1	10/27/21 01:51	10/25/21	

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Analytical Report

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

Service Request: R2111061
Date Collected: 10/21/21 10:35
Date Received: 10/21/21 13:05

Sample Name: MW18S-1021
Lab Code: R2111061-005

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	10/27/21 01:55	10/25/21	
Barium, Total	6010C	48	ug/L	20	1	10/27/21 01:55	10/25/21	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	10/27/21 01:55	10/25/21	
Calcium, Total	6010C	40100	ug/L	1000	1	10/27/21 01:55	10/25/21	
Chromium, Total	6010C	10 U	ug/L	10	1	10/27/21 01:55	10/25/21	
Copper, Total	6010C	20 U	ug/L	20	1	10/27/21 01:55	10/25/21	
Iron, Total	6010C	610	ug/L	100	1	10/27/21 01:55	10/25/21	
Lead, Total	6010C	50 U	ug/L	50	1	10/27/21 01:55	10/25/21	
Magnesium, Total	6010C	14400	ug/L	1000	1	10/27/21 01:55	10/25/21	
Manganese, Total	6010C	79	ug/L	10	1	10/27/21 01:55	10/25/21	
Nickel, Total	6010C	40 U	ug/L	40	1	10/27/21 01:55	10/25/21	
Potassium, Total	6010C	2000	ug/L	2000	1	10/27/21 01:55	10/25/21	
Selenium, Total	6010C	10 U	ug/L	10	1	10/27/21 01:55	10/25/21	
Sodium, Total	6010C	4300	ug/L	1000	1	10/27/21 01:55	10/25/21	
Zinc, Total	6010C	20 U	ug/L	20	1	10/27/21 01:55	10/25/21	

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Analytical Report

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

Service Request: R2111061
Date Collected: 10/21/21 11:15
Date Received: 10/21/21 13:05

Sample Name: LS1-1021
Lab Code: R2111061-006

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	10/27/21 01:58	10/25/21	
Barium, Total	6010C	66	ug/L	20	1	10/27/21 01:58	10/25/21	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	10/27/21 01:58	10/25/21	
Calcium, Total	6010C	81100	ug/L	1000	1	10/27/21 01:58	10/25/21	
Chromium, Total	6010C	10 U	ug/L	10	1	10/27/21 01:58	10/25/21	
Copper, Total	6010C	20 U	ug/L	20	1	10/27/21 01:58	10/25/21	
Iron, Total	6010C	2130	ug/L	100	1	10/27/21 01:58	10/25/21	
Lead, Total	6010C	50 U	ug/L	50	1	10/27/21 01:58	10/25/21	
Magnesium, Total	6010C	18200	ug/L	1000	1	10/27/21 01:58	10/25/21	
Manganese, Total	6010C	2080	ug/L	10	1	10/27/21 01:58	10/25/21	
Nickel, Total	6010C	40 U	ug/L	40	1	10/27/21 01:58	10/25/21	
Potassium, Total	6010C	2300	ug/L	2000	1	10/27/21 01:58	10/25/21	
Selenium, Total	6010C	10 U	ug/L	10	1	10/27/21 01:58	10/25/21	
Sodium, Total	6010C	6600	ug/L	1000	1	10/27/21 01:58	10/25/21	
Zinc, Total	6010C	20 U	ug/L	20	1	10/27/21 01:58	10/25/21	



QC Summary Forms

ALS Environmental—Rochester Laboratory

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Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

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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: R2111061

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Sample Name	Lab Code	4-Bromofluorobenzene	Toluene-d8	Dibromofluoromethane
		85-122	87-121	80-116
MW4D-1021	R2111061-001	98	104	106
MW3D-1021	R2111061-002	95	103	103
MW11S-1021	R2111061-003	99	103	104
MW18D-1021	R2111061-004	99	100	101
MW18S-1021	R2111061-005	97	102	100
LS1-1021	R2111061-006	100	105	105
Method Blank	RQ2113642-05	98	102	104
Lab Control Sample	RQ2113642-03	96	98	101
Duplicate Lab Control Sample	RQ2113642-04	98	98	103

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111061
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2113642-05

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
Acetone	10 U	10	1	10/26/21 13:34	
Benzene	5.0 U	5.0	1	10/26/21 13:34	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 13:34	
Bromoform	5.0 U	5.0	1	10/26/21 13:34	
Bromomethane	5.0 U	5.0	1	10/26/21 13:34	
2-Butanone (MEK)	10 U	10	1	10/26/21 13:34	
Carbon Disulfide	10 U	10	1	10/26/21 13:34	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 13:34	
Chlorobenzene	5.0 U	5.0	1	10/26/21 13:34	
Chloroethane	5.0 U	5.0	1	10/26/21 13:34	
Chloroform	5.0 U	5.0	1	10/26/21 13:34	
Chloromethane	5.0 U	5.0	1	10/26/21 13:34	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 13:34	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 13:34	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 13:34	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 13:34	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 13:34	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 13:34	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 13:34	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 13:34	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 13:34	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 13:34	
Ethylbenzene	5.0 U	5.0	1	10/26/21 13:34	
2-Hexanone	10 U	10	1	10/26/21 13:34	
Methylene Chloride	5.0 U	5.0	1	10/26/21 13:34	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 13:34	
Styrene	5.0 U	5.0	1	10/26/21 13:34	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 13:34	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 13:34	
Toluene	5.0 U	5.0	1	10/26/21 13:34	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 13:34	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 13:34	
Trichloroethene	5.0 U	5.0	1	10/26/21 13:34	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 13:34	
o-Xylene	5.0 U	5.0	1	10/26/21 13:34	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 13:34	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2111061
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2113642-05

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	10/26/21 13:34	
Toluene-d8	102	87 - 121	10/26/21 13:34	
Dibromofluoromethane	104	80 - 116	10/26/21 13:34	

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: R2111061
Date Analyzed: 10/26/21

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample RQ2113642-03					Duplicate Lab Control Sample RQ2113642-04					
Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Acetone	8260C	20.1	20.0	101	21.1	20.0	105	40-161	5	30
Benzene	8260C	20.6	20.0	103	18.0	20.0	90	79-119	14	30
Bromodichloromethane	8260C	19.5	20.0	97	17.0	20.0	85	81-123	14	30
Bromoform	8260C	18.9	20.0	94	16.4	20.0	82	65-146	14	30
Bromomethane	8260C	11.2	20.0	56	10.4	20.0	52	42-166	7	30
2-Butanone (MEK)	8260C	25.7	20.0	128	24.8	20.0	124	61-137	3	30
Carbon Disulfide	8260C	21.8	20.0	109	21.4	20.0	107	66-128	2	30
Carbon Tetrachloride	8260C	17.4	20.0	87	15.0	20.0	75	70-127	15	30
Chlorobenzene	8260C	19.5	20.0	98	17.9	20.0	89	80-121	9	30
Chloroethane	8260C	18.7	20.0	94	17.2	20.0	86	62-131	8	30
Chloroform	8260C	19.5	20.0	98	17.7	20.0	88	79-120	10	30
Chloromethane	8260C	29.9	20.0	150 *	25.9	20.0	130	65-135	14	30
Dibromochloromethane	8260C	18.8	20.0	94	16.4	20.0	82	72-128	14	30
1,1-Dichloroethane	8260C	21.7	20.0	109	19.3	20.0	96	80-124	12	30
1,2-Dibromoethane	8260C	20.0	20.0	100	17.5	20.0	87	82-127	13	30
1,2-Dichloroethane	8260C	20.7	20.0	103	18.8	20.0	94	71-127	9	30
1,1-Dichloroethene	8260C	20.0	20.0	100	17.9	20.0	89	71-118	11	30
cis-1,2-Dichloroethene	8260C	19.7	20.0	98	17.8	20.0	89	80-121	10	30
trans-1,2-Dichloroethene	8260C	20.3	20.0	102	17.6	20.0	88	73-118	14	30
1,2-Dichloropropane	8260C	21.3	20.0	106	17.8	20.0	89	80-119	18	30
cis-1,3-Dichloropropene	8260C	16.8	20.0	84	15.0	20.0	75 *	77-122	11	30
trans-1,3-Dichloropropene	8260C	15.2	20.0	76	13.5	20.0	67 *	71-133	12	30
Ethylbenzene	8260C	20.6	20.0	103	18.0	20.0	90	76-120	14	30
2-Hexanone	8260C	22.1	20.0	111	22.7	20.0	114	63-124	3	30
Methylene Chloride	8260C	18.7	20.0	94	16.9	20.0	84	73-122	10	30
4-Methyl-2-pentanone (MIBK)	8260C	22.6	20.0	113	22.7	20.0	113	66-124	<1	30
Styrene	8260C	19.9	20.0	99	17.6	20.0	88	80-124	12	30
1,1,2,2-Tetrachloroethane	8260C	21.4	20.0	107	18.3	20.0	91	78-126	16	30
Tetrachloroethene	8260C	22.2	20.0	111	19.6	20.0	98	72-125	13	30
Toluene	8260C	20.4	20.0	102	18.0	20.0	90	79-119	12	30
1,1,1-Trichloroethane	8260C	18.9	20.0	94	16.4	20.0	82	75-125	14	30
1,1,2-Trichloroethane	8260C	19.9	20.0	99	18.4	20.0	92	82-121	8	30
Trichloroethene	8260C	20.8	20.0	104	18.1	20.0	90	74-122	14	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: R2111061
Date Analyzed: 10/26/21

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L**Basis:**NA

Analyte Name	Lab Control Sample				Duplicate Lab Control Sample					
	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Vinyl Chloride	8260C	23.0	20.0	115	19.6	20.0	98	74-159	16	30
o-Xylene	8260C	20.4	20.0	102	17.7	20.0	88	79-123	14	30
m,p-Xylenes	8260C	42.6	40.0	106	36.8	40.0	92	80-126	14	30



Metals

ALS Environmental—Rochester Laboratory

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Analytical Report

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

Sample Name: Method Blank
Lab Code: R2111061-MB

Service Request: R2111061
Date Collected: NA
Date Received: NA

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	10/27/21 00:24	10/25/21	
Barium, Total	6010C	20 U	ug/L	20	1	10/27/21 00:24	10/25/21	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	10/27/21 00:24	10/25/21	
Calcium, Total	6010C	1000 U	ug/L	1000	1	10/27/21 00:24	10/25/21	
Chromium, Total	6010C	10 U	ug/L	10	1	10/27/21 00:24	10/25/21	
Copper, Total	6010C	20 U	ug/L	20	1	10/27/21 00:24	10/25/21	
Iron, Total	6010C	100 U	ug/L	100	1	10/27/21 00:24	10/25/21	
Lead, Total	6010C	50 U	ug/L	50	1	10/27/21 00:24	10/25/21	
Magnesium, Total	6010C	1000 U	ug/L	1000	1	10/27/21 00:24	10/25/21	
Manganese, Total	6010C	10 U	ug/L	10	1	10/27/21 00:24	10/25/21	
Nickel, Total	6010C	40 U	ug/L	40	1	10/27/21 00:24	10/25/21	
Potassium, Total	6010C	2000 U	ug/L	2000	1	10/27/21 00:24	10/25/21	
Selenium, Total	6010C	10 U	ug/L	10	1	10/27/21 00:24	10/25/21	
Sodium, Total	6010C	1000 U	ug/L	1000	1	10/27/21 00:24	10/25/21	
Zinc, Total	6010C	20 U	ug/L	20	1	10/27/21 00:24	10/25/21	

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: R2111061
Date Analyzed: 10/27/21

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R2111061-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic, Total	6010C	35.5	40	89	80-120
Barium, Total	6010C	2060	2000	103	80-120
Cadmium, Total	6010C	51.0	50.0	102	80-120
Calcium, Total	6010C	2060	2000	103	80-120
Chromium, Total	6010C	206	200	103	80-120
Copper, Total	6010C	247	250	99	80-120
Iron, Total	6010C	1020	1000	102	80-120
Lead, Total	6010C	504	500	101	80-120
Magnesium, Total	6010C	1970	2000	98	80-120
Manganese, Total	6010C	504	500	101	80-120
Nickel, Total	6010C	520	500	104	80-120
Potassium, Total	6010C	19500	20000	98	80-120
Selenium, Total	6010C	989	1010	98	80-120
Sodium, Total	6010C	20900	20000	104	80-120
Zinc, Total	6010C	505	500	101	80-120



November 11, 2021

Service Request No:R2111173

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, 2021
For your reference, these analyses have been assigned our service request number **R2111173**.

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

Janice Jaeger
Project Manager



Narrative Documents

ALS Environmental—Rochester Laboratory

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

Service Request: R2111173
Date Received: 10/26/2021

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:

Two drinking water samples were received for analysis at ALS Environmental on 10/26/2021. 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:

Method 200.7, 10/28/2021: The control limits for matrix spike recovery of one or more of the spiked analytes are not applicable and have been flagged with a "#". The concentration of the analyte(s) in the parent sample is more than 4x the spike concentration. No further corrective action was required.

Volatiles by GC/MS:

No significant anomalies were noted with this analysis.

A handwritten signature in black ink, appearing to read "J. Amato".

Approved by _____

Date 11/02/2021

SAMPLE DETECTION SUMMARY

CLIENT ID: WAL1-1021			Lab ID: R2111173-001			

Analyte	Results	Flag	MDL	MRL	Units	Method
Barium, Total	70			20	ug/L	200.7
Calcium, Total	41600			1000	ug/L	200.7
Magnesium, Total	13700			1000	ug/L	200.7
Manganese, Total	84			10	ug/L	200.7
Sodium, Total	8700			1000	ug/L	200.7
Zinc, Total	22			20	ug/L	200.7

CLIENT ID: WAL2-1021			Lab ID: R2111173-002			

Analyte	Results	Flag	MDL	MRL	Units	Method
Barium, Total	33			20	ug/L	200.7
Calcium, Total	44800			1000	ug/L	200.7
Iron, Total	530			100	ug/L	200.7
Magnesium, Total	14300			1000	ug/L	200.7
Manganese, Total	669			10	ug/L	200.7
Sodium, Total	53500			1000	ug/L	200.7



Sample Receipt Information

ALS Environmental—Rochester Laboratory

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www.alsglobal.com

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

Service Request:R2111173

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2111173-001	WAL1-1021	10/22/2021	1315
R2111173-002	WAL2-1021	10/23/2021	1205



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

Client: **On-Site**

72 Railroad Ave.
Wellsville, NY 14895

Project
Manager **Jon Brandes**

CHAIN of CUSTODY

Project: **WAL - Semiannual Sampling**

Telephone No.
585-593-1824

Email: jonb@on-sitehs.com

Page 1 of 1

Method of Shipment

UPS

Special Detection
Limit/Reporting

Sample I.D.

Lab Sample No.

No. of Containers

Soil

Water

Air

Other

Yes

No

Sampling Date

Sampling Time

VOA's 8260 (HCl)

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)

TOC, Phenols (H2SO4) (SW/SED)

TDS, NO3 (NP) (Manhole)

WAL2-1021

WAL2-1021

R E M A R K S

Sample Received Intact: Yes No

Temperature received: Ice No ice

Relinquished by (Sign & Print Name)

Jon Brandes / Jonathan E Brandes

Date Time

10/25/21 1246

Received by (Sign & Print Name)

Gregory O. Esmeran
ALS 10/26/21 09:30

Relinquished by

Date Time

Received by

Relinquished by

Date Time

Received by

Relinquished by

Date Time

Received by laboratory

Date Time

Lab Work No.

R2111173
On-Site Technical Services, Inc.
WAL - Semiannual Sampling



5



Cooler Receipt and Preservation Check Form

R2111173
On-Site Technical Services, Inc.
WAL - Semiannual Sampling

5

Project/Client On-site Folder Number _____

Cooler received on 10/26/21 by: HE

COURIER: ALS UPS FEDEX VELOCITY CLIENT

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

5a	Perchlorate samples have required headspace?	Y <u>(N)</u> <u>NA</u>
5b	Did <u>VOA</u> vials, Alk, or Sulfide have sig* bubbles?	Y <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>NA</u>

8. Temperature Readings Date: 10/26/21 Time: 09:36 ID: IR#7 IR#11 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>5.3</u>						
Within 0-6°C?	<u>(Y)</u> N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y <u>(N)</u>	Y N	Y N	Y N	Y N	Y N	Y 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: R002 by HE on 10/26/21 at 09:40
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 10/26/21 Time: 11:40 by: AD

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
13. 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
≥12		NaOH	Yes	No						
≤2	<u>205320</u>	HNO ₃	✓		<u>1121061</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	**	**						

**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: 21-09-20 0-283-005

Explain all Discrepancies/ Other Comments: _____

HPROD	BULK
HTR	FLDT
SUB	HGFB
ALS	LL3541

Labels secondary reviewed by: AMS
PC Secondary Review: AMS 11/2/21

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



Miscellaneous Forms

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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.

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Analyst Summary report

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

Service Request: R2111173

Sample Name: WAL1-1021
Lab Code: R2111173-001
Sample Matrix: Drinking Water

Date Collected: 10/22/21
Date Received: 10/26/21

Analysis Method
200.7
524.2

Extracted/Digested By
BDIAMOND

Analyzed By
KMCLAEN
BALLGEIER

Sample Name: WAL2-1021
Lab Code: R2111173-002
Sample Matrix: Drinking Water

Date Collected: 10/23/21
Date Received: 10/26/21

Analysis Method
200.7

Extracted/Digested By
BDIAMOND

Analyzed By
KMCLAEN



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.	



Sample Results

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Volatile Organic Compounds by GC/MS

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ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2111173
Date Collected: 10/22/21 13:15
Date Received: 10/26/21 09:30

Sample Name: WAL1-1021
Lab Code: R2111173-001

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	11/01/21 14:23	
Bromobenzene	0.50 U	0.50	1	11/01/21 14:23	
Bromochloromethane	0.50 U	0.50	1	11/01/21 14:23	
Bromodichloromethane	0.50 U	0.50	1	11/01/21 14:23	
Bromoform	0.50 U	0.50	1	11/01/21 14:23	
Bromomethane	0.50 U	0.50	1	11/01/21 14:23	
Methyl tert-Butyl Ether	0.50 U	0.50	1	11/01/21 14:23	
tert-Butylbenzene	0.50 U	0.50	1	11/01/21 14:23	
sec-Butylbenzene	0.50 U	0.50	1	11/01/21 14:23	
n-Butylbenzene	0.50 U	0.50	1	11/01/21 14:23	
Carbon Tetrachloride	0.50 U	0.50	1	11/01/21 14:23	
Chlorobenzene	0.50 U	0.50	1	11/01/21 14:23	
Chloroethane	0.50 U	0.50	1	11/01/21 14:23	
Chloroform	0.50 U	0.50	1	11/01/21 14:23	
Chloromethane	0.50 U	0.50	1	11/01/21 14:23	
2-Chlorotoluene	0.50 U	0.50	1	11/01/21 14:23	
4-Chlorotoluene	0.50 U	0.50	1	11/01/21 14:23	
Dibromochloromethane	0.50 U	0.50	1	11/01/21 14:23	
Dibromomethane	0.50 U	0.50	1	11/01/21 14:23	
1,2-Dichlorobenzene	0.50 U	0.50	1	11/01/21 14:23	
1,4-Dichlorobenzene	0.50 U	0.50	1	11/01/21 14:23	
1,3-Dichlorobenzene	0.50 U	0.50	1	11/01/21 14:23	
Dichlorodifluoromethane	0.50 U	0.50	1	11/01/21 14:23	
1,1-Dichloroethane	0.50 U	0.50	1	11/01/21 14:23	
1,2-Dichloroethane	0.50 U	0.50	1	11/01/21 14:23	
1,1-Dichloroethene	0.50 U	0.50	1	11/01/21 14:23	
trans-1,2-Dichloroethene	0.50 U	0.50	1	11/01/21 14:23	
cis-1,2-Dichloroethene	0.50 U	0.50	1	11/01/21 14:23	
2,2-Dichloropropane	0.50 U	0.50	1	11/01/21 14:23	
1,2-Dichloropropane	0.50 U	0.50	1	11/01/21 14:23	
1,3-Dichloropropane	0.50 U	0.50	1	11/01/21 14:23	
trans-1,3-Dichloropropene	0.50 U	0.50	1	11/01/21 14:23	
cis-1,3-Dichloropropene	0.50 U	0.50	1	11/01/21 14:23	
Ethylbenzene	0.50 U	0.50	1	11/01/21 14:23	
Hexachlorobutadiene	0.50 U	0.50	1	11/01/21 14:23	
Isopropylbenzene	0.50 U	0.50	1	11/01/21 14:23	
p-Isopropyltoluene	0.50 U	0.50	1	11/01/21 14:23	
Methylene Chloride	0.50 U	0.50	1	11/01/21 14:23	
Naphthalene	0.50 U	0.50	1	11/01/21 14:23	
n-Propylbenzene	0.50 U	0.50	1	11/01/21 14:23	
Styrene	0.50 U	0.50	1	11/01/21 14:23	

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Analytical Report

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

Service Request: R2111173
Date Collected: 10/22/21 13:15
Date Received: 10/26/21 09:30

Sample Name: WAL1-1021
Lab Code: R2111173-001

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.50 U	0.50	1	11/01/21 14:23	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	1	11/01/21 14:23	
Tetrachloroethene	0.50 U	0.50	1	11/01/21 14:23	
Toluene	0.50 U	0.50	1	11/01/21 14:23	
1,2,4-Trichlorobenzene	0.50 U	0.50	1	11/01/21 14:23	
1,2,3-Trichlorobenzene	0.50 U	0.50	1	11/01/21 14:23	
1,1,2-Trichloroethane	0.50 U	0.50	1	11/01/21 14:23	
Trichloroethene	0.50 U	0.50	1	11/01/21 14:23	
Trichlorofluoromethane	0.50 U	0.50	1	11/01/21 14:23	
1,2,3-Trichloropropane	0.50 U	0.50	1	11/01/21 14:23	
1,3,5-Trimethylbenzene	0.50 U	0.50	1	11/01/21 14:23	
1,2,4-Trimethylbenzene	0.50 U	0.50	1	11/01/21 14:23	
Vinyl Chloride	0.50 U	0.50	1	11/01/21 14:23	
m,p-Xylenes	1.0 U	1.0	1	11/01/21 14:23	
o-Xylene	0.50 U	0.50	1	11/01/21 14:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	70 - 130	11/01/21 14:23	
1,2-Dichlorobenzene-d4	87	70 - 130	11/01/21 14:23	



Metals

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Analytical Report

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

Service Request: R2111173
Date Collected: 10/22/21 13:15
Date Received: 10/26/21 09:30

Sample Name: WAL1-1021
Lab Code: R2111173-001

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	200.7	10 U	ug/L	10	1	10/28/21 01:07	10/27/21	
Barium, Total	200.7	70	ug/L	20	1	10/28/21 01:07	10/27/21	
Cadmium, Total	200.7	5.0 U	ug/L	5.0	1	10/28/21 01:07	10/27/21	
Calcium, Total	200.7	41600	ug/L	1000	1	10/28/21 01:07	10/27/21	
Chromium, Total	200.7	10 U	ug/L	10	1	10/28/21 01:07	10/27/21	
Copper, Total	200.7	20 U	ug/L	20	1	10/28/21 01:07	10/27/21	
Iron, Total	200.7	100 U	ug/L	100	1	10/28/21 01:07	10/27/21	
Lead, Total	200.7	50 U	ug/L	50	1	10/28/21 01:07	10/27/21	
Magnesium, Total	200.7	13700	ug/L	1000	1	10/28/21 01:07	10/27/21	
Manganese, Total	200.7	84	ug/L	10	1	10/28/21 01:07	10/27/21	
Nickel, Total	200.7	40 U	ug/L	40	1	10/28/21 01:07	10/27/21	
Potassium, Total	200.7	2000 U	ug/L	2000	1	10/28/21 01:07	10/27/21	
Selenium, Total	200.7	10 U	ug/L	10	1	10/28/21 01:07	10/27/21	
Sodium, Total	200.7	8700	ug/L	1000	1	10/28/21 01:07	10/27/21	
Zinc, Total	200.7	22	ug/L	20	1	10/28/21 01:07	10/27/21	

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Analytical Report

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

Service Request: R2111173
Date Collected: 10/23/21 12:05
Date Received: 10/26/21 09:30

Sample Name: WAL2-1021
Lab Code: R2111173-002

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	200.7	10 U	ug/L	10	1	10/28/21 01:28	10/27/21	
Barium, Total	200.7	33	ug/L	20	1	10/28/21 01:28	10/27/21	
Cadmium, Total	200.7	5.0 U	ug/L	5.0	1	10/28/21 01:28	10/27/21	
Calcium, Total	200.7	44800	ug/L	1000	1	10/28/21 01:28	10/27/21	
Chromium, Total	200.7	10 U	ug/L	10	1	10/28/21 01:28	10/27/21	
Copper, Total	200.7	20 U	ug/L	20	1	10/28/21 01:28	10/27/21	
Iron, Total	200.7	530	ug/L	100	1	10/28/21 01:28	10/27/21	
Lead, Total	200.7	50 U	ug/L	50	1	10/28/21 01:28	10/27/21	
Magnesium, Total	200.7	14300	ug/L	1000	1	10/28/21 01:28	10/27/21	
Manganese, Total	200.7	669	ug/L	10	1	10/28/21 01:28	10/27/21	
Nickel, Total	200.7	40 U	ug/L	40	1	10/28/21 01:28	10/27/21	
Potassium, Total	200.7	2000 U	ug/L	2000	1	10/28/21 01:28	10/27/21	
Selenium, Total	200.7	10 U	ug/L	10	1	10/28/21 01:28	10/27/21	
Sodium, Total	200.7	53500	ug/L	1000	1	10/28/21 01:28	10/27/21	
Zinc, Total	200.7	20 U	ug/L	20	1	10/28/21 01:28	10/27/21	



QC Summary Forms

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Volatile Organic Compounds by GC/MS

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QA/QC Report

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

Service Request: R2111173

SURROGATE RECOVERY SUMMARY
Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Sample Name	Lab Code	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
		70-130	70-130
WAL1-1021	R2111173-001	90	87
Method Blank	RQ2113987-05	93	89
Lab Control Sample	RQ2113987-03	98	96
Duplicate Lab Control Sample	RQ2113987-04	101	98

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Analytical Report

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

Service Request: R2111173
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2113987-05

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	11/01/21 13:29	
Bromobenzene	0.50 U	0.50	1	11/01/21 13:29	
Bromochloromethane	0.50 U	0.50	1	11/01/21 13:29	
Bromodichloromethane	0.50 U	0.50	1	11/01/21 13:29	
Bromoform	0.50 U	0.50	1	11/01/21 13:29	
Bromomethane	0.50 U	0.50	1	11/01/21 13:29	
Methyl tert-Butyl Ether	0.50 U	0.50	1	11/01/21 13:29	
tert-Butylbenzene	0.50 U	0.50	1	11/01/21 13:29	
sec-Butylbenzene	0.50 U	0.50	1	11/01/21 13:29	
n-Butylbenzene	0.50 U	0.50	1	11/01/21 13:29	
Carbon Tetrachloride	0.50 U	0.50	1	11/01/21 13:29	
Chlorobenzene	0.50 U	0.50	1	11/01/21 13:29	
Chloroethane	0.50 U	0.50	1	11/01/21 13:29	
Chloroform	0.50 U	0.50	1	11/01/21 13:29	
Chloromethane	0.50 U	0.50	1	11/01/21 13:29	
2-Chlorotoluene	0.50 U	0.50	1	11/01/21 13:29	
4-Chlorotoluene	0.50 U	0.50	1	11/01/21 13:29	
Dibromochloromethane	0.50 U	0.50	1	11/01/21 13:29	
Dibromomethane	0.50 U	0.50	1	11/01/21 13:29	
1,2-Dichlorobenzene	0.50 U	0.50	1	11/01/21 13:29	
1,4-Dichlorobenzene	0.50 U	0.50	1	11/01/21 13:29	
1,3-Dichlorobenzene	0.50 U	0.50	1	11/01/21 13:29	
Dichlorodifluoromethane	0.50 U	0.50	1	11/01/21 13:29	
1,1-Dichloroethane	0.50 U	0.50	1	11/01/21 13:29	
1,2-Dichloroethane	0.50 U	0.50	1	11/01/21 13:29	
1,1-Dichloroethene	0.50 U	0.50	1	11/01/21 13:29	
trans-1,2-Dichloroethene	0.50 U	0.50	1	11/01/21 13:29	
cis-1,2-Dichloroethene	0.50 U	0.50	1	11/01/21 13:29	
2,2-Dichloropropane	0.50 U	0.50	1	11/01/21 13:29	
1,2-Dichloropropane	0.50 U	0.50	1	11/01/21 13:29	
1,3-Dichloropropane	0.50 U	0.50	1	11/01/21 13:29	
trans-1,3-Dichloropropene	0.50 U	0.50	1	11/01/21 13:29	
cis-1,3-Dichloropropene	0.50 U	0.50	1	11/01/21 13:29	
Ethylbenzene	0.50 U	0.50	1	11/01/21 13:29	
Hexachlorobutadiene	0.50 U	0.50	1	11/01/21 13:29	
Isopropylbenzene	0.50 U	0.50	1	11/01/21 13:29	
p-Isopropyltoluene	0.50 U	0.50	1	11/01/21 13:29	
Methylene Chloride	0.50 U	0.50	1	11/01/21 13:29	
Naphthalene	0.50 U	0.50	1	11/01/21 13:29	
n-Propylbenzene	0.50 U	0.50	1	11/01/21 13:29	
Styrene	0.50 U	0.50	1	11/01/21 13:29	

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Analytical Report

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

Service Request: R2111173
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2113987-05

Units: ug/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.50 U	0.50	1	11/01/21 13:29	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	1	11/01/21 13:29	
Tetrachloroethene	0.50 U	0.50	1	11/01/21 13:29	
Toluene	0.50 U	0.50	1	11/01/21 13:29	
1,2,4-Trichlorobenzene	0.50 U	0.50	1	11/01/21 13:29	
1,2,3-Trichlorobenzene	0.50 U	0.50	1	11/01/21 13:29	
1,1,2-Trichloroethane	0.50 U	0.50	1	11/01/21 13:29	
Trichloroethene	0.50 U	0.50	1	11/01/21 13:29	
Trichlorofluoromethane	0.50 U	0.50	1	11/01/21 13:29	
1,2,3-Trichloropropane	0.50 U	0.50	1	11/01/21 13:29	
1,3,5-Trimethylbenzene	0.50 U	0.50	1	11/01/21 13:29	
1,2,4-Trimethylbenzene	0.50 U	0.50	1	11/01/21 13:29	
Vinyl Chloride	0.50 U	0.50	1	11/01/21 13:29	
m,p-Xylenes	1.0 U	1.0	1	11/01/21 13:29	
o-Xylene	0.50 U	0.50	1	11/01/21 13:29	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	70 - 130	11/01/21 13:29	
1,2-Dichlorobenzene-d4	89	70 - 130	11/01/21 13:29	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

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

Service Request: R2111173
Date Analyzed: 11/01/21

Duplicate Lab Control Sample Summary
Purgeable Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample RQ2113987-03					Duplicate Lab Control Sample RQ2113987-04					
Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Benzene	524.2	5.40	5.00	108	5.60	5.00	112	70-130	4	20
Bromobenzene	524.2	4.94	5.00	99	5.24	5.00	105	70-130	6	20
Bromochloromethane	524.2	5.30	5.00	106	5.56	5.00	111	70-130	5	20
Bromodichloromethane	524.2	5.26	5.00	105	5.47	5.00	109	70-130	4	20
Bromoform	524.2	4.57	5.00	91	4.52	5.00	90	70-130	1	20
Bromomethane	524.2	4.64	5.00	93	4.55	5.00	91	70-130	2	20
Methyl tert-Butyl Ether	524.2	4.62	5.00	92	4.73	5.00	95	70-130	2	20
tert-Butylbenzene	524.2	5.66	5.00	113	5.56	5.00	111	70-130	2	20
sec-Butylbenzene	524.2	5.79	5.00	116	5.71	5.00	114	70-130	1	20
n-Butylbenzene	524.2	5.63	5.00	113	5.40	5.00	108	70-130	4	20
Carbon Tetrachloride	524.2	5.77	5.00	115	5.56	5.00	111	70-130	4	20
Chlorobenzene	524.2	5.51	5.00	110	5.65	5.00	113	70-130	3	20
Chloroethane	524.2	6.27	5.00	125	6.35	5.00	127	70-130	1	20
Chloroform	524.2	5.22	5.00	104	5.36	5.00	107	70-130	3	20
Chloromethane	524.2	7.06	5.00	141 *	7.33	5.00	147 *	70-130	4	20
2-Chlorotoluene	524.2	5.39	5.00	108	5.39	5.00	108	70-130	<1	20
4-Chlorotoluene	524.2	5.59	5.00	112	5.60	5.00	112	70-130	<1	20
Dibromochloromethane	524.2	5.07	5.00	101	5.23	5.00	105	70-130	3	20
Dibromomethane	524.2	5.06	5.00	101	5.40	5.00	108	70-130	7	20
1,2-Dichlorobenzene	524.2	5.09	5.00	102	5.21	5.00	104	70-130	2	20
1,4-Dichlorobenzene	524.2	5.13	5.00	103	5.14	5.00	103	70-130	<1	20
1,3-Dichlorobenzene	524.2	5.40	5.00	108	5.39	5.00	108	70-130	<1	20
Dichlorodifluoromethane	524.2	6.71	5.00	134 *	6.29	5.00	126	70-130	6	20
1,1-Dichloroethane	524.2	5.20	5.00	104	5.50	5.00	110	70-130	6	20
1,2-Dichloroethane	524.2	4.94	5.00	99	5.10	5.00	102	70-130	3	20
1,1-Dichloroethene	524.2	5.89	5.00	118	5.75	5.00	115	70-130	2	20
trans-1,2-Dichloroethene	524.2	5.56	5.00	111	5.86	5.00	117	70-130	5	20
cis-1,2-Dichloroethene	524.2	5.35	5.00	107	5.77	5.00	115	70-130	8	20
2,2-Dichloropropane	524.2	5.39	5.00	108	5.35	5.00	107	70-130	<1	20
1,2-Dichloropropane	524.2	5.08	5.00	102	5.20	5.00	104	70-130	2	20
1,3-Dichloropropane	524.2	5.10	5.00	102	5.19	5.00	104	70-130	2	20
trans-1,3-Dichloropropene	524.2	4.63	5.00	93	4.84	5.00	97	70-130	4	20
cis-1,3-Dichloropropene	524.2	5.12	5.00	102	5.27	5.00	105	70-130	3	20

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

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

Service Request: R2111173
Date Analyzed: 11/01/21

Duplicate Lab Control Sample Summary
Purgeable Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample RQ2113987-03					Duplicate Lab Control Sample RQ2113987-04					
Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Ethylbenzene	524.2	5.53	5.00	111	5.52	5.00	110	70-130	<1	20
Hexachlorobutadiene	524.2	5.56	5.00	111	5.65	5.00	113	70-130	2	20
Isopropylbenzene	524.2	5.76	5.00	115	5.52	5.00	110	70-130	4	20
p-Isopropyltoluene	524.2	5.57	5.00	111	5.32	5.00	106	70-130	5	20
Methylene Chloride	524.2	5.42	5.00	108	5.68	5.00	114	70-130	5	20
Naphthalene	524.2	4.42	5.00	88	4.53	5.00	91	70-130	2	20
n-Propylbenzene	524.2	5.78	5.00	116	5.66	5.00	113	70-130	2	20
Styrene	524.2	5.34	5.00	107	5.28	5.00	106	70-130	1	20
1,1,1,2-Tetrachloroethane	524.2	5.38	5.00	108	5.38	5.00	108	70-130	<1	20
1,1,2,2-Tetrachloroethane	524.2	4.80	5.00	96	5.00	5.00	100	70-130	4	20
Tetrachloroethene	524.2	6.15	5.00	123	5.89	5.00	118	70-130	4	20
Toluene	524.2	5.51	5.00	110	5.57	5.00	111	70-130	1	20
1,2,4-Trichlorobenzene	524.2	4.95	5.00	99	5.05	5.00	101	70-130	2	20
1,2,3-Trichlorobenzene	524.2	4.98	5.00	100	4.84	5.00	97	70-130	3	20
1,1,2-Trichloroethane	524.2	5.18	5.00	104	5.48	5.00	110	70-130	6	20
Trichloroethene	524.2	5.72	5.00	114	5.67	5.00	113	70-130	<1	20
Trichlorofluoromethane	524.2	6.09	5.00	122	5.92	5.00	118	70-130	3	20
1,2,3-Trichloropropane	524.2	4.44	5.00	89	4.87	5.00	97	70-130	9	20
1,3,5-Trimethylbenzene	524.2	5.43	5.00	109	5.26	5.00	105	70-130	3	20
1,2,4-Trimethylbenzene	524.2	5.33	5.00	107	5.18	5.00	104	70-130	3	20
Vinyl Chloride	524.2	6.54	5.00	131 *	6.47	5.00	129	70-130	1	20
m,p-Xylenes	524.2	11.1	10.0	111	10.9	10.0	109	70-130	2	20
o-Xylene	524.2	5.38	5.00	108	5.40	5.00	108	70-130	<1	20



Metals

ALS Environmental—Rochester Laboratory

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Phone (585) 288-5380 Fax (585) 288-8475

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: Method Blank
Lab Code: R2111173-MB

Service Request: R2111173
Date Collected: NA
Date Received: NA

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	200.7	10 U	ug/L	10	1	10/28/21 00:14	10/27/21	
Barium, Total	200.7	20 U	ug/L	20	1	10/28/21 00:14	10/27/21	
Cadmium, Total	200.7	5.0 U	ug/L	5.0	1	10/28/21 00:14	10/27/21	
Calcium, Total	200.7	1000 U	ug/L	1000	1	10/28/21 00:14	10/27/21	
Chromium, Total	200.7	10 U	ug/L	10	1	10/28/21 00:14	10/27/21	
Copper, Total	200.7	20 U	ug/L	20	1	10/28/21 00:14	10/27/21	
Iron, Total	200.7	100 U	ug/L	100	1	10/28/21 00:14	10/27/21	
Lead, Total	200.7	50 U	ug/L	50	1	10/28/21 00:14	10/27/21	
Magnesium, Total	200.7	1000 U	ug/L	1000	1	10/28/21 00:14	10/27/21	
Manganese, Total	200.7	10 U	ug/L	10	1	10/28/21 00:14	10/27/21	
Nickel, Total	200.7	40 U	ug/L	40	1	10/28/21 00:14	10/27/21	
Potassium, Total	200.7	2000 U	ug/L	2000	1	10/28/21 00:14	10/27/21	
Selenium, Total	200.7	10 U	ug/L	10	1	10/28/21 00:14	10/27/21	
Sodium, Total	200.7	1000 U	ug/L	1000	1	10/28/21 00:14	10/27/21	
Zinc, Total	200.7	20 U	ug/L	20	1	10/28/21 00:14	10/27/21	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

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

Service Request: R2111173
Date Collected: 10/22/21
Date Received: 10/26/21
Date Analyzed: 10/28/21

Duplicate Matrix Spike Summary
Inorganic Parameters

Sample Name: WAL1-1021 **Units:** ug/L
Lab Code: R2111173-001 **Basis:** NA

Matrix Spike R2111173-001MS						Duplicate Matrix Spike R2111173-001DMS					
Analyte Name	Method	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Arsenic, Total	200.7	10 U	44	40	111	44	40	110	70-130	1	20
Barium, Total	200.7	70	1990	2000	96	2040	2000	98	70-130	2	20
Cadmium, Total	200.7	5.0 U	47.3	50.0	95	48.8	50.0	98	70-130	3	20
Calcium, Total	200.7	41600	42200	2000	35 #	42500	2000	45 #	70-130	<1	20
Chromium, Total	200.7	10 U	195	200	97	200	200	100	70-130	3	20
Copper, Total	200.7	20 U	229	250	92	236	250	94	70-130	3	20
Iron, Total	200.7	100 U	970	1000	97	1000	1000	100	70-130	3	20
Lead, Total	200.7	50 U	465	500	93	480	500	96	70-130	3	20
Magnesium, Total	200.7	13700	15200	2000	78 #	15400	2000	84 #	70-130	<1	20
Manganese, Total	200.7	84	557	500	95	570	500	97	70-130	2	20
Nickel, Total	200.7	40 U	468	500	94	480	500	96	70-130	2	20
Potassium, Total	200.7	2000 U	20300	20000	101	20800	20000	104	70-130	2	20
Selenium, Total	200.7	10 U	896	1010	89	917	1010	91	70-130	2	20
Sodium, Total	200.7	8700	27600	20000	94	28100	20000	97	70-130	2	20
Zinc, Total	200.7	22	487	500	93	501	500	96	70-130	3	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 - Semiannual Sampling
Sample Matrix: Drinking Water

Service Request: R2111173
Date Analyzed: 10/28/21

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R2111173-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic, Total	200.7	38	40	94	85-115
Barium, Total	200.7	1980	2000	99	85-115
Cadmium, Total	200.7	49.8	50.0	100	85-115
Calcium, Total	200.7	1990	2000	99	85-115
Chromium, Total	200.7	200	200	100	85-115
Copper, Total	200.7	237	250	95	85-115
Iron, Total	200.7	980	1000	98	85-115
Lead, Total	200.7	489	500	98	85-115
Magnesium, Total	200.7	1890	2000	94	85-115
Manganese, Total	200.7	486	500	97	85-115
Nickel, Total	200.7	496	500	99	85-115
Potassium, Total	200.7	18800	20000	94	85-115
Selenium, Total	200.7	924	1010	92	85-115
Sodium, Total	200.7	19600	20000	98	85-115
Zinc, Total	200.7	490	500	98	85-115



November 30, 2021

Service Request No:R2110978

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 20, 2021
For your reference, these analyses have been assigned our service request number **R2110978**.

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

Janice Jaeger
Project Manager

ADDRESS

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

PHONE +1 585 288 5380 | **FAX** +1 585 288 8475

ALS Group USA, Corp.
dba ALS Environmental



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: R2110978
Date Received: 10/20/2021

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:

Fourteen water samples were received for analysis at ALS Environmental on 10/20/2021. 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.

General Chemistry:

No significant anomalies were noted with this analysis.

Subcontracted Analytical Parameters:

One or more samples were subcontracted to another laboratory for testing. The certified analytical report from the subcontractor has been included in its entirety at the end of this report and includes the name and address of the subcontracted laboratory.

Volatiles by GC/MS:

Method 8260C, 10/26/2021: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) 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.

Method 8260C, 10/25/2021: 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, 10/27/2021: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) 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.

Method 8260C, 10/27/2021: 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.

Approved by _____

Date 11/30/2021

SAMPLE DETECTION SUMMARY

CLIENT ID: CW4A-1021				Lab ID: R2110978-001		
Analyte	Results	Flag	MDL	MRL	Units	Method
1,4-Dioxane	0.39		0.027	0.040	ug/L	8270D SIM

CLIENT ID: CW4B-1021				Lab ID: R2110978-002		
Analyte	Results	Flag	MDL	MRL	Units	Method
1,4-Dioxane	0.40		0.027	0.040	ug/L	8270D SIM

CLIENT ID: CW3B-1021				Lab ID: R2110978-003		
Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	100			25	ug/L	8260C
Trichloroethene	430			25	ug/L	8260C
1,4-Dioxane	0.90		0.027	0.040	ug/L	8270D SIM

CLIENT ID: CW3A-1021				Lab ID: R2110978-004		
Analyte	Results	Flag	MDL	MRL	Units	Method
Trichloroethene	17			5.0	ug/L	8260C
1,4-Dioxane	0.13		0.027	0.040	ug/L	8270D SIM

CLIENT ID: MW17S-1021				Lab ID: R2110978-006		
Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	33			5.0	ug/L	8260C
Trichloroethene	11			5.0	ug/L	8260C
1,4-Dioxane	0.41		0.027	0.040	ug/L	8270D SIM

CLIENT ID: MW5D-1021				Lab ID: R2110978-007		
Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	150			5.0	ug/L	8260C
Trichloroethene	52			5.0	ug/L	8260C
Vinyl Chloride	13			5.0	ug/L	8260C
1,4-Dioxane	0.66		0.027	0.040	ug/L	8270D SIM

CLIENT ID: MW5S-1021				Lab ID: R2110978-009		
Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	180			5.0	ug/L	8260C
Trichloroethene	35			5.0	ug/L	8260C
Vinyl Chloride	16			5.0	ug/L	8260C
1,4-Dioxane	0.17		0.027	0.040	ug/L	8270D SIM

CLIENT ID: DUP1-1021				Lab ID: R2110978-010		
Analyte	Results	Flag	MDL	MRL	Units	Method
cis-1,2-Dichloroethene	180			5.0	ug/L	8260C
Trichloroethene	35			5.0	ug/L	8260C
Vinyl Chloride	16			5.0	ug/L	8260C
1,4-Dioxane	0.17		0.027	0.040	ug/L	8270D SIM

SAMPLE DETECTION SUMMARY

CLIENT ID: MH33-1021			Lab ID: R2110978-012			

Analyte	Results	Flag	MDL	MRL	Units	Method
Solids, Total Dissolved (TDS)	216			10	mg/L	SM 2540 C-1997 (2011)
cis-1,2-Dichloroethene	31			5.0	ug/L	8260C

CLIENT ID: MH32-1021			Lab ID: R2110978-013			

Analyte	Results	Flag	MDL	MRL	Units	Method
Solids, Total Dissolved (TDS)	258			10	mg/L	SM 2540 C-1997 (2011)
cis-1,2-Dichloroethene	8800	D		500	ug/L	8260C
Ethylbenzene	72			50	ug/L	8260C
Methylene Chloride	510			50	ug/L	8260C
Toluene	150			50	ug/L	8260C
Trichloroethene	370			50	ug/L	8260C
Vinyl Chloride	310			50	ug/L	8260C



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

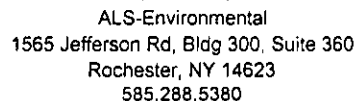
www.alsglobal.com

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

Service Request:R2110978

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2110978-001	CW4A-1021	10/18/2021	0955
R2110978-002	CW4B-1021	10/18/2021	1200
R2110978-003	CW3B-1021	10/18/2021	1355
R2110978-004	CW3A-1021	10/18/2021	1535
R2110978-005	MW17D-1021	10/19/2021	1005
R2110978-006	MW17S-1021	10/19/2021	1155
R2110978-007	MW5D-1021	10/19/2021	1355
R2110978-009	MW5S-1021	10/19/2021	1510
R2110978-010	DUP1-1021	10/19/2021	1515
R2110978-011	EB1-1021	10/20/2021	0730
R2110978-012	MH33-1021	10/20/2021	0840
R2110978-013	MH32-1021	10/20/2021	0910
R2110978-014	Trip Blank	10/20/2021	0910



72 Railroad Ave.
Wellsville, NY 14895

Page 1 of 1

WAL - Annual Sampling

Method of Shipment	

Method of Shipment
On-site

Project Manager	Jon Brandes

Telephone No. 585-593-1824

Email: jonb@on-sitehs.com

Special Detection Limit/Reporting	

[illegible]
$$-ms/msD$$

REMARKS
X Field Blank

Temperature received: Ice ☒ No ice ☐

Relinquished by sampler (Sign & Print Name)

Date / Time

Received by (Sign & Print Name)

Relinquished by

Date	Time

Received by

Relinquished by

Date	Time

Received by	

Relinquished by

Date	Time

Received by laboratory	

Date	10/26/21	Time	1153

Lab Work No. _____

R2110978

5

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





Cooler Receipt and Preservation Check Form

R2110978

5

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



Project/Client On-Site Folder Number _____

Cooler received on 10/20/21 by 2 COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	Y <u>N</u>	5a	Perchlorate samples have required headspace?	Y N <u>NA</u>
2	Custody papers properly completed (ink, signed)?	<u>Y</u> N	5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	Y <u>N</u> NA
3	Did all bottles arrive in good condition (unbroken)?	<u>Y</u> N	6	Where did the bottles originate?	<u>ALS/ROC</u> CLIENT
4	Circle: <u>Wet Ice</u> Dry Ice Gel packs present?	<u>Y</u> N	7	Soil VOA received as: Bulk Encore 5035set	<u>NA</u>

8. Temperature Readings Date: 10/20/21 Time: 1155 ID: IR#7 IR#11 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>4.4</u>	<u>3.9</u>	<u>4.5</u>				
Within 0-6°C?	<u>Y</u> N	<u>Y</u> N	<u>Y</u> N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y 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: R-02 by 12 on 10/20/21 at 1205
5035 samples placed in storage location: _____ by _____ on _____ at _____ within 48 hours of sampling? Y N

Cooler Breakdown/Preservation Check**: Date: 10/21/21 Time: 0920 by: _____

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. 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								
<u>2</u>	<u>223419</u>	HNO ₃	<u>✓</u>		<u>1120121</u>					
<u>2</u>		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: 90821-212 080921-2112 21-0119
Explain all Discrepancies/ Other Comments: _____

HPROD	BULK
HTR	FLDT
<u>SUB</u>	HGFB
ALS	LL3541

Labels secondary reviewed by: 2
PC Secondary Review: 10/25/21

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

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Internal Chain of Custody Report

Client: On-Site Technical Services, Inc.

Service Request: R2110978

Project: WAL - Annual Sampling

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2110978-001.01					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-001.02					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-001.03					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-001.04					
	6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C				
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-A01 / GLAFORCE	
		10/28/2021	1403	In Lab / BDIAMOND	
		10/28/2021	1425	In Lab / BDIAMOND	
		10/29/2021	0939	R-A01 / BDIAMOND	
R2110978-001.05					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-001.06					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-001.07					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
R2110978-001.08					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
R2110978-001.09					
	8260C				
		10/21/2021	0926	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
		10/25/2021	1042	In Lab / FNAEGLER	

ALS Group USA, Corp.
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Internal Chain of Custody Report

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

Service Request: R2110978

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	8260C	10/25/2021	1045	R-001-S08 / FNAEGLER	
		10/26/2021	1220	In Lab / FNAEGLER	
		10/26/2021	1227	R-001-S08 / FNAEGLER	
		R2110978-001.10			
		10/21/2021	0926	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-001.11					
		10/21/2021	0926	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-001.12					
		10/21/2021	0926	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-001.13					
		10/21/2021	0926	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-001.14					
	8270D SIM	10/21/2021	0926	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
		10/21/2021	1344	In Lab / MMCMAHON	
		10/21/2021	1607	R-002 / MMCMAHON	
R2110978-001.15					
		10/21/2021	0926	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
		10/21/2021	1344	In Lab / MMCMAHON	
		10/21/2021	1608	R-002 / MMCMAHON	
R2110978-002.01					
	8260C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
		10/25/2021	1042	In Lab / FNAEGLER	
		10/25/2021	1045	R-001-S08 / FNAEGLER	
		10/26/2021	1220	In Lab / FNAEGLER	
		10/26/2021	1227	R-001-S08 / FNAEGLER	
R2110978-002.02					

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Internal Chain of Custody Report

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

Service Request: R2110978

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-002.03					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-002.04					
	6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-A01 / GLAFORCE	
		10/28/2021	1403	In Lab / BDIAMOND	
		10/28/2021	1425	In Lab / BDIAMOND	
		10/29/2021	0939	R-A01 / BDIAMOND	
R2110978-002.05					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-002.06					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-002.07					
	8270D SIM	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
		10/21/2021	1344	In Lab / MMCMAHON	
		10/21/2021	1608	R-002 / MMCMAHON	
R2110978-002.08					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
R2110978-003.01					
	8260C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
		10/25/2021	1042	In Lab / FNAEGLER	
		10/25/2021	1045	R-001-S08 / FNAEGLER	
		10/26/2021	1220	In Lab / FNAEGLER	
		10/26/2021	1227	R-001-S08 / FNAEGLER	

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Internal Chain of Custody Report

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

Service Request: R2110978

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2110978-003.02					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-003.03					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-003.04					
	6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-A01 / GLAFORCE	
		10/28/2021	1403	In Lab / BDIAMOND	
		10/28/2021	1425	In Lab / BDIAMOND	
		10/29/2021	0939	R-A01 / BDIAMOND	
R2110978-003.05					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-003.06					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-003.07					
	8270D SIM	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
		10/21/2021	1344	In Lab / MMCMAHON	
		10/21/2021	1608	R-002 / MMCMAHON	
R2110978-003.08					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
R2110978-004.01					
	8260C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
		10/25/2021	1042	In Lab / FNAEGLER	
		10/25/2021	1045	R-001-S08 / FNAEGLER	
		10/26/2021	1220	In Lab / FNAEGLER	

ALS Group USA, Corp.
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Internal Chain of Custody Report

Client: On-Site Technical Services, Inc.

Service Request: R2110978

Project: WAL - Annual Sampling

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2110978-004.02	8260C	10/26/2021	1227	R-001-S08 / FNAEGLER	
R2110978-004.03		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-004.04		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-004.05	6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-A01 / GLAFORCE	
		10/28/2021	1403	In Lab / BDIAMOND	
		10/28/2021	1425	In Lab / BDIAMOND	
		10/29/2021	0939	R-A01 / BDIAMOND	
R2110978-004.06		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-004.07		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-004.08	8270D SIM	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
		10/21/2021	1344	In Lab / MMCMAHON	
		10/21/2021	1608	R-002 / MMCMAHON	
R2110978-005.01		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-005.02					

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Internal Chain of Custody Report

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

Service Request: R2110978

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	8260C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
		10/25/2021	1042	In Lab / FNAEGLER	
		10/25/2021	1045	R-001-S08 / FNAEGLER	
		10/26/2021	1220	In Lab / FNAEGLER	
		10/26/2021	1227	R-001-S08 / FNAEGLER	
		R2110978-005.03			
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-005.04					
	6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-A01 / GLAFORCE	
		10/28/2021	1403	In Lab / BDIAMOND	
		10/28/2021	1425	In Lab / BDIAMOND	
		10/29/2021	0939	R-A01 / BDIAMOND	
		R2110978-005.05			
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-005.06					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-005.07					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
R2110978-005.08					
	8270D SIM	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
		10/21/2021	1344	In Lab / MMCMAHON	
		10/21/2021	1607	R-002 / MMCMAHON	
R2110978-006.01					
	8260C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	

ALS Group USA, Corp.
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Internal Chain of Custody Report

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

Service Request: R2110978

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	8260C				
		10/25/2021	1042	In Lab / FNAEGLER	
		10/25/2021	1045	R-001-S08 / FNAEGLER	
		10/26/2021	1220	In Lab / FNAEGLER	
		10/26/2021	1227	R-001-S08 / FNAEGLER	
R2110978-006.02					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-006.03					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-006.04					
	6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C				
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-A01 / GLAFORCE	
		10/28/2021	1403	In Lab / BDIAMOND	
		10/28/2021	1425	In Lab / BDIAMOND	
		10/29/2021	0939	R-A01 / BDIAMOND	
R2110978-006.05					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-006.06					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-006.07					
	8270D SIM				
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
		10/21/2021	1344	In Lab / MMCMAHON	
		10/21/2021	1607	R-002 / MMCMAHON	
R2110978-006.08					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
R2110978-007.01					

ALS Group USA, Corp.
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Internal Chain of Custody Report

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

Service Request: R2110978

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-007.02					
	8260C				
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
		10/25/2021	1042	In Lab / FNAEGLER	
		10/25/2021	1045	R-001-S08 / FNAEGLER	
		10/26/2021	1220	In Lab / FNAEGLER	
		10/26/2021	1227	R-001-S08 / FNAEGLER	
		10/27/2021	0854	In Lab / FNAEGLER	
		10/27/2021	0856	R-001-S08 / FNAEGLER	
R2110978-007.03					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-007.04					
	6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C				
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-A01 / GLAFORCE	
		10/28/2021	1403	In Lab / BDIAMOND	
		10/28/2021	1425	In Lab / BDIAMOND	
		10/29/2021	0939	R-A01 / BDIAMOND	
R2110978-007.05					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-007.06					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-007.07					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
R2110978-007.08					
	8270D SIM				
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	

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Internal Chain of Custody Report

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

Service Request: R2110978

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	8270D SIM	10/21/2021	1344	In Lab / MMCMAHON	
		10/21/2021	1607	R-002 / MMCMAHON	
		R2110978-008.01			
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
		R2110978-008.02			
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
		R2110978-009.01			
	8260C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
		10/25/2021	1042	In Lab / FNAEGLER	
		10/25/2021	1045	R-001-S08 / FNAEGLER	
		10/26/2021	1220	In Lab / FNAEGLER	
		10/26/2021	1227	R-001-S08 / FNAEGLER	
		R2110978-009.02			
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
		R2110978-009.03			
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
		R2110978-009.04			
	6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-A01 / GLAFORCE	
		10/28/2021	1403	In Lab / BDIAMOND	
		10/28/2021	1425	In Lab / BDIAMOND	
		10/29/2021	0939	R-A01 / BDIAMOND	
		R2110978-009.05			
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
		R2110978-009.06			

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Internal Chain of Custody Report

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

Service Request: R2110978

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-009.07					
	8270D SIM				
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
		10/21/2021	1344	In Lab / MMCMAHON	
		10/21/2021	1608	R-002 / MMCMAHON	
R2110978-009.08					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
R2110978-010.01					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-010.02					
	8260C				
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
		10/25/2021	1042	In Lab / FNAEGLER	
		10/25/2021	1045	R-001-S08 / FNAEGLER	
		10/26/2021	1220	In Lab / FNAEGLER	
		10/26/2021	1227	R-001-S08 / FNAEGLER	
R2110978-010.03					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-010.04					
	6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C				
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-A01 / GLAFORCE	
		10/28/2021	1403	In Lab / BDIAMOND	
		10/28/2021	1425	In Lab / BDIAMOND	
		10/29/2021	0939	R-A01 / BDIAMOND	
R2110978-010.05					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	

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dba ALS Environmental

Internal Chain of Custody Report

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

Service Request: R2110978

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2110978-010.06					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-010.07					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
R2110978-010.08					
	8270D SIM				
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
		10/21/2021	1344	In Lab / MMCMAHON	
		10/21/2021	1608	R-002 / MMCMAHON	
R2110978-011.01					
	8260C				
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
		10/25/2021	1042	In Lab / FNAEGLER	
		10/25/2021	1045	R-001-S08 / FNAEGLER	
		10/26/2021	1220	In Lab / FNAEGLER	
		10/26/2021	1227	R-001-S08 / FNAEGLER	
R2110978-011.02					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-011.03					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-011.04					
	6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C				
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-A01 / GLAFORCE	
		10/28/2021	1403	In Lab / BDIAMOND	
		10/28/2021	1425	In Lab / BDIAMOND	
		10/29/2021	0938	R-A01 / BDIAMOND	
R2110978-011.05					
		10/21/2021	0924	SMO / GLAFORCE	

ALS Group USA, Corp.
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Internal Chain of Custody Report

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

Service Request: R2110978

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
R2110978-011.06		10/21/2021	0926	SUBBED / GLAFORCE	
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	SUBBED / GLAFORCE	
R2110978-011.07	8270D SIM	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
		10/21/2021	1344	In Lab / MMCMAHON	
		10/21/2021	1607	R-002 / MMCMAHON	
R2110978-011.08		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-002 / GLAFORCE	
R2110978-012.01	8260C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
		10/25/2021	1042	In Lab / FNAEGLER	
		10/25/2021	1045	R-001-S08 / FNAEGLER	
		10/26/2021	1220	In Lab / FNAEGLER	
		10/26/2021	1227	R-001-S08 / FNAEGLER	
R2110978-012.02		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-012.03		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-012.04	6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-A01 / GLAFORCE	
		10/28/2021	1403	In Lab / BDIAMOND	
		10/28/2021	1425	In Lab / BDIAMOND	
		10/29/2021	0938	R-A01 / BDIAMOND	
R2110978-012.05					

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Internal Chain of Custody Report

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

Service Request: R2110978

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	SM 2540 C-1997(2011)	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	1057	RT000444 / GESMERIAN	
		10/21/2021	1057	R-017 / GESMERIAN	
		11/5/2021	1645	R-002 / GESMERIAN	
		R2110978-012.06			
	300.0	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	1057	RT000444 / GESMERIAN	
		10/21/2021	1057	R-017 / GESMERIAN	
		11/5/2021	1645	R-002 / GESMERIAN	
		R2110978-013.01			
	8260C,8260C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
		10/25/2021	1042	In Lab / FNAEGLER	
		10/25/2021	1045	R-001-S08 / FNAEGLER	
		10/26/2021	1220	In Lab / FNAEGLER	
		10/26/2021	1227	R-001-S08 / FNAEGLER	
		10/27/2021	0854	In Lab / FNAEGLER	
		10/27/2021	0856	R-001-S08 / FNAEGLER	
R2110978-013.02					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-013.03					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-013.04					
	6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C,6010C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-A01 / GLAFORCE	
		10/28/2021	1403	In Lab / BDIAMOND	
		10/28/2021	1425	In Lab / BDIAMOND	
		10/29/2021	0938	R-A01 / BDIAMOND	
		R2110978-013.05			
	SM 2540 C-1997(2011)	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	1057	RT000444 / GESMERIAN	

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Internal Chain of Custody Report

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

Service Request: R2110978

Bottle ID	Methods	Date	Time	Sample Location / User	Disposed On
	SM 2540 C-1997(2011)	10/21/2021	1057	R-017 / GESMERIAN	
		11/5/2021	1645	R-002 / GESMERIAN	
R2110978-013.06					
	300.0	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	1057	R-017 / GESMERIAN	
		10/21/2021	1058	RT000444 / GESMERIAN	
		11/5/2021	1645	R-002 / GESMERIAN	
R2110978-014.01					
	8260C	10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
		10/25/2021	1035	In Lab / FNAEGLER	
		10/25/2021	1044	R-001-S08 / FNAEGLER	
R2110978-014.02					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	
R2110978-014.03					
		10/21/2021	0924	SMO / GLAFORCE	
		10/21/2021	0926	R-001 / GLAFORCE	



Miscellaneous Forms

ALS Environmental—Rochester Laboratory

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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.

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Analyst Summary report

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

Service Request: R2110978

Sample Name: CW4A-1021
Lab Code: R2110978-001
Sample Matrix: Water

Date Collected: 10/18/21
Date Received: 10/20/21

Analysis Method

6010C
8260C
8270D SIM

Extracted/Digested By

BDIAMOND

MMCMAHON

Analyzed By

KMCLAEN
FNAEGLER
MMCMAHON

Sample Name: CW4B-1021
Lab Code: R2110978-002
Sample Matrix: Water

Date Collected: 10/18/21
Date Received: 10/20/21

Analysis Method

6010C
8260C
8270D SIM

Extracted/Digested By

BDIAMOND

MMCMAHON

Analyzed By

KMCLAEN
FNAEGLER
MMCMAHON

Sample Name: CW3B-1021
Lab Code: R2110978-003
Sample Matrix: Water

Date Collected: 10/18/21
Date Received: 10/20/21

Analysis Method

6010C
8260C
8270D SIM

Extracted/Digested By

BDIAMOND

MMCMAHON

Analyzed By

KMCLAEN
FNAEGLER
MMCMAHON

Sample Name: CW3A-1021
Lab Code: R2110978-004
Sample Matrix: Water

Date Collected: 10/18/21
Date Received: 10/20/21

Analysis Method

6010C
8260C
8270D SIM

Extracted/Digested By

BDIAMOND

MMCMAHON

Analyzed By

KMCLAEN
FNAEGLER
MMCMAHON

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

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

Service Request: R2110978

Sample Name: MW17D-1021
Lab Code: R2110978-005
Sample Matrix: Water

Date Collected: 10/19/21
Date Received: 10/20/21

Analysis Method

6010C
8260C
8270D SIM

Extracted/Digested By

BDIAMOND

MMCMAHON

Analyzed By

KMCLAEN
FNAEGLER
MMCMAHON

Sample Name: MW17S-1021
Lab Code: R2110978-006
Sample Matrix: Water

Date Collected: 10/19/21
Date Received: 10/20/21

Analysis Method

6010C
8260C
8270D SIM

Extracted/Digested By

BDIAMOND

MMCMAHON

Analyzed By

KMCLAEN
FNAEGLER
MMCMAHON

Sample Name: MW5D-1021
Lab Code: R2110978-007
Sample Matrix: Water

Date Collected: 10/19/21
Date Received: 10/20/21

Analysis Method

6010C
8260C
8270D SIM

Extracted/Digested By

BDIAMOND

MMCMAHON

Analyzed By

KMCLAEN
FNAEGLER
MMCMAHON

Sample Name: MW5S-1021
Lab Code: R2110978-009
Sample Matrix: Water

Date Collected: 10/19/21
Date Received: 10/20/21

Analysis Method

6010C
8260C
8270D SIM

Extracted/Digested By

BDIAMOND

MMCMAHON

Analyzed By

KMCLAEN
FNAEGLER
MMCMAHON

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

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

Service Request: R2110978

Sample Name: DUP1-1021
Lab Code: R2110978-010
Sample Matrix: Water

Date Collected: 10/19/21
Date Received: 10/20/21

Analysis Method

6010C
8260C
8270D SIM

Extracted/Digested By

BDIAMOND

MMCMAHON

Analyzed By

KMCLAEN
FNAEGLER
MMCMAHON

Sample Name: EB1-1021
Lab Code: R2110978-011
Sample Matrix: Water

Date Collected: 10/20/21
Date Received: 10/20/21

Analysis Method

6010C
8260C
8270D SIM

Extracted/Digested By

BDIAMOND

MMCMAHON

Analyzed By

KMCLAEN
FNAEGLER
MMCMAHON

Sample Name: MH33-1021
Lab Code: R2110978-012
Sample Matrix: Water

Date Collected: 10/20/21
Date Received: 10/20/21

Analysis Method

300.0
6010C
8260C
SM 2540 C-1997(2011)

Extracted/Digested By

BDIAMOND

Analyzed By

SMORGAN
KMCLAEN
FNAEGLER
KAWONG

Sample Name: MH32-1021
Lab Code: R2110978-013
Sample Matrix: Water

Date Collected: 10/20/21
Date Received: 10/20/21

Analysis Method

300.0
6010C
8260C

Extracted/Digested By

BDIAMOND

Analyzed By

SMORGAN
KMCLAEN
FNAEGLER

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

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

Service Request: R2110978

Sample Name: MH32-1021
Lab Code: R2110978-013
Sample Matrix: Water

Date Collected: 10/20/21
Date Received: 10/20/21

Analysis Method
SM 2540 C-1997(2011)

Extracted/Digested By

Analyzed By
KAWONG

Sample Name: MH32-1021
Lab Code: R2110978-013.R01
Sample Matrix: Water

Date Collected: 10/20/21
Date Received: 10/20/21

Analysis Method
8260C

Extracted/Digested By

Analyzed By
FNAEGLER

Sample Name: Trip Blank
Lab Code: R2110978-014
Sample Matrix: Water

Date Collected: 10/20/21
Date Received: 10/20/21

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.	



Sample Results

ALS Environmental—Rochester Laboratory

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Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

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dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 09:55
Date Received: 10/20/21 11:53

Sample Name: CW4A-1021
Lab Code: R2110978-001

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	10 U	10	1	10/26/21 15:18	
Benzene	5.0 U	5.0	1	10/26/21 15:18	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 15:18	
Bromoform	5.0 U	5.0	1	10/26/21 15:18	
Bromomethane	5.0 U	5.0	1	10/26/21 15:18	
2-Butanone (MEK)	10 U	10	1	10/26/21 15:18	
Carbon Disulfide	10 U	10	1	10/26/21 15:18	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 15:18	
Chlorobenzene	5.0 U	5.0	1	10/26/21 15:18	
Chloroethane	5.0 U	5.0	1	10/26/21 15:18	
Chloroform	5.0 U	5.0	1	10/26/21 15:18	
Chloromethane	5.0 U	5.0	1	10/26/21 15:18	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 15:18	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 15:18	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 15:18	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 15:18	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 15:18	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 15:18	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 15:18	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 15:18	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 15:18	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 15:18	
Ethylbenzene	5.0 U	5.0	1	10/26/21 15:18	
2-Hexanone	10 U	10	1	10/26/21 15:18	
Methylene Chloride	5.0 U	5.0	1	10/26/21 15:18	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 15:18	
Styrene	5.0 U	5.0	1	10/26/21 15:18	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 15:18	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 15:18	
Toluene	5.0 U	5.0	1	10/26/21 15:18	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 15:18	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 15:18	
Trichloroethene	5.0 U	5.0	1	10/26/21 15:18	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 15:18	
o-Xylene	5.0 U	5.0	1	10/26/21 15:18	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 15:18	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 09:55
Date Received: 10/20/21 11:53

Sample Name: CW4A-1021
Lab Code: R2110978-001

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	10/26/21 15:18	
Toluene-d8	98	87 - 121	10/26/21 15:18	
Dibromofluoromethane	97	80 - 116	10/26/21 15:18	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 12:00
Date Received: 10/20/21 11:53

Sample Name: CW4B-1021
Lab Code: R2110978-002

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	10 U	10	1	10/26/21 15:41	
Benzene	5.0 U	5.0	1	10/26/21 15:41	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 15:41	
Bromoform	5.0 U	5.0	1	10/26/21 15:41	
Bromomethane	5.0 U	5.0	1	10/26/21 15:41	
2-Butanone (MEK)	10 U	10	1	10/26/21 15:41	
Carbon Disulfide	10 U	10	1	10/26/21 15:41	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 15:41	
Chlorobenzene	5.0 U	5.0	1	10/26/21 15:41	
Chloroethane	5.0 U	5.0	1	10/26/21 15:41	
Chloroform	5.0 U	5.0	1	10/26/21 15:41	
Chloromethane	5.0 U	5.0	1	10/26/21 15:41	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 15:41	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 15:41	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 15:41	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 15:41	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 15:41	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 15:41	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 15:41	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 15:41	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 15:41	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 15:41	
Ethylbenzene	5.0 U	5.0	1	10/26/21 15:41	
2-Hexanone	10 U	10	1	10/26/21 15:41	
Methylene Chloride	5.0 U	5.0	1	10/26/21 15:41	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 15:41	
Styrene	5.0 U	5.0	1	10/26/21 15:41	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 15:41	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 15:41	
Toluene	5.0 U	5.0	1	10/26/21 15:41	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 15:41	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 15:41	
Trichloroethene	5.0 U	5.0	1	10/26/21 15:41	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 15:41	
o-Xylene	5.0 U	5.0	1	10/26/21 15:41	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 15:41	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 12:00
Date Received: 10/20/21 11:53

Sample Name: CW4B-1021
Lab Code: R2110978-002

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	10/26/21 15:41	
Toluene-d8	96	87 - 121	10/26/21 15:41	
Dibromofluoromethane	98	80 - 116	10/26/21 15:41	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 13:55
Date Received: 10/20/21 11:53

Sample Name: CW3B-1021
Lab Code: R2110978-003

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	50 U	50	5	10/26/21 16:03	
Benzene	25 U	25	5	10/26/21 16:03	
Bromodichloromethane	25 U	25	5	10/26/21 16:03	
Bromoform	25 U	25	5	10/26/21 16:03	
Bromomethane	25 U	25	5	10/26/21 16:03	
2-Butanone (MEK)	50 U	50	5	10/26/21 16:03	
Carbon Disulfide	50 U	50	5	10/26/21 16:03	
Carbon Tetrachloride	25 U	25	5	10/26/21 16:03	
Chlorobenzene	25 U	25	5	10/26/21 16:03	
Chloroethane	25 U	25	5	10/26/21 16:03	
Chloroform	25 U	25	5	10/26/21 16:03	
Chloromethane	25 U	25	5	10/26/21 16:03	
Dibromochloromethane	25 U	25	5	10/26/21 16:03	
1,2-Dibromoethane	25 U	25	5	10/26/21 16:03	
1,1-Dichloroethane	25 U	25	5	10/26/21 16:03	
1,2-Dichloroethane	25 U	25	5	10/26/21 16:03	
1,1-Dichloroethene	25 U	25	5	10/26/21 16:03	
cis-1,2-Dichloroethene	100	25	5	10/26/21 16:03	
trans-1,2-Dichloroethene	25 U	25	5	10/26/21 16:03	
1,2-Dichloropropane	25 U	25	5	10/26/21 16:03	
cis-1,3-Dichloropropene	25 U	25	5	10/26/21 16:03	
trans-1,3-Dichloropropene	25 U	25	5	10/26/21 16:03	
Ethylbenzene	25 U	25	5	10/26/21 16:03	
2-Hexanone	50 U	50	5	10/26/21 16:03	
Methylene Chloride	25 U	25	5	10/26/21 16:03	
4-Methyl-2-pentanone (MIBK)	50 U	50	5	10/26/21 16:03	
Styrene	25 U	25	5	10/26/21 16:03	
1,1,2,2-Tetrachloroethane	25 U	25	5	10/26/21 16:03	
Tetrachloroethene	25 U	25	5	10/26/21 16:03	
Toluene	25 U	25	5	10/26/21 16:03	
1,1,1-Trichloroethane	25 U	25	5	10/26/21 16:03	
1,1,2-Trichloroethane	25 U	25	5	10/26/21 16:03	
Trichloroethene	430	25	5	10/26/21 16:03	
Vinyl Chloride	25 U	25	5	10/26/21 16:03	
o-Xylene	25 U	25	5	10/26/21 16:03	
m,p-Xylenes	25 U	25	5	10/26/21 16:03	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 13:55
Date Received: 10/20/21 11:53

Sample Name: CW3B-1021
Lab Code: R2110978-003

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	85	85 - 122	10/26/21 16:03	
Toluene-d8	95	87 - 121	10/26/21 16:03	
Dibromofluoromethane	96	80 - 116	10/26/21 16:03	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 15:35
Date Received: 10/20/21 11:53

Sample Name: CW3A-1021
Lab Code: R2110978-004

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	10 U	10	1	10/26/21 16:25	
Benzene	5.0 U	5.0	1	10/26/21 16:25	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 16:25	
Bromoform	5.0 U	5.0	1	10/26/21 16:25	
Bromomethane	5.0 U	5.0	1	10/26/21 16:25	
2-Butanone (MEK)	10 U	10	1	10/26/21 16:25	
Carbon Disulfide	10 U	10	1	10/26/21 16:25	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 16:25	
Chlorobenzene	5.0 U	5.0	1	10/26/21 16:25	
Chloroethane	5.0 U	5.0	1	10/26/21 16:25	
Chloroform	5.0 U	5.0	1	10/26/21 16:25	
Chloromethane	5.0 U	5.0	1	10/26/21 16:25	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 16:25	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 16:25	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 16:25	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 16:25	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 16:25	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 16:25	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 16:25	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 16:25	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 16:25	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 16:25	
Ethylbenzene	5.0 U	5.0	1	10/26/21 16:25	
2-Hexanone	10 U	10	1	10/26/21 16:25	
Methylene Chloride	5.0 U	5.0	1	10/26/21 16:25	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 16:25	
Styrene	5.0 U	5.0	1	10/26/21 16:25	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 16:25	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 16:25	
Toluene	5.0 U	5.0	1	10/26/21 16:25	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 16:25	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 16:25	
Trichloroethene	17	5.0	1	10/26/21 16:25	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 16:25	
o-Xylene	5.0 U	5.0	1	10/26/21 16:25	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 16:25	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 15:35
Date Received: 10/20/21 11:53

Sample Name: CW3A-1021
Lab Code: R2110978-004

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	10/26/21 16:25	
Toluene-d8	95	87 - 121	10/26/21 16:25	
Dibromofluoromethane	97	80 - 116	10/26/21 16:25	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 10:05
Date Received: 10/20/21 11:53

Sample Name: MW17D-1021
Lab Code: R2110978-005

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	10 U	10	1	10/26/21 16:47	
Benzene	5.0 U	5.0	1	10/26/21 16:47	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 16:47	
Bromoform	5.0 U	5.0	1	10/26/21 16:47	
Bromomethane	5.0 U	5.0	1	10/26/21 16:47	
2-Butanone (MEK)	10 U	10	1	10/26/21 16:47	
Carbon Disulfide	10 U	10	1	10/26/21 16:47	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 16:47	
Chlorobenzene	5.0 U	5.0	1	10/26/21 16:47	
Chloroethane	5.0 U	5.0	1	10/26/21 16:47	
Chloroform	5.0 U	5.0	1	10/26/21 16:47	
Chloromethane	5.0 U	5.0	1	10/26/21 16:47	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 16:47	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 16:47	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 16:47	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 16:47	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 16:47	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 16:47	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 16:47	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 16:47	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 16:47	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 16:47	
Ethylbenzene	5.0 U	5.0	1	10/26/21 16:47	
2-Hexanone	10 U	10	1	10/26/21 16:47	
Methylene Chloride	5.0 U	5.0	1	10/26/21 16:47	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 16:47	
Styrene	5.0 U	5.0	1	10/26/21 16:47	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 16:47	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 16:47	
Toluene	5.0 U	5.0	1	10/26/21 16:47	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 16:47	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 16:47	
Trichloroethene	5.0 U	5.0	1	10/26/21 16:47	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 16:47	
o-Xylene	5.0 U	5.0	1	10/26/21 16:47	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 16:47	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 10:05
Date Received: 10/20/21 11:53

Sample Name: MW17D-1021
Lab Code: R2110978-005

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	10/26/21 16:47	
Toluene-d8	96	87 - 121	10/26/21 16:47	
Dibromofluoromethane	95	80 - 116	10/26/21 16:47	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 11:55
Date Received: 10/20/21 11:53

Sample Name: MW17S-1021
Lab Code: R2110978-006

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	10 U	10	1	10/26/21 17:10	
Benzene	5.0 U	5.0	1	10/26/21 17:10	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 17:10	
Bromoform	5.0 U	5.0	1	10/26/21 17:10	
Bromomethane	5.0 U	5.0	1	10/26/21 17:10	
2-Butanone (MEK)	10 U	10	1	10/26/21 17:10	
Carbon Disulfide	10 U	10	1	10/26/21 17:10	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 17:10	
Chlorobenzene	5.0 U	5.0	1	10/26/21 17:10	
Chloroethane	5.0 U	5.0	1	10/26/21 17:10	
Chloroform	5.0 U	5.0	1	10/26/21 17:10	
Chloromethane	5.0 U	5.0	1	10/26/21 17:10	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 17:10	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 17:10	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 17:10	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 17:10	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 17:10	
cis-1,2-Dichloroethene	33	5.0	1	10/26/21 17:10	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 17:10	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 17:10	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 17:10	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 17:10	
Ethylbenzene	5.0 U	5.0	1	10/26/21 17:10	
2-Hexanone	10 U	10	1	10/26/21 17:10	
Methylene Chloride	5.0 U	5.0	1	10/26/21 17:10	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 17:10	
Styrene	5.0 U	5.0	1	10/26/21 17:10	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 17:10	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 17:10	
Toluene	5.0 U	5.0	1	10/26/21 17:10	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 17:10	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 17:10	
Trichloroethene	11	5.0	1	10/26/21 17:10	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 17:10	
o-Xylene	5.0 U	5.0	1	10/26/21 17:10	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 17:10	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 11:55
Date Received: 10/20/21 11:53

Sample Name: MW17S-1021
Lab Code: R2110978-006

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	86	85 - 122	10/26/21 17:10	
Toluene-d8	97	87 - 121	10/26/21 17:10	
Dibromofluoromethane	97	80 - 116	10/26/21 17:10	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 13:55
Date Received: 10/20/21 11:53

Sample Name: MW5D-1021
Lab Code: R2110978-007

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	10 U	10	1	10/27/21 12:31	
Benzene	5.0 U	5.0	1	10/27/21 12:31	
Bromodichloromethane	5.0 U	5.0	1	10/27/21 12:31	
Bromoform	5.0 U	5.0	1	10/27/21 12:31	
Bromomethane	5.0 U	5.0	1	10/27/21 12:31	
2-Butanone (MEK)	10 U	10	1	10/27/21 12:31	
Carbon Disulfide	10 U	10	1	10/27/21 12:31	
Carbon Tetrachloride	5.0 U	5.0	1	10/27/21 12:31	
Chlorobenzene	5.0 U	5.0	1	10/27/21 12:31	
Chloroethane	5.0 U	5.0	1	10/27/21 12:31	
Chloroform	5.0 U	5.0	1	10/27/21 12:31	
Chloromethane	5.0 U	5.0	1	10/27/21 12:31	
Dibromochloromethane	5.0 U	5.0	1	10/27/21 12:31	
1,2-Dibromoethane	5.0 U	5.0	1	10/27/21 12:31	
1,1-Dichloroethane	5.0 U	5.0	1	10/27/21 12:31	
1,2-Dichloroethane	5.0 U	5.0	1	10/27/21 12:31	
1,1-Dichloroethene	5.0 U	5.0	1	10/27/21 12:31	
cis-1,2-Dichloroethene	150	5.0	1	10/27/21 12:31	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/27/21 12:31	
1,2-Dichloropropane	5.0 U	5.0	1	10/27/21 12:31	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/27/21 12:31	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/27/21 12:31	
Ethylbenzene	5.0 U	5.0	1	10/27/21 12:31	
2-Hexanone	10 U	10	1	10/27/21 12:31	
Methylene Chloride	5.0 U	5.0	1	10/27/21 12:31	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/27/21 12:31	
Styrene	5.0 U	5.0	1	10/27/21 12:31	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/27/21 12:31	
Tetrachloroethene	5.0 U	5.0	1	10/27/21 12:31	
Toluene	5.0 U	5.0	1	10/27/21 12:31	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/27/21 12:31	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/27/21 12:31	
Trichloroethene	52	5.0	1	10/27/21 12:31	
Vinyl Chloride	13	5.0	1	10/27/21 12:31	
o-Xylene	5.0 U	5.0	1	10/27/21 12:31	
m,p-Xylenes	5.0 U	5.0	1	10/27/21 12:31	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 13:55
Date Received: 10/20/21 11:53

Sample Name: MW5D-1021
Lab Code: R2110978-007

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	10/27/21 12:31	
Toluene-d8	97	87 - 121	10/27/21 12:31	
Dibromofluoromethane	101	80 - 116	10/27/21 12:31	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 15:10
Date Received: 10/20/21 11:53

Sample Name: MW5S-1021
Lab Code: R2110978-009

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	10 U	10	1	10/26/21 17:54	
Benzene	5.0 U	5.0	1	10/26/21 17:54	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 17:54	
Bromoform	5.0 U	5.0	1	10/26/21 17:54	
Bromomethane	5.0 U	5.0	1	10/26/21 17:54	
2-Butanone (MEK)	10 U	10	1	10/26/21 17:54	
Carbon Disulfide	10 U	10	1	10/26/21 17:54	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 17:54	
Chlorobenzene	5.0 U	5.0	1	10/26/21 17:54	
Chloroethane	5.0 U	5.0	1	10/26/21 17:54	
Chloroform	5.0 U	5.0	1	10/26/21 17:54	
Chloromethane	5.0 U	5.0	1	10/26/21 17:54	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 17:54	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 17:54	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 17:54	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 17:54	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 17:54	
cis-1,2-Dichloroethene	180	5.0	1	10/26/21 17:54	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 17:54	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 17:54	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 17:54	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 17:54	
Ethylbenzene	5.0 U	5.0	1	10/26/21 17:54	
2-Hexanone	10 U	10	1	10/26/21 17:54	
Methylene Chloride	5.0 U	5.0	1	10/26/21 17:54	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 17:54	
Styrene	5.0 U	5.0	1	10/26/21 17:54	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 17:54	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 17:54	
Toluene	5.0 U	5.0	1	10/26/21 17:54	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 17:54	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 17:54	
Trichloroethene	35	5.0	1	10/26/21 17:54	
Vinyl Chloride	16	5.0	1	10/26/21 17:54	
o-Xylene	5.0 U	5.0	1	10/26/21 17:54	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 17:54	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 15:10
Date Received: 10/20/21 11:53

Sample Name: MW5S-1021
Lab Code: R2110978-009

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	10/26/21 17:54	
Toluene-d8	99	87 - 121	10/26/21 17:54	
Dibromofluoromethane	100	80 - 116	10/26/21 17:54	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 15:15
Date Received: 10/20/21 11:53

Sample Name: DUP1-1021
Lab Code: R2110978-010

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	10 U	10	1	10/26/21 18:16	
Benzene	5.0 U	5.0	1	10/26/21 18:16	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 18:16	
Bromoform	5.0 U	5.0	1	10/26/21 18:16	
Bromomethane	5.0 U	5.0	1	10/26/21 18:16	
2-Butanone (MEK)	10 U	10	1	10/26/21 18:16	
Carbon Disulfide	10 U	10	1	10/26/21 18:16	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 18:16	
Chlorobenzene	5.0 U	5.0	1	10/26/21 18:16	
Chloroethane	5.0 U	5.0	1	10/26/21 18:16	
Chloroform	5.0 U	5.0	1	10/26/21 18:16	
Chloromethane	5.0 U	5.0	1	10/26/21 18:16	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 18:16	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 18:16	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 18:16	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 18:16	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 18:16	
cis-1,2-Dichloroethene	180	5.0	1	10/26/21 18:16	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 18:16	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 18:16	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 18:16	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 18:16	
Ethylbenzene	5.0 U	5.0	1	10/26/21 18:16	
2-Hexanone	10 U	10	1	10/26/21 18:16	
Methylene Chloride	5.0 U	5.0	1	10/26/21 18:16	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 18:16	
Styrene	5.0 U	5.0	1	10/26/21 18:16	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 18:16	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 18:16	
Toluene	5.0 U	5.0	1	10/26/21 18:16	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 18:16	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 18:16	
Trichloroethene	35	5.0	1	10/26/21 18:16	
Vinyl Chloride	16	5.0	1	10/26/21 18:16	
o-Xylene	5.0 U	5.0	1	10/26/21 18:16	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 18:16	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 15:15
Date Received: 10/20/21 11:53

Sample Name: DUP1-1021
Lab Code: R2110978-010

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	85	85 - 122	10/26/21 18:16	
Toluene-d8	96	87 - 121	10/26/21 18:16	
Dibromofluoromethane	96	80 - 116	10/26/21 18:16	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 07:30
Date Received: 10/20/21 11:53

Sample Name: EB1-1021
Lab Code: R2110978-011

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	10 U	10	1	10/26/21 18:39	
Benzene	5.0 U	5.0	1	10/26/21 18:39	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 18:39	
Bromoform	5.0 U	5.0	1	10/26/21 18:39	
Bromomethane	5.0 U	5.0	1	10/26/21 18:39	
2-Butanone (MEK)	10 U	10	1	10/26/21 18:39	
Carbon Disulfide	10 U	10	1	10/26/21 18:39	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 18:39	
Chlorobenzene	5.0 U	5.0	1	10/26/21 18:39	
Chloroethane	5.0 U	5.0	1	10/26/21 18:39	
Chloroform	5.0 U	5.0	1	10/26/21 18:39	
Chloromethane	5.0 U	5.0	1	10/26/21 18:39	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 18:39	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 18:39	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 18:39	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 18:39	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 18:39	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 18:39	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 18:39	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 18:39	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 18:39	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 18:39	
Ethylbenzene	5.0 U	5.0	1	10/26/21 18:39	
2-Hexanone	10 U	10	1	10/26/21 18:39	
Methylene Chloride	5.0 U	5.0	1	10/26/21 18:39	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 18:39	
Styrene	5.0 U	5.0	1	10/26/21 18:39	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 18:39	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 18:39	
Toluene	5.0 U	5.0	1	10/26/21 18:39	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 18:39	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 18:39	
Trichloroethene	5.0 U	5.0	1	10/26/21 18:39	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 18:39	
o-Xylene	5.0 U	5.0	1	10/26/21 18:39	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 18:39	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 07:30
Date Received: 10/20/21 11:53

Sample Name: EB1-1021
Lab Code: R2110978-011

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	85	85 - 122	10/26/21 18:39	
Toluene-d8	95	87 - 121	10/26/21 18:39	
Dibromofluoromethane	95	80 - 116	10/26/21 18:39	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 08:40
Date Received: 10/20/21 11:53

Sample Name: MH33-1021
Lab Code: R2110978-012

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	10 U	10	1	10/26/21 19:01	
Benzene	5.0 U	5.0	1	10/26/21 19:01	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 19:01	
Bromoform	5.0 U	5.0	1	10/26/21 19:01	
Bromomethane	5.0 U	5.0	1	10/26/21 19:01	
2-Butanone (MEK)	10 U	10	1	10/26/21 19:01	
Carbon Disulfide	10 U	10	1	10/26/21 19:01	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 19:01	
Chlorobenzene	5.0 U	5.0	1	10/26/21 19:01	
Chloroethane	5.0 U	5.0	1	10/26/21 19:01	
Chloroform	5.0 U	5.0	1	10/26/21 19:01	
Chloromethane	5.0 U	5.0	1	10/26/21 19:01	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 19:01	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 19:01	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 19:01	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 19:01	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 19:01	
cis-1,2-Dichloroethene	31	5.0	1	10/26/21 19:01	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 19:01	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 19:01	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 19:01	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 19:01	
Ethylbenzene	5.0 U	5.0	1	10/26/21 19:01	
2-Hexanone	10 U	10	1	10/26/21 19:01	
Methylene Chloride	5.0 U	5.0	1	10/26/21 19:01	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 19:01	
Styrene	5.0 U	5.0	1	10/26/21 19:01	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 19:01	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 19:01	
Toluene	5.0 U	5.0	1	10/26/21 19:01	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 19:01	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 19:01	
Trichloroethene	5.0 U	5.0	1	10/26/21 19:01	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 19:01	
o-Xylene	5.0 U	5.0	1	10/26/21 19:01	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 19:01	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 08:40
Date Received: 10/20/21 11:53

Sample Name: MH33-1021
Lab Code: R2110978-012

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	10/26/21 19:01	
Toluene-d8	96	87 - 121	10/26/21 19:01	
Dibromofluoromethane	98	80 - 116	10/26/21 19:01	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 09:10
Date Received: 10/20/21 11:53

Sample Name: MH32-1021
Lab Code: R2110978-013

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	100 U	100	10	10/26/21 19:23	
Benzene	50 U	50	10	10/26/21 19:23	
Bromodichloromethane	50 U	50	10	10/26/21 19:23	
Bromoform	50 U	50	10	10/26/21 19:23	
Bromomethane	50 U	50	10	10/26/21 19:23	
2-Butanone (MEK)	100 U	100	10	10/26/21 19:23	
Carbon Disulfide	100 U	100	10	10/26/21 19:23	
Carbon Tetrachloride	50 U	50	10	10/26/21 19:23	
Chlorobenzene	50 U	50	10	10/26/21 19:23	
Chloroethane	50 U	50	10	10/26/21 19:23	
Chloroform	50 U	50	10	10/26/21 19:23	
Chloromethane	50 U	50	10	10/26/21 19:23	
Dibromochloromethane	50 U	50	10	10/26/21 19:23	
1,2-Dibromoethane	50 U	50	10	10/26/21 19:23	
1,1-Dichloroethane	50 U	50	10	10/26/21 19:23	
1,2-Dichloroethane	50 U	50	10	10/26/21 19:23	
1,1-Dichloroethene	50 U	50	10	10/26/21 19:23	
cis-1,2-Dichloroethene	8800 D	500	100	10/27/21 12:53	
trans-1,2-Dichloroethene	50 U	50	10	10/26/21 19:23	
1,2-Dichloropropane	50 U	50	10	10/26/21 19:23	
cis-1,3-Dichloropropene	50 U	50	10	10/26/21 19:23	
trans-1,3-Dichloropropene	50 U	50	10	10/26/21 19:23	
Ethylbenzene	72	50	10	10/26/21 19:23	
2-Hexanone	100 U	100	10	10/26/21 19:23	
Methylene Chloride	510	50	10	10/26/21 19:23	
4-Methyl-2-pentanone (MIBK)	100 U	100	10	10/26/21 19:23	
Styrene	50 U	50	10	10/26/21 19:23	
1,1,2,2-Tetrachloroethane	50 U	50	10	10/26/21 19:23	
Tetrachloroethene	50 U	50	10	10/26/21 19:23	
Toluene	150	50	10	10/26/21 19:23	
1,1,1-Trichloroethane	50 U	50	10	10/26/21 19:23	
1,1,2-Trichloroethane	50 U	50	10	10/26/21 19:23	
Trichloroethene	370	50	10	10/26/21 19:23	
Vinyl Chloride	310	50	10	10/26/21 19:23	
o-Xylene	50 U	50	10	10/26/21 19:23	
m,p-Xylenes	50 U	50	10	10/26/21 19:23	

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dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 09:10
Date Received: 10/20/21 11:53

Sample Name: MH32-1021
Lab Code: R2110978-013

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	10/26/21 19:23	
Toluene-d8	97	87 - 121	10/26/21 19:23	
Dibromofluoromethane	99	80 - 116	10/26/21 19:23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 09:10
Date Received: 10/20/21 11:53

Sample Name: Trip Blank
Lab Code: R2110978-014

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	10 U	10	1	10/25/21 13:29	
Benzene	5.0 U	5.0	1	10/25/21 13:29	
Bromodichloromethane	5.0 U	5.0	1	10/25/21 13:29	
Bromoform	5.0 U	5.0	1	10/25/21 13:29	
Bromomethane	5.0 U	5.0	1	10/25/21 13:29	
2-Butanone (MEK)	10 U	10	1	10/25/21 13:29	
Carbon Disulfide	10 U	10	1	10/25/21 13:29	
Carbon Tetrachloride	5.0 U	5.0	1	10/25/21 13:29	
Chlorobenzene	5.0 U	5.0	1	10/25/21 13:29	
Chloroethane	5.0 U	5.0	1	10/25/21 13:29	
Chloroform	5.0 U	5.0	1	10/25/21 13:29	
Chloromethane	5.0 U	5.0	1	10/25/21 13:29	
Dibromochloromethane	5.0 U	5.0	1	10/25/21 13:29	
1,1-Dichloroethane	5.0 U	5.0	1	10/25/21 13:29	
1,2-Dibromoethane	5.0 U	5.0	1	10/25/21 13:29	
1,2-Dichloroethane	5.0 U	5.0	1	10/25/21 13:29	
1,1-Dichloroethene	5.0 U	5.0	1	10/25/21 13:29	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/25/21 13:29	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/25/21 13:29	
1,2-Dichloropropane	5.0 U	5.0	1	10/25/21 13:29	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/25/21 13:29	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/25/21 13:29	
Ethylbenzene	5.0 U	5.0	1	10/25/21 13:29	
2-Hexanone	10 U	10	1	10/25/21 13:29	
Methylene Chloride	5.0 U	5.0	1	10/25/21 13:29	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/25/21 13:29	
Styrene	5.0 U	5.0	1	10/25/21 13:29	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/25/21 13:29	
Tetrachloroethene	5.0 U	5.0	1	10/25/21 13:29	
Toluene	5.0 U	5.0	1	10/25/21 13:29	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/25/21 13:29	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/25/21 13:29	
Trichloroethene	5.0 U	5.0	1	10/25/21 13:29	
Vinyl Chloride	5.0 U	5.0	1	10/25/21 13:29	
o-Xylene	5.0 U	5.0	1	10/25/21 13:29	
m,p-Xylenes	5.0 U	5.0	1	10/25/21 13:29	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 09:10
Date Received: 10/20/21 11:53

Sample Name: Trip Blank
Lab Code: R2110978-014

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	10/25/21 13:29	
Toluene-d8	94	87 - 121	10/25/21 13:29	
Dibromofluoromethane	97	80 - 116	10/25/21 13:29	



Semivolatile Organic Compounds by GC/MS

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 09:55
Date Received: 10/20/21 11:53

Sample Name: CW4A-1021
Lab Code: R2110978-001

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	0.39	0.040	0.027	1	10/22/21 10:18	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	90	64 - 124	10/22/21 10:18	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 12:00
Date Received: 10/20/21 11:53

Sample Name: CW4B-1021
Lab Code: R2110978-002

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	0.40	0.040	0.027	1	10/22/21 11:11	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	89	64 - 124	10/22/21 11:11	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 13:55
Date Received: 10/20/21 11:53

Sample Name: CW3B-1021
Lab Code: R2110978-003

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	0.90	0.040	0.027	1	10/22/21 11:29	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	94	64 - 124	10/22/21 11:29	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 15:35
Date Received: 10/20/21 11:53

Sample Name: CW3A-1021
Lab Code: R2110978-004

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	0.13	0.040	0.027	1	10/22/21 11:47	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	92	64 - 124	10/22/21 11:47	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 10:05
Date Received: 10/20/21 11:53

Sample Name: MW17D-1021
Lab Code: R2110978-005

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	0.040 U	0.040	0.027	1	10/22/21 12:05	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	89	64 - 124	10/22/21 12:05	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 11:55
Date Received: 10/20/21 11:53

Sample Name: MW17S-1021
Lab Code: R2110978-006

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	0.41	0.040	0.027	1	10/22/21 12:24	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	87	64 - 124	10/22/21 12:24	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 13:55
Date Received: 10/20/21 11:53

Sample Name: MW5D-1021
Lab Code: R2110978-007

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	0.66	0.040	0.027	1	10/22/21 12:42	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	103	64 - 124	10/22/21 12:42	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 15:10
Date Received: 10/20/21 11:53

Sample Name: MW5S-1021
Lab Code: R2110978-009

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	0.17	0.040	0.027	1	10/22/21 13:00	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	95	64 - 124	10/22/21 13:00	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 15:15
Date Received: 10/20/21 11:53

Sample Name: DUP1-1021
Lab Code: R2110978-010

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	0.17	0.040	0.027	1	10/22/21 13:18	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	95	64 - 124	10/22/21 13:18	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 07:30
Date Received: 10/20/21 11:53

Sample Name: EB1-1021
Lab Code: R2110978-011

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	0.040 U	0.040	0.027	1	10/22/21 13:36	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	92	64 - 124	10/22/21 13:36	



Metals

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

CW4A-1021

Contract: R2110978

Lab Code:

Case No.:

SAS No.:

SDG NO.: CW4A-1021

Matrix (soil/water): WATER

Lab Sample ID: R2110978-001

Level (low/med): LOW

Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	60.9			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	33400			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	17100			P
7439-96-5	Manganese	491			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	13900			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless

Clarity Before: Clear

Texture:

Color After: Colorless

Clarity After: Clear

Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

CW4B-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-002

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	31.6			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	40700			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	17100			P
7439-96-5	Manganese	249			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	15500			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

CW3B-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-003

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	38.4			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	69900			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	35500			P
7439-96-5	Manganese	29.8			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2460			P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	22300			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

CW3A-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-004

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	62.8			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	36900			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	2860			P
7439-96-5	Manganese	18.3			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	12000			P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	55700			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW17D-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-005

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	20.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	5260			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	16200			P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	19400			P
7439-96-5	Manganese	214			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	5260			P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	35900			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW17S-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-006

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	40.4			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	91200			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	64100			P
7439-96-5	Manganese	55.0			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	3650			P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	78400			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW5D-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-007

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	37.9			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	20100			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	125			P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	14100			P
7439-96-5	Manganese	519			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	7370			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW5S-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-009

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	20.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	14700			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	2170			P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	9970			P
7439-96-5	Manganese	172			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	6540			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

DUP1-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-010

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	20.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	14700			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	1860			P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	9910			P
7439-96-5	Manganese	171			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	6500			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

EB1-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-011

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	20.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	1000	U		P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	1000	U		P
7439-96-5	Manganese	10.0	U		P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	1000	U		P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MH33-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-012

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	48.1			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	54600			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	2430			P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	15500			P
7439-96-5	Manganese	939			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	2370			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MH32-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-013

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.8			P
7440-39-3	Barium	76.0			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	76000			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	11600			P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	13200			P
7439-96-5	Manganese	2250			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	1830			P
7440-66-6	Zinc	25.1			P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:



General Chemistry

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

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Analytical Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: MH33-1021
Lab Code: R2110978-012

Service Request: R2110978
Date Collected: 10/20/21 08:40
Date Received: 10/20/21 11:53
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	10/20/21 18:21	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	216	mg/L	10	1	10/27/21 15:20	

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Analytical Report

Client: On-Site Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water
Sample Name: MH32-1021
Lab Code: R2110978-013

Service Request: R2110978
Date Collected: 10/20/21 09:10
Date Received: 10/20/21 11:53
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	10/20/21 18:42	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	258	mg/L	10	1	10/27/21 15:20	



QC Summary Forms

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Volatile Organic Compounds by GC/MS

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QA/QC Report

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

Service Request: R2110978

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene	Toluene-d8	Dibromofluoromethane
		85-122	87-121	80-116
CW4A-1021	R2110978-001	88	98	97
CW4B-1021	R2110978-002	89	96	98
CW3B-1021	R2110978-003	85	95	96
CW3A-1021	R2110978-004	88	95	97
MW17D-1021	R2110978-005	88	96	95
MW17S-1021	R2110978-006	86	97	97
MW5D-1021	R2110978-007	89	97	101
MW5S-1021	R2110978-009	89	99	100
DUP1-1021	R2110978-010	85	96	96
EB1-1021	R2110978-011	85	95	95
MH33-1021	R2110978-012	88	96	98
MH32-1021	R2110978-013	90	97	99
Trip Blank	R2110978-014	88	94	97
Method Blank	RQ2113550-04	86	93	94
Method Blank	RQ2113636-04	85	95	97
Method Blank	RQ2113686-04	86	95	97
Lab Control Sample	RQ2113550-03	91	95	101
Lab Control Sample	RQ2113636-03	93	99	102
Lab Control Sample	RQ2113686-03	93	99	103
CW4A-1021 MS	RQ2113636-05	91	97	100
CW4A-1021 DMS	RQ2113636-06	95	98	101

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QA/QC Report

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

Service Request: R2110978
Date Collected: 10/18/21
Date Received: 10/20/21
Date Analyzed: 10/26/21
Date Extracted: NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: CW4A-1021
Lab Code: R2110978-001
Analysis Method: 8260C
Prep Method: EPA 5030C

Units: ug/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike RQ2113636-05			Duplicate Matrix Spike RQ2113636-06			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Acetone	10 U	50.5	50.0	101	51.2	50.0	102	35-183	1	30
Benzene	5.0 U	52.4	50.0	105	53.7	50.0	107	76-129	3	30
Bromodichloromethane	5.0 U	52.6	50.0	105	54.8	50.0	110	78-133	4	30
Bromoform	5.0 U	48.4	50.0	97	50.2	50.0	100	58-133	4	30
Bromomethane	5.0 U	55.5	50.0	111	57.0	50.0	114	10-184	3	30
2-Butanone (MEK)	10 U	46.3	50.0	93	48.2	50.0	96	61-137	4	30
Carbon Disulfide	10 U	56.0	50.0	112	59.8	50.0	120	59-140	7	30
Carbon Tetrachloride	5.0 U	56.0	50.0	112	59.2	50.0	118	65-135	6	30
Chlorobenzene	5.0 U	51.4	50.0	103	53.1	50.0	106	76-125	3	30
Chloroethane	5.0 U	66.5	50.0	133	66.4	50.0	133	48-146	<1	30
Chloroform	5.0 U	47.6	50.0	95	49.6	50.0	99	75-130	4	30
Chloromethane	5.0 U	65.8	50.0	132	68.9	50.0	138	55-160	5	30
Dibromochloromethane	5.0 U	51.7	50.0	103	53.9	50.0	108	72-128	4	30
1,1-Dichloroethane	5.0 U	54.9	50.0	110	57.6	50.0	115	74-132	5	30
1,2-Dibromoethane	5.0 U	50.7	50.0	101	52.5	50.0	105	67-127	4	30
1,2-Dichloroethane	5.0 U	50.9	50.0	102	52.7	50.0	105	68-130	3	30
1,1-Dichloroethene	5.0 U	56.4	50.0	113	61.7	50.0	123 *	71-118	9	30
cis-1,2-Dichloroethene	5.0 U	55.1	50.0	110	54.8	50.0	110	77-127	<1	30
trans-1,2-Dichloroethene	5.0 U	54.7	50.0	109	57.2	50.0	114	73-118	5	30
1,2-Dichloropropane	5.0 U	53.5	50.0	107	54.6	50.0	109	79-124	2	30
cis-1,3-Dichloropropene	5.0 U	48.9	50.0	98	50.8	50.0	102	52-134	4	30
trans-1,3-Dichloropropene	5.0 U	47.8	50.0	96	50.7	50.0	101	71-133	6	30
Ethylbenzene	5.0 U	55.2	50.0	110	56.2	50.0	112	72-134	2	30
2-Hexanone	10 U	49.2	50.0	98	50.7	50.0	101	56-132	3	30
Methylene Chloride	5.0 U	50.4	50.0	101	51.6	50.0	103	73-122	2	30
4-Methyl-2-pentanone (MIBK)	10 U	51.3	50.0	103	52.0	50.0	104	60-141	1	30
Styrene	5.0 U	50.4	50.0	101	52.1	50.0	104	74-136	3	30
1,1,2,2-Tetrachloroethane	5.0 U	55.5	50.0	111	57.3	50.0	115	72-122	3	30
Tetrachloroethene	5.0 U	51.9	50.0	104	53.3	50.0	107	72-125	3	30
Toluene	5.0 U	54.1	50.0	108	55.4	50.0	111	79-119	2	30
1,1,1-Trichloroethane	5.0 U	54.9	50.0	110	58.3	50.0	117	74-127	6	30
1,1,2-Trichloroethane	5.0 U	52.0	50.0	104	52.8	50.0	106	82-121	2	30
Trichloroethene	5.0 U	47.1	50.0	94	48.1	50.0	96	74-122	2	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.
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QA/QC Report

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

Service Request: R2110978
Date Collected: 10/18/21
Date Received: 10/20/21
Date Analyzed: 10/26/21
Date Extracted: NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: CW4A-1021
Lab Code: R2110978-001
Analysis Method: 8260C
Prep Method: EPA 5030C

Units: ug/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike RQ2113636-05			Duplicate Matrix Spike RQ2113636-06			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Vinyl Chloride	5.0 U	66.4	50.0	133	67.3	50.0	135	74-159	1	30
o-Xylene	5.0 U	54.0	50.0	108	54.6	50.0	109	79-123	1	30
m,p-Xylenes	5.0 U	108	100	108	110	100	110	80-126	2	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 Technical Services, Inc.
Project: WAL - Annual Sampling
Sample Matrix: Water

Service Request: R2110978
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2113550-04

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	10 U	10	1	10/25/21 12:00	
Benzene	5.0 U	5.0	1	10/25/21 12:00	
Bromodichloromethane	5.0 U	5.0	1	10/25/21 12:00	
Bromoform	5.0 U	5.0	1	10/25/21 12:00	
Bromomethane	5.0 U	5.0	1	10/25/21 12:00	
2-Butanone (MEK)	10 U	10	1	10/25/21 12:00	
Carbon Disulfide	10 U	10	1	10/25/21 12:00	
Carbon Tetrachloride	5.0 U	5.0	1	10/25/21 12:00	
Chlorobenzene	5.0 U	5.0	1	10/25/21 12:00	
Chloroethane	5.0 U	5.0	1	10/25/21 12:00	
Chloroform	5.0 U	5.0	1	10/25/21 12:00	
Chloromethane	5.0 U	5.0	1	10/25/21 12:00	
Dibromochloromethane	5.0 U	5.0	1	10/25/21 12:00	
1,1-Dichloroethane	5.0 U	5.0	1	10/25/21 12:00	
1,2-Dibromoethane	5.0 U	5.0	1	10/25/21 12:00	
1,2-Dichloroethane	5.0 U	5.0	1	10/25/21 12:00	
1,1-Dichloroethene	5.0 U	5.0	1	10/25/21 12:00	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/25/21 12:00	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/25/21 12:00	
1,2-Dichloropropane	5.0 U	5.0	1	10/25/21 12:00	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/25/21 12:00	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/25/21 12:00	
Ethylbenzene	5.0 U	5.0	1	10/25/21 12:00	
2-Hexanone	10 U	10	1	10/25/21 12:00	
Methylene Chloride	5.0 U	5.0	1	10/25/21 12:00	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/25/21 12:00	
Styrene	5.0 U	5.0	1	10/25/21 12:00	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/25/21 12:00	
Tetrachloroethene	5.0 U	5.0	1	10/25/21 12:00	
Toluene	5.0 U	5.0	1	10/25/21 12:00	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/25/21 12:00	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/25/21 12:00	
Trichloroethene	5.0 U	5.0	1	10/25/21 12:00	
Vinyl Chloride	5.0 U	5.0	1	10/25/21 12:00	
o-Xylene	5.0 U	5.0	1	10/25/21 12:00	
m,p-Xylenes	5.0 U	5.0	1	10/25/21 12:00	

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Analytical Report

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

Service Request: R2110978
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2113550-04

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	86	85 - 122	10/25/21 12:00	
Toluene-d8	93	87 - 121	10/25/21 12:00	
Dibromofluoromethane	94	80 - 116	10/25/21 12:00	

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Analytical Report

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

Service Request: R2110978
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2113636-04

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	10 U	10	1	10/26/21 11:54	
Benzene	5.0 U	5.0	1	10/26/21 11:54	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 11:54	
Bromoform	5.0 U	5.0	1	10/26/21 11:54	
Bromomethane	5.0 U	5.0	1	10/26/21 11:54	
2-Butanone (MEK)	10 U	10	1	10/26/21 11:54	
Carbon Disulfide	10 U	10	1	10/26/21 11:54	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 11:54	
Chlorobenzene	5.0 U	5.0	1	10/26/21 11:54	
Chloroethane	5.0 U	5.0	1	10/26/21 11:54	
Chloroform	5.0 U	5.0	1	10/26/21 11:54	
Chloromethane	5.0 U	5.0	1	10/26/21 11:54	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 11:54	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 11:54	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 11:54	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 11:54	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 11:54	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 11:54	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 11:54	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 11:54	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 11:54	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 11:54	
Ethylbenzene	5.0 U	5.0	1	10/26/21 11:54	
2-Hexanone	10 U	10	1	10/26/21 11:54	
Methylene Chloride	5.0 U	5.0	1	10/26/21 11:54	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 11:54	
Styrene	5.0 U	5.0	1	10/26/21 11:54	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 11:54	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 11:54	
Toluene	5.0 U	5.0	1	10/26/21 11:54	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 11:54	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 11:54	
Trichloroethene	5.0 U	5.0	1	10/26/21 11:54	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 11:54	
o-Xylene	5.0 U	5.0	1	10/26/21 11:54	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 11:54	

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Analytical Report

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

Service Request: R2110978
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2113636-04

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	85	85 - 122	10/26/21 11:54	
Toluene-d8	95	87 - 121	10/26/21 11:54	
Dibromofluoromethane	97	80 - 116	10/26/21 11:54	

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Analytical Report

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

Service Request: R2110978
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2113686-04

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	10 U	10	1	10/27/21 11:24	
Benzene	5.0 U	5.0	1	10/27/21 11:24	
Bromodichloromethane	5.0 U	5.0	1	10/27/21 11:24	
Bromoform	5.0 U	5.0	1	10/27/21 11:24	
Bromomethane	5.0 U	5.0	1	10/27/21 11:24	
2-Butanone (MEK)	10 U	10	1	10/27/21 11:24	
Carbon Disulfide	10 U	10	1	10/27/21 11:24	
Carbon Tetrachloride	5.0 U	5.0	1	10/27/21 11:24	
Chlorobenzene	5.0 U	5.0	1	10/27/21 11:24	
Chloroethane	5.0 U	5.0	1	10/27/21 11:24	
Chloroform	5.0 U	5.0	1	10/27/21 11:24	
Chloromethane	5.0 U	5.0	1	10/27/21 11:24	
Dibromochloromethane	5.0 U	5.0	1	10/27/21 11:24	
1,1-Dichloroethane	5.0 U	5.0	1	10/27/21 11:24	
1,2-Dibromoethane	5.0 U	5.0	1	10/27/21 11:24	
1,2-Dichloroethane	5.0 U	5.0	1	10/27/21 11:24	
1,1-Dichloroethene	5.0 U	5.0	1	10/27/21 11:24	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/27/21 11:24	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/27/21 11:24	
1,2-Dichloropropane	5.0 U	5.0	1	10/27/21 11:24	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/27/21 11:24	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/27/21 11:24	
Ethylbenzene	5.0 U	5.0	1	10/27/21 11:24	
2-Hexanone	10 U	10	1	10/27/21 11:24	
Methylene Chloride	5.0 U	5.0	1	10/27/21 11:24	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/27/21 11:24	
Styrene	5.0 U	5.0	1	10/27/21 11:24	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/27/21 11:24	
Tetrachloroethene	5.0 U	5.0	1	10/27/21 11:24	
Toluene	5.0 U	5.0	1	10/27/21 11:24	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/27/21 11:24	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/27/21 11:24	
Trichloroethene	5.0 U	5.0	1	10/27/21 11:24	
Vinyl Chloride	5.0 U	5.0	1	10/27/21 11:24	
o-Xylene	5.0 U	5.0	1	10/27/21 11:24	
m,p-Xylenes	5.0 U	5.0	1	10/27/21 11:24	

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Analytical Report

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

Service Request: R2110978
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2113686-04

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	86	85 - 122	10/27/21 11:24	
Toluene-d8	95	87 - 121	10/27/21 11:24	
Dibromofluoromethane	97	80 - 116	10/27/21 11:24	

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QA/QC Report

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

Service Request: R2110978
Date Analyzed: 10/25/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2113550-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	13.8	20.0	69	40-161
Benzene	8260C	19.3	20.0	97	79-119
Bromodichloromethane	8260C	21.4	20.0	107	81-123
Bromoform	8260C	20.9	20.0	104	65-146
Bromomethane	8260C	20.4	20.0	102	42-166
2-Butanone (MEK)	8260C	15.6	20.0	78	61-137
Carbon Disulfide	8260C	23.4	20.0	117	66-128
Carbon Tetrachloride	8260C	22.8	20.0	114	70-127
Chlorobenzene	8260C	19.9	20.0	99	80-121
Chloroethane	8260C	21.6	20.0	108	62-131
Chloroform	8260C	17.3	20.0	87	79-120
Chloromethane	8260C	22.3	20.0	112	65-135
Dibromochloromethane	8260C	21.9	20.0	110	72-128
1,1-Dichloroethane	8260C	19.3	20.0	96	80-124
1,2-Dibromoethane	8260C	18.9	20.0	95	82-127
1,2-Dichloroethane	8260C	18.8	20.0	94	71-127
1,1-Dichloroethene	8260C	20.1	20.0	100	71-118
cis-1,2-Dichloroethene	8260C	19.3	20.0	97	80-121
trans-1,2-Dichloroethene	8260C	19.6	20.0	98	73-118
1,2-Dichloropropane	8260C	19.2	20.0	96	80-119
cis-1,3-Dichloropropene	8260C	21.3	20.0	106	77-122
trans-1,3-Dichloropropene	8260C	21.3	20.0	107	71-133
Ethylbenzene	8260C	20.4	20.0	102	76-120
2-Hexanone	8260C	15.5	20.0	78	63-124
Methylene Chloride	8260C	17.9	20.0	90	73-122
4-Methyl-2-pentanone (MIBK)	8260C	16.7	20.0	84	66-124
Styrene	8260C	20.0	20.0	100	80-124
1,1,2,2-Tetrachloroethane	8260C	19.5	20.0	97	78-126
Tetrachloroethene	8260C	21.5	20.0	108	72-125
Toluene	8260C	20.0	20.0	100	79-119
1,1,1-Trichloroethane	8260C	20.4	20.0	102	75-125
1,1,2-Trichloroethane	8260C	19.9	20.0	99	82-121
Trichloroethene	8260C	19.0	20.0	95	74-122

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QA/QC Report

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

Service Request: R2110978
Date Analyzed: 10/25/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L**Basis:**NA**Lab Control Sample**

RQ2113550-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	8260C	21.9	20.0	109	74-159
o-Xylene	8260C	19.4	20.0	97	79-123
m,p-Xylenes	8260C	40.5	40.0	101	80-126

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QA/QC Report

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

Service Request: R2110978
Date Analyzed: 10/26/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2113636-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	17.2	20.0	86	40-161
Benzene	8260C	20.4	20.0	102	79-119
Bromodichloromethane	8260C	21.3	20.0	107	81-123
Bromoform	8260C	18.9	20.0	94	65-146
Bromomethane	8260C	21.0	20.0	105	42-166
2-Butanone (MEK)	8260C	18.8	20.0	94	61-137
Carbon Disulfide	8260C	25.1	20.0	126	66-128
Carbon Tetrachloride	8260C	22.7	20.0	114	70-127
Chlorobenzene	8260C	20.2	20.0	101	80-121
Chloroethane	8260C	26.1	20.0	130	62-131
Chloroform	8260C	18.6	20.0	93	79-120
Chloromethane	8260C	25.9	20.0	129	65-135
Dibromochloromethane	8260C	20.8	20.0	104	72-128
1,1-Dichloroethane	8260C	21.7	20.0	109	80-124
1,2-Dibromoethane	8260C	19.7	20.0	98	82-127
1,2-Dichloroethane	8260C	20.4	20.0	102	71-127
1,1-Dichloroethene	8260C	21.2	20.0	106	71-118
cis-1,2-Dichloroethene	8260C	20.6	20.0	103	80-121
trans-1,2-Dichloroethene	8260C	21.6	20.0	108	73-118
1,2-Dichloropropane	8260C	20.5	20.0	103	80-119
cis-1,3-Dichloropropene	8260C	22.1	20.0	110	77-122
trans-1,3-Dichloropropene	8260C	22.1	20.0	111	71-133
Ethylbenzene	8260C	20.3	20.0	102	76-120
2-Hexanone	8260C	17.6	20.0	88	63-124
Methylene Chloride	8260C	20.4	20.0	102	73-122
4-Methyl-2-pentanone (MIBK)	8260C	18.7	20.0	93	66-124
Styrene	8260C	20.3	20.0	102	80-124
1,1,2,2-Tetrachloroethane	8260C	21.9	20.0	109	78-126
Tetrachloroethene	8260C	20.4	20.0	102	72-125
Toluene	8260C	20.7	20.0	104	79-119
1,1,1-Trichloroethane	8260C	21.8	20.0	109	75-125
1,1,2-Trichloroethane	8260C	19.9	20.0	100	82-121
Trichloroethene	8260C	18.6	20.0	93	74-122

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QA/QC Report

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

Service Request: R2110978
Date Analyzed: 10/26/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L**Basis:**NA**Lab Control Sample**

RQ2113636-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	8260C	24.6	20.0	123	74-159
o-Xylene	8260C	20.3	20.0	102	79-123
m,p-Xylenes	8260C	41.1	40.0	103	80-126

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QA/QC Report

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

Service Request: R2110978
Date Analyzed: 10/27/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2113686-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	15.8	20.0	79	40-161
Benzene	8260C	20.1	20.0	101	79-119
Bromodichloromethane	8260C	21.0	20.0	105	81-123
Bromoform	8260C	19.1	20.0	95	65-146
Bromomethane	8260C	27.2	20.0	136	42-166
2-Butanone (MEK)	8260C	17.2	20.0	86	61-137
Carbon Disulfide	8260C	24.3	20.0	121	66-128
Carbon Tetrachloride	8260C	22.2	20.0	111	70-127
Chlorobenzene	8260C	20.1	20.0	100	80-121
Chloroethane	8260C	25.7	20.0	128	62-131
Chloroform	8260C	18.7	20.0	94	79-120
Chloromethane	8260C	24.2	20.0	121	65-135
Dibromochloromethane	8260C	20.4	20.0	102	72-128
1,1-Dichloroethane	8260C	21.1	20.0	106	80-124
1,2-Dibromoethane	8260C	19.8	20.0	99	82-127
1,2-Dichloroethane	8260C	19.8	20.0	99	71-127
1,1-Dichloroethene	8260C	21.2	20.0	106	71-118
cis-1,2-Dichloroethene	8260C	21.0	20.0	105	80-121
trans-1,2-Dichloroethene	8260C	21.9	20.0	110	73-118
1,2-Dichloropropane	8260C	20.6	20.0	103	80-119
cis-1,3-Dichloropropene	8260C	22.0	20.0	110	77-122
trans-1,3-Dichloropropene	8260C	22.1	20.0	111	71-133
Ethylbenzene	8260C	21.5	20.0	107	76-120
2-Hexanone	8260C	16.2	20.0	81	63-124
Methylene Chloride	8260C	20.0	20.0	100	73-122
4-Methyl-2-pentanone (MIBK)	8260C	17.8	20.0	89	66-124
Styrene	8260C	20.1	20.0	100	80-124
1,1,2,2-Tetrachloroethane	8260C	21.0	20.0	105	78-126
Tetrachloroethene	8260C	20.0	20.0	100	72-125
Toluene	8260C	20.5	20.0	103	79-119
1,1,1-Trichloroethane	8260C	21.4	20.0	107	75-125
1,1,2-Trichloroethane	8260C	19.5	20.0	98	82-121
Trichloroethene	8260C	18.6	20.0	93	74-122

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QA/QC Report

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

Service Request: R2110978
Date Analyzed: 10/27/21

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L**Basis:**NA**Lab Control Sample**

RQ2113686-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	8260C	25.3	20.0	127	74-159
o-Xylene	8260C	20.3	20.0	102	79-123
m,p-Xylenes	8260C	41.3	40.0	103	80-126



Semivolatile Organic Compounds by GC/MS

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QA/QC Report

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

Service Request: R2110978

SURROGATE RECOVERY SUMMARY
1,4-Dioxane by GC/MS

Analysis Method: 8270D SIM
Extraction Method: EPA 3535A

Sample Name	Lab Code	1,4-Dioxane-d8
		64-124
CW4A-1021	R2110978-001	90
CW4B-1021	R2110978-002	89
CW3B-1021	R2110978-003	94
CW3A-1021	R2110978-004	92
MW17D-1021	R2110978-005	89
MW17S-1021	R2110978-006	87
MW5D-1021	R2110978-007	103
MW5S-1021	R2110978-009	95
DUP1-1021	R2110978-010	95
EB1-1021	R2110978-011	92
Method Blank	RQ2113403-01	84
Lab Control Sample	RQ2113403-02	91
Duplicate Lab Control Sample	RQ2113403-03	92
CW4A-1021 MS	RQ2113403-04	104
CW4A-1021 DMS	RQ2113403-05	92

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QA/QC Report

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

Service Request: R2110978
Date Collected: 10/18/21
Date Received: 10/20/21
Date Analyzed: 10/22/21
Date Extracted: 10/21/21

Duplicate Matrix Spike Summary
1,4-Dioxane by GC/MS

Sample Name: CW4A-1021
Lab Code: R2110978-001
Analysis Method: 8270D SIM
Prep Method: EPA 3535A

Units: ug/L
Basis: NA

Analyte Name	Sample Result	Result	Matrix Spike RQ2113403-04		Duplicate Matrix Spike RQ2113403-05				RPD	RPD Limit
			Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits		
1,4-Dioxane	0.39	10.7	10.0	103	9.32	10.0	89	33-146	14	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.

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Analytical Report

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

Service Request: R2110978
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ2113403-01

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	0.040 U	0.040	0.027	1	10/22/21 09:24	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	84	64 - 124	10/22/21 09:24	

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QA/QC Report

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

Service Request: R2110978
Date Analyzed: 10/22/21

Duplicate Lab Control Sample Summary
1,4-Dioxane by GC/MS

Units:ug/L**Basis:**NA

			Lab Control Sample			Duplicate Lab Control Sample				
			RQ2113403-02			RQ2113403-03				
Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,4-Dioxane	8270D SIM	9.11	10.0	91	9.24	10.0	92	58-124	1	30



Metals

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METALS

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BLANKS

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	Continuing Calibration Blank ug/L						Preparation Blank		M
		1	2	3						
Arsenic	10.00 U	10.00 U	10.00 U	10.00 U				10.000 U		P
Barium	20.00 U	20.00 U	20.00 U	20.00 U				20.000 U		P
Cadmium	5.00 U	5.00 U	5.00 U	5.00 U				5.000 U		P
Calcium	1000.00 U	1000.00 U	1000.00 U	1000.00 U				1000.000 U		P
Chromium	10.00 U	10.00 U	10.00 U	10.00 U				10.000 U		P
Copper	20.00 U	20.00 U	20.00 U	20.00 U				20.000 U		P
Iron	100.00 U	100.00 U	100.00 U	100.00 U				100.000 U		P
Lead	50.00 U	50.00 U	50.00 U	50.00 U				50.000 U		P
Magnesium	1000.00 U	1000.00 U	1000.00 U	1000.00 U				1000.000 U		P
Manganese	10.00 U	10.00 U	10.00 U	10.00 U				10.000 U		P
Nickel	40.00 U	40.00 U	40.00 U	40.00 U				40.000 U		P
Potassium	2000.00 U	2000.00 U	2000.00 U	2000.00 U				2000.000 U		P
Selenium	10.00 U	10.00 U	10.00 U	10.00 U				10.000 U		P
Sodium	1000.00 U	1000.00 U	1000.00 U	1000.00 U				1000.000 U		P
Zinc	20.00 U	20.00 U	20.00 U	20.00 U				20.000 U		P

Comments:

METALS

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BLANKS

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	Continuing Calibration Blank ug/L						Preparation Blank	C	M
		1	C	2	C	3	C			
Arsenic		10.00	U	10.00	U	10.00	U			P
Barium		20.00	U	20.00	U	20.00	U			P
Cadmium		5.00	U	5.00	U	5.00	U			P
Calcium		1000.00	U	1000.00	U	1000.00	U			P
Chromium		10.00	U	10.00	U	10.00	U			P
Copper		20.00	U	20.00	U	20.00	U			P
Iron		100.00	U	100.00	U	100.00	U			P
Lead		50.00	U	50.00	U	50.00	U			P
Magnesium		1000.00	U	1000.00	U	1000.00	U			P
Manganese		10.00	U	10.00	U	10.00	U			P
Nickel		40.00	U	40.00	U	40.00	U			P
Potassium		2000.00	U	2000.00	U	2000.00	U			P
Selenium		10.00	U	10.00	U	10.00	U			P
Sodium		1000.00	U	1000.00	U	1000.00	U			P
Zinc		20.00	U	20.00	U	20.00	U			P

Comments:

METALS

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SPIKE SAMPLE RECOVERY

SAMPLE NO.

CW4A-1021S

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Arsenic	75 - 125	34.80	10.00 U	40.0	87		P
Barium	75 - 125	2100.00	60.90	2000.0	102		P
Cadmium	75 - 125	50.30	5.00 U	50.0	101		P
Calcium		35900.00	33400.00	2000.0	125		P
Chromium	75 - 125	205.00	10.00 U	200.0	102		P
Copper	75 - 125	245.00	20.00 U	250.0	98		P
Iron	75 - 125	1060.00	100.00 U	1000.0	106		P
Lead	75 - 125	495.00	50.00 U	500.0	99		P
Magnesium		19500.00	17100.00	2000.0	120		P
Manganese	75 - 125	1040.00	491.00	500.0	110		P
Nickel	75 - 125	503.00	40.00 U	500.0	101		P
Potassium	75 - 125	20700.00	2000.00 U	20000.0	104		P
Selenium	75 - 125	1010.00	10.00 U	1010.0	100		P
Sodium	75 - 125	34200.00	13900.00	20000.0	102		P
Zinc	75 - 125	509.00	20.00 U	500.0	102		P

Comments:

METALS

-5A-

SPIKE SAMPLE RECOVERY

SAMPLE NO.

CW4A-1021SD

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Arsenic	75 - 125	37.80	10.00 U	40.0	94		P
Barium	75 - 125	2130.00	60.90	2000.0	103		P
Cadmium	75 - 125	51.10	5.00 U	50.0	102		P
Calcium		35600.00	33400.00	2000.0	110		P
Chromium	75 - 125	209.00	10.00 U	200.0	104		P
Copper	75 - 125	250.00	20.00 U	250.0	100		P
Iron	75 - 125	1070.00	100.00 U	1000.0	107		P
Lead	75 - 125	504.00	50.00 U	500.0	101		P
Magnesium		19400.00	17100.00	2000.0	115		P
Manganese	75 - 125	1040.00	491.00	500.0	110		P
Nickel	75 - 125	514.00	40.00 U	500.0	103		P
Potassium	75 - 125	21200.00	2000.00 U	20000.0	106		P
Selenium	75 - 125	1010.00	10.00 U	1010.0	100		P
Sodium	75 - 125	34400.00	13900.00	20000.0	102		P
Zinc	75 - 125	517.00	20.00 U	500.0	103		P

Comments:

METALS
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DUPLICATES

SAMPLE NO.

CW4A-1021SD

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S) C	Duplicate (D) C	RPD	Q	M
Arsenic		34.80	37.80	8		P
Barium		2100.00	2130.00	1		P
Cadmium		50.30	51.10	2		P
Calcium		35900.00	35600.00	1		P
Chromium		205.00	209.00	2		P
Copper		245.00	250.00	2		P
Iron		1060.00	1070.00	1		P
Lead		495.00	504.00	2		P
Magnesium		19500.00	19400.00	1		P
Manganese		1040.00	1040.00	0		P
Nickel		503.00	514.00	2		P
Potassium		20700.00	21200.00	2		P
Selenium		1010.00	1010.00	0		P
Sodium		34200.00	34400.00	1		P
Zinc		509.00	517.00	2		P

Comments:

METALS

-7-

LABORATORY CONTROL SAMPLE

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous (ug/L			Solid (mg/K					
	True	Found	%R	True	Found	C	Limits	%R	
Arsenic	40	36	90						
Barium	2000	2090	104						
Cadmium	50	52	104						
Calcium	2000	2080	104						
Chromium	200	210	105						
Copper	250	250	100						
Iron	1000	1030	103						
Lead	500	509	102						
Magnesium	2000	1990	100						
Manganese	500	509	102						
Nickel	500	525	105						
Potassium	20000	19300	96						
Selenium	1010	1020	101						
Sodium	20000	20400	102						
Zinc	500	511	102						

Comments:



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: Method Blank
Lab Code: R2110978-MB

Service Request: R2110978
Date Collected: NA
Date Received: NA
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	0.10 U	mg/L	0.10	1	10/20/21 17:12	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	10 U	mg/L	10	1	10/27/21 15:20	

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: R2110978
Date Analyzed: 10/20/21 - 10/27/21

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L**Basis:**NA**Lab Control Sample**

R2110978-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Nitrate as Nitrogen	300.0	0.928	1.00	93	90-110
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	908	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

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09-Nov-2021

Janice Jaeger
ALS Environmental
1565 Jefferson Rd
Bldg 300
Rochester, NY 14623

Re: **R2110978**

Work Order: **21102596**

Dear Janice,

ALS Environmental received 11 samples on 29-Oct-2021 10:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 44.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

A handwritten signature in cursive script that reads "Jodi Blouw".

Electronically approved by: Jodi Blouw

Jodi Blouw

Report of Laboratory Analysis

Certificate No: MN 026-999-449

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

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RIGHT SOLUTIONS RIGHT PARTNER

Client: ALS Environmental
Project: R2110978
Work Order: 21102596

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
21102596-01	R2110978-001 CW4A-1021	Water		10/18/2021 09:55	10/29/2021 10:00	☐
21102596-02	R2110978-002 CW4B-1021	Water		10/18/2021 12:00	10/29/2021 10:00	☐
21102596-03	R2110978-003 CW3B-1021	Water		10/18/2021 13:55	10/29/2021 10:00	☐
21102596-04	R2110978-004 CW3A-1021	Water		10/18/2021 15:35	10/29/2021 10:00	☐
21102596-05	R2110978-005 MW17D-1021	Water		10/19/2021 10:05	10/29/2021 10:00	☐
21102596-06	R2110978-006 MW17S-1021	Water		10/19/2021 11:55	10/29/2021 10:00	☐
21102596-07	R2110978-007 MW5D-1021	Water		10/19/2021 13:55	10/29/2021 10:00	☐
21102596-08	R2110978-008 FB-1021	Water		10/19/2021 15:10	10/29/2021 10:00	☐
21102596-09	R2110978-009 MW5S-1021	Water		10/19/2021 15:10	10/29/2021 10:00	☐
21102596-10	R2110978-010 DUP1-1021	Water		10/19/2021 15:15	10/29/2021 10:00	☐
21102596-11	R2110978-011 EB1-1021	Water		10/20/2021 07:30	10/29/2021 10:00	☐

Client: ALS Environmental

Project: R2110978

WorkOrder: 21102596

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
ng/L	Nanograms per Liter

Client: ALS Environmental
Project: R2110978
Work Order: 21102596

Case Narrative

Samples for the above noted Work Order were received on 10/29/2021. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

Extractable Organics:

Batch 186437, Method E537 Mod, Sample 21102596-01AMS: 13C2-FtS 6:2 surrogate failed high.

Batch 186655, Method E537 Mod, Sample MBLK-186655: 13C5-PFNA failed in CCV. Passes in sample.

Batch 186437, Method E537 Mod, Sample R2110978-001 CW4A-1021 (21102596-01A): Ion transition ratios did not meet acceptance criteria due to matrix interference and/or the presence of branched isomers not represented in the quantitation standards. PFOS

Batch 186437, Method E537 Mod, Sample R2110978-001 CW4A-1021 (21102596-01A): One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed. 13C2-FtS 6:2, 13C2-FtS 8:2

Batch 186437, Method E537 Mod, Sample R2110978-002 CW4B-1021 (21102596-02A): Ion transition ratios did not meet acceptance criteria due to matrix interference and/or the presence of branched isomers not represented in the quantitation standards. PFOS

Batch 186437, Method E537 Mod, Sample R2110978-003 CW3B-1021 (21102596-03A): Ion transition ratios did not meet acceptance criteria due to matrix interference and/or the presence of branched isomers not represented in the quantitation standards. PFHxS

Client: ALS Environmental
Project: R2110978
Work Order: 21102596

Case Narrative

Batch 186437, Method E537 Mod, Sample R2110978-004 CW3A-1021 (21102596-04A): Ion transition ratios did not meet acceptance criteria due to matrix interference and/or the presence of branched isomers not represented in the quantitation standards. PFPeS, PFOS

Batch 186437, Method E537 Mod, Sample R2110978-004 CW3A-1021 (21102596-04A): One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed. 13C2-FtS 6:2

Batch 186437, Method E537 Mod, Sample R2110978-006 MW17S-1021 (21102596-06A): Ion transition ratios did not meet acceptance criteria due to matrix interference and/or the presence of branched isomers not represented in the quantitation standards. PFOS

Batch 186437, Method E537 Mod, Sample R2110978-010 DUP1-1021 (21102596-10A): Ion transition ratios did not meet acceptance criteria due to matrix interference and/or the presence of branched isomers not represented in the quantitation standards. PFOS

Batch 186437, Method E537 Mod, Sample R2110978-010 DUP1-1021 (21102596-10A): One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed. 13C2-FtS 6:2

Batch 186655, Method E537 Mod, Sample R2110978-001 CW4A-1021 (21102596-01A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-002 CW4B-1021 (21102596-02A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-003 CW3B-1021 (21102596-03A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-003 CW3B-1021 (21102596-03A): One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed. 13C2-FtS 6:2, 13C3-HFPO-DA

Batch 186655, Method E537 Mod, Sample R2110978-004 CW3A-1021 (21102596-04A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-005 MW17D-1021 (21102596-05A): The sample ran outside of the holding time due to quality control failure during the initial

Client: ALS Environmental
Project: R2110978
Work Order: 21102596

Case Narrative

extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-006 MW17S-1021 (21102596-06A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-007 MW5D-1021 (21102596-07A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-009 MW5S-1021 (21102596-09A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-010 DUP1-1021 (21102596-10A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-011 EB1-1021 (21102596-11A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample LCS-186655: The LCS recovery was above the upper control limit. The sample results for this batch may be biased high for this analyte: 13C5-PFPeA, target passes.
d7-N-MeFOSE, 13C3-HFPO-DA, 13C2-FtS 6:2

Batch 186655, Method E537 Mod, Sample LCSD-186655: The LCSD recovery was above the upper control limit. The sample results for this analyte may be biased high for this analyte: 13C3-HFPO-DA, d7-N-MeFOSE

Batch 186437, Method E537 Mod, Sample 21102596-01AMSD: The MSD recovery was above the upper control limit. The corresponding result in the parent sample may be biased high for this analyte: PFBA

Batch 186437, Method E537 Mod, Sample 21102596-01AMSD: The MSD recovery was outside of the control limit. However, the MS recovery and the RPD between the MS and MSD was in control. No qualification is required for this analyte: PFHxA, PFNA, PFOA, PFPeA

Batch 186437, Method E537 Mod, Sample 21102596-01AMSD: The RPD between the MS and MSD was outside of the control limit. The corresponding result should be considered estimated for this compound: PFBA, 13C2-FtS 6:2, 13C4-PFHxA, 13C4-PFOA

Client: ALS Environmental
Project: R2110978
Work Order: 21102596

Case Narrative

No other deviations or anomalies were noted.

ALS Group, USA

Date: 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-001 CW4A-1021
Collection Date: 10/18/2021 09:55 AM

Work Order: 21102596
Lab ID: 21102596-01
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PFAS BY EPA 537 MODIFIED							
			Method: E537 MOD		Prep: E537 Mod / 11/1/21		Analyst: SK
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	U		0.55	4.1	ng/L	1	11/2/2021 20:41
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	U		0.93	4.1	ng/L	1	11/2/2021 20:41
Perfluorobutanesulfonic Acid (PFBS)	1.4	J	0.29	4.1	ng/L	1	11/2/2021 20:41
Perfluorobutanoic Acid (PFBA)	6.1	H	2.4	4.5	ng/L	1	11/5/2021 13:01
Perfluorodecanesulfonic Acid (PFDS)	U		1.1	4.1	ng/L	1	11/2/2021 20:41
Perfluorodecanoic Acid (PFDA)	U		1.0	4.1	ng/L	1	11/2/2021 20:41
Perfluorododecanoic Acid (PFDoA)	U		1.2	4.1	ng/L	1	11/2/2021 20:41
Perfluoroheptanesulfonic Acid (PFHpS)	U		0.47	4.1	ng/L	1	11/2/2021 20:41
Perfluoroheptanoic Acid (PFHpA)	0.67	J	0.36	4.1	ng/L	1	11/2/2021 20:41
Perfluorohexanesulfonic Acid (PFHxS)	1.0	J	0.30	4.1	ng/L	1	11/2/2021 20:41
Perfluorohexanoic Acid (PFHxA)	1.4	J	0.99	4.1	ng/L	1	11/2/2021 20:41
Perfluorononanoic Acid (PFNA)	1.2	J	0.72	4.1	ng/L	1	11/2/2021 20:41
Perfluorooctanesulfonamide (PFOSA)	U		0.58	4.1	ng/L	1	11/2/2021 20:41
Perfluorooctanesulfonic Acid (PFOS)	6.5		0.73	1.6	ng/L	1	11/2/2021 20:41
Perfluorooctanoic Acid (PFOA)	7.2		0.52	1.6	ng/L	1	11/2/2021 20:41
Perfluoropentanoic Acid (PFPeA)	U	H	1.2	4.5	ng/L	1	11/5/2021 13:01
Perfluorotetradecanoic Acid (PFTeA)	U		2.2	4.1	ng/L	1	11/2/2021 20:41
Perfluorotridecanoic Acid (PFTriA)	0.74	J	0.63	4.1	ng/L	1	11/2/2021 20:41
Perfluoroundecanoic Acid (PFUnA)	U		0.80	4.1	ng/L	1	11/2/2021 20:41
N-Ethylperfluorooctanesulfonamidoacetic Acid	U		0.52	4.1	ng/L	1	11/2/2021 20:41
N-Methylperfluorooctanesulfonamidoacetic Acid	U		0.53	4.1	ng/L	1	11/2/2021 20:41
Surr: 13C2-FtS 6:2	243	S		50-150	%REC	1	11/2/2021 20:41
Surr: 13C2-FtS 8:2	160	S		50-150	%REC	1	11/2/2021 20:41
Surr: 13C2-PFDA	116			50-150	%REC	1	11/2/2021 20:41
Surr: 13C2-PFDoA	104			50-150	%REC	1	11/2/2021 20:41
Surr: 13C2-PFHxA	115			50-150	%REC	1	11/2/2021 20:41
Surr: 13C2-PFTeA	92.5			50-150	%REC	1	11/2/2021 20:41
Surr: 13C2-PFUnA	98.8			50-150	%REC	1	11/2/2021 20:41
Surr: 13C3-HFPO-DA	107			50-150	%REC	1	11/2/2021 20:41
Surr: 13C3-PFBS	109			50-150	%REC	1	11/2/2021 20:41
Surr: 13C4-PFBA	115			50-150	%REC	1	11/2/2021 20:41
Surr: 13C4-PFBA	123			50-150	%REC	1	11/5/2021 13:01
Surr: 13C4-PFHpA	137			50-150	%REC	1	11/2/2021 20:41

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-001 CW4A-1021
Collection Date: 10/18/2021 09:55 AM

Work Order: 21102596
Lab ID: 21102596-01
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 13C4-PFOA	120			50-150	%REC	1	11/2/2021 20:41
Surr: 13C4-PFOS	117			50-150	%REC	1	11/2/2021 20:41
Surr: 13C5-PFNA	114			50-150	%REC	1	11/2/2021 20:41
Surr: 13C5-PFPeA	123			50-150	%REC	1	11/2/2021 20:41
Surr: 13C5-PFPeA	129			50-150	%REC	1	11/5/2021 13:01
Surr: 13C8-FOSA	103			50-150	%REC	1	11/2/2021 20:41
Surr: 18O2-PFHxS	114			50-150	%REC	1	11/2/2021 20:41
Surr: d5-N-EtFOSA	124			50-150	%REC	1	11/2/2021 20:41
Surr: d5-N-EtFOSAA	127			50-150	%REC	1	11/2/2021 20:41
Surr: d9-N-EtFOSE	115			50-150	%REC	1	11/2/2021 20:41
Surr: d3-N-MeFOSA	113			50-150	%REC	1	11/2/2021 20:41
Surr: d3-N-MeFOSAA	117			50-150	%REC	1	11/2/2021 20:41
Surr: d7-N-MeFOSE	126			50-150	%REC	1	11/2/2021 20:41

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-002 CW4B-1021
Collection Date: 10/18/2021 12:00 PM

Work Order: 21102596
Lab ID: 21102596-02
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PFAS BY EPA 537 MODIFIED							
			Method: E537 MOD		Prep: E537 Mod / 11/1/21		Analyst: SK
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	U		0.58	4.3	ng/L	1	11/2/2021 20:52
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	U		0.98	4.3	ng/L	1	11/2/2021 20:52
Perfluorobutanesulfonic Acid (PFBS)	1.7	J	0.30	4.3	ng/L	1	11/2/2021 20:52
Perfluorobutanoic Acid (PFBA)	6.8	H	2.3	4.3	ng/L	1	11/5/2021 13:09
Perfluorodecanesulfonic Acid (PFDS)	U		1.2	4.3	ng/L	1	11/2/2021 20:52
Perfluorodecanoic Acid (PFDA)	U		1.1	4.3	ng/L	1	11/2/2021 20:52
Perfluorododecanoic Acid (PFDoA)	U		1.2	4.3	ng/L	1	11/2/2021 20:52
Perfluoroheptanesulfonic Acid (PFHpS)	U		0.49	4.3	ng/L	1	11/2/2021 20:52
Perfluoroheptanoic Acid (PFHpA)	1.7	J	0.38	4.3	ng/L	1	11/2/2021 20:52
Perfluorohexanesulfonic Acid (PFHxS)	1.1	J	0.32	4.3	ng/L	1	11/2/2021 20:52
Perfluorohexanoic Acid (PFHxA)	3.9	J	1.0	4.3	ng/L	1	11/2/2021 20:52
Perfluorononanoic Acid (PFNA)	1.5	J	0.76	4.3	ng/L	1	11/2/2021 20:52
Perfluorooctanesulfonamide (PFOSA)	U		0.62	4.3	ng/L	1	11/2/2021 20:52
Perfluorooctanesulfonic Acid (PFOS)	6.2		0.77	1.7	ng/L	1	11/2/2021 20:52
Perfluorooctanoic Acid (PFOA)	8.9		0.55	1.7	ng/L	1	11/2/2021 20:52
Perfluoropentanoic Acid (PFPeA)	U	H	1.1	4.3	ng/L	1	11/5/2021 13:09
Perfluorotetradecanoic Acid (PFTeA)	U		2.3	4.3	ng/L	1	11/2/2021 20:52
Perfluorotridecanoic Acid (PFTriA)	U		0.67	4.3	ng/L	1	11/2/2021 20:52
Perfluoroundecanoic Acid (PFUnA)	U		0.85	4.3	ng/L	1	11/2/2021 20:52
N-Ethylperfluorooctanesulfonamidoacetic Acid	U		0.54	4.3	ng/L	1	11/2/2021 20:52
N-Methylperfluorooctanesulfonamidoacetic Acid	U		0.56	4.3	ng/L	1	11/2/2021 20:52
Surr: 13C2-FtS 6:2	145			50-150	%REC	1	11/2/2021 20:52
Surr: 13C2-FtS 8:2	104			50-150	%REC	1	11/2/2021 20:52
Surr: 13C2-PFDA	77.5			50-150	%REC	1	11/2/2021 20:52
Surr: 13C2-PFDoA	72.6			50-150	%REC	1	11/2/2021 20:52
Surr: 13C2-PFHxA	85.0			50-150	%REC	1	11/2/2021 20:52
Surr: 13C2-PFTeA	79.1			50-150	%REC	1	11/2/2021 20:52
Surr: 13C2-PFUnA	86.6			50-150	%REC	1	11/2/2021 20:52
Surr: 13C3-HFPO-DA	86.5			50-150	%REC	1	11/2/2021 20:52
Surr: 13C3-PFBS	86.9			50-150	%REC	1	11/2/2021 20:52
Surr: 13C4-PFBA	87.7			50-150	%REC	1	11/2/2021 20:52
Surr: 13C4-PFBA	121			50-150	%REC	1	11/5/2021 13:09
Surr: 13C4-PFHpA	94.4			50-150	%REC	1	11/2/2021 20:52

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-002 CW4B-1021
Collection Date: 10/18/2021 12:00 PM

Work Order: 21102596
Lab ID: 21102596-02
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 13C4-PFOA	97.6			50-150	%REC	1	11/2/2021 20:52
Surr: 13C4-PFOS	89.6			50-150	%REC	1	11/2/2021 20:52
Surr: 13C5-PFNA	81.7			50-150	%REC	1	11/2/2021 20:52
Surr: 13C5-PFPeA	92.7			50-150	%REC	1	11/2/2021 20:52
Surr: 13C5-PFPeA	126			50-150	%REC	1	11/5/2021 13:09
Surr: 13C8-FOSA	87.5			50-150	%REC	1	11/2/2021 20:52
Surr: 18O2-PFHxS	95.9			50-150	%REC	1	11/2/2021 20:52
Surr: d5-N-EtFOSA	87.4			50-150	%REC	1	11/2/2021 20:52
Surr: d5-N-EtFOSAA	84.1			50-150	%REC	1	11/2/2021 20:52
Surr: d9-N-EtFOSE	104			50-150	%REC	1	11/2/2021 20:52
Surr: d3-N-MeFOSA	94.7			50-150	%REC	1	11/2/2021 20:52
Surr: d3-N-MeFOSAA	77.6			50-150	%REC	1	11/2/2021 20:52
Surr: d7-N-MeFOSE	80.3			50-150	%REC	1	11/2/2021 20:52

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-003 CW3B-1021
Collection Date: 10/18/2021 01:55 PM

Work Order: 21102596
Lab ID: 21102596-03
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PFAS BY EPA 537 MODIFIED							
			Method: E537 MOD		Prep: E537 Mod / 11/1/21		Analyst: SK
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	U		0.56	4.2	ng/L	1	11/2/2021 21:02
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	U		0.96	4.2	ng/L	1	11/2/2021 21:02
Perfluorobutanesulfonic Acid (PFBS)	2.2	J	0.30	4.2	ng/L	1	11/2/2021 21:02
Perfluorobutanoic Acid (PFBA)	2.7	JH	2.2	4.3	ng/L	1	11/5/2021 13:17
Perfluorodecanesulfonic Acid (PFDS)	U		1.2	4.2	ng/L	1	11/2/2021 21:02
Perfluorodecanoic Acid (PFDA)	U		1.1	4.2	ng/L	1	11/2/2021 21:02
Perfluorododecanoic Acid (PFDoA)	U		1.2	4.2	ng/L	1	11/2/2021 21:02
Perfluoroheptanesulfonic Acid (PFHpS)	U		0.48	4.2	ng/L	1	11/2/2021 21:02
Perfluoroheptanoic Acid (PFHpA)	4.7		0.37	4.2	ng/L	1	11/2/2021 21:02
Perfluorohexanesulfonic Acid (PFHxS)	2.5	J	0.31	4.2	ng/L	1	11/2/2021 21:02
Perfluorohexanoic Acid (PFHxA)	11		1.0	4.2	ng/L	1	11/2/2021 21:02
Perfluorononanoic Acid (PFNA)	0.87	J	0.74	4.2	ng/L	1	11/2/2021 21:02
Perfluorooctanesulfonamide (PFOSA)	U		0.60	4.2	ng/L	1	11/2/2021 21:02
Perfluorooctanesulfonic Acid (PFOS)	11		0.76	1.7	ng/L	1	11/2/2021 21:02
Perfluorooctanoic Acid (PFOA)	8.5		0.53	1.7	ng/L	1	11/2/2021 21:02
Perfluoropentanoic Acid (PFPeA)	2.1	JH	1.1	4.3	ng/L	1	11/5/2021 13:17
Perfluorotetradecanoic Acid (PFTeA)	U		2.2	4.2	ng/L	1	11/2/2021 21:02
Perfluorotridecanoic Acid (PFTriA)	U		0.65	4.2	ng/L	1	11/2/2021 21:02
Perfluoroundecanoic Acid (PFUnA)	U		0.83	4.2	ng/L	1	11/2/2021 21:02
N-Ethylperfluorooctanesulfonamidoacetic Acid	U		0.53	4.2	ng/L	1	11/2/2021 21:02
N-Methylperfluorooctanesulfonamidoacetic Acid	U		0.55	4.2	ng/L	1	11/2/2021 21:02
Surr: 13C2-FtS 6:2	152	S		50-150	%REC	1	11/5/2021 13:17
Surr: 13C2-FtS 8:2	130			50-150	%REC	1	11/5/2021 13:17
Surr: 13C2-PFDA	87.3			50-150	%REC	1	11/5/2021 13:17
Surr: 13C2-PFDoA	77.2			50-150	%REC	1	11/5/2021 13:17
Surr: 13C2-PFHxA	114			50-150	%REC	1	11/5/2021 13:17
Surr: 13C2-PFTeA	96.4			50-150	%REC	1	11/5/2021 13:17
Surr: 13C2-PFUnA	105			50-150	%REC	1	11/5/2021 13:17
Surr: 13C3-HFPO-DA	161	S		50-150	%REC	1	11/5/2021 13:17
Surr: 13C3-PFBS	102			50-150	%REC	1	11/5/2021 13:17
Surr: 13C4-PFBA	112			50-150	%REC	1	11/5/2021 13:17
Surr: 13C4-PFHpA	96.6			50-150	%REC	1	11/5/2021 13:17
Surr: 13C4-PFOA	92.9			50-150	%REC	1	11/5/2021 13:17

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-003 CW3B-1021
Collection Date: 10/18/2021 01:55 PM

Work Order: 21102596
Lab ID: 21102596-03
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 13C4-PFOS	89.3			50-150	%REC	1	11/5/2021 13:17
Surr: 13C5-PFNA	87.3			50-150	%REC	1	11/5/2021 13:17
Surr: 13C5-PFPeA	116			50-150	%REC	1	11/5/2021 13:17
Surr: 13C8-FOSA	119			50-150	%REC	1	11/5/2021 13:17
Surr: 18O2-PFHxS	79.3			50-150	%REC	1	11/5/2021 13:17
Surr: d5-N-EtFOSA	118			50-150	%REC	1	11/5/2021 13:17
Surr: d5-N-EtFOSAA	112			50-150	%REC	1	11/5/2021 13:17
Surr: d9-N-EtFOSE	114			50-150	%REC	1	11/5/2021 13:17
Surr: d3-N-MeFOSA	116			50-150	%REC	1	11/5/2021 13:17
Surr: d3-N-MeFOSAA	104			50-150	%REC	1	11/5/2021 13:17
Surr: d7-N-MeFOSE	118			50-150	%REC	1	11/5/2021 13:17

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-004 CW3A-1021
Collection Date: 10/18/2021 03:35 PM

Work Order: 21102596
Lab ID: 21102596-04
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PFAS BY EPA 537 MODIFIED							
			Method: E537 MOD		Prep: E537 Mod / 11/1/21		Analyst: SK
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	U		0.56	4.2	ng/L	1	11/2/2021 21:13
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	U		0.96	4.2	ng/L	1	11/2/2021 21:13
Perfluorobutanesulfonic Acid (PFBS)	U		0.30	4.2	ng/L	1	11/2/2021 21:13
Perfluorobutanoic Acid (PFBA)	2.4	JH	2.3	4.4	ng/L	1	11/5/2021 13:25
Perfluorodecanesulfonic Acid (PFDS)	U		1.2	4.2	ng/L	1	11/2/2021 21:13
Perfluorodecanoic Acid (PFDA)	U		1.1	4.2	ng/L	1	11/2/2021 21:13
Perfluorododecanoic Acid (PFDoA)	U		1.2	4.2	ng/L	1	11/2/2021 21:13
Perfluoroheptanesulfonic Acid (PFHpS)	U		0.48	4.2	ng/L	1	11/2/2021 21:13
Perfluoroheptanoic Acid (PFHpA)	0.99	J	0.37	4.2	ng/L	1	11/2/2021 21:13
Perfluorohexanesulfonic Acid (PFHxS)	0.62	J	0.31	4.2	ng/L	1	11/2/2021 21:13
Perfluorohexanoic Acid (PFHxA)	3.7	J	1.0	4.2	ng/L	1	11/2/2021 21:13
Perfluorononanoic Acid (PFNA)	0.85	J	0.74	4.2	ng/L	1	11/2/2021 21:13
Perfluorooctanesulfonamide (PFOSA)	U		0.60	4.2	ng/L	1	11/2/2021 21:13
Perfluorooctanesulfonic Acid (PFOS)	1.3	J	0.76	1.7	ng/L	1	11/2/2021 21:13
Perfluorooctanoic Acid (PFOA)	2.1		0.53	1.7	ng/L	1	11/2/2021 21:13
Perfluoropentanoic Acid (PFPeA)	U	H	1.1	4.4	ng/L	1	11/5/2021 13:25
Perfluorotetradecanoic Acid (PFTeA)	U		2.2	4.2	ng/L	1	11/2/2021 21:13
Perfluorotridecanoic Acid (PFTriA)	U		0.65	4.2	ng/L	1	11/2/2021 21:13
Perfluoroundecanoic Acid (PFUnA)	U		0.83	4.2	ng/L	1	11/2/2021 21:13
N-Ethylperfluorooctanesulfonamidoacetic Acid	U		0.53	4.2	ng/L	1	11/2/2021 21:13
N-Methylperfluorooctanesulfonamidoacetic Acid	U		0.55	4.2	ng/L	1	11/2/2021 21:13
Surr: 13C2-FtS 6:2	164	S		50-150	%REC	1	11/2/2021 21:13
Surr: 13C2-FtS 8:2	132			50-150	%REC	1	11/2/2021 21:13
Surr: 13C2-PFDA	93.4			50-150	%REC	1	11/2/2021 21:13
Surr: 13C2-PFDoA	76.2			50-150	%REC	1	11/2/2021 21:13
Surr: 13C2-PFHxA	85.9			50-150	%REC	1	11/2/2021 21:13
Surr: 13C2-PFTeA	76.5			50-150	%REC	1	11/2/2021 21:13
Surr: 13C2-PFUnA	79.5			50-150	%REC	1	11/2/2021 21:13
Surr: 13C3-HFPO-DA	86.0			50-150	%REC	1	11/2/2021 21:13
Surr: 13C3-PFBS	88.0			50-150	%REC	1	11/2/2021 21:13
Surr: 13C4-PFBA	103			50-150	%REC	1	11/2/2021 21:13
Surr: 13C4-PFBA	107			50-150	%REC	1	11/5/2021 13:25
Surr: 13C4-PFHpA	96.2			50-150	%REC	1	11/2/2021 21:13

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-004 CW3A-1021
Collection Date: 10/18/2021 03:35 PM

Work Order: 21102596
Lab ID: 21102596-04
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 13C4-PFOA	86.6			50-150	%REC	1	11/2/2021 21:13
Surr: 13C4-PFOS	95.5			50-150	%REC	1	11/2/2021 21:13
Surr: 13C5-PFNA	104			50-150	%REC	1	11/2/2021 21:13
Surr: 13C5-PFPeA	94.9			50-150	%REC	1	11/2/2021 21:13
Surr: 13C5-PFPeA	106			50-150	%REC	1	11/5/2021 13:25
Surr: 13C8-FOSA	70.6			50-150	%REC	1	11/2/2021 21:13
Surr: 18O2-PFHxS	82.0			50-150	%REC	1	11/2/2021 21:13
Surr: d5-N-EtFOSA	90.6			50-150	%REC	1	11/2/2021 21:13
Surr: d5-N-EtFOSAA	91.0			50-150	%REC	1	11/2/2021 21:13
Surr: d9-N-EtFOSE	92.4			50-150	%REC	1	11/2/2021 21:13
Surr: d3-N-MeFOSA	97.4			50-150	%REC	1	11/2/2021 21:13
Surr: d3-N-MeFOSAA	86.5			50-150	%REC	1	11/2/2021 21:13
Surr: d7-N-MeFOSE	98.7			50-150	%REC	1	11/2/2021 21:13

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-005 MW17D-1021
Collection Date: 10/19/2021 10:05 AM

Work Order: 21102596
Lab ID: 21102596-05
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PFAS BY EPA 537 MODIFIED							
			Method: E537 MOD			Prep: E537 Mod / 11/1/21	Analyst: SK
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	U		0.57	4.3	ng/L	1	11/2/2021 21:23
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	U		0.96	4.3	ng/L	1	11/2/2021 21:23
Perfluorobutanesulfonic Acid (PFBS)	U		0.30	4.3	ng/L	1	11/2/2021 21:23
Perfluorobutanoic Acid (PFBA)	U	H	2.2	4.3	ng/L	1	11/5/2021 13:33
Perfluorodecanesulfonic Acid (PFDS)	U		1.2	4.3	ng/L	1	11/2/2021 21:23
Perfluorodecanoic Acid (PFDA)	1.8	J	1.1	4.3	ng/L	1	11/2/2021 21:23
Perfluorododecanoic Acid (PFDoA)	U		1.2	4.3	ng/L	1	11/2/2021 21:23
Perfluoroheptanesulfonic Acid (PFHpS)	U		0.48	4.3	ng/L	1	11/2/2021 21:23
Perfluoroheptanoic Acid (PFHpA)	1.6	J	0.38	4.3	ng/L	1	11/2/2021 21:23
Perfluorohexanesulfonic Acid (PFHxS)	0.35	J	0.31	4.3	ng/L	1	11/2/2021 21:23
Perfluorohexanoic Acid (PFHxA)	3.4	J	1.0	4.3	ng/L	1	11/2/2021 21:23
Perfluorononanoic Acid (PFNA)	1.0	J	0.74	4.3	ng/L	1	11/2/2021 21:23
Perfluorooctanesulfonamide (PFOSA)	U		0.61	4.3	ng/L	1	11/2/2021 21:23
Perfluorooctanesulfonic Acid (PFOS)	U		0.76	1.7	ng/L	1	11/2/2021 21:23
Perfluorooctanoic Acid (PFOA)	2.0		0.54	1.7	ng/L	1	11/2/2021 21:23
Perfluoropentanoic Acid (PFPeA)	U	H	1.1	4.3	ng/L	1	11/5/2021 13:33
Perfluorotetradecanoic Acid (PFTeA)	U		2.3	4.3	ng/L	1	11/2/2021 21:23
Perfluorotridecanoic Acid (PFTriA)	U		0.66	4.3	ng/L	1	11/2/2021 21:23
Perfluoroundecanoic Acid (PFUnA)	U		0.83	4.3	ng/L	1	11/2/2021 21:23
N-Ethylperfluorooctanesulfonamidoacetic Acid	U		0.53	4.3	ng/L	1	11/2/2021 21:23
N-Methylperfluorooctanesulfonamidoacetic Acid	U		0.55	4.3	ng/L	1	11/2/2021 21:23
Surr: 13C2-FtS 6:2	96.0			50-150	%REC	1	11/2/2021 21:23
Surr: 13C2-FtS 8:2	103			50-150	%REC	1	11/2/2021 21:23
Surr: 13C2-PFDA	57.9			50-150	%REC	1	11/2/2021 21:23
Surr: 13C2-PFDoA	56.0			50-150	%REC	1	11/2/2021 21:23
Surr: 13C2-PFHxA	73.8			50-150	%REC	1	11/2/2021 21:23
Surr: 13C2-PFTeA	83.4			50-150	%REC	1	11/2/2021 21:23
Surr: 13C2-PFUnA	62.8			50-150	%REC	1	11/2/2021 21:23
Surr: 13C3-HFPO-DA	84.9			50-150	%REC	1	11/2/2021 21:23
Surr: 13C3-PFBS	76.8			50-150	%REC	1	11/2/2021 21:23
Surr: 13C4-PFBA	67.1			50-150	%REC	1	11/2/2021 21:23
Surr: 13C4-PFBA	98.4			50-150	%REC	1	11/5/2021 13:33
Surr: 13C4-PFHxA	68.4			50-150	%REC	1	11/2/2021 21:23

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-005 MW17D-1021
Collection Date: 10/19/2021 10:05 AM

Work Order: 21102596
Lab ID: 21102596-05
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 13C4-PFOA	66.7			50-150	%REC	1	11/2/2021 21:23
Surr: 13C4-PFOS	62.6			50-150	%REC	1	11/2/2021 21:23
Surr: 13C5-PFNA	68.1			50-150	%REC	1	11/2/2021 21:23
Surr: 13C5-PFPeA	82.4			50-150	%REC	1	11/2/2021 21:23
Surr: 13C5-PFPeA	127			50-150	%REC	1	11/5/2021 13:33
Surr: 13C8-FOSA	79.0			50-150	%REC	1	11/2/2021 21:23
Surr: 18O2-PFHxS	63.3			50-150	%REC	1	11/2/2021 21:23
Surr: d5-N-EtFOSA	80.3			50-150	%REC	1	11/2/2021 21:23
Surr: d5-N-EtFOSAA	77.0			50-150	%REC	1	11/2/2021 21:23
Surr: d9-N-EtFOSE	91.7			50-150	%REC	1	11/2/2021 21:23
Surr: d3-N-MeFOSA	92.9			50-150	%REC	1	11/2/2021 21:23
Surr: d3-N-MeFOSAA	70.1			50-150	%REC	1	11/2/2021 21:23
Surr: d7-N-MeFOSE	70.3			50-150	%REC	1	11/2/2021 21:23

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-006 MW17S-1021
Collection Date: 10/19/2021 11:55 AM

Work Order: 21102596
Lab ID: 21102596-06
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PFAS BY EPA 537 MODIFIED							
			Method: E537 MOD			Prep: E537 Mod / 11/1/21	Analyst: SK
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	1.2	J	0.57	4.3	ng/L	1	11/2/2021 21:34
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	U		0.96	4.3	ng/L	1	11/2/2021 21:34
Perfluorobutanesulfonic Acid (PFBS)	2.0	J	0.30	4.3	ng/L	1	11/2/2021 21:34
Perfluorobutanoic Acid (PFBA)	7.0	H	2.2	4.3	ng/L	1	11/5/2021 13:42
Perfluorodecanesulfonic Acid (PFDS)	U		1.2	4.3	ng/L	1	11/2/2021 21:34
Perfluorodecanoic Acid (PFDA)	U		1.1	4.3	ng/L	1	11/2/2021 21:34
Perfluorododecanoic Acid (PFDoA)	U		1.2	4.3	ng/L	1	11/2/2021 21:34
Perfluoroheptanesulfonic Acid (PFHpS)	U		0.48	4.3	ng/L	1	11/2/2021 21:34
Perfluoroheptanoic Acid (PFHpA)	6.4		0.38	4.3	ng/L	1	11/2/2021 21:34
Perfluorohexanesulfonic Acid (PFHxS)	1.9	J	0.31	4.3	ng/L	1	11/2/2021 21:34
Perfluorohexanoic Acid (PFHxA)	8.6		1.0	4.3	ng/L	1	11/2/2021 21:34
Perfluorononanoic Acid (PFNA)	1.5	J	0.74	4.3	ng/L	1	11/2/2021 21:34
Perfluorooctanesulfonamide (PFOSA)	U		0.61	4.3	ng/L	1	11/2/2021 21:34
Perfluorooctanesulfonic Acid (PFOS)	4.2		0.76	1.7	ng/L	1	11/2/2021 21:34
Perfluorooctanoic Acid (PFOA)	27		0.54	1.7	ng/L	1	11/2/2021 21:34
Perfluoropentanoic Acid (PFPeA)	1.8	JH	1.1	4.3	ng/L	1	11/5/2021 13:42
Perfluorotetradecanoic Acid (PFTeA)	U		2.3	4.3	ng/L	1	11/2/2021 21:34
Perfluorotridecanoic Acid (PFTriA)	U		0.66	4.3	ng/L	1	11/2/2021 21:34
Perfluoroundecanoic Acid (PFUnA)	U		0.83	4.3	ng/L	1	11/2/2021 21:34
N-Ethylperfluorooctanesulfonamidoacetic Acid	U		0.53	4.3	ng/L	1	11/2/2021 21:34
N-Methylperfluorooctanesulfonamidoacetic Acid	U		0.55	4.3	ng/L	1	11/2/2021 21:34
Surr: 13C2-FtS 6:2	122			50-150	%REC	1	11/2/2021 21:34
Surr: 13C2-FtS 8:2	106			50-150	%REC	1	11/2/2021 21:34
Surr: 13C2-PFDA	69.1			50-150	%REC	1	11/2/2021 21:34
Surr: 13C2-PFDoA	66.4			50-150	%REC	1	11/2/2021 21:34
Surr: 13C2-PFHxA	82.3			50-150	%REC	1	11/2/2021 21:34
Surr: 13C2-PFTeA	84.9			50-150	%REC	1	11/2/2021 21:34
Surr: 13C2-PFUnA	70.6			50-150	%REC	1	11/2/2021 21:34
Surr: 13C3-HFPO-DA	81.2			50-150	%REC	1	11/2/2021 21:34
Surr: 13C3-PFBS	75.7			50-150	%REC	1	11/2/2021 21:34
Surr: 13C4-PFBA	76.3			50-150	%REC	1	11/2/2021 21:34
Surr: 13C4-PFBA	108			50-150	%REC	1	11/5/2021 13:42
Surr: 13C4-PFHxA	71.5			50-150	%REC	1	11/2/2021 21:34

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-006 MW17S-1021
Collection Date: 10/19/2021 11:55 AM

Work Order: 21102596
Lab ID: 21102596-06
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 13C4-PFOA	68.2			50-150	%REC	1	11/2/2021 21:34
Surr: 13C4-PFOS	70.7			50-150	%REC	1	11/2/2021 21:34
Surr: 13C5-PFNA	79.8			50-150	%REC	1	11/2/2021 21:34
Surr: 13C5-PFPeA	84.4			50-150	%REC	1	11/2/2021 21:34
Surr: 13C5-PFPeA	116			50-150	%REC	1	11/5/2021 13:42
Surr: 13C8-FOSA	80.5			50-150	%REC	1	11/2/2021 21:34
Surr: 18O2-PFHxS	67.8			50-150	%REC	1	11/2/2021 21:34
Surr: d5-N-EtFOSA	80.7			50-150	%REC	1	11/2/2021 21:34
Surr: d5-N-EtFOSAA	82.3			50-150	%REC	1	11/2/2021 21:34
Surr: d9-N-EtFOSE	92.5			50-150	%REC	1	11/2/2021 21:34
Surr: d3-N-MeFOSA	84.9			50-150	%REC	1	11/2/2021 21:34
Surr: d3-N-MeFOSAA	78.1			50-150	%REC	1	11/2/2021 21:34
Surr: d7-N-MeFOSE	78.3			50-150	%REC	1	11/2/2021 21:34

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-007 MW5D-1021
Collection Date: 10/19/2021 01:55 PM

Work Order: 21102596
Lab ID: 21102596-07
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PFAS BY EPA 537 MODIFIED							
			Method: E537 MOD		Prep: E537 Mod / 11/1/21		Analyst: SK
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	0.93	J	0.56	4.2	ng/L	1	11/2/2021 22:05
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	U		0.96	4.2	ng/L	1	11/2/2021 22:05
Perfluorobutanesulfonic Acid (PFBS)	U		0.30	4.2	ng/L	1	11/2/2021 22:05
Perfluorobutanoic Acid (PFBA)	2.8	JH	2.2	4.3	ng/L	1	11/5/2021 13:58
Perfluorodecanesulfonic Acid (PFDS)	U		1.2	4.2	ng/L	1	11/2/2021 22:05
Perfluorodecanoic Acid (PFDA)	U		1.1	4.2	ng/L	1	11/2/2021 22:05
Perfluorododecanoic Acid (PFDoA)	U		1.2	4.2	ng/L	1	11/2/2021 22:05
Perfluoroheptanesulfonic Acid (PFHpS)	U		0.48	4.2	ng/L	1	11/2/2021 22:05
Perfluoroheptanoic Acid (PFHpA)	0.96	J	0.37	4.2	ng/L	1	11/2/2021 22:05
Perfluorohexanesulfonic Acid (PFHxS)	0.49	J	0.31	4.2	ng/L	1	11/2/2021 22:05
Perfluorohexanoic Acid (PFHxA)	3.6	J	1.0	4.2	ng/L	1	11/2/2021 22:05
Perfluorononanoic Acid (PFNA)	U		0.74	4.2	ng/L	1	11/2/2021 22:05
Perfluorooctanesulfonamide (PFOSA)	U		0.60	4.2	ng/L	1	11/2/2021 22:05
Perfluorooctanesulfonic Acid (PFOS)	U		0.76	1.7	ng/L	1	11/2/2021 22:05
Perfluorooctanoic Acid (PFOA)	1.7	J	0.53	1.7	ng/L	1	11/2/2021 22:05
Perfluoropentanoic Acid (PFPeA)	U	H	1.1	4.3	ng/L	1	11/5/2021 13:58
Perfluorotetradecanoic Acid (PFTeA)	U		2.2	4.2	ng/L	1	11/2/2021 22:05
Perfluorotridecanoic Acid (PFTriA)	U		0.65	4.2	ng/L	1	11/2/2021 22:05
Perfluoroundecanoic Acid (PFUnA)	0.84	J	0.83	4.2	ng/L	1	11/2/2021 22:05
N-Ethylperfluorooctanesulfonamidoacetic Acid	U		0.53	4.2	ng/L	1	11/2/2021 22:05
N-Methylperfluorooctanesulfonamidoacetic Acid	U		0.55	4.2	ng/L	1	11/2/2021 22:05
Surr: 13C2-FtS 6:2	116			50-150	%REC	1	11/2/2021 22:05
Surr: 13C2-FtS 8:2	109			50-150	%REC	1	11/2/2021 22:05
Surr: 13C2-PFDA	89.7			50-150	%REC	1	11/2/2021 22:05
Surr: 13C2-PFDoA	81.5			50-150	%REC	1	11/2/2021 22:05
Surr: 13C2-PFHxA	86.5			50-150	%REC	1	11/2/2021 22:05
Surr: 13C2-PFTeA	79.3			50-150	%REC	1	11/2/2021 22:05
Surr: 13C2-PFUnA	81.6			50-150	%REC	1	11/2/2021 22:05
Surr: 13C3-HFPO-DA	89.4			50-150	%REC	1	11/2/2021 22:05
Surr: 13C3-PFBS	93.3			50-150	%REC	1	11/2/2021 22:05
Surr: 13C4-PFBA	85.9			50-150	%REC	1	11/2/2021 22:05
Surr: 13C4-PFBA	92.5			50-150	%REC	1	11/5/2021 13:58
Surr: 13C4-PFHpA	112			50-150	%REC	1	11/2/2021 22:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-007 MW5D-1021
Collection Date: 10/19/2021 01:55 PM

Work Order: 21102596
Lab ID: 21102596-07
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 13C4-PFOA	93.6			50-150	%REC	1	11/2/2021 22:05
Surr: 13C4-PFOS	91.1			50-150	%REC	1	11/2/2021 22:05
Surr: 13C5-PFNA	89.1			50-150	%REC	1	11/2/2021 22:05
Surr: 13C5-PFPeA	96.2			50-150	%REC	1	11/2/2021 22:05
Surr: 13C5-PFPeA	101			50-150	%REC	1	11/5/2021 13:58
Surr: 13C8-FOSA	85.3			50-150	%REC	1	11/2/2021 22:05
Surr: 18O2-PFHxS	93.8			50-150	%REC	1	11/2/2021 22:05
Surr: d5-N-EtFOSA	101			50-150	%REC	1	11/2/2021 22:05
Surr: d5-N-EtFOSAA	95.7			50-150	%REC	1	11/2/2021 22:05
Surr: d9-N-EtFOSE	99.5			50-150	%REC	1	11/2/2021 22:05
Surr: d3-N-MeFOSA	96.4			50-150	%REC	1	11/2/2021 22:05
Surr: d3-N-MeFOSAA	87.4			50-150	%REC	1	11/2/2021 22:05
Surr: d7-N-MeFOSE	108			50-150	%REC	1	11/2/2021 22:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-008 FB-1021
Collection Date: 10/19/2021 03:10 PM

Work Order: 21102596
Lab ID: 21102596-08
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PFAS BY EPA 537 MODIFIED							
			Method: E537 MOD		Prep: E537 Mod / 11/1/21		Analyst: SK
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	U		0.56	4.2	ng/L	1	11/2/2021 22:15
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	U		0.96	4.2	ng/L	1	11/2/2021 22:15
Perfluorobutanesulfonic Acid (PFBS)	U		0.30	4.2	ng/L	1	11/2/2021 22:15
Perfluorobutanoic Acid (PFBA)	11		2.2	4.2	ng/L	1	11/2/2021 22:15
Perfluorodecanesulfonic Acid (PFDS)	U		1.2	4.2	ng/L	1	11/2/2021 22:15
Perfluorodecanoic Acid (PFDA)	U		1.1	4.2	ng/L	1	11/2/2021 22:15
Perfluorododecanoic Acid (PFDoA)	U		1.2	4.2	ng/L	1	11/2/2021 22:15
Perfluoroheptanesulfonic Acid (PFHpS)	U		0.48	4.2	ng/L	1	11/2/2021 22:15
Perfluoroheptanoic Acid (PFHpA)	1.0	J	0.37	4.2	ng/L	1	11/2/2021 22:15
Perfluorohexanesulfonic Acid (PFHxS)	U		0.31	4.2	ng/L	1	11/2/2021 22:15
Perfluorohexanoic Acid (PFHxA)	3.2	J	1.0	4.2	ng/L	1	11/2/2021 22:15
Perfluorononanoic Acid (PFNA)	0.76	J	0.74	4.2	ng/L	1	11/2/2021 22:15
Perfluorooctanesulfonamide (PFOSA)	U		0.60	4.2	ng/L	1	11/2/2021 22:15
Perfluorooctanesulfonic Acid (PFOS)	U		0.76	1.7	ng/L	1	11/2/2021 22:15
Perfluorooctanoic Acid (PFOA)	0.87	J	0.53	1.7	ng/L	1	11/2/2021 22:15
Perfluoropentanoic Acid (PFPeA)	5.5		1.1	4.2	ng/L	1	11/2/2021 22:15
Perfluorotetradecanoic Acid (PFTeA)	U		2.2	4.2	ng/L	1	11/2/2021 22:15
Perfluorotridecanoic Acid (PFTriA)	U		0.65	4.2	ng/L	1	11/2/2021 22:15
Perfluoroundecanoic Acid (PFUnA)	U		0.83	4.2	ng/L	1	11/2/2021 22:15
N-Ethylperfluorooctanesulfonamidoacetic Acid	U		0.53	4.2	ng/L	1	11/2/2021 22:15
N-Methylperfluorooctanesulfonamidoacetic Acid	U		0.55	4.2	ng/L	1	11/2/2021 22:15
Surr: 13C2-FtS 6:2	110			50-150	%REC	1	11/2/2021 22:15
Surr: 13C2-FtS 8:2	100			50-150	%REC	1	11/2/2021 22:15
Surr: 13C2-PFDA	76.1			50-150	%REC	1	11/2/2021 22:15
Surr: 13C2-PFDoA	70.0			50-150	%REC	1	11/2/2021 22:15
Surr: 13C2-PFHxA	76.2			50-150	%REC	1	11/2/2021 22:15
Surr: 13C2-PFTeA	67.0			50-150	%REC	1	11/2/2021 22:15
Surr: 13C2-PFUnA	76.6			50-150	%REC	1	11/2/2021 22:15
Surr: 13C3-HFPO-DA	78.9			50-150	%REC	1	11/2/2021 22:15
Surr: 13C3-PFBS	83.2			50-150	%REC	1	11/2/2021 22:15
Surr: 13C4-PFBA	75.3			50-150	%REC	1	11/2/2021 22:15
Surr: 13C4-PFHpA	101			50-150	%REC	1	11/2/2021 22:15
Surr: 13C4-PFOA	84.3			50-150	%REC	1	11/2/2021 22:15
Surr: 13C4-PFOS	82.1			50-150	%REC	1	11/2/2021 22:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-008 FB-1021
Collection Date: 10/19/2021 03:10 PM

Work Order: 21102596
Lab ID: 21102596-08
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 13C5-PFNA	77.1			50-150	%REC	1	11/2/2021 22:15
Surr: 13C5-PFPeA	88.8			50-150	%REC	1	11/2/2021 22:15
Surr: 13C8-FOSA	76.7			50-150	%REC	1	11/2/2021 22:15
Surr: 18O2-PFHxS	76.2			50-150	%REC	1	11/2/2021 22:15
Surr: d5-N-EtFOSA	70.7			50-150	%REC	1	11/2/2021 22:15
Surr: d5-N-EtFOSAA	85.1			50-150	%REC	1	11/2/2021 22:15
Surr: d9-N-EtFOSE	90.3			50-150	%REC	1	11/2/2021 22:15
Surr: d3-N-MeFOSA	75.5			50-150	%REC	1	11/2/2021 22:15
Surr: d3-N-MeFOSAA	76.8			50-150	%REC	1	11/2/2021 22:15
Surr: d7-N-MeFOSE	85.3			50-150	%REC	1	11/2/2021 22:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-009 MW5S-1021
Collection Date: 10/19/2021 03:10 PM

Work Order: 21102596
Lab ID: 21102596-09
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PFAS BY EPA 537 MODIFIED							
			Method: E537 MOD			Prep: E537 Mod / 11/1/21	Analyst: SK
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	U		0.58	4.4	ng/L	1	11/2/2021 22:26
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	U		0.99	4.4	ng/L	1	11/2/2021 22:26
Perfluorobutanesulfonic Acid (PFBS)	0.47	J	0.31	4.4	ng/L	1	11/2/2021 22:26
Perfluorobutanoic Acid (PFBA)	2.8	JH	2.2	4.3	ng/L	1	11/5/2021 14:06
Perfluorodecanesulfonic Acid (PFDS)	U		1.2	4.4	ng/L	1	11/2/2021 22:26
Perfluorodecanoic Acid (PFDA)	U		1.1	4.4	ng/L	1	11/2/2021 22:26
Perfluorododecanoic Acid (PFDoA)	U		1.2	4.4	ng/L	1	11/2/2021 22:26
Perfluoroheptanesulfonic Acid (PFHpS)	U		0.49	4.4	ng/L	1	11/2/2021 22:26
Perfluoroheptanoic Acid (PFHpA)	2.3	J	0.38	4.4	ng/L	1	11/2/2021 22:26
Perfluorohexanesulfonic Acid (PFHxS)	0.46	J	0.32	4.4	ng/L	1	11/2/2021 22:26
Perfluorohexanoic Acid (PFHxA)	3.9	J	1.0	4.4	ng/L	1	11/2/2021 22:26
Perfluorononanoic Acid (PFNA)	1.1	J	0.76	4.4	ng/L	1	11/2/2021 22:26
Perfluorooctanesulfonamide (PFOSA)	U		0.62	4.4	ng/L	1	11/2/2021 22:26
Perfluorooctanesulfonic Acid (PFOS)	2.3		0.78	1.7	ng/L	1	11/2/2021 22:26
Perfluorooctanoic Acid (PFOA)	2.9		0.55	1.7	ng/L	1	11/2/2021 22:26
Perfluoropentanoic Acid (PFPeA)	U	H	1.1	4.3	ng/L	1	11/5/2021 14:06
Perfluorotetradecanoic Acid (PFTeA)	U		2.3	4.4	ng/L	1	11/2/2021 22:26
Perfluorotridecanoic Acid (PFTriA)	U		0.67	4.4	ng/L	1	11/2/2021 22:26
Perfluoroundecanoic Acid (PFUnA)	U		0.85	4.4	ng/L	1	11/2/2021 22:26
N-Ethylperfluorooctanesulfonamidoacetic Acid	U		0.55	4.4	ng/L	1	11/2/2021 22:26
N-Methylperfluorooctanesulfonamidoacetic Acid	U		0.56	4.4	ng/L	1	11/2/2021 22:26
Surr: 13C2-FtS 6:2	146			50-150	%REC	1	11/2/2021 22:26
Surr: 13C2-FtS 8:2	118			50-150	%REC	1	11/2/2021 22:26
Surr: 13C2-PFDA	87.3			50-150	%REC	1	11/2/2021 22:26
Surr: 13C2-PFDoA	81.1			50-150	%REC	1	11/2/2021 22:26
Surr: 13C2-PFHxA	87.5			50-150	%REC	1	11/2/2021 22:26
Surr: 13C2-PFTeA	67.7			50-150	%REC	1	11/2/2021 22:26
Surr: 13C2-PFUnA	81.4			50-150	%REC	1	11/2/2021 22:26
Surr: 13C3-HFPO-DA	84.8			50-150	%REC	1	11/2/2021 22:26
Surr: 13C3-PFBS	88.8			50-150	%REC	1	11/2/2021 22:26
Surr: 13C4-PFBA	95.4			50-150	%REC	1	11/2/2021 22:26
Surr: 13C4-PFBA	109			50-150	%REC	1	11/5/2021 14:06
Surr: 13C4-PFHpA	97.4			50-150	%REC	1	11/2/2021 22:26

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-009 MW5S-1021
Collection Date: 10/19/2021 03:10 PM

Work Order: 21102596
Lab ID: 21102596-09
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 13C4-PFOA	109			50-150	%REC	1	11/2/2021 22:26
Surr: 13C4-PFOS	95.3			50-150	%REC	1	11/2/2021 22:26
Surr: 13C5-PFNA	87.9			50-150	%REC	1	11/2/2021 22:26
Surr: 13C5-PFPeA	93.2			50-150	%REC	1	11/2/2021 22:26
Surr: 13C5-PFPeA	115			50-150	%REC	1	11/5/2021 14:06
Surr: 13C8-FOSA	82.3			50-150	%REC	1	11/2/2021 22:26
Surr: 18O2-PFHxS	104			50-150	%REC	1	11/2/2021 22:26
Surr: d5-N-EtFOSA	96.4			50-150	%REC	1	11/2/2021 22:26
Surr: d5-N-EtFOSAA	92.1			50-150	%REC	1	11/2/2021 22:26
Surr: d9-N-EtFOSE	94.9			50-150	%REC	1	11/2/2021 22:26
Surr: d3-N-MeFOSA	92.2			50-150	%REC	1	11/2/2021 22:26
Surr: d3-N-MeFOSAA	84.8			50-150	%REC	1	11/2/2021 22:26
Surr: d7-N-MeFOSE	97.1			50-150	%REC	1	11/2/2021 22:26

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-010 DUP1-1021
Collection Date: 10/19/2021 03:15 PM

Work Order: 21102596
Lab ID: 21102596-10
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PFAS BY EPA 537 MODIFIED							
			Method: E537 MOD			Prep: E537 Mod / 11/1/21	Analyst: SK
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	U		0.56	4.2	ng/L	1	11/2/2021 22:36
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	U		0.96	4.2	ng/L	1	11/2/2021 22:36
Perfluorobutanesulfonic Acid (PFBS)	0.40	J	0.30	4.2	ng/L	1	11/2/2021 22:36
Perfluorobutanoic Acid (PFBA)	3.2	JH	2.3	4.3	ng/L	1	11/5/2021 14:14
Perfluorodecanesulfonic Acid (PFDS)	U		1.2	4.2	ng/L	1	11/2/2021 22:36
Perfluorodecanoic Acid (PFDA)	U		1.1	4.2	ng/L	1	11/2/2021 22:36
Perfluorododecanoic Acid (PFDoA)	U		1.2	4.2	ng/L	1	11/2/2021 22:36
Perfluoroheptanesulfonic Acid (PFHpS)	U		0.48	4.2	ng/L	1	11/2/2021 22:36
Perfluoroheptanoic Acid (PFHpA)	3.3	J	0.37	4.2	ng/L	1	11/2/2021 22:36
Perfluorohexanesulfonic Acid (PFHxS)	0.40	J	0.31	4.2	ng/L	1	11/2/2021 22:36
Perfluorohexanoic Acid (PFHxA)	3.7	J	1.0	4.2	ng/L	1	11/2/2021 22:36
Perfluorononanoic Acid (PFNA)	0.90	J	0.74	4.2	ng/L	1	11/2/2021 22:36
Perfluorooctanesulfonamide (PFOSA)	U		0.60	4.2	ng/L	1	11/2/2021 22:36
Perfluorooctanesulfonic Acid (PFOS)	2.3		0.76	1.7	ng/L	1	11/2/2021 22:36
Perfluorooctanoic Acid (PFOA)	3.5		0.53	1.7	ng/L	1	11/2/2021 22:36
Perfluoropentanoic Acid (PFPeA)	U	H	1.1	4.3	ng/L	1	11/5/2021 14:14
Perfluorotetradecanoic Acid (PFTeA)	U		2.2	4.2	ng/L	1	11/2/2021 22:36
Perfluorotridecanoic Acid (PFTriA)	0.91	J	0.65	4.2	ng/L	1	11/2/2021 22:36
Perfluoroundecanoic Acid (PFUnA)	U		0.83	4.2	ng/L	1	11/2/2021 22:36
N-Ethylperfluorooctanesulfonamidoacetic Acid	U		0.53	4.2	ng/L	1	11/2/2021 22:36
N-Methylperfluorooctanesulfonamidoacetic Acid	U		0.55	4.2	ng/L	1	11/2/2021 22:36
Surr: 13C2-FtS 6:2	162	S		50-150	%REC	1	11/2/2021 22:36
Surr: 13C2-FtS 8:2	122			50-150	%REC	1	11/2/2021 22:36
Surr: 13C2-PFDA	84.9			50-150	%REC	1	11/2/2021 22:36
Surr: 13C2-PFDoA	75.6			50-150	%REC	1	11/2/2021 22:36
Surr: 13C2-PFHxA	84.3			50-150	%REC	1	11/2/2021 22:36
Surr: 13C2-PFTeA	60.1			50-150	%REC	1	11/2/2021 22:36
Surr: 13C2-PFUnA	75.5			50-150	%REC	1	11/2/2021 22:36
Surr: 13C3-HFPO-DA	77.3			50-150	%REC	1	11/2/2021 22:36
Surr: 13C3-PFBS	81.0			50-150	%REC	1	11/2/2021 22:36
Surr: 13C4-PFBA	87.0			50-150	%REC	1	11/2/2021 22:36
Surr: 13C4-PFBA	110			50-150	%REC	1	11/5/2021 14:14
Surr: 13C4-PFHpA	97.3			50-150	%REC	1	11/2/2021 22:36

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-010 DUP1-1021
Collection Date: 10/19/2021 03:15 PM

Work Order: 21102596
Lab ID: 21102596-10
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 13C4-PFOA	88.3			50-150	%REC	1	11/2/2021 22:36
Surr: 13C4-PFOS	84.4			50-150	%REC	1	11/2/2021 22:36
Surr: 13C5-PFNA	87.4			50-150	%REC	1	11/2/2021 22:36
Surr: 13C5-PFPeA	90.3			50-150	%REC	1	11/2/2021 22:36
Surr: 13C5-PFPeA	123			50-150	%REC	1	11/5/2021 14:14
Surr: 13C8-FOSA	77.6			50-150	%REC	1	11/2/2021 22:36
Surr: 18O2-PFHxS	82.7			50-150	%REC	1	11/2/2021 22:36
Surr: d5-N-EtFOSA	96.6			50-150	%REC	1	11/2/2021 22:36
Surr: d5-N-EtFOSAA	92.6			50-150	%REC	1	11/2/2021 22:36
Surr: d9-N-EtFOSE	92.4			50-150	%REC	1	11/2/2021 22:36
Surr: d3-N-MeFOSA	84.0			50-150	%REC	1	11/2/2021 22:36
Surr: d3-N-MeFOSAA	84.4			50-150	%REC	1	11/2/2021 22:36
Surr: d7-N-MeFOSE	101			50-150	%REC	1	11/2/2021 22:36

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-011 EB1-1021
Collection Date: 10/20/2021 07:30 AM

Work Order: 21102596
Lab ID: 21102596-11
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PFAS BY EPA 537 MODIFIED							
			Method: E537 MOD			Prep: E537 Mod / 11/1/21	Analyst: SK
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	U		0.61	4.6	ng/L	1	11/2/2021 22:47
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	U		1.0	4.6	ng/L	1	11/2/2021 22:47
Perfluorobutanesulfonic Acid (PFBS)	U		0.32	4.6	ng/L	1	11/2/2021 22:47
Perfluorobutanoic Acid (PFBA)	U	H	2.4	4.6	ng/L	1	11/5/2021 14:22
Perfluorodecanesulfonic Acid (PFDS)	U		1.3	4.6	ng/L	1	11/2/2021 22:47
Perfluorodecanoic Acid (PFDA)	U		1.1	4.6	ng/L	1	11/2/2021 22:47
Perfluorododecanoic Acid (PFDoA)	U		1.3	4.6	ng/L	1	11/2/2021 22:47
Perfluoroheptanesulfonic Acid (PFHpS)	U		0.52	4.6	ng/L	1	11/2/2021 22:47
Perfluoroheptanoic Acid (PFHpA)	0.92	J	0.41	4.6	ng/L	1	11/2/2021 22:47
Perfluorohexanesulfonic Acid (PFHxS)	U		0.34	4.6	ng/L	1	11/2/2021 22:47
Perfluorohexanoic Acid (PFHxA)	3.1	J	1.1	4.6	ng/L	1	11/2/2021 22:47
Perfluorononanoic Acid (PFNA)	U		0.80	4.6	ng/L	1	11/2/2021 22:47
Perfluorooctanesulfonamide (PFOSA)	U		0.66	4.6	ng/L	1	11/2/2021 22:47
Perfluorooctanesulfonic Acid (PFOS)	U		0.82	1.8	ng/L	1	11/2/2021 22:47
Perfluorooctanoic Acid (PFOA)	0.87	J	0.58	1.8	ng/L	1	11/2/2021 22:47
Perfluoropentanoic Acid (PFPeA)	U	H	1.2	4.6	ng/L	1	11/5/2021 14:22
Perfluorotetradecanoic Acid (PFTeA)	U		2.4	4.6	ng/L	1	11/2/2021 22:47
Perfluorotridecanoic Acid (PFTriA)	U		0.71	4.6	ng/L	1	11/2/2021 22:47
Perfluoroundecanoic Acid (PFUnA)	U		0.90	4.6	ng/L	1	11/2/2021 22:47
N-Ethylperfluorooctanesulfonamidoacetic Acid	U		0.58	4.6	ng/L	1	11/2/2021 22:47
N-Methylperfluorooctanesulfonamidoacetic Acid	U		0.59	4.6	ng/L	1	11/2/2021 22:47
Surr: 13C2-FtS 6:2	100			50-150	%REC	1	11/2/2021 22:47
Surr: 13C2-FtS 8:2	106			50-150	%REC	1	11/2/2021 22:47
Surr: 13C2-PFDA	65.7			50-150	%REC	1	11/2/2021 22:47
Surr: 13C2-PFDoA	65.1			50-150	%REC	1	11/2/2021 22:47
Surr: 13C2-PFHxA	75.1			50-150	%REC	1	11/2/2021 22:47
Surr: 13C2-PFTeA	73.8			50-150	%REC	1	11/2/2021 22:47
Surr: 13C2-PFUnA	81.5			50-150	%REC	1	11/2/2021 22:47
Surr: 13C3-HFPO-DA	89.4			50-150	%REC	1	11/2/2021 22:47
Surr: 13C3-PFBS	84.6			50-150	%REC	1	11/2/2021 22:47
Surr: 13C4-PFBA	72.2			50-150	%REC	1	11/2/2021 22:47
Surr: 13C4-PFBA	113			50-150	%REC	1	11/5/2021 14:22
Surr: 13C4-PFHpA	83.0			50-150	%REC	1	11/2/2021 22:47
Surr: 13C4-PFOA	73.9			50-150	%REC	1	11/2/2021 22:47

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 09-Nov-21

Client: ALS Environmental
Project: R2110978
Sample ID: R2110978-011 EB1-1021
Collection Date: 10/20/2021 07:30 AM

Work Order: 21102596
Lab ID: 21102596-11
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 13C4-PFOS	71.4			50-150	%REC	1	11/2/2021 22:47
Surr: 13C5-PFNA	71.6			50-150	%REC	1	11/2/2021 22:47
Surr: 13C5-PFPeA	90.8			50-150	%REC	1	11/2/2021 22:47
Surr: 13C5-PFPeA	123			50-150	%REC	1	11/5/2021 14:22
Surr: 13C8-FOSA	88.6			50-150	%REC	1	11/2/2021 22:47
Surr: 18O2-PFHxS	75.1			50-150	%REC	1	11/2/2021 22:47
Surr: d5-N-EtFOSA	80.3			50-150	%REC	1	11/2/2021 22:47
Surr: d5-N-EtFOSAA	95.0			50-150	%REC	1	11/2/2021 22:47
Surr: d9-N-EtFOSE	96.3			50-150	%REC	1	11/2/2021 22:47
Surr: d3-N-MeFOSA	80.0			50-150	%REC	1	11/2/2021 22:47
Surr: d3-N-MeFOSAA	85.0			50-150	%REC	1	11/2/2021 22:47
Surr: d7-N-MeFOSE	71.4			50-150	%REC	1	11/2/2021 22:47

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: ALS Environmental
 Work Order: 21102596
 Project: R2110978

QC BATCH REPORT

Batch ID: 186437 Instrument ID LCMS1 Method: E537 Mod

MBLK		Sample ID: MBLK-186437-186437				Units: ng/L		Analysis Date: 11/2/2021 07:59 PM			
Client ID:		Run ID: LCMS1_211102A				SeqNo: 7913646		Prep Date: 11/1/2021		DF: 1	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluorotelomer Sulphonic Acid (FSA)	U	0.66	5.0								
Fluorotelomer Sulphonic Acid (FSA)	U	1.1	5.0								
Perfluorobutanesulfonic Acid (PFBS)	U	0.35	5.0								
Perfluorobutanoic Acid (PFBA)	U	2.6	5.0								
Perfluorodecanesulfonic Acid (PFDS)	U	1.4	5.0								
Perfluorodecanoic Acid (PFDA)	U	1.2	5.0								
Perfluorododecanoic Acid (PFDA)	U	1.4	5.0								
Perfluoroheptanesulfonic Acid (PFHxS)	U	0.57	5.0								
Perfluoroheptanoic Acid (PFHxA)	2.083	0.44	5.0								J
Perfluorohexanesulfonic Acid (PFHxS)	0.3744	0.37	5.0								J
Perfluorohexanoic Acid (PFHxA)	U	1.2	5.0								
Perfluorononanoic Acid (PFNA)	U	0.87	5.0								
Perfluorooctanesulfonamide (PFOSA)	U	0.71	5.0								
Perfluorooctanesulfonic Acid (PFOS)	U	0.89	2.0								
Perfluorooctanoic Acid (PFOA)	0.6688	0.63	2.0								J
Perfluoropentanoic Acid (PFPeA)	U	1.3	5.0								
Perfluorotetradecanoic Acid (PFTrDA)	U	2.6	5.0								
Perfluorotridecanoic Acid (PFTrDA)	U	0.77	5.0								
Perfluoroundecanoic Acid (PFUnDA)	U	0.97	5.0								
N-Ethylperfluorooctanesulfonamide (N-EtPFOSA)	U	0.63	5.0								
N-Methylperfluorooctanesulfonamide (N-MePFOSA)	U	0.64	5.0								
Surr: 13C2-FtS 6:2	165.4	0	0	152	0	109	50-150	0			
Surr: 13C2-FtS 8:2	183.9	0	0	153.3	0	120	50-150	0			
Surr: 13C2-PFDA	139.1	0	0	160	0	87	50-150	0			
Surr: 13C2-PFDoA	133.5	0	0	160	0	83.4	50-150	0			
Surr: 13C2-PFHxA	167.6	0	0	160	0	105	50-150	0			
Surr: 13C2-PFTrA	178.1	0	0	160	0	111	50-150	0			
Surr: 13C2-PFUnA	148.5	0	0	160	0	92.8	50-150	0			
Surr: 13C3-HFPO-DA	180.5	0	0	160	0	113	50-150	0			
Surr: 13C3-PFBS	151.7	0	0	148.8	0	102	50-150	0			
Surr: 13C4-PFBA	151.9	0	0	160	0	94.9	50-150	0			
Surr: 13C4-PFHxA	157.7	0	0	160	0	98.5	50-150	0			
Surr: 13C4-PFOA	151.9	0	0	160	0	94.9	50-150	0			
Surr: 13C4-PFOS	138.7	0	0	152.8	0	90.8	50-150	0			
Surr: 13C5-PFNA	161.6	0	0	160	0	101	50-150	0			
Surr: 13C5-PFPeA	176.6	0	0	160	0	110	50-150	0			
Surr: 13C8-FOSA	159.7	0	0	160	0	99.8	50-150	0			
Surr: 18O2-PFHxS	144.1	0	0	151.2	0	95.3	50-150	0			
Surr: d5-N-EtFOSA	156.4	0	0	160	0	97.8	50-150	0			
Surr: d5-N-EtFOSAA	153.8	0	0	160	0	96.1	50-150	0			
Surr: d9-N-EtFOSE	177	0	0	160	0	111	50-150	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental
Work Order: 21102596
Project: R2110978

QC BATCH REPORT

Batch ID: 186437		Instrument ID LCMS1		Method: E537 Mod					
<i>Surr: d3-N-MeFOSA</i>		<i>175</i>	0	0	<i>160</i>	0	<i>109</i>	<i>50-150</i>	0
<i>Surr: d3-N-MeFOSAA</i>		<i>150.4</i>	0	0	<i>160</i>	0	<i>94</i>	<i>50-150</i>	0
<i>Surr: d7-N-MeFOSE</i>		<i>145.2</i>	0	0	<i>160</i>	0	<i>90.7</i>	<i>50-150</i>	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental
 Work Order: 21102596
 Project: R2110978

QC BATCH REPORT

Batch ID: 186437 Instrument ID LCMS1 Method: E537 Mod

LCS Sample ID: LCS-186437-186437					Units: ng/L			Analysis Date: 11/2/2021 08:10 PM			
Client ID:		Run ID: LCMS1_211102A			SeqNo: 7913647		Prep Date: 11/1/2021		DF: 1		
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluorotelomer Sulphonic Acid (	36.29	0.66	5.0	30.3	0	120	64-140	0			
Fluorotelomer Sulphonic Acid (	31.36	1.1	5.0	30.7	0	102	67-138	0			
Perfluorobutanesulfonic Acid (	32.01	0.35	5.0	28.3	0	113	72-130	0			
Perfluorobutanoic Acid (PFBA)	33.21	2.6	5.0	32	0	104	73-129	0			
Perfluorodecanesulfonic Acid (	32.47	1.4	5.0	30.8	0	105	53-142	0			
Perfluorodecanoic Acid (PFDA	31.88	1.2	5.0	32	0	99.6	71-129	0			
Perfluorododecanoic Acid (PFI	30.55	1.4	5.0	32	0	95.5	72-134	0			
Perfluoroheptanesulfonic Acid	33.69	0.57	5.0	30.5	0	110	69-134	0			
Perfluoroheptanoic Acid (PFH	37.69	0.44	5.0	32	0	118	72-130	0			
Perfluorohexanesulfonic Acid (	31.23	0.37	5.0	29.1	0	107	68-131	0			
Perfluorohexanoic Acid (PFHx	33.99	1.2	5.0	32	0	106	72-129	0			
Perfluorononanoic Acid (PFNA	29.79	0.87	5.0	32	0	93.1	69-130	0			
Perfluorooctanesulfonamide (F	30.03	0.71	5.0	32	0	93.8	67-137	0			
Perfluorooctanesulfonic Acid (l	32.15	0.89	2.0	29.7	0	108	65-140	0			
Perfluorooctanoic Acid (PFOA	33.02	0.63	2.0	32	0	103	71-133	0			
Perfluoropentanoic Acid (PFPe	35.06	1.3	5.0	32	0	110	72-129	0			
Perfluorotetradecanoic Acid (F	32.77	2.6	5.0	32	0	102	71-132	0			
Perfluorotridecanoic Acid (PFT	29.25	0.77	5.0	32	0	91.4	65-144	0			
Perfluoroundecanoic Acid (PFI	32.64	0.97	5.0	32	0	102	69-133	0			
N-Ethylperfluorooctanesulfona	34.4	0.63	5.0	32	0	108	61-135	0			
N-Methylperfluorooctanesulfor	33.9	0.64	5.0	32	0	106	65-136	0			
Surr: 13C2-FtS 6:2	177.7	0	0	152	0	117	50-150	0			
Surr: 13C2-FtS 8:2	195.6	0	0	153.3	0	128	50-150	0			
Surr: 13C2-PFDA	166.1	0	0	160	0	104	50-150	0			
Surr: 13C2-PFDoA	158	0	0	160	0	98.8	50-150	0			
Surr: 13C2-PFHxA	165.8	0	0	160	0	104	50-150	0			
Surr: 13C2-PFTEA	155.8	0	0	160	0	97.4	50-150	0			
Surr: 13C2-PFUnA	139.2	0	0	160	0	87	50-150	0			
Surr: 13C3-HFPO-DA	141.8	0	0	160	0	88.7	50-150	0			
Surr: 13C3-PFBS	139.4	0	0	148.8	0	93.7	50-150	0			
Surr: 13C4-PFBA	158.3	0	0	160	0	99	50-150	0			
Surr: 13C4-PFHpA	143.8	0	0	160	0	89.9	50-150	0			
Surr: 13C4-PFOA	142.9	0	0	160	0	89.3	50-150	0			
Surr: 13C4-PFOS	154.1	0	0	152.8	0	101	50-150	0			
Surr: 13C5-PFNA	179.2	0	0	160	0	112	50-150	0			
Surr: 13C5-PFPeA	157.6	0	0	160	0	98.5	50-150	0			
Surr: 13C8-FOSA	132.5	0	0	160	0	82.8	50-150	0			
Surr: 18O2-PFHxS	132.6	0	0	151.2	0	87.7	50-150	0			
Surr: d5-N-EtFOSA	151.5	0	0	160	0	94.7	50-150	0			
Surr: d5-N-EtFOSAA	153.1	0	0	160	0	95.7	50-150	0			
Surr: d9-N-EtFOSE	149.3	0	0	160	0	93.3	50-150	0			
Surr: d3-N-MeFOSA	142.9	0	0	160	0	89.3	50-150	0			
Surr: d3-N-MeFOSAA	146.3	0	0	160	0	91.4	50-150	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental
Work Order: 21102596
Project: R2110978

QC BATCH REPORT

Batch ID: 186437	Instrument ID LCMS1	Method: E537 Mod							
Surr: d7-N-MeFOSE	154.8	0	0	160	0	96.8	50-150	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental
 Work Order: 21102596
 Project: R2110978

QC BATCH REPORT

Batch ID: 186437 Instrument ID LCMS1 Method: E537 Mod

MS					Sample ID: 21102596-01AMS				Units: ng/L			Analysis Date: 11/2/2021 08:20 PM		
Client ID: R2110978-001 CW4A-1021				Run ID: LCMS1_211102A				SeqNo: 7913648			Prep Date: 11/1/2021		DF: 1	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Fluorotelomer Sulphonic Acid (	29.5	0.6	4.5	27.45	0	108	64-140	0						
Fluorotelomer Sulphonic Acid (	26.3	1	4.5	27.81	0	94.6	67-138	0						
Perfluorobutanesulfonic Acid (	28.71	0.32	4.5	25.63	1.371	107	72-130	0						
Perfluorobutanoic Acid (PFBA)	38.23	2.4	4.5	28.99	5.971	111	73-129	0						
Perfluorodecanesulfonic Acid (	21.37	1.2	4.5	27.9	0	76.6	53-142	0						
Perfluorodecanoic Acid (PFDA)	30.06	1.1	4.5	28.99	0.7421	101	71-129	0						
Perfluorododecanoic Acid (PFI	27.41	1.3	4.5	28.99	0.6447	92.3	72-134	0						
Perfluoroheptanesulfonic Acid	23.68	0.51	4.5	27.63	0	85.7	69-134	0						
Perfluoroheptanoic Acid (PFH	32.88	0.4	4.5	28.99	0.6684	111	72-130	0						
Perfluorohexanesulfonic Acid (	31.07	0.33	4.5	26.36	1.039	114	68-131	0						
Perfluorohexanoic Acid (PFHx	35.24	1.1	4.5	28.99	1.366	117	72-129	0						
Perfluorononanoic Acid (PFNA	31.96	0.79	4.5	28.99	1.176	106	69-130	0						
Perfluorooctanesulfonamide (F	29.51	0.64	4.5	28.99	0	102	67-137	0						
Perfluorooctanesulfonic Acid (l	34.78	0.81	1.8	26.9	6.516	105	65-140	0						
Perfluorooctanoic Acid (PFOA	38.79	0.57	1.8	28.99	7.179	109	71-133	0						
Perfluoropentanoic Acid (PFPe	30.12	1.2	4.5	28.99	0.7868	101	72-129	0						
Perfluorotetradecanoic Acid (F	27.73	2.4	4.5	28.99	0.3632	94.4	71-132	0						
Perfluorotridecanoic Acid (PFI	27.29	0.7	4.5	28.99	0.7447	91.6	65-144	0						
Perfluoroundecanoic Acid (PFI	31.69	0.88	4.5	28.99	0.6711	107	69-133	0						
N-Ethylperfluorooctanesulfona	33.39	0.57	4.5	28.99	0	115	61-135	0						
N-Methylperfluorooctanesulfor	34.79	0.58	4.5	28.99	0	120	65-136	0						
Surr: 13C2-FtS 6:2	289.8	0	0	137.7	0	210	50-150	0			S			
Surr: 13C2-FtS 8:2	200.2	0	0	138.8	0	144	50-150	0						
Surr: 13C2-PFDA	148.3	0	0	144.9	0	102	50-150	0						
Surr: 13C2-PFDoA	134.6	0	0	144.9	0	92.9	50-150	0						
Surr: 13C2-PFHxA	151.8	0	0	144.9	0	105	50-150	0						
Surr: 13C2-PFTeA	140.8	0	0	144.9	0	97.2	50-150	0						
Surr: 13C2-PFUnA	150.2	0	0	144.9	0	104	50-150	0						
Surr: 13C3-HFPO-DA	165.1	0	0	144.9	0	114	50-150	0						
Surr: 13C3-PFBS	151.4	0	0	134.8	0	112	50-150	0						
Surr: 13C4-PFBA	158.1	0	0	144.9	0	109	50-150	0						
Surr: 13C4-PFHpA	188.9	0	0	144.9	0	130	50-150	0						
Surr: 13C4-PFOA	185.2	0	0	144.9	0	128	50-150	0						
Surr: 13C4-PFOS	155.7	0	0	138.4	0	113	50-150	0						
Surr: 13C5-PFNA	152.8	0	0	144.9	0	105	50-150	0						
Surr: 13C5-PFPeA	174.1	0	0	144.9	0	120	50-150	0						
Surr: 13C8-FOSA	152.8	0	0	144.9	0	105	50-150	0						
Surr: 18O2-PFHxS	161.9	0	0	137	0	118	50-150	0						
Surr: d5-N-EtFOSA	155.4	0	0	144.9	0	107	50-150	0						
Surr: d5-N-EtFOSAA	167.7	0	0	144.9	0	116	50-150	0						
Surr: d9-N-EtFOSE	176.2	0	0	144.9	0	122	50-150	0						
Surr: d3-N-MeFOSA	175.3	0	0	144.9	0	121	50-150	0						
Surr: d3-N-MeFOSAA	155.5	0	0	144.9	0	107	50-150	0						

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental
Work Order: 21102596
Project: R2110978

QC BATCH REPORT

Batch ID: 186437	Instrument ID LCMS1	Method: E537 Mod							
<i>Surr: d7-N-MeFOSE</i>	<i>162.1</i>	<i>0</i>	<i>0</i>	<i>144.9</i>	<i>0</i>	<i>112</i>	<i>50-150</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental
 Work Order: 21102596
 Project: R2110978

QC BATCH REPORT

Batch ID: 186437 Instrument ID LCMS1 Method: E537 Mod

MSD					Sample ID: 21102596-01AMSD			Units: ng/L		Analysis Date: 11/2/2021 08:31 PM	
Client ID: R2110978-001 CW4A-1021					Run ID: LCMS1_211102A			SeqNo: 7913649		Prep Date: 11/1/2021	
								DF: 1			
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluorotelomer Sulphonic Acid (	31.38	0.6	4.5	27.35	0	115	64-140	29.5	6.18	30	
Fluorotelomer Sulphonic Acid (	29.65	1	4.5	27.71	0	107	67-138	26.3	11.9	30	
Perfluorobutanesulfonic Acid (	30	0.32	4.5	25.54	1.371	112	72-130	28.71	4.4	30	
Perfluorobutanoic Acid (PFBA)	55.06	2.3	4.5	28.88	5.971	170	73-129	38.23	36.1	30	SR
Perfluorodecanesulfonic Acid (	27.16	1.2	4.5	27.8	0	97.7	53-142	21.37	23.8	30	
Perfluorodecanoic Acid (PFDA)	33.5	1.1	4.5	28.88	0.7421	113	71-129	30.06	10.8	30	
Perfluorododecanoic Acid (PFI	32.99	1.3	4.5	28.88	0.6447	112	72-134	27.41	18.5	30	
Perfluoroheptanesulfonic Acid	23.7	0.51	4.5	27.53	0	86.1	69-134	23.68	0.0781	30	
Perfluoroheptanoic Acid (PFH	36.75	0.4	4.5	28.88	0.6684	125	72-130	32.88	11.1	30	
Perfluorohexanesulfonic Acid (	31.21	0.33	4.5	26.26	1.039	115	68-131	31.07	0.465	30	
Perfluorohexanoic Acid (PFHx	40.52	1.1	4.5	28.88	1.366	136	72-129	35.24	13.9	30	S
Perfluorononanoic Acid (PFNA	38.89	0.79	4.5	28.88	1.176	131	69-130	31.96	19.6	30	S
Perfluorooctanesulfonamide (F	31.48	0.64	4.5	28.88	0	109	67-137	29.51	6.44	30	
Perfluorooctanesulfonic Acid (l	35.6	0.81	1.8	26.81	6.516	108	65-140	34.78	2.32	30	
Perfluorooctanoic Acid (PFOA	47	0.57	1.8	28.88	7.179	138	71-133	38.79	19.1	30	S
Perfluoropentanoic Acid (PFPe	40.48	1.2	4.5	28.88	0.7868	137	72-129	30.12	29.3	30	S
Perfluorotetradecanoic Acid (F	29.42	2.4	4.5	28.88	0.3632	101	71-132	27.73	5.9	30	
Perfluorotridecanoic Acid (PFT	24.95	0.7	4.5	28.88	0.7447	83.8	65-144	27.29	8.96	30	
Perfluoroundecanoic Acid (PFI	31.36	0.88	4.5	28.88	0.6711	106	69-133	31.69	1.02	30	
N-Ethylperfluorooctanesulfona	34.21	0.57	4.5	28.88	0	118	61-135	33.39	2.44	30	
N-Methylperfluorooctanesulfor	34.04	0.58	4.5	28.88	0	118	65-136	34.79	2.17	30	
Surr: 13C2-FtS 6:2	202.2	0	0	137.2	0	147	50-150	289.8	35.6	30	R
Surr: 13C2-FtS 8:2	172.9	0	0	138.3	0	125	50-150	200.2	14.7	30	
Surr: 13C2-PFDA	117.8	0	0	144.4	0	81.6	50-150	148.3	22.9	30	
Surr: 13C2-PFDoA	113.9	0	0	144.4	0	78.9	50-150	134.6	16.6	30	
Surr: 13C2-PFHxA	135.6	0	0	144.4	0	93.9	50-150	151.8	11.3	30	
Surr: 13C2-PFTEA	135.4	0	0	144.4	0	93.8	50-150	140.8	3.93	30	
Surr: 13C2-PFUnA	127.8	0	0	144.4	0	88.5	50-150	150.2	16.1	30	
Surr: 13C3-HFPO-DA	148.5	0	0	144.4	0	103	50-150	165.1	10.6	30	
Surr: 13C3-PFBS	127.1	0	0	134.3	0	94.6	50-150	151.4	17.5	30	
Surr: 13C4-PFBA	138.7	0	0	144.4	0	96.1	50-150	158.1	13	30	
Surr: 13C4-PFHpA	137	0	0	144.4	0	94.9	50-150	188.9	31.8	30	R
Surr: 13C4-PFOA	132.5	0	0	144.4	0	91.8	50-150	185.2	33.2	30	R
Surr: 13C4-PFOS	125.8	0	0	137.9	0	91.2	50-150	155.7	21.3	30	
Surr: 13C5-PFNA	133.4	0	0	144.4	0	92.4	50-150	152.8	13.6	30	
Surr: 13C5-PFPeA	147.6	0	0	144.4	0	102	50-150	174.1	16.5	30	
Surr: 13C8-FOSA	140.3	0	0	144.4	0	97.2	50-150	152.8	8.53	30	
Surr: 18O2-PFHxS	130.1	0	0	136.5	0	95.3	50-150	161.9	21.8	30	
Surr: d5-N-EtFOSA	133.8	0	0	144.4	0	92.7	50-150	155.4	14.9	30	
Surr: d5-N-EtFOSAA	135	0	0	144.4	0	93.5	50-150	167.7	21.6	30	
Surr: d9-N-EtFOSE	158.8	0	0	144.4	0	110	50-150	176.2	10.4	30	
Surr: d3-N-MeFOSA	145.3	0	0	144.4	0	101	50-150	175.3	18.7	30	
Surr: d3-N-MeFOSAA	126.3	0	0	144.4	0	87.4	50-150	155.5	20.8	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental
Work Order: 21102596
Project: R2110978

QC BATCH REPORT

Batch ID: 186437	Instrument ID LCMS1	Method: E537 Mod									
Surr: d7-N-MeFOSE	124.4	0	0	144.4	0	86.2	50-150	162.1	26.3	30	

The following samples were analyzed in this batch:

21102596-01A	21102596-02A	21102596-03A
21102596-04A	21102596-05A	21102596-06A
21102596-07A	21102596-08A	21102596-09A
21102596-10A	21102596-11A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental
 Work Order: 21102596
 Project: R2110978

QC BATCH REPORT

Batch ID: **186655** Instrument ID **LCMS1** Method: **E537 Mod**

MBLK		Sample ID: MBLK-186655-186655				Units: ng/L			Analysis Date: 11/5/2021 03:38 PM		
Client ID:		Run ID: LCMS1_211105A				SeqNo: 7914324			Prep Date: 11/4/2021		DF: 1
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Perfluorobutanoic Acid (PFBA)	U	2.6	5.0								
Perfluoroheptanoic Acid (PFH ₇)	U	0.44	5.0								
Perfluorohexanoic Acid (PFH ₆)	U	1.2	5.0								
Perfluoropentanoic Acid (PFPeA)	U	1.3	5.0								
Surr: 13C2-FtS 6:2	206.7	0	0	152	0	136	50-150	0			
Surr: 13C2-FtS 8:2	205.8	0	0	153.3	0	134	50-150	0			
Surr: 13C2-PFDA	175.9	0	0	160	0	110	50-150	0			
Surr: 13C2-PFDoA	182.5	0	0	160	0	114	50-150	0			
Surr: 13C2-PFHxA	210	0	0	160	0	131	50-150	0			
Surr: 13C2-PFTEA	156.5	0	0	160	0	97.8	50-150	0			
Surr: 13C2-PFUnA	156.4	0	0	160	0	97.8	50-150	0			
Surr: 13C3-HFPO-DA	253.7	0	0	160	0	159	50-150	0			S
Surr: 13C3-PFBS	153.3	0	0	148.8	0	103	50-150	0			
Surr: 13C4-PFBA	207.1	0	0	160	0	129	50-150	0			
Surr: 13C4-PFHpA	163.7	0	0	160	0	102	50-150	0			
Surr: 13C4-PFOA	196.5	0	0	160	0	123	50-150	0			
Surr: 13C4-PFOS	184	0	0	152.8	0	120	50-150	0			
Surr: 13C5-PFNA	178	0	0	160	0	111	50-150	0			
Surr: 13C5-PFPeA	190.2	0	0	160	0	119	50-150	0			
Surr: 13C8-FOSA	179.9	0	0	160	0	112	50-150	0			
Surr: 18O2-PFHxS	143.6	0	0	151.2	0	95	50-150	0			
Surr: d5-N-EtFOSA	169	0	0	160	0	106	50-150	0			
Surr: d5-N-EtFOSAA	182.8	0	0	160	0	114	50-150	0			
Surr: d9-N-EtFOSE	170.7	0	0	160	0	107	50-150	0			
Surr: d3-N-MeFOSA	154.4	0	0	160	0	96.5	50-150	0			
Surr: d3-N-MeFOSAA	173.6	0	0	160	0	109	50-150	0			
Surr: d7-N-MeFOSE	213.8	0	0	160	0	134	50-150	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental
 Work Order: 21102596
 Project: R2110978

QC BATCH REPORT

Batch ID: **186655** Instrument ID **LCMS1** Method: **E537 Mod**

LCS		Sample ID: LCS-186655-186655				Units: ng/L		Analysis Date: 11/5/2021 12:36 PM			
Client ID:		Run ID: LCMS1_211105A				SeqNo: 7914261		Prep Date: 11/4/2021		DF: 1	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Perfluorobutanoic Acid (PFBA)	40.34	2.6	5.0	32	0	126	73-129	0			
Perfluoroheptanoic Acid (PFHpA)	34.35	0.44	5.0	32	0	107	72-130	0			
Perfluorohexanoic Acid (PFHx)	41.25	1.2	5.0	32	0	129	72-129	0			
Perfluoropentanoic Acid (PFPeA)	32.7	1.3	5.0	32	0	102	72-129	0			
Surr: 13C2-FtS 6:2	248.1	0	0	152	0	163	50-150	0			S
Surr: 13C2-FtS 8:2	223.6	0	0	153.3	0	146	50-150	0			
Surr: 13C2-PFDA	159.5	0	0	160	0	99.7	50-150	0			
Surr: 13C2-PFDoA	135.2	0	0	160	0	84.5	50-150	0			
Surr: 13C2-PFHxA	203.6	0	0	160	0	127	50-150	0			
Surr: 13C2-PFTEA	191.3	0	0	160	0	120	50-150	0			
Surr: 13C2-PFUnA	172.6	0	0	160	0	108	50-150	0			
Surr: 13C3-HFPO-DA	310.4	0	0	160	0	194	50-150	0			S
Surr: 13C3-PFBS	202.1	0	0	148.8	0	136	50-150	0			
Surr: 13C4-PFBA	220.2	0	0	160	0	138	50-150	0			
Surr: 13C4-PFHpA	202.3	0	0	160	0	126	50-150	0			
Surr: 13C4-PFOA	174.4	0	0	160	0	109	50-150	0			
Surr: 13C4-PFOS	205.9	0	0	152.8	0	135	50-150	0			
Surr: 13C5-PFNA	168.1	0	0	160	0	105	50-150	0			
Surr: 13C5-PFPeA	245	0	0	160	0	153	50-150	0			S
Surr: 13C8-FOSA	203.5	0	0	160	0	127	50-150	0			
Surr: 18O2-PFHxS	143.9	0	0	151.2	0	95.2	50-150	0			
Surr: d5-N-EtFOSA	200.2	0	0	160	0	125	50-150	0			
Surr: d5-N-EtFOSAA	236.5	0	0	160	0	148	50-150	0			
Surr: d9-N-EtFOSE	197.3	0	0	160	0	123	50-150	0			
Surr: d3-N-MeFOSA	166	0	0	160	0	104	50-150	0			
Surr: d3-N-MeFOSAA	212.5	0	0	160	0	133	50-150	0			
Surr: d7-N-MeFOSE	263.4	0	0	160	0	165	50-150	0			S

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental
 Work Order: 21102596
 Project: R2110978

QC BATCH REPORT

Batch ID: **186655** Instrument ID **LCMS1** Method: **E537 Mod**

LCSD					Sample ID: LCSD-186655-186655			Units: ng/L		Analysis Date: 11/5/2021 12:44 PM		
Client ID:					Run ID: LCMS1_211105A			SeqNo: 7914264		Prep Date: 11/4/2021		DF: 1
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Perfluorobutanoic Acid (PFBA)	38.71	2.6	5.0	32	0	121	73-129	40.34	4.13	30		
Perfluoroheptanoic Acid (PFHx)	32.99	0.44	5.0	32	0	103	72-130	34.35	4.03	30		
Perfluorohexanoic Acid (PFHx)	41.48	1.2	5.0	32	0	130	72-129	41.25	0.534	30	S	
Perfluoropentanoic Acid (PFPeA)	31.44	1.3	5.0	32	0	98.2	72-129	32.7	3.94	30		
Surr: 13C2-FtS 6:2	226.9	0	0	152	0	149	50-150	248.1	8.91	30		
Surr: 13C2-FtS 8:2	193.3	0	0	153.3	0	126	50-150	223.6	14.5	30		
Surr: 13C2-PFDA	134.7	0	0	160	0	84.2	50-150	159.5	16.9	30		
Surr: 13C2-PFDoA	129.5	0	0	160	0	81	50-150	135.2	4.27	30		
Surr: 13C2-PFHxA	186	0	0	160	0	116	50-150	203.6	9.04	30		
Surr: 13C2-PFTEA	154	0	0	160	0	96.2	50-150	191.3	21.6	30		
Surr: 13C2-PFUnA	173	0	0	160	0	108	50-150	172.6	0.236	30		
Surr: 13C3-HFPO-DA	293.1	0	0	160	0	183	50-150	310.4	5.72	30	S	
Surr: 13C3-PFBS	185.4	0	0	148.8	0	125	50-150	202.1	8.58	30		
Surr: 13C4-PFBA	193.8	0	0	160	0	121	50-150	220.2	12.7	30		
Surr: 13C4-PFHpA	196.4	0	0	160	0	123	50-150	202.3	2.95	30		
Surr: 13C4-PFOA	162.5	0	0	160	0	102	50-150	174.4	7.08	30		
Surr: 13C4-PFOS	180	0	0	152.8	0	118	50-150	205.9	13.4	30		
Surr: 13C5-PFNA	147.7	0	0	160	0	92.3	50-150	168.1	12.9	30		
Surr: 13C5-PFPeA	221.7	0	0	160	0	139	50-150	245	9.98	30		
Surr: 13C8-FOSA	209.9	0	0	160	0	131	50-150	203.5	3.09	30		
Surr: 18O2-PFHxS	136.3	0	0	151.2	0	90.2	50-150	143.9	5.42	30		
Surr: d5-N-EtFOSA	196.8	0	0	160	0	123	50-150	200.2	1.69	30		
Surr: d5-N-EtFOSAA	213.1	0	0	160	0	133	50-150	236.5	10.4	30		
Surr: d9-N-EtFOSE	195.4	0	0	160	0	122	50-150	197.3	0.968	30		
Surr: d3-N-MeFOSA	156.9	0	0	160	0	98	50-150	166	5.67	30		
Surr: d3-N-MeFOSAA	194	0	0	160	0	121	50-150	212.5	9.12	30		
Surr: d7-N-MeFOSE	249.2	0	0	160	0	156	50-150	263.4	5.56	30	S	

The following samples were analyzed in this batch:

21102596-01A	21102596-02A	21102596-03A
21102596-04A	21102596-05A	21102596-06A
21102596-07A	21102596-09A	21102596-10A
21102596-11A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental Chain of Custody

1565 Jefferson Rd, Building 300 • Rochester, NY 14623 • 585-288-5380 • FAX 585-288-8475

ALS Contact: Janice Jaeger

Project Number: R2110978
Project Manager: Janice Jaeger
QAP: LAB QAP

21102596

Lab Code	Sample ID	# of Cont.	Matrix	Sample		Lab ID	PFAS PFC/537M
				Date	Time		
R2110978-001	CW4A-1021	4	Water	10/18/21	0955	Holland ALS	X
R2110978-002	CW4B-1021	2	Water	10/18/21	1200	Holland ALS	X
R2110978-003	CW3B-1021	↓	Water	10/18/21	1355	Holland ALS	X
R2110978-004	CW3A-1021		Water	10/18/21	1535	Holland ALS	X
R2110978-005	MW17D-1021		Water	10/19/21	1005	Holland ALS	X
R2110978-006	MW17S-1021		Water	10/19/21	1155	Holland ALS	X
R2110978-007	MW5D-1021	↓	Water	10/19/21	1355	Holland ALS	X
R2110978-008	FB-1021		Water	10/19/21	1510	Holland ALS	X
R2110978-009	MW5S-1021	2	Water	10/19/21	1510	Holland ALS	X
R2110978-010	DUP1-1021	↓	Water	10/19/21	1515	Holland ALS	X
R2110978-011	EB1-1021		Water	10/20/21	0730	Holland ALS	X

537M
WLCG
742

see alternate QAP

↓

Special Instructions/Comments <i>excel add</i> <i>nysdec equls v4 add</i> NPDES H - Test is On Hold P - Test is Authorized for Prep Only	Turnaround Requirements ☐ RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 ☒ STANDARD Requested FAX Date: _____ Requested Report Date: <u>11/05/21</u>	Report Requirements ☐ I. Results Only ☒ II. Results + QC Summaries ☐ III. Results + QC and Calibration Summaries ☒ IV. Data Validation Report with Raw Data PQL/MDL/J <u>Y</u> EDD <u>Y</u>	Invoice Information
			PO# 58R2110978 Bill to

Relinquished By: *[Signature]* 10/27/21 135D

Received By: *[Signature]* 10/29/21 1000

Airbill Number: 32°C 123

ALS Environmental Chain of Custody

1565 Jefferson Rd, Building 300 • Rochester, NY 14623 • 585-288-5380 • FAX 585-288-8475

ALS Contact: Janice Jaeger

Project Number: R2110978
Project Manager: Janice Jaeger
QAP: LAB QAP

Folder Comments:

MRL U

Run QC on sample R2110978-001 for PFC/537M/PFAS

Special Instructions/Comments	Turnaround Requirements	Report Requirements	Invoice Information
NPDES H - Test is On Hold P - Test is Authorized for Prep Only	____ RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 ____ STANDARD Requested FAX Date: _____ Requested Report Date: <u>11/05/21</u>	____ I. Results Only ____ II. Results + QC Summaries ____ III. Results + QC and Calibration Summaries ____ IV. Data Validation Report with Raw Data PQL/MDL/J <u>Y</u> EDD <u>Y</u>	PO# 58R2110978
			Bill to

Relinquished By: _____

Received By: _____

Airbill Number: _____

R2110978

X **Ship To: Holland ALS**
ALS Laboratory Group
3352 128th Avenue
Holland, MI 49424

[Handwritten signature]

Date _____

10/25/21

SMO

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Date _____

.....

Instructions:

Ice _____

Dry Ice _____

No Ice _____

Bill to Client Account

Shipping:

Overnight _____

2nd Day _____

Ground _____

Comments:

Sample Receipt Checklist

Client Name: **ALS - ROCHESTER**

Date/Time Received: **29-Oct-21 10:00**

Work Order: **21102596**

Received by: **KRW**

Checklist completed by Keith Wurenga
eSignature

29-Oct-21
Date

Reviewed by: Jodi Blum
eSignature

01-Nov-21
Date

Matrices: **Water**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Sample(s) received on ice?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>3.2/4.2 C</u>		<u>IR3</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>10/29/2021 3:34:29 PM</u>		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☒	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☒	N/A ☐
pH adjusted by:	<u></u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

Appendix G

Data Validation Report

DATA VALIDATION REPORT

**WAL – Annual Sampling
Wellsville, NY 14895**

SDG: R2110978
12 Waters, EB, FB, and TB

Prepared for:

**On-Site Geological Services, D.P.C.
72 Railroad Avenue
Wellsville, NY 14895
Attention: Jon Brandes**

December 2021



Environmental Data Usability 10028 Deer Park Dr. Dansville, NY 14437 585-991-9156

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REVIEWER'S NARRATIVE

On-Site SDG R2110978 WAL – Annual Sampling

The data associated with this Sample Delivery Group (SDG) R2110978, analyzed by ALS Environmental, Rochester, NY have been reviewed in accordance with assessment criteria provided by the New York State Department of Environmental Conservation following the review procedures provided in the USEPA Functional Guidelines for evaluating organic and inorganic data.

All analytical results reported by the laboratory are considered valid and acceptable except results that have been qualified as rejected, “R”. Results qualified as estimated “J”, or as non-detects, “U”, are considered usable for the purpose of evaluating water and/or soil quality. However, these qualifiers indicate that the accuracy and/or precision of the analytical result is questionable. A summary of all data that have been qualified and the reasons for qualification are provided in the following data usability summary report (DUSR).

Two facts should be noted by all data users. First, the “R” qualifier means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Values qualified with an “R” should not appear on the final data tables because they cannot be relied upon, even as the last resort. Second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error.

Reviewer's Signature: Michael K. Perry Date: 12/11/2021
Michael K. Perry
Chemist

1.0 SUMMARY

SITE:	WAL – Annual Sampling Wellsville, NY 14895
SAMPLING DATE:	October 18 - 20, 2021
SAMPLE TYPE:	12 water samples, equipment blank, field blank, and trip blank
LABORATORY:	ALS Environmental Rochester, NY
SDG No.:	R2110978

2.0 INTRODUCTION

This data validation report was prepared in accordance with Part 363-4.6(g)(5)(i) of the New York State Department of Environmental Conservation (NYSDEC) Solid Waste Management Regulations. In general, validation of the laboratory analytical data consists of a review of field records and analytical data to determine whether the data are accurate and defensible. All AQA/AQC are reviewed along with any corrective actions taken during the sampling event. In addition, the validated data are clearly marked with qualifiers that identify any data that are not representative of environmental conditions at the sampling site or that were not generated in accordance with the Site Analytical Plan (SAP).

Specifically, validation of the analytical data includes the review and evaluation of the following elements of the data package:

- Completeness of the data package as defined under the requirements of the NYSDEC Analytical Services Protocols (ASP) Category B or the United States Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) deliverables,
- Compliance with established analyte holding times,
- Adherence to quality control (QC) limits and specifications for blanks, instrument tuning and calibration, surrogate recoveries, spike recoveries, laboratory duplicate analyses, and other QC criteria,

- Adherence to established analytical protocols,
- Conformance of data summary sheets with raw analytical data, and
- Use of correct data qualifiers.

Data deficiencies, analytical protocol deviations, and quality control problems identified using the review criteria above and their effect on the analytical results are discussed in this report.

3.0 SAMPLE AND ANALYSIS SUMMARY

The data package consists of analytical results for 12 water samples, EB, FD, and TB collected on October 18 - 20, 2021. These samples were analyzed for Volatile Organic Compounds (VOCs), 1,4-Dioxane, Metals, Wet Chemistry, and PFASs.

All laboratory analyses were submitted to ALS Environmental, Rochester, NY and analyzed as SDG R2110978 except the PFASs were subcontracted to ALS-Midland, MI. The analytical results were provided in NYSDEC ASP Category B format, which includes all raw analytical data and laboratory QC data.

4.0 GUIDANCE DOCUMENTS AND DATA REVIEW CRITERIA

The guidance documents appropriate for reviewing laboratory quality control (QC) data and assigning data qualifiers (flags) to analytical results were selected from those listed in Table 4-1. The QC limits established in the documents applicable to this data review were used to assess the quality of the analytical results. In some cases, however, QC limits established internally by the laboratory were taken into account to determine data quality.

The QC criteria considered for assessing the usability of the reported analytical results provided for each analyte type (i.e. VOCs, SVOCs, metals, etc.) are listed in Table 4-2. These criteria may vary with the analytical method utilized by the laboratory. These criteria comply with the guidance recommended in Section 2.0 above.

TABLE 4-1**Guidance Used For Validating Laboratory Analytical Data**

Analyte Group	Guidance	Date
Metals (ICP-AES)	USEPA SOP HW-3a, Rev. 1	September 2016
Metals (Hg & CN)	USEPA SOP HW-3c, Rev. 1	September 2016
Volatile Organic Compounds (by Methods 8260B & 8260C)	USEPA SOP HW-24, Rev. 4	September 2014
Semi-Volatile Organic Compounds (by Method 8270D)	USEPA SOP HW-22 Rev. 5	December 2010
Pesticides (by Method 8181B)	USEPA SOP HW-44, Rev. 1.1	December 2010
Chlorinated Herbicides (by Method 8151A)	USEPA SOP HW-17, Rev. 3.1	December 2010
Polychlorinated Biphenyls (PCBs)	USEPA SOP HW-37A, Rev. 0	June 2015
Volatile Organic Compounds (Air) (by Method TO-15)	USEPA SOP HW-31, Rev. 6	September 2016
Per- and PolyFluoroAlkyl Substances (PFAS)	* NYSDEC	January 2021
General Chemistry Parameters	per NYSDEC ASP	July 2005

* Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs, Appendix I

TABLE 4-2

**QUALITY CONTROL CRITERIA USED FOR VALIDATING
LABORATORY ANALYTICAL DATA**

VOCs	SVOCs	Pesticides/PCBs	Metals	Gen Chemistry	PFAS
Completeness of Pkg Sample Preservation Holding Time System Monitoring Compounds Lab Control Sample Matrix Spikes Blanks Instrument Tuning Internal Standards Initial Calibration Continuing Calibration Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Time Surrogate Recoveries Lab Control Sample Matrix Spikes Blanks Instrument Tuning Internal Standards Initial Calibration Continuing Calibration Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Time Surrogate Recoveries Matrix Spikes Blanks Instrument Calibration & Verification Comparison of duplicate GC column results Analyte ID Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Time Initial/Continuing Calibration CRDL Standards Blanks Interference Check Sample Spike Recoveries Lab Duplicate Lab Control Sample ICP Serial Dilutions Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Times Calibration Lab Control Samples Blanks Spike Recoveries Lab Duplicates	Completeness of Pkg Sample Preservation Holding Time Instr Performance Check Initial Calibration Continuing Calibration Blanks Surrogates Lab Fortified Blank Matrix Spikes Internal Standards

Method TO-15 (Air)

Completeness of Pkg
Sample Preservation
Holding Time
Canister Certification
Instrument Tuning
Initial Calibration and
Instrument Performance
Daily Calibration
Blanks
Lab Control Sample
Field Duplicate

5.0 DATA VALIDATION QUALIFIERS

The letter qualifiers (flags) used to define data usability are described briefly below. These letters are assigned by the data validator to analytical results having questionable accuracy and/or precision as determined by reviewing the laboratory QC data associated with the analytical results.

The laboratory may also use various letters and symbols to flag analytical results generated when QC limits were exceeded. The meanings of these flags may differ from those used by the independent data validator. Those used by the laboratory are provided with the analytical results.

NOTE: The assignment of data qualifiers by the data reviewer (validator) to laboratory analytical results should not necessarily be interpreted by the data user as a measure of laboratory ability or proficiency. Rather, the qualifiers are intended to provide a measure of data accuracy and precision to the data user, which, for example, may provide a level of confidence in determining whether or not standards or cleanup objectives have been met.

- U** The analyte was analyzed for but was not detected at or above the sample quantitation limit.
- J** The analyte was positively identified; the associated numerical value is the *approximate* concentration of the analyte in the sample. (The magnitude of any $\pm$ value associated with the result is not determined by data validation).
- J+** The result is an estimated quantity and may be biased high.
- J-** The result is an estimated quantity and may be biased low.
- UJ** The analyte was analyzed for but not detected. The reported quantitation limit is approximate and may inaccurate or imprecise.
- R** The sample result is rejected (i.e., is unusable) due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- NJ** The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.

The validated analytical results are attached to this report. Validation qualifiers (flags) are indicated in red print. Data sheets having qualified data are signed and dated by the data reviewer.

6.0 RESULTS OF THE DATA REVIEW

The results of the data review are summarized in Tables 6-1 through 6-5. The tables list the samples where QC criteria were found to exceed acceptable limits and the actions taken to qualify the associated analytical results.

7.0 TOTAL USABLE DATA

For SDG R2110987, fifteen samples were analyzed and results were reported for 907 analyses. Even though some results were flagged with a “J” as estimated, all results (100 %) are considered usable. See the summary table for the analyses that have been qualified and the associated QC reasons.

Table 6-1 8260 VOCs

SAMPLES AFFECTED	ANALYTES	ACTION	QC VIOLATION	COMMENTS
CW4A-1021	1,1-Dichloroethene	J detects	MS > QC limit	Detected data are estimated
MW5D-1021	Bromomethane	J detects UJ non-detects	CCV > QC limit	Data are estimated

Table 6-2 8270D-SIM 1,4-Dioxane

SAMPLES AFFECTED	ANALYTES	ACTION	QC VIOLATION	COMMENTS
none			none	

Table 6-3 Metals

SAMPLES AFFECTED	ANALYTES	ACTION	QC VIOLATION	COMMENTS
none			none	

Table 6-4 Wet Chemistry

SAMPLES AFFECTED	ANALYTES	ACTION	QC VIOLATION	COMMENTS
none			none	

Table 6-5 PFASs

SAMPLES AFFECTED	ANALYTES	ACTION	QC VIOLATION	COMMENTS
CW4A-1021 CW3A-1021 DUP1-1021	6:2 FTS 8:2 FTS	J detects	Surr rec > QC limit	No data affected
CW4A-1021	PFBA PFHxA PFNA PFOA PFPeA	J detects	MS > QC limit	Data are estimated
All samples	PFHpA PFHxS PFOA	CRQL-U	Detected in method blank	Data changed to non-detect
All samples	PFBA PFHxA PFNA PFPeA	CRQL-U	Detected in field blank	Data changed to non-detect
All samples	PFHxA	CRQL-U	Detected in equipment blank	Data changed to non-detect

ACRONYMS

BSP	Blank Spike
CCAL	Continuing Calibration
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
%D	Percent Difference
ICAL	Initial Calibration
ICB	Initial Calibration Blank
IS	Internal Standard
LCS	Laboratory Control Sample
MS/MSD	Matrix Spike/Matrix Spike Duplicate
QA	Quality Assurance
QC	Quality Control
%R	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
%RSD	Percent Relative Standard Deviation
TAL	Target Analyte List (metals)
TCL	Target Compound List (organics)

Appendix A

Validated Analytical Results



November 30, 2021

Service Request No:R2110978

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 20, 2021
For your reference, these analyses have been assigned our service request number **R2110978**.

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

Janice Jaeger
Project Manager

ADDRESS

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

PHONE +1 585 288 5380 | **FAX** +1 585 288 8475

ALS Group USA, Corp.
dba ALS Environmental

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

Service Request: R2110978
Date Received: 10/20/2021

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:

Fourteen water samples were received for analysis at ALS Environmental on 10/20/2021. 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.

General Chemistry:

No significant anomalies were noted with this analysis.

Subcontracted Analytical Parameters:

One or more samples were subcontracted to another laboratory for testing. The certified analytical report from the subcontractor has been included in its entirety at the end of this report and includes the name and address of the subcontracted laboratory.

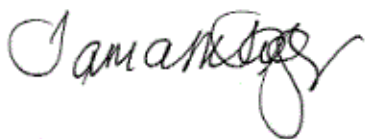
Volatiles by GC/MS:

Method 8260C, 10/26/2021: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) 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.

Method 8260C, 10/25/2021: 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, 10/27/2021: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) 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.

Method 8260C, 10/27/2021: 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.



Approved by _____

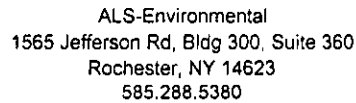
Date 11/30/2021

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

Service Request:R2110978

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R2110978-001	CW4A-1021	10/18/2021	0955
R2110978-002	CW4B-1021	10/18/2021	1200
R2110978-003	CW3B-1021	10/18/2021	1355
R2110978-004	CW3A-1021	10/18/2021	1535
R2110978-005	MW17D-1021	10/19/2021	1005
R2110978-006	MW17S-1021	10/19/2021	1155
R2110978-007	MW5D-1021	10/19/2021	1355
R2110978-009	MW5S-1021	10/19/2021	1510
R2110978-010	DUP1-1021	10/19/2021	1515
R2110978-011	EB1-1021	10/20/2021	0730
R2110978-012	MH33-1021	10/20/2021	0840
R2110978-013	MH32-1021	10/20/2021	0910
R2110978-014	Trip Blank	10/20/2021	0910



Project	
Manager	Jon Brandes

Project:	WAL - Annual Sampling

Email: jonb@on-sitehs.com

Page 1 of 1

On-Site

Special Detection
Limit/Reporting[illegible]
$$-ms/msD$$

REMARKS

Temperature received: Ice ☒ No ice ☐

Received by (Sign & Print Name)
Pamela Palmer

Lab Work No.

Received by	

Received by	

Received by laboratory

Date	10/20/21	Time	1153

5

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





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: Water

Service Request: R2110978
Date Collected: 10/18/21 09:55
Date Received: 10/20/21 11:53

Sample Name: CW4A-1021
Lab Code: R2110978-001

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	10 U	10	1	10/26/21 15:18	
Benzene	5.0 U	5.0	1	10/26/21 15:18	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 15:18	
Bromoform	5.0 U	5.0	1	10/26/21 15:18	
Bromomethane	5.0 U	5.0	1	10/26/21 15:18	
2-Butanone (MEK)	10 U	10	1	10/26/21 15:18	
Carbon Disulfide	10 U	10	1	10/26/21 15:18	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 15:18	
Chlorobenzene	5.0 U	5.0	1	10/26/21 15:18	
Chloroethane	5.0 U	5.0	1	10/26/21 15:18	
Chloroform	5.0 U	5.0	1	10/26/21 15:18	
Chloromethane	5.0 U	5.0	1	10/26/21 15:18	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 15:18	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 15:18	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 15:18	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 15:18	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 15:18	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 15:18	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 15:18	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 15:18	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 15:18	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 15:18	
Ethylbenzene	5.0 U	5.0	1	10/26/21 15:18	
2-Hexanone	10 U	10	1	10/26/21 15:18	
Methylene Chloride	5.0 U	5.0	1	10/26/21 15:18	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 15:18	
Styrene	5.0 U	5.0	1	10/26/21 15:18	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 15:18	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 15:18	
Toluene	5.0 U	5.0	1	10/26/21 15:18	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 15:18	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 15:18	
Trichloroethene	5.0 U	5.0	1	10/26/21 15:18	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 15:18	
o-Xylene	5.0 U	5.0	1	10/26/21 15:18	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 15:18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 09:55
Date Received: 10/20/21 11:53

Sample Name: CW4A-1021
Lab Code: R2110978-001

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	10/26/21 15:18	
Toluene-d8	98	87 - 121	10/26/21 15:18	
Dibromofluoromethane	97	80 - 116	10/26/21 15:18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 12:00
Date Received: 10/20/21 11:53

Sample Name: CW4B-1021
Lab Code: R2110978-002

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	10 U	10	1	10/26/21 15:41	
Benzene	5.0 U	5.0	1	10/26/21 15:41	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 15:41	
Bromoform	5.0 U	5.0	1	10/26/21 15:41	
Bromomethane	5.0 U	5.0	1	10/26/21 15:41	
2-Butanone (MEK)	10 U	10	1	10/26/21 15:41	
Carbon Disulfide	10 U	10	1	10/26/21 15:41	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 15:41	
Chlorobenzene	5.0 U	5.0	1	10/26/21 15:41	
Chloroethane	5.0 U	5.0	1	10/26/21 15:41	
Chloroform	5.0 U	5.0	1	10/26/21 15:41	
Chloromethane	5.0 U	5.0	1	10/26/21 15:41	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 15:41	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 15:41	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 15:41	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 15:41	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 15:41	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 15:41	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 15:41	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 15:41	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 15:41	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 15:41	
Ethylbenzene	5.0 U	5.0	1	10/26/21 15:41	
2-Hexanone	10 U	10	1	10/26/21 15:41	
Methylene Chloride	5.0 U	5.0	1	10/26/21 15:41	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 15:41	
Styrene	5.0 U	5.0	1	10/26/21 15:41	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 15:41	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 15:41	
Toluene	5.0 U	5.0	1	10/26/21 15:41	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 15:41	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 15:41	
Trichloroethene	5.0 U	5.0	1	10/26/21 15:41	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 15:41	
o-Xylene	5.0 U	5.0	1	10/26/21 15:41	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 15:41	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 12:00
Date Received: 10/20/21 11:53

Sample Name: CW4B-1021
Lab Code: R2110978-002

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	10/26/21 15:41	
Toluene-d8	96	87 - 121	10/26/21 15:41	
Dibromofluoromethane	98	80 - 116	10/26/21 15:41	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 13:55
Date Received: 10/20/21 11:53

Sample Name: CW3B-1021
Lab Code: R2110978-003

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	50 U	50	5	10/26/21 16:03	
Benzene	25 U	25	5	10/26/21 16:03	
Bromodichloromethane	25 U	25	5	10/26/21 16:03	
Bromoform	25 U	25	5	10/26/21 16:03	
Bromomethane	25 U	25	5	10/26/21 16:03	
2-Butanone (MEK)	50 U	50	5	10/26/21 16:03	
Carbon Disulfide	50 U	50	5	10/26/21 16:03	
Carbon Tetrachloride	25 U	25	5	10/26/21 16:03	
Chlorobenzene	25 U	25	5	10/26/21 16:03	
Chloroethane	25 U	25	5	10/26/21 16:03	
Chloroform	25 U	25	5	10/26/21 16:03	
Chloromethane	25 U	25	5	10/26/21 16:03	
Dibromochloromethane	25 U	25	5	10/26/21 16:03	
1,2-Dibromoethane	25 U	25	5	10/26/21 16:03	
1,1-Dichloroethane	25 U	25	5	10/26/21 16:03	
1,2-Dichloroethane	25 U	25	5	10/26/21 16:03	
1,1-Dichloroethene	25 U	25	5	10/26/21 16:03	
cis-1,2-Dichloroethene	100	25	5	10/26/21 16:03	
trans-1,2-Dichloroethene	25 U	25	5	10/26/21 16:03	
1,2-Dichloropropane	25 U	25	5	10/26/21 16:03	
cis-1,3-Dichloropropene	25 U	25	5	10/26/21 16:03	
trans-1,3-Dichloropropene	25 U	25	5	10/26/21 16:03	
Ethylbenzene	25 U	25	5	10/26/21 16:03	
2-Hexanone	50 U	50	5	10/26/21 16:03	
Methylene Chloride	25 U	25	5	10/26/21 16:03	
4-Methyl-2-pentanone (MIBK)	50 U	50	5	10/26/21 16:03	
Styrene	25 U	25	5	10/26/21 16:03	
1,1,2,2-Tetrachloroethane	25 U	25	5	10/26/21 16:03	
Tetrachloroethene	25 U	25	5	10/26/21 16:03	
Toluene	25 U	25	5	10/26/21 16:03	
1,1,1-Trichloroethane	25 U	25	5	10/26/21 16:03	
1,1,2-Trichloroethane	25 U	25	5	10/26/21 16:03	
Trichloroethene	430	25	5	10/26/21 16:03	
Vinyl Chloride	25 U	25	5	10/26/21 16:03	
o-Xylene	25 U	25	5	10/26/21 16:03	
m,p-Xylenes	25 U	25	5	10/26/21 16:03	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 13:55
Date Received: 10/20/21 11:53

Sample Name: CW3B-1021
Lab Code: R2110978-003

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	85	85 - 122	10/26/21 16:03	
Toluene-d8	95	87 - 121	10/26/21 16:03	
Dibromofluoromethane	96	80 - 116	10/26/21 16:03	

ALS Group USA, Corp.
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Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 15:35
Date Received: 10/20/21 11:53

Sample Name: CW3A-1021
Lab Code: R2110978-004

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	10 U	10	1	10/26/21 16:25	
Benzene	5.0 U	5.0	1	10/26/21 16:25	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 16:25	
Bromoform	5.0 U	5.0	1	10/26/21 16:25	
Bromomethane	5.0 U	5.0	1	10/26/21 16:25	
2-Butanone (MEK)	10 U	10	1	10/26/21 16:25	
Carbon Disulfide	10 U	10	1	10/26/21 16:25	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 16:25	
Chlorobenzene	5.0 U	5.0	1	10/26/21 16:25	
Chloroethane	5.0 U	5.0	1	10/26/21 16:25	
Chloroform	5.0 U	5.0	1	10/26/21 16:25	
Chloromethane	5.0 U	5.0	1	10/26/21 16:25	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 16:25	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 16:25	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 16:25	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 16:25	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 16:25	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 16:25	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 16:25	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 16:25	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 16:25	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 16:25	
Ethylbenzene	5.0 U	5.0	1	10/26/21 16:25	
2-Hexanone	10 U	10	1	10/26/21 16:25	
Methylene Chloride	5.0 U	5.0	1	10/26/21 16:25	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 16:25	
Styrene	5.0 U	5.0	1	10/26/21 16:25	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 16:25	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 16:25	
Toluene	5.0 U	5.0	1	10/26/21 16:25	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 16:25	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 16:25	
Trichloroethene	17	5.0	1	10/26/21 16:25	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 16:25	
o-Xylene	5.0 U	5.0	1	10/26/21 16:25	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 16:25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 15:35
Date Received: 10/20/21 11:53

Sample Name: CW3A-1021
Lab Code: R2110978-004

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	10/26/21 16:25	
Toluene-d8	95	87 - 121	10/26/21 16:25	
Dibromofluoromethane	97	80 - 116	10/26/21 16:25	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 10:05
Date Received: 10/20/21 11:53

Sample Name: MW17D-1021
Lab Code: R2110978-005

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	10 U	10	1	10/26/21 16:47	
Benzene	5.0 U	5.0	1	10/26/21 16:47	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 16:47	
Bromoform	5.0 U	5.0	1	10/26/21 16:47	
Bromomethane	5.0 U	5.0	1	10/26/21 16:47	
2-Butanone (MEK)	10 U	10	1	10/26/21 16:47	
Carbon Disulfide	10 U	10	1	10/26/21 16:47	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 16:47	
Chlorobenzene	5.0 U	5.0	1	10/26/21 16:47	
Chloroethane	5.0 U	5.0	1	10/26/21 16:47	
Chloroform	5.0 U	5.0	1	10/26/21 16:47	
Chloromethane	5.0 U	5.0	1	10/26/21 16:47	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 16:47	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 16:47	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 16:47	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 16:47	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 16:47	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 16:47	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 16:47	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 16:47	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 16:47	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 16:47	
Ethylbenzene	5.0 U	5.0	1	10/26/21 16:47	
2-Hexanone	10 U	10	1	10/26/21 16:47	
Methylene Chloride	5.0 U	5.0	1	10/26/21 16:47	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 16:47	
Styrene	5.0 U	5.0	1	10/26/21 16:47	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 16:47	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 16:47	
Toluene	5.0 U	5.0	1	10/26/21 16:47	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 16:47	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 16:47	
Trichloroethene	5.0 U	5.0	1	10/26/21 16:47	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 16:47	
o-Xylene	5.0 U	5.0	1	10/26/21 16:47	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 16:47	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 10:05
Date Received: 10/20/21 11:53

Sample Name: MW17D-1021
Lab Code: R2110978-005

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	10/26/21 16:47	
Toluene-d8	96	87 - 121	10/26/21 16:47	
Dibromofluoromethane	95	80 - 116	10/26/21 16:47	

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dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 11:55
Date Received: 10/20/21 11:53

Sample Name: MW17S-1021
Lab Code: R2110978-006

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	10 U	10	1	10/26/21 17:10	
Benzene	5.0 U	5.0	1	10/26/21 17:10	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 17:10	
Bromoform	5.0 U	5.0	1	10/26/21 17:10	
Bromomethane	5.0 U	5.0	1	10/26/21 17:10	
2-Butanone (MEK)	10 U	10	1	10/26/21 17:10	
Carbon Disulfide	10 U	10	1	10/26/21 17:10	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 17:10	
Chlorobenzene	5.0 U	5.0	1	10/26/21 17:10	
Chloroethane	5.0 U	5.0	1	10/26/21 17:10	
Chloroform	5.0 U	5.0	1	10/26/21 17:10	
Chloromethane	5.0 U	5.0	1	10/26/21 17:10	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 17:10	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 17:10	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 17:10	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 17:10	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 17:10	
cis-1,2-Dichloroethene	33	5.0	1	10/26/21 17:10	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 17:10	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 17:10	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 17:10	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 17:10	
Ethylbenzene	5.0 U	5.0	1	10/26/21 17:10	
2-Hexanone	10 U	10	1	10/26/21 17:10	
Methylene Chloride	5.0 U	5.0	1	10/26/21 17:10	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 17:10	
Styrene	5.0 U	5.0	1	10/26/21 17:10	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 17:10	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 17:10	
Toluene	5.0 U	5.0	1	10/26/21 17:10	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 17:10	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 17:10	
Trichloroethene	11	5.0	1	10/26/21 17:10	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 17:10	
o-Xylene	5.0 U	5.0	1	10/26/21 17:10	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 17:10	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 11:55
Date Received: 10/20/21 11:53

Sample Name: MW17S-1021
Lab Code: R2110978-006

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	86	85 - 122	10/26/21 17:10	
Toluene-d8	97	87 - 121	10/26/21 17:10	
Dibromofluoromethane	97	80 - 116	10/26/21 17:10	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 13:55
Date Received: 10/20/21 11:53

Sample Name: MW5D-1021
Lab Code: R2110978-007

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	10 U	10	1	10/27/21 12:31	
Benzene	5.0 U	5.0	1	10/27/21 12:31	
Bromodichloromethane	5.0 U	5.0	1	10/27/21 12:31	
Bromoform	5.0 U	5.0	1	10/27/21 12:31	
Bromomethane	5.0 U UJ	5.0	1	10/27/21 12:31	
2-Butanone (MEK)	10 U	10	1	10/27/21 12:31	
Carbon Disulfide	10 U	10	1	10/27/21 12:31	
Carbon Tetrachloride	5.0 U	5.0	1	10/27/21 12:31	
Chlorobenzene	5.0 U	5.0	1	10/27/21 12:31	
Chloroethane	5.0 U	5.0	1	10/27/21 12:31	
Chloroform	5.0 U	5.0	1	10/27/21 12:31	
Chloromethane	5.0 U	5.0	1	10/27/21 12:31	
Dibromochloromethane	5.0 U	5.0	1	10/27/21 12:31	
1,2-Dibromoethane	5.0 U	5.0	1	10/27/21 12:31	
1,1-Dichloroethane	5.0 U	5.0	1	10/27/21 12:31	
1,2-Dichloroethane	5.0 U	5.0	1	10/27/21 12:31	
1,1-Dichloroethene	5.0 U	5.0	1	10/27/21 12:31	
cis-1,2-Dichloroethene	150	5.0	1	10/27/21 12:31	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/27/21 12:31	
1,2-Dichloropropane	5.0 U	5.0	1	10/27/21 12:31	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/27/21 12:31	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/27/21 12:31	
Ethylbenzene	5.0 U	5.0	1	10/27/21 12:31	
2-Hexanone	10 U	10	1	10/27/21 12:31	
Methylene Chloride	5.0 U	5.0	1	10/27/21 12:31	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/27/21 12:31	
Styrene	5.0 U	5.0	1	10/27/21 12:31	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/27/21 12:31	
Tetrachloroethene	5.0 U	5.0	1	10/27/21 12:31	
Toluene	5.0 U	5.0	1	10/27/21 12:31	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/27/21 12:31	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/27/21 12:31	
Trichloroethene	52	5.0	1	10/27/21 12:31	
Vinyl Chloride	13	5.0	1	10/27/21 12:31	
o-Xylene	5.0 U	5.0	1	10/27/21 12:31	
m,p-Xylenes	5.0 U	5.0	1	10/27/21 12:31	

MKP 12/6/2021

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 13:55
Date Received: 10/20/21 11:53

Sample Name: MW5D-1021
Lab Code: R2110978-007

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	10/27/21 12:31	
Toluene-d8	97	87 - 121	10/27/21 12:31	
Dibromofluoromethane	101	80 - 116	10/27/21 12:31	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 15:10
Date Received: 10/20/21 11:53

Sample Name: MW5S-1021
Lab Code: R2110978-009

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	10 U	10	1	10/26/21 17:54	
Benzene	5.0 U	5.0	1	10/26/21 17:54	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 17:54	
Bromoform	5.0 U	5.0	1	10/26/21 17:54	
Bromomethane	5.0 U	5.0	1	10/26/21 17:54	
2-Butanone (MEK)	10 U	10	1	10/26/21 17:54	
Carbon Disulfide	10 U	10	1	10/26/21 17:54	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 17:54	
Chlorobenzene	5.0 U	5.0	1	10/26/21 17:54	
Chloroethane	5.0 U	5.0	1	10/26/21 17:54	
Chloroform	5.0 U	5.0	1	10/26/21 17:54	
Chloromethane	5.0 U	5.0	1	10/26/21 17:54	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 17:54	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 17:54	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 17:54	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 17:54	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 17:54	
cis-1,2-Dichloroethene	180	5.0	1	10/26/21 17:54	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 17:54	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 17:54	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 17:54	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 17:54	
Ethylbenzene	5.0 U	5.0	1	10/26/21 17:54	
2-Hexanone	10 U	10	1	10/26/21 17:54	
Methylene Chloride	5.0 U	5.0	1	10/26/21 17:54	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 17:54	
Styrene	5.0 U	5.0	1	10/26/21 17:54	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 17:54	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 17:54	
Toluene	5.0 U	5.0	1	10/26/21 17:54	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 17:54	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 17:54	
Trichloroethene	35	5.0	1	10/26/21 17:54	
Vinyl Chloride	16	5.0	1	10/26/21 17:54	
o-Xylene	5.0 U	5.0	1	10/26/21 17:54	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 17:54	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 15:10
Date Received: 10/20/21 11:53

Sample Name: MW5S-1021
Lab Code: R2110978-009

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	10/26/21 17:54	
Toluene-d8	99	87 - 121	10/26/21 17:54	
Dibromofluoromethane	100	80 - 116	10/26/21 17:54	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 15:15
Date Received: 10/20/21 11:53

Sample Name: DUP1-1021
Lab Code: R2110978-010

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	10 U	10	1	10/26/21 18:16	
Benzene	5.0 U	5.0	1	10/26/21 18:16	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 18:16	
Bromoform	5.0 U	5.0	1	10/26/21 18:16	
Bromomethane	5.0 U	5.0	1	10/26/21 18:16	
2-Butanone (MEK)	10 U	10	1	10/26/21 18:16	
Carbon Disulfide	10 U	10	1	10/26/21 18:16	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 18:16	
Chlorobenzene	5.0 U	5.0	1	10/26/21 18:16	
Chloroethane	5.0 U	5.0	1	10/26/21 18:16	
Chloroform	5.0 U	5.0	1	10/26/21 18:16	
Chloromethane	5.0 U	5.0	1	10/26/21 18:16	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 18:16	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 18:16	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 18:16	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 18:16	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 18:16	
cis-1,2-Dichloroethene	180	5.0	1	10/26/21 18:16	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 18:16	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 18:16	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 18:16	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 18:16	
Ethylbenzene	5.0 U	5.0	1	10/26/21 18:16	
2-Hexanone	10 U	10	1	10/26/21 18:16	
Methylene Chloride	5.0 U	5.0	1	10/26/21 18:16	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 18:16	
Styrene	5.0 U	5.0	1	10/26/21 18:16	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 18:16	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 18:16	
Toluene	5.0 U	5.0	1	10/26/21 18:16	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 18:16	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 18:16	
Trichloroethene	35	5.0	1	10/26/21 18:16	
Vinyl Chloride	16	5.0	1	10/26/21 18:16	
o-Xylene	5.0 U	5.0	1	10/26/21 18:16	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 18:16	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 15:15
Date Received: 10/20/21 11:53

Sample Name: DUP1-1021
Lab Code: R2110978-010

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	85	85 - 122	10/26/21 18:16	
Toluene-d8	96	87 - 121	10/26/21 18:16	
Dibromofluoromethane	96	80 - 116	10/26/21 18:16	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 07:30
Date Received: 10/20/21 11:53

Sample Name: EB1-1021
Lab Code: R2110978-011

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	10 U	10	1	10/26/21 18:39	
Benzene	5.0 U	5.0	1	10/26/21 18:39	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 18:39	
Bromoform	5.0 U	5.0	1	10/26/21 18:39	
Bromomethane	5.0 U	5.0	1	10/26/21 18:39	
2-Butanone (MEK)	10 U	10	1	10/26/21 18:39	
Carbon Disulfide	10 U	10	1	10/26/21 18:39	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 18:39	
Chlorobenzene	5.0 U	5.0	1	10/26/21 18:39	
Chloroethane	5.0 U	5.0	1	10/26/21 18:39	
Chloroform	5.0 U	5.0	1	10/26/21 18:39	
Chloromethane	5.0 U	5.0	1	10/26/21 18:39	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 18:39	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 18:39	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 18:39	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 18:39	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 18:39	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 18:39	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 18:39	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 18:39	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 18:39	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 18:39	
Ethylbenzene	5.0 U	5.0	1	10/26/21 18:39	
2-Hexanone	10 U	10	1	10/26/21 18:39	
Methylene Chloride	5.0 U	5.0	1	10/26/21 18:39	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 18:39	
Styrene	5.0 U	5.0	1	10/26/21 18:39	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 18:39	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 18:39	
Toluene	5.0 U	5.0	1	10/26/21 18:39	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 18:39	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 18:39	
Trichloroethene	5.0 U	5.0	1	10/26/21 18:39	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 18:39	
o-Xylene	5.0 U	5.0	1	10/26/21 18:39	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 18:39	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 07:30
Date Received: 10/20/21 11:53

Sample Name: EB1-1021
Lab Code: R2110978-011

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	85	85 - 122	10/26/21 18:39	
Toluene-d8	95	87 - 121	10/26/21 18:39	
Dibromofluoromethane	95	80 - 116	10/26/21 18:39	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 08:40
Date Received: 10/20/21 11:53

Sample Name: MH33-1021
Lab Code: R2110978-012

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	10 U	10	1	10/26/21 19:01	
Benzene	5.0 U	5.0	1	10/26/21 19:01	
Bromodichloromethane	5.0 U	5.0	1	10/26/21 19:01	
Bromoform	5.0 U	5.0	1	10/26/21 19:01	
Bromomethane	5.0 U	5.0	1	10/26/21 19:01	
2-Butanone (MEK)	10 U	10	1	10/26/21 19:01	
Carbon Disulfide	10 U	10	1	10/26/21 19:01	
Carbon Tetrachloride	5.0 U	5.0	1	10/26/21 19:01	
Chlorobenzene	5.0 U	5.0	1	10/26/21 19:01	
Chloroethane	5.0 U	5.0	1	10/26/21 19:01	
Chloroform	5.0 U	5.0	1	10/26/21 19:01	
Chloromethane	5.0 U	5.0	1	10/26/21 19:01	
Dibromochloromethane	5.0 U	5.0	1	10/26/21 19:01	
1,1-Dichloroethane	5.0 U	5.0	1	10/26/21 19:01	
1,2-Dibromoethane	5.0 U	5.0	1	10/26/21 19:01	
1,2-Dichloroethane	5.0 U	5.0	1	10/26/21 19:01	
1,1-Dichloroethene	5.0 U	5.0	1	10/26/21 19:01	
cis-1,2-Dichloroethene	31	5.0	1	10/26/21 19:01	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/26/21 19:01	
1,2-Dichloropropane	5.0 U	5.0	1	10/26/21 19:01	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 19:01	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/26/21 19:01	
Ethylbenzene	5.0 U	5.0	1	10/26/21 19:01	
2-Hexanone	10 U	10	1	10/26/21 19:01	
Methylene Chloride	5.0 U	5.0	1	10/26/21 19:01	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/26/21 19:01	
Styrene	5.0 U	5.0	1	10/26/21 19:01	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/26/21 19:01	
Tetrachloroethene	5.0 U	5.0	1	10/26/21 19:01	
Toluene	5.0 U	5.0	1	10/26/21 19:01	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/26/21 19:01	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/26/21 19:01	
Trichloroethene	5.0 U	5.0	1	10/26/21 19:01	
Vinyl Chloride	5.0 U	5.0	1	10/26/21 19:01	
o-Xylene	5.0 U	5.0	1	10/26/21 19:01	
m,p-Xylenes	5.0 U	5.0	1	10/26/21 19:01	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 08:40
Date Received: 10/20/21 11:53

Sample Name: MH33-1021
Lab Code: R2110978-012

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	10/26/21 19:01	
Toluene-d8	96	87 - 121	10/26/21 19:01	
Dibromofluoromethane	98	80 - 116	10/26/21 19:01	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 09:10
Date Received: 10/20/21 11:53

Sample Name: MH32-1021
Lab Code: R2110978-013

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	100 U	100	10	10/26/21 19:23	
Benzene	50 U	50	10	10/26/21 19:23	
Bromodichloromethane	50 U	50	10	10/26/21 19:23	
Bromoform	50 U	50	10	10/26/21 19:23	
Bromomethane	50 U	50	10	10/26/21 19:23	
2-Butanone (MEK)	100 U	100	10	10/26/21 19:23	
Carbon Disulfide	100 U	100	10	10/26/21 19:23	
Carbon Tetrachloride	50 U	50	10	10/26/21 19:23	
Chlorobenzene	50 U	50	10	10/26/21 19:23	
Chloroethane	50 U	50	10	10/26/21 19:23	
Chloroform	50 U	50	10	10/26/21 19:23	
Chloromethane	50 U	50	10	10/26/21 19:23	
Dibromochloromethane	50 U	50	10	10/26/21 19:23	
1,2-Dibromoethane	50 U	50	10	10/26/21 19:23	
1,1-Dichloroethane	50 U	50	10	10/26/21 19:23	
1,2-Dichloroethane	50 U	50	10	10/26/21 19:23	
1,1-Dichloroethene	50 U	50	10	10/26/21 19:23	
cis-1,2-Dichloroethene	8800 D	500	100	10/27/21 12:53	
trans-1,2-Dichloroethene	50 U	50	10	10/26/21 19:23	
1,2-Dichloropropane	50 U	50	10	10/26/21 19:23	
cis-1,3-Dichloropropene	50 U	50	10	10/26/21 19:23	
trans-1,3-Dichloropropene	50 U	50	10	10/26/21 19:23	
Ethylbenzene	72	50	10	10/26/21 19:23	
2-Hexanone	100 U	100	10	10/26/21 19:23	
Methylene Chloride	510	50	10	10/26/21 19:23	
4-Methyl-2-pentanone (MIBK)	100 U	100	10	10/26/21 19:23	
Styrene	50 U	50	10	10/26/21 19:23	
1,1,2,2-Tetrachloroethane	50 U	50	10	10/26/21 19:23	
Tetrachloroethene	50 U	50	10	10/26/21 19:23	
Toluene	150	50	10	10/26/21 19:23	
1,1,1-Trichloroethane	50 U	50	10	10/26/21 19:23	
1,1,2-Trichloroethane	50 U	50	10	10/26/21 19:23	
Trichloroethene	370	50	10	10/26/21 19:23	
Vinyl Chloride	310	50	10	10/26/21 19:23	
o-Xylene	50 U	50	10	10/26/21 19:23	
m,p-Xylenes	50 U	50	10	10/26/21 19:23	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 09:10
Date Received: 10/20/21 11:53

Sample Name: MH32-1021
Lab Code: R2110978-013

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	10/26/21 19:23	
Toluene-d8	97	87 - 121	10/26/21 19:23	
Dibromofluoromethane	99	80 - 116	10/26/21 19:23	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 09:10
Date Received: 10/20/21 11:53

Sample Name: Trip Blank
Lab Code: R2110978-014

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	10 U	10	1	10/25/21 13:29	
Benzene	5.0 U	5.0	1	10/25/21 13:29	
Bromodichloromethane	5.0 U	5.0	1	10/25/21 13:29	
Bromoform	5.0 U	5.0	1	10/25/21 13:29	
Bromomethane	5.0 U	5.0	1	10/25/21 13:29	
2-Butanone (MEK)	10 U	10	1	10/25/21 13:29	
Carbon Disulfide	10 U	10	1	10/25/21 13:29	
Carbon Tetrachloride	5.0 U	5.0	1	10/25/21 13:29	
Chlorobenzene	5.0 U	5.0	1	10/25/21 13:29	
Chloroethane	5.0 U	5.0	1	10/25/21 13:29	
Chloroform	5.0 U	5.0	1	10/25/21 13:29	
Chloromethane	5.0 U	5.0	1	10/25/21 13:29	
Dibromochloromethane	5.0 U	5.0	1	10/25/21 13:29	
1,1-Dichloroethane	5.0 U	5.0	1	10/25/21 13:29	
1,2-Dibromoethane	5.0 U	5.0	1	10/25/21 13:29	
1,2-Dichloroethane	5.0 U	5.0	1	10/25/21 13:29	
1,1-Dichloroethene	5.0 U	5.0	1	10/25/21 13:29	
cis-1,2-Dichloroethene	5.0 U	5.0	1	10/25/21 13:29	
trans-1,2-Dichloroethene	5.0 U	5.0	1	10/25/21 13:29	
1,2-Dichloropropane	5.0 U	5.0	1	10/25/21 13:29	
cis-1,3-Dichloropropene	5.0 U	5.0	1	10/25/21 13:29	
trans-1,3-Dichloropropene	5.0 U	5.0	1	10/25/21 13:29	
Ethylbenzene	5.0 U	5.0	1	10/25/21 13:29	
2-Hexanone	10 U	10	1	10/25/21 13:29	
Methylene Chloride	5.0 U	5.0	1	10/25/21 13:29	
4-Methyl-2-pentanone (MIBK)	10 U	10	1	10/25/21 13:29	
Styrene	5.0 U	5.0	1	10/25/21 13:29	
1,1,2,2-Tetrachloroethane	5.0 U	5.0	1	10/25/21 13:29	
Tetrachloroethene	5.0 U	5.0	1	10/25/21 13:29	
Toluene	5.0 U	5.0	1	10/25/21 13:29	
1,1,1-Trichloroethane	5.0 U	5.0	1	10/25/21 13:29	
1,1,2-Trichloroethane	5.0 U	5.0	1	10/25/21 13:29	
Trichloroethene	5.0 U	5.0	1	10/25/21 13:29	
Vinyl Chloride	5.0 U	5.0	1	10/25/21 13:29	
o-Xylene	5.0 U	5.0	1	10/25/21 13:29	
m,p-Xylenes	5.0 U	5.0	1	10/25/21 13:29	

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Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 09:10
Date Received: 10/20/21 11:53

Sample Name: Trip Blank
Lab Code: R2110978-014

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	10/25/21 13:29	
Toluene-d8	94	87 - 121	10/25/21 13:29	
Dibromofluoromethane	97	80 - 116	10/25/21 13:29	



Semivolatile Organic Compounds by GC/MS

No data validation qualifiers were added

MKP 12/6/2021

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 09:55
Date Received: 10/20/21 11:53

Sample Name: CW4A-1021
Lab Code: R2110978-001

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	0.39	0.040	0.027	1	10/22/21 10:18	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	90	64 - 124	10/22/21 10:18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 12:00
Date Received: 10/20/21 11:53

Sample Name: CW4B-1021
Lab Code: R2110978-002

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	0.40	0.040	0.027	1	10/22/21 11:11	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	89	64 - 124	10/22/21 11:11	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 13:55
Date Received: 10/20/21 11:53

Sample Name: CW3B-1021
Lab Code: R2110978-003

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	0.90	0.040	0.027	1	10/22/21 11:29	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	94	64 - 124	10/22/21 11:29	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/18/21 15:35
Date Received: 10/20/21 11:53

Sample Name: CW3A-1021
Lab Code: R2110978-004

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	0.13	0.040	0.027	1	10/22/21 11:47	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	92	64 - 124	10/22/21 11:47	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 10:05
Date Received: 10/20/21 11:53

Sample Name: MW17D-1021
Lab Code: R2110978-005

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	0.040 U	0.040	0.027	1	10/22/21 12:05	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	89	64 - 124	10/22/21 12:05	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 11:55
Date Received: 10/20/21 11:53

Sample Name: MW17S-1021
Lab Code: R2110978-006

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	0.41	0.040	0.027	1	10/22/21 12:24	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	87	64 - 124	10/22/21 12:24	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 13:55
Date Received: 10/20/21 11:53

Sample Name: MW5D-1021
Lab Code: R2110978-007

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	0.66	0.040	0.027	1	10/22/21 12:42	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	103	64 - 124	10/22/21 12:42	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 15:10
Date Received: 10/20/21 11:53

Sample Name: MW5S-1021
Lab Code: R2110978-009

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	0.17	0.040	0.027	1	10/22/21 13:00	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	95	64 - 124	10/22/21 13:00	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/19/21 15:15
Date Received: 10/20/21 11:53

Sample Name: DUP1-1021
Lab Code: R2110978-010

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	0.17	0.040	0.027	1	10/22/21 13:18	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	95	64 - 124	10/22/21 13:18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R2110978
Date Collected: 10/20/21 07:30
Date Received: 10/20/21 11:53

Sample Name: EB1-1021
Lab Code: R2110978-011

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	0.040 U	0.040	0.027	1	10/22/21 13:36	10/21/21	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,4-Dioxane-d8	92	64 - 124	10/22/21 13:36	



Metals

No data validation qualifiers were added

MKP 12/6/2021

ALS Environmental—Rochester Laboratory
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Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

METALS

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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

CW4A-1021

Contract: R2110978

Lab Code:

Case No.:

SAS No.:

SDG NO.: CW4A-1021

Matrix (soil/water): WATER

Lab Sample ID: R2110978-001

Level (low/med): LOW

Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	60.9			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	33400			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	17100			P
7439-96-5	Manganese	491			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	13900			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless

Clarity Before: Clear

Texture:

Color After: Colorless

Clarity After: Clear

Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

CW4B-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-002

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	31.6			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	40700			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	17100			P
7439-96-5	Manganese	249			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	15500			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

CW3B-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-003

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	38.4			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	69900			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	35500			P
7439-96-5	Manganese	29.8			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2460			P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	22300			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

CW3A-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-004

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	62.8			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	36900			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	2860			P
7439-96-5	Manganese	18.3			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	12000			P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	55700			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW17D-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-005

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	20.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	5260			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	16200			P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	19400			P
7439-96-5	Manganese	214			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	5260			P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	35900			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW17S-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-006

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	40.4			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	91200			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	64100			P
7439-96-5	Manganese	55.0			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	3650			P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	78400			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW5D-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-007

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	37.9			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	20100			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	125			P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	14100			P
7439-96-5	Manganese	519			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	7370			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW5S-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-009

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	20.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	14700			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	2170			P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	9970			P
7439-96-5	Manganese	172			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	6540			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
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INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

DUP1-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-010

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	20.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	14700			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	1860			P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	9910			P
7439-96-5	Manganese	171			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	6500			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

EB1-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-011

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	20.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	1000	U		P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	1000	U		P
7439-96-5	Manganese	10.0	U		P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	1000	U		P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MH33-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-012

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	48.1			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	54600			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	2430			P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	15500			P
7439-96-5	Manganese	939			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	2370			P
7440-66-6	Zinc	20.0	U		P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MH32-1021

Contract: R2110978

Lab Code: Case No.: SAS No.: SDG NO.: CW4A-1021

Matrix (soil/water): WATER Lab Sample ID: R2110978-013

Level (low/med): LOW Date Received: 10/20/2021

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.8			P
7440-39-3	Barium	76.0			P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	76000			P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-89-6	Iron	11600			P
7439-92-1	Lead	50.0	U		P
7439-95-4	Magnesium	13200			P
7439-96-5	Manganese	2250			P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	2000	U		P
7782-49-2	Selenium	10.0	U		P
7440-23-5	Sodium	1830			P
7440-66-6	Zinc	25.1			P

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:



General Chemistry

No data validation qualifiers were added

MKP 12/6/2021

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: MH33-1021
Lab Code: R2110978-012

Service Request: R2110978
Date Collected: 10/20/21 08:40
Date Received: 10/20/21 11:53
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	10/20/21 18:21	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	216	mg/L	10	1	10/27/21 15:20	

ALS Group USA, Corp.
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Analytical Report

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

Sample Name: MH32-1021
Lab Code: R2110978-013

Service Request: R2110978
Date Collected: 10/20/21 09:10
Date Received: 10/20/21 11:53

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Nitrate as Nitrogen	300.0	1.0 U	mg/L	1.0	10	10/20/21 18:42	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	258	mg/L	10	1	10/27/21 15:20	



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

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November 23, 2021

Janice Jaeger
ALS Environmental
1565 Jefferson Rd
Bldg 300
Rochester, NY 14623

Work Order: **21102596**

Re: **R2110978**

Dear Janice,

ALS Environmental received 11 sample(s) on Oct 29, 2021 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 768.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

Jodi Blouw
/S/ Jodi Blouw

Jodi Blouw

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: ALS Environmental
Project: R2110978
Work Order: 21102596

Case Narrative

Samples for the above noted Work Order were received on 10/29/2021. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

Extractable Organics:

Batch 186437, Method E537 Mod, Sample 21102596-01AMS: 13C2-FtS 6:2 surrogate failed high.

Batch 186655, Method E537 Mod, Sample MBLK-186655: 13C5-PFNA failed in CCV. Passes in sample.

Batch 186437, Method E537 Mod, Sample R2110978-001 CW4A-1021 (21102596-01A): Ion transition ratios did not meet acceptance criteria due to matrix interference and/or the presence of branched isomers not represented in the quantitation standards. PFOS

Batch 186437, Method E537 Mod, Sample R2110978-001 CW4A-1021 (21102596-01A): One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed. 13C2-FtS 6:2, 13C2-FtS 8:2

Batch 186437, Method E537 Mod, Sample R2110978-002 CW4B-1021 (21102596-02A): Ion transition ratios did not meet acceptance criteria due to matrix interference and/or the presence of branched isomers not represented in the quantitation standards. PFOS

Batch 186437, Method E537 Mod, Sample R2110978-003 CW3B-1021 (21102596-03A): Ion transition ratios did not meet acceptance criteria due to matrix interference and/or the presence of branched isomers not represented in the quantitation standards. PFHxS

Client: ALS Environmental
Project: R2110978
Work Order: 21102596

Case Narrative

Batch 186437, Method E537 Mod, Sample R2110978-004 CW3A-1021 (21102596-04A): Ion transition ratios did not meet acceptance criteria due to matrix interference and/or the presence of branched isomers not represented in the quantitation standards. PFPeS, PFOS

Batch 186437, Method E537 Mod, Sample R2110978-004 CW3A-1021 (21102596-04A): One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed. 13C2-FtS 6:2

Batch 186437, Method E537 Mod, Sample R2110978-006 MW17S-1021 (21102596-06A): Ion transition ratios did not meet acceptance criteria due to matrix interference and/or the presence of branched isomers not represented in the quantitation standards. PFOS

Batch 186437, Method E537 Mod, Sample R2110978-010 DUP1-1021 (21102596-10A): Ion transition ratios did not meet acceptance criteria due to matrix interference and/or the presence of branched isomers not represented in the quantitation standards. PFOS

Batch 186437, Method E537 Mod, Sample R2110978-010 DUP1-1021 (21102596-10A): One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed. 13C2-FtS 6:2

Batch 186655, Method E537 Mod, Sample R2110978-001 CW4A-1021 (21102596-01A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-002 CW4B-1021 (21102596-02A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-003 CW3B-1021 (21102596-03A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-003 CW3B-1021 (21102596-03A): One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed. 13C2-FtS 6:2, 13C3-HFPO-DA

Batch 186655, Method E537 Mod, Sample R2110978-004 CW3A-1021 (21102596-04A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-005 MW17D-1021 (21102596-05A): The sample ran outside of the holding time due to quality control failure during the initial

Client: ALS Environmental
Project: R2110978
Work Order: 21102596

Case Narrative

extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-006 MW17S-1021 (21102596-06A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-007 MW5D-1021 (21102596-07A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-009 MW5S-1021 (21102596-09A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-010 DUP1-1021 (21102596-10A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample R2110978-011 EB1-1021 (21102596-11A): The sample ran outside of the holding time due to quality control failure during the initial extraction. Results should be considered estimated. Reprepped due to blank contamination.

Batch 186655, Method E537 Mod, Sample LCS-186655: The LCS recovery was above the upper control limit. The sample results for this batch may be biased high for this analyte: 13C5-PFPeA, target passes.
d7-N-MeFOSE, 13C3-HFPO-DA, 13C2-FtS 6:2

Batch 186655, Method E537 Mod, Sample LCSD-186655: The LCSD recovery was above the upper control limit. The sample results for this analyte may be biased high for this analyte: 13C3-HFPO-DA, d7-N-MeFOSE

Batch 186437, Method E537 Mod, Sample 21102596-01AMSD: The MSD recovery was above the upper control limit. The corresponding result in the parent sample may be biased high for this analyte: PFBA

Batch 186437, Method E537 Mod, Sample 21102596-01AMSD: The MSD recovery was outside of the control limit. However, the MS recovery and the RPD between the MS and MSD was in control. No qualification is required for this analyte: PFHxA, PFNA, PFOA, PFPeA

Batch 186437, Method E537 Mod, Sample 21102596-01AMSD: The RPD between the MS and MSD was outside of the control limit. The corresponding result should be considered estimated for this compound: PFBA, 13C2-FtS 6:2, 13C4-PFHpA, 13C4-PFOA

Client: ALS Environmental
Project: R2110978
Work Order: 21102596

Case Narrative

No other deviations or anomalies were noted.

Client: ALS Environmental
Project: R2110978
Work Order: 21102596

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
21102596-01	R2110978-001 CW4A-1021	Water		10/18/2021 09:55	10/29/2021 10:00	☐
21102596-02	R2110978-002 CW4B-1021	Water		10/18/2021 12:00	10/29/2021 10:00	☐
21102596-03	R2110978-003 CW3B-1021	Water		10/18/2021 13:55	10/29/2021 10:00	☐
21102596-04	R2110978-004 CW3A-1021	Water		10/18/2021 15:35	10/29/2021 10:00	☐
21102596-05	R2110978-005 MW17D-1021	Water		10/19/2021 10:05	10/29/2021 10:00	☐
21102596-06	R2110978-006 MW17S-1021	Water		10/19/2021 11:55	10/29/2021 10:00	☐
21102596-07	R2110978-007 MW5D-1021	Water		10/19/2021 13:55	10/29/2021 10:00	☐
21102596-08	R2110978-008 FB-1021	Water		10/19/2021 15:10	10/29/2021 10:00	☐
21102596-09	R2110978-009 MW5S-1021	Water		10/19/2021 15:10	10/29/2021 10:00	☐
21102596-10	R2110978-010 DUP1-1021	Water		10/19/2021 15:15	10/29/2021 10:00	☐
21102596-11	R2110978-011 EB1-1021	Water		10/20/2021 07:30	10/29/2021 10:00	☐

ALS Environmental Chain of Custody

1565 Jefferson Rd, Building 300 • Rochester, NY 14623 • 585-288-5380 • FAX 585-288-8475

ALS Contact: Janice Jaeger

Project Number: R2110978
Project Manager: Janice Jaeger
QAP: LAB QAP

21102596

537M
10/21
10/21

see alternate QAP

37

Lab Code	Sample ID	# of Cont.	Matrix	Sample Time		Lab ID	PFC/537M
R2110978-001	CW4A-1021	4	Water	10/18/21	0955	Holland ALS	X
R2110978-002	CW4B-1021	2	Water	10/18/21	1200	Holland ALS	X
R2110978-003	CW3B-1021	1	Water	10/18/21	1355	Holland ALS	X
R2110978-004	CW3A-1021	1	Water	10/18/21	1535	Holland ALS	X
R2110978-005	MW17D-1021	1	Water	10/19/21	1005	Holland ALS	X
R2110978-006	MW17S-1021	1	Water	10/19/21	1155	Holland ALS	X
R2110978-007	MW5D-1021	1	Water	10/19/21	1355	Holland ALS	X
R2110978-008	FB-1021	1	Water	10/19/21	1510	Holland ALS	X
R2110978-009	MW5S-1021	2	Water	10/19/21	1510	Holland ALS	X
R2110978-010	DUP1-1021	1	Water	10/19/21	1515	Holland ALS	X
R2110978-011	EB1-1021	1	Water	10/20/21	0730	Holland ALS	X

Special Instructions/Comments excel add nysdec egus v4 add NPDES 15 of 768 HI - Test is On Hold P - Test is Authorized for Prep Only	Turnaround Requirements RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 STANDARD Requested FAX Date: _____ Requested Report Date: 11/05/21	Report Requirements I. Results Only II. Results + QC Summaries III. Results + QC and Calibration Summaries IV. Data Validation Report with Raw Data PQL/MDL/J Y EDD Y	Invoice Information PO# 58R2110978 Bill to

Relinquished By: *Supp 10/27/21* Received By: *10/29/21* Airbill Number: 37°C 103

ALS Contact: Janice Jaeger

Project Number: R2110978
Project Manager: Janice Jaeger
QAP: LAB QAP

Folder Comments:
MRL U
Run QC on sample R2110978-001 for PFC/537M/PFAS

Special Instructions/Comments	Turnaround Requirements	Report Requirements	Invoice Information
NPDES 16 of 768 H - Test is On Hold P - Test is Authorized for Prep Only	☐ RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 ☐ STANDARD Requested FAX Date: _____ Requested Report Date: 11/05/21	☐ I. Results Only ☐ II. Results + QC Summaries ☐ III. Results + QC and Calibration Summaries ☐ IV. Data Validation Report with Raw Data PQL/MDL/J ☐ Y ☐ Y EDD ☐ Y ☐ Y	PO# 58R2110978 Bill to



Organic LC

ALS Enviromental - Holland Laboratory
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ALS Group USA, Corp.
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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Sample Name: R2110978-001 CW4A-1021
Lab Code: 21102596-01

Service Request: 21102596
Date Collected: 10/18/21 09:55
Date Received: 10/29/21 10:00

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	0.55 U	4.1	0.55	1	11/02/21 20:41	11/01/21 16:23	
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	0.93 U	4.1	0.93	1	11/02/21 20:41	11/01/21 16:23	
N-Ethylperfluorooctanesulfonamidoacetic Acid	0.52 U	4.1	0.52	1	11/02/21 20:41	11/01/21 16:23	
N-Methylperfluorooctanesulfonamidoacetic Acid	0.53 U	4.1	0.53	1	11/02/21 20:41	11/01/21 16:23	
Perfluorobutanesulfonic Acid (PFBS)	1.4 J	4.1	0.29	1	11/02/21 20:41	11/01/21 16:23	
Perfluorobutanoic Acid (PFBA)	6.1 U ~~6.1 HH~~	4.5	2.4	1	11/05/21 13:01	11/04/21 16:13	
Perfluorodecanesulfonic Acid (PFDS)	1.1 U	4.1	1.1	1	11/02/21 20:41	11/01/21 16:23	
Perfluorodecanoic Acid (PFDA)	1.0 U	4.1	1.0	1	11/02/21 20:41	11/01/21 16:23	
Perfluorododecanoic Acid (PFDoA)	1.2 U	4.1	1.2	1	11/02/21 20:41	11/01/21 16:23	
Perfluoroheptanesulfonic Acid (PFHpS)	0.47 U	4.1	0.47	1	11/02/21 20:41	11/01/21 16:23	
Perfluoroheptanoic Acid (PFHpA)	4.1 U ~~0.67 J~~	4.1	0.36	1	11/02/21 20:41	11/01/21 16:23	
Perfluorohexanesulfonic Acid (PFHxS)	4.1 U ~~1.0 J~~	4.1	0.30	1	11/02/21 20:41	11/01/21 16:23	
Perfluorohexanoic Acid (PFHxA)	4.1 U ~~1.4 J~~	4.1	0.99	1	11/02/21 20:41	11/01/21 16:23	
Perfluorononanoic Acid (PFNA)	4.1 U ~~1.2 J~~	4.1	0.72	1	11/02/21 20:41	11/01/21 16:23	
Perfluorooctanesulfonamide (PFOSA)	0.58 U	4.1	0.58	1	11/02/21 20:41	11/01/21 16:23	
Perfluorooctanesulfonic Acid (PFOS)	6.5	1.6	0.73	1	11/02/21 20:41	11/01/21 16:23	
Perfluorooctanoic Acid (PFOA)	7.2 J	1.6	0.52	1	11/02/21 20:41	11/01/21 16:23	
Perfluoropentanoic Acid (PFPeA)	1.2 HH,U	4.5	1.2	1	11/05/21 13:01	11/04/21 16:13	
Perfluorotetradecanoic Acid (PFTeA)	2.2 U	4.1	2.2	1	11/02/21 20:41	11/01/21 16:23	
Perfluorotridecanoic Acid (PFTriA)	0.74 J	4.1	0.63	1	11/02/21 20:41	11/01/21 16:23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS - ROCHESTER

Project: R2110978

Sample Matrix: Water

Service Request: 21102596

Date Collected: 10/18/21 09:55

Date Received: 10/29/21 10:00

Sample Name: R2110978-001 CW4A-1021

Units: ng/L

Lab Code: 21102596-01

Basis: Wet

Organic LC

Analysis Method: E537 Mod

Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroundecanoic Acid (PFUnA)	0.80 U	4.1	0.80	1	11/02/21 20:41	11/01/21 16:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C2-FtS 6:2	243	50 - 150	11/02/21 20:41	S
13C2-FtS 8:2	160	50 - 150	11/02/21 20:41	S
13C2-PFDA	116	50 - 150	11/02/21 20:41	
13C2-PFDoA	104	50 - 150	11/02/21 20:41	
13C2-PFHxA	115	50 - 150	11/02/21 20:41	
13C2-PFTeA	92.5	50 - 150	11/02/21 20:41	
13C2-PFUnA	98.8	50 - 150	11/02/21 20:41	
13C3-HFPO-DA	107	50 - 150	11/02/21 20:41	
13C3-PFBS	109	50 - 150	11/02/21 20:41	
13C4-PFBA	123	50 - 150	11/05/21 13:01	
13C4-PFBA	115	50 - 150	11/02/21 20:41	
13C4-PFHpA	137	50 - 150	11/02/21 20:41	
13C4-PFOA	120	50 - 150	11/02/21 20:41	
13C4-PFOS	117	50 - 150	11/02/21 20:41	
13C5-PFNA	114	50 - 150	11/02/21 20:41	
13C5-PFPeA	129	50 - 150	11/05/21 13:01	
13C5-PFPeA	123	50 - 150	11/02/21 20:41	
13C8-FOSA	103	50 - 150	11/02/21 20:41	
18O2-PFHxS	114	50 - 150	11/02/21 20:41	
d3-N-MeFOSA	113	50 - 150	11/02/21 20:41	
d3-N-MeFOSAA	117	50 - 150	11/02/21 20:41	
d5-N-EtFOSA	124	50 - 150	11/02/21 20:41	
d5-N-EtFOSAA	127	50 - 150	11/02/21 20:41	
d7-N-MeFOSE	126	50 - 150	11/02/21 20:41	
d9-N-EtFOSE	115	50 - 150	11/02/21 20:41	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Sample Name: R2110978-002 CW4B-1021
Lab Code: 21102596-02

Service Request: 21102596
Date Collected: 10/18/21 12:00
Date Received: 10/29/21 10:00

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	0.58 U	4.3	0.58	1	11/02/21 20:52	11/01/21 16:23	
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	0.98 U	4.3	0.98	1	11/02/21 20:52	11/01/21 16:23	
N-Ethylperfluorooctanesulfonamidoacetic Acid	0.54 U	4.3	0.54	1	11/02/21 20:52	11/01/21 16:23	
N-Methylperfluorooctanesulfonamidoacetic Acid	0.56 U	4.3	0.56	1	11/02/21 20:52	11/01/21 16:23	
Perfluorobutanesulfonic Acid (PFBS)	1.7 J	4.3	0.30	1	11/02/21 20:52	11/01/21 16:23	
Perfluorobutanoic Acid (PFBA)	6.8 U ~~6.8 HH~~	4.3	2.3	1	11/05/21 13:09	11/04/21 16:13	
Perfluorodecanesulfonic Acid (PFDS)	1.2 U	4.3	1.2	1	11/02/21 20:52	11/01/21 16:23	
Perfluorodecanoic Acid (PFDA)	1.1 U	4.3	1.1	1	11/02/21 20:52	11/01/21 16:23	
Perfluorododecanoic Acid (PFDoA)	1.2 U	4.3	1.2	1	11/02/21 20:52	11/01/21 16:23	
Perfluoroheptanesulfonic Acid (PFHpS)	0.49 U	4.3	0.49	1	11/02/21 20:52	11/01/21 16:23	
Perfluoroheptanoic Acid (PFHpA)	4.3 U ~~1.7 J~~	4.3	0.38	1	11/02/21 20:52	11/01/21 16:23	
Perfluorohexanesulfonic Acid (PFHxS)	4.3 U ~~1.1 J~~	4.3	0.32	1	11/02/21 20:52	11/01/21 16:23	
Perfluorohexanoic Acid (PFHxA)	4.3 U ~~3.9 J~~	4.3	1.0	1	11/02/21 20:52	11/01/21 16:23	
Perfluorononanoic Acid (PFNA)	4.3 U ~~1.5 J~~	4.3	0.76	1	11/02/21 20:52	11/01/21 16:23	
Perfluorooctanesulfonamide (PFOSA)	0.62 U	4.3	0.62	1	11/02/21 20:52	11/01/21 16:23	
Perfluorooctanesulfonic Acid (PFOS)	6.2	1.7	0.77	1	11/02/21 20:52	11/01/21 16:23	
Perfluorooctanoic Acid (PFOA)	8.9	1.7	0.55	1	11/02/21 20:52	11/01/21 16:23	
Perfluoropentanoic Acid (PFPeA)	1.1 HH,U	4.3	1.1	1	11/05/21 13:09	11/04/21 16:13	
Perfluorotetradecanoic Acid (PFTeA)	2.3 U	4.3	2.3	1	11/02/21 20:52	11/01/21 16:23	
Perfluorotridecanoic Acid (PFTriA)	0.67 U	4.3	0.67	1	11/02/21 20:52	11/01/21 16:23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS - ROCHESTER

Project: R2110978

Sample Matrix: Water

Service Request: 21102596

Date Collected: 10/18/21 12:00

Date Received: 10/29/21 10:00

Sample Name: R2110978-002 CW4B-1021

Units: ng/L

Lab Code: 21102596-02

Basis: Wet

Organic LC

Analysis Method: E537 Mod

Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroundecanoic Acid (PFUnA)	0.85 U	4.3	0.85	1	11/02/21 20:52	11/01/21 16:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C2-FtS 6:2	145	50 - 150	11/02/21 20:52	
13C2-FtS 8:2	104	50 - 150	11/02/21 20:52	
13C2-PFDA	77.5	50 - 150	11/02/21 20:52	
13C2-PFDoA	72.6	50 - 150	11/02/21 20:52	
13C2-PFHxA	85.0	50 - 150	11/02/21 20:52	
13C2-PFTeA	79.1	50 - 150	11/02/21 20:52	
13C2-PFUnA	86.6	50 - 150	11/02/21 20:52	
13C3-HFPO-DA	86.5	50 - 150	11/02/21 20:52	
13C3-PFBS	86.9	50 - 150	11/02/21 20:52	
13C4-PFBA	121	50 - 150	11/05/21 13:09	
13C4-PFBA	87.7	50 - 150	11/02/21 20:52	
13C4-PFHpA	94.4	50 - 150	11/02/21 20:52	
13C4-PFOA	97.6	50 - 150	11/02/21 20:52	
13C4-PFOS	89.6	50 - 150	11/02/21 20:52	
13C5-PFNA	81.7	50 - 150	11/02/21 20:52	
13C5-PFPeA	126	50 - 150	11/05/21 13:09	
13C5-PFPeA	92.7	50 - 150	11/02/21 20:52	
13C8-FOSA	87.5	50 - 150	11/02/21 20:52	
18O2-PFHxS	95.9	50 - 150	11/02/21 20:52	
d3-N-MeFOSA	94.7	50 - 150	11/02/21 20:52	
d3-N-MeFOSAA	77.6	50 - 150	11/02/21 20:52	
d5-N-EtFOSA	87.4	50 - 150	11/02/21 20:52	
d5-N-EtFOSAA	84.1	50 - 150	11/02/21 20:52	
d7-N-MeFOSE	80.3	50 - 150	11/02/21 20:52	
d9-N-EtFOSE	104	50 - 150	11/02/21 20:52	

ALS Group USA, Corp.
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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Sample Name: R2110978-003 CW3B-1021
Lab Code: 21102596-03

Service Request: 21102596
Date Collected: 10/18/21 13:55
Date Received: 10/29/21 10:00

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	0.56 U	4.2	0.56	1	11/02/21 21:02	11/01/21 16:23	
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	0.96 U	4.2	0.96	1	11/02/21 21:02	11/01/21 16:23	
N-Ethylperfluorooctanesulfonamidoacetic Acid	0.53 U	4.2	0.53	1	11/02/21 21:02	11/01/21 16:23	
N-Methylperfluorooctanesulfonamidoacetic Acid	0.55 U	4.2	0.55	1	11/02/21 21:02	11/01/21 16:23	
Perfluorobutanesulfonic Acid (PFBS)	2.2 J	4.2	0.30	1	11/02/21 21:02	11/01/21 16:23	
Perfluorobutanoic Acid (PFBA)	4.3 U ~~2.7 JH~~	4.3	2.2	1	11/05/21 13:17	11/04/21 16:13	
Perfluorodecanesulfonic Acid (PFDS)	1.2 U	4.2	1.2	1	11/02/21 21:02	11/01/21 16:23	
Perfluorodecanoic Acid (PFDA)	1.1 U	4.2	1.1	1	11/02/21 21:02	11/01/21 16:23	
Perfluorododecanoic Acid (PFDoA)	1.2 U	4.2	1.2	1	11/02/21 21:02	11/01/21 16:23	
Perfluoroheptanesulfonic Acid (PFHpS)	0.48 U	4.2	0.48	1	11/02/21 21:02	11/01/21 16:23	
Perfluoroheptanoic Acid (PFHpA)	4.7 U ~~4.7~~	4.2	0.37	1	11/02/21 21:02	11/01/21 16:23	
Perfluorohexanesulfonic Acid (PFHxS)	4.2 U ~~2.5 J~~	4.2	0.31	1	11/02/21 21:02	11/01/21 16:23	
Perfluorohexanoic Acid (PFHxA)	11 U ~~11~~	4.2	1.0	1	11/02/21 21:02	11/01/21 16:23	
Perfluorononanoic Acid (PFNA)	4.2 U ~~0.87 J~~	4.2	0.74	1	11/02/21 21:02	11/01/21 16:23	
Perfluorooctanesulfonamide (PFOSA)	0.60 U	4.2	0.60	1	11/02/21 21:02	11/01/21 16:23	
Perfluorooctanesulfonic Acid (PFOS)	11	1.7	0.76	1	11/02/21 21:02	11/01/21 16:23	
Perfluorooctanoic Acid (PFOA)	8.5	1.7	0.53	1	11/02/21 21:02	11/01/21 16:23	
Perfluoropentanoic Acid (PFPeA)	4.3 U ~~2.1 JH~~	4.3	1.1	1	11/05/21 13:17	11/04/21 16:13	
Perfluorotetradecanoic Acid (PFTeA)	2.2 U	4.2	2.2	1	11/02/21 21:02	11/01/21 16:23	
Perfluorotridecanoic Acid (PFTriA)	0.65 U	4.2	0.65	1	11/02/21 21:02	11/01/21 16:23	

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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Sample Name: R2110978-003 CW3B-1021
Lab Code: 21102596-03

Service Request: 21102596
Date Collected: 10/18/21 13:55
Date Received: 10/29/21 10:00

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroundecanoic Acid (PFUnA)	0.83 U	4.2	0.83	1	11/02/21 21:02	11/01/21 16:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C2-FtS 6:2	152	50 - 150	11/05/21 13:17	S
13C2-FtS 8:2	130	50 - 150	11/05/21 13:17	
13C2-PFDA	87.3	50 - 150	11/05/21 13:17	
13C2-PFDoA	77.2	50 - 150	11/05/21 13:17	
13C2-PFHxA	114	50 - 150	11/05/21 13:17	
13C2-PFTeA	96.4	50 - 150	11/05/21 13:17	
13C2-PFUnA	105	50 - 150	11/05/21 13:17	
13C3-HFPO-DA	161	50 - 150	11/05/21 13:17	S
13C3-PFBS	102	50 - 150	11/05/21 13:17	
13C4-PFBA	112	50 - 150	11/05/21 13:17	
13C4-PFHpA	96.6	50 - 150	11/05/21 13:17	
13C4-PFOA	92.9	50 - 150	11/05/21 13:17	
13C4-PFOS	89.3	50 - 150	11/05/21 13:17	
13C5-PFNA	87.3	50 - 150	11/05/21 13:17	
13C5-PFPeA	116	50 - 150	11/05/21 13:17	
13C8-FOSA	119	50 - 150	11/05/21 13:17	
18O2-PFHxS	79.3	50 - 150	11/05/21 13:17	
d3-N-MeFOSA	116	50 - 150	11/05/21 13:17	
d3-N-MeFOSAA	104	50 - 150	11/05/21 13:17	
d5-N-EtFOSA	118	50 - 150	11/05/21 13:17	
d5-N-EtFOSAA	112	50 - 150	11/05/21 13:17	
d7-N-MeFOSE	118	50 - 150	11/05/21 13:17	
d9-N-EtFOSE	114	50 - 150	11/05/21 13:17	

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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water
Sample Name: R2110978-004 CW3A-1021
Lab Code: 21102596-04

Service Request: 21102596
Date Collected: 10/18/21 15:35
Date Received: 10/29/21 10:00

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	0.56 U	4.2	0.56	1	11/02/21 21:13	11/01/21 16:23	
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	0.96 U	4.2	0.96	1	11/02/21 21:13	11/01/21 16:23	
N-Ethylperfluorooctanesulfonamidoacetic Acid	0.53 U	4.2	0.53	1	11/02/21 21:13	11/01/21 16:23	
N-Methylperfluorooctanesulfonamidoacetic Acid	0.55 U	4.2	0.55	1	11/02/21 21:13	11/01/21 16:23	
Perfluorobutanesulfonic Acid (PFBS)	0.30 U	4.2	0.30	1	11/02/21 21:13	11/01/21 16:23	
Perfluorobutanoic Acid (PFBA)	4.4 U ~~2.4 JHH~~	4.4	2.3	1	11/05/21 13:25	11/04/21 16:13	
Perfluorodecanesulfonic Acid (PFDS)	1.2 U	4.2	1.2	1	11/02/21 21:13	11/01/21 16:23	
Perfluorodecanoic Acid (PFDA)	1.1 U	4.2	1.1	1	11/02/21 21:13	11/01/21 16:23	
Perfluorododecanoic Acid (PFDoA)	1.2 U	4.2	1.2	1	11/02/21 21:13	11/01/21 16:23	
Perfluoroheptanesulfonic Acid (PFHpS)	0.48 U	4.2	0.48	1	11/02/21 21:13	11/01/21 16:23	
Perfluoroheptanoic Acid (PFHpA)	4.2 U ~~0.99 J~~	4.2	0.37	1	11/02/21 21:13	11/01/21 16:23	
Perfluorohexanesulfonic Acid (PFHxS)	4.2 U ~~0.62 J~~	4.2	0.31	1	11/02/21 21:13	11/01/21 16:23	
Perfluorohexanoic Acid (PFHxA)	4.2 U ~~3.7 J~~	4.2	1.0	1	11/02/21 21:13	11/01/21 16:23	
Perfluorononanoic Acid (PFNA)	4.2 U ~~0.85 J~~	4.2	0.74	1	11/02/21 21:13	11/01/21 16:23	
Perfluorooctanesulfonamide (PFOSA)	0.60 U	4.2	0.60	1	11/02/21 21:13	11/01/21 16:23	
Perfluorooctanesulfonic Acid (PFOS)	1.3 J	1.7	0.76	1	11/02/21 21:13	11/01/21 16:23	
Perfluorooctanoic Acid (PFOA)	2.1 U ~~2.1~~	1.7	0.53	1	11/02/21 21:13	11/01/21 16:23	
Perfluoropentanoic Acid (PFPeA)	1.1 HH,U	4.4	1.1	1	11/05/21 13:25	11/04/21 16:13	
Perfluorotetradecanoic Acid (PFTeA)	2.2 U	4.2	2.2	1	11/02/21 21:13	11/01/21 16:23	
Perfluorotridecanoic Acid (PFTriA)	0.65 U	4.2	0.65	1	11/02/21 21:13	11/01/21 16:23	

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Analytical Report

Client: ALS - ROCHESTER

Project: R2110978

Sample Matrix: Water

Service Request: 21102596

Date Collected: 10/18/21 15:35

Date Received: 10/29/21 10:00

Sample Name: R2110978-004 CW3A-1021

Units: ng/L

Lab Code: 21102596-04

Basis: Wet

Organic LC

Analysis Method: E537 Mod

Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroundecanoic Acid (PFUnA)	0.83 U	4.2	0.83	1	11/02/21 21:13	11/01/21 16:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C2-FtS 6:2	164	50 - 150	11/02/21 21:13	S
13C2-FtS 8:2	132	50 - 150	11/02/21 21:13	
13C2-PFDA	93.4	50 - 150	11/02/21 21:13	
13C2-PFDoA	76.2	50 - 150	11/02/21 21:13	
13C2-PFHxA	85.9	50 - 150	11/02/21 21:13	
13C2-PFTeA	76.5	50 - 150	11/02/21 21:13	
13C2-PFUnA	79.5	50 - 150	11/02/21 21:13	
13C3-HFPO-DA	86.0	50 - 150	11/02/21 21:13	
13C3-PFBS	88.0	50 - 150	11/02/21 21:13	
13C4-PFBA	107	50 - 150	11/05/21 13:25	
13C4-PFBA	103	50 - 150	11/02/21 21:13	
13C4-PFHpA	96.2	50 - 150	11/02/21 21:13	
13C4-PFOA	86.6	50 - 150	11/02/21 21:13	
13C4-PFOS	95.5	50 - 150	11/02/21 21:13	
13C5-PFNA	104	50 - 150	11/02/21 21:13	
13C5-PFPeA	106	50 - 150	11/05/21 13:25	
13C5-PFPeA	94.9	50 - 150	11/02/21 21:13	
13C8-FOSA	70.6	50 - 150	11/02/21 21:13	
18O2-PFHxS	82.0	50 - 150	11/02/21 21:13	
d3-N-MeFOSA	97.4	50 - 150	11/02/21 21:13	
d3-N-MeFOSAA	86.5	50 - 150	11/02/21 21:13	
d5-N-EtFOSA	90.6	50 - 150	11/02/21 21:13	
d5-N-EtFOSAA	91.0	50 - 150	11/02/21 21:13	
d7-N-MeFOSE	98.7	50 - 150	11/02/21 21:13	
d9-N-EtFOSE	92.4	50 - 150	11/02/21 21:13	

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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Sample Name: R2110978-005 MW17D-1021
Lab Code: 21102596-05

Service Request: 21102596
Date Collected: 10/19/21 10:05
Date Received: 10/29/21 10:00

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	0.57 U	4.3	0.57	1	11/02/21 21:23	11/01/21 16:23	
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	0.96 U	4.3	0.96	1	11/02/21 21:23	11/01/21 16:23	
N-Ethylperfluorooctanesulfonamidoacetic Acid	0.53 U	4.3	0.53	1	11/02/21 21:23	11/01/21 16:23	
N-Methylperfluorooctanesulfonamidoacetic Acid	0.55 U	4.3	0.55	1	11/02/21 21:23	11/01/21 16:23	
Perfluorobutanesulfonic Acid (PFBS)	0.30 U	4.3	0.30	1	11/02/21 21:23	11/01/21 16:23	
Perfluorobutanoic Acid (PFBA)	2.2 HH,U	4.3	2.2	1	11/05/21 13:33	11/04/21 16:13	
Perfluorodecanesulfonic Acid (PFDS)	1.2 U	4.3	1.2	1	11/02/21 21:23	11/01/21 16:23	
Perfluorodecanoic Acid (PFDA)	1.8 J	4.3	1.1	1	11/02/21 21:23	11/01/21 16:23	
Perfluorododecanoic Acid (PFDoA)	1.2 U	4.3	1.2	1	11/02/21 21:23	11/01/21 16:23	
Perfluoroheptanesulfonic Acid (PFHpS)	0.48 U	4.3	0.48	1	11/02/21 21:23	11/01/21 16:23	
Perfluoroheptanoic Acid (PFHpA)	4.3 U ~~1.6 J~~	4.3	0.38	1	11/02/21 21:23	11/01/21 16:23	
Perfluorohexanesulfonic Acid (PFHxS)	4.3 U ~~0.35 J~~	4.3	0.31	1	11/02/21 21:23	11/01/21 16:23	
Perfluorohexanoic Acid (PFHxA)	4.3 U ~~3.4 J~~	4.3	1.0	1	11/02/21 21:23	11/01/21 16:23	
Perfluorononanoic Acid (PFNA)	4.3 U ~~1.8 J~~	4.3	0.74	1	11/02/21 21:23	11/01/21 16:23	
Perfluorooctanesulfonamide (PFOSA)	0.61 U	4.3	0.61	1	11/02/21 21:23	11/01/21 16:23	
Perfluorooctanesulfonic Acid (PFOS)	0.76 U	1.7	0.76	1	11/02/21 21:23	11/01/21 16:23	
Perfluorooctanoic Acid (PFOA)	2.0 U ~~2.0~~	1.7	0.54	1	11/02/21 21:23	11/01/21 16:23	
Perfluoropentanoic Acid (PFPeA)	1.1 HH,U	4.3	1.1	1	11/05/21 13:33	11/04/21 16:13	
Perfluorotetradecanoic Acid (PFTeA)	2.3 U	4.3	2.3	1	11/02/21 21:23	11/01/21 16:23	
Perfluorotridecanoic Acid (PFTriA)	0.66 U	4.3	0.66	1	11/02/21 21:23	11/01/21 16:23	

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Analytical Report

Client: ALS - ROCHESTER

Project: R2110978

Sample Matrix: Water

Service Request: 21102596

Date Collected: 10/19/21 10:05

Date Received: 10/29/21 10:00

Sample Name: R2110978-005 MW17D-1021

Units: ng/L

Lab Code: 21102596-05

Basis: Wet

Organic LC

Analysis Method: E537 Mod

Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroundecanoic Acid (PFUnA)	0.83 U	4.3	0.83	1	11/02/21 21:23	11/01/21 16:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C2-FtS 6:2	96.0	50 - 150	11/02/21 21:23	
13C2-FtS 8:2	103	50 - 150	11/02/21 21:23	
13C2-PFDA	57.9	50 - 150	11/02/21 21:23	
13C2-PFDoA	56.0	50 - 150	11/02/21 21:23	
13C2-PFHxA	73.8	50 - 150	11/02/21 21:23	
13C2-PFTeA	83.4	50 - 150	11/02/21 21:23	
13C2-PFUnA	62.8	50 - 150	11/02/21 21:23	
13C3-HFPO-DA	84.9	50 - 150	11/02/21 21:23	
13C3-PFBS	76.8	50 - 150	11/02/21 21:23	
13C4-PFBA	98.4	50 - 150	11/05/21 13:33	
13C4-PFBA	67.1	50 - 150	11/02/21 21:23	
13C4-PFHpA	68.4	50 - 150	11/02/21 21:23	
13C4-PFOA	66.7	50 - 150	11/02/21 21:23	
13C4-PFOS	62.6	50 - 150	11/02/21 21:23	
13C5-PFNA	68.1	50 - 150	11/02/21 21:23	
13C5-PFPeA	127	50 - 150	11/05/21 13:33	
13C5-PFPeA	82.4	50 - 150	11/02/21 21:23	
13C8-FOSA	79.0	50 - 150	11/02/21 21:23	
18O2-PFHxS	63.3	50 - 150	11/02/21 21:23	
d3-N-MeFOSA	92.9	50 - 150	11/02/21 21:23	
d3-N-MeFOSAA	70.1	50 - 150	11/02/21 21:23	
d5-N-EtFOSA	80.3	50 - 150	11/02/21 21:23	
d5-N-EtFOSAA	77.0	50 - 150	11/02/21 21:23	
d7-N-MeFOSE	70.3	50 - 150	11/02/21 21:23	
d9-N-EtFOSE	91.7	50 - 150	11/02/21 21:23	

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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water
Sample Name: R2110978-006 MW17S-1021
Lab Code: 21102596-06

Service Request: 21102596
Date Collected: 10/19/21 11:55
Date Received: 10/29/21 10:00

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	1.2 J	4.3	0.57	1	11/02/21 21:34	11/01/21 16:23	
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	0.96 U	4.3	0.96	1	11/02/21 21:34	11/01/21 16:23	
N-Ethylperfluorooctanesulfonamidoacetic Acid	0.53 U	4.3	0.53	1	11/02/21 21:34	11/01/21 16:23	
N-Methylperfluorooctanesulfonamidoacetic Acid	0.55 U	4.3	0.55	1	11/02/21 21:34	11/01/21 16:23	
Perfluorobutanesulfonic Acid (PFBS)	2.0 J	4.3	0.30	1	11/02/21 21:34	11/01/21 16:23	
Perfluorobutanoic Acid (PFBA)	7.0 U ~~7.0 HH~~	4.3	2.2	1	11/05/21 13:42	11/04/21 16:13	
Perfluorodecanesulfonic Acid (PFDS)	1.2 U	4.3	1.2	1	11/02/21 21:34	11/01/21 16:23	
Perfluorodecanoic Acid (PFDA)	1.1 U	4.3	1.1	1	11/02/21 21:34	11/01/21 16:23	
Perfluorododecanoic Acid (PFDoA)	1.2 U	4.3	1.2	1	11/02/21 21:34	11/01/21 16:23	
Perfluoroheptanesulfonic Acid (PFHpS)	0.48 U	4.3	0.48	1	11/02/21 21:34	11/01/21 16:23	
Perfluoroheptanoic Acid (PFHpA)	6.4 U ~~6.4~~	4.3	0.38	1	11/02/21 21:34	11/01/21 16:23	
Perfluorohexanesulfonic Acid (PFHxS)	4.3 U ~~1.9 J~~	4.3	0.31	1	11/02/21 21:34	11/01/21 16:23	
Perfluorohexanoic Acid (PFHxA)	8.6 U ~~8.6~~	4.3	1.0	1	11/02/21 21:34	11/01/21 16:23	
Perfluorononanoic Acid (PFNA)	4.3 U ~~1.5 J~~	4.3	0.74	1	11/02/21 21:34	11/01/21 16:23	
Perfluorooctanesulfonamide (PFOSA)	0.61 U	4.3	0.61	1	11/02/21 21:34	11/01/21 16:23	
Perfluorooctanesulfonic Acid (PFOS)	4.2	1.7	0.76	1	11/02/21 21:34	11/01/21 16:23	
Perfluorooctanoic Acid (PFOA)	27	1.7	0.54	1	11/02/21 21:34	11/01/21 16:23	
Perfluoropentanoic Acid (PFPeA)	4.3 U ~~1.9 JHH~~	4.3	1.1	1	11/05/21 13:42	11/04/21 16:13	
Perfluorotetradecanoic Acid (PFTeA)	2.3 U	4.3	2.3	1	11/02/21 21:34	11/01/21 16:23	
Perfluorotridecanoic Acid (PFTriA)	0.66 U	4.3	0.66	1	11/02/21 21:34	11/01/21 16:23	

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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Service Request: 21102596
Date Collected: 10/19/21 11:55
Date Received: 10/29/21 10:00

Sample Name: R2110978-006 MW17S-1021
Lab Code: 21102596-06

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroundecanoic Acid (PFUnA)	0.83 U	4.3	0.83	1	11/02/21 21:34	11/01/21 16:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C2-FtS 6:2	122	50 - 150	11/02/21 21:34	
13C2-FtS 8:2	106	50 - 150	11/02/21 21:34	
13C2-PFDA	69.1	50 - 150	11/02/21 21:34	
13C2-PFDoA	66.4	50 - 150	11/02/21 21:34	
13C2-PFHxA	82.3	50 - 150	11/02/21 21:34	
13C2-PFTeA	84.9	50 - 150	11/02/21 21:34	
13C2-PFUnA	70.6	50 - 150	11/02/21 21:34	
13C3-HFPO-DA	81.2	50 - 150	11/02/21 21:34	
13C3-PFBS	75.7	50 - 150	11/02/21 21:34	
13C4-PFBA	108	50 - 150	11/05/21 13:42	
13C4-PFBA	76.3	50 - 150	11/02/21 21:34	
13C4-PFHpA	71.5	50 - 150	11/02/21 21:34	
13C4-PFOA	68.2	50 - 150	11/02/21 21:34	
13C4-PFOS	70.7	50 - 150	11/02/21 21:34	
13C5-PFNA	79.8	50 - 150	11/02/21 21:34	
13C5-PFPeA	116	50 - 150	11/05/21 13:42	
13C5-PFPeA	84.4	50 - 150	11/02/21 21:34	
13C8-FOSA	80.5	50 - 150	11/02/21 21:34	
18O2-PFHxS	67.8	50 - 150	11/02/21 21:34	
d3-N-MeFOSA	84.9	50 - 150	11/02/21 21:34	
d3-N-MeFOSAA	78.1	50 - 150	11/02/21 21:34	
d5-N-EtFOSA	80.7	50 - 150	11/02/21 21:34	
d5-N-EtFOSAA	82.3	50 - 150	11/02/21 21:34	
d7-N-MeFOSE	78.3	50 - 150	11/02/21 21:34	
d9-N-EtFOSE	92.5	50 - 150	11/02/21 21:34	

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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Sample Name: R2110978-007 MW5D-1021
Lab Code: 21102596-07

Service Request: 21102596
Date Collected: 10/19/21 13:55
Date Received: 10/29/21 10:00

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	0.93 J	4.2	0.56	1	11/02/21 22:05	11/01/21 16:23	
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	0.96 U	4.2	0.96	1	11/02/21 22:05	11/01/21 16:23	
N-Ethylperfluorooctanesulfonamidoacetic Acid	0.53 U	4.2	0.53	1	11/02/21 22:05	11/01/21 16:23	
N-Methylperfluorooctanesulfonamidoacetic Acid	0.55 U	4.2	0.55	1	11/02/21 22:05	11/01/21 16:23	
Perfluorobutanesulfonic Acid (PFBS)	0.30 U	4.2	0.30	1	11/02/21 22:05	11/01/21 16:23	
Perfluorobutanoic Acid (PFBA)	4.3 U ~~2.8 HH~~	4.3	2.2	1	11/05/21 13:58	11/04/21 16:13	
Perfluorodecanesulfonic Acid (PFDS)	1.2 U	4.2	1.2	1	11/02/21 22:05	11/01/21 16:23	
Perfluorodecanoic Acid (PFDA)	1.1 U	4.2	1.1	1	11/02/21 22:05	11/01/21 16:23	
Perfluorododecanoic Acid (PFDoA)	1.2 U	4.2	1.2	1	11/02/21 22:05	11/01/21 16:23	
Perfluoroheptanesulfonic Acid (PFHpS)	0.48 U	4.2	0.48	1	11/02/21 22:05	11/01/21 16:23	
Perfluoroheptanoic Acid (PFHpA)	4.2 U ~~0.96 J~~	4.2	0.37	1	11/02/21 22:05	11/01/21 16:23	
Perfluorohexanesulfonic Acid (PFHxS)	4.2 U ~~0.49 J~~	4.2	0.31	1	11/02/21 22:05	11/01/21 16:23	
Perfluorohexanoic Acid (PFHxA)	4.2 U ~~3.6 J~~	4.2	1.0	1	11/02/21 22:05	11/01/21 16:23	
Perfluorononanoic Acid (PFNA)	0.74 U	4.2	0.74	1	11/02/21 22:05	11/01/21 16:23	
Perfluorooctanesulfonamide (PFOSA)	0.60 U	4.2	0.60	1	11/02/21 22:05	11/01/21 16:23	
Perfluorooctanesulfonic Acid (PFOS)	0.76 U	1.7	0.76	1	11/02/21 22:05	11/01/21 16:23	
Perfluorooctanoic Acid (PFOA)	1.7 U ~~1.7 J~~	1.7	0.53	1	11/02/21 22:05	11/01/21 16:23	
Perfluoropentanoic Acid (PFPeA)	1.1 HH,U	4.3	1.1	1	11/05/21 13:58	11/04/21 16:13	
Perfluorotetradecanoic Acid (PFTeA)	2.2 U	4.2	2.2	1	11/02/21 22:05	11/01/21 16:23	
Perfluorotridecanoic Acid (PFTriA)	0.65 U	4.2	0.65	1	11/02/21 22:05	11/01/21 16:23	

ALS Group USA, Corp.
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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Sample Name: R2110978-007 MW5D-1021
Lab Code: 21102596-07

Service Request: 21102596
Date Collected: 10/19/21 13:55
Date Received: 10/29/21 10:00

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroundecanoic Acid (PFUnA)	0.84 J	4.2	0.83	1	11/02/21 22:05	11/01/21 16:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C2-FtS 6:2	116	50 - 150	11/02/21 22:05	
13C2-FtS 8:2	109	50 - 150	11/02/21 22:05	
13C2-PFDA	89.7	50 - 150	11/02/21 22:05	
13C2-PFDoA	81.5	50 - 150	11/02/21 22:05	
13C2-PFHxA	86.5	50 - 150	11/02/21 22:05	
13C2-PFTeA	79.3	50 - 150	11/02/21 22:05	
13C2-PFUnA	81.6	50 - 150	11/02/21 22:05	
13C3-HFPO-DA	89.4	50 - 150	11/02/21 22:05	
13C3-PFBS	93.3	50 - 150	11/02/21 22:05	
13C4-PFBA	92.5	50 - 150	11/05/21 13:58	
13C4-PFBA	85.9	50 - 150	11/02/21 22:05	
13C4-PFHpA	112	50 - 150	11/02/21 22:05	
13C4-PFOA	93.6	50 - 150	11/02/21 22:05	
13C4-PFOS	91.1	50 - 150	11/02/21 22:05	
13C5-PFNA	89.1	50 - 150	11/02/21 22:05	
13C5-PFPeA	101	50 - 150	11/05/21 13:58	
13C5-PFPeA	96.2	50 - 150	11/02/21 22:05	
13C8-FOSA	85.3	50 - 150	11/02/21 22:05	
18O2-PFHxS	93.8	50 - 150	11/02/21 22:05	
d3-N-MeFOSA	96.4	50 - 150	11/02/21 22:05	
d3-N-MeFOSAA	87.4	50 - 150	11/02/21 22:05	
d5-N-EtFOSA	101	50 - 150	11/02/21 22:05	
d5-N-EtFOSAA	95.7	50 - 150	11/02/21 22:05	
d7-N-MeFOSE	108	50 - 150	11/02/21 22:05	
d9-N-EtFOSE	99.5	50 - 150	11/02/21 22:05	

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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water
Sample Name: R2110978-008 FB-1021
Lab Code: 21102596-08

Service Request: 21102596
Date Collected: 10/19/21 15:10
Date Received: 10/29/21 10:00

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	0.56 U	4.2	0.56	1	11/02/21 22:15	11/01/21 16:23	
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	0.96 U	4.2	0.96	1	11/02/21 22:15	11/01/21 16:23	
N-Ethylperfluorooctanesulfonamidoacetic Acid	0.53 U	4.2	0.53	1	11/02/21 22:15	11/01/21 16:23	
N-Methylperfluorooctanesulfonamidoacetic Acid	0.55 U	4.2	0.55	1	11/02/21 22:15	11/01/21 16:23	
Perfluorobutanesulfonic Acid (PFBS)	0.30 U	4.2	0.30	1	11/02/21 22:15	11/01/21 16:23	
Perfluorobutanoic Acid (PFBA)	11	4.2	2.2	1	11/02/21 22:15	11/01/21 16:23	
Perfluorodecanesulfonic Acid (PFDS)	1.2 U	4.2	1.2	1	11/02/21 22:15	11/01/21 16:23	
Perfluorodecanoic Acid (PFDA)	1.1 U	4.2	1.1	1	11/02/21 22:15	11/01/21 16:23	
Perfluorododecanoic Acid (PFDoA)	1.2 U	4.2	1.2	1	11/02/21 22:15	11/01/21 16:23	
Perfluoroheptanesulfonic Acid (PFHpS)	0.48 U	4.2	0.48	1	11/02/21 22:15	11/01/21 16:23	
Perfluoroheptanoic Acid (PFHpA)	~~1.0 J~~ 4.2 U	4.2	0.37	1	11/02/21 22:15	11/01/21 16:23	
Perfluorohexanesulfonic Acid (PFHxS)	0.31 U	4.2	0.31	1	11/02/21 22:15	11/01/21 16:23	
Perfluorohexanoic Acid (PFHxA)	3.2 J	4.2	1.0	1	11/02/21 22:15	11/01/21 16:23	
Perfluorononanoic Acid (PFNA)	0.76 J	4.2	0.74	1	11/02/21 22:15	11/01/21 16:23	
Perfluorooctanesulfonamide (PFOSA)	0.60 U	4.2	0.60	1	11/02/21 22:15	11/01/21 16:23	
Perfluorooctanesulfonic Acid (PFOS)	0.76 U	1.7	0.76	1	11/02/21 22:15	11/01/21 16:23	
Perfluorooctanoic Acid (PFOA)	~~0.87 J~~ 1.7 U	1.7	0.53	1	11/02/21 22:15	11/01/21 16:23	
Perfluoropentanoic Acid (PFPeA)	5.5	4.2	1.1	1	11/02/21 22:15	11/01/21 16:23	
Perfluorotetradecanoic Acid (PFTeA)	2.2 U	4.2	2.2	1	11/02/21 22:15	11/01/21 16:23	
Perfluorotridecanoic Acid (PFTriA)	0.65 U	4.2	0.65	1	11/02/21 22:15	11/01/21 16:23	

ALS Group USA, Corp.
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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Sample Name: R2110978-008 FB-1021
Lab Code: 21102596-08

Service Request: 21102596
Date Collected: 10/19/21 15:10
Date Received: 10/29/21 10:00

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroundecanoic Acid (PFUnA)	0.83 U	4.2	0.83	1	11/02/21 22:15	11/01/21 16:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C2-FtS 6:2	110	50 - 150	11/02/21 22:15	
13C2-FtS 8:2	100	50 - 150	11/02/21 22:15	
13C2-PFDA	76.1	50 - 150	11/02/21 22:15	
13C2-PFDoA	70.0	50 - 150	11/02/21 22:15	
13C2-PFHxA	76.2	50 - 150	11/02/21 22:15	
13C2-PFTeA	67.0	50 - 150	11/02/21 22:15	
13C2-PFUnA	76.6	50 - 150	11/02/21 22:15	
13C3-HFPO-DA	78.9	50 - 150	11/02/21 22:15	
13C3-PFBS	83.2	50 - 150	11/02/21 22:15	
13C4-PFBA	75.3	50 - 150	11/02/21 22:15	
13C4-PFHpA	101	50 - 150	11/02/21 22:15	
13C4-PFOA	84.3	50 - 150	11/02/21 22:15	
13C4-PFOS	82.1	50 - 150	11/02/21 22:15	
13C5-PFNA	77.1	50 - 150	11/02/21 22:15	
13C5-PFPeA	88.8	50 - 150	11/02/21 22:15	
13C8-FOSA	76.7	50 - 150	11/02/21 22:15	
18O2-PFHxS	76.2	50 - 150	11/02/21 22:15	
d3-N-MeFOSA	75.5	50 - 150	11/02/21 22:15	
d3-N-MeFOSAA	76.8	50 - 150	11/02/21 22:15	
d5-N-EtFOSA	70.7	50 - 150	11/02/21 22:15	
d5-N-EtFOSAA	85.1	50 - 150	11/02/21 22:15	
d7-N-MeFOSE	85.3	50 - 150	11/02/21 22:15	
d9-N-EtFOSE	90.3	50 - 150	11/02/21 22:15	

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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Sample Name: R2110978-009 MW5S-1021
Lab Code: 21102596-09

Service Request: 21102596
Date Collected: 10/19/21 15:10
Date Received: 10/29/21 10:00

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	0.58 U	4.4	0.58	1	11/02/21 22:26	11/01/21 16:23	
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	0.99 U	4.4	0.99	1	11/02/21 22:26	11/01/21 16:23	
N-Ethylperfluorooctanesulfonamidoacetic Acid	0.55 U	4.4	0.55	1	11/02/21 22:26	11/01/21 16:23	
N-Methylperfluorooctanesulfonamidoacetic Acid	0.56 U	4.4	0.56	1	11/02/21 22:26	11/01/21 16:23	
Perfluorobutanesulfonic Acid (PFBS)	0.47 J	4.4	0.31	1	11/02/21 22:26	11/01/21 16:23	
Perfluorobutanoic Acid (PFBA)	4.3 U ~~2.8 J HH~~	4.3	2.2	1	11/05/21 14:06	11/04/21 16:13	
Perfluorodecanesulfonic Acid (PFDS)	1.2 U	4.4	1.2	1	11/02/21 22:26	11/01/21 16:23	
Perfluorodecanoic Acid (PFDA)	1.1 U	4.4	1.1	1	11/02/21 22:26	11/01/21 16:23	
Perfluorododecanoic Acid (PFDoA)	1.2 U	4.4	1.2	1	11/02/21 22:26	11/01/21 16:23	
Perfluoroheptanesulfonic Acid (PFHpS)	0.49 U	4.4	0.49	1	11/02/21 22:26	11/01/21 16:23	
Perfluoroheptanoic Acid (PFHpA)	4.4 U ~~2.3 J~~	4.4	0.38	1	11/02/21 22:26	11/01/21 16:23	
Perfluorohexanesulfonic Acid (PFHxS)	4.4 U ~~0.46 J~~	4.4	0.32	1	11/02/21 22:26	11/01/21 16:23	
Perfluorohexanoic Acid (PFHxA)	4.4 U ~~3.9 J~~	4.4	1.0	1	11/02/21 22:26	11/01/21 16:23	
Perfluorononanoic Acid (PFNA)	4.4 U ~~1.1 J~~	4.4	0.76	1	11/02/21 22:26	11/01/21 16:23	
Perfluorooctanesulfonamide (PFOSA)	0.62 U	4.4	0.62	1	11/02/21 22:26	11/01/21 16:23	
Perfluorooctanesulfonic Acid (PFOS)	2.3	1.7	0.78	1	11/02/21 22:26	11/01/21 16:23	
Perfluorooctanoic Acid (PFOA)	2.9 U ~~2.9~~	1.7	0.55	1	11/02/21 22:26	11/01/21 16:23	
Perfluoropentanoic Acid (PFPeA)	1.1 HH,U	4.3	1.1	1	11/05/21 14:06	11/04/21 16:13	
Perfluorotetradecanoic Acid (PFTeA)	2.3 U	4.4	2.3	1	11/02/21 22:26	11/01/21 16:23	
Perfluorotridecanoic Acid (PFTriA)	0.67 U	4.4	0.67	1	11/02/21 22:26	11/01/21 16:23	

ALS Group USA, Corp.
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Analytical Report

Client: ALS - ROCHESTER

Project: R2110978

Sample Matrix: Water

Service Request: 21102596

Date Collected: 10/19/21 15:10

Date Received: 10/29/21 10:00

Sample Name: R2110978-009 MW5S-1021

Units: ng/L

Lab Code: 21102596-09

Basis: Wet

Organic LC

Analysis Method: E537 Mod

Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroundecanoic Acid (PFUnA)	0.85 U	4.4	0.85	1	11/02/21 22:26	11/01/21 16:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C2-FtS 6:2	146	50 - 150	11/02/21 22:26	
13C2-FtS 8:2	118	50 - 150	11/02/21 22:26	
13C2-PFDA	87.3	50 - 150	11/02/21 22:26	
13C2-PFDoA	81.1	50 - 150	11/02/21 22:26	
13C2-PFHxA	87.5	50 - 150	11/02/21 22:26	
13C2-PFTeA	67.7	50 - 150	11/02/21 22:26	
13C2-PFUnA	81.4	50 - 150	11/02/21 22:26	
13C3-HFPO-DA	84.8	50 - 150	11/02/21 22:26	
13C3-PFBS	88.8	50 - 150	11/02/21 22:26	
13C4-PFBA	109	50 - 150	11/05/21 14:06	
13C4-PFBA	95.4	50 - 150	11/02/21 22:26	
13C4-PFHpA	97.4	50 - 150	11/02/21 22:26	
13C4-PFOA	109	50 - 150	11/02/21 22:26	
13C4-PFOS	95.3	50 - 150	11/02/21 22:26	
13C5-PFNA	87.9	50 - 150	11/02/21 22:26	
13C5-PFPeA	115	50 - 150	11/05/21 14:06	
13C5-PFPeA	93.2	50 - 150	11/02/21 22:26	
13C8-FOSA	82.3	50 - 150	11/02/21 22:26	
18O2-PFHxS	104	50 - 150	11/02/21 22:26	
d3-N-MeFOSA	92.2	50 - 150	11/02/21 22:26	
d3-N-MeFOSAA	84.8	50 - 150	11/02/21 22:26	
d5-N-EtFOSA	96.4	50 - 150	11/02/21 22:26	
d5-N-EtFOSAA	92.1	50 - 150	11/02/21 22:26	
d7-N-MeFOSE	97.1	50 - 150	11/02/21 22:26	
d9-N-EtFOSE	94.9	50 - 150	11/02/21 22:26	

ALS Group USA, Corp.
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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Sample Name: R2110978-010 DUP1-1021
Lab Code: 21102596-10

Service Request: 21102596
Date Collected: 10/19/21 15:15
Date Received: 10/29/21 10:00

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	0.56 U	4.2	0.56	1	11/02/21 22:36	11/01/21 16:23	
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	0.96 U	4.2	0.96	1	11/02/21 22:36	11/01/21 16:23	
N-Ethylperfluorooctanesulfonamidoacetic Acid	0.53 U	4.2	0.53	1	11/02/21 22:36	11/01/21 16:23	
N-Methylperfluorooctanesulfonamidoacetic Acid	0.55 U	4.2	0.55	1	11/02/21 22:36	11/01/21 16:23	
Perfluorobutanesulfonic Acid (PFBS)	0.40 J	4.2	0.30	1	11/02/21 22:36	11/01/21 16:23	
Perfluorobutanoic Acid (PFBA)	4.3 U ~~3.2 JHH~~	4.3	2.3	1	11/05/21 14:14	11/04/21 16:13	
Perfluorodecanesulfonic Acid (PFDS)	1.2 U	4.2	1.2	1	11/02/21 22:36	11/01/21 16:23	
Perfluorodecanoic Acid (PFDA)	1.1 U	4.2	1.1	1	11/02/21 22:36	11/01/21 16:23	
Perfluorododecanoic Acid (PFDoA)	1.2 U	4.2	1.2	1	11/02/21 22:36	11/01/21 16:23	
Perfluoroheptanesulfonic Acid (PFHpS)	0.48 U	4.2	0.48	1	11/02/21 22:36	11/01/21 16:23	
Perfluoroheptanoic Acid (PFHpA)	4.2 U ~~3.3 J~~	4.2	0.37	1	11/02/21 22:36	11/01/21 16:23	
Perfluorohexanesulfonic Acid (PFHxS)	4.2 U ~~0.40 J~~	4.2	0.31	1	11/02/21 22:36	11/01/21 16:23	
Perfluorohexanoic Acid (PFHxA)	4.2 U ~~3.7 J~~	4.2	1.0	1	11/02/21 22:36	11/01/21 16:23	
Perfluorononanoic Acid (PFNA)	4.2 U ~~0.90 J~~	4.2	0.74	1	11/02/21 22:36	11/01/21 16:23	
Perfluorooctanesulfonamide (PFOSA)	0.60 U	4.2	0.60	1	11/02/21 22:36	11/01/21 16:23	
Perfluorooctanesulfonic Acid (PFOS)	2.3	1.7	0.76	1	11/02/21 22:36	11/01/21 16:23	
Perfluorooctanoic Acid (PFOA)	3.5 U ~~3.5~~	1.7	0.53	1	11/02/21 22:36	11/01/21 16:23	
Perfluoropentanoic Acid (PFPeA)	1.1 HH,U	4.3	1.1	1	11/05/21 14:14	11/04/21 16:13	
Perfluorotetradecanoic Acid (PFTeA)	2.2 U	4.2	2.2	1	11/02/21 22:36	11/01/21 16:23	
Perfluorotridecanoic Acid (PFTriA)	0.91 J	4.2	0.65	1	11/02/21 22:36	11/01/21 16:23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Service Request: 21102596
Date Collected: 10/19/21 15:15
Date Received: 10/29/21 10:00

Sample Name: R2110978-010 DUP1-1021
Lab Code: 21102596-10

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroundecanoic Acid (PFUnA)	0.83 U	4.2	0.83	1	11/02/21 22:36	11/01/21 16:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C2-FtS 6:2	162	50 - 150	11/02/21 22:36	S
13C2-FtS 8:2	122	50 - 150	11/02/21 22:36	
13C2-PFDA	84.9	50 - 150	11/02/21 22:36	
13C2-PFDoA	75.6	50 - 150	11/02/21 22:36	
13C2-PFHxA	84.3	50 - 150	11/02/21 22:36	
13C2-PFTeA	60.1	50 - 150	11/02/21 22:36	
13C2-PFUnA	75.5	50 - 150	11/02/21 22:36	
13C3-HFPO-DA	77.3	50 - 150	11/02/21 22:36	
13C3-PFBS	81.0	50 - 150	11/02/21 22:36	
13C4-PFBA	110	50 - 150	11/05/21 14:14	
13C4-PFBA	87.0	50 - 150	11/02/21 22:36	
13C4-PFHpA	97.3	50 - 150	11/02/21 22:36	
13C4-PFOA	88.3	50 - 150	11/02/21 22:36	
13C4-PFOS	84.4	50 - 150	11/02/21 22:36	
13C5-PFNA	87.4	50 - 150	11/02/21 22:36	
13C5-PFPeA	123	50 - 150	11/05/21 14:14	
13C5-PFPeA	90.3	50 - 150	11/02/21 22:36	
13C8-FOSA	77.6	50 - 150	11/02/21 22:36	
18O2-PFHxS	82.7	50 - 150	11/02/21 22:36	
d3-N-MeFOSA	84.0	50 - 150	11/02/21 22:36	
d3-N-MeFOSAA	84.4	50 - 150	11/02/21 22:36	
d5-N-EtFOSA	96.6	50 - 150	11/02/21 22:36	
d5-N-EtFOSAA	92.6	50 - 150	11/02/21 22:36	
d7-N-MeFOSE	101	50 - 150	11/02/21 22:36	
d9-N-EtFOSE	92.4	50 - 150	11/02/21 22:36	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water
Sample Name: R2110978-011 EB1-1021
Lab Code: 21102596-11

Service Request: 21102596
Date Collected: 10/20/21 07:30
Date Received: 10/29/21 10:00

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	0.61 U	4.6	0.61	1	11/02/21 22:47	11/01/21 16:23	
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	1.0 U	4.6	1.0	1	11/02/21 22:47	11/01/21 16:23	
N-Ethylperfluorooctanesulfonamidoacetic Acid	0.58 U	4.6	0.58	1	11/02/21 22:47	11/01/21 16:23	
N-Methylperfluorooctanesulfonamidoacetic Acid	0.59 U	4.6	0.59	1	11/02/21 22:47	11/01/21 16:23	
Perfluorobutanesulfonic Acid (PFBS)	0.32 U	4.6	0.32	1	11/02/21 22:47	11/01/21 16:23	
Perfluorobutanoic Acid (PFBA)	2.4 HH,U	4.6	2.4	1	11/05/21 14:22	11/04/21 16:13	
Perfluorodecanesulfonic Acid (PFDS)	1.3 U	4.6	1.3	1	11/02/21 22:47	11/01/21 16:23	
Perfluorodecanoic Acid (PFDA)	1.1 U	4.6	1.1	1	11/02/21 22:47	11/01/21 16:23	
Perfluorododecanoic Acid (PFDoA)	1.3 U	4.6	1.3	1	11/02/21 22:47	11/01/21 16:23	
Perfluoroheptanesulfonic Acid (PFHpS)	0.52 U	4.6	0.52	1	11/02/21 22:47	11/01/21 16:23	
Perfluoroheptanoic Acid (PFHpA)	4.6 U ~~0.92 J~~	4.6	0.41	1	11/02/21 22:47	11/01/21 16:23	
Perfluorohexanesulfonic Acid (PFHxS)	0.34 U	4.6	0.34	1	11/02/21 22:47	11/01/21 16:23	
Perfluorohexanoic Acid (PFHxA)	3.1 J	4.6	1.1	1	11/02/21 22:47	11/01/21 16:23	
Perfluorononanoic Acid (PFNA)	0.80 U	4.6	0.80	1	11/02/21 22:47	11/01/21 16:23	
Perfluorooctanesulfonamide (PFOSA)	0.66 U	4.6	0.66	1	11/02/21 22:47	11/01/21 16:23	
Perfluorooctanesulfonic Acid (PFOS)	0.82 U	1.8	0.82	1	11/02/21 22:47	11/01/21 16:23	
Perfluorooctanoic Acid (PFOA)	1.8 U ~~0.87 J~~	1.8	0.58	1	11/02/21 22:47	11/01/21 16:23	
Perfluoropentanoic Acid (PFPeA)	1.2 HH,U	4.6	1.2	1	11/05/21 14:22	11/04/21 16:13	
Perfluorotetradecanoic Acid (PFTeA)	2.4 U	4.6	2.4	1	11/02/21 22:47	11/01/21 16:23	
Perfluorotridecanoic Acid (PFTriA)	0.71 U	4.6	0.71	1	11/02/21 22:47	11/01/21 16:23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Sample Name: R2110978-011 EB1-1021
Lab Code: 21102596-11

Service Request: 21102596
Date Collected: 10/20/21 07:30
Date Received: 10/29/21 10:00

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroundecanoic Acid (PFUnA)	0.90 U	4.6	0.90	1	11/02/21 22:47	11/01/21 16:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C2-FtS 6:2	100	50 - 150	11/02/21 22:47	
13C2-FtS 8:2	106	50 - 150	11/02/21 22:47	
13C2-PFDA	65.7	50 - 150	11/02/21 22:47	
13C2-PFDoA	65.1	50 - 150	11/02/21 22:47	
13C2-PFHxA	75.1	50 - 150	11/02/21 22:47	
13C2-PFTeA	73.8	50 - 150	11/02/21 22:47	
13C2-PFUnA	81.5	50 - 150	11/02/21 22:47	
13C3-HFPO-DA	89.4	50 - 150	11/02/21 22:47	
13C3-PFBS	84.6	50 - 150	11/02/21 22:47	
13C4-PFBA	113	50 - 150	11/05/21 14:22	
13C4-PFBA	72.2	50 - 150	11/02/21 22:47	
13C4-PFHpA	83.0	50 - 150	11/02/21 22:47	
13C4-PFOA	73.9	50 - 150	11/02/21 22:47	
13C4-PFOS	71.4	50 - 150	11/02/21 22:47	
13C5-PFNA	71.6	50 - 150	11/02/21 22:47	
13C5-PFPeA	123	50 - 150	11/05/21 14:22	
13C5-PFPeA	90.8	50 - 150	11/02/21 22:47	
13C8-FOSA	88.6	50 - 150	11/02/21 22:47	
18O2-PFHxS	75.1	50 - 150	11/02/21 22:47	
d3-N-MeFOSA	80.0	50 - 150	11/02/21 22:47	
d3-N-MeFOSAA	85.0	50 - 150	11/02/21 22:47	
d5-N-EtFOSA	80.3	50 - 150	11/02/21 22:47	
d5-N-EtFOSAA	95.0	50 - 150	11/02/21 22:47	
d7-N-MeFOSE	71.4	50 - 150	11/02/21 22:47	
d9-N-EtFOSE	96.3	50 - 150	11/02/21 22:47	

Appendix B

Laboratory QC Documentation

ALS Group USA, Corp.
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QA/QC Report

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

Service Request: R2110978
Date Collected: 10/18/21
Date Received: 10/20/21
Date Analyzed: 10/26/21
Date Extracted: NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: CW4A-1021
Lab Code: R2110978-001
Analysis Method: 8260C
Prep Method: EPA 5030C

Units: ug/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike RQ2113636-05			Duplicate Matrix Spike RQ2113636-06			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Acetone	10 U	50.5	50.0	101	51.2	50.0	102	35-183	1	30
Benzene	5.0 U	52.4	50.0	105	53.7	50.0	107	76-129	3	30
Bromodichloromethane	5.0 U	52.6	50.0	105	54.8	50.0	110	78-133	4	30
Bromoform	5.0 U	48.4	50.0	97	50.2	50.0	100	58-133	4	30
Bromomethane	5.0 U	55.5	50.0	111	57.0	50.0	114	10-184	3	30
2-Butanone (MEK)	10 U	46.3	50.0	93	48.2	50.0	96	61-137	4	30
Carbon Disulfide	10 U	56.0	50.0	112	59.8	50.0	120	59-140	7	30
Carbon Tetrachloride	5.0 U	56.0	50.0	112	59.2	50.0	118	65-135	6	30
Chlorobenzene	5.0 U	51.4	50.0	103	53.1	50.0	106	76-125	3	30
Chloroethane	5.0 U	66.5	50.0	133	66.4	50.0	133	48-146	<1	30
Chloroform	5.0 U	47.6	50.0	95	49.6	50.0	99	75-130	4	30
Chloromethane	5.0 U	65.8	50.0	132	68.9	50.0	138	55-160	5	30
Dibromochloromethane	5.0 U	51.7	50.0	103	53.9	50.0	108	72-128	4	30
1,1-Dichloroethane	5.0 U	54.9	50.0	110	57.6	50.0	115	74-132	5	30
1,2-Dibromoethane	5.0 U	50.7	50.0	101	52.5	50.0	105	67-127	4	30
1,2-Dichloroethane	5.0 U	50.9	50.0	102	52.7	50.0	105	68-130	3	30
1,1-Dichloroethene	5.0 U	56.4	50.0	113	61.7	50.0	123 *	71-118	9	30
cis-1,2-Dichloroethene	5.0 U	55.1	50.0	110	54.8	50.0	110	77-127	<1	30
trans-1,2-Dichloroethene	5.0 U	54.7	50.0	109	57.2	50.0	114	73-118	5	30
1,2-Dichloropropane	5.0 U	53.5	50.0	107	54.6	50.0	109	79-124	2	30
cis-1,3-Dichloropropene	5.0 U	48.9	50.0	98	50.8	50.0	102	52-134	4	30
trans-1,3-Dichloropropene	5.0 U	47.8	50.0	96	50.7	50.0	101	71-133	6	30
Ethylbenzene	5.0 U	55.2	50.0	110	56.2	50.0	112	72-134	2	30
2-Hexanone	10 U	49.2	50.0	98	50.7	50.0	101	56-132	3	30
Methylene Chloride	5.0 U	50.4	50.0	101	51.6	50.0	103	73-122	2	30
4-Methyl-2-pentanone (MIBK)	10 U	51.3	50.0	103	52.0	50.0	104	60-141	1	30
Styrene	5.0 U	50.4	50.0	101	52.1	50.0	104	74-136	3	30
1,1,2,2-Tetrachloroethane	5.0 U	55.5	50.0	111	57.3	50.0	115	72-122	3	30
Tetrachloroethene	5.0 U	51.9	50.0	104	53.3	50.0	107	72-125	3	30
Toluene	5.0 U	54.1	50.0	108	55.4	50.0	111	79-119	2	30
1,1,1-Trichloroethane	5.0 U	54.9	50.0	110	58.3	50.0	117	74-127	6	30
1,1,2-Trichloroethane	5.0 U	52.0	50.0	104	52.8	50.0	106	82-121	2	30
Trichloroethene	5.0 U	47.1	50.0	94	48.1	50.0	96	74-122	2	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.
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QA/QC Report

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

Service Request: R2110978
Date Analyzed: 10/27/21 09:29

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C

Calibration Date: 8/11/2021

File ID: I:\ACQUDATA\MSVOA14\Data\102721\F9588.D\

Calibration ID: RC2100107

Signal ID: 1

Analysis Lot: 743909

Units: ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Acetone	50.0	39.7	0.3774	0.2998	-20.6*	NA	±20	Average RF
Benzene	50.0	49.6	1.2762	1.2654	-0.8	NA	±20	Average RF
Bromodichloromethane	50.0	51.8	0.4068	0.4312	NA	3.6	±20	Quadratic
Bromoform	50.0	46.8	0.2083	0.2009	NA	-6.4	±20	Quadratic
Bromomethane	50.0	66.4	0.5101	0.6771	32.7*	NA	±20	Average RF
2-Butanone (MEK)	50.0	42.3	0.5163	0.4371	-15.3	NA	±20	Average RF
Carbon Disulfide	50.0	58.8	1.0663	1.2479	NA	17.7	±20	Quadratic
Carbon Tetrachloride	50.0	53.4	0.341	0.3785	NA	6.7	±20	Quadratic
Chlorobenzene	50.0	47.6	0.9493	0.904	-4.8	NA	±20	Average RF
Chloroethane	50.0	56.5	0.4365	0.4931	13.0	NA	±20	Average RF
Chloroform	50.0	47.3	1.0291	0.974	-5.4	NA	±20	Average RF
Chloromethane	50.0	45.6	0.6286	0.5739	-8.7	NA	±20	Average RF
Dibromochloromethane	50.0	50.7	0.2976	0.3179	NA	1.4	±20	Quadratic
1,1-Dichloroethane	50.0	52.3	0.9452	0.9891	4.6	NA	±20	Average RF
1,2-Dibromoethane	50.0	48.8	0.3716	0.3626	-2.4	NA	±20	Average RF
1,2-Dichloroethane	50.0	49.4	0.5477	0.541	-1.2	NA	±20	Average RF
1,1-Dichloroethene	50.0	51.9	0.4509	0.4684	3.9	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	50.3	0.567	0.5703	0.6	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	51.9	0.4788	0.4965	3.7	NA	±20	Average RF
1,2-Dichloropropane	50.0	50.3	0.3586	0.3608	0.6	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	51.8	0.4663	0.4999	NA	3.6	±20	Quadratic
trans-1,3-Dichloropropene	50.0	51.4	0.4127	0.4501	NA	2.8	±20	Quadratic
Ethylbenzene	50.0	49.2	0.4886	0.4808	-1.6	NA	±20	Average RF
2-Hexanone	50.0	43.5	0.4589	0.3992	-13.0	NA	±20	Average RF
Methylene Chloride	50.0	49.2	0.5545	0.5455	-1.6	NA	±20	Average RF
4-Methyl-2-pentanone (MIBK)	50.0	46.5	0.555	0.5157	-7.1	NA	±20	Average RF
Styrene	50.0	49.1	1.021	1.0023	-1.8	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	50.7	0.9185	1.0047	NA	1.4	±20	Quadratic
Tetrachloroethene	50.0	48.4	0.2611	0.253	-3.1	NA	±20	Average RF
Toluene	50.0	50.2	1.3622	1.3672	0.4	NA	±20	Average RF
1,1,1-Trichloroethane	50.0	51.9	0.7309	0.7592	3.9	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	49.8	0.3238	0.3224	-0.4	NA	±20	Average RF
Trichloroethene	50.0	44.6	0.3528	0.3151	-10.7	NA	±20	Average RF
Vinyl Chloride	50.0	54.1	0.6425	0.6951	8.2	NA	±20	Average RF
o-Xylene	50.0	48.4	0.6052	0.5863	-3.1	NA	±20	Average RF
m,p-Xylenes	100	99.2	0.614	0.6091	-0.8	NA	±20	Average RF

ALS Group USA, Corp.
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QA/QC Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Service Request: 21102596

SURROGATE RECOVERY SUMMARY
Organic LC

Analysis Method: E537 Mod
Extraction Method: E537 Mod

Analysis Lab Lot: LCMS1_211102A

Sample Name	Lab Code	13C2-FtS 6:2	13C2-FtS 8:2	13C2-PFDA
		50 - 150	50 - 150	50 - 150
R2110978-001 CW4A-1021	21102596-01	243 S *	160 S *	116
21102596-01AMS	21102596-01AMS	210 S *	144	102
21102596-01AMSD	21102596-01AMSD	147 R	125	81.6
R2110978-002 CW4B-1021	21102596-02	145	104	77.5
R2110978-004 CW3A-1021	21102596-04	164 S *	132	93.4
R2110978-005 MW17D-1021	21102596-05	96.0	103	57.9
R2110978-006 MW17S-1021	21102596-06	122	106	69.1
R2110978-007 MW5D-1021	21102596-07	116	109	89.7
R2110978-008 FB-1021	21102596-08	110	100	76.1
R2110978-009 MW5S-1021	21102596-09	146	118	87.3
R2110978-010 DUP1-1021	21102596-10	162 S *	122	84.9
R2110978-011 EB1-1021	21102596-11	100	106	65.7
LCS-186437	LCS-186437	117	128	104
MBLK-186437	MBLK-186437	109	120	87.0

ALS Group USA, Corp.
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QA/QC Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Service Request: 21102596
Date Collected: N/A
Date Received: N/A
Date Analyzed: 11/02/2021
Date Extracted: 11/01/2021

Duplicate Matrix Spike Summary
Organic LC

Sample Name: 21102596-01A
Lab Code: R2110978-001 CW4A-1021
Analysis Method: E537 Mod
Prep Method: E537 Mod

Units: ng/L
Basis: Wet
AnalysisLabLot: LCMS1_211102A

Analyte Name	Matrix Spike 21102596-01AMS				Duplicate Matrix Spike 21102596-01AMSD				RPD	RPD Limit
	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits		
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	0	29.50	27.45	108	31.38	27.35	115	64-140	6.18	30
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	0	26.30	27.81	94.6	29.65	27.71	107	67-138	11.9	30
N-Ethylperfluorooctanesulfonamidoacetic Acid	0	33.39	28.99	115	34.21	28.88	118	61-135	2.44	30
N-Methylperfluorooctanesulfonamidoacetic Acid	0	34.79	28.99	120	34.04	28.88	118	65-136	2.17	30
Perfluorobutanesulfonic Acid (PFBS)	1.371	28.71	25.63	107	30	25.54	112	72-130	4.4	30
Perfluorobutanoic Acid (PFBA)	5.971	38.23	28.99	111	55.06 SR	28.88	170 *	73-129	36.1*	30
Perfluorodecanesulfonic Acid (PFDS)	0	21.37	27.9	76.6	27.16	27.8	97.7	53-142	23.8	30
Perfluorodecanoic Acid (PFDA)	0.7421	30.06	28.99	101	33.5	28.88	113	71-129	10.8	30
Perfluorododecanoic Acid (PFDoA)	0.6447	27.41	28.99	92.3	32.99	28.88	112	72-134	18.5	30
Perfluoroheptanesulfonic Acid (PFHpS)	0	23.68	27.63	85.7	23.7	27.53	86.1	69-134	0.0781	30
Perfluoroheptanoic Acid (PFHpA)	0.6684	32.88	28.99	111	36.75	28.88	125	72-130	11.1	30
Perfluorohexanesulfonic Acid (PFHxS)	1.039	31.07	26.36	114	31.21	26.26	115	68-131	0.465	30

Results flagged with an asterisk (*) indicate values outside control criteria.

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: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Service Request: 21102596
Date Collected: N/A
Date Received: N/A
Date Analyzed: 11/02/2021
Date Extracted: 11/01/2021

Duplicate Matrix Spike Summary
Organic LC

Sample Name: 21102596-01A
Lab Code: R2110978-001 CW4A-1021
Analysis Method: E537 Mod
Prep Method: E537 Mod

Units: ng/L
Basis: Wet
AnalysisLabLot: LCMS1_211102A

Analyte Name	Matrix Spike 21102596-01AMS				Duplicate Matrix Spike 21102596-01AMSD					
	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Perfluorohexanoic Acid (PFHxA)	1.366	35.24	28.99	117	40.52 S	28.88	136 *	72-129	13.9	30
Perfluorononanoic Acid (PFNA)	1.176	31.96	28.99	106	38.89 S	28.88	131 *	69-130	19.6	30
Perfluorooctanesulfonamide (PFOSA)	0	29.51	28.99	102	31.48	28.88	109	67-137	6.44	30
Perfluorooctanesulfonic Acid (PFOS)	6.516	34.78	26.9	105	35.6	26.81	108	65-140	2.32	30
Perfluorooctanoic Acid (PFOA)	7.179	38.79	28.99	109	47 S	28.88	138 *	71-133	19.1	30
Perfluoropentanoic Acid (PFPeA)	0.7868	30.12	28.99	101	40.48 S	28.88	137 *	72-129	29.3	30
Perfluorotetradecanoic Acid (PFTeA)	0.3632	27.73	28.99	94.4	29.42	28.88	101	71-132	5.9	30
Perfluorotridecanoic Acid (PFTriA)	0.7447	27.29	28.99	91.6	24.95	28.88	83.8	65-144	8.96	30
Perfluoroundecanoic Acid (PFUnA)	0.6711	31.69	28.99	107	31.36	28.88	106	69-133	1.02	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Service Request: 21102596
Date Collected: NA
Date Received: NA

Sample Name: MBLK-186437
Lab Code: MBLK-186437

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	0.66 U	5.0	0.66	1	11/02/21 19:59	11/01/21 16:23	
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	1.1 U	5.0	1.1	1	11/02/21 19:59	11/01/21 16:23	
N-Ethylperfluorooctanesulfonamidoacetic Acid	0.63 U	5.0	0.63	1	11/02/21 19:59	11/01/21 16:23	
N-Methylperfluorooctanesulfonamidoacetic Acid	0.64 U	5.0	0.64	1	11/02/21 19:59	11/01/21 16:23	
Perfluorobutanesulfonic Acid (PFBS)	0.35 U	5.0	0.35	1	11/02/21 19:59	11/01/21 16:23	
Perfluorobutanoic Acid (PFBA)	2.6 U	5.0	2.6	1	11/02/21 19:59	11/01/21 16:23	
Perfluorodecanesulfonic Acid (PFDS)	1.4 U	5.0	1.4	1	11/02/21 19:59	11/01/21 16:23	
Perfluorodecanoic Acid (PFDA)	1.2 U	5.0	1.2	1	11/02/21 19:59	11/01/21 16:23	
Perfluorododecanoic Acid (PFDoA)	1.4 U	5.0	1.4	1	11/02/21 19:59	11/01/21 16:23	
Perfluoroheptanesulfonic Acid (PFHpS)	0.57 U	5.0	0.57	1	11/02/21 19:59	11/01/21 16:23	
Perfluoroheptanoic Acid (PFHpA)	2.083 J	5.0	0.44	1	11/02/21 19:59	11/01/21 16:23	
Perfluorohexanesulfonic Acid (PFHxS)	0.3744 J	5.0	0.37	1	11/02/21 19:59	11/01/21 16:23	
Perfluorohexanoic Acid (PFHxA)	1.2 U	5.0	1.2	1	11/02/21 19:59	11/01/21 16:23	
Perfluorononanoic Acid (PFNA)	0.87 U	5.0	0.87	1	11/02/21 19:59	11/01/21 16:23	
Perfluorooctanesulfonamide (PFOSA)	0.71 U	5.0	0.71	1	11/02/21 19:59	11/01/21 16:23	
Perfluorooctanesulfonic Acid (PFOS)	0.89 U	2.0	0.89	1	11/02/21 19:59	11/01/21 16:23	
Perfluorooctanoic Acid (PFOA)	0.6688 J	2.0	0.63	1	11/02/21 19:59	11/01/21 16:23	
Perfluoropentanoic Acid (PFPeA)	1.3 U	5.0	1.3	1	11/02/21 19:59	11/01/21 16:23	
Perfluorotetradecanoic Acid (PFTeA)	2.6 U	5.0	2.6	1	11/02/21 19:59	11/01/21 16:23	
Perfluorotridecanoic Acid (PFTriA)	0.77 U	5.0	0.77	1	11/02/21 19:59	11/01/21 16:23	

ALS Group USA, Corp.
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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Service Request: 21102596
Date Collected: NA
Date Received: NA

Sample Name: MBLK-186437
Lab Code: MBLK-186437

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroundecanoic Acid (PFUnA)	0.97 U	5.0	0.97	1	11/02/21 19:59	11/01/21 16:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C2-FtS 6:2	109	50 - 150	11/02/21 19:59	
13C2-FtS 8:2	120	50 - 150	11/02/21 19:59	
13C2-PFDA	87.0	50 - 150	11/02/21 19:59	
13C2-PFDoA	83.4	50 - 150	11/02/21 19:59	
13C2-PFHxA	105	50 - 150	11/02/21 19:59	
13C2-PFTeA	111	50 - 150	11/02/21 19:59	
13C2-PFUnA	92.8	50 - 150	11/02/21 19:59	
13C3-HFPO-DA	113	50 - 150	11/02/21 19:59	
13C3-PFBS	102	50 - 150	11/02/21 19:59	
13C4-PFBA	94.9	50 - 150	11/02/21 19:59	
13C4-PFHpA	98.5	50 - 150	11/02/21 19:59	
13C4-PFOA	94.9	50 - 150	11/02/21 19:59	
13C4-PFOS	90.8	50 - 150	11/02/21 19:59	
13C5-PFNA	101	50 - 150	11/02/21 19:59	
13C5-PFPeA	110	50 - 150	11/02/21 19:59	
13C8-FOSA	99.8	50 - 150	11/02/21 19:59	
18O2-PFHxS	95.3	50 - 150	11/02/21 19:59	
d3-N-MeFOSA	109	50 - 150	11/02/21 19:59	
d3-N-MeFOSAA	94.0	50 - 150	11/02/21 19:59	
d5-N-EtFOSA	97.8	50 - 150	11/02/21 19:59	
d5-N-EtFOSAA	96.1	50 - 150	11/02/21 19:59	
d7-N-MeFOSE	90.7	50 - 150	11/02/21 19:59	
d9-N-EtFOSE	111	50 - 150	11/02/21 19:59	

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Analytical Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Service Request: 21102596
Date Collected: NA
Date Received: NA

Sample Name: MBLK-186655
Lab Code: MBLK-186655

Units: ng/L
Basis: Wet

Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluorobutanoic Acid (PFBA)	2.6 U	5.0	2.6	1	11/05/21 15:38	11/04/21 16:13	
Perfluoroheptanoic Acid (PFHpA)	0.44 U	5.0	0.44	1	11/05/21 15:38	11/04/21 16:13	
Perfluorohexanoic Acid (PFHxA)	1.2 U	5.0	1.2	1	11/05/21 15:38	11/04/21 16:13	
Perfluoropentanoic Acid (PFPeA)	1.3 U	5.0	1.3	1	11/05/21 15:38	11/04/21 16:13	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C2-FtS 6:2	136	50 - 150	11/05/21 15:38	
13C2-FtS 8:2	134	50 - 150	11/05/21 15:38	
13C2-PFDA	110	50 - 150	11/05/21 15:38	
13C2-PFDoA	114	50 - 150	11/05/21 15:38	
13C2-PFHxA	131	50 - 150	11/05/21 15:38	
13C2-PFTeA	97.8	50 - 150	11/05/21 15:38	
13C2-PFUnA	97.8	50 - 150	11/05/21 15:38	
13C3-HFPO-DA	159	50 - 150	11/05/21 15:38	S
13C3-PFBS	103	50 - 150	11/05/21 15:38	
13C4-PFBA	129	50 - 150	11/05/21 15:38	
13C4-PFHpA	102	50 - 150	11/05/21 15:38	
13C4-PFOA	123	50 - 150	11/05/21 15:38	
13C4-PFOS	120	50 - 150	11/05/21 15:38	
13C5-PFNA	111	50 - 150	11/05/21 15:38	
13C5-PFPeA	119	50 - 150	11/05/21 15:38	
13C8-FOSA	112	50 - 150	11/05/21 15:38	
18O2-PFHxS	95.0	50 - 150	11/05/21 15:38	
d3-N-MeFOSA	96.5	50 - 150	11/05/21 15:38	
d3-N-MeFOSAA	109	50 - 150	11/05/21 15:38	
d5-N-EtFOSA	106	50 - 150	11/05/21 15:38	
d5-N-EtFOSAA	114	50 - 150	11/05/21 15:38	
d7-N-MeFOSE	134	50 - 150	11/05/21 15:38	
d9-N-EtFOSE	107	50 - 150	11/05/21 15:38	

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QA/QC Report

Client: ALS - ROCHESTER
Project: R2110978
Sample Matrix: Water

Service Request: 21102596
Date Analyzed: 11/05/2021
Date Extracted: 11/04/2021

Duplicate Lab Control Sample Summary
Organic LC

Analysis Method: E537 Mod
Prep Method: E537 Mod

Units: ng/L
Basis: Wet
Analysis Lot: LCMS1_211105A

Analyte Name	Lab Control Sample LCS-186655			Duplicate Lab Control Sample LCSD-186655			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Perfluorobutanoic Acid (PFBA)	40.34	32	126	38.71	32	121	73-129	4.13	30
Perfluoroheptanoic Acid (PFHpA)	34.35	32	107	32.99	32	103	72-130	4.03	30
Perfluorohexanoic Acid (PFHxA)	41.25	32	129	41.48 S	32	130 *	72-129	0.534	30
Perfluoropentanoic Acid (PFPeA)	32.7	32	102	31.44	32	98.2	72-129	3.94	30

ALS Group USA, Corp.
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QA/QC Report

Client: ALS - ROCHESTER
Project: R2110978/

Service Request:21102596
Date Analyzed:11/02/21 19:38

Internal Standard Area and RT SUMMARY
Organic LC

File ID: 21110252
Instrument ID: LCMS1
Analysis Method: E537 Mod

Lab Code:CCV3-211102
Analysis Lot:LCMS1_211102A
Signal ID:

	13C2-FtS 4:2 IS		13C2-FtS 6:2 IS		13C2-FtS 8:2 IS	
	Area	RT	Area	RT	Area	RT
Result ==>	491,845	3.50	319,284	3.88	296,808	4.26
Upper Limit ==>	983,690	4.00	638,568	4.38	593,616	4.76
Lower Limit ==>	245,923	3.00	159,642	3.38	148,404	3.76

Associated Analyses

CCV3-211102	CCV3-211102	491845	3.5	319284	3.88	296808	4.26
MBLK-186437	MBLK-186437	535347	3.5	310534	3.87	327733	4.26
LCS-186437	LCS-186437	492508	3.5	326032	3.88	340607	4.26
21102596-01AMSMS	21102596-01AMS	970785	3.5	518643	3.87	340244	4.26
21102596-01AMSDDMS	21102596-01AMSD	754823	3.5	376485	3.87	305613	4.26
R2110978-001 CW4A-1021	21102596-01	1018901*	3.5	585073	3.87	368437	4.26
R2110978-002 CW4B-1021	21102596-02	816533	3.5	438788	3.87	302707	4.26
R2110978-003 CW3B-1021	21102596-03	612924	3.5	352445	3.87	345213	4.26
R2110978-004 CW3A-1021	21102596-04	732159	3.5	534866	3.88	413336	4.26
R2110978-005 MW17D-1021	21102596-05	512072	3.5	325671	3.87	334545	4.26
R2110978-006 MW17S-1021	21102596-06	758790	3.5	429679	3.87	356624	4.26

ALS Group USA, Corp.
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QA/QC Report

Client: ALS - ROCHESTER
Project: R2110978/

Service Request:21102596
Date Analyzed:11/02/21 19:38

Internal Standard Area and RT SUMMARY
Organic LC

File ID: 21110252
Instrument ID: LCMS1
Analysis Method: E537 Mod

Lab Code:CCV3-211102
Analysis Lot:LCMS1_211102A
Signal ID:

	13C5-PFNA IS		13C5-PFPeA IS		13C7-PFUnDA IS	
	Area	RT	Area	RT	Area	RT
Result ==>	3,042,027	4.07	2,037,759	3.26	2,460,992	4.46
Upper Limit ==>	6,084,054	4.57	4,075,518	3.76	4,921,984	4.96
Lower Limit ==>	1,521,014	3.57	1,018,880	2.76	1,230,496	3.96

Associated Analyses

CCV3-211102	CCV3-211102	3042027	4.07	2037759	3.26	2460992	4.46
MBLK-186437	MBLK-186437	2695298	4.07	2117704	3.26	2588065	4.45
LCS-186437	LCS-186437	2921145	4.07	1846594	3.26	2529538	4.46
21102596-01AMSMS	21102596-01AMS	2428810	4.07	1989881	3.25	2235097	4.45
21102596-01AMSDDMS	21102596-01AMSD	2205875	4.07	1754990	3.26	2316823	4.45
R2110978-001 CW4A-1021	21102596-01	2561137	4.07	1989326	3.25	2181144	4.45
R2110978-002 CW4B-1021	21102596-02	2313532	4.07	1887492	3.26	2745969	4.45
R2110978-003 CW3B-1021	21102596-03	2726917	4.07	1984092	3.26	865945*	4.45
R2110978-004 CW3A-1021	21102596-04	3177586	4.07	2080753	3.26	2958928	4.46
R2110978-005 MW17D-1021	21102596-05	2160427	4.07	1877760	3.26	3075876	4.45
R2110978-006 MW17S-1021	21102596-06	2629719	4.07	2000020	3.26	3196451	4.45

Appendix C

Validator Qualifications

KENNETH R. APPLIN

Geochemist/Data Validator

Ph.D., Geochemistry and Mineralogy, The Pennsylvania State University

M.S., Geochemistry and Mineralogy, The Pennsylvania State University

B.A., Geological Sciences, SUNY at Geneseo, NY

Dr. Applin has over 35 years of experience working with the geochemistry of natural waters. His prior experience includes working as an Assistant Professor of Geology at the University of Missouri-Columbia and as Chief Hydrogeologist and Geochemist with a leading engineering firm in Rochester, NY. In 1993, he established KR Applin and Associates, a small consulting business that focuses on the geochemistry of natural waters, especially as applied to problems involving the contamination of groundwater and surface water.

Dr. Applin is also an experienced analytical data validator and has provided data validation services since 1994 to a variety of clients performing brownfield cleanup projects, hazardous waste remediation, groundwater monitoring at solid waste facilities, and other projects requiring third-party data validation. Dr. Applin has several years of hands-on experience with the laboratory analysis of natural waters and has successfully completed the USEPA Region II certification courses for performing inorganic and organic analytical data validation.

MICHAEL K. PERRY

Chemist/Data Validator

B.S. Chemistry, Georgia State University, Atlanta, GA

A.A.S., Chemical Technology, Alfred State College, Alfred, NY

Mr. Perry has over 30 years of experience in the analytical laboratory business. During his early career, he spent several years as a laboratory analyst performing the analysis of soil, water, and air samples for inorganic and organic chemical parameters. During his last 20 years in the environmental laboratory business, he managed and directed two major analytical laboratories in Rochester, NY. His management responsibilities included oversight of the daily operations of the lab, staff training and supervision, the selection, purchase, and maintenance of analytical instruments, the introduction of new laboratory methods, analytical quality assurance and quality control, data acquisition and management, and other business-related activities.

Mr. Perry has an extensive working knowledge of the methods and procedures used for sampling and analyzing both inorganic and organic analytes in soil, water, and air. He is an accomplished laboratory chemist and is familiar with the analytical methods and procedures established under the USEPA Contract Laboratory Protocols (CLP), the NYSDEC Analytical Services Protocols (ASP), and the NYSDOH Environmental Laboratory Approval Program (ELAP).