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March 14, 2016

David Szymanski
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) – 2016 Annual Site Report

Dear David:

On behalf of the Village of Wellsville the purpose of this letter is to submit the 2016 Annual Periodic Review Report for the Wellsville/Andover Landfill located in Allegany County, New York. Please note the PRR certification is included as Appendix A, and an electronic copy of the annual report is enclosed as Appendix F.

If you have any questions or require any clarification of the enclosed data, please feel free to call (585) 593-1824.

Sincerely,

Jonathan Brandes, P.G.
Senior Geologist

Attachments

cc: Bill Whitfield, Village of Wellsville

Prepared for:

Village of Wellsville

Department of Public Works

200 Bolivar Road

Wellsville, NY 14895

2016 ANNUAL PERIODIC REVIEW REPORT

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

Prepared by:

On-Site Technical Services, Inc.

72 Railroad Avenue

Wellsville, NY 14895

March 2016

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1.0 OVERVIEW

1.1 Introduction

This report presents the 2016 operations, maintenance and monitoring activities associated with the Wellsville/Andover Landfill Site (Site) located in Wellsville and Andover townships, Allegany County, New York (Figure 1) and has been prepared by On-Site Technical Services, Inc., (On-Site) of Wellsville, New York. This report summarizes operation, maintenance and monitoring activities performed from January 1 to December 31, 2016. Starting in 2009, NYSDEC is requiring an annual Periodic Review Report (PRR) be completed for the Site. This report is the 2016 PRR, documenting that site management requirements are being met. The PRR certification is included as Appendix A of this report.

Operation, maintenance and monitoring requirements for this project are detailed in the *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 the New York State Department of Environmental Conservation (NYSDEC) and the current O&M requirements are outlined in Section 2 of this report (here after referred to as Approved O&M Plan) with details included in Appendix B.

1.2 Project 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 with waste consolidation and capping as the remedial action in the Record of Decision (ROD) (NYSDEC 1994). To accomplish the remedy, a contract to remove waste from the northwest and northeast fill areas, and consolidate and cap the south/south-central fill area, (please see Figure 2) was awarded to IT Corporation and construction activities commenced in April 1996. 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. Construction activities concluded in September 1997.

The leachate collection system gravity drains to a Leachate Sump (LS-1), from which leachate is pumped into two 15,000-gal 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 up-gradient groundwater from the north and east landfill perimeters prior to contacting waste within the landfill. 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 sump. The pipes from the manholes to the drainage channel are closed with removable plugs.

1.3 Summary of 2016 Monitoring, Inspection and Maintenance Activities

This section provides an overview of the monitoring, inspection and maintenance activities completed in 2016.

On-Site completed the required 2016 monitoring events in accordance with procedures set forth in the Approved O&M Plan (Appendix B). Semi-annual groundwater and residential water supply monitoring events were conducted in April and October/November 2016. Laboratory analysis was conducted by ALS Environmental (ALS), located in Rochester, New York. The 2016 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.

Quarterly inspections are conducted and documented on the Quarterly Inspection and Maintenance Checklist by Village of Wellsville personnel (Appendix C). 2016 Quarterly inspections resulted in no unresolved problems. 2016 maintenance activities included the following.

1. Replacement of the leachate storage tanks level gauges with new ultrasonic gauges during the first quarter 2016. Manufacture information for the ultrasonic gauges provided in Appendix C.
2. Annual mowing of the cap vegetation in October 2016.
3. Leachate management and disposal throughout 2016.
4. Maintenance of the water treatment unit at the LaDue residence (WAL-19).

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). The most recent revisions to the analytical program were approved in May 2009 and have been implemented starting with the fall 2009 sampling event.

Table 2-1 presents the revised monitoring program, with the current analyte list presented as Table 2-2. Sampling locations are presented in Figure 2. Details of the approved monitoring requirements are provided below.

- Monitoring is conducted semi-annually with one event conducted in the spring and one event completed in the fall.
- Five monitoring wells and one residential water supply are sampled for Volatile Organic Compounds (VOCs) during each spring sampling event. During each fall sampling events 16 monitoring wells are sampled for field parameters, VOCs and metals. Surface water location SWS-1, Groundwater cut-off system locations MH-32 and MW-33, and LS-1 are sampled annually in the fall event for the parameters listed on Table 2-2. However due to dry conditions often preventing surface water sampling in the fall, starting in 2016, surface water and sediment sampling will be conducted as part of the spring monitoring event.
- The Village of Wellsville continues to maintain a water filtration system at residential location WAL-19, which is currently owned and occupied by Mr. and Mrs. LaDue at 3914 Snyder Road in Wellsville, NY 14895. This residence will continue to be sampled on a semi-annually for VOCs before the filter, inter-filter and after the filter. Residential water supply locations WAL-2 and WAL-5 are sampled on an annual basis during the fall event. Starting in 2016, vacant residential location WAL-1 became occupied and was added back into the monitoring program. WAL-1 is sampled annually during the fall monitoring event.
- Static water level elevations are required to be measured in the monitoring wells and piezometers located on and around the landfill cap as part of sampling events. Water elevations are used to construct potentiometric maps. Table 2-3 provides a tabular listing of the 2016 static water elevations along with well construction information.
- Landfill gas monitoring and perimeter air monitoring are completed during the fall monitoring event for VOCs, Lower Explosive Level (LEL) and Oxygen (O_2). The

2016 air monitoring results are presented in Table 6-1.

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 water treatment unit at the LaDue residence, located at 3914 Synder Hill Road.

3.0 GROUNDWATER MONITORING RESULTS

Two groundwater monitoring events were completed during 2016. The spring event includes five monitoring wells for VOC analysis, while the fall event is a Site wide monitoring event.

3.1 Spring Monitoring Event Summary

Spring 2016 groundwater sampling was conducted on April 25 and 26, 2016. Monitoring wells MW-5D, MW-5S, MW-4D, MW-11S and MW-16S were sampled and analyzed for VOCs.

April 2016 Groundwater results are typical of historical data with several monitoring wells exceeding Class GA Standards for cis-1,2-Dichloroethene (cDCE), 1,1-Dichloroethene, trans-1,2-Dichloroethene, Trichloroethene (TCE) and Vinyl chloride. Monitoring well MW-16S is the furthest downgradient well. April 2016 MW-16S VOC concentrations are reported as non-detect.

WAL-19 residential water supply was sampled during the spring sampling event as required. Samples were collected from WAL-19 for VOC analysis before filters, between filters, and after filters on April 26, 2016. ALS performed analysis of the residential samples for TCL VOCs (method 524.2) as required by the current O&M Plan. Residential location WAL-19 results are typical of historic results with cDCE detected before filters at

concentrations below Class GA standards and NYSDOH MCLs and non-detect after filtration.

For further details regarding the April 2016 monitoring event, refer to the *April 2016 Monitoring Event Summary* dated May 26, 2016.

3.2 Potentiometric Mapping

Prior to purging and collecting groundwater samples, static water levels were measured from the monitoring wells and piezometers. The spring and fall 2016 data were utilized to develop separate potentiometric maps for wells screened in overburden and wells screened in bedrock. The potentiometric maps for 2016 are included as Figures 3 through 6. Each contour represents a line of equivalent groundwater elevation. The direction of groundwater flow is from higher to lower elevation approximately perpendicular to the contours. The 2016 potentiometric maps are consistent with historic groundwater level data indicating stable and predictable groundwater flow.

3.3 Fall Monitoring Event Results

Groundwater samples were collected from the 16 required wells in fall 2016. Table 3-1 exhibits the detection frequency, minimum and maximum detection, NYSDEC Class GA Groundwater Standard (Class GA Standard) and the number of Class GA Standard exceedances for groundwater samples collected in 2015 and 2016. Table 3-2 lists the 2016 Class GA and NYSDOH Maximum Contaminant Level (MCL) exceedances by individual wells. Table 3-3 is a tabular listing of groundwater analytical results from the two sampling events completed in 2016. Monitoring well locations are presented in Figure 2. A discussion of the analytical results is provided below.

Inorganic Compounds (metals)

Groundwater samples were analyzed for fifteen inorganic compounds during the fall 2016 sampling event (Table 2-2). As shown in Table 3-1, seven metals (Barium, Calcium, Iron, Magnesium, Manganese, Potassium, and Sodium) were detected in 2016. In 2015 the same metals were detected with the addition of zinc. Iron, Manganese and Sodium exceeded Class GA standards in 2015 and 2016 and are the metals that exceed Class GA Standards on a frequent basis. Based upon NYSDEC request, concentration time trend plots for these three metals have been created. Plots, which include data from 1998 through 2016, are presented in Appendix D for monitoring wells that have shown NYSDEC Class GA Standard exceedances for these metals. Monitoring wells CW-3A, CW-3B, CW-4A, CW-4B, MW-3S, MW-4D, MW-5D, MW-5S, MW-15S, MW-17S, MW-17D, MW-18S and MW-18D are included. With the exception of a possible slight

decreasing trend in Sodium at several wells no obvious increasing or decreasing time trends are 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 often occur naturally at the concentrations detected in Site groundwater.

VOCs

Groundwater from each well sampled during both the spring and fall 2016 sampling events were analyzed for VOCs, which include 36 compounds (Table 2-2). 21 groundwater samples were analyzed for VOCs in 2015 while 22 groundwater samples were tested for VOCs in 2016. In 2015 and 2016 cis-1,2-dichloroethene (cDCE), trichloroethylene (TCE) and Vinyl chloride were detected and exceeded Class GA Standard. Additionally, 1,1-Dichloroethene and trans-1,2-Dichloroethene exceeded Class GA Standards at monitoring well MW-5D in spring 2016. Vinyl Chloride, cDCE and TCE most commonly exceed the Class GA Standard. Based upon NYSDEC request, concentration time trend plots for these three VOCs have been created. The plots include data from 1998 through 2016 and are included in Appendix D for monitoring wells that have shown NYSDEC Class GA Standard exceedances for these compounds. These monitoring wells include CW-3A, CW-3B, CW-4A, CW-4B, MW-3D, MW-4D, MW-5D, MW-5S, MW-11S, MW-15S, MW-16S, 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 since 2008, while Vinyl chloride has been non-detect except in June 2005.
- Downgradient well CW-3B shows a potential increasing trend in TCE concentration. cDCE concentrations have generally stable and Vinyl chloride has been mainly non-detect.
- Downgradient well CW-4A shows results as non-detect for TCE and Vinyl chloride the last 18 samplings, while cDCE results have been non-detect the last six samplings.
- Downgradient well CW-4B shows TCE and Vinyl chloride results as non-detect the last 21 samplings and cDCE has been non-detect the last 15 events.
- Upgradient well MW-3D has shown non-detect or low-level concentrations of cDCE, TCE and Vinyl chloride since 2004.
- Historically, cross gradient well MW-4D exhibited apparent seasonal fluctuation in VOCs with an inverse proportional relationship to groundwater elevation. Elevated concentrations of primarily cDCE occur when groundwater elevations are low (generally fall) and then decrease when groundwater elevations are high

(generally spring). However, this seasonal fluctuation is not obvious since 2009. Both cDCE and Vinyl chloride have been stable or slight decreasing trend since 2009. TCE has been non-detect the last 16 samplings.

- Cross gradient well MW-5S exhibits an overall slight decreasing trend in cDCE, TCE and Vinyl chloride.
- Cross gradient well MW-5D exhibits low levels of TCE and Vinyl Chloride. cDCE has shown a decrease starting in 2009 with seasonal fluctuations starting in 2011.
- Downgradient well MW-11S was sampled in June 1998 and then semi-annually starting in December 2004. Vinyl chloride has remained near or below detection limits. cDCE has shown a slight decreasing trend through 2009 and has shown stable results since 2009. With the exception of a decrease in 2009, TCE appears to be mainly stable between 2.5 mg/L and 3.5 mg/L.
- Downgradient well MW-15S has no discernable trends other than the detection of cDCE at concentrations between 0.011 mg/L and 0.057 mg/L, and TCE and Vinyl chloride have been mostly non-detect or at low-level concentrations.
- Furthest downgradient well MW-16S has been sampled on the same frequency as MW-11S. MW-16S cDCE, TCE and Vinyl chloride results are non-detect with the exception of a low-level TCE detection in 2006.
- Cross gradient well MW-17S shows mostly stable results since 2009 and Vinyl chloride has been non-detect since 2005.
- At cross gradient well MW-18S, previously no time trend was obvious, but since 2008 there has been a decreasing trend in cDCE and TCE, while Vinyl chloride has not been detected.

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 during the fall event. However due to frequent lack of surface water during typical dry fall conditions, SWS-1 sampling schedule was adjusted to spring starting in 2016. In 2016 SWS-1 was not sampled in the spring due to dry conditions; however SWS-1 was sampled during the fall 2016 event. Present and historic surface water and sediment results are presented in Tables 4-1 and 4-2. The 2016 surface water results are below Class C Standards. VOCs are non-detect in 2016. The 2016 sediment results are generally typical of historic

results and with the exception of Tetrachloroethene at 0.33 D mg/L, VOCs are non-detect.

Surface water seeps along the perimeter of the landfill were not observed active during 2016; therefore no seep samples were collected.

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 exhibits the detection frequency, minimum and maximum detection for leachate sump and manhole samples collected in 2015 and 2016. Table 5-2 is a tabular listing of current and historic leachate sump analytical results. Table 5-3 is a tabular listing of current and historic manhole analytical results. A discussion of leachate sump and manhole analytical results is provided below.

5.1 Leachate Sump Results

Metals

Metals were analyzed in one leachate sump sample during 2016. Metals detected in 2016 include Barium, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium and Zinc. The same metals with the addition of Arsenic and the exception of Zinc were detected in 2015. 2016 Metals results are consistent of historic data and below Class C Standards.

VOCs

VOCs were analyzed in one leachate sump sample during 2016 with cDCE (0.24 mg/L) the only reported VOC detection. VOC leachate sump results are consistent with historic results.

5.2 Manhole Monitoring Results

Metals

Metals were analyzed in two manhole samples in fall 2016. Metals detected in 2016 at MH-32 include Barium, Calcium, Iron, Magnesium, Manganese, and Sodium. The same metals were detected at MH-33. 2016 Metals results are consistent with historic data and are below Class C Standards.

VOCs

VOCs were analyzed in two manhole samples in fall 2016. cDCE was detected at MH-32 and MH-33 at 5.4 mg/L and 0.0071 mg/L, respectively. 2016 VOC results are consistent with previous analyses.

Wet Chemistry

Manholes MH-32 and MH-33 were sampled for Nitrate Nitrogen and Total Dissolved Solids (TDS) in 2016. Nitrate Nitrogen results are non-detect. TDS results are below Class C surface water standard.

6.0 AIR MONITORING RESULTS

Air monitoring at the landfill perimeter, gas vents and LCS locations was conducted during the fall 2016 event utilizing a Photo Ionization Detector (PID) for VOCs and a four-gas meter for Oxygen (O_2) 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 59.1 ppm. PID readings provided are above background which ranged from 0.5 ppm to 1.4 ppm during the air monitoring. Oxygen levels range from 11.7% to 20.9%. LEL levels range from 0% to greater than 100%, indicating the presence of methane gas at some locations. 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 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

Two residential water supply sampling events were completed during 2016. The sampling events were conducted in April and October/November 2016. The current monitoring schedule requires that one water supply (WAL-19) be sampled semi-annually (spring and fall) and the remaining two locations (WAL-1, WAL-2) be sampled annually. However, WAL-11 was sampled in the fall 2016 as requested by the resident owner. WAL-11 is not intended to be added to the sampling schedule. However residential location WAL-1, a formerly vacant property located immediately adjacent to the landfill, is occupied starting in 2016 and has been added back into the sampling schedule.

Residential locations WAL-19 was sampled in the spring and fall of 2016 while, residential locations WAL-1, WAL-2, and WAL-11 were sampled in fall of 2016. Residential location WAL-5 is currently unoccupied and therefore was not monitored in 2016.

Table 7-1 presents an overview of residential sampling locations and sampling frequencies during 2016. Figure 2 shows the approximate sampling locations.

A total of nine residential water samples were collected in 2016. Table 7-2 exhibits the detection frequency, minimum and maximum detection, NYSDOH MCL, number of NYSDOH MCL exceedances, NYSDEC Class GA Standard and the number of Class GA Standard exceedances for both 2015 and 2016. Table 7-3 is a tabular listing of 2016 residential water analytical results. A discussion of the analytical results is provided below.

Metals

Metals are not required to be analyzed at WAL-19. 2016 metals results at WAL-1 and WAL-11 are below the NYSDOH MCLs and Class GA Standards. WAL-2 shows Iron at 0.62 mg/L and Manganese 0.7 mg/L exceeding the NYSDOH MCLS and Class GA Standards, whereas Sodium at 50.6 mg/L is only exceeds Class GA Standards. The WAL-2 2016 metals results are consistent with historic results and are likely not associated with the landfill.

VOCs

During 2015 and 2016, residential water samples were analyzed for VOCs with two parameters detected (cDCE and TCE). These detections are at WAL-19 prior to filtration and are below the NYSDOH MCLs and NYSDEC Class GA Standards in 2015 and 2016. TCE was not detected at WAL-19 after filtration.

8.0 INSPECTIONS AND MAINTENANCE ACTIVITES

Quarterly Inspections and routine maintenance were performed by Village of Wellsville personnel and recorded on the Quarterly Inspection and Maintenance Checklist provided in the O&M Plan. Quarterly inspections were completed on March 31, June 30, September 30 and December 30, 2016. No unresolved problems were noted on the inspection forms. The 2016 completed inspection forms are included in Appendix C.

A description of maintenance activities performed during 2016 is provided below.

- Village of Wellsville personnel mowed the landfill cap in October 2016.
- The Village of Wellsville continues to maintain a water treatment unit at the LaDue (WAL-19) residence.
- New ultrasonic water level gauges were installed for the leachate storage tanks.
- A total of approximately 1,777,155 gallons of leachate was hauled from the Landfill to the Village of Wellsville POTW during 2016. The table below lists the total leachate gallons by year for the previous seven years. The increased volume observed during 2011 is directly related to the increase in precipitation during 2011.

Year/Gallons	2010	2011	2012	2013	2014	2015	2016
	1,581,614	2,359,104	1,643,350	1,690,269	1,441,683	1,682,710	1,777,155

9.0 CONCLUSIONS

Monitoring and maintenance activities are being performed as required at the Wellsville/Andover Landfill. Routine maintenance and inspections are being conducted to maintain the Site. The Site has been monitored for over 18 years following completion of the remedial action. Monitoring will continued as required by the approved plan.

Maintenance activities planned for 2017 include scheduled annual mowing, clean water flushing of the leachate collection system and some monitoring well painting/labelling.

This 2016 annual report is submitted as part of the Site Management Periodic Review required by the NYSDEC. An electronic copy of this report is included as Appendix F.

Table 2-1

Monitoring Requirements
Wellsville/Andover Landfill
Wellsville, New York

Location	Revised Sampling Frequency	Spring Analyte List[1]	Fall Analyte List[1]
Groundwater			
CW-3A	Annual - Fall	WL	Field, VOCs, Metals
CW-3B	Annual - Fall	WL	Field, VOCs, Metals
CW-4A	Annual - Fall	WL	Field, VOCs, Metals
CW-4B	Annual - Fall	WL	Field, VOCs, Metals
MW-15DA	NR	WL	NR
MW-15S	Annual - Fall	WL	Field, VOCs, Metals
MW-17D	Annual - Fall	WL	Field, VOCs, Metals
MW-17S	Annual - Fall	WL	Field, VOCs, Metals
MW-18D	Annual - Fall	WL	Field, VOCs, Metals
MW-18S	Annual - Fall	WL	Field, VOCs, Metals
MW-1D	NR	WL	NR
MW-3D	Annual - Fall	WL	Field, VOCs, Metals
MW-3S	Annual - Fall	WL	Field, VOCs, Metals
MW-4D	Semiannual - Spring/Fall	WL, VOCs	Field, VOCs, Metals
MW-5D	Semiannual - Spring/Fall	WL, VOCs	Field, VOCs, Metals
MW-5S	Semiannual - Spring/Fall	WL, VOCs	Field, VOCs, Metals
MW-11S	Semiannual - Spring/Fall	WL, VOCs	Field, VOCs, Metals
MW-16S	Semiannual - Spring/Fall	WL, VOCs	Field, VOCs, Metals
Leachate			
LS-1	Annual - Fall	NR	Field, VOCs, Metals

Location	Revised Sampling Frequency	Spring Analyte List[1]	Fall Analyte List[1]
Residential Water Supply			
WAL-2	Annual - Fall	NR	Metals
WAL-5	Annual - Fall	NR	VOCs[6], Metals
WAL-19	Semiannual - Spring/Fall	VOCs[2,6]	VOCs[2,6]
WAL-1	Annual - Fall	NR	VOCs[6], Metals
Landfill Gas Monitoring			
Vents	Annual - Fall	NR	PID, LEL, O_2
Leachate Clean-outs	Annual - Fall	NR	PID, LEL, O_2
Manholes	Annual - Fall	NR	PID, LEL, O_2
Perimeter	Annual - Fall	NR	PID, LEL, O_2
Surface Water [7]			
SWS-1	Annual - Spring	Field, VOCs, Metals, Wet Chem3	NR
Sediment [7]			
SWS-1	Annual - Spring	Field, VOCs, Metals, Wet Chem3	NR
Groundwater Cut-Off System			
MH-32	Annual - Fall	NR	Field, VOCs, Metals, NO_3, TDS
MH-33	Annual - Fall	NR	Field, VOCs, Metals, NO_3, TDS

Reporting

Spring Event	Summary Letter[4]
Annual	Detailed Annual Report[5]

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; and follow up e-mail.)

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

WL - Water level

[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, K, Se, Na, Z
- NO_3 = 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, SO_4, TDS, NO_3, NH_3, COD, TKN

[4] Letter reports will include a summary of the sampling event and provide the event's analytical report

[5] Annual periodic review report will include details of the years monitoring results, comparison of results to standards and historic results, potentiometric maps and details operation and maintenance activities.

[6] Residential VOCs are tested using method 524.2

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

Table 2-2

Approved Analyte List
Wellsville/Andover Landfill
Wellsville, New York

Field Parameters
Specific Conductance
Temperature
Field pH
Oxygen Reduction Potential
Dissolved Oxygen
Turbidity

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

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

Table 2-3

2016 Static Water Level Information
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	4/22/2016 DTW From TOC (ft)	4/22/2016 Static Water Elevation (ft amsl)	10/28/2016 DTW From TOC (ft)	10/28/2016 Static Water Elevation (ft amsl)
MW-1D	2	2193.32	2193.75	2190.6	77.39	64 - 74	Bedrock	68.98	2124.34	69.78	2123.54
MW-3D	2	2095.80	2096.07	2092.4	46.75	30 - 40	Bedrock	17.31	2078.49	22.28	2073.52
MW-3S	2	2095.70	2095.96	2093.1	25.92	9 - 19	Overburden	11.50	2084.20	12.73	2082.97
MW-4D	2	2092.22	2092.39	2090.3	24.63	12 - 22	Bedrock	9.63	2082.59	12.74	2079.48
MW-5D	2	2066.87	2067.26	2065.4	37.74	26.5 - 36.5	Bedrock	1.59	2065.28	2.15	2064.72
MW-5S	2	2067.30	2067.59	2065.5	21.20	10 - 20	Overburden	2.02	2065.28	2.34	2064.96
MW-7D	2	2012.13	2012.69	2009.6	47.97	35 - 45	Bedrock	36.91	1975.22	37.42	1974.71
MW-11S	2	2003.52	2003.86	2001.6	20.40	8 - 18	Overburden	5.61	1997.91	6.46	1997.06
MW-15S	2	2022.88	2023.05	2020.2	22.10	9 - 19	Overburden	19.69	2003.19	19.80	2003.08
MW-15DA	2	2022.67	2023.08	2020.4	56.28	43 - 53	Bedrock	56.08	1966.59	56.09	1966.58
MW-16D	2	1924.73	1925.25	1922.0	53.00	40 - 50	Bedrock	28.83	1895.90	28.22	1896.51
MW-16S	2	1924.98	1925.15	1922.2	18.67	6 - 16	Overburden	9.72	1915.26	14.23	1910.75
MW-17D	4	2037.36	NA	2034.9	65.1	48 - 63 (open hole)	Bedrock	32.26	2005.10	32.52	2004.84
MW-17S	2	2037.59	2037.68	2034.6	26.94	9 - 24	Overburden	8.31	2029.28	9.40	2028.19
MW-18D	4	2066.19	NA	2062.6	28.50	24.5 - 39.5 (open hole)	Bedrock	14.48	2051.71	14.94	2051.25
MW-18S	2	2064.60	2065.72	2063.0	20.49	4 - 19	Overburden	4.82	2059.78	4.07	2060.53
CW-3A	2	2013.75	2013.90	2012.9	27.47	21 - 26	Overburden	11.20	2002.55	10.08	2003.67
CW-3B	2	2013.90	2014.10	2012.9	37.70	33.5 - 38.5	Overburden	21.16	1992.74	21.25	1992.65
CW-4A	2	2006.11	2006.35	2004.7	19.12	13 - 18	Overburden	4.41	2001.70	3.65	2002.46
CW-4B	2	2005.84	2005.93	2004.7	30.16	25.5 - 30.5	Overburden	3.81	2002.03	3.03	2002.81
PZ-1	2	2095.11	2095.27	2092.2	NM	6 - 13	Overburden/ Refuse	15.01	2080.10	13.69	2081.42
PZ-2	2	2095.83	2096.13	2092.9	NM	14 - 24	Overburden/ Refuse	15.46	2080.37	14.33	2081.50
PZ-4	2	2067.13	2067.38	2064.4	NM	12 - 22	Overburden/ Refuse	26.15	2040.98	26.26	2040.87
PZ-5	2	2059.71	2059.71	2056.7	NM	8 - 18	Overburden/ Refuse	13.28	2046.43	11.90	2047.81
PZ-6	2	2042.18	2042.31	2039.2	NM	8 - 18	Overburden/ Refuse	22.58	2019.60	21.36	2020.82

Notes:

Dry - Water not present
NM - Not Measured

NA - Not Applicable

Table 3-1

Summary of 2015 and 2016 Groundwater Detection Frequencies
Wellsville/Andover Landfill
Wellsville, New York

Parameter	2015 Detection Frequency	2015 Minimum	2015 Maximum	2016 Detection Frequency	2016 Minimum	2016 Maximum	Class GA Standard	2015 Class GA Exceedances	2016 Class GA Exceedances
Inorganic Compounds									
Arsenic	0/16			0/17			0.025	0	0
Barium	12/16	0.025	0.08	12/17	0.03	0.084	1	0	0
Cadmium	0/16			0/17			0.005	0	0
Calcium	16/16	3.1	99.8	17/17	2.2	89.1			
Chromium	0/16			0/17			0.05	0	0
Copper	0/16			0/17			0.2	0	0
Iron	7/16	0.12	3.38	9/17	0.11	15.1	0.3	5	6
Lead	0/16			0/17			0.025	0	0
Magnesium	16/16	1.2	59.6	15/17	1.5	58.8			
Manganese	13/16	0.014	1.25	14/17	0.011	1.25	0.3	6	7
Nickel	0/16			0/17			0.1	0	0
Potassium	8/16	2.4	15.7	9/17	2.5	14.3			
Selenium	0/16			0/17			0.01	0	0
Sodium	16/16	1.6	66.3	17/17	1.5	68.1	20	4	7
Zinc	1/16	0.025	0.025	0/17					
Volatile Organic Compounds									
1,1,1-Trichloroethane	0/21			0/22			0.005	0	0
1,1,2,2-Tetrachloroethane	0/21			0/22			0.005	0	0
1,1,2-Trichloroethane	0/21			0/22			0.001	0	0
1,1-Dichloroethane	0/21			0/22			0.005	0	0
1,1-Dichloroethene	0/21			1/22	0.0065	0.0065	0.005	0	1
1,2-Dibromoethane	0/21			0/22					
1,2-Dichloroethane	0/21			0/22			0.0006	0	0
1,2-Dichloropropane	0/21			0/22			0.001	0	0
2-Butanone (MEK)	0/21			0/22					
2-Hexanone	0/21			0/22					
4-Methyl-2-pentanone	0/21			0/22					
Acetone	0/21			0/22					
Benzene	0/21			0/22			0.001	0	0
Bromodichloromethane	0/21			0/22					
Bromoform	0/21			0/22					
Bromomethane	0/21			0/22			0.005	0	0
Carbon disulfide	0/21			0/22					
Carbon tetrachloride	0/21			0/22			0.005	0	0
Chlorobenzene	0/21			0/22			0.005	0	0
Chloroethane	0/21			0/22			0.005	0	0
Chloroform	0/21			0/22			0.007	0	0
Chloromethane	0/21			0/22			0.005	0	0
cis-1,2-Dichloroethene	13/21	0.0058	0.88	12/22	0.0065	0.73	0.005	13	12
cis-1,3-Dichloropropene	0/21			0/22					
Dibromochloromethane	0/21			0/22					
Dichloromethane (Methylene chloride)	0/21			0/22			0.005	0	0
Ethyl benzene	0/21			0/22			0.005	0	0
m&p-Xylene	0/21			0/22					
o-Xylene	0/21			0/22					
Styrene	0/21			0/22			0.005	0	0
Tetrachloroethene	0/21			0/22			0.005	0	0
Toluene	0/21			0/22			0.005	0	0
trans-1,2-Dichloroethene	0/21			1/22	0.021	0.021	0.005	0	1
trans-1,3-Dichloropropene	0/21			0/22					
Trichloroethene	9/21	0.012	3.2	10/22	0.016	3.5	0.005	9	10
Vinyl chloride	5/21	0.019	0.15	6/22	0.018	0.067	0.002	5	6

Note:
Class GA Standard - NYSDEC Class GA Groundwater Standards

Table 3-2

2016 Groundwater NYSDEC and NYSDOH Standards Exceedances
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	April 2016 Results	October/November 2016 Results	Class GA Standard	NYSDOH MCL
CW-3A	Sodium		40.6	20	
CW-3A	cis-1,2-Dichloroethene		0.0065	0.005	0.005
CW-3A	Trichloroethene		0.033	0.005	0.005
CW-3B	Sodium		21.7	20	
CW-3B	cis-1,2-Dichloroethene		0.091	0.005	0.005
CW-3B	Trichloroethene		0.44	0.005	0.005
CW-4A	Iron		0.32	0.3	0.3
CW-4A	Manganese		0.515	0.3	0.3
CW-4B	Manganese		0.767	0.3	0.3
MW-11S	Manganese		0.844	0.3	0.3
MW-11S	Sodium		21.2	20	
MW-11S	cis-1,2-Dichloroethene	0.27	0.35	0.005	0.005
MW-11S	Trichloroethene	2.50	3.5	0.005	0.005
MW-17D	Iron		8.21	0.3	0.3
MW-17D	Manganese		0.312	0.3	0.3
MW-17D	Sodium		33.6	20	
MW-17S	Sodium		68.1	20	
MW-17S	cis-1,2-Dichloroethene		0.054	0.005	0.005
MW-17S	Trichloroethene		0.016	0.005	0.005
MW-18D	Iron		15.1	0.3	0.3
MW-18D	Manganese		0.857	0.3	0.3
MW-18S	Iron		0.99	0.3	0.3
MW-3S	Sodium		47	20	

Please see page 2 for notes.

Table 3-2

2016 Groundwater NYSDEC and NYSDOH Standards Exceedances
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	April 2016 Results	October/November 2016 Results	Class GA Standard	NYSDOH MCL
MW-4D	Iron		0.64	0.3	0.3
MW-4D	Manganese		1.25	0.3	0.3
MW-4D	cis-1,2-Dichloroethene	0.18	0.28 D	0.005	0.005
MW-4D	Vinyl chloride	0.025	0.049	0.002	0.002
MW-5D	Manganese		0.869	0.3	0.3
MW-5D	1,1-Dichloroethene	0.0065		0.005	0.005
MW-5D	cis-1,2-Dichloroethene	0.73 D	0.31	0.005	0.005
MW-5D	trans-1,2-Dichloroethene	0.021		0.005	0.005
MW-5D	Trichloroethene	0.24 D	0.05	0.005	0.005
MW-5D	Vinyl chloride	0.067	0.03	0.002	0.002
MW-5S	Iron		1.1	0.3	0.3
MW-5S	cis-1,2-Dichloroethene	0.19	0.18	0.005	0.005
MW-5S	Trichloroethene	0.038	0.043	0.005	0.005
MW-5S	Vinyl chloride	0.018	0.018	0.002	0.002

Notes:
Class GA Standard - NYSDEC Class GA Groundwater Standard
NYSDOH MCL - New York State Department of Health Maximum Containment Level
D - Concentration is a results of dilution

Please see page 2 for notes.

Table 3-3

2016 Groundwater Analytical Results
Wellville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	April 2016					October 2016			
	MW-4D 4/25/2016	MW-5D 4/26/2016	MW-5S 4/26/2016	MW-11S 4/26/2016	MW-16S 4/25/2016	CW-3A 11/1-2/2016	CW-3B 11/1/2016	CW-4A 11/1/2016	CW-4B 11/1/2016
Inorganic Compounds									
Arsenic						0.01 U	0.01 U	0.01 U	0.01 U
Barium						0.084	0.036	0.056	0.039
Cadmium						0.005 U	0.005 U	0.005 U	0.005 U
Calcium						89.1	68.6	31.1	35.9
Chromium						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
Iron						0.1 U	0.1 U	0.32	0.1 U
Lead						0.05 U	0.05 U	0.05 U	0.05 U
Magnesium						1 U	33.9	16.2	15
Manganese						0.011	0.031	0.515	0.767
Nickel						0.04 U	0.04 U	0.04 U	0.04 U
Potassium						14.3	2.5	2 U	2 U
Selenium						0.01 U	0.01 U	0.01 U	0.01 U
Sodium						40.6	21.7	14.3	16
Zinc						0.02 U	0.02 U	0.02 U	0.02 U
Volatile Organic Compounds									
1,1,1-Trichloroethane	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
1,1,2,2-Tetrachloroethane	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
1,1,2-Trichloroethane	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
1,1-Dichloroethane	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
1,1-Dichloroethene	0.005 U	0.0065	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
1,2-Dibromoethane	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
1,2-Dichloroethane	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
1,2-Dichloropropane	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
2-Butanone (MEK)	0.01 U	0.01 U	0.01 U	0.25 U	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U
2-Hexanone	0.01 U	0.01 U	0.01 U	0.25 U	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U
4-Methyl-2-pentanone	0.01 U	0.01 U	0.01 U	0.25 U	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U
Acetone	0.01 U	0.01 U	0.01 U	0.25 U	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U
Benzene	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
Bromodichloromethane	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
Bromoform	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
Bromomethane	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
Carbon disulfide	0.01 U	0.01 U	0.01 U	0.25 U	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U
Carbon tetrachloride	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
Chlorobenzene	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
Chloroethane	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
Chloroform	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
Chloromethane	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	0.18	0.73 D	0.19	0.27	0.005 U	0.0065	0.091	0.005 U	0.005 U
cis-1,3-Dichloropropene	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
Dibromochloromethane	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
Dichloromethane (Methylene chloride)	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
Ethyl benzene	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
m&p-Xylene	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
o-Xylene	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
Styrene	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
Tetrachloroethene	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
Toluene	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
trans-1,2-Dichloroethene	0.005 U	0.021	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
trans-1,3-Dichloropropene	0.005 U	0.005 U	0.005 U	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U
Trichloroethene	0.005 U	0.24 D	0.038	2.5	0.005 U	0.033	0.44	0.005 U	0.005 U
Vinyl chloride	0.025	0.067	0.018	0.13 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U

Please see page 3 for notes.

Table 3-3

2016 Groundwater Analytical Results
Wellville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	October 2016							
	MW-11S 11/1/2016	MW-15S 10/31/2016	MW-16S 10/31/2016	MW-17D 10/31/2016	MW-17S 10/31/2016	MW-18D 10/31/2016	MW-18S 10/31/2016	MW-3D 11/2/2016
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
Barium	0.03	0.02 U	0.02 U	0.02 U	0.04	0.083	0.037	0.077
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
Calcium	58.5	2.2	16.2	18.1	86.7	42.6	29.5	35.7
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
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
Iron	0.16	0.1 U	0.1 U	8.21	0.11	15.1	0.99	0.1 U
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
Magnesium	35.5	1.5	9.2	17.3	58.8	17.5	10.7	19.4
Manganese	0.844	0.01 U	0.01 U	0.312	0.093	0.857	0.14	0.011
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
Potassium	2 U	2 U	2 U	5	3.9	2.7	2 U	3.9
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
Sodium	21.2	1.5	8.9	33.6	68.1	19.9	2.5	17.9
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
Volatile Organic Compounds								
1,1,1-Trichloroethane	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,1,2,2-Tetrachloroethane	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,1,2-Trichloroethane	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,1-Dichloroethane	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,1-Dichloroethene	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,2-Dibromoethane	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,2-Dichloroethane	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,2-Dichloropropane	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Butanone (MEK)	0.25 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Hexanone	0.25 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	0.25 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	0.25 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzene	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Bromodichloromethane	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Bromoform	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Bromomethane	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	0.25 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Carbon tetrachloride	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chlorobenzene	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloroethane	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloroform	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloromethane	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	0.35	0.005 U	0.005 U	0.005 U	0.054	0.005 U	0.005 U	0.005 U
cis-1,3-Dichloropropene	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Dibromochloromethane	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Dichloromethane (Methylene chloride)	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl benzene	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
m&p-Xylene	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
o-Xylene	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Tetrachloroethene	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Toluene	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
trans-1,2-Dichloroethene	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
trans-1,3-Dichloropropene	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Trichloroethene	3.5	0.005 U	0.005 U	0.005 U	0.016	0.005 U	0.005 U	0.005 U
Vinyl chloride	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U

Please see page 3 for notes.

Table 3-3

2016 Groundwater Analytical Results
Wellville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	October 2016			
	MW-3S 11/2/2016	MW-4D 11/1/2016	MW-5D 11/1/2016	MW-5S 11/1/2016
Inorganic Compounds				
Arsenic	0.01 U	0.01 U	0.01 U	0.01 U
Barium	0.042	0.02 U	0.037	0.02 U
Cadmium	0.005 U	0.005 U	0.005 U	0.005 U
Calcium	42	22.2	20.1	14.7
Chromium	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
Iron	0.1 U	0.64	0.26	1.1
Lead	0.05 U	0.05 U	0.05 U	0.05 U
Magnesium	31.5	19.7	11.9	9.5
Manganese	0.01 U	1.25	0.869	0.153
Nickel	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	3	4.2	2 U	2 U
Selenium	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	47	7.3	5.5	6
Zinc	0.02 U	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	0.005 U
1,1,2,2-Tetrachloroethane	0.005 U	0.005 U	0.013 U	0.005 U
1,1,2-Trichloroethane	0.005 U	0.005 U	0.013 U	0.005 U
1,1-Dichloroethane	0.005 U	0.005 U	0.013 U	0.005 U
1,1-Dichloroethene	0.005 U	0.005 U	0.013 U	0.005 U
1,2-Dibromoethane	0.005 U	0.005 U	0.013 U	0.005 U
1,2-Dichloroethane	0.005 U	0.005 U	0.013 U	0.005 U
1,2-Dichloropropane	0.005 U	0.005 U	0.013 U	0.005 U
2-Butanone (MEK)	0.01 U	0.01 U	0.025 U	0.01 U
2-Hexanone	0.01 U	0.01 U	0.025 U	0.01 U
4-Methyl-2-pentanone	0.01 U	0.01 U	0.025 U	0.01 U
Acetone	0.01 U	0.01 U	0.025 U	0.01 U
Benzene	0.005 U	0.005 U	0.013 U	0.005 U
Bromodichloromethane	0.005 U	0.005 U	0.013 U	0.005 U
Bromoform	0.005 U	0.005 U	0.013 U	0.005 U
Bromomethane	0.005 U	0.005 U	0.013 U	0.005 U
Carbon disulfide	0.01 U	0.01 U	0.025 U	0.01 U
Carbon tetrachloride	0.005 U	0.005 U	0.013 U	0.005 U
Chlorobenzene	0.005 U	0.005 U	0.013 U	0.005 U
Chloroethane	0.005 U	0.005 U	0.013 U	0.005 U
Chloroform	0.005 U	0.005 U	0.013 U	0.005 U
Chloromethane	0.005 U	0.005 U	0.013 U	0.005 U
cis-1,2-Dichloroethene	0.005 U	0.28 D	0.31	0.18
cis-1,3-Dichloropropene	0.005 U	0.005 U	0.013 U	0.005 U
Dibromochloromethane	0.005 U	0.005 U	0.013 U	0.005 U
Dichloromethane (Methylene chloride)	0.005 U	0.005 U	0.013 U	0.005 U
Ethyl benzene	0.005 U	0.005 U	0.013 U	0.005 U
m&p-Xylene	0.005 U	0.005 U	0.013 U	0.005 U
o-Xylene	0.005 U	0.005 U	0.013 U	0.005 U
Styrene	0.005 U	0.005 U	0.013 U	0.005 U
Tetrachloroethene	0.005 U	0.005 U	0.013 U	0.005 U
Toluene	0.005 U	0.005 U	0.013 U	0.005 U
trans-1,2-Dichloroethene	0.005 U	0.005 U	0.013 U	0.005 U
trans-1,3-Dichloropropene	0.005 U	0.005 U	0.013 U	0.005 U
Trichloroethene	0.005 U	0.005 U	0.05	0.043
Vinyl chloride	0.005 U	0.049	0.03	0.018

Notes: **U** - Concentration not detected at specified limit

Please see page 3 for notes.

Table 4-1

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

Parameter	SWS-1 10/22/2013	SWS-1 10/23/2014	SWS-1 10/31/2016	Class C Standard
Inorganic Compounds				
Arsenic	0.01 U	0.01 U	0.01 U	
Barium	0.027	0.037	0.021	
Cadmium	0.005 U	0.005 U	0.005 U	
Calcium	30.3	36.5	23.8	
Chromium	0.01 U	0.01 U	0.01 U	
Copper	0.02 U	0.02 U	0.02 U	
Iron	1.02	1.49	0.37	
Lead	0.005 U	0.05 U	0.05 U	0.008
Magnesium	10.1	12.3	7.9	
Manganese	0.028	0.032	0.012	
Nickel	0.04 U	0.04 U	0.04 U	0.0082
Potassium	2.7	2.4	2.8	
Selenium	0.01 U	0.01 U	0.01 U	
Sodium	11.7	21.6	6.9	
Zinc	0.02 U	0.045	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	
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	
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	

Please see page 2 for notes.

Table 4-1

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

Parameter	SWS-1 10/22/2013	SWS-1 10/23/2014	SWS-1 10/31/2016	Class C Standard
Wet Chemistry				
Alkalinity	127	139	98.8	
Ammonia Nitrogen	0.05 U	0.05 U	0.05 U	
Biochemical Oxygen Demand	2 U	2 U	2 U	
Bromide	1 U	1 U	1 U	
Chemical Oxygen Demand	33.6	30.3	24.5	
Chloride	11.8	33.5	7	
Color (True) (C.U.)	86	88	84	
Nitrate Nitrogen	1 U	1 U	1 U	
pH of Color Analysis			7.34	
Sulfate	2.7	4.8	2.1	
Total Dissolved Solids	180	223	138	500
Total Kjeldahl Nitrogen	0.85	0.74	0.64	
Total Organic Carbon (TOC)	9.9	10.3	11.2	
Total Phenolics	0.005 U	0.005 U	0.0076	

Notes:
Class C Standard - NYSDEC Class C Surface Water Standard
Concentrations in **bold** exceed Class C Standards
U - Concentration not detected at specified detection limit

Please see page 2 for notes.

Table 4-2

Current and Historic Sediment Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/Kg except where noted)

Parameter	SWS-1 9/28/2011	SWS-1 10/22/2013	SWS-1 10/31/2016
Inorganic Compounds			
Arsenic	8	10.6	8.1
Barium	114	113	57.7
Cadmium	1.6 U	1.3 U	0.62 U
Calcium	3790	12400	46400
Chromium	14.9	13.5	8.7
Copper	20.7	22.5	16.2
Iron	22500	23700	28200
Lead	16 U	15	8.4
Magnesium	3810	3640	7940
Manganese	1120	1020	571
Nickel	23	21	16.6
Potassium	2220	2060	800
Selenium	3.2 U	2.5 U	1.2 U
Sodium	380 U	300	120 U
Zinc	273	5340	414
Volatile Organic Compounds			
1,1,1-Trichloroethane	0.017 U	0.013 U	0.0064 U
1,1,2,2-Tetrachloroethane	0.017 U	0.013 U	0.0064 U
1,1,2-Trichloroethane	0.017 U	0.013 U	0.0064 U
1,1-Dichloroethane	0.017 U	0.013 U	0.0064 U
1,1-Dichloroethene	0.017 U	0.013 U	0.0064 U
1,2-Dibromoethane	0.017 U	0.013 U	0.0064 U
1,2-Dichloroethane	0.017 U	0.013 U	0.0064 U
1,2-Dichloropropane	0.017 U	0.013 U	0.0064 U
2-Butanone (MEK)	0.017 U	0.013 U	0.0064 U
2-Hexanone	0.017 U	0.013 U	0.0064 U
4-Methyl-2-pentanone	0.017 U	0.013 U	0.0064 U
Acetone	0.017 U	0.013 U	0.0064 U
Benzene	0.017 U	0.013 U	0.0064 U
Bromodichloromethane	0.017 U	0.013 U	0.0064 U
Bromoform	0.017 U	0.013 U	0.0064 U
Bromomethane	0.017 U	0.013 U	0.0064 U
Carbon disulfide	0.017 U	0.013 U	0.0064 U
Carbon tetrachloride	0.017 U	0.013 U	0.0064 U
Chlorobenzene	0.017 U	0.013 U	0.0064 U
Chloroethane	0.017 U	0.013 U	0.0064 U
Chloroform	0.017 U	0.013 U	0.0064 U
Chloromethane	0.017 U	0.013 U	0.0064 U
cis-1,2-Dichloroethene	0.017 U	0.013 U	0.0064 U
cis-1,3-Dichloropropene	0.017 U	0.013 U	0.0064 U
Dibromochloromethane	0.017 U	0.013 U	0.0064 U
Dichloromethane (Methylene chloride)	0.017 U	0.013 U	0.0064 U
Ethyl benzene	0.017 U	0.013 U	0.0064 U
m&p-Xylene	0.034 U	0.026 U	0.013 U
o-Xylene	0.017 U	0.013 U	0.0064 U
Styrene	0.017 U	0.013 U	0.0064 U
Tetrachloroethene	0.017 U	0.013 U	0.33 D
Toluene	0.017 U	0.013 U	0.0064 U
trans-1,2-Dichloroethene	0.017 U	0.013 U	0.0064 U
trans-1,3-Dichloropropene	0.017 U	0.013 U	0.0064 U
Trichloroethene	0.017 U	0.013 U	0.0064 U
Vinyl chloride	0.017 U	0.013 U	0.0064 U

Parameter	SWS-1 9/28/2011	SWS-1 10/22/2013	SWS-1 10/31/2016
Wet Chemistry			
Alkalinity	5220	3390	360
Ammonia Nitrogen	56	25	6.4 U
Bromide	34 U	26 U	13 U
Chemical Oxygen Demand	165000	96900	75800
Chloride	420	224	39 U
Nitrate Nitrogen	34 U	26 U	13 U
Sulfate	119	79 U	39 U
Total Kjeldahl Nitrogen	5050	3430	297
Total Organic Carbon (TOC)	32300	32300	11000
Total Phenolics	0.33 U	0.26 U	0.13 U
Total Solids	29.5	37.8	77.8

Note:
U - Concentration not detected at specified detection limit

Table 5-1

Summary of 2015 and 2016 Leachate Sump and Manhole Detection Frequencies
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	2015 Detction Frequency	2015 Minimum	2015 Maximum	2016 Detection Frequency	2016 Minimum	2016 Maximum
Inorganic Compounds						
Arsenic	2/3	0.011	0.02	0/3		
Barium	3/3	0.046	0.108	3/3	0.044	0.07
Cadmium	0/3			0/3		
Calcium	3/3	68.1	96.8	3/3	49	65
Chromium	0/3			0/3		
Copper	0/3			0/3		
Iron	3/3	0.62	21.5	3/3	1.09	8.56
Lead	0/3			0/3		
Magnesium	3/3	15.6	19.8	3/3	12.1	14
Manganese	3/3	0.858	2.7	3/3	0.501	1.37
Nickel	0/3			0/3		
Potassium	2/3	2.7	2.9	1/3	2.4	2.4
Selenium	0/3			0/3		
Sodium	3/3	3.4	13.9	3/3	2.5	8
Zinc	0/3			1/3	0.151	0.151
Volatile Organic Compounds						
1,1,1-Trichloroethane	0/3			0/3		
1,1,2,2-Tetrachloroethane	0/3			0/3		
1,1,2-Trichloroethane	0/3			0/3		
1,1-Dichloroethane	0/3			0/3		
1,1-Dichloroethene	0/3			0/3		
1,2-Dibromoethane	0/3			0/3		
1,2-Dichloroethane	0/3			0/3		
1,2-Dichloropropane	0/3			0/3		
2-Butanone (MEK)	0/3			0/3		
2-Hexanone	0/3			0/3		
4-Methyl-2-pentanone	0/3			0/3		
Acetone	0/3			0/3		
Benzene	0/3			0/3		
Bromodichloromethane	0/3			0/3		
Bromoform	0/3			0/3		
Bromomethane	0/3			0/3		
Carbon disulfide	0/3			0/3		
Carbon tetrachloride	0/3			0/3		
Chlorobenzene	0/3			0/3		
Chloroethane	0/3			0/3		
Chloroform	0/3			0/3		
Chloromethane	0/3			0/3		
cis-1,2-Dichloroethene	3/3	0.023	9.1	3/3	0.0071	5.4
cis-1,3-Dichloropropene	0/3			0/3		
Dibromochloromethane	0/3			0/3		
Dichloromethane (Methylene chloride)	0/3			0/3		
Ethyl benzene	0/3			0/3		
m&p-Xylene	0/3			0/3		
o-Xylene	0/3			0/3		
Styrene	0/3			0/3		
Tetrachloroethene	0/3			0/3		
Toluene	0/3			0/3		
trans-1,2-Dichloroethene	0/3			0/3		
trans-1,3-Dichloropropene	0/3			0/3		
Trichloroethene	0/3			0/3		
Vinyl chloride	1/3	0.0054	0.0054	0/3		
Wet Chemistry						
Nitrate Nitrogen				0/2		
Total Dissolved Solids				2/2	208	247

Table 5-2

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

Parameter	LS-1 10/27/2014	LS-1 10/21/2015	LS-1 10/31/2016	Class C Standard
Inorganic Compounds				
Arsenic	0.01 U	0.011	0.01 U	
Barium	0.101	0.077	0.053	
Cadmium	0.005 U	0.005 U	0.005 U	
Calcium	104	82.5	57.6	
Chromium	0.01 U	0.01 U	0.01 U	
Copper	0.02 U	0.02 U	0.02 U	
Iron	1.5	2.36	1.45	
Lead	0.05 U	0.05 U	0.05 U	0.008
Magnesium	27.3	19.8	14	
Manganese	2.79	1.64	1.29	
Nickel	0.04 U	0.04 U	0.04 U	0.0082
Potassium	3.8	2.9	2.4	
Selenium	0.01 U	0.01 U	0.01 U	
Sodium	23.7	13.9	8	
Zinc	0.02 U	0.02 U	0.151	
Volatile Organic Compounds				
1,1,1-Trichloroethane	0.005 U	0.005 U	0.013 U	
1,1,2,2-Tetrachloroethane	0.005 U	0.005 U	0.013 U	
1,1,2-Trichloroethane	0.005 U	0.005 U	0.013 U	
1,1-Dichloroethane	0.005 U	0.005 U	0.013 U	
1,1-Dichloroethene	0.005 U	0.005 U	0.013 U	
1,2-Dibromoethane	0.005 U	0.005 U	0.013 U	
1,2-Dichloroethane	0.005 U	0.005 U	0.013 U	
1,2-Dichloropropane	0.005 U	0.005 U	0.013 U	
2-Butanone (MEK)	0.01 U	0.01 U	0.025 U	
2-Hexanone	0.01 U	0.01 U	0.025 U	
4-Methyl-2-pentanone	0.01 U	0.01 U	0.025 U	
Acetone	0.01 U	0.01 U	0.025 U	
Benzene	0.005 U	0.005 U	0.013 U	
Bromodichloromethane	0.005 U	0.005 U	0.013 U	
Bromoform	0.005 U	0.005 U	0.013 U	
Bromomethane	0.005 U	0.005 U	0.013 U	
Carbon disulfide	0.01 U	0.01 U	0.025 U	
Carbon tetrachloride	0.005 U	0.005 U	0.013 U	
Chlorobenzene	0.005 U	0.005 U	0.013 U	0.005
Chloroethane	0.005 U	0.005 U	0.013 U	
Chloroform	0.005 U	0.005 U	0.013 U	
Chloromethane	0.005 U	0.005 U	0.013 U	
cis-1,2-Dichloroethene	0.041	0.2 D	0.24	
cis-1,3-Dichloropropene	0.005 U	0.005 U	0.013 U	
Dibromochloromethane	0.005 U	0.005 U	0.013 U	
Dichloromethane (Methylene chloride)	0.005 U	0.005 U	0.013 U	0.2
Ethyl benzene	0.005 U	0.005 U	0.013 U	
m&p-Xylene	0.005 U	0.005 U	0.013 U	
o-Xylene	0.005 U	0.005 U	0.013 U	
Styrene	0.005 U	0.005 U	0.013 U	
Tetrachloroethene	0.005 U	0.005 U	0.013 U	
Toluene	0.005 U	0.005 U	0.013 U	6
trans-1,2-Dichloroethene	0.005 U	0.005 U	0.013 U	
trans-1,3-Dichloropropene	0.005 U	0.005 U	0.013 U	
Trichloroethene	0.005 U	0.005 U	0.013 U	0.04
Vinyl chloride	0.005 U	0.0054	0.013 U	

Notes:
Class C Standard - NYSDEC Class C Surface Water Standard
Concentration in **bold** exceed Class C Standards
U - Concentration not detected at specified detection limit

Table 5-3

Current and Historic Manhole Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	MH-32 10/23/2014	MH-32 10/21/2015	MH-32 10/31/2016	MH-33 10/23/2014	MH-33 10/21/2015	MH-33 10/31/2016	Class C Standard
Inorganic Compounds							
Arsenic	0.01 U	0.02	0.01 U	0.01 U	0.01 U	0.01 U	
Barium	0.1	0.108	0.07	0.061	0.046	0.044	
Cadmium	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Calcium	79.6	96.8	65	77.2	68.1	49	
Chromium	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	
Iron	11.7	21.5	8.56	2.36	0.62	1.09	
Lead	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.008
Magnesium	15	18.2	12.1	17.6	15.6	13.2	
Manganese	1.84	2.7	1.37	1.55	0.858	0.501	
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.0082
Potassium	2.8	2.7	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	
Sodium	4.3	5.3	2.5	4.4	3.4	2.8	
Zinc	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	
Volatile Organic Compounds							
1,1,1-Trichloroethane	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
1,1,2,2-Tetrachloroethane	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
1,1-Dichloroethane	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
1,1-Dichloroethene	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
1,2-Dibromoethane	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
1,2-Dichloroethane	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
1,2-Dichloropropane	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
2-Butanone (MEK)	0.5 U	0.5 U	0.5 U	0.01 U	0.01 U	0.01 U	
2-Hexanone	0.5 U	0.5 U	0.5 U	0.01 U	0.01 U	0.01 U	
4-Methyl-2-pentanone	0.5 U	0.5 U	0.5 U	0.01 U	0.01 U	0.01 U	
Acetone	0.5 U	0.5 U	0.5 U	0.01 U	0.01 U	0.01 U	
Benzene	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
Bromodichloromethane	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
Bromoform	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
Bromomethane	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.01 U	0.01 U	0.01 U	
Carbon tetrachloride	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
Chlorobenzene	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	0.005
Chloroethane	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
Chloroform	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
Chloromethane	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
cis-1,2-Dichloroethene	6.7	9.1	5.4	0.012	0.023	0.0071	
cis-1,3-Dichloropropene	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
Dibromochloromethane	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
Dichloromethane (Methylene chloride)	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	0.2
Ethyl benzene	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
m&p-Xylene	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
o-Xylene	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
Styrene	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
Tetrachloroethene	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
Toluene	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	6
trans-1,2-Dichloroethene	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
trans-1,3-Dichloropropene	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
Trichloroethene	0.25 U	0.25 U	0.25 U	0.0051	0.005 U	0.005 U	0.04
Vinyl chloride	0.25 U	0.25 U	0.25 U	0.005 U	0.005 U	0.005 U	
Wet Chemistry							
Alkalinity		278			258		
Nitrate Nitrogen	1 U		1 U	1 U		1 U	
Total Dissolved Solids	389		247	290		208	500

Notes:
Class C Standard - NYSDEC Class C Surface Water Standard
Concentrations in **bold** exceed Class C Standards
U - Concentration not detected at specified detection limit

Table 6-1

Fall 2016 Air Monitoring Results
Wellsville/Andover Landfill
Wellsville, New York

Monitoring Point	Date	PID above background (ppm)[1]	O_2 (%)	LEL (%)
V-1	10/28/2016	0.4	20.4	0
V-2	10/28/2016	0.0	20.4	0
V-3	10/28/2016	0.2	20.4	0
V-4	10/28/2016	1.5	20.3	11
V-5	10/28/2016	0.0	20.4	0
V-6	10/28/2016	1.8	20.3	0
V-7	10/28/2016	0.0	20.9	0
V-8	10/28/2016	8.2	20.2	37
V-9	10/28/2016	4.5	20.3	11
V-10	10/28/2016	0.0	20.4	0
V-11	10/28/2016	3.9	20.2	12
V-12	10/28/2016	0.1	20.4	0
V-13	10/28/2016	0.5	20.4	9
V-14	10/28/2016	0.4	20.3	6
V-15	10/28/2016	0.0	20.4	0
V-16	10/28/2016	0.0	20.4	0
V-17	10/28/2016	0.2	20.3	0
V-18	10/28/2016	0.4	19.9	16
V-19	10/28/2016	0.0	20.4	0
V-20	10/28/2016	0.0	20.4	0
V-21	10/28/2016	0.1	20.3	0
L-16	10/28/2016	0.0	20.4	0
L-17	10/28/2016	1.1	20.9	0
L-19	10/28/2016	20.8	15.5	>100
L-21	10/28/2016	2.7	17.9	>100
L-23	10/28/2016	6.9	18.4	>100
L-25	10/28/2016	0.3	20.9	0
L-27	10/28/2016	6.8	12.2	>100
L-29	10/28/2016	59.1	20.3	9
L-31	10/28/2016	10.9	11.7	>100
MH-6	10/28/2016	13.0	18.5	0
MH-7	10/28/2016	21.7	20.2	0
MH-8	10/28/2016	14.8	20.0	3
MH-9	10/28/2016	10.4	20.2	0
MH-10	10/28/2016	8.8	18.5	45
MH-11	10/28/2016	2.1	20.3	0
MH-12	10/28/2016	18.4	19.1	33
MH-13	10/28/2016	57.3	19.3	10
MH-32	10/28/2016	1.2	20.4	0
MH-33	10/28/2016	1.1	20.2	0
Upwind	10/28/2016	0.0	20.9	0
Downwind-1	10/28/2016	0.0	20.9	0
Downwind-2	10/28/2016	0.0	20.9	0
Downwind-3	10/28/2016	0.0	20.9	0

Notes:
Meters: Rae Systems MiniRAE 3000, QRAEIll 4 SP gas meter
Background Readings:
O_2=20.4-20.9 LEL = 0 PID = 0.5-1.4
Weather: Cloudy 36° F, 5-10 mph winds from North West
Monitored By: K. Dye and Colin Brown
1 - PID readings provided are above background
which ranged between 0.5 ppm and 1.4 ppm

Table 7-1

Fall 2016
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]	11/1/2016	1220	Yes	Kitchen Sink	11/2/2016	1035
Mrs. Rosalie Rosini	210 E. Linden Ave. Rochester, NY 14445	3899 Snyder Road Wellsville, NY	585-586-0810	WAL-2	Well[1,2] 150 ft deep	10/27/2016	1441	Yes	Kitchen Sink	10/28/2016	1200
Mr. Phil Rosini	NA	3899 Snyder Road Wellsville, NY	Phil Cell: 585-754-6328 Phil (H): 585-671-3831								
Vacant - Formerly Ormsby	NA	4011 Duffy Hollow Rd Wellsville, NY 14895	NA	WAL-5	Spring[3]	House is vacant and reportedly owned by Key Bank					
Mr. Ray Tuberdyck	1391 West Blood Rd East Aurora, NY 14052	3947 Duffy Hollow Rd Wellsville, NY 14895	716-655-1203	WAL-11	Spring[1]	10/27/2016	1444	Yes	Kitchen Sink	11/1/2016	1020
Mr. Daniel & Mrs. Barbara LaDue	3914 Snyder Rd. Wellsville, NY 14895	3914 Snyder Rd. Wellsville, NY 14895	585-593-7200	WAL-19	Spring[2]	10/27/2016	1447	Yes	Post - Kitchen Sink	11/1/2016	1120
									Inter - Between Filters		1135
									Pre - Before Filters		1145

Updated: Nov 2016

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

NA - Not applicable

WAL-1 has been vacant for several years but starting in 2016 has new resident utilizing existing water well at property

WAL-11 sampled fall 2016 as requested by property owner

Table 7-2

Summary of 2015 and 2016 Residential Water Supply Detection Frequencies
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	2015 Detection Frequency	2015 Minmum	2015 Maximum	2016 Detection Frequency	2016 Minimum	2016 Maximum	NYSDOH MCL	2015 MCL Exceedances	2016 MCL Exceedances	Class GA Standard	2015 Class GA Exceedances	2016 Class GA Exceedances
Inorganic Compounds												
Arsenic				0/3			0.05		0	0.025		0
Barium				2/3	0.032	0.067	1		0	1		0
Cadmium				0/3			0.01		0	0.005		0
Calcium				3/3	2.2	46.2						
Chromium				0/3			0.05		0	0.05		0
Copper				1/3	0.025	0.025	1		0	0.2		0
Iron				2/3	0.14	0.62	0.3		1	0.3		1
Lead				0/3			0.05		0	0.025		0
Magnesium				3/3	1.1	14.8						
Manganese				3/3	0.013	0.7	0.3		1	0.3		1
Nickel				0/3						0.1		0
Potassium				0/3								
Selenium				0/3			0.01		0	0.01		0
Sodium				2/3	9.2	50.6				20		1
Zinc				1/3	0.13	0.13						
Volatile Organic Compounds												
1,1,1,2-Tetrachloroethane	0/6			0/8			0.005	0	0	0.005	0	0
1,1,1-Trichloroethane	0/6			0/8			0.005	0	0	0.005	0	0
1,1,2,2-Tetrachloroethane	0/6			0/8			0.005	0	0	0.005	0	0
1,1,2-Trichloroethane	0/6			0/8			0.005	0	0	0.001	0	0
1,1-Dichloroethane	0/6			0/8			0.005	0	0	0.005	0	0
1,1-Dichloroethene	0/6			0/8			0.005	0	0	0.005	0	0
1,1-Dichloropropene	0/6			0/8								
1,2,3-Trichloropropane	0/6			0/8						0.00004	0	0
1,2,4-Trimethylbenzene	0/6			0/8			0.005	0	0	0.005	0	0
1,2-Dibromo-3-chloropropane	0/6			0/8						0.00004	0	0
1,2-Dibromoethane	0/6			0/8								
1,2-Dichlorobenzene	0/6			0/8			0.005	0	0	0.003	0	0
1,2-Dichloroethane	0/6			0/8						0.0006	0	0
1,2-Dichloropropane	0/6			0/8						0.001	0	0
1,3,5-Trimethylbenzene	0/6			0/8			0.005	0	0	0.005	0	0
1,3-Dichlorobenzene	0/6			0/8			0.005	0	0	0.003	0	0
1,3-Dichloropropane	0/6			0/8			0.005	0	0	0.005	0	0
1,4-Dichlorobenzene	0/6			0/8			0.005	0	0	0.003	0	0
2,2-Dichloropropane	0/6			0/8			0.005	0	0	0.005	0	0
2-Chlorotoluene	0/6			0/8			0.005	0	0	0.005	0	0
4-Chlorotoluene	0/6			0/8			0.005	0	0	0.005	0	0
Benzene	0/6			0/8			0.005	0	0	0.001	0	0
Bromobenzene	0/6			0/8			0.005	0	0	0.005	0	0
Bromochloromethane	0/6			0/8			0.005	0	0	0.005	0	0

Please see page 2 for notes.

Table 7-2

Summary of 2015 and 2016 Residential Water Supply Detection Frequencies
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	2015 Detection Frequency	2015 Minmum	2015 Maximum	2016 Detection Frequency	2016 Minimum	2016 Maximum	NYSDOH MCL	2015 MCL Exceedances	2016 MCL Exceedances	Class GA Standard	2015 Class GA Exceedances	2016 Class GA Exceedances
VOC's Continued												
Bromodichloromethane	0/6			0/8								
Bromoform	0/6			0/8								
Bromomethane	0/6			0/8			0.005	0	0	0.005	0	0
Carbon tetrachloride	0/6			0/8			0.005	0	0	0.005	0	0
Chlorobenzene	0/6			0/8			0.005	0	0	0.005	0	0
Chloroethane	0/6			0/8			0.005	0	0	0.005	0	0
Chloroform	0/6			0/8			0.005	0	0	0.007	0	0
Chloromethane	0/6			0/8						0.005	0	0
cis-1,2-Dichloroethene	2/6	0.0025	0.0027	2/8	0.0025	0.0026				0.005	0	0
cis-1,3-Dichloropropene	0/6			0/8								
Dibromochloromethane	0/6			0/8								
Dibromomethane	0/6			0/8			0.005	0	0	0.005	0	0
Dichlorodifluoromethane	0/6			0/8			0.005	0	0	0.005	0	0
Dichloromethane (Methylene chloride)	0/6			0/8			0.005	0	0	0.005	0	0
Ethyl benzene	0/6			0/8			0.005	0	0	0.005	0	0
Isopropylbenzene	0/6			0/8			0.005	0	0	0.005	0	0
m&p-Xylene	0/6			0/8								
Methyl tert-butyl ether (MTBE)	0/6			0/8								
n-Butylbenzene	0/6			0/8			0.005	0	0	0.005	0	0
n-Propylbenzene	0/6			0/8			0.005	0	0	0.005	0	0
o-Xylene	0/6			0/8								
p-Isopropyltoluene	0/6			0/8						0.005	0	0
sec-Butylbenzene	0/6			0/8						0.005	0	0
Styrene	0/6			0/8			0.005	0	0	0.005	0	0
Tert-Butyl Alcohol	0/6			0/8								
tert-Butylbenzene	0/6			0/8						0.005	0	0
Tetrachloroethene	0/6			0/8			0.005	0	0	0.005	0	0
Toluene	0/6			0/8			0.005	0	0	0.005	0	0
trans-1,2-Dichloroethene	0/6			0/8						0.005	0	0
trans-1,3-Dichloropropene	0/6			0/8								
Trichloroethene	2/6	0.0025	0.0027	2/8	0.0027	0.0028	0.005	0	0	0.005	0	0
Trichlorofluoromethane	0/6			0/8			0.005	0	0	0.005	0	0
Vinyl chloride	0/6			0/8			0.005	0	0	0.002	0	0
1,2,3-Trichlorobenzene	0/6			0/8			0.005	0	0	0.005	0	0
1,2,4-Trichlorobenzene	0/6			0/8			0.005	0	0	0.005	0	0
Hexachlorobutadiene	0/6			0/8						0.0005	0	0
Naphthalene	0/6			0/8								

Notes:
NYSDOH MCL - NYSDOH Maximum Containment Level
Class GA Standard - NYSDEC Class GA Groundwater Standard

Please see page 2 for notes.

Table 7-3

2016 Residential Water Supply Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	WAL11-1116 11/1/2016	WAL1-1116 11/2/2016	WAL2-1016 10/28/2016	WAL19PRE-0416 4/26/2016	WAL19-Pre-1116 11/1/2016	WAL19INTER-0416 4/26/2016	WAL19-Inter-1116 11/1/2016	WAL19POST-0416 4/26/2016	WAL19-Post-1116 11/1/2016
Inorganic Compounds									
Arsenic	0.01 U	0.01 U	0.01 U						
Barium	0.02 U	0.067	0.032						
Cadmium	0.005 U	0.005 U	0.005 U						
Calcium	2.2	41.5	46.2						
Chromium	0.01 U	0.01 U	0.01 U						
Copper	0.025	0.02 U	0.02 U						
Iron	0.14	0.1 U	0.62						
Lead	0.05 U	0.05 U	0.05 U						
Magnesium	1.1	13.4	14.8						
Manganese	0.013	0.078	0.7						
Nickel	0.04 U	0.04 U	0.04 U						
Potassium	2 U	2 U	2 U						
Selenium	0.01 U	0.01 U	0.01 U						
Sodium	1 U	9.2	50.6						
Zinc	0.02 U	0.13	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	0.0005 U
1,1,1-Trichloroethane	0.0005 U	0.0005 U		0.0005 U	0.0005 U	0.0005 U	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	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	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	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	0.0005 U
1,1-Dichloropropene	0.0005 U	0.0005 U		0.0005 U	0.0005 U	0.0005 U	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	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	0.0005 U
1,2-Dibromo-3-chloropropane	0.0005 U	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,2-Dibromoethane	0.0005 U	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	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	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	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	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	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	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	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	0.0005 U
2-Chlorotoluene	0.0005 U	0.0005 U		0.0005 U	0.0005 U	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	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	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	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	0.0005 U

Please see page 2 for notes.

Table 7-3

2016 Residential Water Supply Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

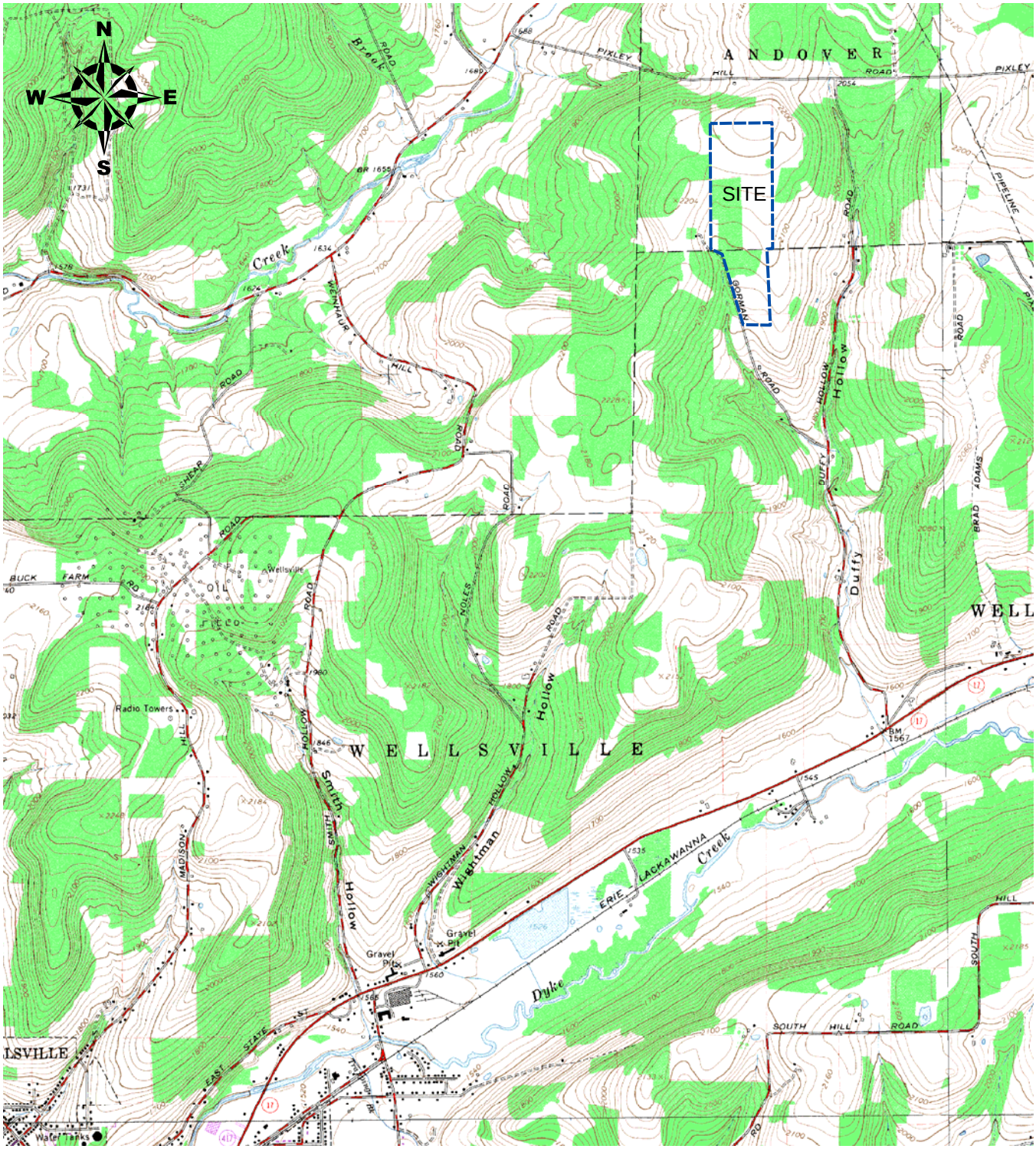
Parameter	WAL11-1116 11/1/2016	WAL1-1116 11/2/2016	WAL2-1016 10/28/2016	WAL19PRE-0416 4/26/2016	WAL19-Pre-1116 11/1/2016	WAL19INTER-0416 4/26/2016	WAL19-Inter-1116 11/1/2016	WAL19POST-0416 4/26/2016	WAL19-Post-1116 11/1/2016
VOC's Continued									
Bromodichloromethane	0.0005 U	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Bromoform	0.0005 U	0.0005 U		0.0005 U	0.0005 U	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	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	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	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	0.0005 U
Chloroform	0.0005 U	0.0005 U		0.0005 U	0.0005 U	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	0.0005 U
cis-1,2-Dichloroethene	0.0005 U	0.0005 U		0.0025	0.0026	0.0005 U	0.0005 U	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	0.0005 U
Dibromochloromethane	0.0005 U	0.0005 U		0.0005 U	0.0005 U	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	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	0.0005 U
Dichloromethane (Methylene chloride)	0.0005 U	0.0005 U		0.0005 U	0.0005 U	0.0005 U	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	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	0.0005 U
m&p-Xylene	0.001 U	0.001 U		0.001 U	0.001 U	0.001 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	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	0.0005 U
n-Propylbenzene	0.0005 U	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
o-Xylene	0.0005 U	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
p-Isopropyltoluene	0.0005 U	0.0005 U		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	0.0005 U
Styrene	0.0005 U	0.0005 U		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Tert-Butyl Alcohol	0.02 U	0.02 U		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
tert-Butylbenzene	0.0005 U	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	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	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	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	0.0005 U
Trichloroethene	0.0005 U	0.0005 U		0.0027	0.0028	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Trichlorofluoromethane	0.0005 U	0.0005 U		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	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	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	0.0005 U
Hexachlorobutadiene	0.0005 U	0.0005 U		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	0.0005 U	0.0005 U	0.0005 U	0.0005 U

Notes:

U - Concentrations not detected at specified limit

Please see page 2 for notes.

SITE LOCATION



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

3,000 1,500 0 3,000
Feet

1 inch = 3,000 feet

Legend

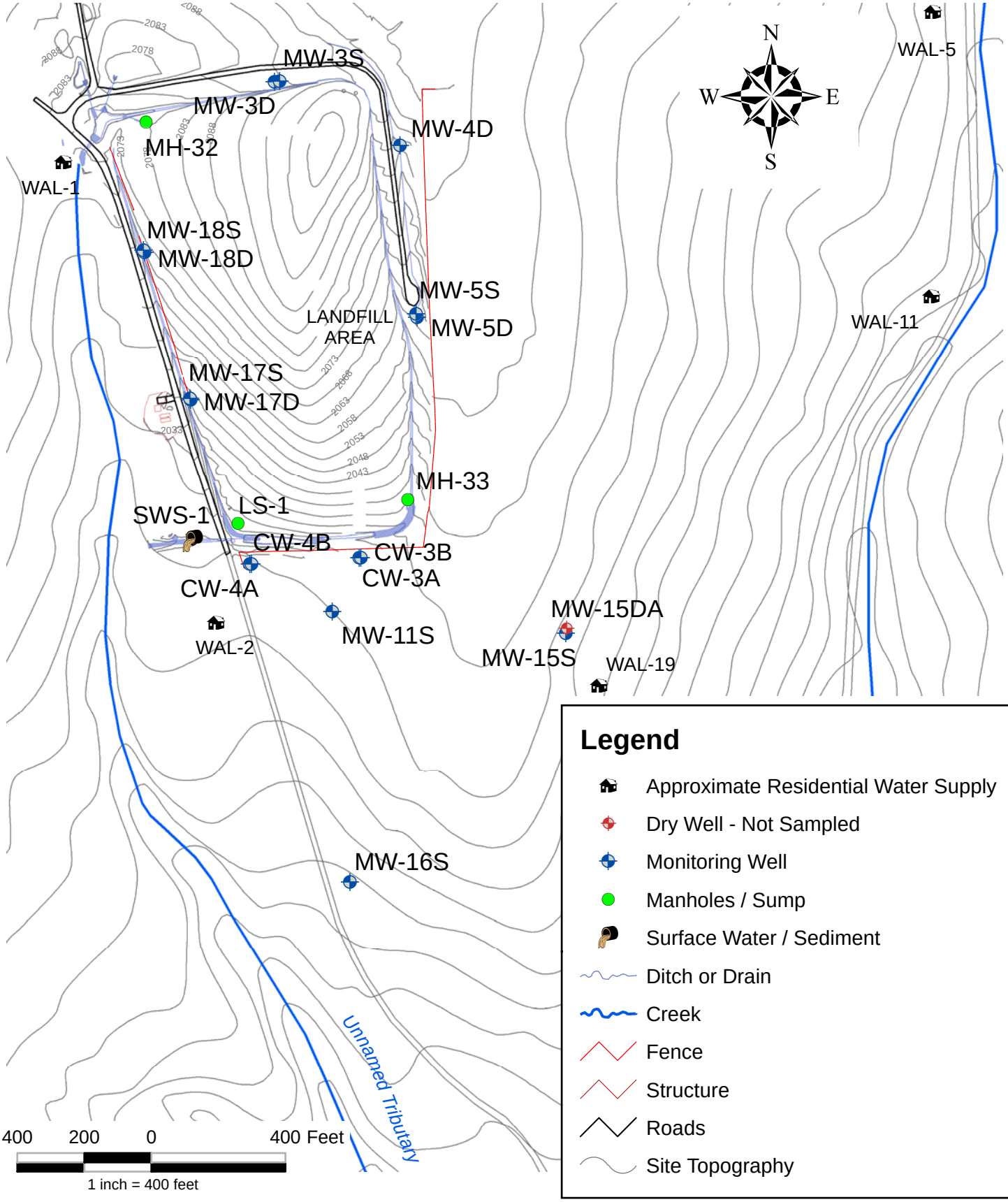
Approximate Site Boundary

ON-SITE TECHNICAL SERVICES, INC.
72 Railroad Aveune Wellsville, NY14895

FIGURE NO.	1
PROJECT	WAL
DOCUMENT	2016 Annual Report
FILE NO.	Fig 1.mxd

N:\WAL\ANNUAL REPORTS\2015 ANNUAL REPORT\FIGURES\FIG 1.MXD

2016 SAMPLING LOCATIONS



Legend

- Approximate Residential Water Supply
- Dry Well - Not Sampled
- Monitoring Well
- Manholes / Sump
- Surface Water / Sediment
- Ditch or Drain
- Creek
- Fence
- Structure
- Roads
- Site Topography

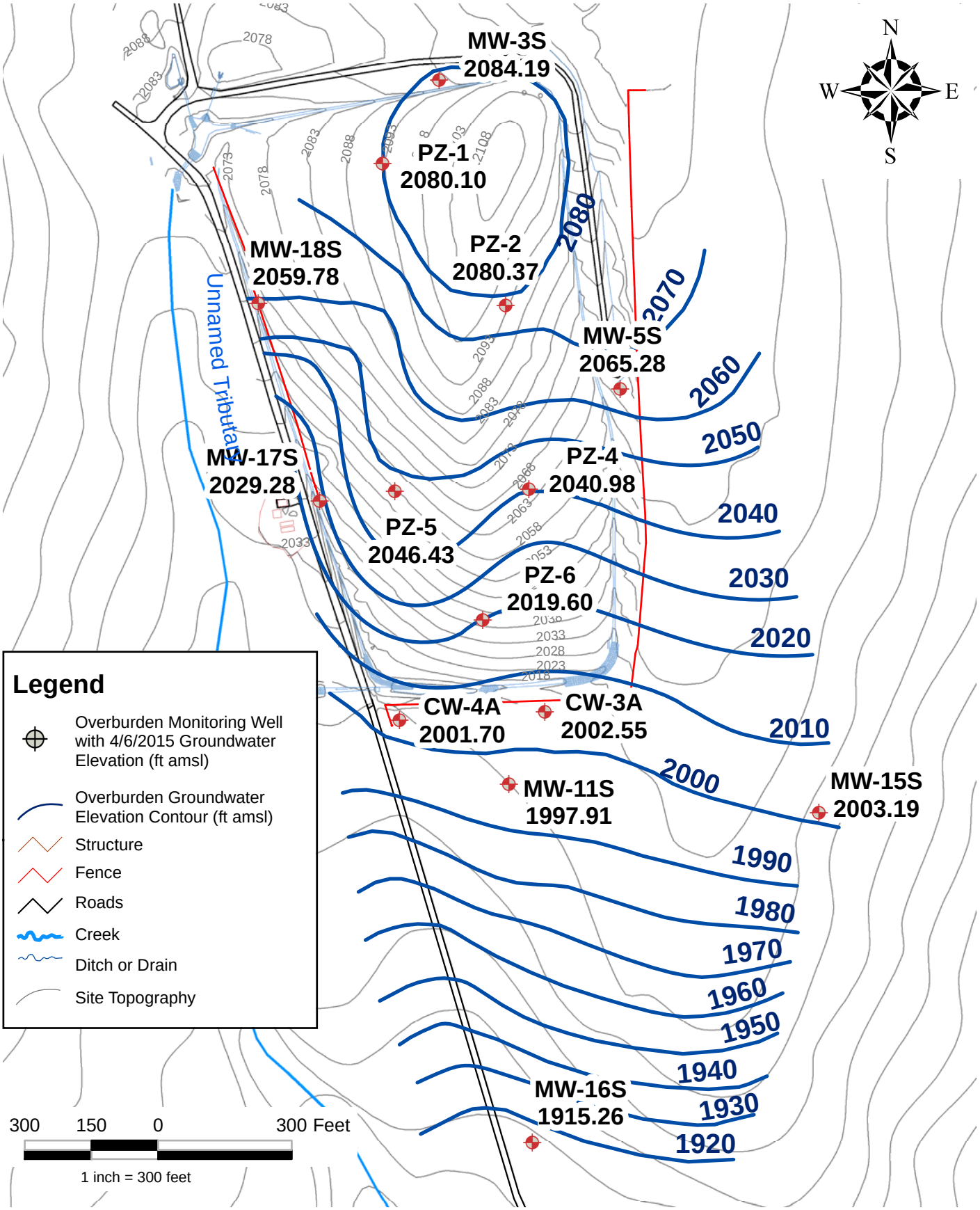
ON-SITE TECHNICAL SERVICES, INC.

72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	2
PROJECT	WAL
DOCUMENT	2016 Annual Report
FILE NO.	Fig 2.mxd

N:\WAL\ANNUAL REPORTS\2015 ANNUAL REPORT\FIGURES\FIG 2.MXD

APRIL 22, 2016 OVERBURDEN MONITORING WELL POTENTIOMETRIC MAP

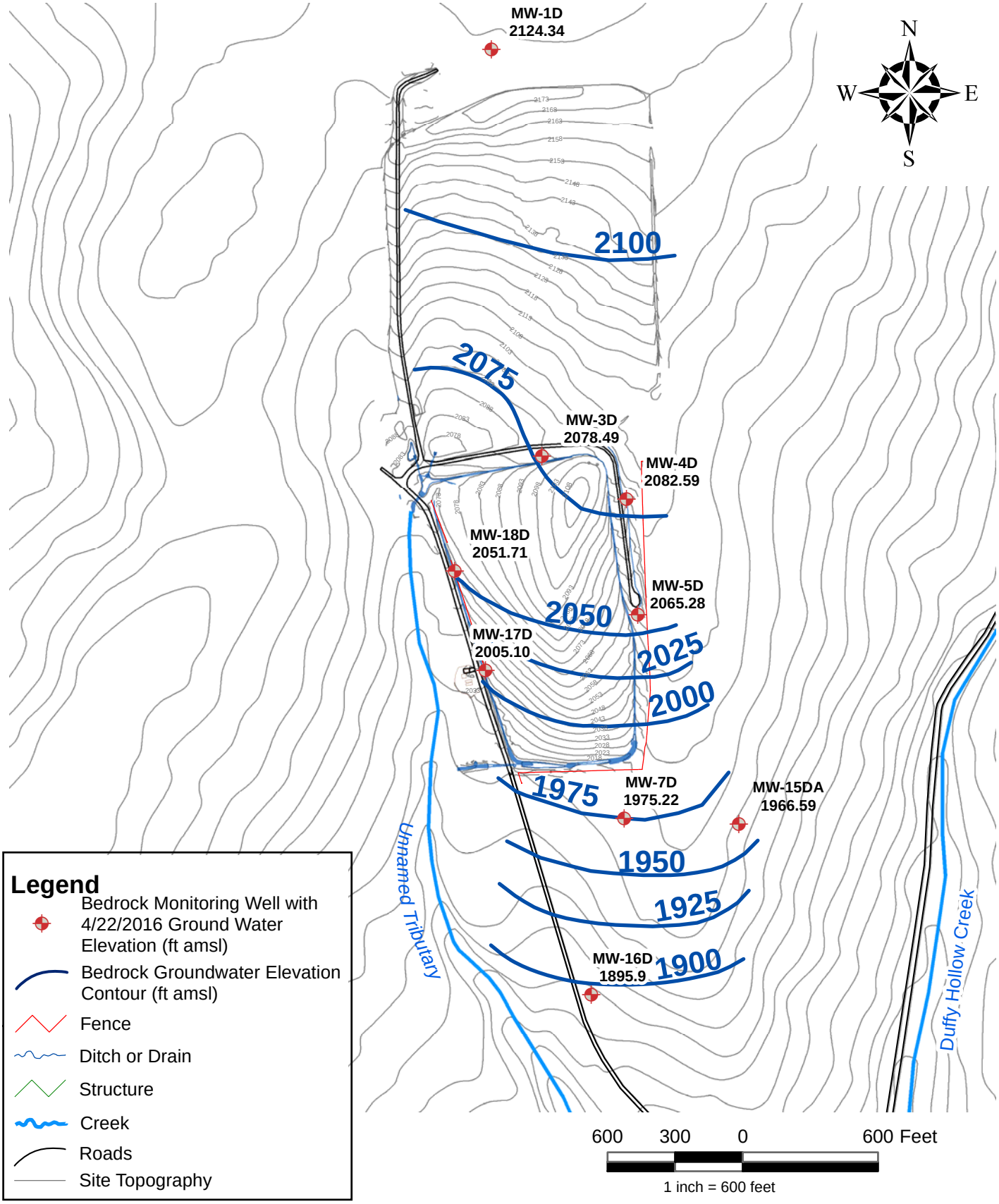


ON-SITE TECHNICAL SERVICES, INC.
72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	3
PROJECT	WAL
DOCUMENT	2016 Annual Report
FILE NO	Fig 3 0416 OB.mxd

N:\WAL\2016\FALL REPORT\FIGURES\FIG 3 0416 OB.MXD

APRIL 22, 2016 BEDROCK MONITORING WELL POTENTIOMETRIC MAP



Legend

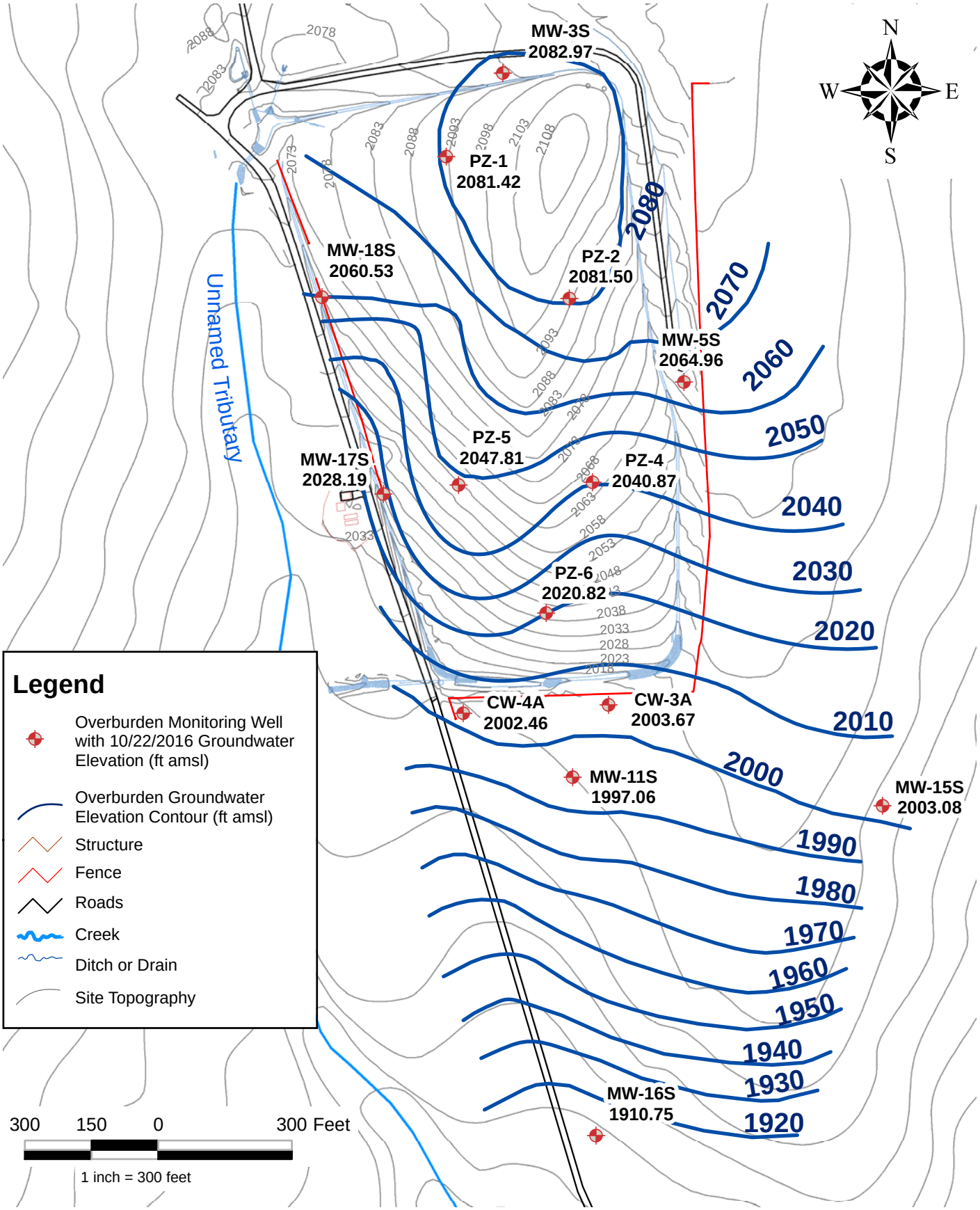
- Bedrock Monitoring Well with 4/22/2016 Ground Water Elevation (ft amsl)
- Bedrock Groundwater Elevation Contour (ft amsl)
- Fence
- Ditch or Drain
- Structure
- Creek
- Roads
- Site Topography

ON-SITE TECHNICAL SERVICES, INC.
72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	4
PROJECT	WAL
DOCUMENT	2016 Annual Report
FILE NO	Fig 4 0416 BR.mxd

N:\WAL\ANNUALREPORTS\2015ANNUALREPORT\FIGURES\FIG 4 0415 BR.MXD

October 28, 2016 OVERBURDEN MONITORING WELL POTENTIOMETRIC MAP

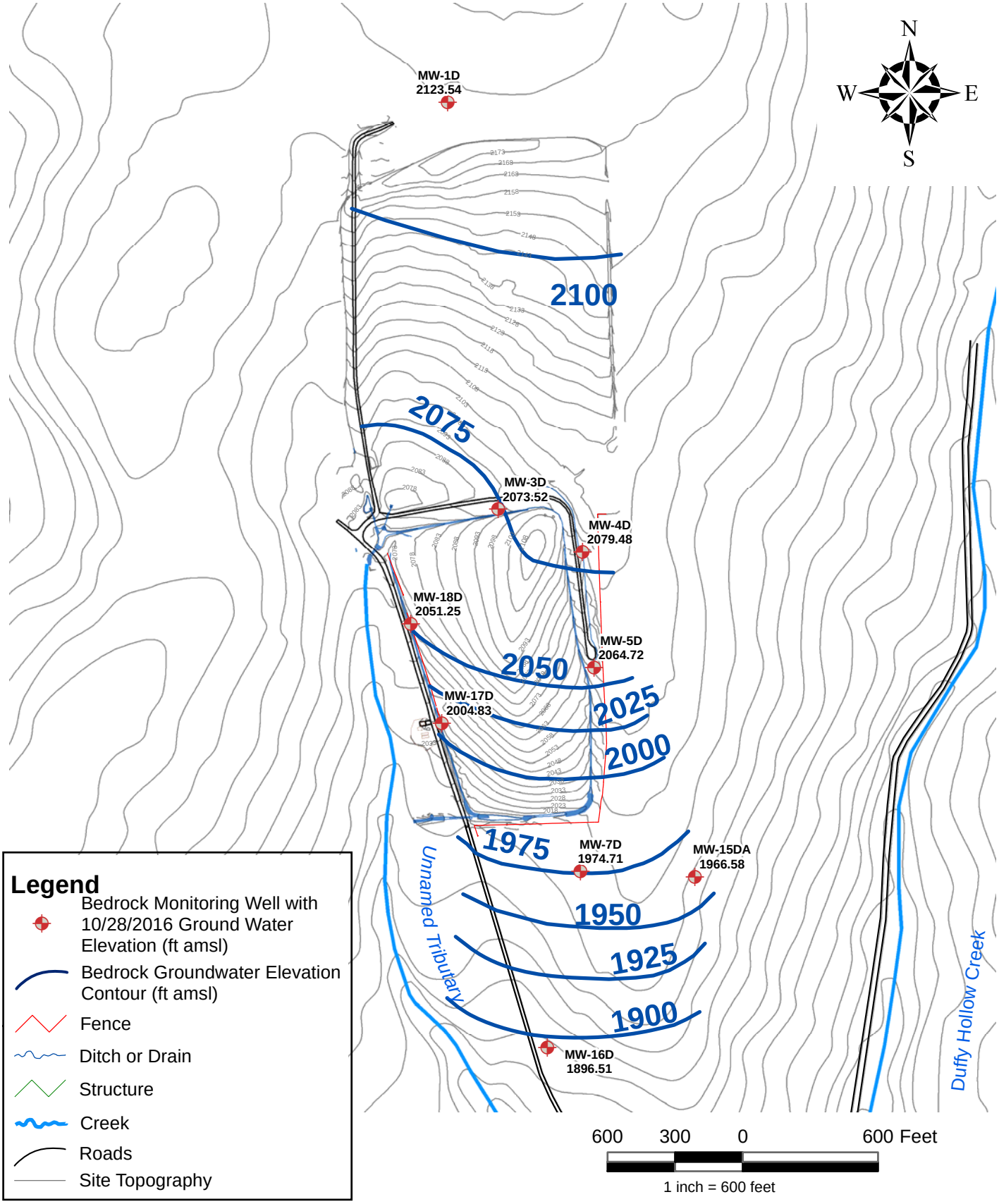


ON-SITE TECHNICAL SERVICES, INC.
72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	5
PROJECT	WAL
DOCUMENT	2016 Annual Report
FILE NO	Fig 5 1116 OB.mxd

N:\WAL\ANNUALREPORTS\2014ANNUALREPORT\FIGURES\FIG 5 1014 OB.MXD

OCTOBER 28, 2016 BEDROCK MONITORING WELL POTENTIOMETRIC MAP



Legend

- Bedrock Monitoring Well with 10/28/2016 Ground Water Elevation (ft amsl)
- Bedrock Groundwater Elevation Contour (ft amsl)
- Fence
- Ditch or Drain
- Structure
- Creek
- Roads
- Site Topography

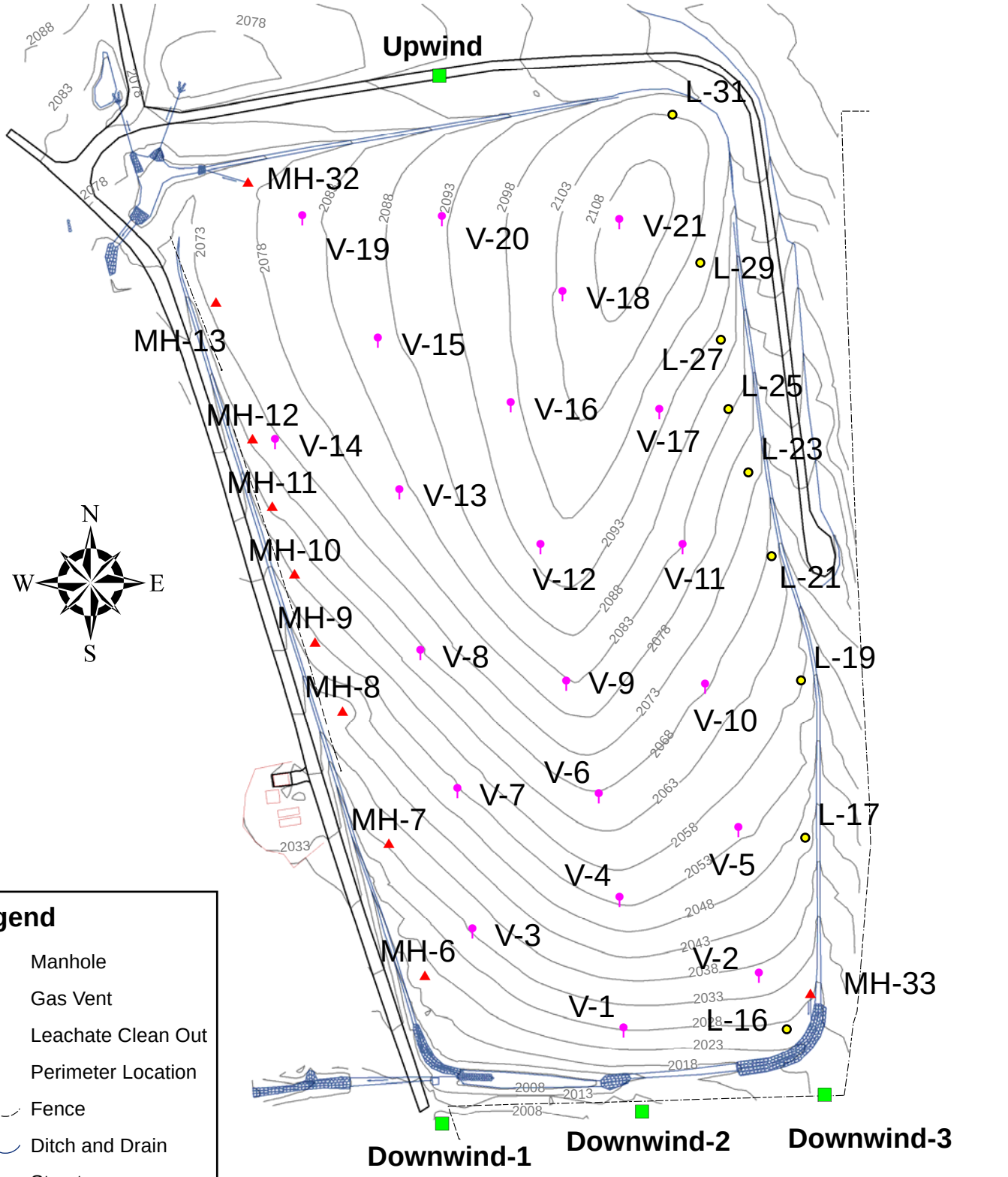
ON-SITE TECHNICAL SERVICES, INC.

72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	6
PROJECT	WAL
DOCUMENT	2016 Annual Report
FILE NO	Fig 6 1116 BR.mxd

N:\WAL\ANNUALREPORTS\2015ANNUALREPORT\FIGURES\FIG 6 1015 BR.MXD

OCTOBER 28, 2016 AIR MONITORING LOCATIONS



Legend

- Manhole
- Gas Vent
- Leachate Clean Out
- Perimeter Location
- Fence
- Ditch and Drain
- Structure
- Road
- Site Topography

ON-SITE TECHNICAL SERVICES, INC.

72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	7
PROJECT	WAL
DOCUMENT	2016 ANNUAL RPT
FILE NO.	FIG 7.MXD

N:\WAL\ANNUALREPORTS\2015ANNUALREPORT\FIGURES\FIG 7.MXD

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation
625 Broadway, 11th Floor, Albany, NY 12233-7020
P: (518)402-9543 | F: (518)402-9547
www.dec.ny.gov

1/6/2017

William D. Whitfield
Director Of Public Works
Village of Wellsville
200 Bolivar Road
Wellsville, NY 14895

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal
Site Name: Wellsville-Andover Landfill
Site No.: 902004
Site Address: Snyder Hill Road
Wellsville, NY 14895

Dear William D. Whitfield:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at http://www.dec.ny.gov/regulations/67386.html) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **March 17, 2017**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Qualified Environmental Professional (QEP). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

All site-related documents and data, including the PRR, are to be submitted in electronic format to the Department of Environmental Conservation. The Department will not approve the PRR unless all documents and data generated in support of that report have been submitted in accordance with the electronic submissions protocol. In addition, the certification forms are required to be submitted in both paper and electronic formats.

Information on the format of the data submissions can be found at:
http://www.dec.ny.gov/regulations/2586.html

The signed certification forms should be sent to David Szymanski, Project Manager, at the following address:

New York State Department of Environmental Conservation
270 Michigan Ave
Buffalo, NY 14203-2915

Phone number: 716-851-7220. E-mail: david.szymanski@dec.ny.gov

The contact information above is also provided so that you may notify the project manager about upcoming inspections, or for any other questions or concerns that may arise in regard to the site.

Enclosures

PRR General Guidance
Certification Form Instructions
Certification Forms

ec: w/ enclosures
David Szymanski, Project Manager
Chad Staniszewski, Hazardous Waste Remediation Engineer, Region 9

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: 19.0

Reporting Period: February 15, 2016 to February 15, 2017

	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/ECs 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

SITE NO. 902004 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
201-1-15.2	VILLAGE OF WELLSVILLE	Ground Water Use Restriction Monitoring Plan O&M Plan

Box 4

Description of Engineering Controls

Parcel	Engineering Control
201-1-15.2	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.

Box 5

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 certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☒	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or 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 William Whitfield (print name) at 200 Bolivar Rd Wellsville, NY 14895 (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

Date 3/13/17

IC/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 (print name) at 72 Railroad Ave Wellsville, NY 14895 (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)	Date
Jonathan E Brandes		3/13/17

ON-SITE TECHNICAL SERVICES, INC
72 Railroad Avenue
Wellsville, New York 14895
Phone: (585) 593-1824
Fax: (585) 593-7471

April 3, 2009

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

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

Dear Linda:

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

Background

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

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

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

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

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

Site Hydrogeology

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

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

Evaluation of Monitoring Results

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

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 O_2/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 O_2/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.

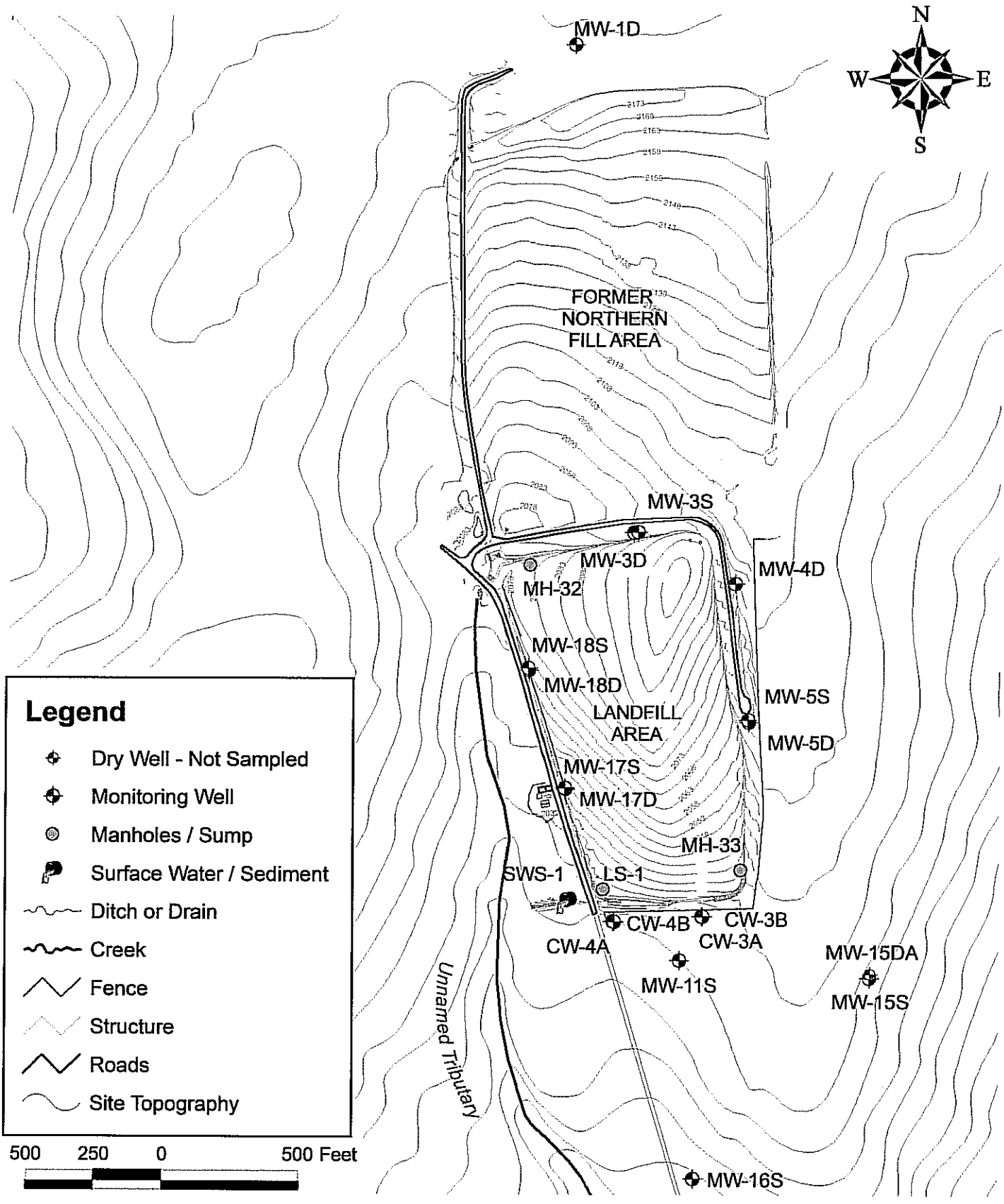
Sincerely,

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



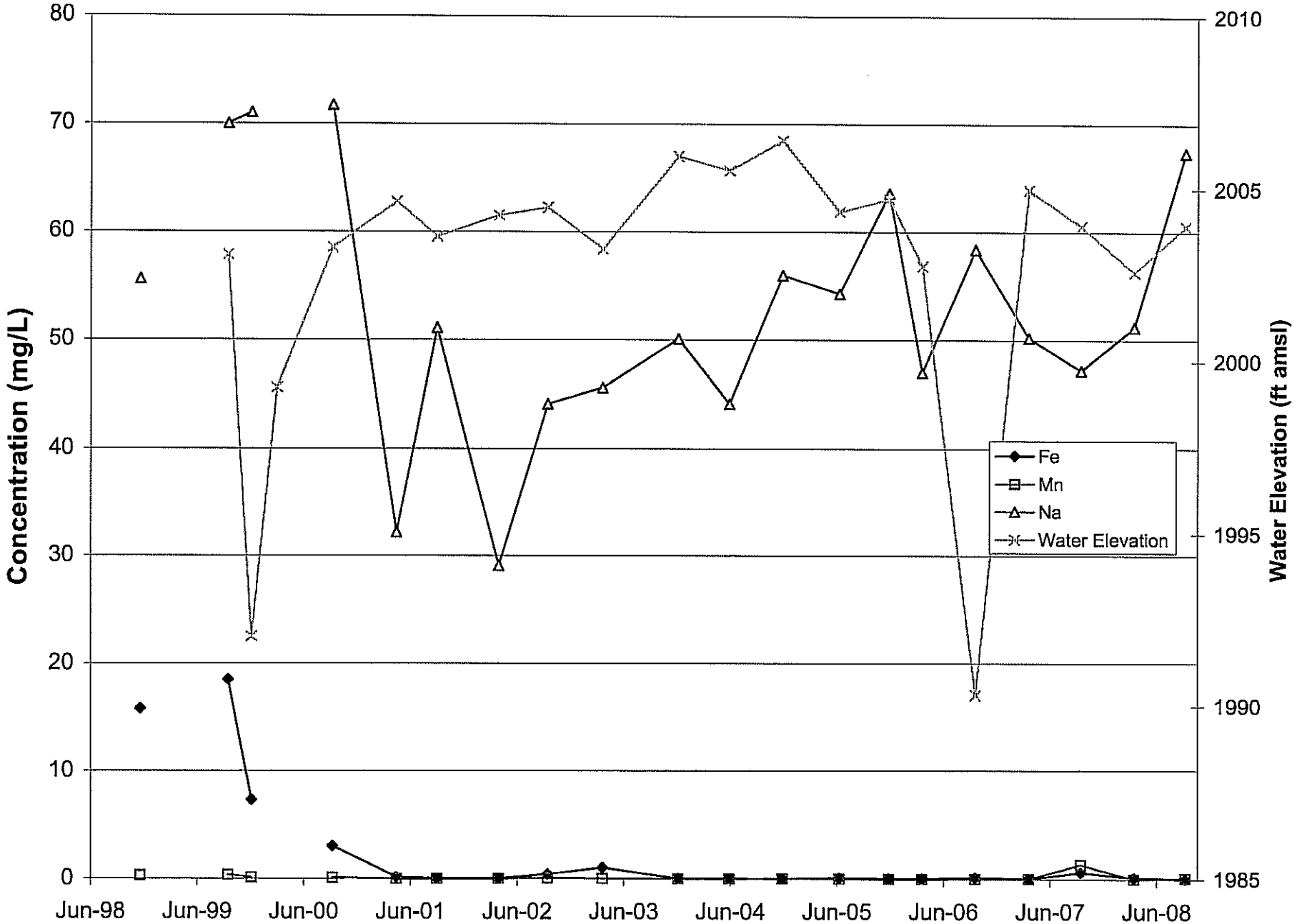
ON-SITE TECHNICAL SERVICES, INC.

72 Railroad Avenue Wellsville, NY 14895

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

N:\WAL\2009 SITE REVIEW\FIG 1 - SAMP LOCS.MXD

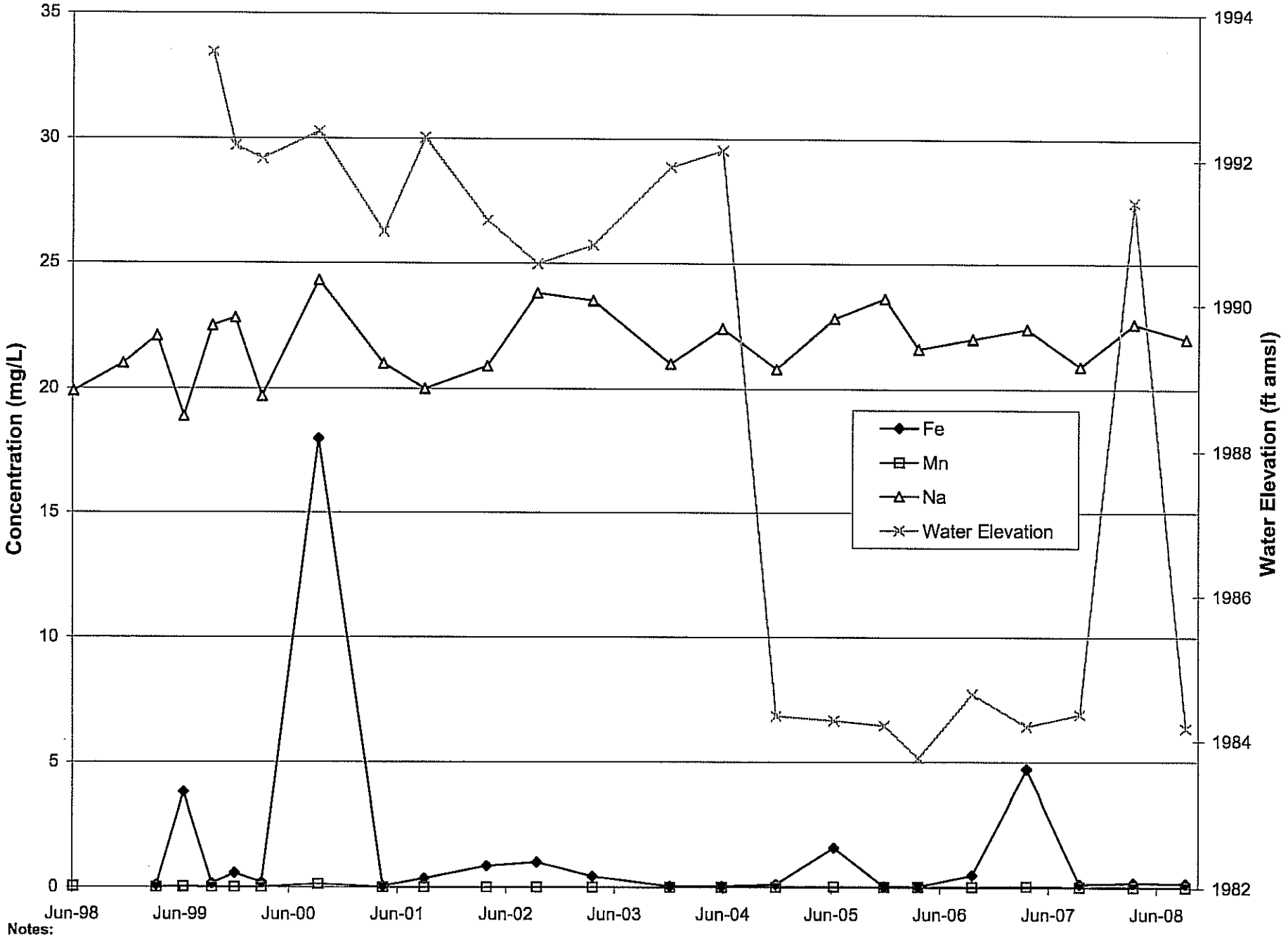
CW-3A Metals



Notes:

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

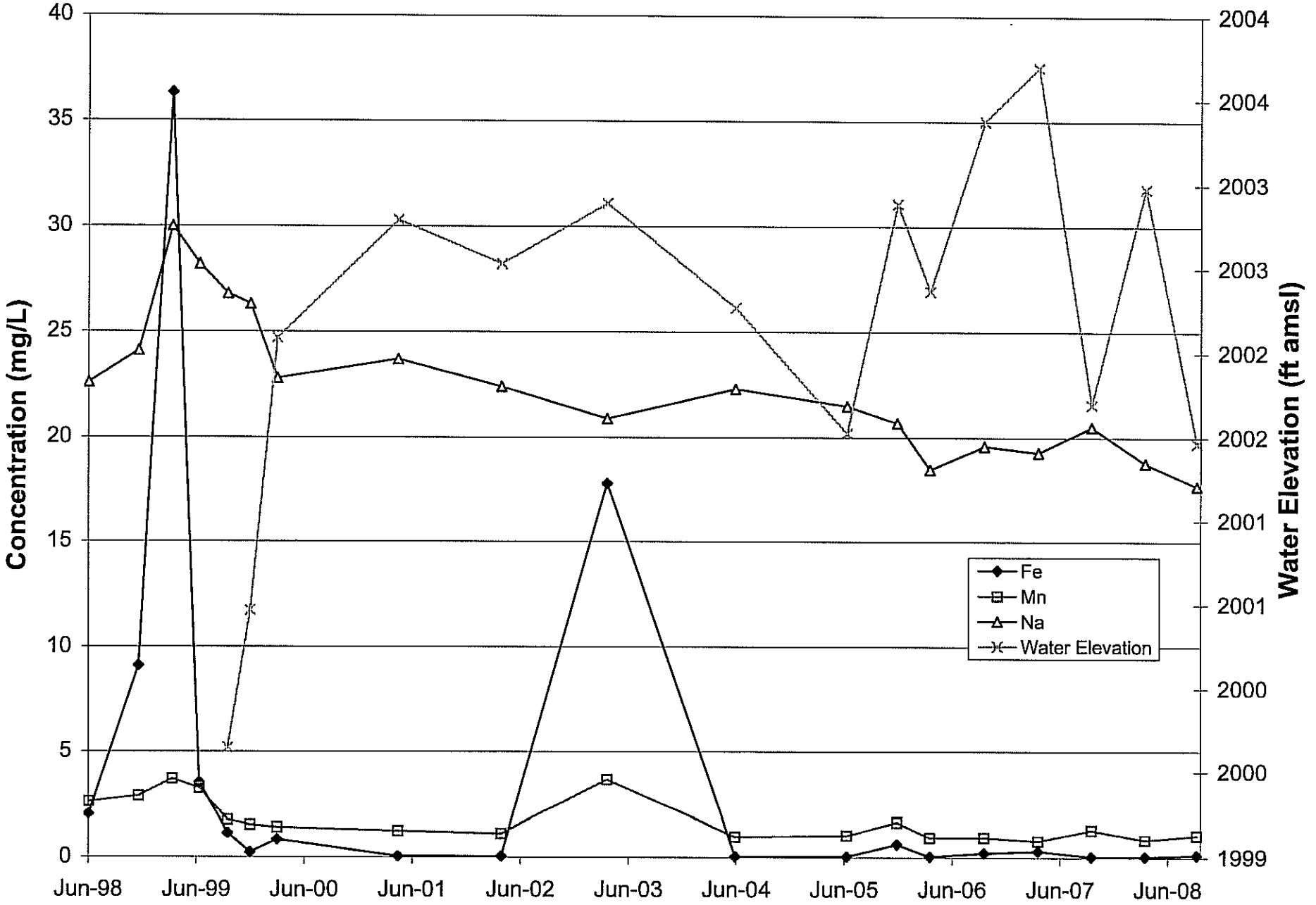
CW-3B Metals



Notes:

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

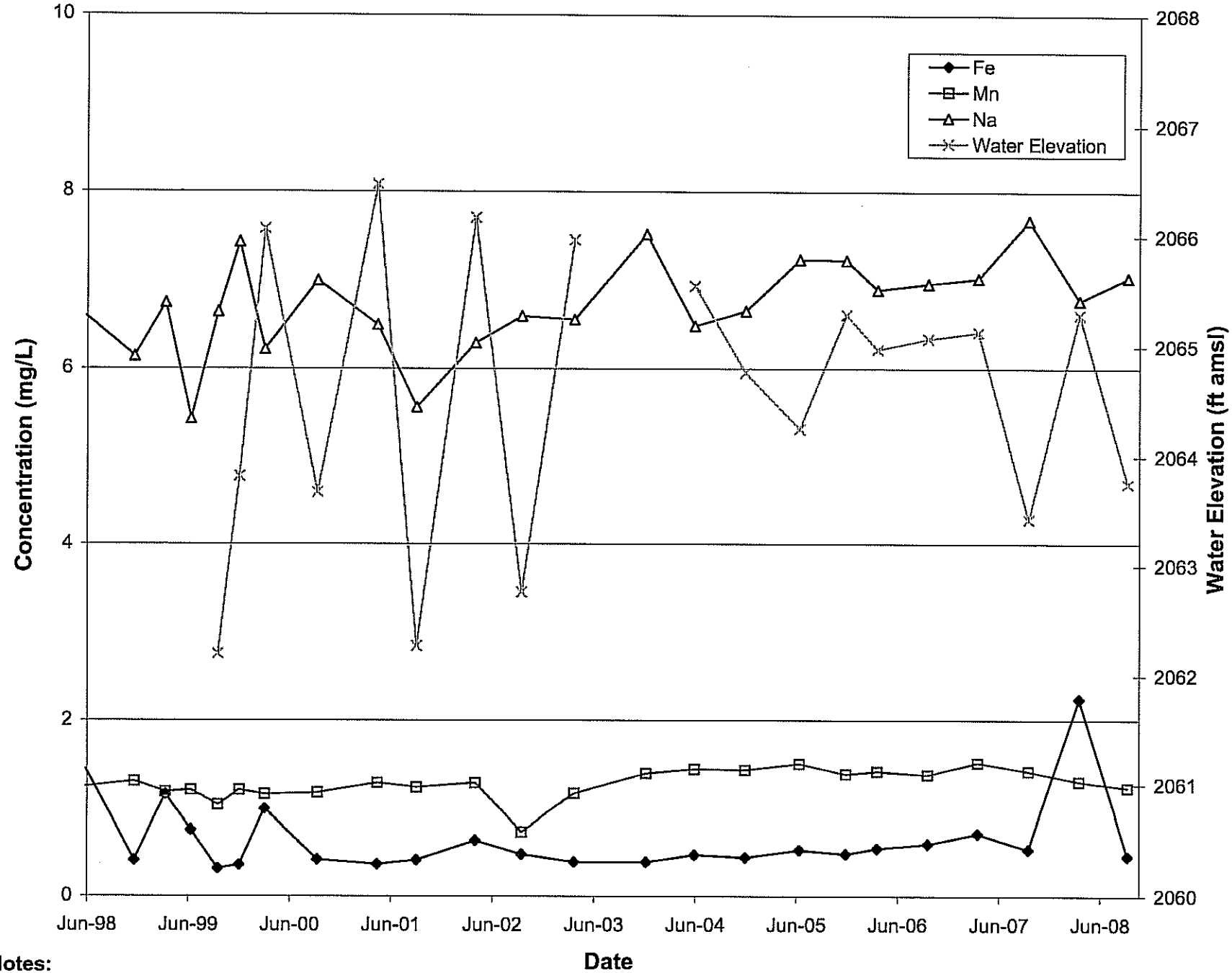
CW-4B Metals



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

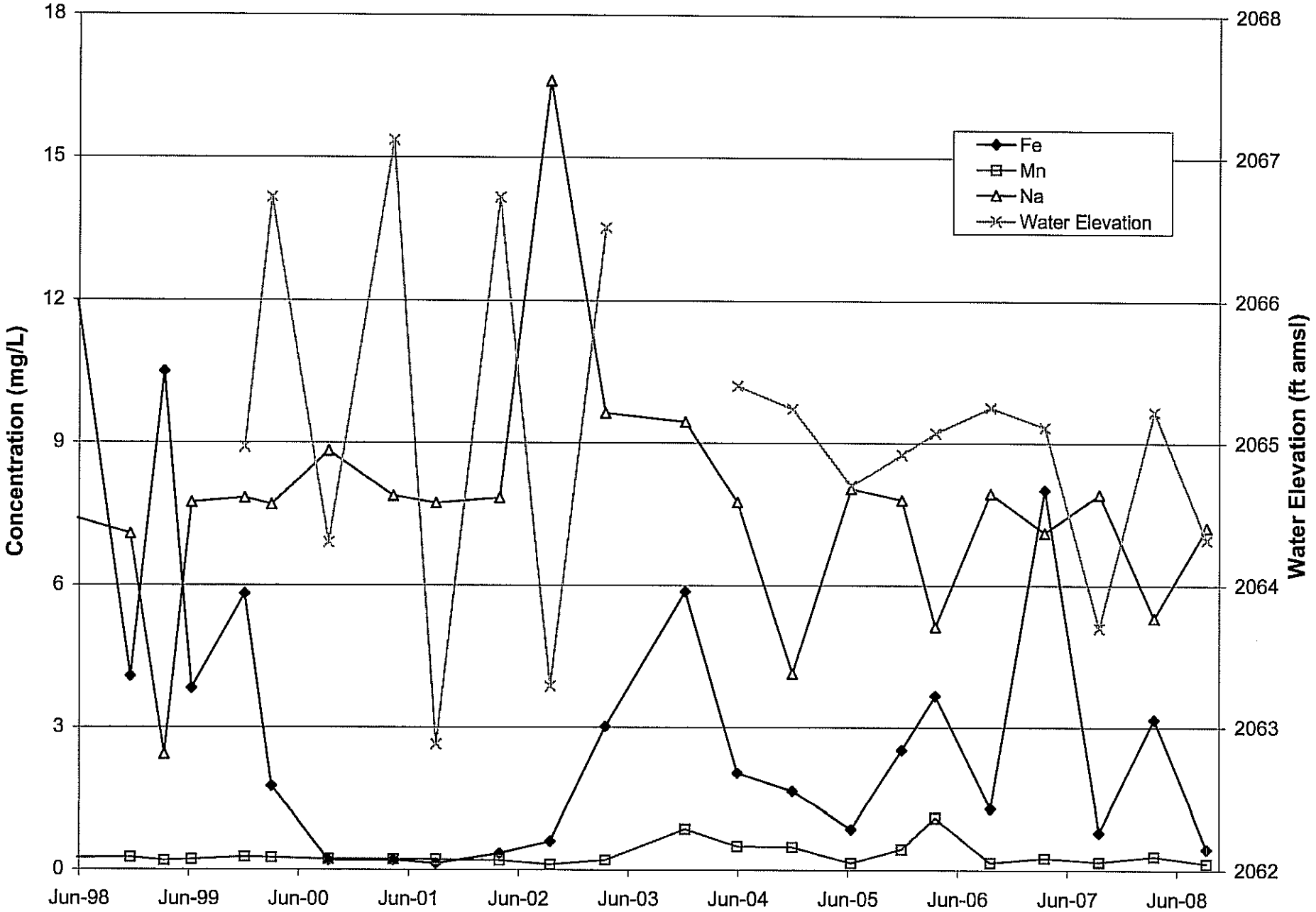
MW-5D Metals



Notes:

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

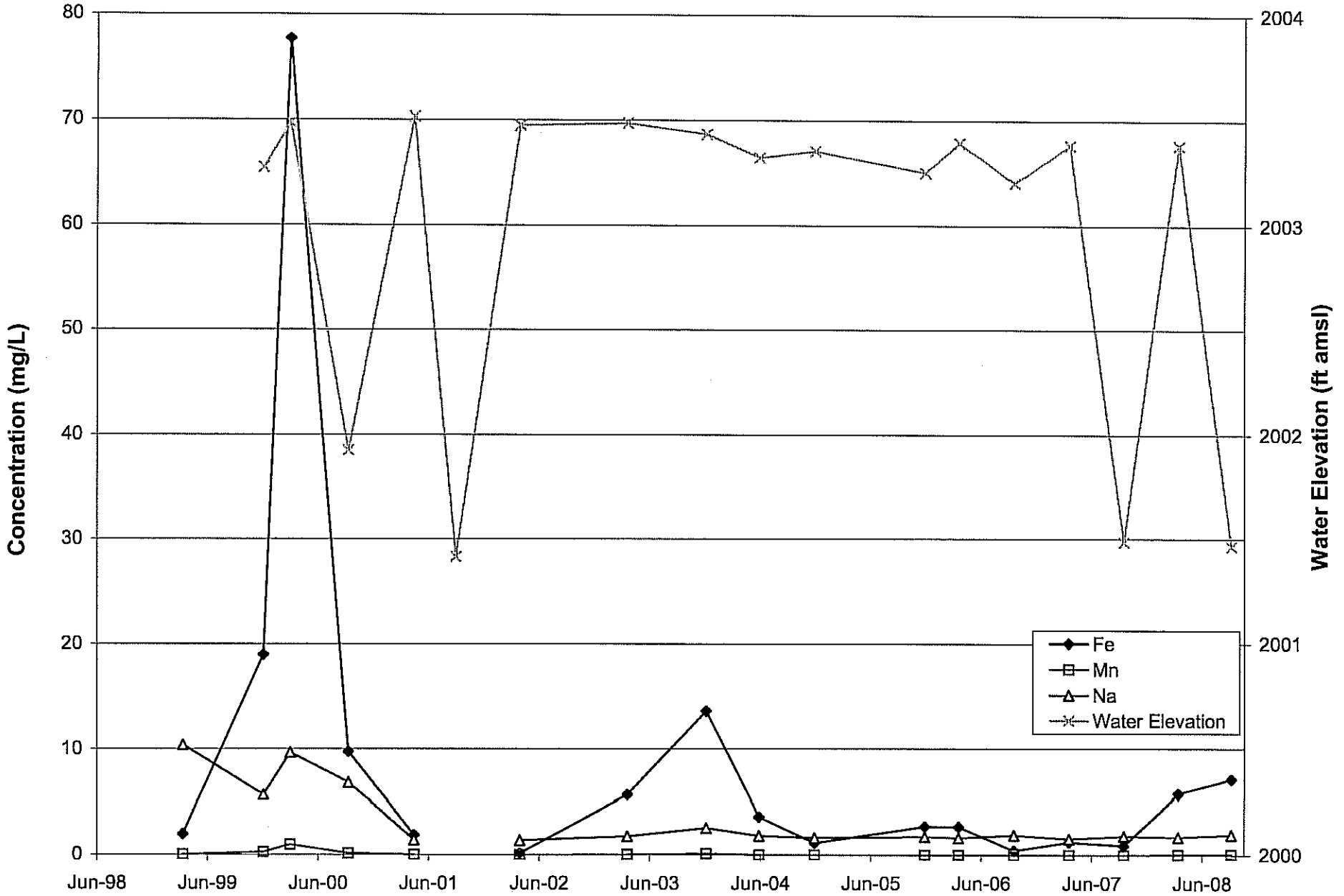
MW-5S Metals



Note:

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

MW-15S Metals

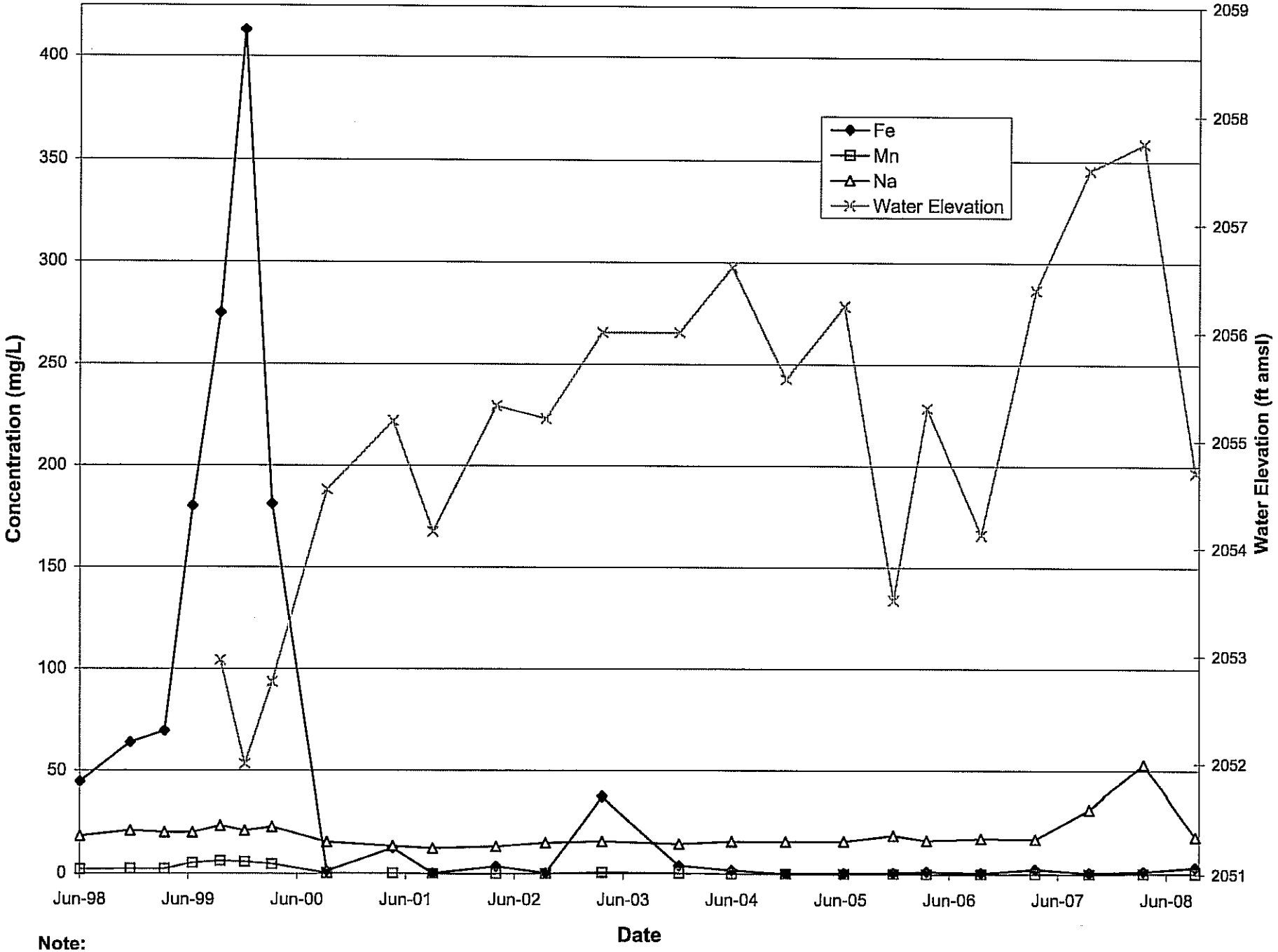


Notes:

1. 1/2 detection limit used for non-detects
2. Manganese is non-detect on 4/10/2002 and 9/28/2006.
3. VOCs only collected on 9/11/2001 due to insufficient water volume.

Date

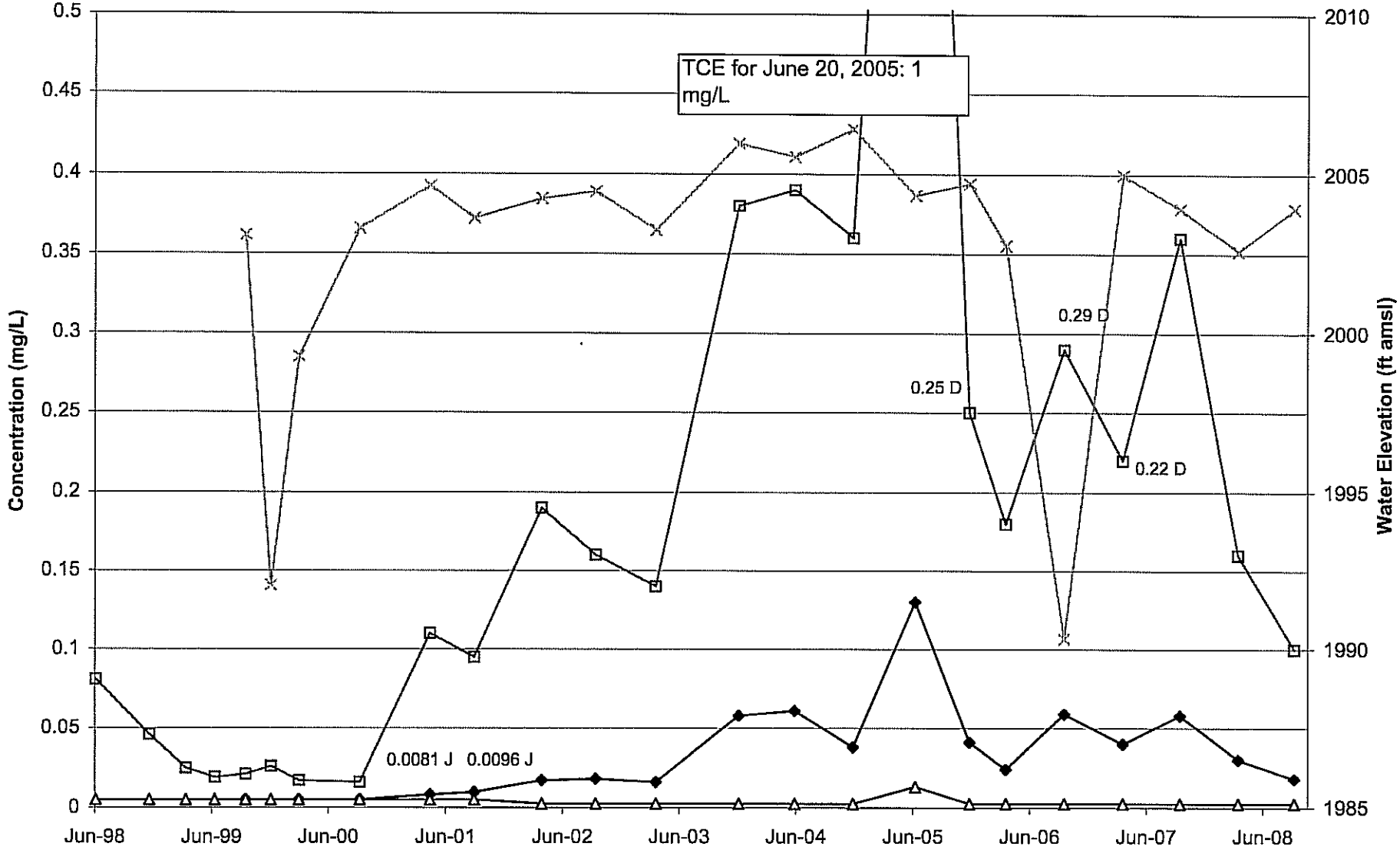
MW-18S Metals



Note:

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

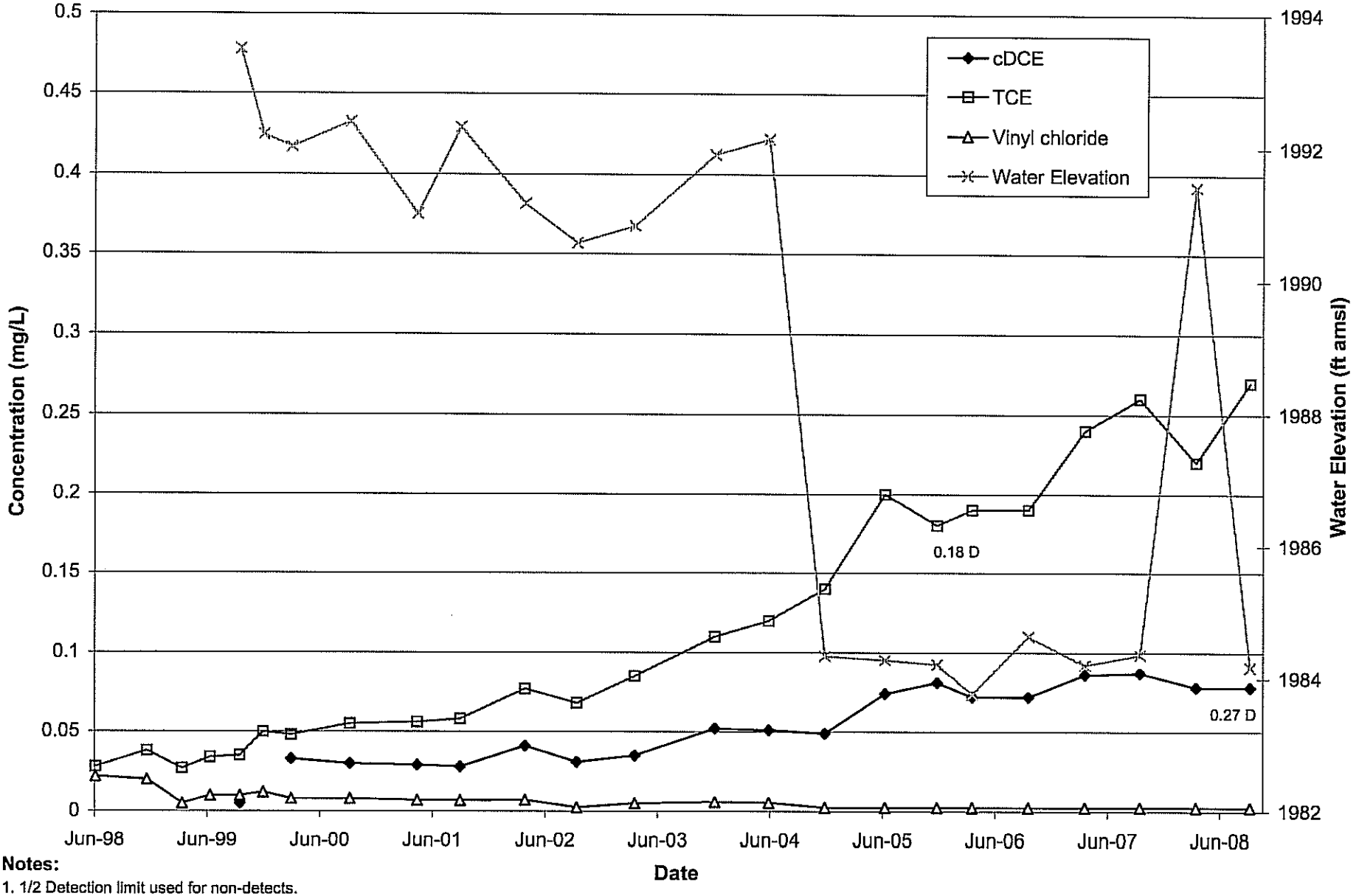
CW-3A VOCs



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. Vinyl choride results are non-detected except in June 2005.
4. 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.
5. D - This flag indicates a result from a diluted sample.
6. Data with flag labeled on graph as appropriate.

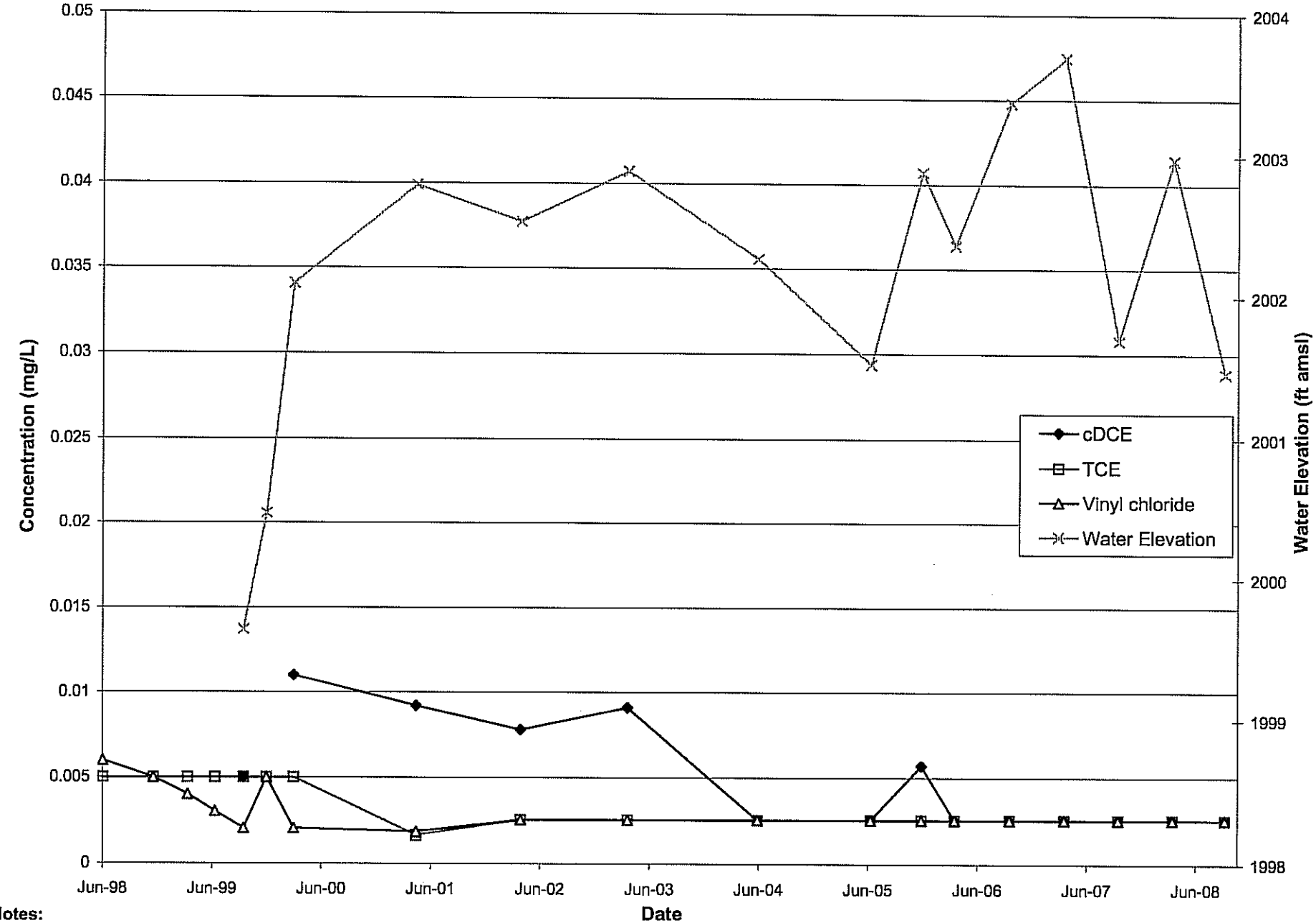
CW-3B VOCs



Notes:

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

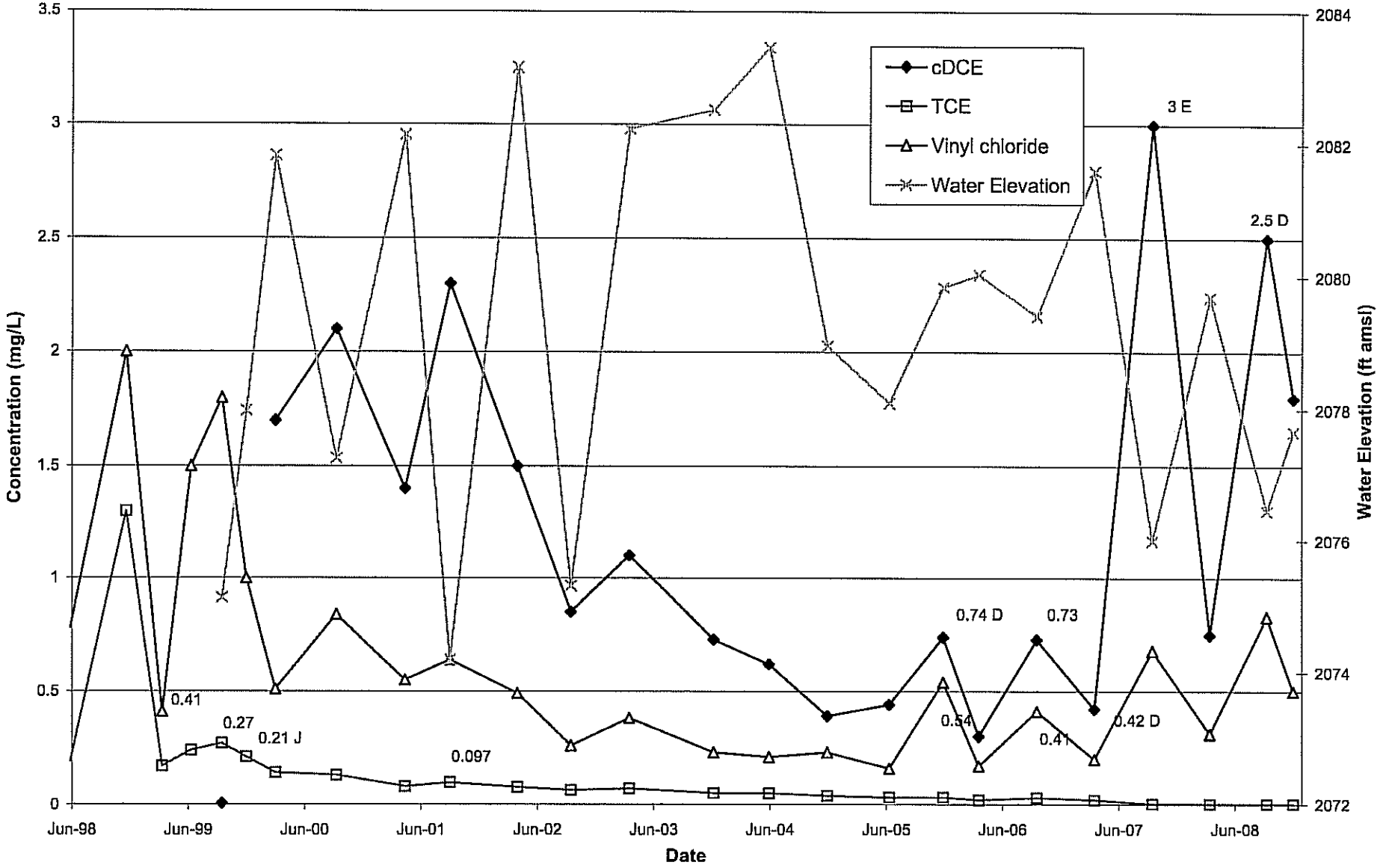
CW-4B VOCs



Notes:

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

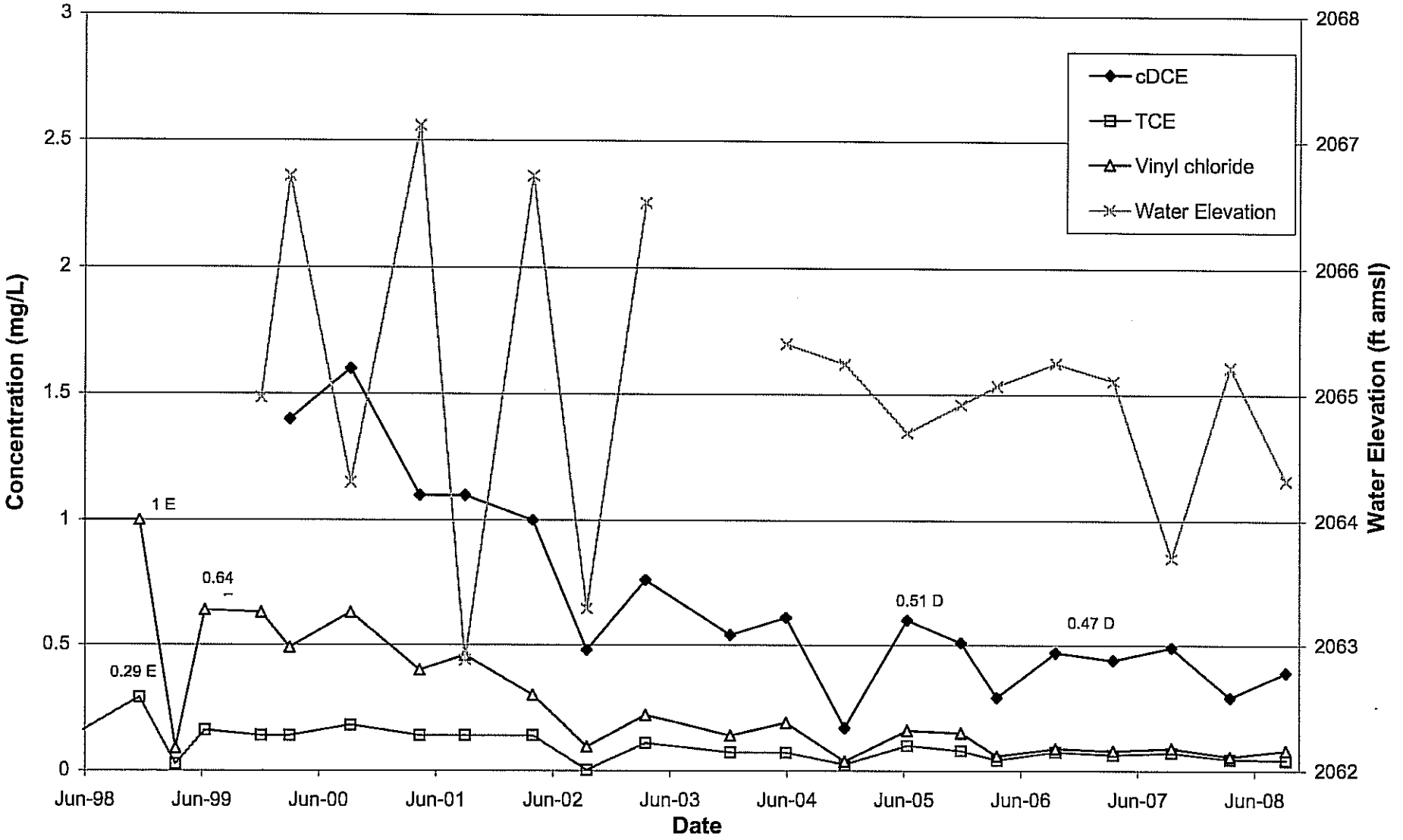
MW-4D VOCs



NOTES:

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

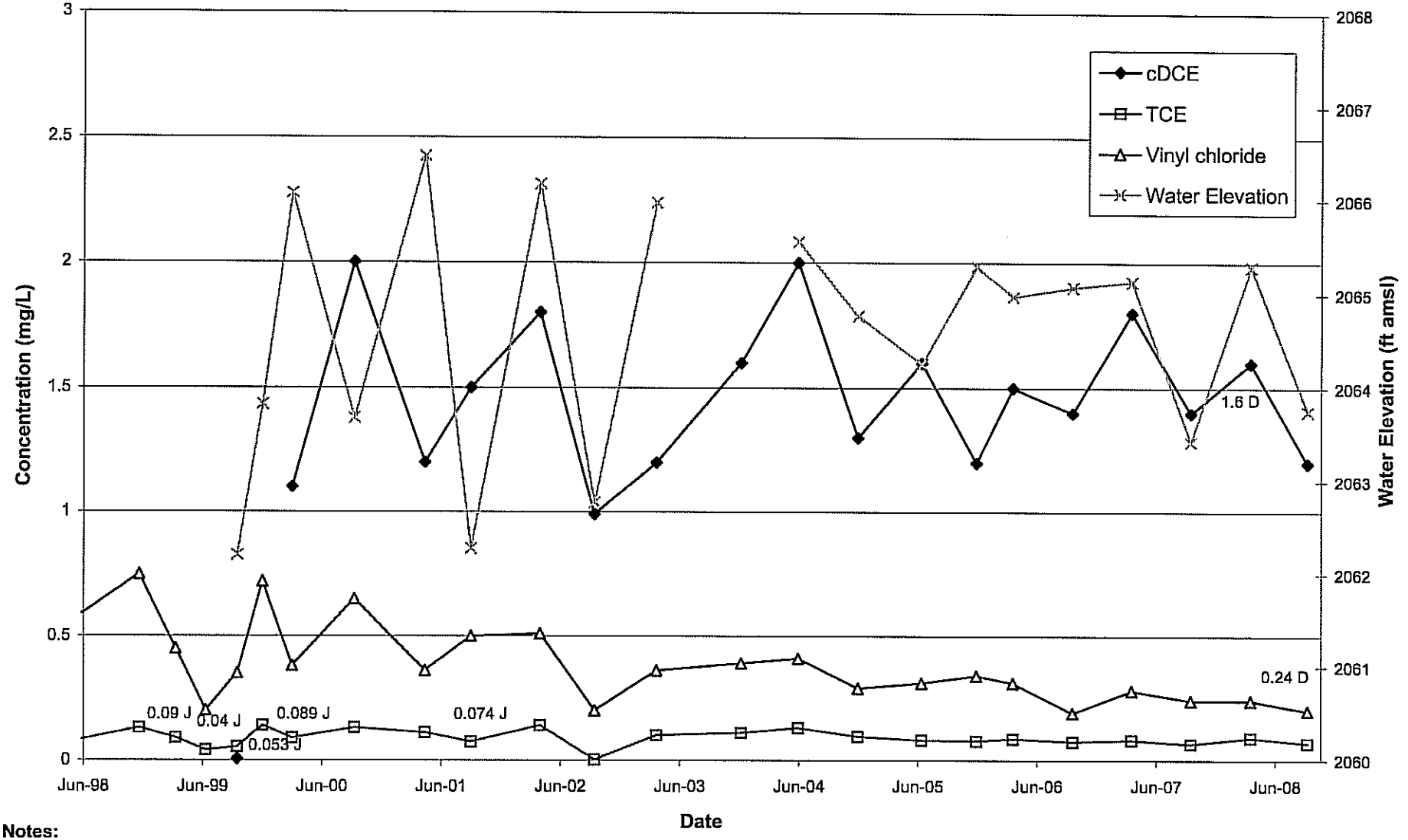
MW-5S VOCs



Notes:

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

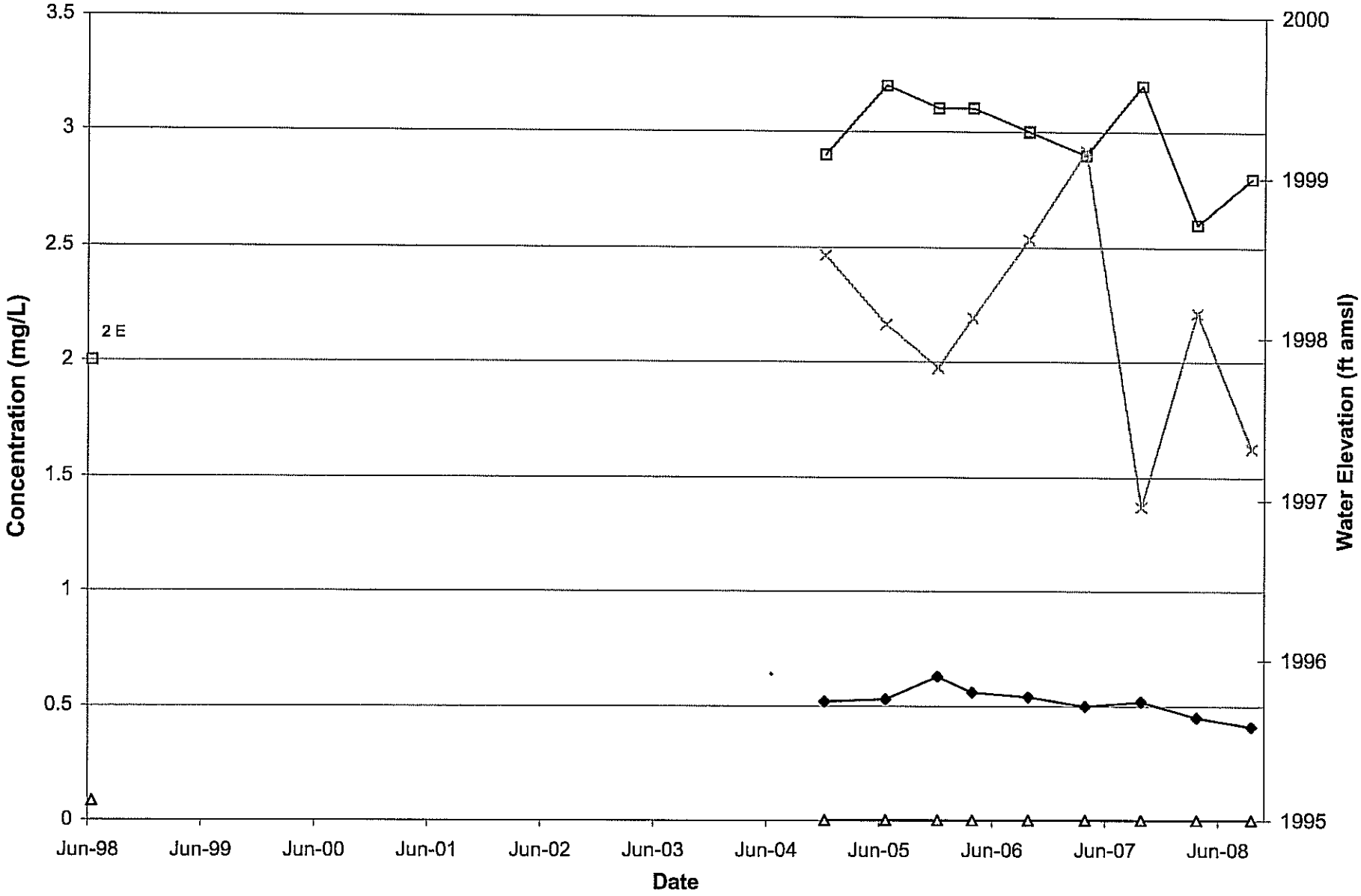
MW-5D VOCs



Notes:

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

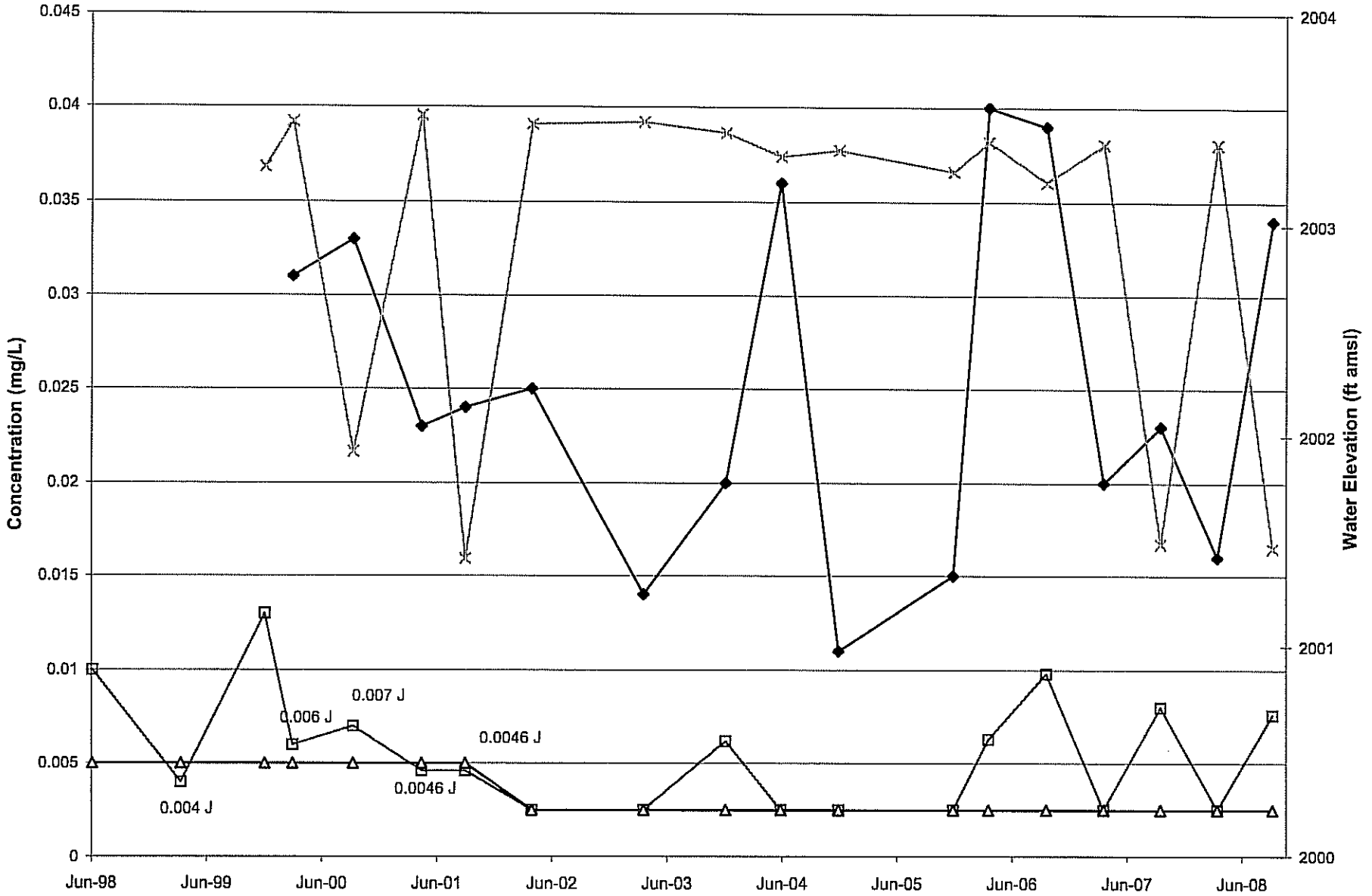
MW-11S VOCs



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 fo 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.

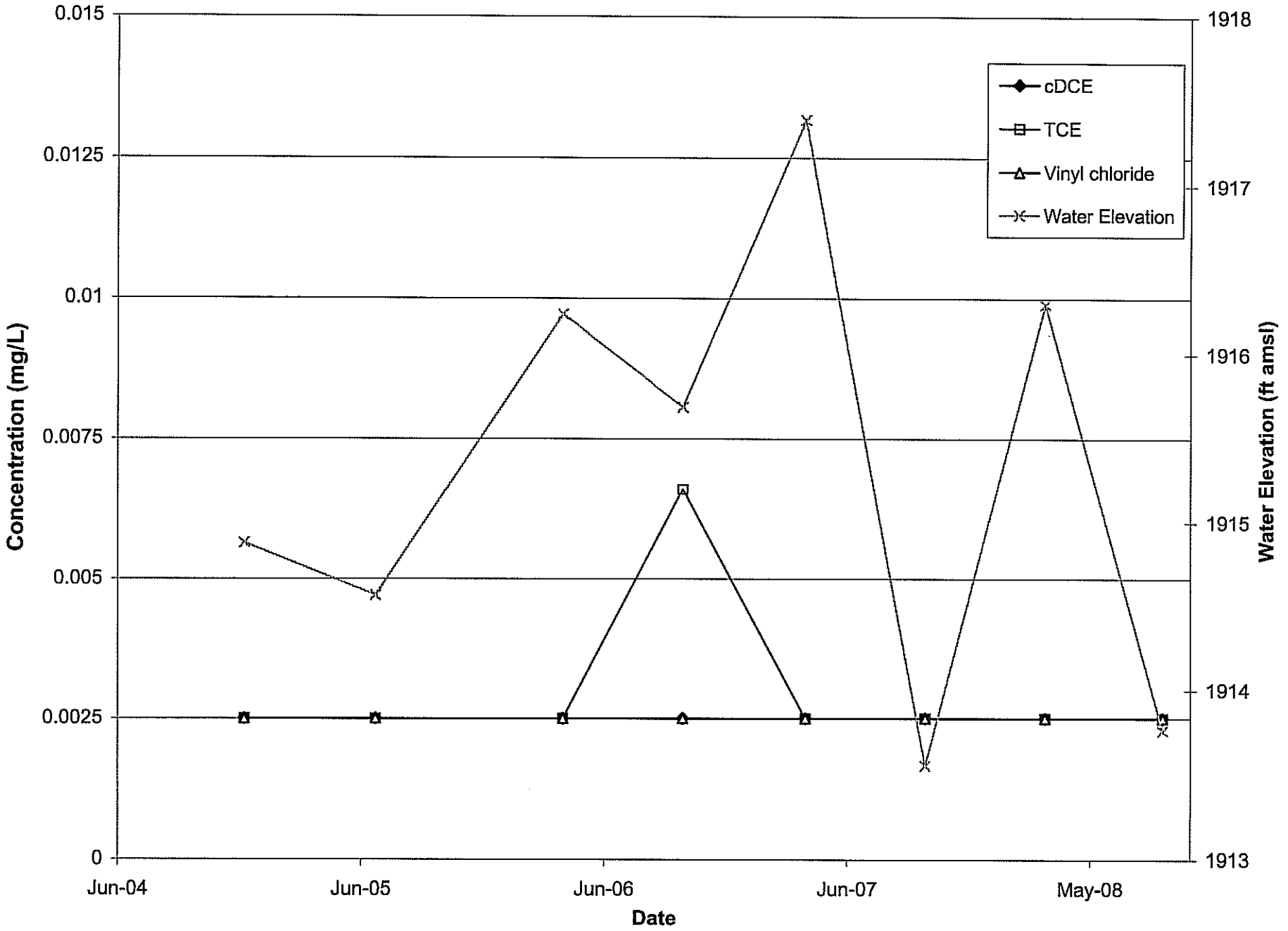
MW-15S VOCs



Notes:

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

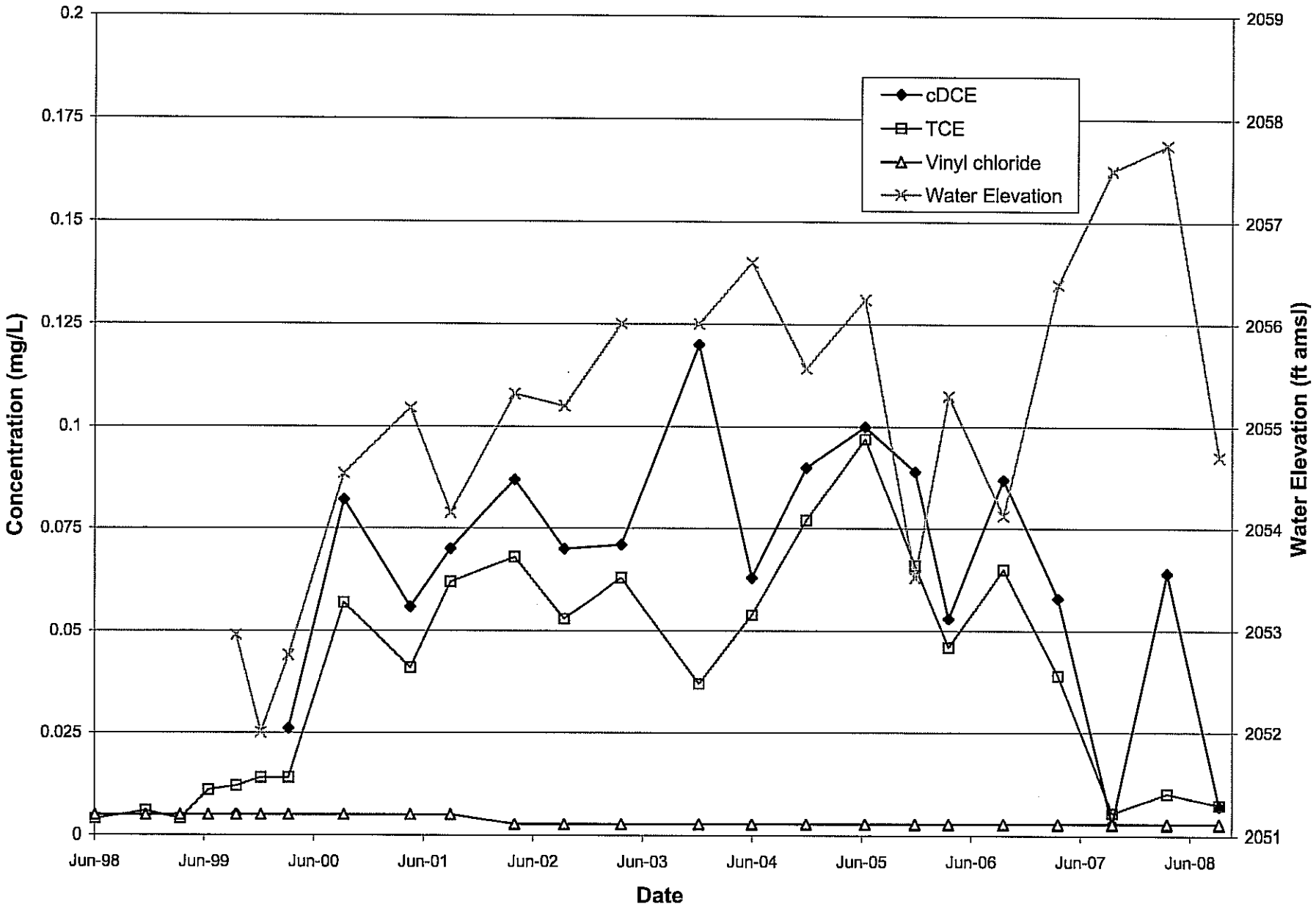
MW-16S VOCs



Notes:

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.

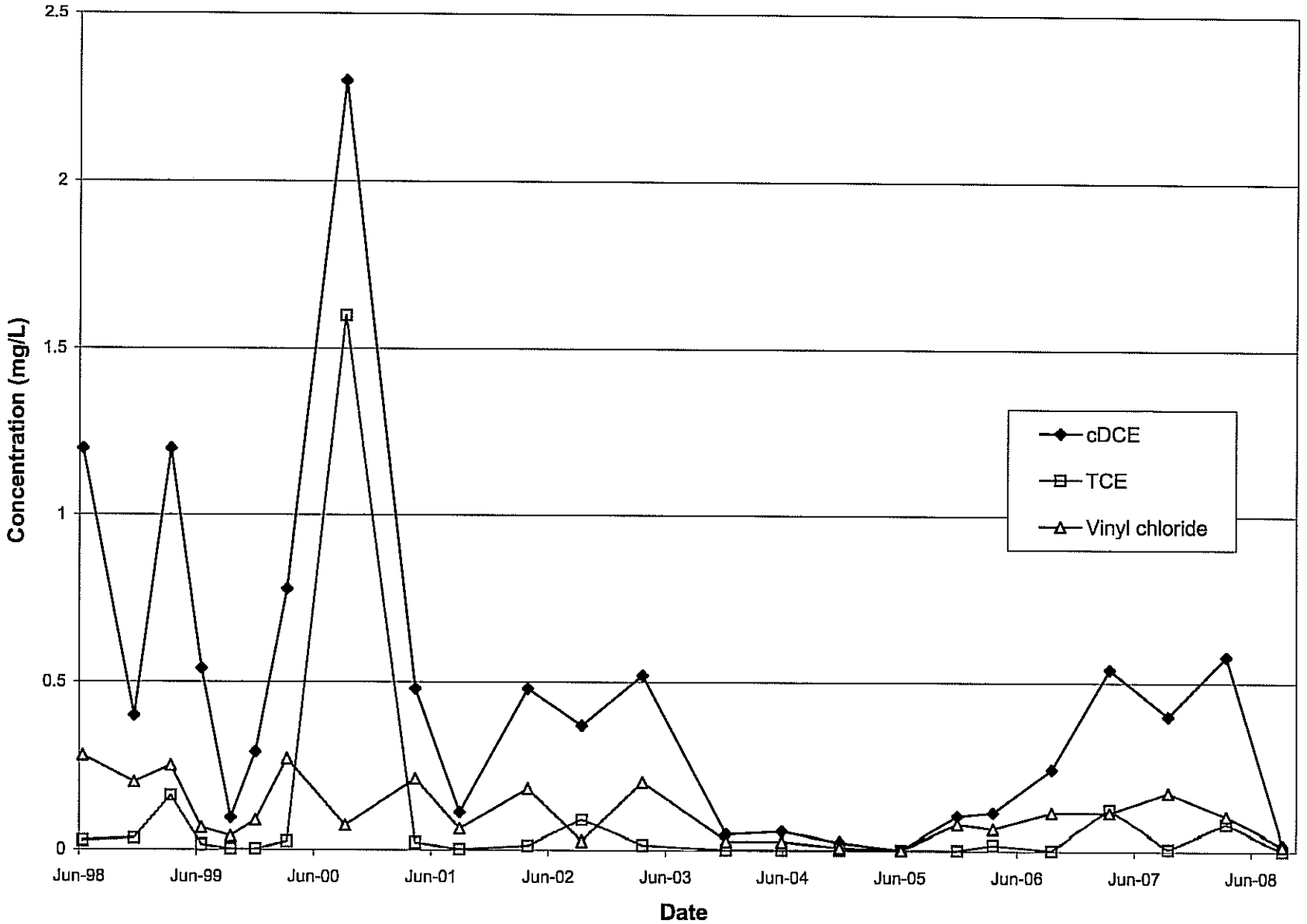
MW-18S VOCs



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.

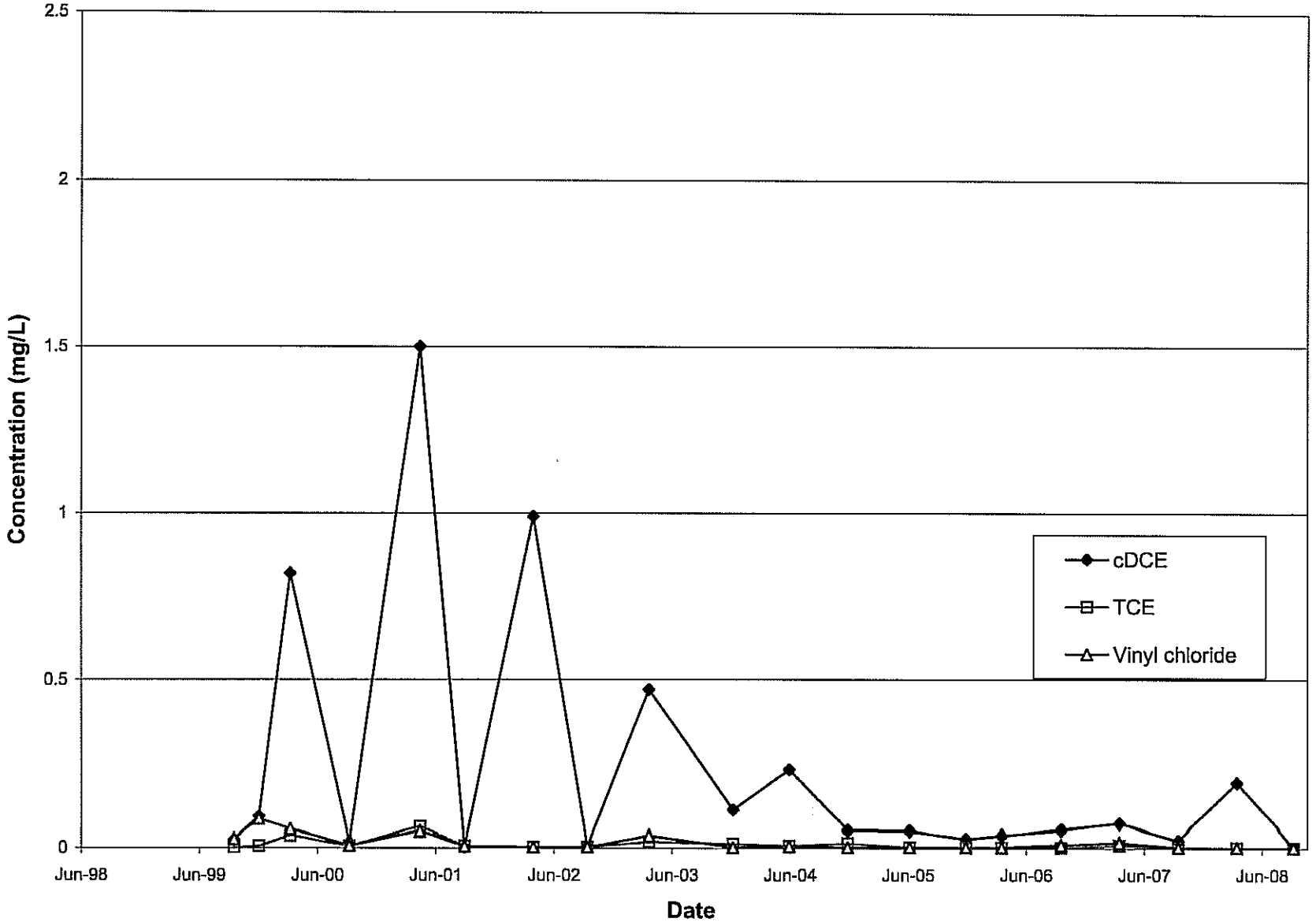
MH-32



Notes:

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

MH-33



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	9/28/99	12/16/99	3/13/00	9/19/00	4/26/01	9/11/01	4/10/02	9/25/02	4/1/03	12/16/03	6/8/04	12/7/04	6/20/05	12/6/05	3/30/06	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 "+"	Count "-"
0.086		-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	16	7
0.048			-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	16	6
0.03				-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	17	4
0.021					+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	19	1
0.024						+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	18	1
0.027							-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	17	1
0.017								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	17	0
0.032									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	16	0
0.1301										-	+	+	+	+	+	+	+	+	+	+	+	+	+	-	13	2
0.113											+	+	+	+	+	+	+	+	+	+	+	+	+	+	14	0
0.207												-	-	+	+	+	+	+	-	+	+	+	-	-	8	5
0.178													-	+	+	+	+	+	+	+	+	+	+	-	10	2
0.156														+	+	+	+	+	+	+	+	+	+	-	10	1
0.438															+	-	+	-	-	-	-	-	-	-	2	8
0.451																-	+	-	-	-	-	-	-	-	1	8
0.398																	+	-	-	-	-	+	-	-	2	6
1.143																		-	-	-	-	-	-	-	0	7
0.291																			-	+	-	+	-	-	2	4
0.204																				+	+	+	-	-	3	2
0.349																					-	+	-	-	1	3
0.26																						+	-	-	1	2
0.418																							-	-	0	2
0.19																								-	0	1
																									203	73
																									Total "+"	Total "-"

S = Total Number of "+" minus Total Number of "-" = 130

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

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

STEP 3. Test Statistics:

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

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

Where: n (number of samples) = 24

t_1 = number of tied samples in the first group = 0

t_2 = number of tied samples in second group = 0

g = the number of tied sample groups

V(S) = 1625.33

z_o = 3.1998

STEP 4. a) Critical Value: From Table A-2, $z_{0.95}$ (critical value at 5% significance level) = 1.645

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

p-value = 0.0007

STEP 5. a) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if absolute value of z_o is > $z_{0.95}$

Since absolute value z_o = 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).**

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

1/2 detection limit used for non-detects.

Table 1

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

Monitoring Well CW-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 "+"	Count "-"
0.104		-	-	-	-	+	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	14	9
0.094			-	-	-	+	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	16	6
0.054				+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	21	0
0.085					-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	19	1
0.08						+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	19	0
0.116							-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+	13	5
0.091								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	17	0
0.093									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	16	0
0.0939										+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	15	0
0.0947											+	+	+	+	+	+	+	+	+	+	+	+	+	+	14	0
0.1251												-	0	+	+	+	+	+	+	+	+	+	+	+	11	1
0.099													+	+	+	+	+	+	+	+	+	+	+	+	12	0
0.1251														+	+	+	+	+	+	+	+	+	+	+	11	0
0.168															+	+	+	+	+	+	+	+	+	+	10	0
0.1765																+	+	+	+	+	+	+	+	+	9	0
0.189																	+	+	+	+	+	+	+	+	8	0
0.274																		+	-	-	+	+	+	+	5	2
0.537																			-	-	-	-	-	-	0	6
0.262																				0	+	+	+	+	4	0
0.262																					+	+	+	+	4	0
0.326																						+	-	+	2	1
0.347																							-	+	1	1
0.298																								+	1	0
																									242	32
																									Total "+"	Total "-"

S = Total Number of "+" minus Total Number of "-" = 210

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

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

STEP 3. Test Statistics:

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

and $V(S) = 1/18\{n(n-1)(2n+5) - [t_1(t_1-1)(2t_1+5)+[t_2(t_2-1)(2t_2+5)+\ldots$ 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_o = 5.1873

STEP 4. a) Critical Value: From Table A-2, $z_{0.95}$ (critical value at 5% significance level) = 1.645

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

p-value = 0.0001

STEP 5. a) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if absolute value of z_o is > $z_{0.95}$

Since absolute value z_o = 5.1873 > 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 = 0.0001 < 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

1/2 detection limit used for non-detects.

Table 1

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

Monitoring Well CW-4B Total VOCs

COMPUTATIONS: Compute Statistic (S).

Date	6/15/98	12/1/98	3/25/99	6/24/99	9/28/99	12/13/99	3/13/00	4/25/01	4/9/02	4/1/03	6/8/04	6/20/05	12/7/05	3/28/06	9/27/06	3/29/07	9/25/07	3/25/08	9/16/08		
Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		
Result (mg/L)	0.021	0.0025	0.012	0.017	0.014	0.007	0.013	0.0126	0.0078	0.0091	0.0025	0.0025	0.0057	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	Count "+"	Count "-"
0.021		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	18
0.0025			+	+	+	+	+	+	+	+	0	0	+	0	0	0	0	0	0	9	0
0.012				+	+	-	+	+	-	-	-	-	-	-	-	-	-	-	-	4	12
0.017					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	15
0.014						-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	14
0.007							+	+	+	+	-	-	-	-	-	-	-	-	-	4	9
0.013								-	-	-	-	-	-	-	-	-	-	-	-	0	12
0.0126									-	-	-	-	-	-	-	-	-	-	-	0	11
0.0078										+	-	-	-	-	-	-	-	-	-	1	9
0.0091											-	-	-	-	-	-	-	-	-	0	9
0.0025												0	+	0	0	0	0	0	0	1	0
0.0025													+	0	0	0	0	0	0	1	0
0.0057														-	-	-	-	-	-	0	6
0.0025															0	0	0	0	0	0	0
0.0025																0	0	0	0	0	0
0.0025																	0	0	0	0	0
0.0025																		0	0	0	0
0.0025																			0	0	0
0.0025																			0	0	0
																				20	115
																				Total "+"	Total "-"

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

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_o = S - sign(S) / V(S)^0.5 Where: 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) - [$t_1(t_1-1)(2t_1+5)$+[$t_2(t_2-1)(2t_2+5)$+... up to t_g]}

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

g = the number of tied sample groups

V(S) = 725.00

z_o = -3.4911

STEP 4. a) Critical Value: From Table A-2, $z_{0.95}$ (critical value at 5% significance level) = 1.645

STEP 4. b) Probability Value: p-value = (P(Z > z_o) = 1 - z_p, where z_p from Table A-1 = 0.0002

p-value = 0.9998

STEP 5. a) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if absolute value of z_o is > $z_{0.95}$

Since absolute value z_o = 3.4911 > 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 = 0.9998 > 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 eveidence 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

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 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	6/21/05	12/7/05	3/29/06	9/27/06	3/27/07	9/25/07	3/24/08	9/16/08	12/11/08		
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	1.06	3.33	2.3	Count "+"	Count "-"
1.83		+	-	+	+	+	+	+	+	+	+	-	+	-	-	-	-	-	-	-	-	+	-	+	+	13	11
15.3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	23
1.784			+	+	+	+	+	+	+	+	+	-	+	-	-	-	-	-	-	-	-	+	-	+	+	12	10
6.774				+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	19
11.25					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	20
6.81						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	19
2.35							+	-	+	-	-	+	-	-	-	-	-	-	-	-	-	+	-	+	-	5	13
3.07								-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	2	15
2.0401									+	+	-	+	-	-	-	-	-	-	-	-	-	+	-	+	+	6	10
3.037										-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	2	13
2.067											-	+	-	-	-	-	-	-	-	-	-	+	-	+	+	4	10
1.173												+	-	-	-	+	+	-	-	-	-	+	-	+	+	6	7
3.012													-	-	-	-	-	-	-	-	-	+	-	+	-	2	10
1.011														-	-	+	+	-	+	-	+	+	+	+	+	7	4
0.88															-	+	+	-	+	-	+	+	+	+	+	7	3
0.659																+	+	-	+	-	+	+	+	+	+	7	2
1.317																	-	-	-	-	+	-	+	+	+	3	5
1.312																		-	-	-	+	-	+	+	+	3	4
0.503																			+	+	+	+	+	+	+	6	0
1.17																				-	+	-	+	+	+	3	2
0.651																					+	+	+	+	+	4	0
3.68																						-	+	-	-	0	3
1.06																							+	+	+	2	0
3.33																									-	0	1
																										75	189
																										Total "+"	Total "-"

S = Total Number of "+" minus Total Number of "-" = -114

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

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

STEP 3. Test Statistics:

z_o = S - sign(S) / V(S)^0.5 Where: 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)+... up to t_g]}

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 groups

V(S) = 1833.33

z_o = -2.6391

STEP 4. a) Critical Value: From Table A-2, $z_{0.95}$ (critical value at 5% significance level) = 1.645

STEP 4. b) Probability Value: p-value = (P(Z > z_o) = 1 - z_p, where z_p from Table A-1 = 0.0041

p-value = 0.9959

STEP 5. a) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if absolute value of z_o is > $z_{0.95}$

Since absolute value z_o = 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 eveidence 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

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 MW-5D Total VOCs

COMPUTATIONS: Compute Statistic (S).

Date	6/9/98	12/1/98	3/23/99	6/23/99	9/28/99	12/14/99	3/14/00	9/20/00	4/24/01	9/12/01	4/11/02	9/25/02	4/2/03	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	24		
Result (mg/L)	2.484	2.98	1.74	1.166	1.84	3.134	1.581	2.78	1.7073	4.4528	4.9869	1.19	1.66	2.1	2.5814	1.686	1.991	1.618	1.897	1.665	2.161	1.706	1.945	1.469	Count "+"	Count "-"
2.484		+	-	-	-	+	-	+	-	+	+	-	-	-	+	-	-	-	-	-	-	-	-	-	6	17
2.98			-	-	-	+	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	3	19
1.74				-	+	+	-	+	-	+	+	-	-	+	+	-	+	-	+	-	+	-	+	-	11	10
1.166					+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	20	0
1.84						+	-	+	-	+	+	-	-	+	+	-	+	-	+	-	+	-	+	-	10	9
3.134							-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	2	16
1.581								+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	-	15	2
2.78									-	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	2	14
1.7073										+	+	-	-	+	+	-	+	-	+	-	+	-	+	-	8	7
4.4528											+	-	-	-	-	-	-	-	-	-	-	-	-	-	1	13
4.9869												-	-	-	-	-	-	-	-	-	-	-	-	-	0	13
1.19													+	+	+	+	+	+	+	+	+	+	+	+	12	0
1.66														+	+	+	+	-	+	+	+	+	+	-	9	2
2.1															+	-	-	-	-	-	+	-	-	-	2	8
2.5814																-	-	-	-	-	-	-	-	-	0	9
1.686																	+	-	+	-	+	+	+	-	5	3
1.991																		-	-	-	+	-	-	-	1	6
1.618																			+	+	+	+	+	-	5	1
1.897																				-	+	-	+	-	2	3
1.665																					+	+	+	-	3	1
2.161																						-	-	-	0	3
1.706																							+	-	1	1
1.945																								-	0	1
																									118 Total "+"	158 Total "-"

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

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_o = S - sign(S) / V(S)^0.5 Where: 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) - [$t_1(t_1-1)(2t_1+5)$+[$t_2(t_2-1)(2t_2+5)$+... up to t_g]}

Where: n (number of samples) = 24

t_1 = number of tied samples in the first group = 0

t_2 = number of tied samples in second group = 0

g = the number of tied sample groups

V(S) = 1625.33

z_o = -0.9674

STEP 4. a) Critical Value: From Table A-2, $z_{0.95}$ (critical value at 5% significance level) = 1.645

STEP 4. b) Probability Value: p-value = (P(Z > z_o) = 1 - z_p, where z_p from Table A-1 = 0.165

p-value = 0.8350

STEP 5. a) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if absolute value of z_o is > $z_{0.95}$

Since absolute value z_o = 0.9674 < 1.645

we fail to reject the null hypothesis of no trend

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

Since p-value = 0.8350 > 0.05

we fail to reject the null hypothesis of no trend

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

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

1/2 detection limit used for non-detects.

Table 1

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

Monitoring Well 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		
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	Count "+"	Count "-"
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																			+	+	+	0	+	4	0
0.634																				+	+	-	-	2	2
1.118																					-	-	-	0	3
0.651																						-	-	0	2
0.391																							+	1	0
																								56	196
																								Total "+"	Total "-"

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

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_o = S - sign(S) / V(S)^0.5 Where: 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) - [$t_1(t_1-1)(2t_1+5)$+[$t_2(t_2-1)(2t_2+5)$+... 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_o = -3.6723

STEP 4. a) Critical Value: From Table A-2, $z_{0.95}$ (critical value at 5% significance level) = 1.645

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

p-value = 0.9999

STEP 5. a) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if absolute value of z_o is > $z_{0.95}$

Since absolute value z_o = 3.6723 > 1.645

we reject the null hypothesis of no trend

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

Since p-value = 0.9999 > 0.05

we fail to reject the null hypothesis of no trend

Therefore: We fail to reject the null hypothesis of no trend at the 5% significance level (i.e. there is eveidence 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

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 MW-11S Total VOCs

COMPUTATIONS: Compute Statistic (S).

Date	6/17/98	12/8/04	6/23/05	12/8/05	3/31/06	9/27/06	3/30/07	9/26/07	3/24/08	9/17/08		
Event	1	2	3	4	5	6	7	8	9	10		
Result (mg/L)	2.752	3.42	3.73	3.73	3.66	3.54	3.4	3.72	3.05	3.21	Count "+"	Count "-"
2.752		+	+	+	+	+	+	+	+	+	9	0
3.42			+	+	+	+	-	+	-	-	5	3
3.73				0	-	-	-	-	-	-	0	6
3.73					-	-	-	-	-	-	0	6
3.66						-	-	+	-	-	1	4
3.54							-	+	-	-	1	3
3.4								+	-	-	1	2
3.72									-	-	0	2
3.05										+	1	0
											18	26
											Total "+"	Total "-"

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

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_o = S - sign(S) / V(S)^0.5 Where: 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) - [$t_1(t_1-1)(2t_1+5)$+[$t_2(t_2-1)(2t_2+5)$+... 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_o = -0.6286

STEP 4. a) Critical Value: From Table A-2, $z_{0.95}$ (critical value at 5% significance level) = 1.645

STEP 4. b) Probability Value: p-value = ($P(Z > z_o) = 1 - z_p$, where z_p from Table A-1 = 0.2648

p-value = 0.7352

STEP 5. a) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if absolute value of z_o is > $z_{0.95}$

Since absolute value z_o = 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

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 MW-15S Total VOCs

COMPUTATIONS: Compute Statistic (S).

Date	6/17/98	3/25/99	12/16/99	3/13/00	9/21/00	4/26/01	9/11/01	4/10/02	3/31/03	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 "+"	Count "-"
0.103		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	19
0.027			+	+	+	+	+	-	-	-	+	-	-	+	+	-	+	-	+	+	11	7
0.073				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	17
0.037					+	-	-	-	-	-	-	-	-	+	+	-	-	-	+	+	5	11
0.04						-	-	-	-	-	-	-	-	+	+	-	-	-	+	+	4	11
0.0276							+	-	-	-	+	-	-	+	+	-	+	-	+	+	7	7
0.0286								-	-	-	+	-	-	+	+	-	+	-	+	+	6	7
0.025									-	+	+	-	-	+	+	-	+	-	+	+	7	5
0.014										+	+	-	+	+	+	+	+	+	+	+	10	1
0.0262											+	-	-	+	+	-	+	-	+	+	6	4
0.036												-	-	+	+	-	-	-	+	+	4	5
0.011													+	+	+	+	+	+	+	+	8	0
0.015														+	+	+	+	+	+	+	7	0
0.0463															+	-	-	-	-	-	1	5
0.0488																-	-	-	-	-	0	5
0.02																	+	-	+	+	3	1
0.031																		-	+	+	2	1
0.016																			+	+	2	0
0.0416																				0	0	0
																					83	106
																					Total "+"	Total "-"

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:

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

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

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_o = -0.7142

STEP 4. a) Critical Value: From Table A-2, $z_{0.95}$ (critical value at 5% significance level) = 1.645

STEP 4. b) Probability Value: p-value = $(P(Z > z_o) = 1 - z_p$, where z_p from Table A-1 = 0.2376

p-value = 0.7624

STEP 5. a) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if absolute value of z_o is > $z_{0.95}$

Since absolute value z_o = 0.7142 < 1.645

we fail to reject the null hypothesis of no trend

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

Since p-value = 0.7624 > 0.05

we fail to reject the null hypothesis of no trend

Therefore:

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

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

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 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	9/21/00	4/30/01	9/11/01	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	18	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										+	+	+	+	+	+	+	+	+	+	+	0	-	-	-	11	3
0.132											+	-	+	+	-	+	+	+	-	+	-	-	-	-	7	7
0.155												-	-	+	-	+	+	0	-	-	-	-	-	-	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	4
0.097																						-	-	-	0	3
0.0052																							+	+	2	0
0.074																								-	0	1
																									171	103
																									Total "+"	Total "-"

S = Total Number of "+" minus Total Number of "-" = 68

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

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

STEP 3. Test Statistics:

z_o = S - sign(S) / V(S)^0.5 Where: 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) - [$t_1(t_1-1)(2t_1+5)$+[$t_2(t_2-1)(2t_2+5)$+... 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_o = 1.6629

STEP 4. a) Critical Value: From Table A-2, $z_{0.95}$ (critical value at 5% significance level) = 1.645

STEP 4. b) Probability Value: p-value = ($P(Z > z_o) = 1 - z_p$, where z_p from Table A-1 = 0.9518

p-value = 0.0482

STEP 5. a) Conclusion: For testing the hypothesis, H_0 (no trend) against H_A - reject H_0 if absolute value of z_o is > $z_{0.95}$

Since absolute value z_o = 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

1/2 detection limit used for non-detects.

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

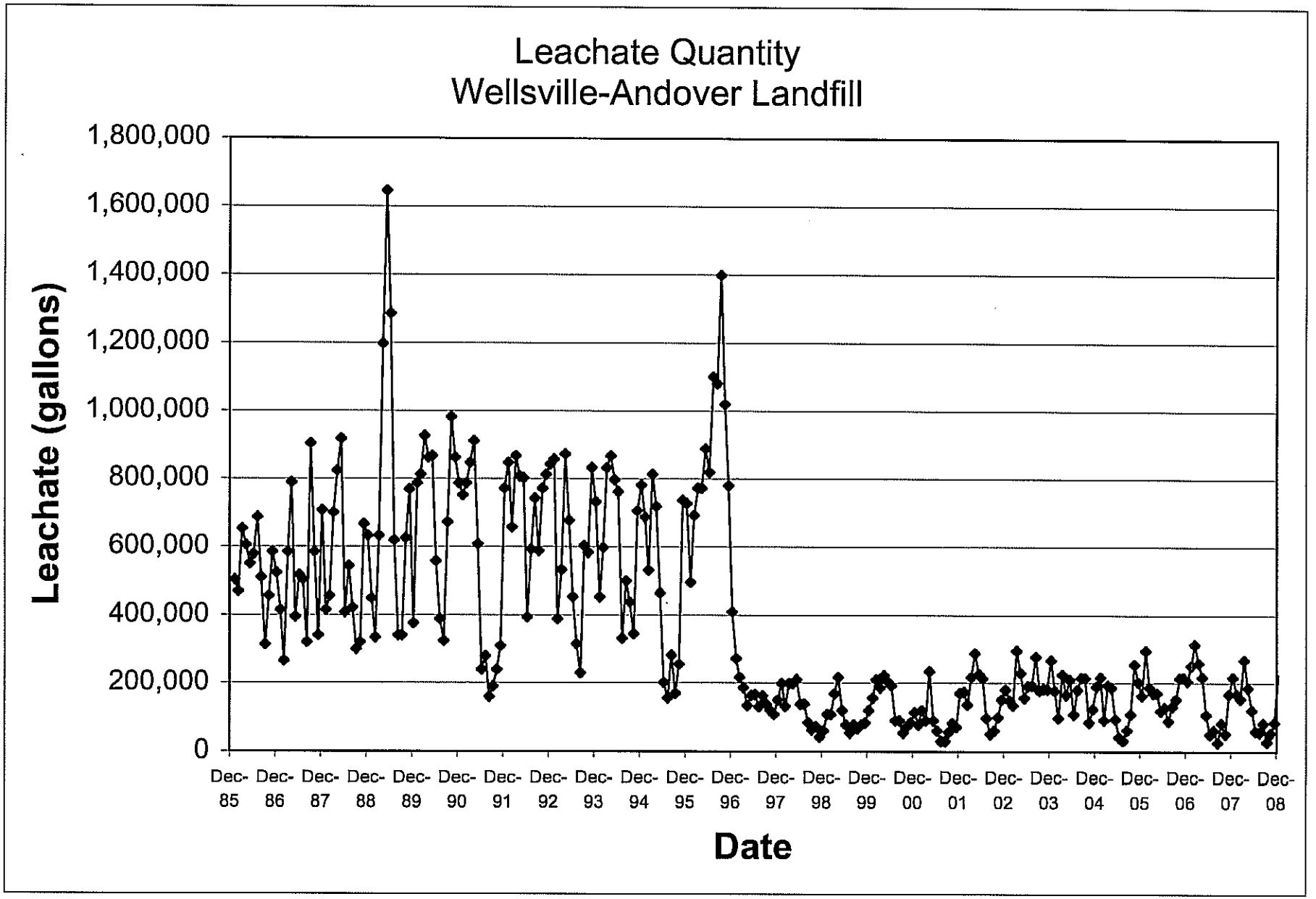
Location	Current Sampling Frequency	Proposed Sampling Frequency	Proposed Analyte List[1]
Residential Water Supply			
WAL-1	Every 3 Years	NR	NR
WAL-2	Semiannual	Annual	Metals
WAL-3	Every 3 Years	NR	NR
WAL-4	Every 3 Years	NR	NR
WAL-5	Semiannual	Annual	VOCs, Metals
WAL-6	Every 3 Years	NR	NR
WAL-7	Every 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

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


Leachate Quantity
Wellsville-Andover Landfill
Leachate (gallons)
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
Dec-85
Dec-86
Dec-87
Dec-88
Dec-89
Dec-90
Dec-91
Dec-92
Dec-93
Dec-94
Dec-95
Dec-96
Dec-97
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Date

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 Comounds (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 sporatically in several sampling events, these compounds were detected at concentrations significantly lower than the NYSDOH public drinking water standards. Based on this information, we agree with the recommendation to discontinue sampling of these wells.

WAL-6: Cimino Residence

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

WAL-11: Urban Residence

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

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

Figure 5-3

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

Inspector: EDWARD LIGHTNER | Date: 3/31/16

Weather: CLOUDY | Temperature: 65°

Area	Item	Action	Comments
Stormwater system	Ditches and swales	Check for pooling, erosion, excessive vegetation, and weak vegetation.	NONE OBSERVED
	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.	GOOD CONDITION
	Culverts	Check condition and for blockage and erosion.	GOOD CONDITION
	Detention ponds	Check outlet structure for blockage and general condition.	GOOD CONDITION
		Check for siltation/silt buildup, erosion, condition of vegetation and embankments.	NONE OBSERVED
Groundwater monitoring system	Sampling wells	See Section 4.	PERFORMED BY ONSITE TESTING
		Check condition of caps, locks, surface seals, and markings. Lubricate locks.	PERFORMED BY ONSITE TESTING
Facility access system	Roads	Check condition. Check for erosion, potholes.	OK
	Access gate	Check condition. Lubricate lock.	OK
Other		Comments	LEACHATE STORAGE TANKS GAUGES REPLACED WITH DIGITAL

Signed: [signature]

Date: 3/31/16

Figure 5-3

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

Inspector: WILLIAM WHITFIELD
Date: 3/31/16
Weather: CLOUDY
Temperature: 64°

Area	Item	Action	Comments
Cover system	Seeps	Delineate, sample, evaluate.	NONE OBSERVED
	Subsidence/ponding	Delineate, fill, and revegetate.	NONE OBSERVED
	Erosion/gullies	Determine cause, grade, and vegetate.	NONE OBSERVED
	Slope stability	Check for erosion, slippage, slope failure.	NONE OBSERVED
	Vegetation	Check for areas of weak/no vegetation, revegetate.	NONE OBSERVED
		Mow semiannually. ANNUALLY	MOWED OCT. 2015
		Remove scrubs and trees from cover system and drainage ways.	NONE OBSERVED
	Vectors	Check for burrows and backfill with clean soil.	NONE OBSERVED
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 621,700 gallons
	Pump stations	Check pump operation.	OK
		Check float operation. Perform manufacturer's recommended maintenance. Operate/cycle valves. Check sump for floating debris and sediments.	INSTALLED NEW DIGITAL TANK GUAGES.
	Forcemain	Check for leaks.	NONE OBSERVED
	Laterals and trunk line	Check for and record VOCs at each manhole and cleanout; check for line blockage visually; lubricate locks.	PERFORMED BY ONSITE TESTING
	Groundwater cutoff manholes	Collect and analyze sample of liquid in cutoff trench. Note which line (surface drainage or LCS) is plugged.	PERFORMED BY ONSITE TESTING
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 ONSITE TESTING

Figure 5-3

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

Inspector: Brad Mather | Date: 6/30/16

Weather: Sunny | Temperature: 78°

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 2015
		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.	Performed By On-Site April, May June 377,065 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.	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.	On-site

Figure 5-3

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

Inspector: BRAD MARTIN — Date: 6/30/16

Weather: SUNNY — Temperature: 78°

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.	on-site
		Check condition of caps, locks, surface seals, and markings. Lubricate locks.	ok
Facility access system	Roads	Check condition. Check for erosion, potholes.	ok
	Access gate	Check condition. Lubricate lock.	OK

Other	Comments

Signed: BRAD MARTIN

Date: 6/30/16

Figure 5-3

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

Inspector: Brad Matise — Date: 9/30/2016

Weather: Rainy / Partly Cloudy — Temperature: 60°

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 2015
		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 OK 156,260.
	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 ON-Site
	Groundwater cutoff manholes	Collect and analyze sample of liquid in cutoff trench. Note which line (surface drainage or LCS) is plugged.	Performed 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: Bradley J Mattson Date: 9/30/16

Weather: Rainy / Partly Cloudy Temperature: 60°

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.	Performed By On-site
		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: Bradley J Mattson

Date: 9/30/16

Figure 5-3

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

Inspector: Brad Mattison
Date: 12/30/16
Weather: Snow Flurry
Temperature: 28°

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 2016
		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 OK 622,130 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.	ON-site
	Laterals and trunk line	Check for and record VOCs at each manhole and cleanout; check for line blockage visually; lubricate locks.	ON-site
	Groundwater cutoff manholes	Collect and analyze sample of liquid in cutoff trench. Note which line (surface drainage or LCS) is plugged.	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.	ON-site

Figure 5-3

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

Inspector: BRAD MATTSON | Date: 12/30/16

Weather: SNOW FLURRY | Temperature: 28°

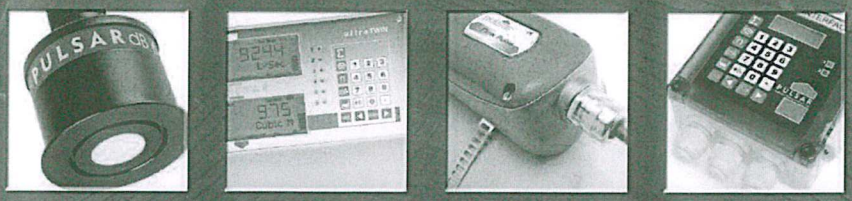
Area	Item	Action	Comments
Stormwater system	Ditches and swales	Check for pooling, erosion, excessive vegetation, and weak vegetation.	ok
	Cover system drainage	Check for cover soils that are excessively wet, slope failure without evidence of fill subsidence. Check condition of geocomposite drainage layer 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.	ON-site
		Check condition of caps, locks, surface seals, and markings. Lubricate locks.	ON-site
Facility access system	Roads	Check condition. Check for erosion, potholes.	ok
	Access gate	Check condition. Lubricate lock.	OK

Other	Comments

Signed: BRAD MATTSON

Date: 12/30/16

Product Guide



Level and Flow Measurement

Ultra Range

Ultra 3, Ultra 5 and UltraTwin

pulsar®
PROCESS MEASUREMENT

pulsar
Ultra Range

Ultra 3

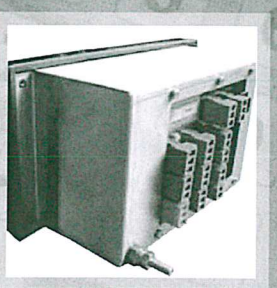
Ultra sophistication in a smart package, Ultra 3 combines reliable non-contacting ultrasonic level and volume measurement, high specification pump control and open channel flow measurement to international standards. Three control or alarm relays, optional data logging, Pulsar's world-leading DATEM echo processing software and a choice of wall, fascia, panel or 19" rack mounting.

Ultra 5

Ultra 5 continues where Ultra 3 leaves off, maintaining the same reliability, flexibility and menu-driven programming simplicity, with two extra relays, extra features for advanced pump control, differential level and open channel flow, plus the option of RS485 digital communication and 4–20 mA input.

UltraTWIN

Two independent ultrasonic systems in one unit. Each channel is user-configurable to operate in any combination of: a full function open channel flow monitor calculating flow rate to BS ISO standards, a pump control system or as a level and volume monitoring unit for liquids or solids, calculating volumes and providing alarms. UltraTWIN features six relays configurable for either channel as well as four digital inputs and 2 x 4-20mA outputs.



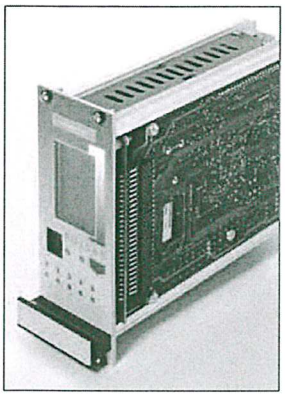
Ultra Range:

Ultra 3

Features

- Solids or liquids level measurement
- Choice of wall, panel, fascia or 19" rack mount controllers
- RS232 standard with optional 485 Modbus and Profibus
- AC or DC supply as standard
- No special interconnection cable
- Up to 1000m separation
- Ultra Wizard easy set up
- Backlit display
- DATEM Software

PANEL MOUNT OPTION



19" RACK MOUNT OPTION

Panel and 19" rack mount versions are calibrated by means of an Infra-Red communicator or via Ultra PC software. One communicator can calibrate any number of controllers.

Ultra 3 combines several full-function, world-beating ultrasonic level measurement instruments into one. Pulsar engineers have created devices that can be simply configured by the user to provide top-drawer performance . Through the use of ULTRA WIZARD, an integrated high level software configuration tool, you choose your application and the Ultra unit leads you through the set-up process for that specific operation. Full control functions are available: open channel flow is calculated to BS ISO 1438 and 4359. Pump control features are built into Ultra 3, and an extensive set of volume calculations and linearisation facilities are available for a tank or silo level measurement task.

Ultra 3 benefits from DATEM, the world's most advanced echo processing software, for reliable level measurement.

Level

Perfect for the wide range of level measurement applications in solids and liquids found in the food, pharmaceutical, chemical, power generation and many more industries. In level measurement configuration, Ultra 3 has three control relays and a measurement range from 125mm to 40m.
Note: A 'modified' Ultra 3 controller will power the dB50 which is available as an option.

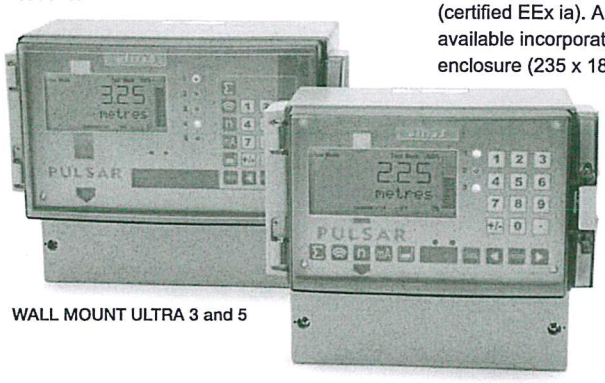
Volume

Ultra 3 features pre-programmed tank shape conversion for a wide variety of standard tank shapes including: cylindrical, rectangular, cone base, pyramid base, sloped base, horizontal including parabolic ended tanks and spherical. Unusual shapes are also accommodated through the 32 point linearisation function.

Open Channel Flow

Ultra 3 in open channel flow mode provides non-contacting, maintenance free flow measurement and control in a wide range of flumes and weirs by calculating flow from the measured head preceding a primary element. Flow calculation to BS ISO 1438 and 4359. Three control relays for control choices.

A data logging board is an optional extra with RS485 connection and large data log capability together with Profibus DP V0 and V1 or Modbus communications.



WALL MOUNT ULTRA 3 and 5

Pump control

Pulsar pump control units are used throughout the global water and waste industries. Ultra 3 gives you sophisticated pump control on changing level or rate of level change to provide:

- **Power on delay,** allows to delay switching on pumps when power resumes.
- **Pump start delay,** allows delay switching on pumps after another has started.
- **Fixed duty assist**
- **Fixed duty back up**
- **Alternate duty assist**
- **Alternate duty back up**
- **Duty back up and assist**
- **Service ratio duty assist**
- **Service ratio duty back up**
- **FOFO (alternate first on first off duty assist)**

Display:

- **8 digit on-board totaliser**
- **6 digit display of flowrate or head**
- **Bar indicator displaying head or flow**

I.S. Barrier Option

The Ultra 3 extends the capability to Zone 0 (certified EEx ia). A wall mount unit with 3 relays is available incorporating I.S. barriers in a single enclosure (235 x 184 x 120mm)

Ultra Range:

Ultra 5

Ultra 5 offers the ultimate flexibility in ultrasonic control and measurement. Like Ultra 3, Ultra 5 is user-configurable to measure level or volume, provide advanced pump control or measure open channel flow to BS ISO 1438 and 4359. Over and above the facilities offered by Ultra 3, Ultra 5 gives you the ultimate flexibility of: five assignable relays with extra alarm options such as pump efficiency; extra pump control functions including pump run-on and pump exercising; storm and aeration control; differential control using two transducers, the addition of further relays in OCM applications.

Ultra 5 benefits from DATEM, the world's most advanced echo processing software, for reliable level measurement.

Features

- Solids or liquids level measurement
- Linearisation for tank shapes
- Advanced pump control choices
- Pump efficiency alarm
- Optional 4 - 20mA input
- Wide choice of flumes and weirs in OCM
- Easy prompt set up
- DATEM software

Level

All the features of the Ultra 3 with 2 additional relays. Offers optional 4 - 20mA input for a pressure transmitter or similar.

Volume

All the features of the Ultra 3 with 2 additional control/alarm relays.

Pump control

Ultra 5 in pump control configuration is a premium specification ultrasonic pump control unit offering many standard features. Advanced control functions include:

- **Pump run-on**, allowing the user to set both the run-on interval and the duration, for periodic pumping past the off point to remove solids from pump stations.
- **Pump exercising,** causes pumps to come on when a period of non operation has occurred, idle time and exercise time can be set.
- **Start point variation,** reduces material build up on the walls at the 'normal' level by setting a band in which the switch point varies.
- **Storm control feature** permits the identification of a storm condition and operate any relay with specific points being set to accommodate needs during a storm, and the ability to disable other relays during the storm if required.
- **Aeration control** activates on elapsed time (since pumps ran), in little used well. Introduces air to reduce well gases.
- **Flush valve control** activates a re-circulation valve for a specific time based on pump cycle frequency, Prevents solids settling.

Data logs

- Running total of individual pump running hours.
- Running total of individual pump starts
- Running total of individual pump run-ons.

Differential

Ultra 5 offers further sophistication with the inclusion of differential level capability using two transducers. With one upstream and the other downstream of a screen or penstock, an alarm or control signal is initiated as the difference between the level exceeds a user-defined limit to automatically operate the cleaning mechanism.

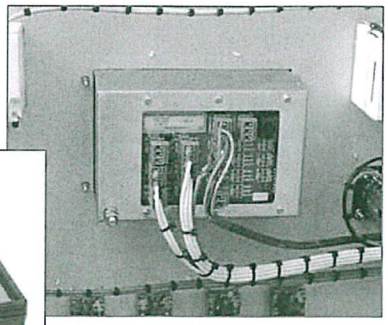
FASCIA MOUNT OPTION

Open Channel Flow

All the features of the Ultra 3 with 2 additional relays. With the additional step/time control for use with a penstock.

A data logging board is an optional extra with RS485 connection and large data log capability together with Profibus DP V0 and V1 or Modbus communications.

FASCIA MOUNT REAR VIEW



HAND-HELD INFRA RED PROGRAMMER USED WITH PANEL OR RACK MOUNT VERSIONS

UltraTWIN:

Features

- 2 independent channels
- Wall or Fascia mount options
- Datalogging option
- Easy prompt led set up
- 4 digital inputs assignable to other alarm functions

Twin-channel ultrasonic level/volume monitoring, pump control, open channel flow measurement or any combination of these.

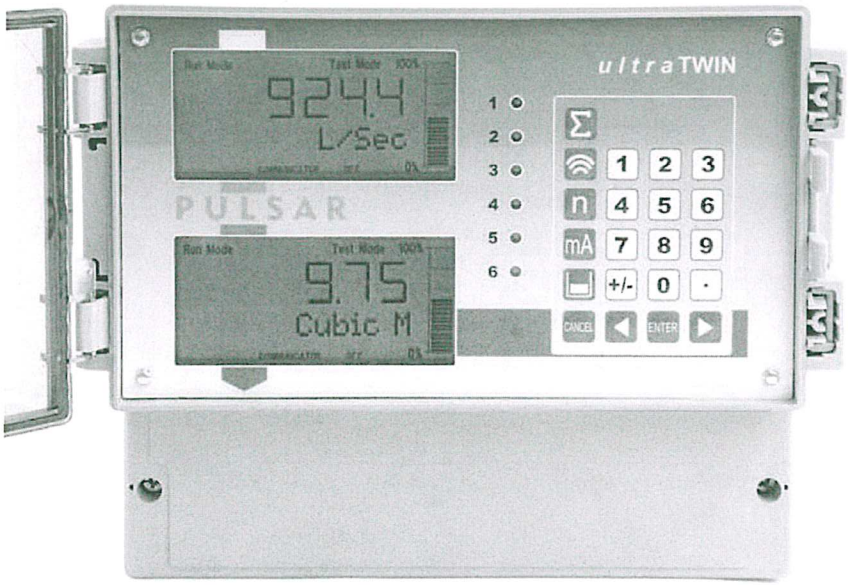
Flexibility is the keyword for the UltraTWIN 2 channel ultrasonic system. Each channel is user-configurable to operate independently either as a full function open channel flow monitor calculating flow rate to BS ISO 1438 and 4359, a pump control system or as a level and volume monitoring unit for liquids or solids, calculating volumes and providing alarms. UltraTWIN is compatible with the full range of Pulsar's dB transducers, from the ultra-high resolution dBMACH 3 to the powerful 40m range dB40. Six relays configurable to either channel provide full alarm and control options.

Level/Volume measurement

Use the level/volume measurement setting and UltraTWIN provides everything you would get from the Pulsar Ultra 3 or Ultra 5 in level measurement mode. UltraTWIN in level/volume mode will calculate volumes based on a wide variety of standard tank shapes and is equally at home measuring liquids and solids.

Open Channel Flow measurement

When you select the Open Channel Flow option, you are getting the full power of Pulsar's flow measurement expertise, the choice of waste water companies and process industries worldwide to measure open channel flow within effluent treatment processes. Features include on-board totalisation and pulsed output. UltraTWIN provides outstanding accuracy when teamed with the high resolution accuracy of the dBMACH 3 transducer.



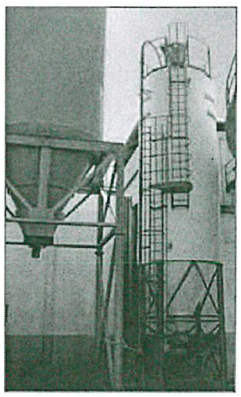
Pump Control

In pump control configuration, UltraTWIN provides all the power of the Pulsar Ultra 3. Extremely reliable level monitoring even in the most difficult applications, it also provides a wide range of sophisticated pump control routines to keep the application running perfectly. UltraTWIN also includes four digital inputs, making it possible to monitor the performance of other equipment, for example a no-flow signal from a pump can trigger an alarm without the need for a PLC.

Data logging/Digital Communications

A powerful data logging solution can be added to the UltraTWIN system. As a factory fit option, level and flow information is recorded and "date stamped" at user defined intervals to build up a complete picture of the changing situation on site. Information may be stored for up to a year, and easily downloaded to a computer through a standard RJ11 port. The data logging solution offers Pulsar's PC Ultra Log software package, which records and charts data and trends in an easily accessible form.

UltraTWIN may also be upgraded to include RS485 communications, operating the Modbus or Profibus DP V0 or V1 protocols.



UltraTWIN with dB10 and dB15 on 7m (23ft) and 10m (33ft) silos containing powder

Ultra Wizard:

A high level software configuration tool allowing the user to dedicate the device to a specific function.

Ultra Wizard is an on-board, menu-driven software tool that allows the user to quickly and simply set up an Ultra 3, 5 or UltraTWIN unit for a specific application.

Simply enter the programming code (1997) and Ultra Wizard leads the user through a set-up menu. From the first question, do you want me to operate as:

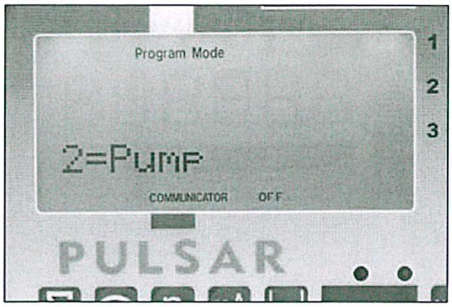
1. Level/volume controller, or
2. Pump controller, or
3. Open Channel Flow.

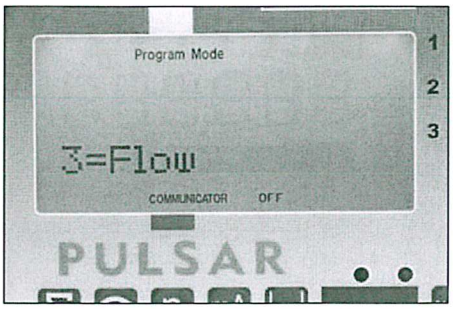
The user is led into a 'Quick Setup' menu specific to the application type that allows parameters such as empty and full distances and alarm/control relay settings to be entered. The majority of applications will then be 'ready to go', while it is easy to finish off the more demanding installations via further menus, refining the programming to add extra sophistication such as Ultra 5's advanced pump control routines.

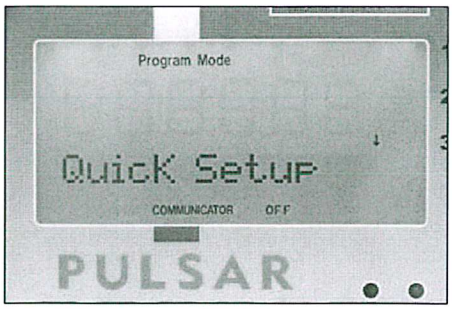
The unique 'Quick Setup' allows a user to avoid time-consuming programming and reference to parameter numbers.

Features

- **Absolute flexibility**
- **User choice of function**
- **Lowers controller stock-holding**
- **Simple to set up**
- **Units can be reprogrammed to suit changing applications**





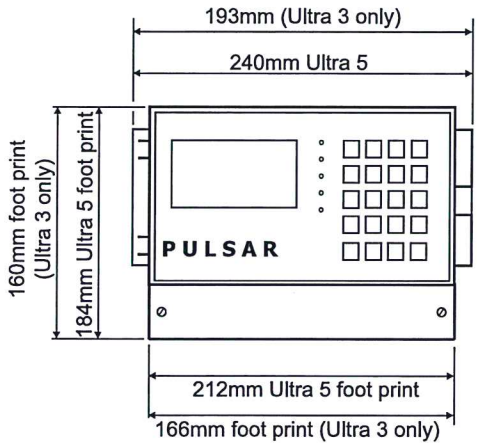


Product comparison:

	Functions														
	Ultra 3				Ultra 5					Ultra TWIN				
	level	volume	pump control	open channel	level	volume	pump control	differential	open channel	level	volume	pump control	differential	open channel
Three control/alarm relays	•	•	•	•										
Five control/alarm relays					•	•	•	•	•					
Six control/alarm relays										•	•	•	•	•
Four digital inputs NO or NC										•	•	•	•	•
Compatible with all dB family transducers for 125mm to 40m (0.41ft-130ft) measurement range (X=db15max)	•	•	•	X	•	•	•	•	X	•	•	•	•	X
Compatible with dB50 transducer for 50m (164ft) measurement range	•	•	•											
High accuracy dBMACH3 transducer	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Liquids, solids and dusty applications	•	•	•	•	•	•	•	•	•	•	•	•	•	•
I.S. transducer (EEx ia) option	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Wall, fascia, panel and 19" rack mount versions (wall and facia only on UltraTWIN)	•	•	•	•	•	•	•	•	•					
Volumetric conversion (12 tank shapes)		•				•					•			
Alarm Functions on changing level to provide:														
High/Low level	•	•	•	•	•	•	•	•	•	•	•	•	•	•
In band/out of band	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Rate of fill and empty	•	•	•	•	•	•	•	•	•	•	•	•	•	•
High/Low temperature	•	•	•	•	•	•	•	•	•	•	•	•	•	•
System fail (loss of echo)	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Pump efficiency							•							
Fill/empty control (initiate/stop)	•	•			•	•		•		•	•		•	
Differential control/alarm using two transducers								•					•	
Pump control functions:														
Fixed duty assist			•	•			•	•	•			•	•	•
Fixed duty backup			•	•			•	•	•			•	•	•
Alternate duty assist			•	•			•	•	•			•	•	•
Alternate duty backup			•	•			•	•	•			•	•	•
Duty backup and assist			•	•			•	•	•			•	•	•
Service ratio duty assist			•	•			•	•	•			•	•	•
Service ratio duty backup			•	•			•	•	•			•	•	•
FOFO (first on first off alternate duty assist)			•	•			•	•	•			•	•	•
Standby			•	•			•	•	•			•	•	•
Pump by time feature							•					•		
2 pump sets (4 pumps total)							•					•		
Advanced pump control functions:														
Pump run-on							•					•		
Power on/off delay							•					•		
Pump start/stop delay							•					•		
Pump exercising							•					•		
Pump start variation							•					•		
Storm control feature							•					•		
Aeration control							•					•		
Flush valve control							•					•		
Data logs:														
Pump running, run-on hours							•					•		
Number of pump starts							•					•		
Maximum and minimum recorded temperatures	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Optional datalogging board for expanded logging capacity and Modbus or Profibus connectivity	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Differential (using two transducers)								•					•	

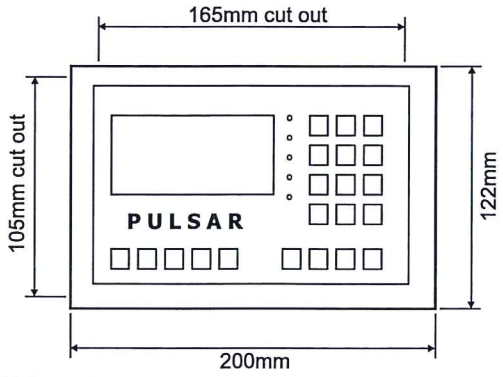
	Functions														
	Ultra 3				Ultra 5					Ultra TWIN				
	level	volume	pump control	open channel	level	volume	pump control	differential	open channel	level	volume	pump control	differential	open channel
Open channel flow				•					•					•
Simple exponential (venturi, parshall, trapezoidal weir etc)				•					•					•
Selected primary element to BS3680, ISO1438 and 4359				•					•					•
Flumes: rectangular, u-throated				•					•					•
Thin plate weirs (standard V-notch)				•					•					•
Thin plate weirs: Rectangular and V-notch 90° and 60°				•					•					•
Other types (Palmer-Bowlus, H-flume etc)				•					•					•
Universal flow calculation (32 setpoints)				•					•					•
Penstock control using step time				•				•	•				•	•

WALL MOUNT



Unit Depth - 108mm

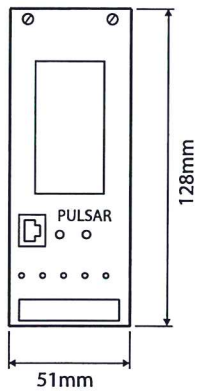
FASCIA MOUNT



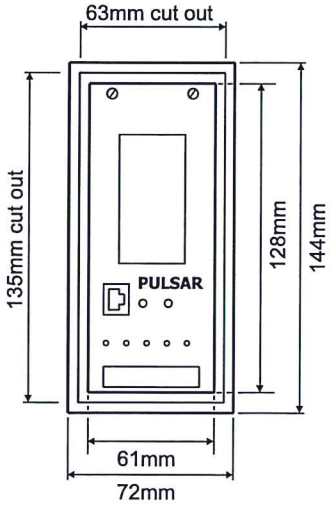
Unit Depth - 108mm

RAIL TRUCK LEVEL FOR WATER SPRAY CONTROL

19" RACK MOUNT



PANEL MOUNT



Unit Depth – 176mm

Technical Specification: Ultra Range

	Ultra 3	Ultra 3 I.S. Barrier Option	Ultra 5	UltraTwin
Volt free contacts:	3 form C (SPDT) 5A, 240V ac	3 form C (SPDT) 5A, 240V ac	5 form C (SPDT) 5A, 240V ac	6 form C (SPDT) 5A, 240V ac
Outside dimensions (wall mount):	188 x 160 x 107mm (7.40 x 6.30 x 4.21in)	235 x 184 x 120mm (9.25 x 7.24 x 4.72in)	235 x 184 x 120mm (9.25 x 7.24 x 4.72in)	235 x 184 x 120mm (9.25 x 7.24 x 4.72in)
Cable entry:	8 cable entries 1 x M16, 3 x M20 underside 4 x PG11 at rear	10 cable entries 5 x M20, 1 x M16 underside 4 x PG11 at rear	10 cable entries 5 x M20, 1 x M16 underside 4 x PG11 at rear	10 cable entries 1 x M16, 5 x M20 underside 4 x PG11 at rear
Digital inputs:	n/a	n/a	n/a	Wall = 4, Fascia = 7, normally open or normally closed, 24VDC supply

COMMON FEATURES	
Weight:	Nominal 1kg (2.2lbs)
Case material:	Polycarbonate, flame resistant to UL91 (wall), UL94-V0 (fascia) (UltraTWIN wall to UL94-5V)
Transducer cable:	Twin screened
Maximum separation:	1000m (3280ft)
Rack mount:	10HP x 160mm (6.29in) deep x 3U 128.5mm (5.06in) high (not UltraTWIN)
Panel mount:	72mm (2.83in) wide x 144mm (5.67in) high x 176mm (6.93in) deep (not UltraTWIN)
Fascia mount:	200mm x 112mm (7.87in x 4.41in) front x 108mm (4.25in) deep, 165mm x 105mm (6.50in x 4.13in) cutout
IP rating (wall mount):	IP65
Fascia mount:	IP64
IP rated panel mount (optional):	IP54
Max and min temp. (electronics):	-20°C to +50°C (-4°F to +122°F)
Hazardous area approval:	Safe area: compatible with approved dB transducers (see transducer specification sheet)
CE approval:	EMC approval to BS EN 50081-1: 1992 for emissions and BS EN 50082-2:1995 for immunity, and to BS EN 61010-1: 1993 for low voltage directive.
Accuracy:	0.25% of measured range or 6mm whichever is greater
Resolution:	0.1% of the measured range or 2mm whichever is greater
Range:	Depending upon transducer, from 125mm to 40m (0.41ft to 130ft). 50m on modified Ultra 3 and Ultra 5. (0m to 2.425m (0 - 7.95ft) dBMACH3 for open channel flow)
Echo processing:	Patented DATEM (Digital Adaptive Tracking of Echo Movement)
Analogue output:	Isolated output 4-20mA or 0-20mA into 500Ω (user programmable and adjustable), 0.1% resolution
Digital output:	Full duplex RS232 via RJ11 port
Display:	6 digits plus 12 character text, plus bargraph with direction indicators, remote communicator identifier and program/run/test mode indicators
Remote programming:	Standard on rack and panel mount units via infra red communicator
On-board programming:	Standard on wall and fascia mount with integral keypad
PC Programming:	Via RS232 (RJ11 port)
Programming security:	Via password (user selectable and adjustable)
Programmed data integrity:	Via non-volatile RAM, plus backup
Power supply:	115V ac +5% -10% 50/60Hz, 230V ac +5% -10%, 18-30V dc

All Pulsar Ultra units must be mounted in a safe area. See transducer specification sheet for flammable atmosphere approval to suit.

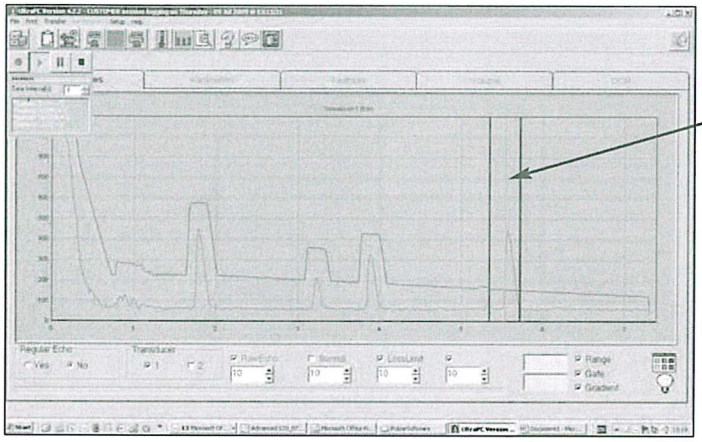
Ultra PC Software:

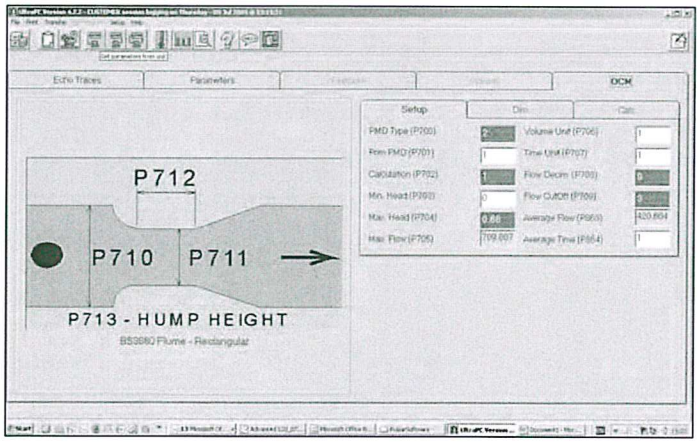
Ultra PC software is a powerful tool that fine tunes the Ultra series of controllers, helping the user get the best from their level or flow system.

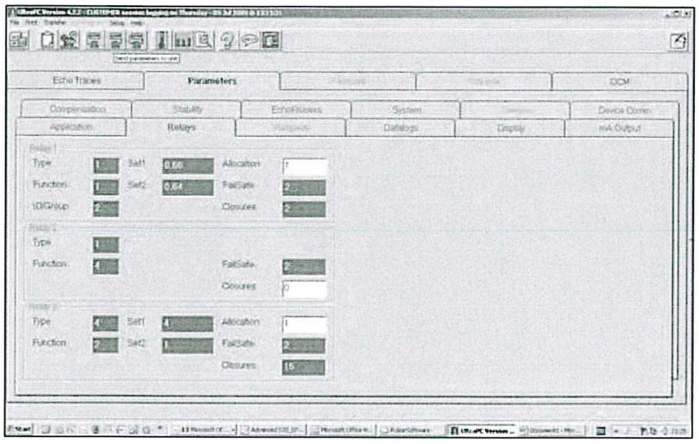
Ultra PC can be used to record all the parameters for your applications, these may be saved to PC, disc or email. All programming parameters can be changed and downloaded to the instrument via your laptop or PC. The software may also be used to record echo profiles of your applications, these can be saved for your records or sent via e-mail back to Pulsar for analysis. Ultra PC can also record echo profiles, allowing them to be saved for your records or emailed to Pulsar for analysis. Events may be recorded and logged over long periods of time, creating an archive of level or flow variations.

Features

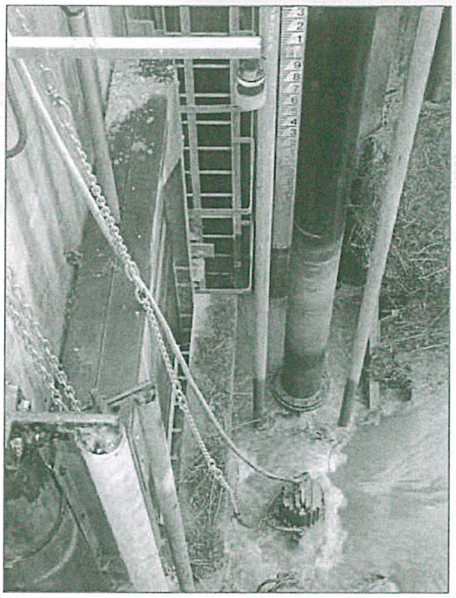
- Allows 'cloning of units'
- Real time recording of echo trace
- Stores all calibrated parameters by site
- Clean effective and accurate storage
- CD with USB port or serial connection leads
- Easy to operate and setup





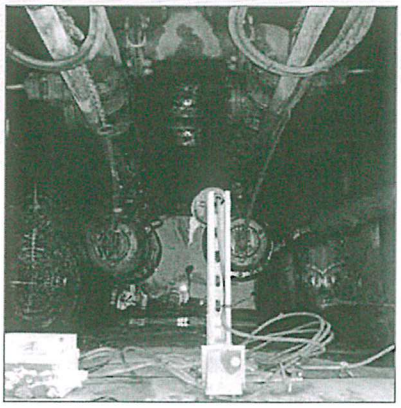


Pump Control:

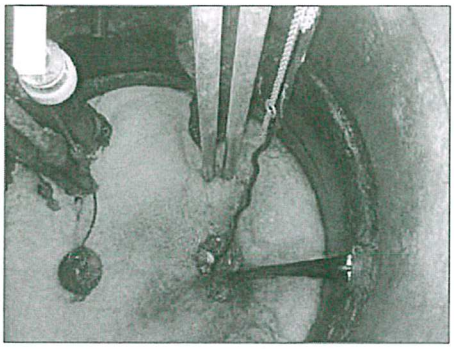


7m (23ft) PUMP CONTROL

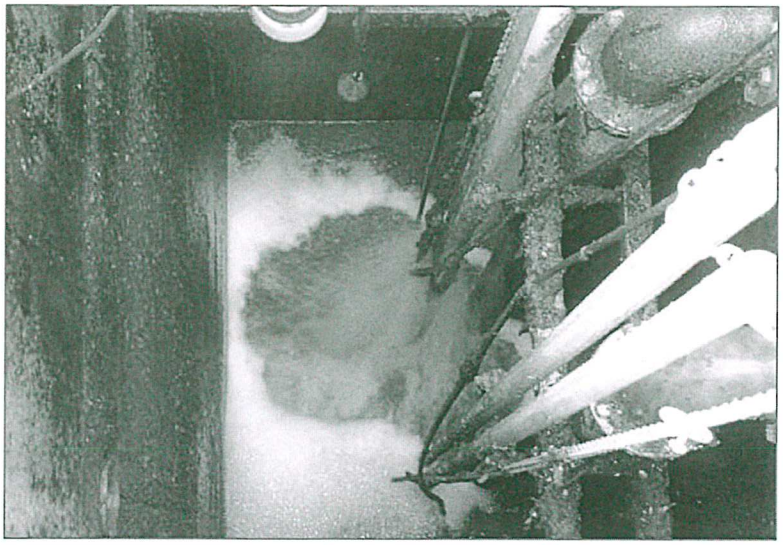
27m (89ft) STORM TANK 3 PUMPS DOWN CENTRAL WELL



4m (13ft) TIGHT WELL

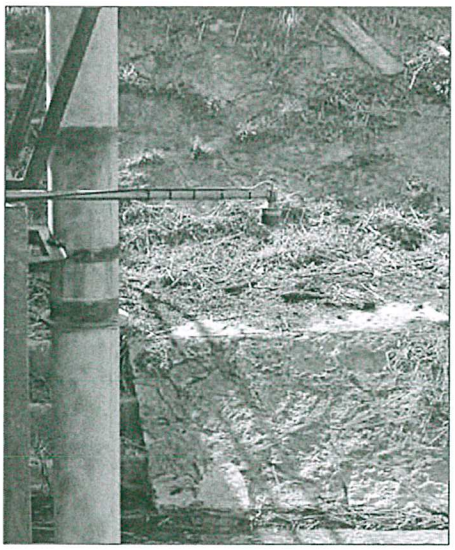


3.5m (11ft) FOAMY WET WELL PUMP CONTROL

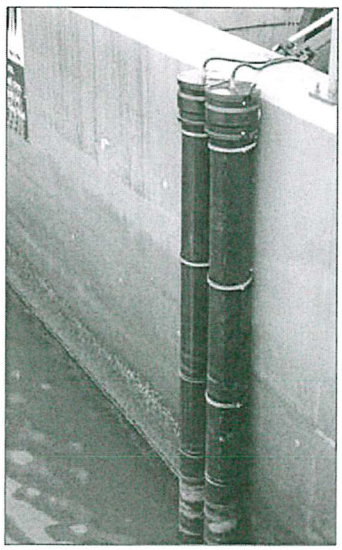


4m (13ft) WET WELL PUMP CONTROL AND HIGH FILL RATE

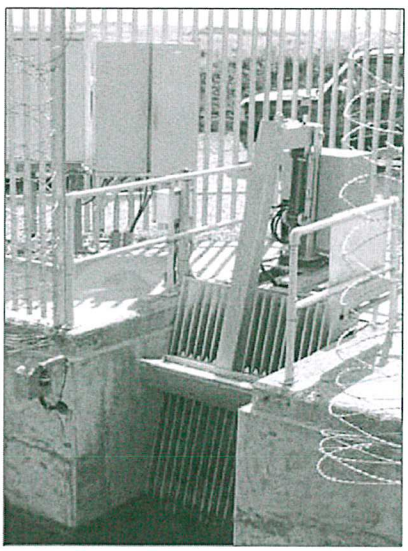
Differential Level:



5m (16ft) CANAL DIFFERENTIAL



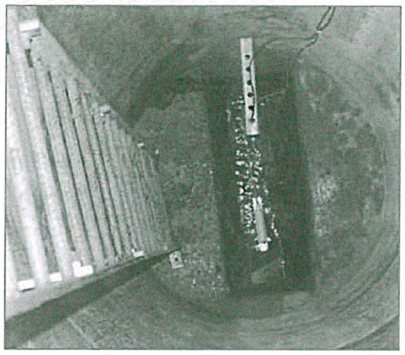
9m (30ft) HARBOUR DIFFERENTIAL



1.5m (5ft) SCREEN DIFFERENTIAL

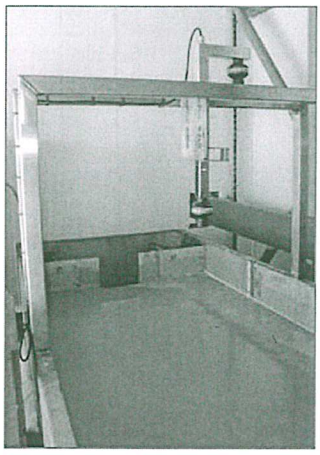
Open Channel Flow:

RECTANGULAR WEIR FLOW

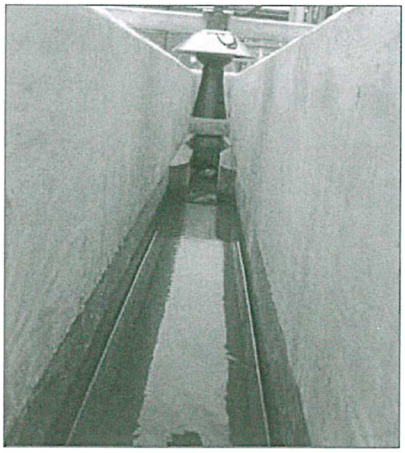


AREA X VELOCITY IN A CHANNEL USING SPEEDY and dBS6

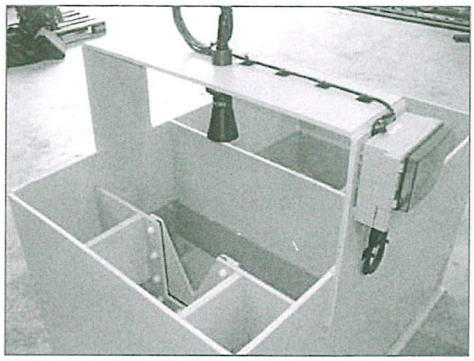
RECTANGULAR FLUME FLOW



RECTANGULAR WEIR and DUET TRANSDUCER



RECTANGULAR FLUME and dBMACH3

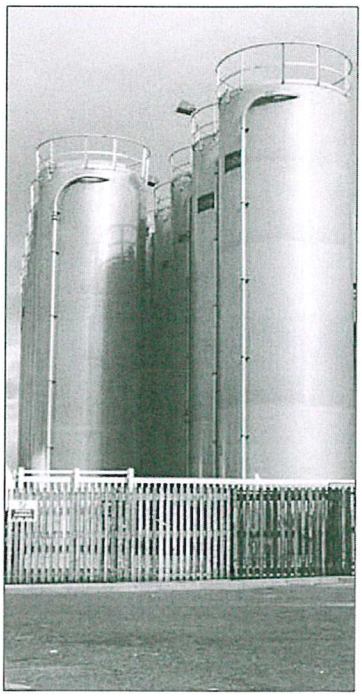


FLOW BOX WITH A V-NOTCH WEIR and dBMACH3

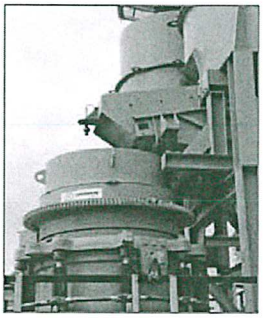
Volume Measurement:

CEMENT 12m (40ft)

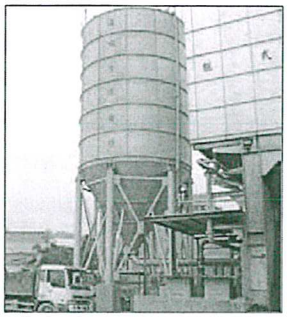
FUEL OIL 9m (30ft)



PLASTIC PELLET SILOS 18m (60ft)



CRUSHER CONTROL 1.8m (5.9ft)



CLINKER 14m (46ft)

CHEMICAL TANK WITH STANDPIPE 1.9m (6ft)

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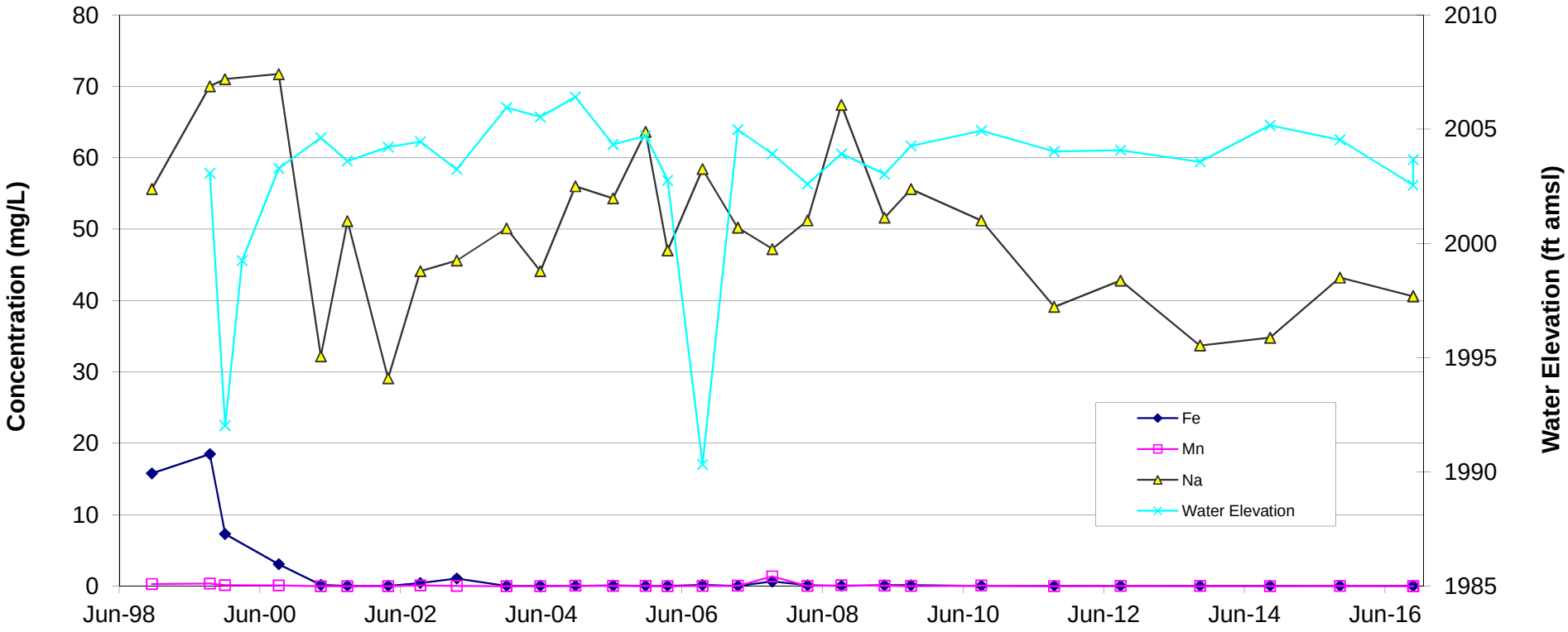
ISO 9001 Registered Company sira CERTIFICATION UKAS MANAGEMENT SYSTEMS 011
CERTIFICATE NUMBER: 950136-1

ISO 14001 Registered Company sira CERTIFICATION UKAS MANAGEMENT SYSTEMS 011
CERTIFICATE NUMBER: 072570-1

Pulsar operates a policy of constant development and improvement and reserves the right to amend technical details as necessary.

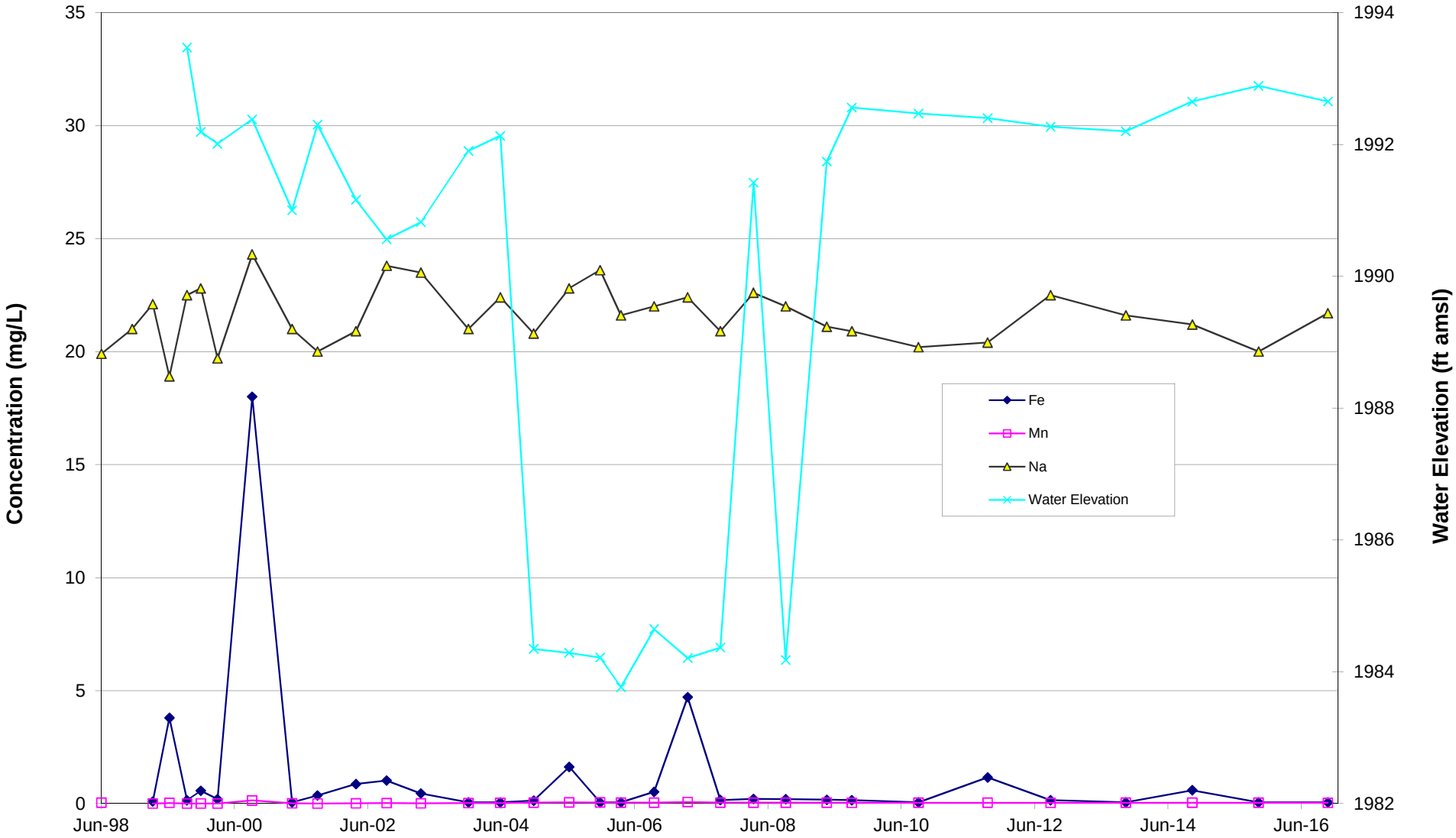
Lit No. Ultra S616

CW-3A Metals



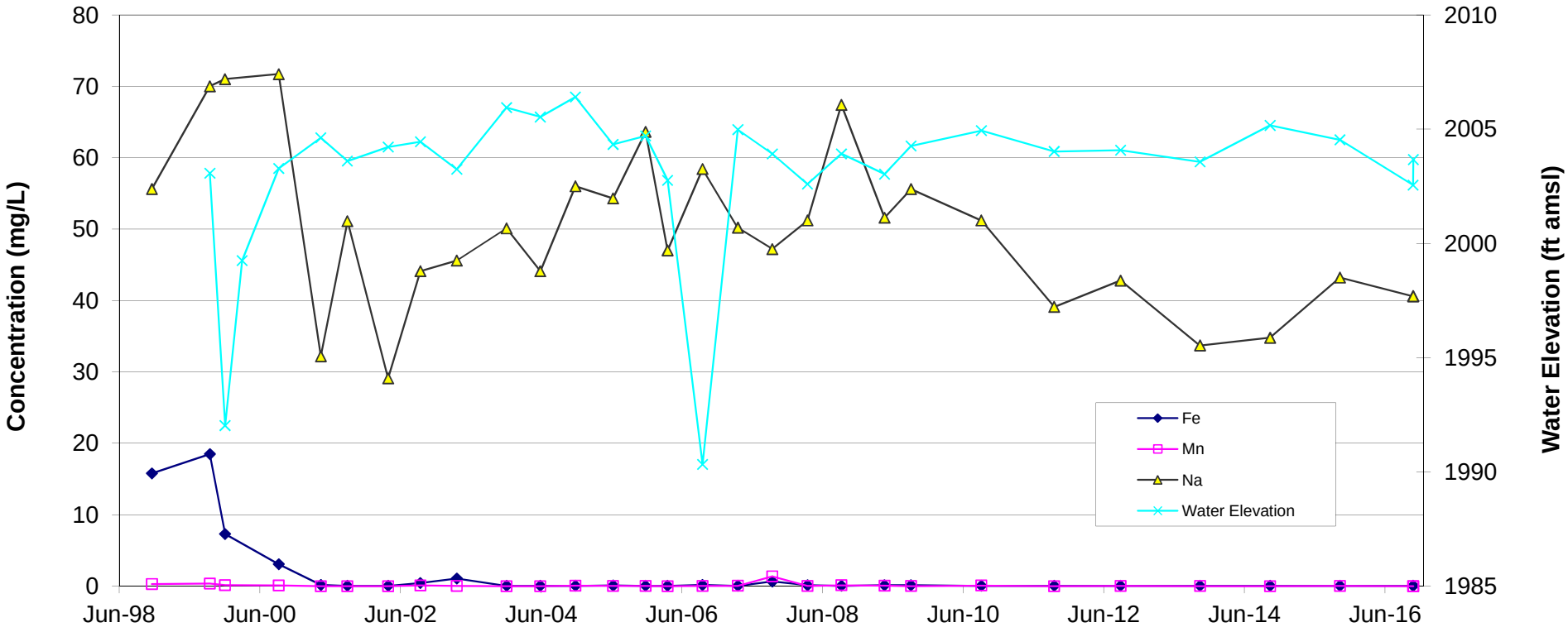
Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.

CW-3B Metals



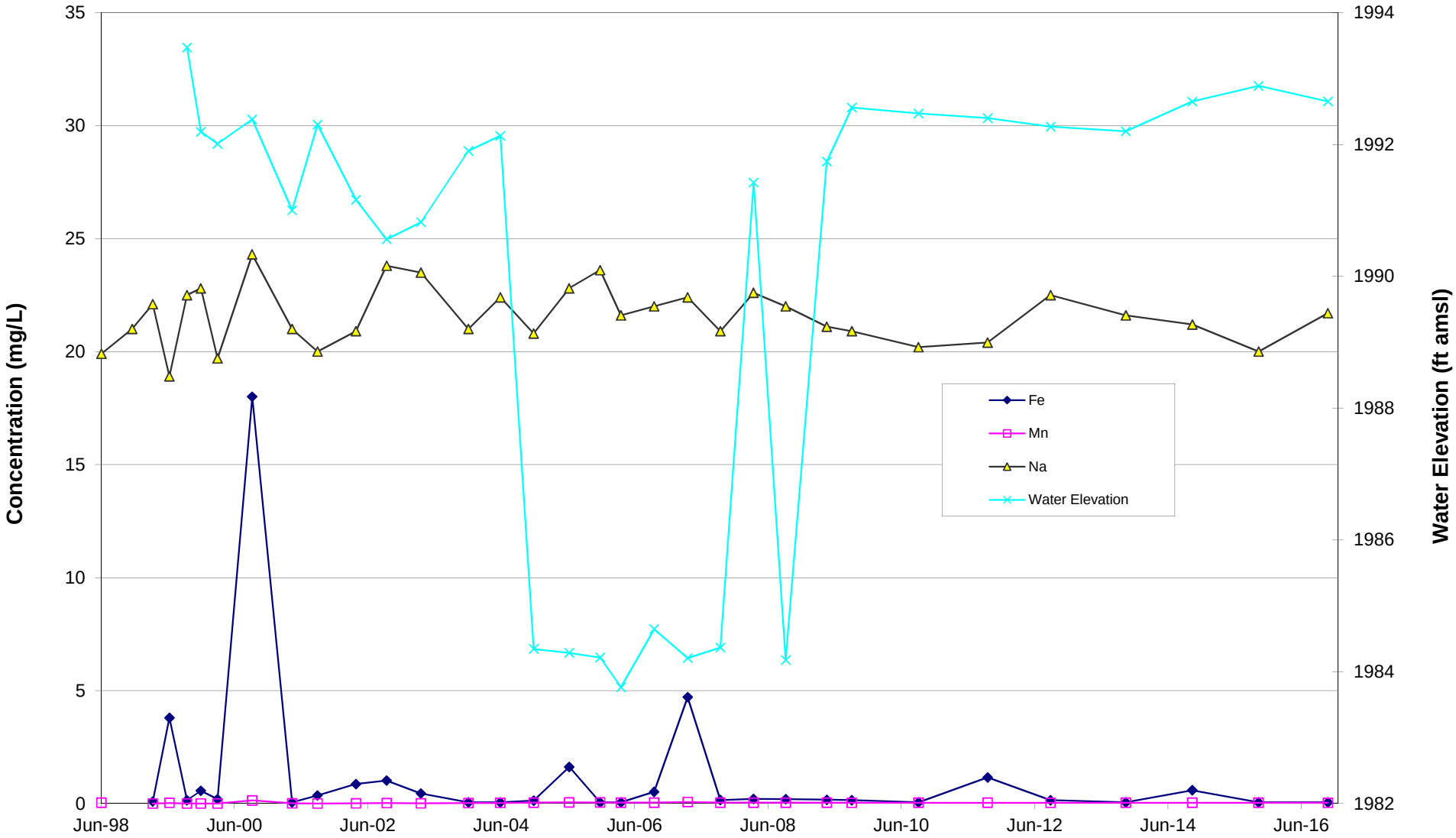
Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.

CW-3A Metals



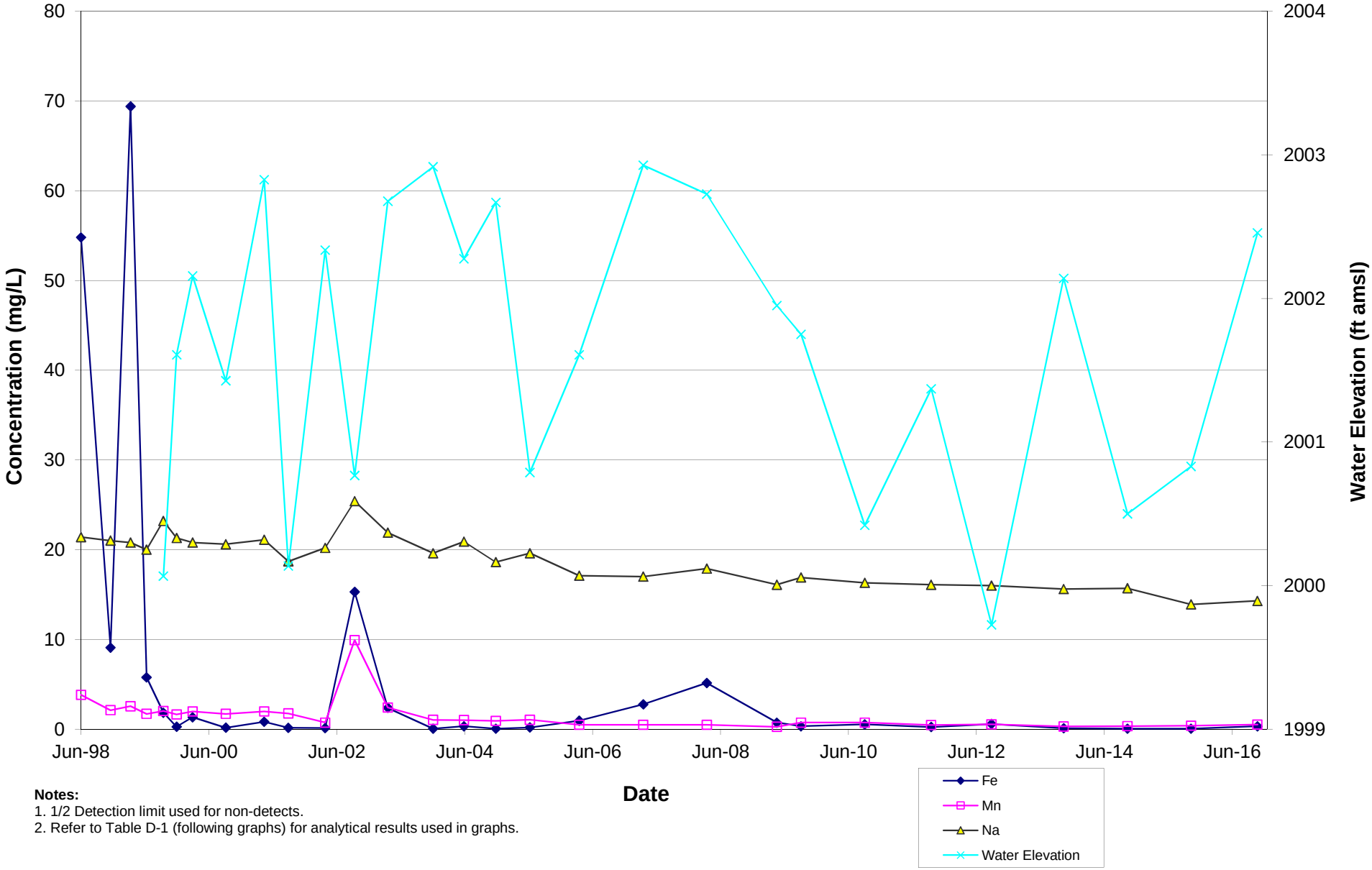
Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.

CW-3B Metals



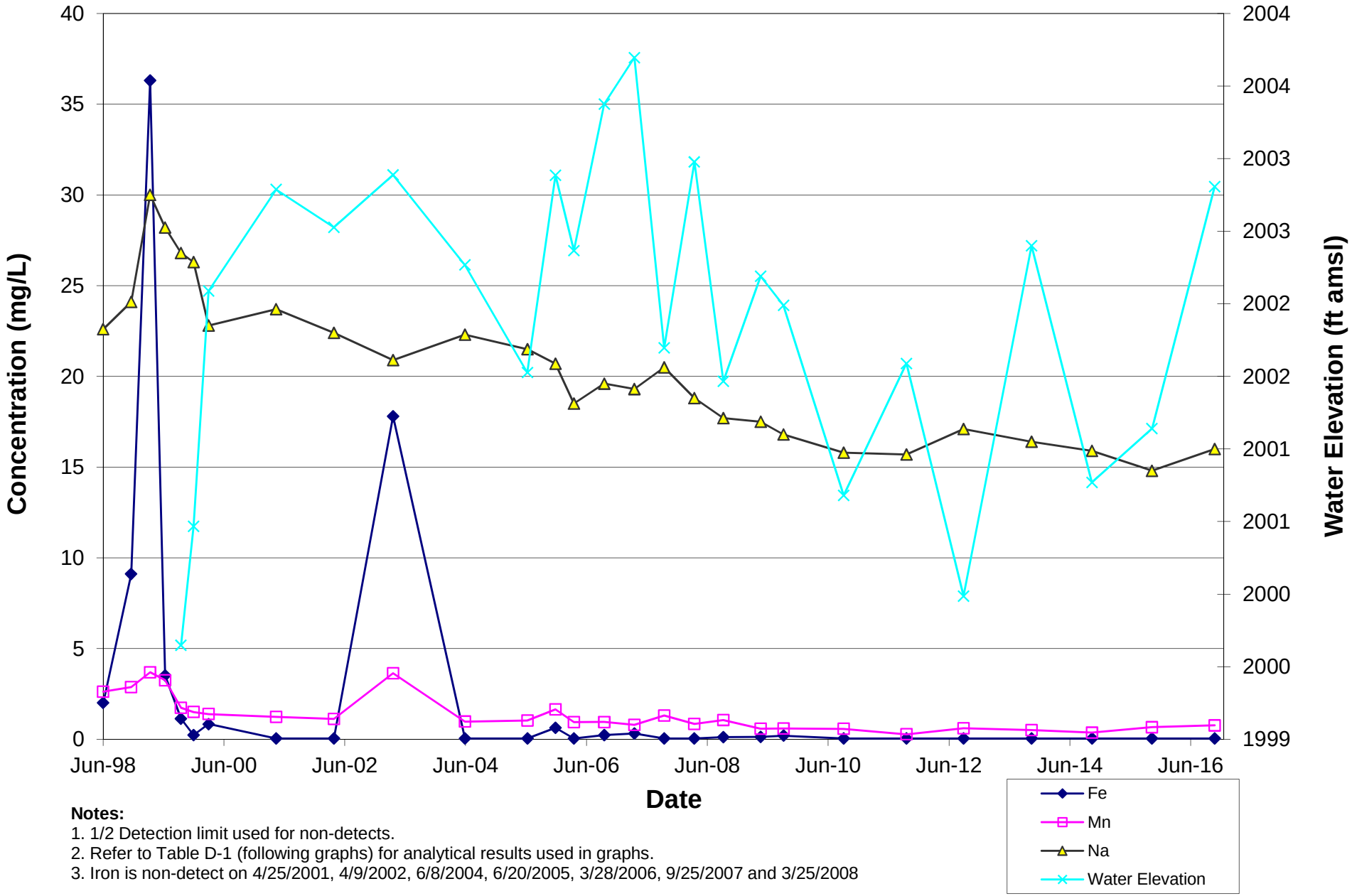
Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.

CW-4A Metals



Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.

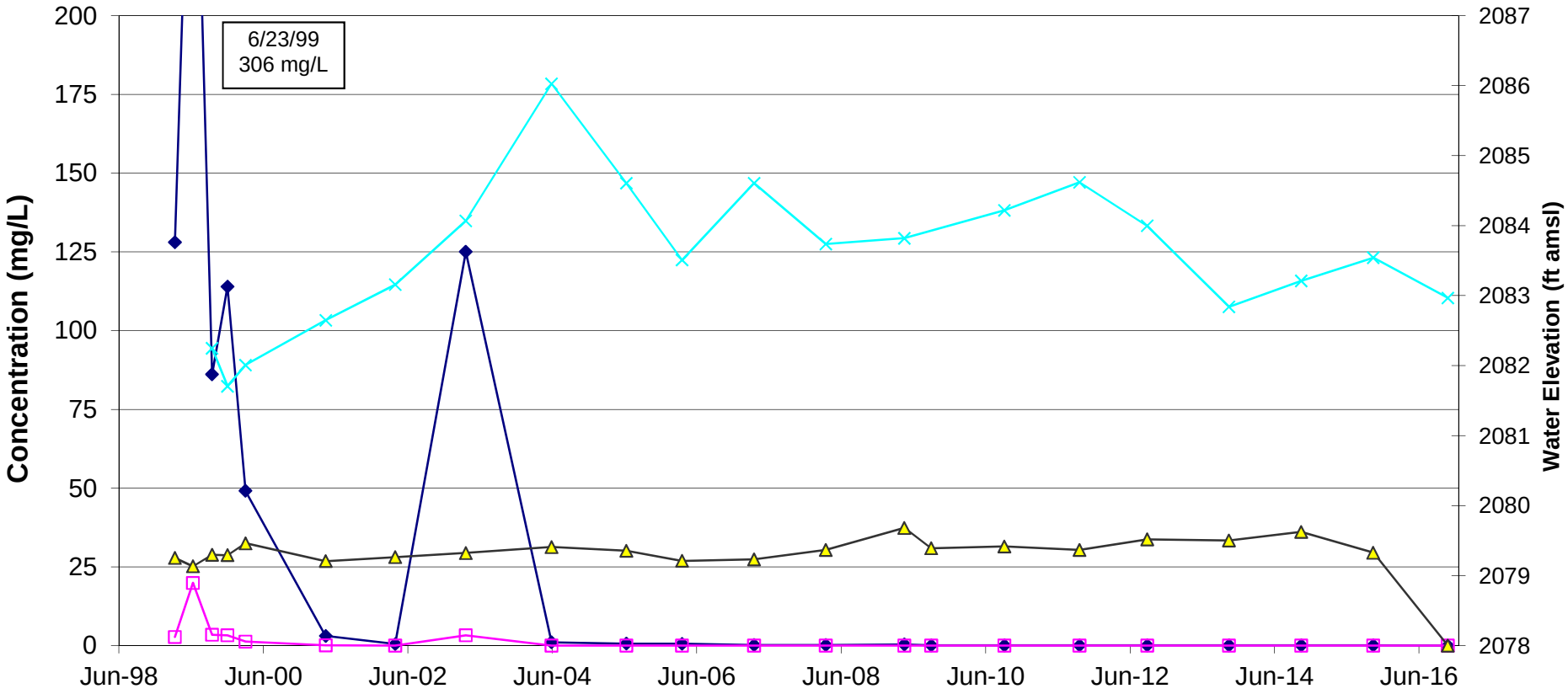
CW-4B Metals



Notes:

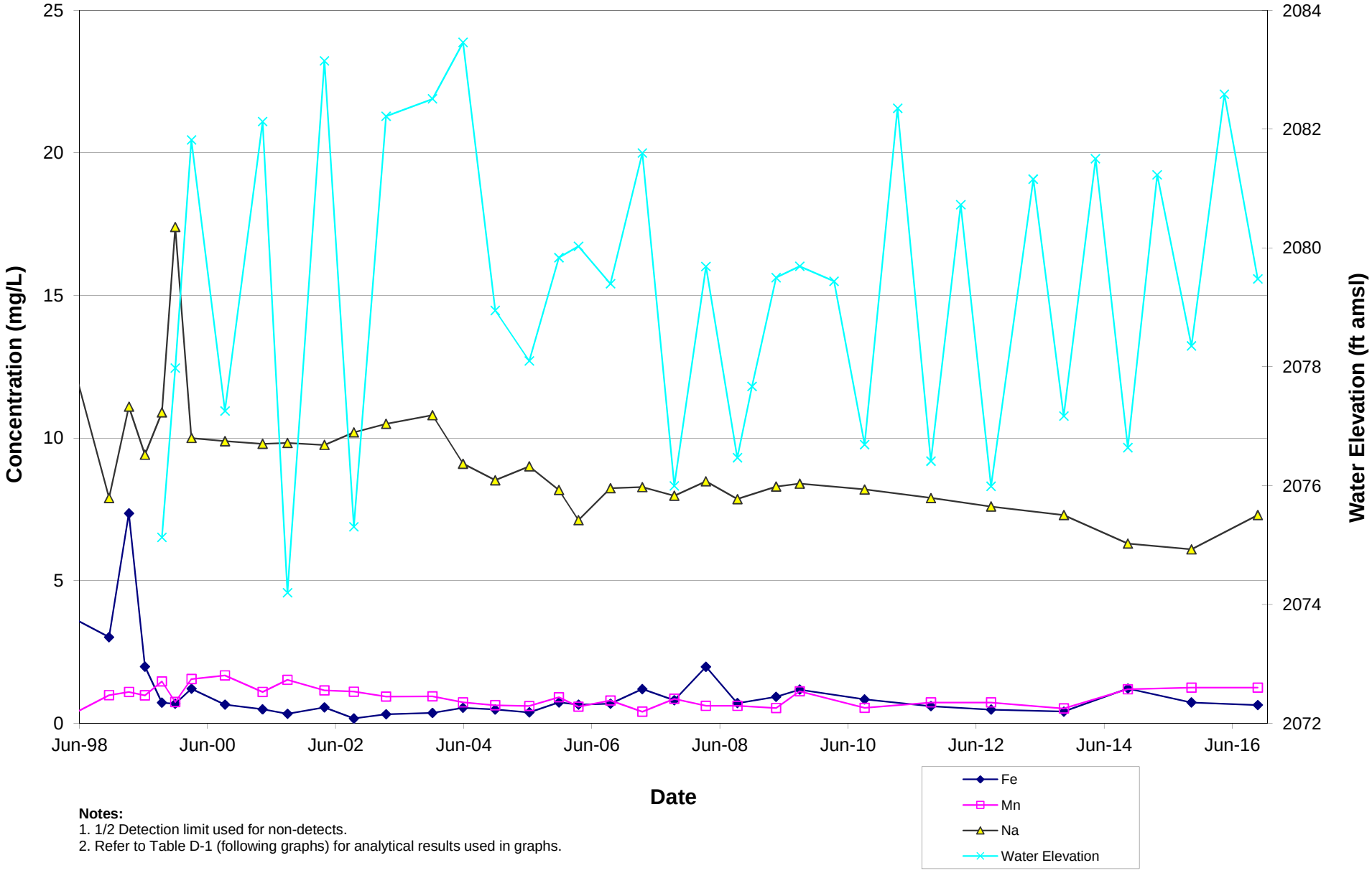
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.
3. Iron is non-detect on 4/25/2001, 4/9/2002, 6/8/2004, 6/20/2005, 3/28/2006, 9/25/2007 and 3/25/2008

MW-3S Metals



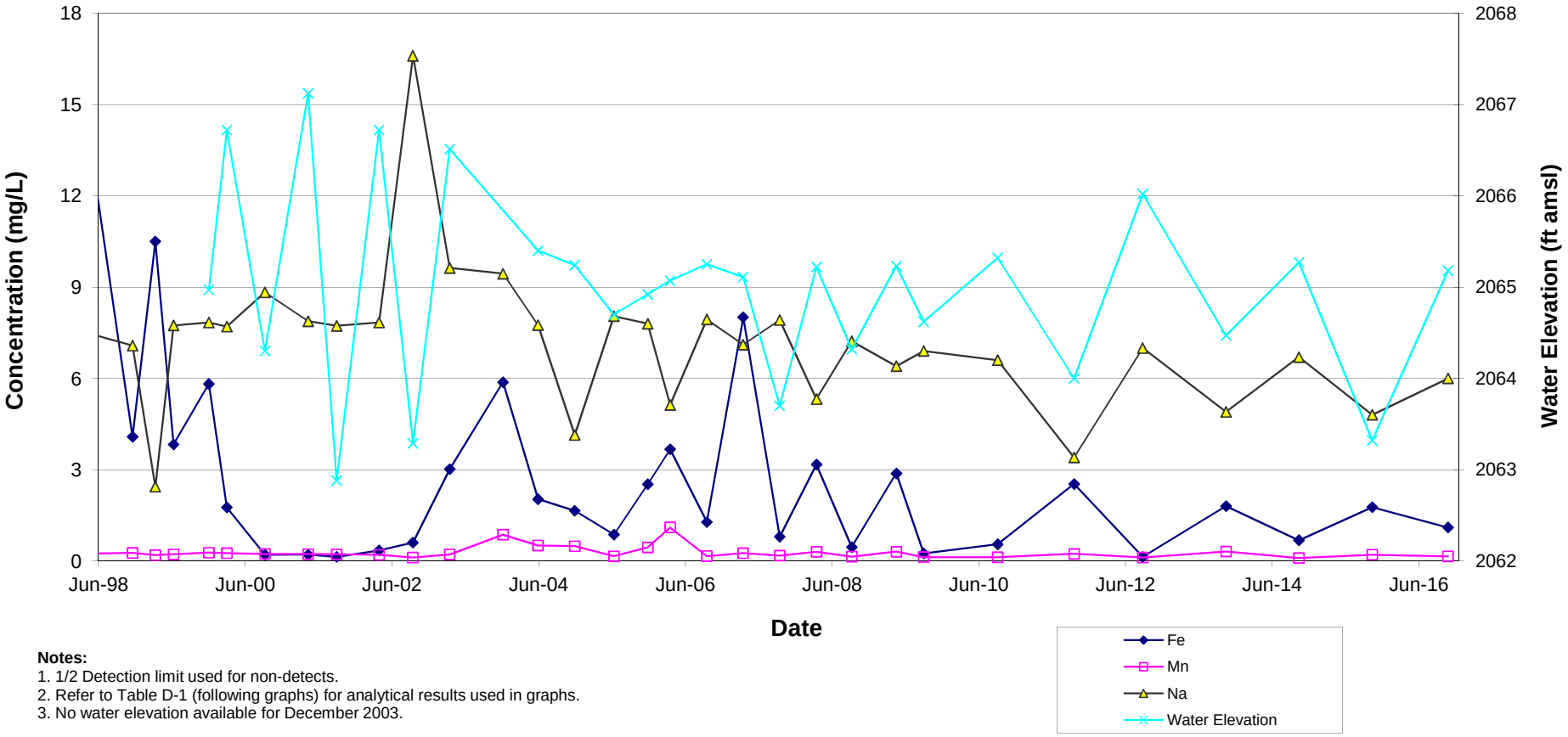
Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.
3. Manganese results were non-detect on 3/29/2007 and 3/25/2008.

MW-4D Metals



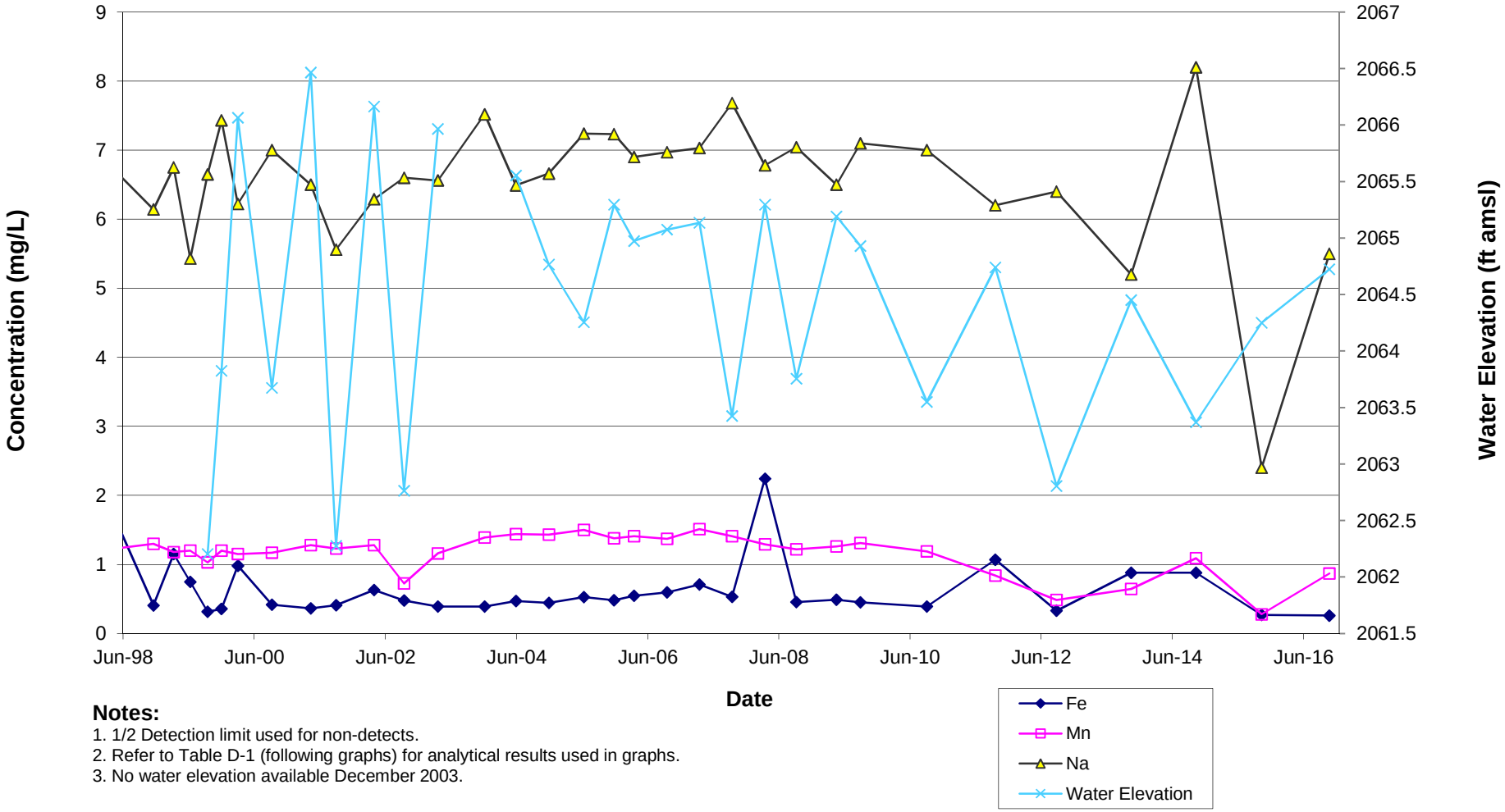
Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.

MW-5S Metals



Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.
3. No water elevation available for December 2003.

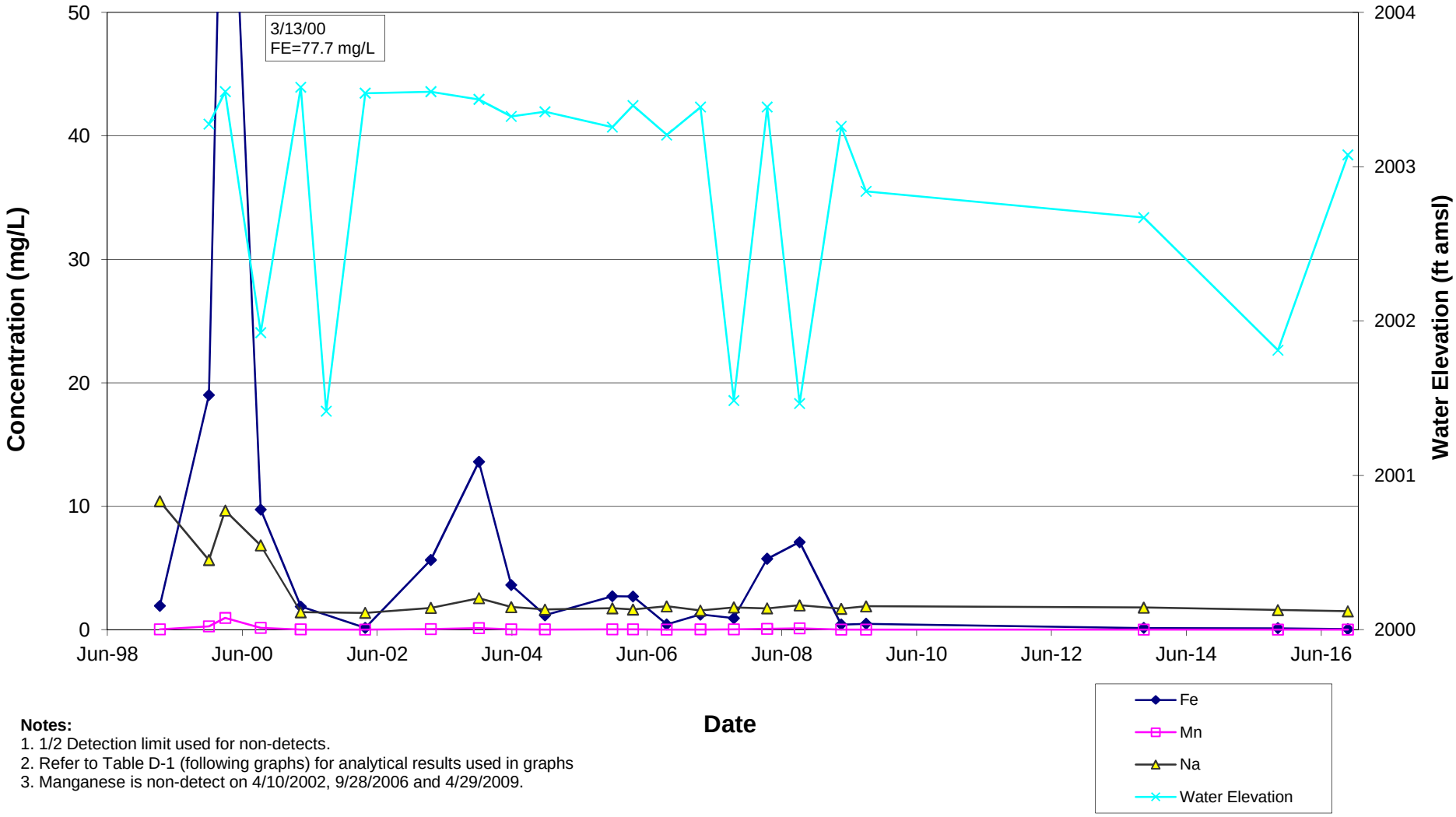
MW-5D Metals



Notes:

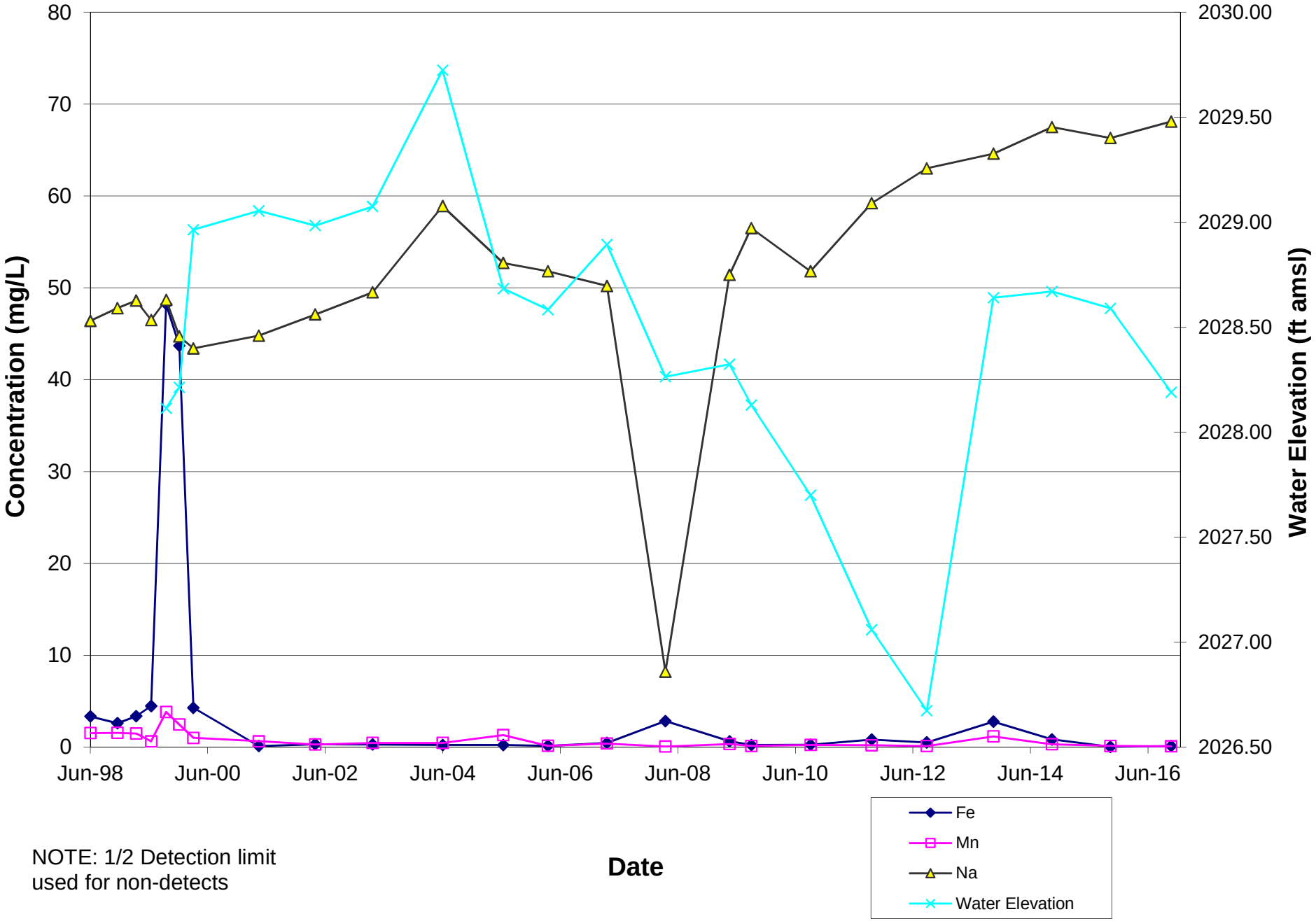
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.
3. No water elevation available December 2003.

MW-15S Metals



Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs
3. Manganese is non-detect on 4/10/2002, 9/28/2006 and 4/29/2009.

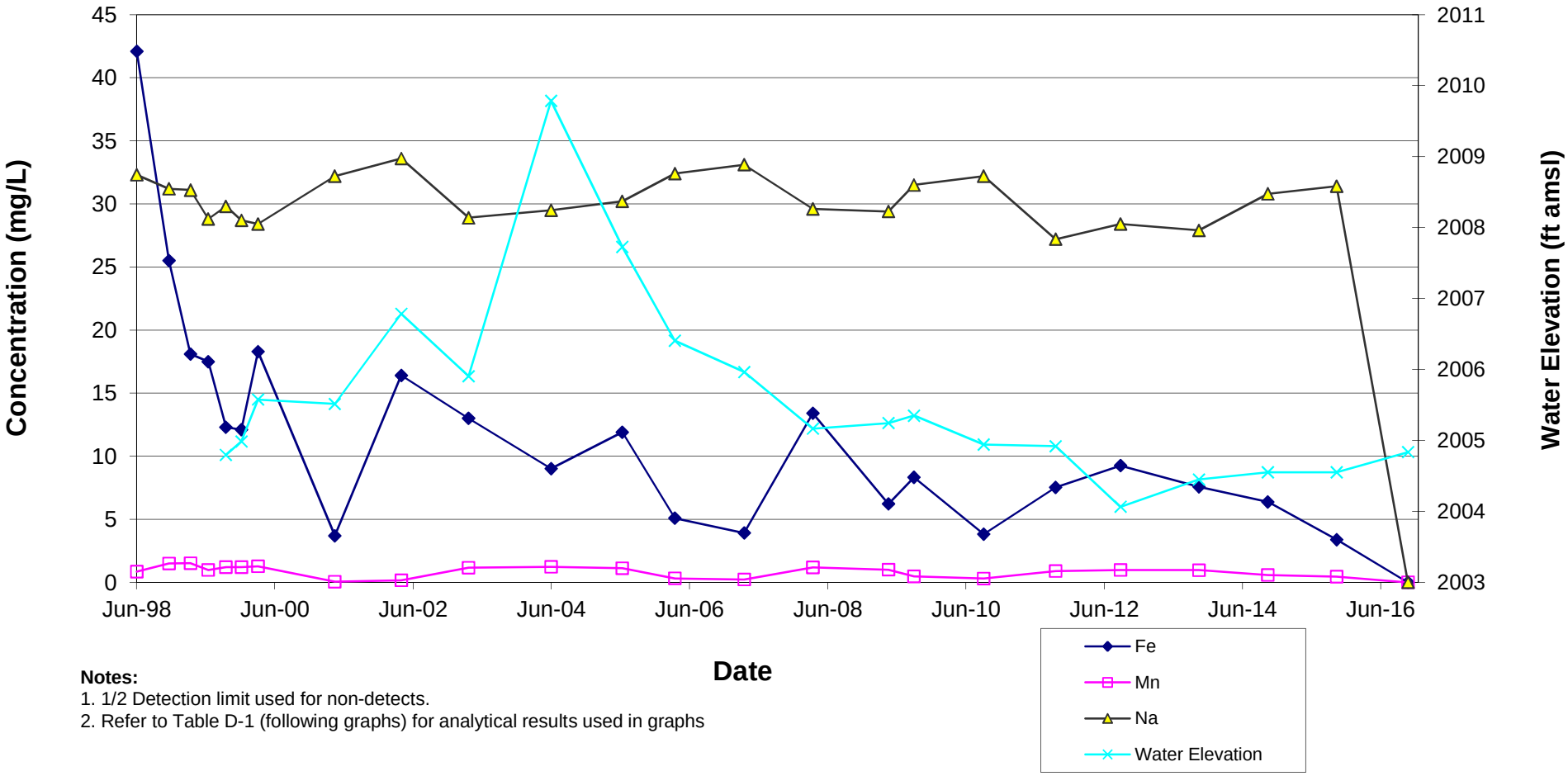
MW-17S Metals



NOTE: 1/2 Detection limit used for non-detects

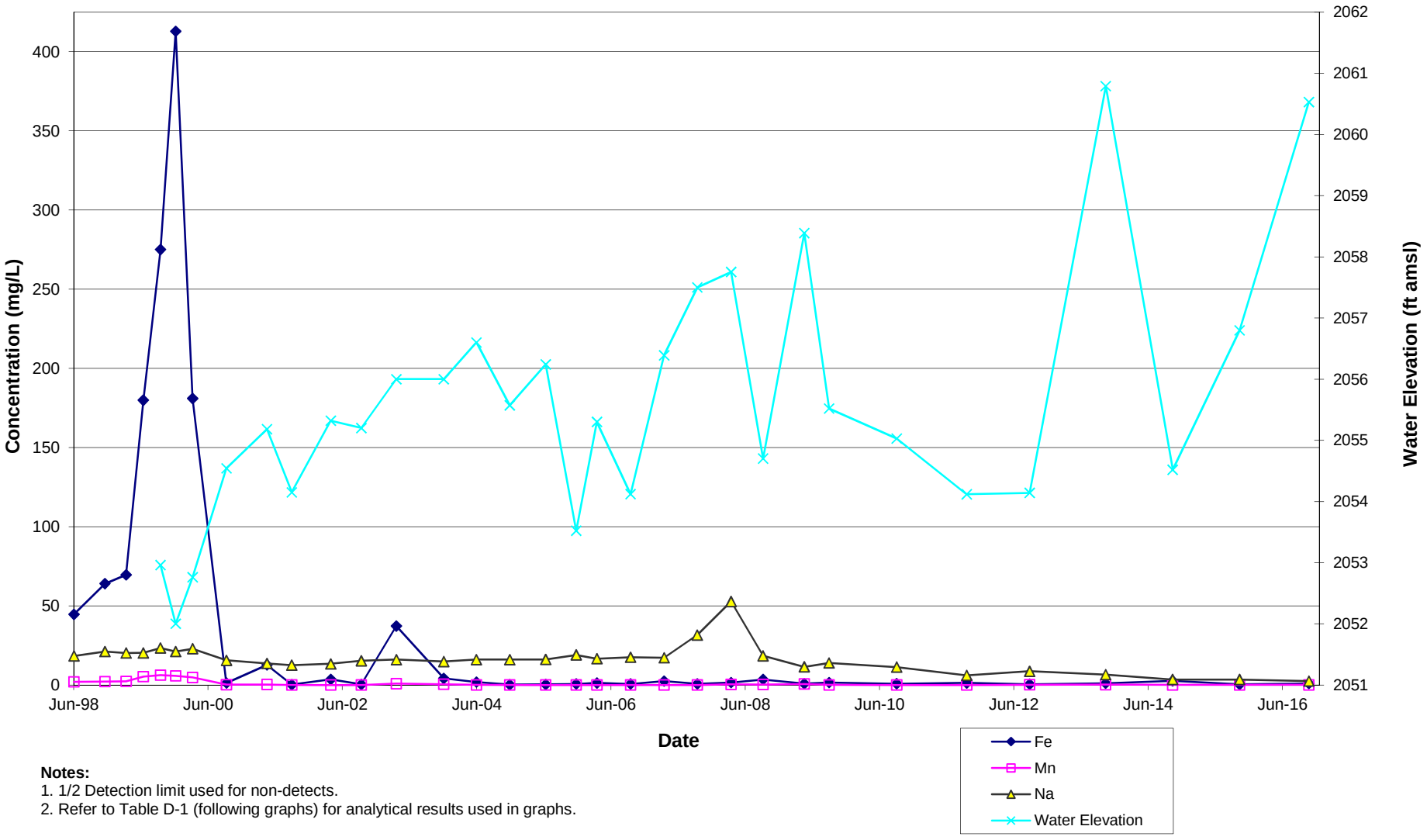
Date

MW-17D Metals



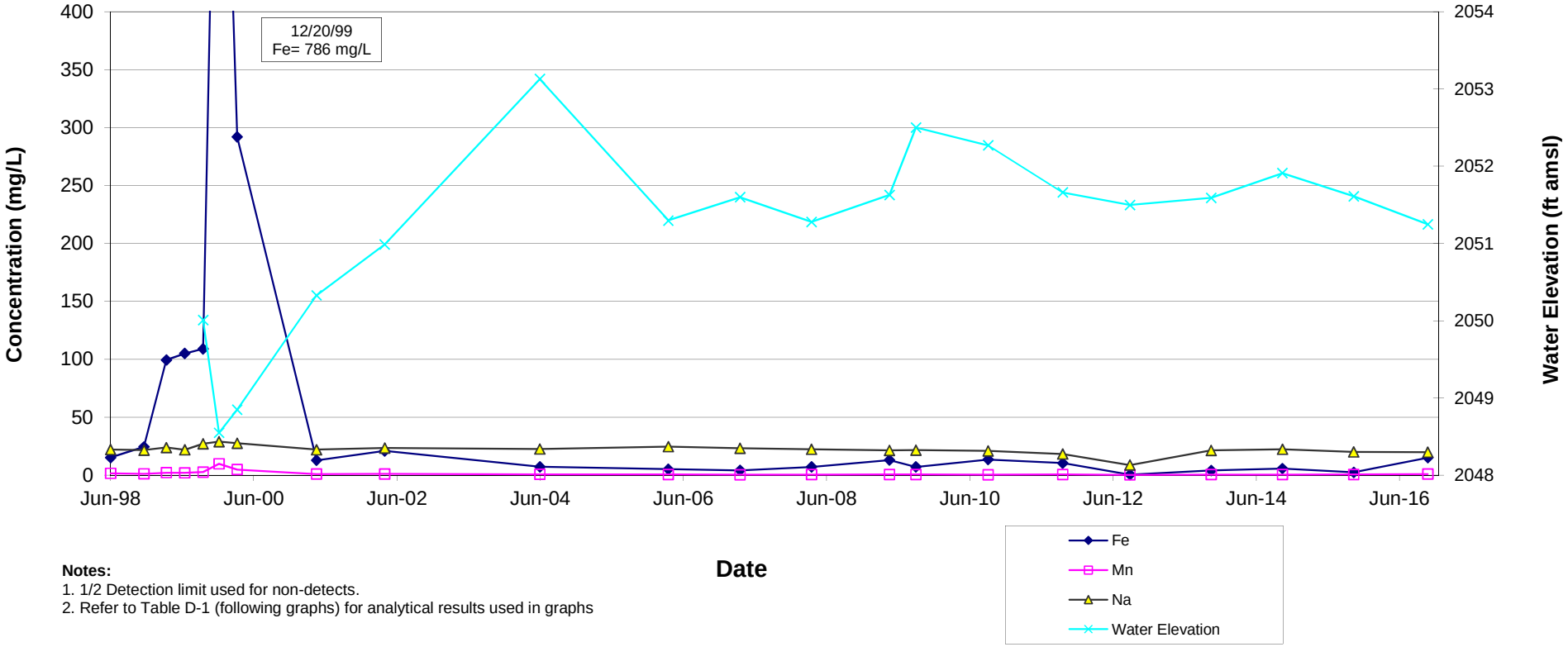
Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs

MW-18S Metals



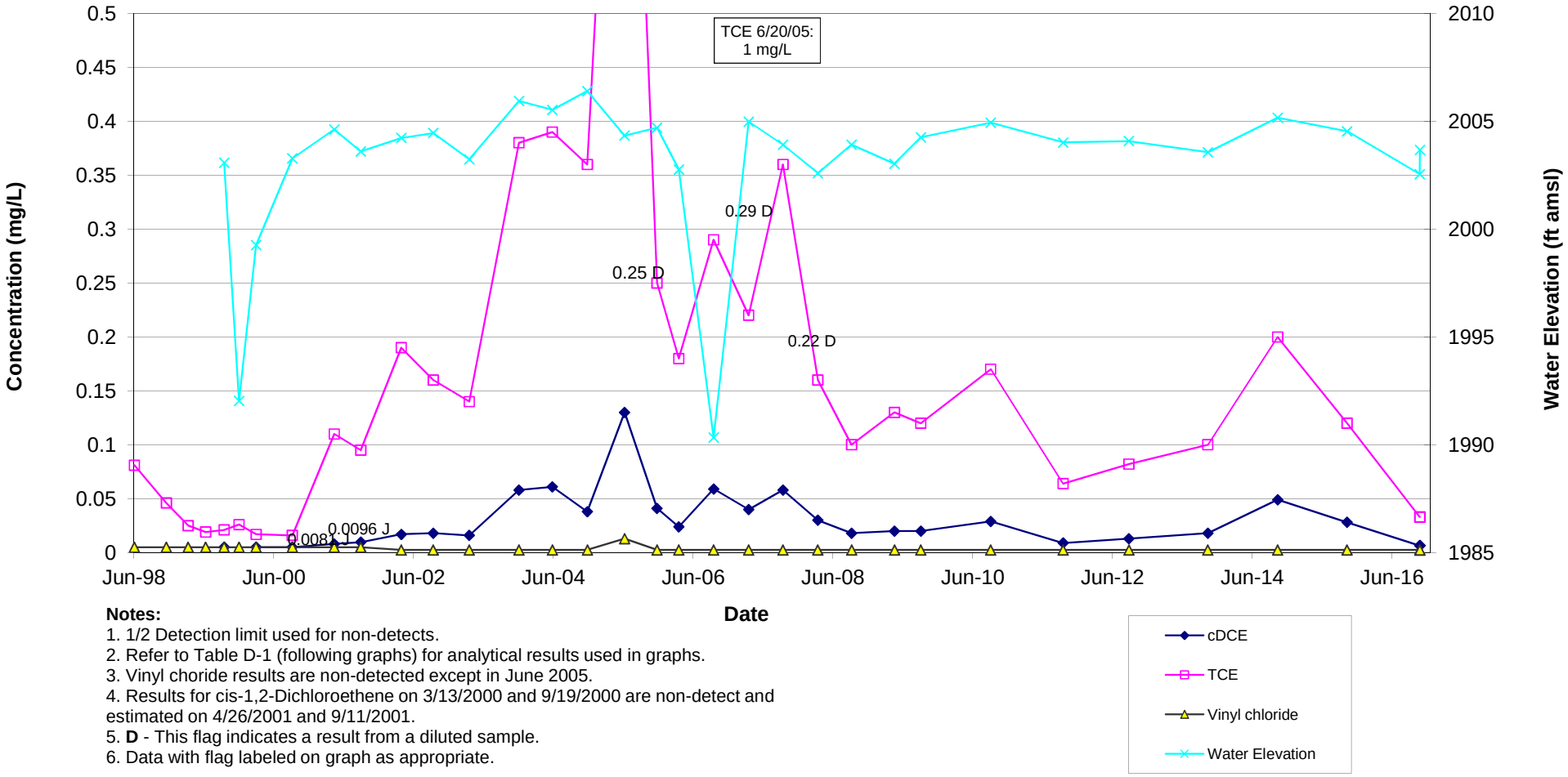
Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.

MW-18D Metals



Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs

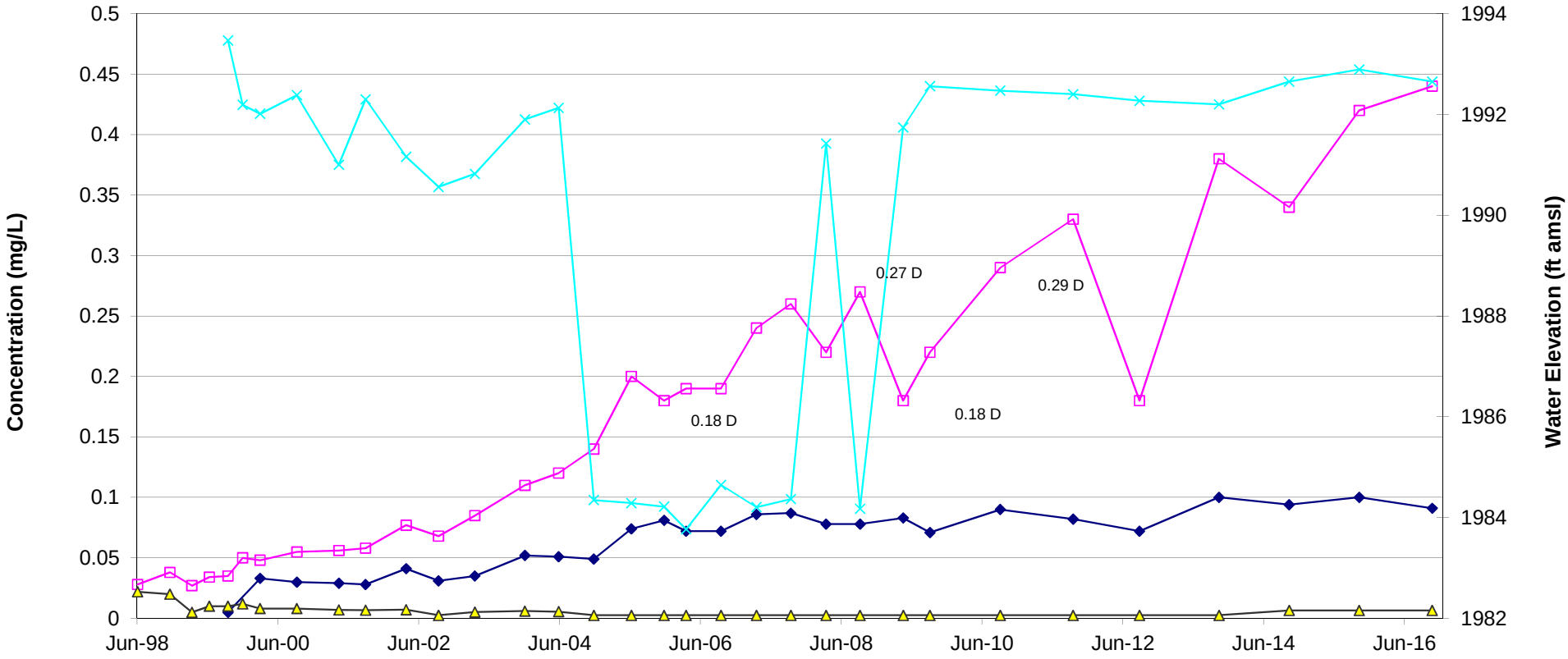
CW-3A VOCs



Notes:

1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.
3. Vinyl choride results are non-detected except in June 2005.
4. 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.
5. **D** - This flag indicates a result from a diluted sample.
6. Data with flag labeled on graph as appropriate.

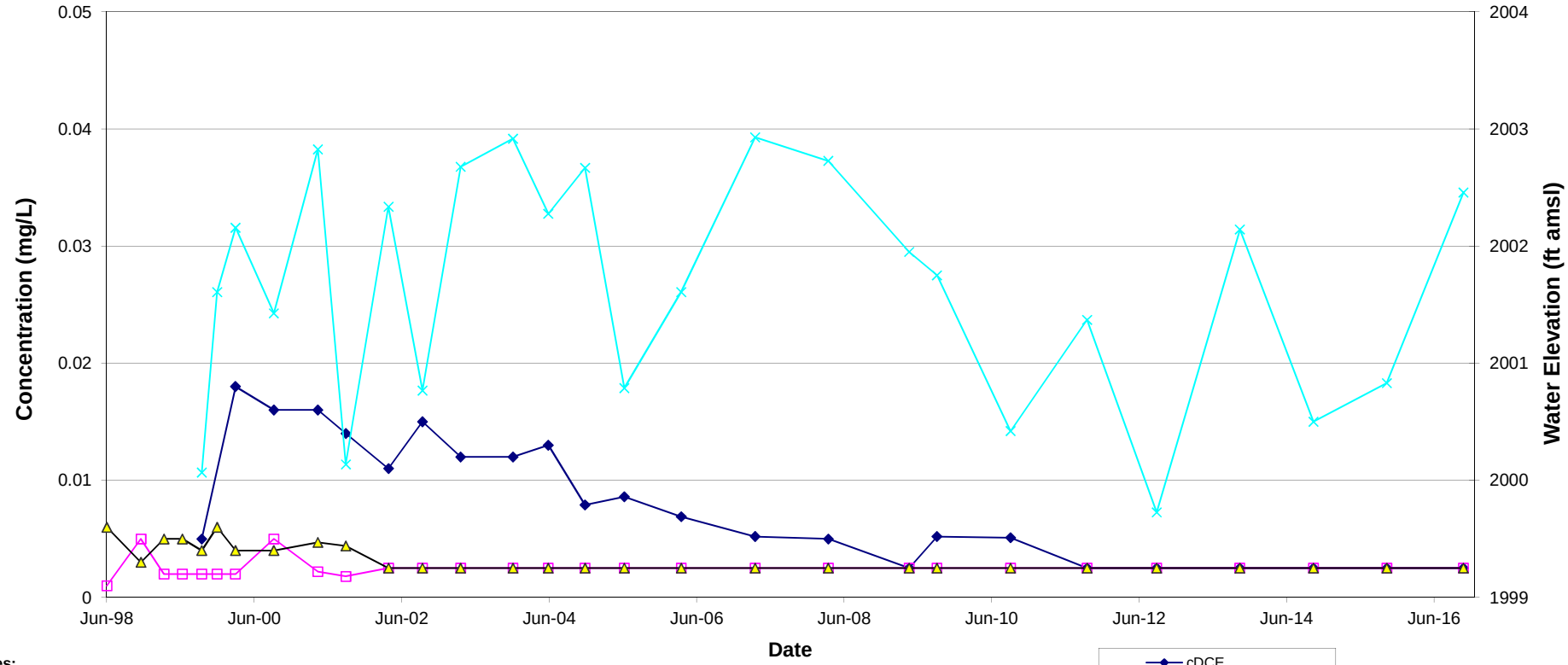
CW-3B VOCs



Notes:

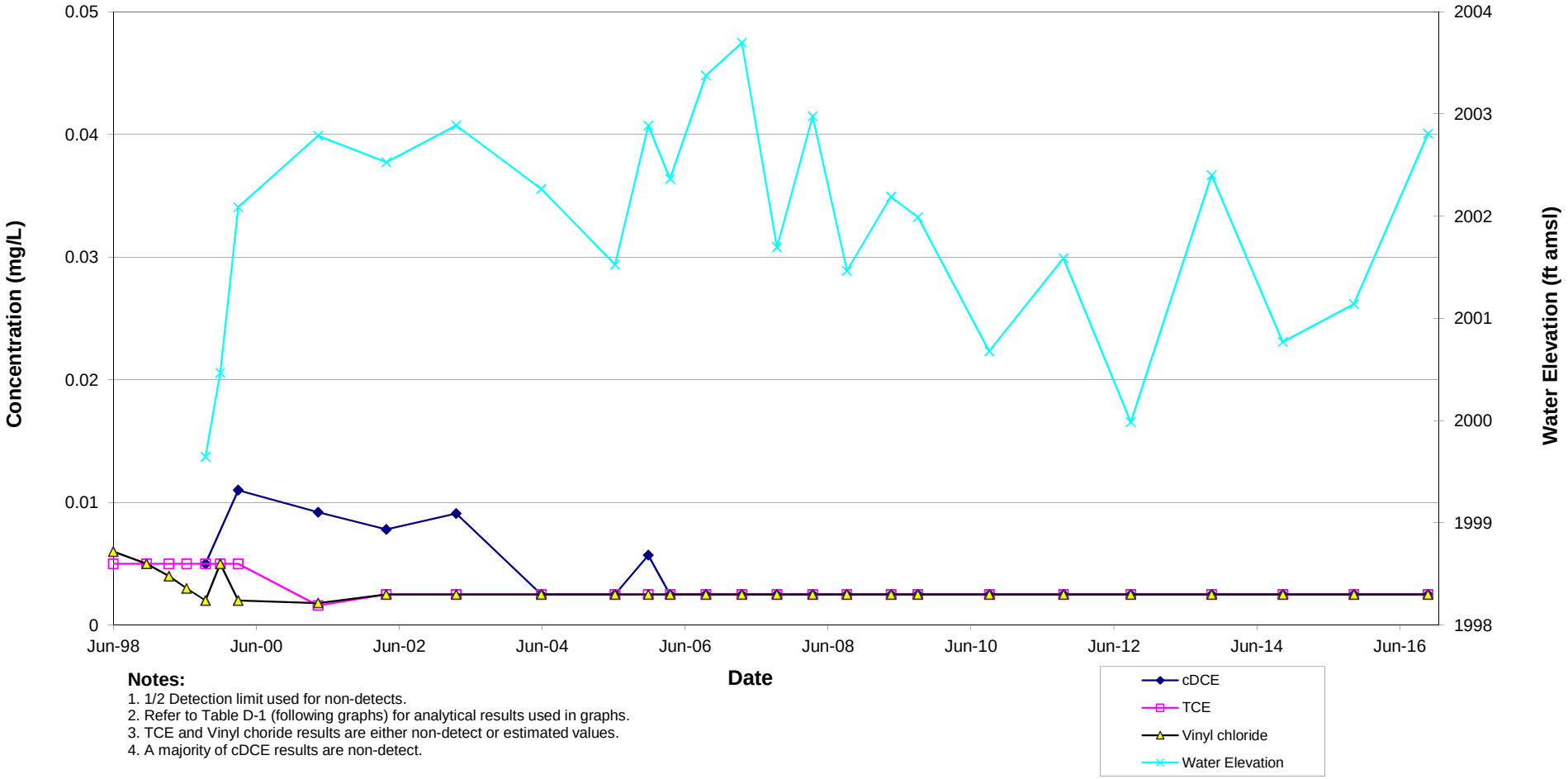
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.
3. The majority of Vinyl choride results are non-detect. Vinyl choride results on 3/13/2000, 9/19/2000,4/25/2001and on 9/11/2001 are estimated values.
4. Results for cDCE on 9/28/1999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

CW-4A VOCs



Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.
3. TCE and Vinyl choride results are either non-detect or estimated values.
4. cDCE is non-detect on 9/28/1999 and 4/29/2009.

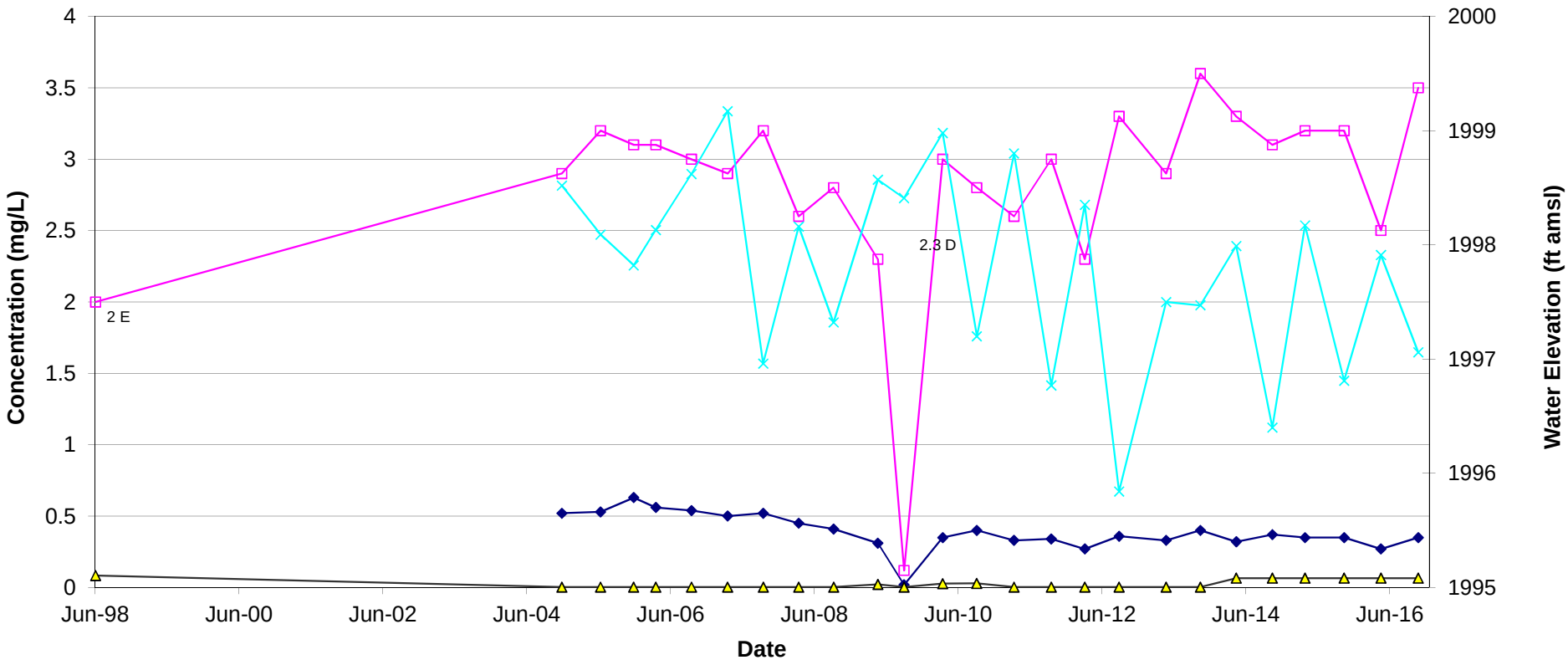
CW-4B VOCs



Notes:

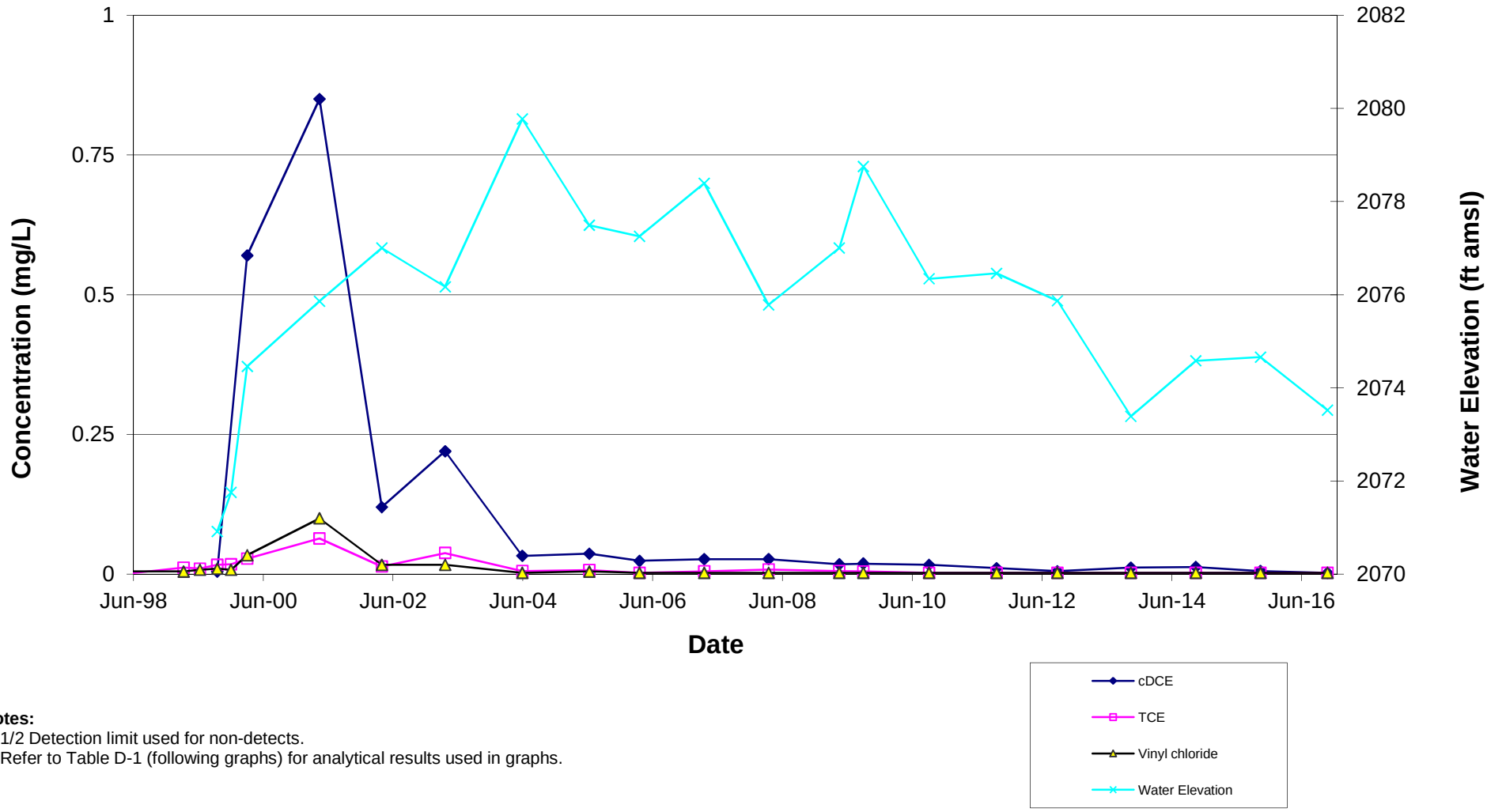
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.
3. TCE and Vinyl choride results are either non-detect or estimated values.
4. A majority of cDCE results are non-detect.

MW-11S VOCs



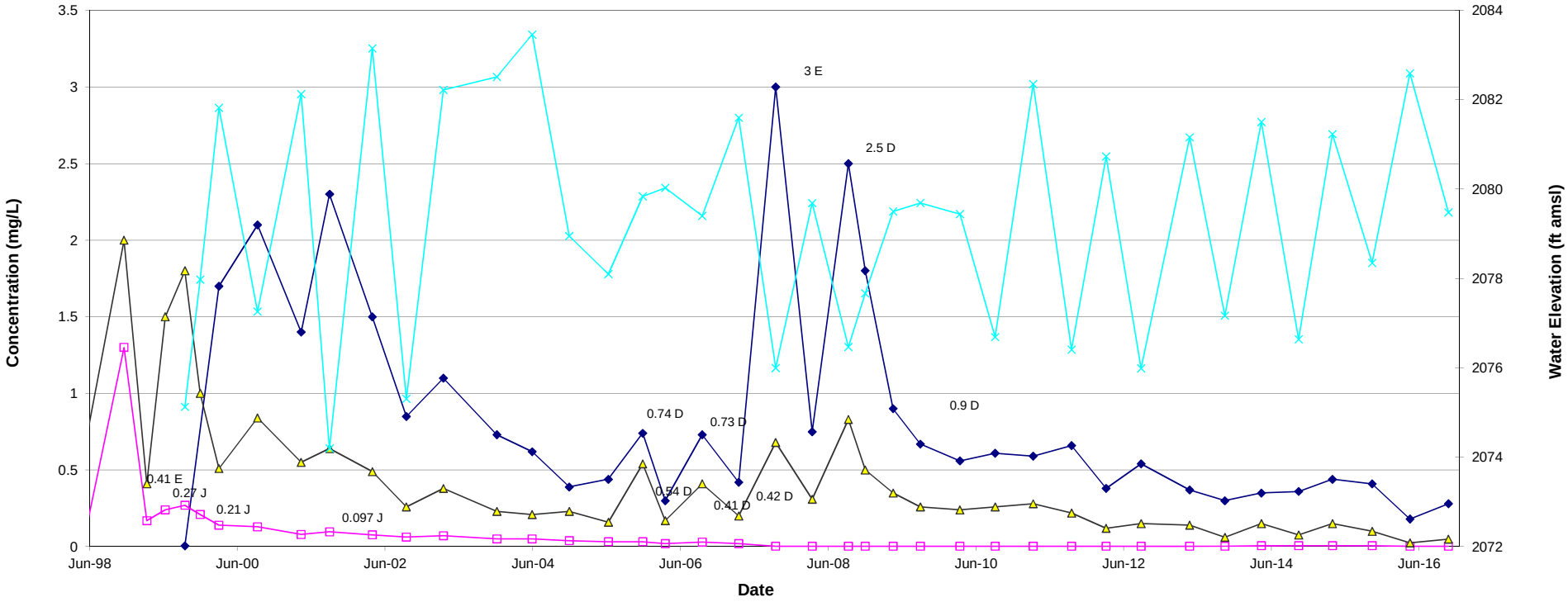
Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.
3. **E** - Results are greater than the calibration range fo the instrument used for analysis.
4. Vinyl chloride results are non-detect with an exception of 6/17/1998.
5. Flagged data is labeled on the graph as appropriate.

MW-3D VOCs



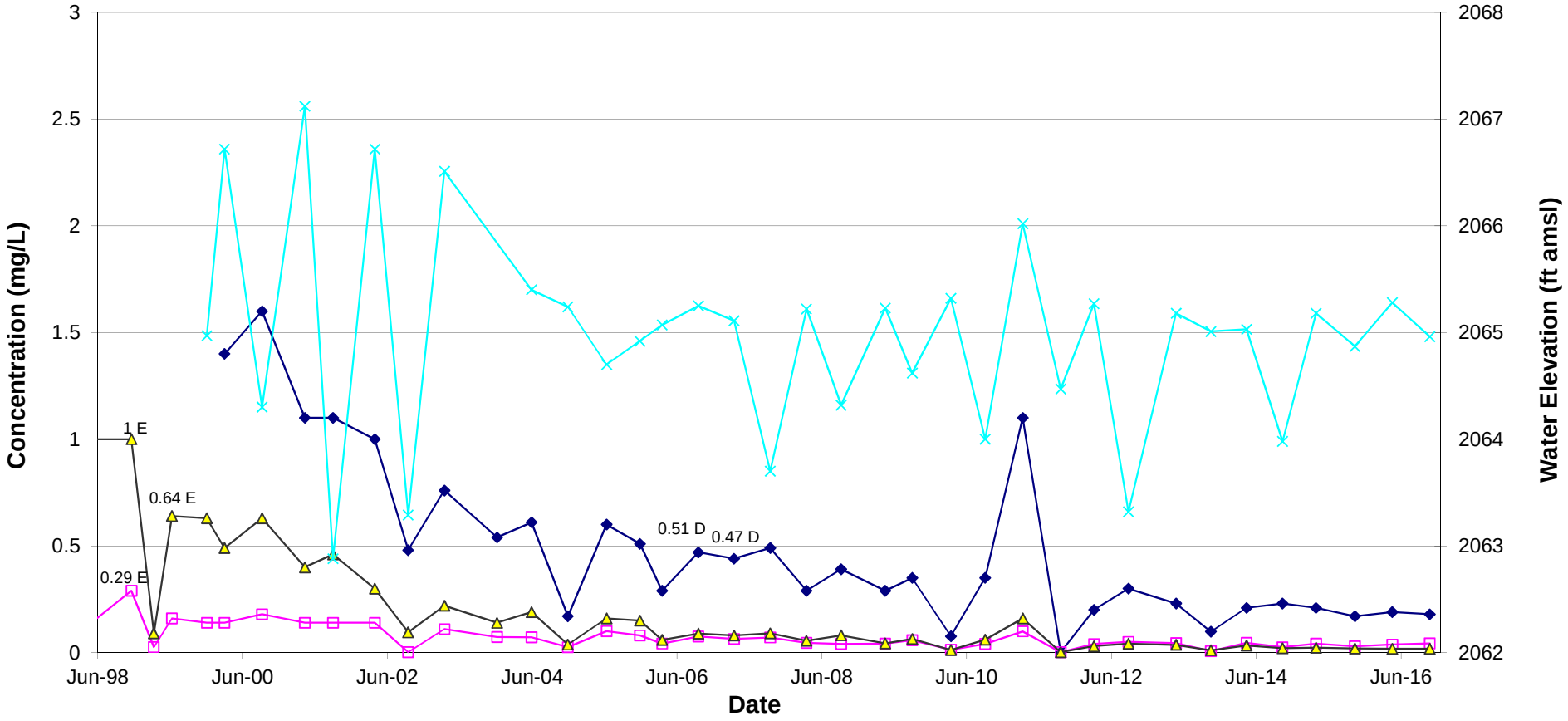
Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.

MW-4D VOCs



Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-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, 3/24/2008, 9/16/2008, 12/11/2008 and 4/28/2009.
7. Flagged data is labeled on the graph as appropriate.

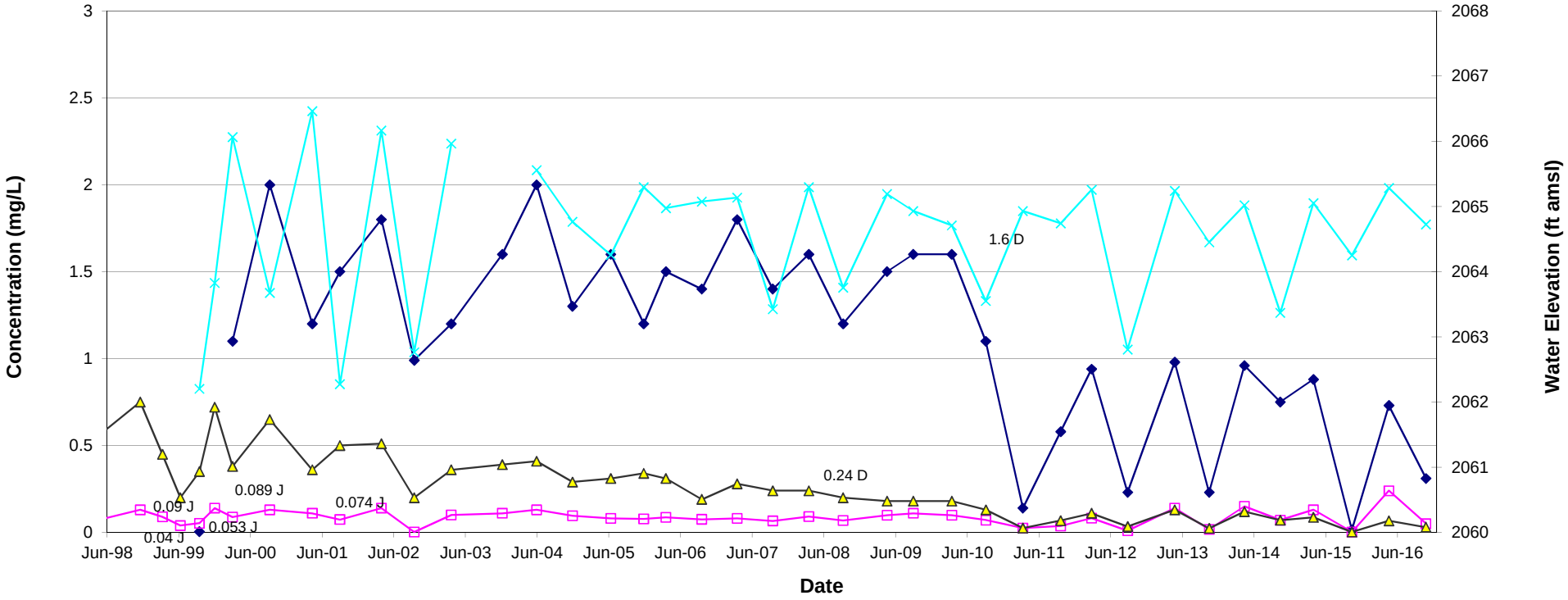
MW-5S VOCs



Notes:

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

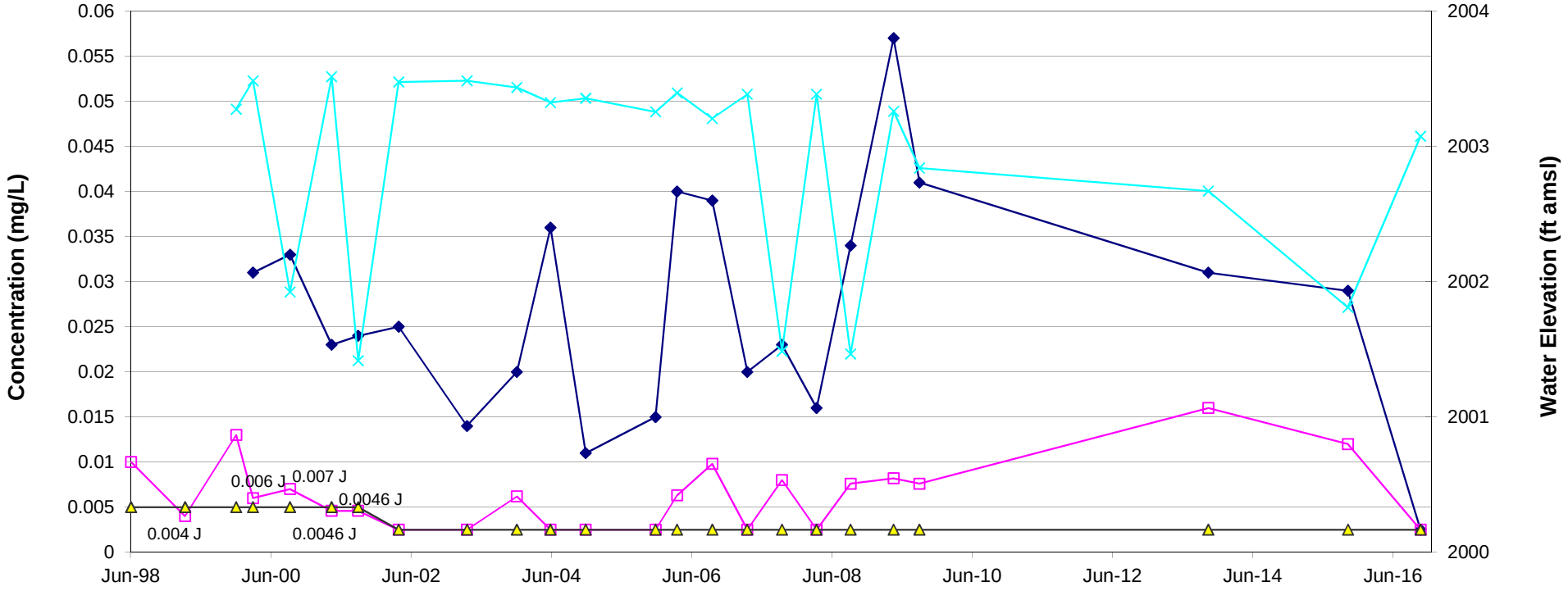
MW-5D VOCs



Notes:

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

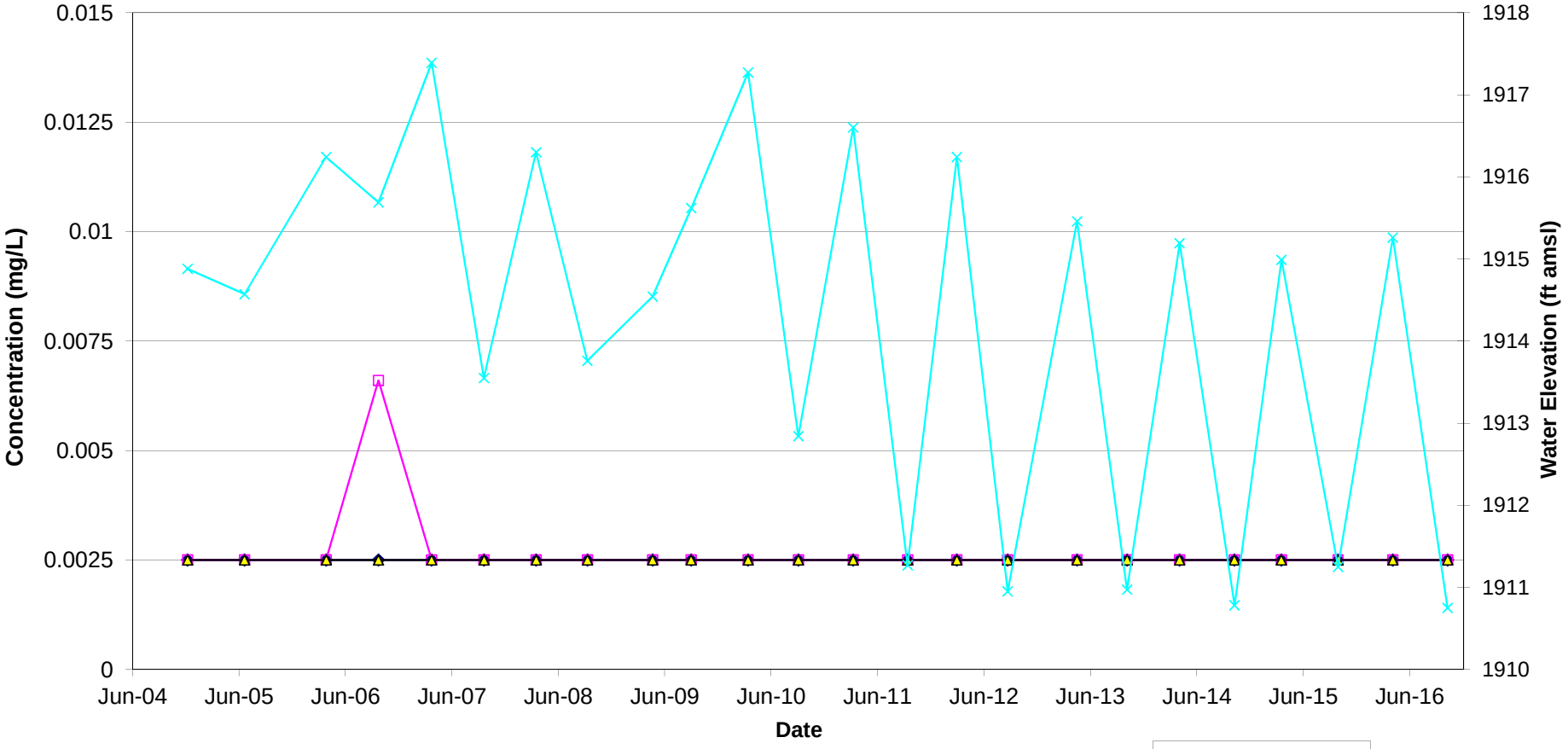
MW-15S VOCs



Notes:

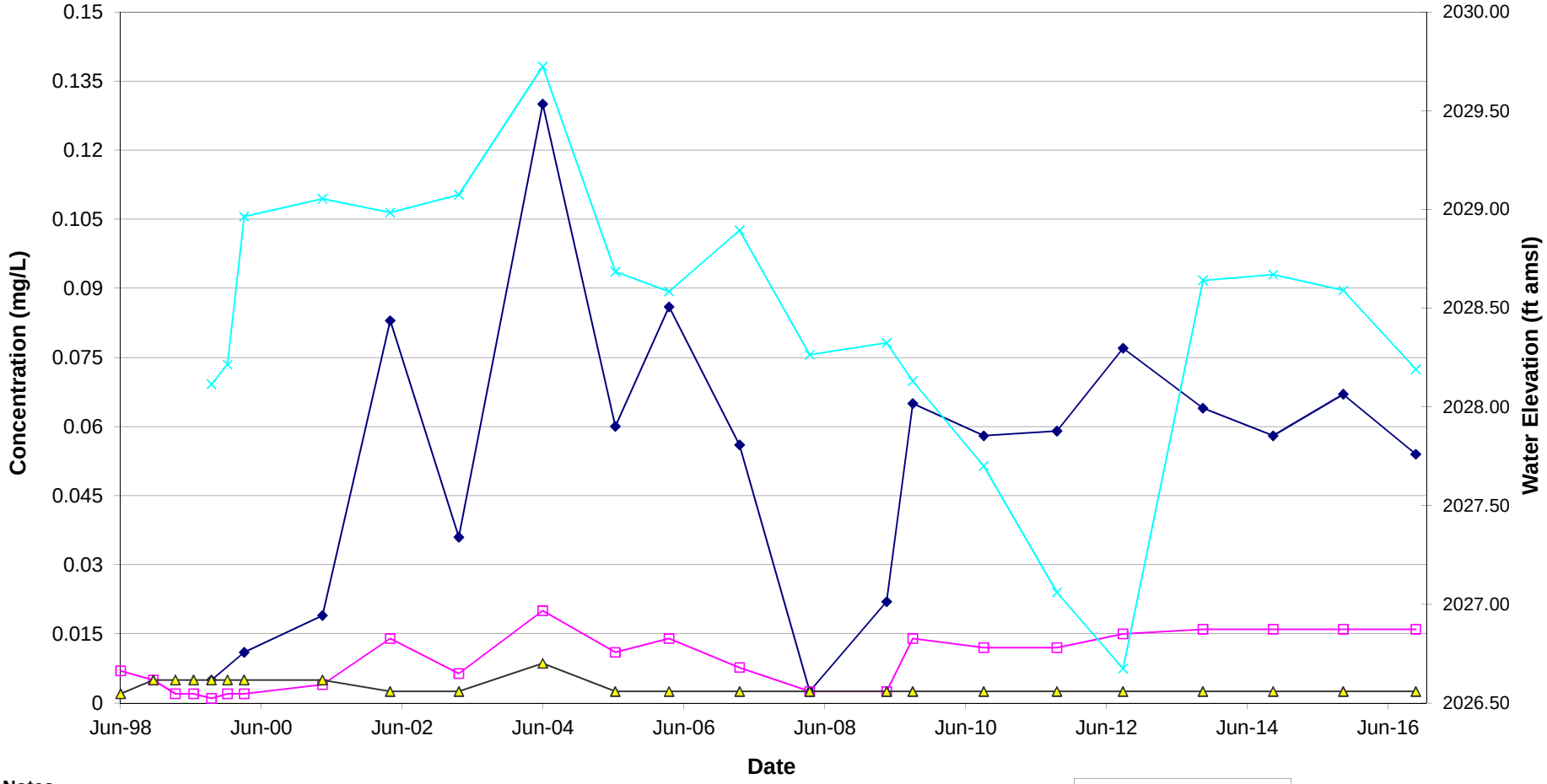
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.
3. **J** - Estimated value.
4. All Vinyl chloride and a majority of TCE results are non-detect.
5. Data with flag labeled on graph as appropriate.
6. MW-15S not sampled between 2009 and 2014 due to insufficent water present in well

MW-16S VOCs



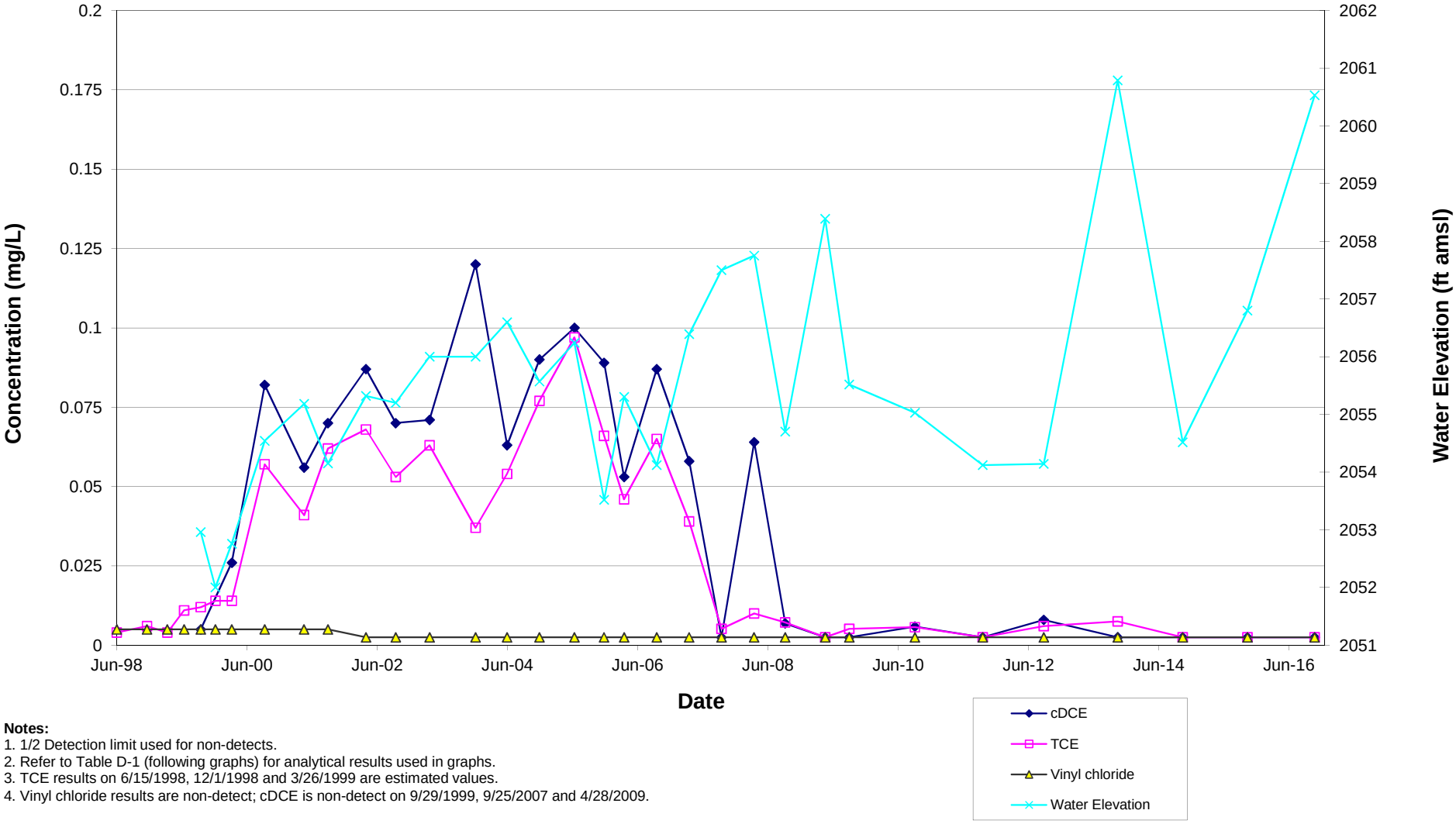
Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.
3. All values for cDCE, TCE and Vinyl chloride are non-detect with the exception of TCE on 9/27/2006.
4. There is no data available for MW-16S prior to December 2004.

MW-17S VOCs



Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-1 (following graphs) for analytical results used in graphs.
3. TCE and Vinyl choride results are either non-detect and/or estimated values.
4. Results for cDCE on 9/29/1999 and 3/25/2008 are non-detect.

MW-18S VOCs



Notes:
1. 1/2 Detection limit used for non-detects.
2. Refer to Table D-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, 9/25/2007 and 4/28/2009.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	6/9/1998	6/15/1998	6/17/1998	12/1/1998	12/2/1998	3/23/1999	3/24/1999	3/25/1999	3/26/1999	6/23/1999	6/24/1999	6/28/1999	9/28/1999	9/29/1999	12/13/1999
CW-3A	Iron				15.8									18.5		
CW-3A	Manganese				0.306									0.371		
CW-3A	Sodium				55.6									70		
CW-3A	cis-1,2-Dichloroethene													0.01 U		
CW-3A	Trichloroethene			0.081	0.046				0.025			0.019		0.021		
CW-3A	Vinyl chloride			0.01 U	0.01 U				0.01 U			0.01 U		0.01 U		
CW-3B	Iron			0 U	0 U				0.0857 B			3.8		0.149		0.568
CW-3B	Manganese			0.0396	0 U				0.0054 B			0.0262		0.01 U		0.01 U
CW-3B	Sodium			19.9	21				22.1			18.9		22.5		22.8
CW-3B	cis-1,2-Dichloroethene													0.01 U		
CW-3B	Trichloroethene			0.028	0.038				0.027			0.034		0.035		0.05
CW-3B	Vinyl chloride			0.022	0.02				0.01 U			0.01		0.01		0.012
CW-4A	Iron		54.8		9.08				69.4			5.76		1.84		0.258
CW-4A	Manganese		3.82		2.11				2.56			1.7		2.02		1.63
CW-4A	Sodium		21.4		21				20.8			20		23.2		21.3
CW-4A	cis-1,2-Dichloroethene													0.01 U		
CW-4A	Trichloroethene		0.001 J		0.01 U				0.002 J			0.002 J		0.002 J		0.002 J
CW-4A	Vinyl chloride		0.006 J		0.003 J				0.005 J			0.005 J		0.004 J		0.006 J
CW-4B	Iron		2		9.11				36.3			3.52		1.14		0.238
CW-4B	Manganese		2.62		2.88				3.69			3.25		1.74		1.5
CW-4B	Sodium		22.6		24.1				30			28.2		26.8		26.3
CW-4B	cis-1,2-Dichloroethene													0.01 U		
CW-4B	Trichloroethene		0.01 U		0.01 U				0.01 U			0.01 U		0.01 U		0.01 U
CW-4B	Vinyl chloride		0.006 J		0.01 U				0.004 J			0.003 J		0.002 J		0.01 U
MW-11S	Iron			23.3												
MW-11S	Manganese			1.38												
MW-11S	Sodium			15.2												
MW-11S	cis-1,2-Dichloroethene															
MW-11S	Trichloroethene			2 E												
MW-11S	Vinyl chloride			0.084												

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	6/9/1998	6/15/1998	6/17/1998	12/1/1998	12/2/1998	3/23/1999	3/24/1999	3/25/1999	3/26/1999	6/23/1999	6/24/1999	6/28/1999	9/28/1999	9/29/1999	12/13/1999
MW-17D	Iron		42.1			25.5				18.1			17.5		12.3	
MW-17D	Manganese		0.857			1.5				1.52			0.982		1.21	
MW-17D	Sodium		32.3			31.2				31.1			28.8		29.8	
MW-17D	cis-1,2-Dichloroethene														0.01 U	
MW-17D	Trichloroethene		0.01 U			0.01 U				0.01 U			0.01 U		0.01 U	
MW-17D	Vinyl chloride		0.01 U			0.01 U				0.01 U			0.01 U		0.01 U	
MW-17S	Iron		3.34		2.61					3.37			4.47		48.2	
MW-17S	Manganese		1.54		1.56					1.47			0.633		3.82	
MW-17S	Sodium		46.4		47.8					48.6			46.5		48.7	
MW-17S	cis-1,2-Dichloroethene														0.01 U	
MW-17S	Trichloroethene		0.007		0.01 U					0.002 J			0.002 J		0.001 J	
MW-17S	Vinyl chloride		0.002 J		0.01 U					0.01 U			0.01 U		0.01 U	
MW-18D	Iron		15.2			24.3				99.5			105		109	
MW-18D	Manganese		1.53			1.03				2.08			1.94		2.64	
MW-18D	Sodium		22.1			21.5				23.8			21.9		27	
MW-18D	cis-1,2-Dichloroethene														0.01 U	
MW-18D	Trichloroethene		0.01 U			0.01 U				0.01 U			0.01 U		0.01 U	
MW-18D	Vinyl chloride		0.01 U			0.01 U				0.01 U			0.01 U		0.01 U	
MW-18S	Iron		44.6		64					69.6			180		275	
MW-18S	Manganese		2.02		2.26					2.32			5.3		6.29	
MW-18S	Sodium		18.4		21.1					20.2			20.3		23.4	
MW-18S	cis-1,2-Dichloroethene														0.01 U	
MW-18S	Trichloroethene		0.004 J		0.006 J					0.004 J			0.011		0.012	
MW-18S	Vinyl chloride		0.01 U		0.01 U					0.01 U			0.01 U		0.01 U	
MW-3S	Iron							128			306			86.1		
MW-3S	Manganese							2.75			19.9			3.46		
MW-3S	Sodium							27.8			25.2			28.8		
MW-3S	cis-1,2-Dichloroethene													0.01 U		
MW-3S	Trichloroethene							0.01 U			0.01 U			0.01 U		
MW-3S	Vinyl chloride							0.01 U			0.01 U			0.01 U		

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	6/9/1998	6/15/1998	6/17/1998	12/1/1998	12/2/1998	3/23/1999	3/24/1999	3/25/1999	3/26/1999	6/23/1999	6/24/1999	6/28/1999	9/28/1999	9/29/1999	12/13/1999
MW-4D	Iron	3.59			3.02			7.36			1.99			0.722		0.686
MW-4D	Manganese	0.426			0.985			1.1			0.978			1.47		0.743
MW-4D	Sodium	11.9			7.9			11.1			9.42			10.9		17.4
MW-4D	cis-1,2-Dichloroethene													0.01 U		
MW-4D	Trichloroethene	0.19			1.3			0.17			0.24			0.27 J		0.21 J
MW-4D	Vinyl chloride	0.78			2			0.41 E			1.5			1.8		1
MW-5D	Iron	1.44			0.408		1.15				0.746			0.315		
MW-5D	Manganese	1.24			1.3		1.18				1.2			1.03		
MW-5D	Sodium	6.6			6.14		6.75				5.43			6.65		
MW-5D	cis-1,2-Dichloroethene													0.01 U		
MW-5D	Trichloroethene	0.083 J			0.13		0.09 J				0.04 J			0.053 J		
MW-5D	Vinyl chloride	0.59			0.75		0.45				0.2			0.35		
MW-5S	Iron	12			4.08			10.5			3.83					
MW-5S	Manganese	0.25			0.266			0.195			0.22					
MW-5S	Sodium	7.4			7.08			2.44 B			7.74					
MW-5S	cis-1,2-Dichloroethene															
MW-5S	Trichloroethene	0.16			0.29 E			0.026			0.16					
MW-5S	Vinyl chloride	1 E			1 E			0.09			0.64 E					

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	12/14/1999	12/15/1999	12/16/1999	12/20/1999	3/13/2000	3/14/2000	3/15/2000	3/16/2000	3/21/2000	9/19/2000	9/20/2000	9/21/2000	4/23/2001	4/24/2001	4/25/2001
CW-3A	Iron			7.29							3.07					
CW-3A	Manganese			0.136							0.101					
CW-3A	Sodium			71							71.7					
CW-3A	cis-1,2-Dichloroethene					0.01 U					0.01 U					
CW-3A	Trichloroethene			0.026		0.017					0.016					
CW-3A	Vinyl chloride			0.01 U		0.01 U					0.01 U					
CW-3B	Iron					0.196					18					0.1 U
CW-3B	Manganese					0.01 U					0.137					0.0122
CW-3B	Sodium					19.7					24.3					21
CW-3B	cis-1,2-Dichloroethene					0.033					0.03					0.029
CW-3B	Trichloroethene					0.048					0.055					0.056
CW-3B	Vinyl chloride					0.008 J					0.008 J					0.007 J
CW-4A	Iron					1.32					0.164					0.821
CW-4A	Manganese					1.97					1.7					1.97
CW-4A	Sodium					20.8					20.6					21.1
CW-4A	cis-1,2-Dichloroethene					0.018					0.016					0.016
CW-4A	Trichloroethene					0.002 J					0.01 U					0.0022 J
CW-4A	Vinyl chloride					0.004 J					0.004 J					0.0047 J
CW-4B	Iron					0.841										0.1 U
CW-4B	Manganese					1.39										1.23
CW-4B	Sodium					22.8										23.7
CW-4B	cis-1,2-Dichloroethene					0.011										0.0092 J
CW-4B	Trichloroethene					0.01 U										0.0016 J
CW-4B	Vinyl chloride					0.002 J										0.0018 J
MW-11S	Iron															
MW-11S	Manganese															
MW-11S	Sodium															
MW-11S	cis-1,2-Dichloroethene															
MW-11S	Trichloroethene															
MW-11S	Vinyl chloride															

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	12/14/1999	12/15/1999	12/16/1999	12/20/1999	3/13/2000	3/14/2000	3/15/2000	3/16/2000	3/21/2000	9/19/2000	9/20/2000	9/21/2000	4/23/2001	4/24/2001	4/25/2001
MW-17D	Iron				12.1				18.3							
MW-17D	Manganese				1.2				1.27							
MW-17D	Sodium				28.7				28.4							
MW-17D	cis-1,2-Dichloroethene								0.01 U							
MW-17D	Trichloroethene				0.01 U				0.01 U							
MW-17D	Vinyl chloride				0.01 U				0.01 U							
MW-17S	Iron				43.7				4.29							
MW-17S	Manganese				2.46				1.01							
MW-17S	Sodium				44.7				43.4							
MW-17S	cis-1,2-Dichloroethene								0.011							
MW-17S	Trichloroethene				0.002 J				0.002 J							
MW-17S	Vinyl chloride				0.01 U				0.01 U							
MW-18D	Iron				786					292						
MW-18D	Manganese				9.77					4.8						
MW-18D	Sodium				28.9					27.5						
MW-18D	cis-1,2-Dichloroethene									0.01 U						
MW-18D	Trichloroethene				0.01 U					0.01 U						
MW-18D	Vinyl chloride				0.01 U					0.01 U						
MW-18S	Iron				413					181			1.29			
MW-18S	Manganese				5.83					4.78			0.301			
MW-18S	Sodium				21.1					22.9			15.6			
MW-18S	cis-1,2-Dichloroethene									0.026			0.082			
MW-18S	Trichloroethene				0.014					0.014			0.057			
MW-18S	Vinyl chloride				0.01 U					0.01 U			0.01 U			
MW-3S	Iron		114					49.1							3.06	
MW-3S	Manganese		3.24					1.31							0.0876	
MW-3S	Sodium		28.7					32.5							26.8	
MW-3S	cis-1,2-Dichloroethene							0.002 J							0.0061 J	
MW-3S	Trichloroethene		0.01 U					0.01 U							0.0019 J	
MW-3S	Vinyl chloride		0.01 U					0.01 U							0.01 U	

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	12/14/1999	12/15/1999	12/16/1999	12/20/1999	3/13/2000	3/14/2000	3/15/2000	3/16/2000	3/21/2000	9/19/2000	9/20/2000	9/21/2000	4/23/2001	4/24/2001	4/25/2001
MW-4D	Iron						1.21						0.657		0.489	
MW-4D	Manganese						1.55						1.68		1.1	
MW-4D	Sodium						10						9.89		9.8	
MW-4D	cis-1,2-Dichloroethene						1.7						2.1		1.4	
MW-4D	Trichloroethene						0.14						0.13		0.08	
MW-4D	Vinyl chloride						0.51						0.84		0.55	
MW-5D	Iron	0.357					0.983					0.418			0.365	
MW-5D	Manganese	1.2					1.15					1.17			1.28	
MW-5D	Sodium	7.43					6.22					7			6.5	
MW-5D	cis-1,2-Dichloroethene						1.1					2			1.2	
MW-5D	Trichloroethene	0.14					0.089 J					0.13			0.11	
MW-5D	Vinyl chloride	0.72					0.38					0.65			0.36	
MW-5S	Iron			5.82			1.76					0.206		0.212		
MW-5S	Manganese			0.274			0.258					0.229		0.227		
MW-5S	Sodium			7.84			7.7					8.83		7.88		
MW-5S	cis-1,2-Dichloroethene						1.4					1.6		1.1		
MW-5S	Trichloroethene			0.14			0.14					0.18		0.14		
MW-5S	Vinyl chloride			0.63			0.49					0.63		0.4		

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	4/26/2001	4/30/2001	9/10/2001	9/11/2001	9/12/2001	4/9/2002	4/10/2002	4/11/2002	4/12/2002	9/24/2002	9/25/2002	9/26/2002	3/28/2003	3/31/2003	4/1/2003	4/2/2003
CW-3A	Iron	0.172			0.1 U			0.1 U				0.445				1.06	
CW-3A	Manganese	0.01 U			0.01 U			0.01 U				0.114				0.0392	
CW-3A	Sodium	32.2			51.1			29.1				44.1				45.6	
CW-3A	cis-1,2-Dichloroethene	0.0081 J			0.0096 J			0.017				0.018				0.016	
CW-3A	Trichloroethene	0.11			0.095			0.19				0.16				0.14	
CW-3A	Vinyl chloride	0.01 U			0.01 U			0.005 U				0.005 U				0.005 U	
CW-3B	Iron				0.357		0.869				1.02				0.447		
CW-3B	Manganese				0.01 U		0.0102				0.0176				0.015		
CW-3B	Sodium				20		20.9				23.8				23.5		
CW-3B	cis-1,2-Dichloroethene				0.028		0.041				0.031				0.035		
CW-3B	Trichloroethene				0.058		0.077				0.068				0.085		
CW-3B	Vinyl chloride				0.0068 J		0.0071				0.005 U				0.0051		
CW-4A	Iron			0.142			0.122				15.3					2.37	
CW-4A	Manganese			1.75			0.735				9.92					2.41	
CW-4A	Sodium			18.7			20.2				25.4					21.9	
CW-4A	cis-1,2-Dichloroethene			0.014			0.011				0.015					0.012	
CW-4A	Trichloroethene			0.0018 J			0.005 U				0.005 U					0.005 U	
CW-4A	Vinyl chloride			0.0044 J			0.005 U				0.005 U					0.005 U	
CW-4B	Iron						0.1 U									17.8	
CW-4B	Manganese						1.12									3.64	
CW-4B	Sodium						22.4									20.9	
CW-4B	cis-1,2-Dichloroethene						0.0078									0.0091	
CW-4B	Trichloroethene						0.005 U									0.005 U	
CW-4B	Vinyl chloride						0.005 U									0.005 U	
MW-11S	Iron																
MW-11S	Manganese																
MW-11S	Sodium																
MW-11S	cis-1,2-Dichloroethene																
MW-11S	Trichloroethene																
MW-11S	Vinyl chloride																

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	4/26/2001	4/30/2001	9/10/2001	9/11/2001	9/12/2001	4/9/2002	4/10/2002	4/11/2002	4/12/2002	9/24/2002	9/25/2002	9/26/2002	3/28/2003	3/31/2003	4/1/2003	4/2/2003
MW-17D	Iron	3.7								16.4							
MW-17D	Manganese	0.0466								0.166							
MW-17D	Sodium	32.2								33.6							
MW-17D	cis-1,2-Dichloroethene	0.01 U								0.005 U							
MW-17D	Trichloroethene	0.01 U								0.005 U							
MW-17D	Vinyl chloride	0.01 U								0.005 U							
MW-17S	Iron	0.11								0.313							
MW-17S	Manganese	0.642								0.292							
MW-17S	Sodium	44.8								47.1							
MW-17S	cis-1,2-Dichloroethene	0.019								0.083							
MW-17S	Trichloroethene	0.004 J								0.014							
MW-17S	Vinyl chloride	0.01 U								0.005 U							
MW-18D	Iron		12.8							20.9							
MW-18D	Manganese		0.952							0.967							
MW-18D	Sodium		22							23.4							
MW-18D	cis-1,2-Dichloroethene		0.01 U							0.005 U							
MW-18D	Trichloroethene		0.01 U							0.005 U							
MW-18D	Vinyl chloride		0.01 U							0.005 U							
MW-18S	Iron		12.7		0.264					3.62		0.394					
MW-18S	Manganese		0.32		0.0218					0.0434		0.058					
MW-18S	Sodium		13.6		12.6					13.4		15.3					
MW-18S	cis-1,2-Dichloroethene		0.056		0.07					0.087		0.07					
MW-18S	Trichloroethene		0.041		0.062					0.068		0.053					
MW-18S	Vinyl chloride		0.01 U		0.01 U					0.005 U		0.005 U					
MW-3S	Iron							0.487									125
MW-3S	Manganese							0.0159									3.26
MW-3S	Sodium							28.1									29.4
MW-3S	cis-1,2-Dichloroethene							0.005 U									0.005 U
MW-3S	Trichloroethene							0.0071									0.005 U
MW-3S	Vinyl chloride							0.005 U									0.005 U

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	4/26/2001	4/30/2001	9/10/2001	9/11/2001	9/12/2001	4/9/2002	4/10/2002	4/11/2002	4/12/2002	9/24/2002	9/25/2002	9/26/2002	3/28/2003	3/31/2003	4/1/2003	4/2/2003
MW-4D	Iron					0.33			0.558				0.169	0.314			
MW-4D	Manganese					1.52			1.15				1.11	0.934			
MW-4D	Sodium					9.83			9.76				10.2	10.5			
MW-4D	cis-1,2-Dichloroethene					2.3			1.5				0.85	1.1			
MW-4D	Trichloroethene					0.097 J			0.077				0.063	0.071			
MW-4D	Vinyl chloride					0.64			0.49				0.26	0.38			
MW-5D	Iron					0.411			0.631			0.478					0.391
MW-5D	Manganese					1.23			1.28			0.726					1.16
MW-5D	Sodium					5.56			6.29			6.6					6.56
MW-5D	cis-1,2-Dichloroethene					1.5			1.8			0.99					1.2
MW-5D	Trichloroethene					0.074 J			0.14			0.005 U					0.1
MW-5D	Vinyl chloride					0.5			0.51			0.2					0.36
MW-5S	Iron					0.136			0.351				0.606	3.02			
MW-5S	Manganese					0.22			0.203				0.114	0.213			
MW-5S	Sodium					7.73			7.84				16.6	9.63			
MW-5S	cis-1,2-Dichloroethene					1.1			1				0.48	0.76			
MW-5S	Trichloroethene					0.14			0.14				0.005 U	0.11			
MW-5S	Vinyl chloride					0.46			0.3				0.095	0.22			

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	4/3/2003	12/16/2003	12/17/2003	12/18/2003	6/8/2004	6/9/2004	6/11/2004	12/7/2004	12/8/2004	12/9/2004	6/20/2005	6/21/2005	6/22/2005	6/23/2005	12/6/2005
CW-3A	Iron		0.1 U			0.1 U			0.1 U			0.117				0.1 U
CW-3A	Manganese		0.0124			0.0102			0.0649			0.0174				0.0313
CW-3A	Sodium		50.1			44.1			56			54.3				63.6
CW-3A	cis-1,2-Dichloroethene		0.058			0.061			0.038			0.13				0.041
CW-3A	Trichloroethene		0.38			0.39			0.36			1				0.25 D
CW-3A	Vinyl chloride		0.005 U			0.005 U			0.005 U			0.013				0.005 U
CW-3B	Iron		0.1 U			0.1 U			0.132			1.62				0.1 U
CW-3B	Manganese		0.0192			0.0275			0.0399			0.0513				0.0473
CW-3B	Sodium		21			22.4			20.8			22.8				23.6
CW-3B	cis-1,2-Dichloroethene		0.052			0.051			0.049			0.074				0.081
CW-3B	Trichloroethene		0.11			0.12			0.14			0.2				0.18 D
CW-3B	Vinyl chloride		0.006			0.0055			0.005 U			0.01 U				0.005 U
CW-4A	Iron		0.1 U			0.322			0.1 U			0.188				
CW-4A	Manganese		1.03			1			0.914			1.04				
CW-4A	Sodium		19.6			20.9			18.6			19.6				
CW-4A	cis-1,2-Dichloroethene		0.012			0.013			0.0079			0.0086				
CW-4A	Trichloroethene		0.005 U			0.005 U			0.005 U			0.005 U				
CW-4A	Vinyl chloride		0.005 U			0.005 U			0.005 U			0.005 U				
CW-4B	Iron					0.1 U						0.1 U				
CW-4B	Manganese					0.971						1.04				
CW-4B	Sodium					22.3						21.5				
CW-4B	cis-1,2-Dichloroethene					0.005 U						0.005 U				
CW-4B	Trichloroethene					0.005 U						0.005 U				
CW-4B	Vinyl chloride					0.005 U						0.005 U				
MW-11S	Iron									0.1 U						
MW-11S	Manganese									1.52						
MW-11S	Sodium									18.6						
MW-11S	cis-1,2-Dichloroethene									0.52					0.53	
MW-11S	Trichloroethene									2.9					3.2	
MW-11S	Vinyl chloride									0.005 U					0.05 U	

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	4/3/2003	12/16/2003	12/17/2003	12/18/2003	6/8/2004	6/9/2004	6/11/2004	12/7/2004	12/8/2004	12/9/2004	6/20/2005	6/21/2005	6/22/2005	6/23/2005	12/6/2005
MW-17D	Iron	13						9.01						11.9		
MW-17D	Manganese	1.17						1.23						1.12		
MW-17D	Sodium	28.9						29.5						30.2		
MW-17D	cis-1,2-Dichloroethene	0.005 U						0.005 U						0.005 U		
MW-17D	Trichloroethene	0.005 U						0.005 U						0.005 U		
MW-17D	Vinyl chloride	0.005 U						0.005 U						0.005 U		
MW-17S	Iron	0.284						0.229						0.24		
MW-17S	Manganese	0.464						0.459						1.3		
MW-17S	Sodium	49.5						58.9						52.7		
MW-17S	cis-1,2-Dichloroethene	0.036						0.13						0.06		
MW-17S	Trichloroethene	0.0064						0.02						0.011		
MW-17S	Vinyl chloride	0.005 U						0.0086						0.005 U		
MW-18D	Iron							7.12								
MW-18D	Manganese							0.628								
MW-18D	Sodium							22.6								
MW-18D	cis-1,2-Dichloroethene							0.005 U								
MW-18D	Trichloroethene							0.005 U								
MW-18D	Vinyl chloride							0.005 U								
MW-18S	Iron	37.3		4.18				1.87			0.254				0.419	0.634
MW-18S	Manganese	0.888		0.536				0.0704			0.043				0.0453	0.0596
MW-18S	Sodium	16.1		14.9				16.1			16.1				16.2	19
MW-18S	cis-1,2-Dichloroethene	0.071		0.12				0.063			0.09				0.1	0.089
MW-18S	Trichloroethene	0.063		0.037				0.054			0.077				0.097	0.066
MW-18S	Vinyl chloride	0.005 U		0.005 U				0.005 U			0.005 U				0.005 U	0.005 U
MW-3S	Iron						1.07						0.621			
MW-3S	Manganese						0.0333						0.0189			
MW-3S	Sodium						31.3						30.1			
MW-3S	cis-1,2-Dichloroethene						0.005 U						0.005 U			
MW-3S	Trichloroethene						0.005 U						0.005 U			
MW-3S	Vinyl chloride						0.005 U						0.005 U			

Please see page 24 for notes.

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Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	4/3/2003	12/16/2003	12/17/2003	12/18/2003	6/8/2004	6/9/2004	6/11/2004	12/7/2004	12/8/2004	12/9/2004	6/20/2005	6/21/2005	6/22/2005	6/23/2005	12/6/2005
MW-4D	Iron				0.36		0.543				0.482		0.382			
MW-4D	Manganese				0.946		0.734				0.632		0.604			
MW-4D	Sodium				10.8		9.1				8.52		9.01			
MW-4D	cis-1,2-Dichloroethene				0.73		0.62				0.39		0.44			
MW-4D	Trichloroethene				0.051		0.05				0.039		0.032			
MW-4D	Vinyl chloride				0.23		0.21				0.23		0.16			
MW-5D	Iron				0.391		0.471				0.443			0.527		
MW-5D	Manganese				1.39		1.44				1.43			1.5		
MW-5D	Sodium				7.52		6.49				6.66			7.24		
MW-5D	cis-1,2-Dichloroethene				1.6		2				1.3			1.6		
MW-5D	Trichloroethene				0.11		0.13				0.096			0.081		
MW-5D	Vinyl chloride				0.39		0.41				0.29			0.31		
MW-5S	Iron				5.87		2.03				1.65			0.866		
MW-5S	Manganese				0.864		0.506				0.489			0.156		
MW-5S	Sodium				9.44		7.75				4.14			8.04		
MW-5S	cis-1,2-Dichloroethene				0.54		0.61				0.17			0.6		
MW-5S	Trichloroethene				0.073		0.072				0.025			0.1		
MW-5S	Vinyl chloride				0.14		0.19				0.038			0.16		

Please see page 24 for notes.

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Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	12/7/2005	12/8/2005	3/27/2006	3/28/2006	3/29/2006	3/30/2006	3/31/2006	9/27/2006	9/28/2006	3/27/2007	3/28/2007	3/29/2007	3/30/2007	9/25/2007	9/26/2007
CW-3A	Iron						0.1 U			0.168				0.1 U	0.661	
CW-3A	Manganese						0.01 U			0.0325				0.0505	1.38	
CW-3A	Sodium						47			58.4				50.2	47.2	
CW-3A	cis-1,2-Dichloroethene						0.024			0.059				0.04	0.058	
CW-3A	Trichloroethene						0.18			0.29 D				0.22 D	0.36	
CW-3A	Vinyl chloride						0.005 U			0.005 U				0.005 U	0.01 U	
CW-3B	Iron						0.1 U			0.516				4.71	0.156	
CW-3B	Manganese						0.0441			0.0446				0.0688	0.0438	
CW-3B	Sodium						21.6			22				22.4	20.9	
CW-3B	cis-1,2-Dichloroethene						0.072			0.072				0.086	0.087	
CW-3B	Trichloroethene						0.19			0.19				0.24	0.26	
CW-3B	Vinyl chloride						0.01 U			0.01 U				0.01 U	0.01 U	
CW-4A	Iron				0.936								2.76			
CW-4A	Manganese				0.495								0.478			
CW-4A	Sodium				17.1								17			
CW-4A	cis-1,2-Dichloroethene				0.0069								0.0052			
CW-4A	Trichloroethene				0.005 U								0.005 U			
CW-4A	Vinyl chloride				0.005 U								0.005 U			
CW-4B	Iron	0.633			0.1 U				0.228				0.322		0.1 U	
CW-4B	Manganese	1.65			0.946				0.953				0.795		1.31	
CW-4B	Sodium	20.7			18.5				19.6				19.3		20.5	
CW-4B	cis-1,2-Dichloroethene	0.0057			0.005 U				0.005 U				0.005 U		0.005 U	
CW-4B	Trichloroethene	0.005 U			0.005 U				0.005 U				0.005 U		0.005 U	
CW-4B	Vinyl chloride	0.005 U			0.005 U				0.005 U				0.005 U		0.005 U	
MW-11S	Iron															
MW-11S	Manganese															
MW-11S	Sodium															
MW-11S	cis-1,2-Dichloroethene		0.63					0.56	0.54					0.5		0.52
MW-11S	Trichloroethene		3.1					3.1	3					2.9		3.2
MW-11S	Vinyl chloride		0.1 U					0.1 U	0.1 U					0.1 U		0.13 U

Please see page 24 for notes.

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Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	12/7/2005	12/8/2005	3/27/2006	3/28/2006	3/29/2006	3/30/2006	3/31/2006	9/27/2006	9/28/2006	3/27/2007	3/28/2007	3/29/2007	3/30/2007	9/25/2007	9/26/2007
MW-17D	Iron			5.08								3.91				
MW-17D	Manganese			0.313								0.222				
MW-17D	Sodium			32.4								33.1				
MW-17D	cis-1,2-Dichloroethene			0.005 U								0.005 U				
MW-17D	Trichloroethene			0.005 U								0.005 U				
MW-17D	Vinyl chloride			0.005 U								0.005 U				
MW-17S	Iron			0.151								0.468				
MW-17S	Manganese			0.146								0.394				
MW-17S	Sodium			51.8								50.2				
MW-17S	cis-1,2-Dichloroethene			0.086								0.056				
MW-17S	Trichloroethene			0.014								0.0077				
MW-17S	Vinyl chloride			0.005 U								0.005 U				
MW-18D	Iron				5.08							4.15				
MW-18D	Manganese				0.583							0.349				
MW-18D	Sodium				24.6							23.1				
MW-18D	cis-1,2-Dichloroethene				0.005 U							0.005 U				
MW-18D	Trichloroethene				0.005 U							0.005 U				
MW-18D	Vinyl chloride				0.005 U							0.005 U				
MW-18S	Iron				1.35				0.622			2.51			0.753	
MW-18S	Manganese				0.0359				0.0339			0.0621			0.0567	
MW-18S	Sodium				16.6				17.6			17.3			31.6	
MW-18S	cis-1,2-Dichloroethene				0.053				0.087			0.058			0.005 U	
MW-18S	Trichloroethene				0.046				0.065			0.039			0.0052	
MW-18S	Vinyl chloride				0.005 U				0.005 U			0.005 U			0.005 U	
MW-3S	Iron						0.585						0.177			
MW-3S	Manganese						0.0106						0.01 U			
MW-3S	Sodium						26.9						27.4			
MW-3S	cis-1,2-Dichloroethene						0.005 U						0.005 U			
MW-3S	Trichloroethene						0.005 U						0.005 U			
MW-3S	Vinyl chloride						0.005 U						0.005 U			

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	12/7/2005	12/8/2005	3/27/2006	3/28/2006	3/29/2006	3/30/2006	3/31/2006	9/27/2006	9/28/2006	3/27/2007	3/28/2007	3/29/2007	3/30/2007	9/25/2007	9/26/2007
MW-4D	Iron	0.733				0.657			0.686		1.2				0.806	
MW-4D	Manganese	0.909				0.583			0.799		0.406				0.859	
MW-4D	Sodium	8.18				7.12			8.24		8.28				7.98	
MW-4D	cis-1,2-Dichloroethene	0.74 D				0.3			0.73 D		0.42 D				3 E	
MW-4D	Trichloroethene	0.032				0.02			0.03		0.02				0.05 U	
MW-4D	Vinyl chloride	0.54 D				0.17			0.41 D		0.2				0.68	
MW-5D	Iron	0.482				0.545				0.595	0.71				0.531	
MW-5D	Manganese	1.38				1.41				1.37	1.51				1.41	
MW-5D	Sodium	7.23				6.9				6.97	7.03				7.68	
MW-5D	cis-1,2-Dichloroethene	1.2				1.5				1.4	1.8				1.4	
MW-5D	Trichloroethene	0.078				0.087				0.075	0.081				0.066	
MW-5D	Vinyl chloride	0.34				0.31				0.19	0.28				0.24	
MW-5S	Iron	2.52				3.67				1.28	8.01				0.794	
MW-5S	Manganese	0.446				1.1				0.161	0.257				0.18	
MW-5S	Sodium	7.8				5.13				7.94	7.11				7.92	
MW-5S	cis-1,2-Dichloroethene	0.51 D				0.29				0.47 D	0.44				0.49	
MW-5S	Trichloroethene	0.08				0.042				0.075	0.064				0.071	
MW-5S	Vinyl chloride	0.15				0.059				0.089	0.08				0.09	

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	3/24/2008	3/25/2008	3/26/2008	9/16/2008	9/17/2008	12/11/2008	4/27/2009	4/28/2009	4/29/2009	4/30/2009	9/9/2009	9/10/2009	9/14/2009	3/24/2010	3/25/2010
CW-3A	Iron		0.15			0.1 U				0.13				0.13		
CW-3A	Manganese		0.018			0.12				0.08				0.014		
CW-3A	Sodium		51.2			67.4				51.6				55.6		
CW-3A	cis-1,2-Dichloroethene		0.03			0.018				0.02				0.02		
CW-3A	Trichloroethene		0.16			0.1				0.13				0.12		
CW-3A	Vinyl chloride		0.005 U			0.005 U				0.005 U				0.005 U		
CW-3B	Iron		0.205			0.193				0.17				0.15		
CW-3B	Manganese		0.0356			0.0386				0.044				0.034		
CW-3B	Sodium		22.6			22				21.1				20.9		
CW-3B	cis-1,2-Dichloroethene		0.078			0.078				0.083				0.071		
CW-3B	Trichloroethene		0.22			0.27 D				0.18 D				0.22		
CW-3B	Vinyl chloride		0.01 U			0.005 U				0.005 U				0.01 U		
CW-4A	Iron		5.14							0.73				0.32		
CW-4A	Manganese		0.49							0.262				0.735		
CW-4A	Sodium		17.9							16.1				16.9		
CW-4A	cis-1,2-Dichloroethene		0.005							0.005 U				0.0052		
CW-4A	Trichloroethene		0.005 U							0.005 U				0.005 U		
CW-4A	Vinyl chloride		0.005 U							0.005 U				0.005 U		
CW-4B	Iron		0.1 U		0.124					0.13				0.2		
CW-4B	Manganese		0.844		1.06					0.583				0.592		
CW-4B	Sodium		18.8		17.7					17.5				16.8		
CW-4B	cis-1,2-Dichloroethene		0.005 U		0.005 U					0.005 U				0.005 U		
CW-4B	Trichloroethene		0.005 U		0.005 U					0.005 U				0.005 U		
CW-4B	Vinyl chloride		0.005 U		0.005 U					0.005 U				0.005 U		
MW-11S	Iron												0.38			
MW-11S	Manganese												1.44			
MW-11S	Sodium												19.8			
MW-11S	cis-1,2-Dichloroethene	0.45				0.41					0.31		0.018			0.35 D
MW-11S	Trichloroethene	2.6				2.8					2.3 D		0.12			3 D
MW-11S	Vinyl chloride	0.1 U				0.1 U					0.022		0.005 U			0.027

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	3/24/2008	3/25/2008	3/26/2008	9/16/2008	9/17/2008	12/11/2008	4/27/2009	4/28/2009	4/29/2009	4/30/2009	9/9/2009	9/10/2009	9/14/2009	3/24/2010	3/25/2010
MW-17D	Iron		13.4						6.21				8.33			
MW-17D	Manganese		1.18						0.997				0.469			
MW-17D	Sodium		29.6						29.4				31.5			
MW-17D	cis-1,2-Dichloroethene		0.005 U						0.005 U				0.005 U			
MW-17D	Trichloroethene		0.005 U						0.005 U				0.005 U			
MW-17D	Vinyl chloride		0.005 U						0.005 U				0.005 U			
MW-17S	Iron		2.85						0.64				0.23			
MW-17S	Manganese		0.0716						0.342				0.134			
MW-17S	Sodium		8.22						51.4				56.5			
MW-17S	cis-1,2-Dichloroethene		0.005 U						0.022				0.065			
MW-17S	Trichloroethene		0.005 U						0.005 U				0.014			
MW-17S	Vinyl chloride		0.005 U						0.005 U				0.005 U			
MW-18D	Iron			7.07					13				7.05			
MW-18D	Manganese			0.454					0.574				0.565			
MW-18D	Sodium			22.4					21.3				21.5			
MW-18D	cis-1,2-Dichloroethene			0.005 U					0.005 U				0.005 U			
MW-18D	Trichloroethene			0.005 U					0.005 U				0.005 U			
MW-18D	Vinyl chloride			0.005 U					0.005 U				0.005 U			
MW-18S	Iron			1.59	3.49				0.89				1.58			
MW-18S	Manganese			0.393	0.341				0.634				0.073			
MW-18S	Sodium			52.8	18.5				11.5				14			
MW-18S	cis-1,2-Dichloroethene			0.064	0.0069				0.005 U				0.005 U			
MW-18S	Trichloroethene			0.01	0.0072				0.005 U				0.0052			
MW-18S	Vinyl chloride			0.005 U	0.005 U				0.005 U				0.005 U			
MW-3S	Iron		0.196					0.34				0.1 U				
MW-3S	Manganese		0.01 U					0.01				0.01 U				
MW-3S	Sodium		30.4					37.4				30.9				
MW-3S	cis-1,2-Dichloroethene		0.005 U					0.005 U				0.005 U				
MW-3S	Trichloroethene		0.005 U					0.005 U				0.005 U				
MW-3S	Vinyl chloride		0.005 U					0.005 U				0.005 U				

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	3/24/2008	3/25/2008	3/26/2008	9/16/2008	9/17/2008	12/11/2008	4/27/2009	4/28/2009	4/29/2009	4/30/2009	9/9/2009	9/10/2009	9/14/2009	3/24/2010	3/25/2010
MW-4D	Iron	1.98			0.706				0.93			1.18				
MW-4D	Manganese	0.614			0.613				0.534			1.12				
MW-4D	Sodium	8.48			7.86				8.3			8.4				
MW-4D	cis-1,2-Dichloroethene	0.75			2.5 D		1.8		0.9 D			0.67			0.56	
MW-4D	Trichloroethene	0.025 U			0.025 U		0.05 U		0.025 U			0.025 U			0.025 U	
MW-4D	Vinyl chloride	0.31			0.83		0.5		0.35			0.26			0.24	
MW-5D	Iron			2.24		0.455			0.49			0.45				
MW-5D	Manganese			1.29		1.22			1.26			1.31				
MW-5D	Sodium			6.78		7.04			6.5			7.1				
MW-5D	cis-1,2-Dichloroethene			1.6 D		1.2			1.5			1.6			1.6	
MW-5D	Trichloroethene			0.091		0.069			0.099			0.11			0.099	
MW-5D	Vinyl chloride			0.24 D		0.2			0.18			0.18			0.18	
MW-5S	Iron			3.17		0.452		2.88					0.25			
MW-5S	Manganese			0.3		0.144		0.307					0.127			
MW-5S	Sodium			5.32		7.22		6.4					6.9			
MW-5S	cis-1,2-Dichloroethene			0.29		0.39		0.29					0.35		0.077	
MW-5S	Trichloroethene			0.045		0.041		0.042					0.058		0.013	
MW-5S	Vinyl chloride			0.056		0.081		0.043					0.064		0.012	

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	9/13/2010	9/14/2010	3/21/2011	3/22/2011	9/27/2011	9/28/2011	9/29/2011	3/14/2012	3/15/2012	9/4/2012	9/5/2012	5/2/2013	10/22/2013	10/23/2013	10/24/2013
CW-3A	Iron		0.1 U			0.1 U						0.1 U		0.1 U		
CW-3A	Manganese		0.088			0.011						0.024		0.014		
CW-3A	Sodium		51.2			39.1						42.8		33.7		
CW-3A	cis-1,2-Dichloroethene		0.029			0.0089						0.013		0.018		
CW-3A	Trichloroethene		0.17			0.064						0.082		0.1		
CW-3A	Vinyl chloride		0.005 U			0.005 U						0.005 U		0.005 U		
CW-3B	Iron		0.1 U			1.16						0.15		0.1 U		
CW-3B	Manganese		0.035			0.037						0.033		0.035		
CW-3B	Sodium		20.2			20.4						22.5		21.6		
CW-3B	cis-1,2-Dichloroethene		0.09			0.082						0.072		0.1		
CW-3B	Trichloroethene		0.29 D			0.33						0.18		0.38 D		
CW-3B	Vinyl chloride		0.005 U			0.01 U						0.005 U		0.005 U		
CW-4A	Iron	0.53				0.24						0.57		0.11		
CW-4A	Manganese	0.731				0.465						0.526		0.294		
CW-4A	Sodium	16.3				16.1						16		15.6		
CW-4A	cis-1,2-Dichloroethene	0.0051				0.005 U						0.005 U		0.005 U		
CW-4A	Trichloroethene	0.005 U				0.005 U						0.005 U		0.005 U		
CW-4A	Vinyl chloride	0.005 U				0.005 U						0.005 U		0.005 U		
CW-4B	Iron	0.1 U				0.1 U						0.1 U		0.1 U		
CW-4B	Manganese	0.573				0.271						0.605		0.503		
CW-4B	Sodium	15.8				15.7						17.1		16.4		
CW-4B	cis-1,2-Dichloroethene	0.005 U				0.005 U						0.005 U		0.005 U		
CW-4B	Trichloroethene	0.005 U				0.005 U						0.005 U		0.005 U		
CW-4B	Vinyl chloride	0.005 U				0.005 U						0.005 U		0.005 U		
MW-11S	Iron		0.18			0.1 U						0.1			0.13	
MW-11S	Manganese		1.26			1.13						1.12			1.15	
MW-11S	Sodium		18.6			18.1						20.2			19.7	
MW-11S	cis-1,2-Dichloroethene		0.4 D		0.33	0.34				0.27		0.36	0.33		0.4	
MW-11S	Trichloroethene		2.8 D		2.6	3				2.3		3.3	2.9		3.6	
MW-11S	Vinyl chloride		0.029		0.13 U	0.13 U				0.13 U		0.13 U	0.13 U		0.13 U	

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	9/13/2010	9/14/2010	3/21/2011	3/22/2011	9/27/2011	9/28/2011	9/29/2011	3/14/2012	3/15/2012	9/4/2012	9/5/2012	5/2/2013	10/22/2013	10/23/2013	10/24/2013
MW-17D	Iron	3.82					7.53				9.25				7.58	
MW-17D	Manganese	0.305					0.903				0.973				0.967	
MW-17D	Sodium	32.2					27.2				28.4				27.9	
MW-17D	cis-1,2-Dichloroethene	0.005 U					0.005 U				0.005 U				0.005 U	
MW-17D	Trichloroethene	0.005 U					0.005 U				0.005 U				0.005 U	
MW-17D	Vinyl chloride	0.005 U					0.005 U				0.005 U				0.005 U	
MW-17S	Iron	0.26					0.83				0.51				2.77	
MW-17S	Manganese	0.233					0.207				0.123				1.17	
MW-17S	Sodium	51.8					59.2				63				64.6	
MW-17S	cis-1,2-Dichloroethene	0.058					0.059				0.077				0.064	
MW-17S	Trichloroethene	0.012					0.012				0.015				0.016	
MW-17S	Vinyl chloride	0.005 U					0.005 U				0.005 U				0.005 U	
MW-18D	Iron	13.4					10.4				9.18				3.99	
MW-18D	Manganese	0.326					0.591				0.547				0.412	
MW-18D	Sodium	20.9					18.1				21.6				21.3	
MW-18D	cis-1,2-Dichloroethene	0.005 U					0.005 U				0.005 U				0.005 U	
MW-18D	Trichloroethene	0.005 U					0.005 U				0.005 U				0.005 U	
MW-18D	Vinyl chloride	0.005 U					0.005 U				0.005 U				0.005 U	
MW-18S	Iron	0.77					1.34				0.49				1.14	
MW-18S	Manganese	0.026					0.034				0.216				0.301	
MW-18S	Sodium	11.3					6.1				8.7				6.6	
MW-18S	cis-1,2-Dichloroethene	0.0059					0.005 U				0.008				0.005 U	
MW-18S	Trichloroethene	0.0057					0.005 U				0.006				0.0075	
MW-18S	Vinyl chloride	0.005 U					0.005 U				0.005 U				0.005 U	
MW-3S	Iron		0.12				0.1 U					0.1 U			0.1 U	
MW-3S	Manganese		0.01				0.01 U					0.01 U			0.01 U	
MW-3S	Sodium		31.5				30.4					33.7			33.4	
MW-3S	cis-1,2-Dichloroethene		0.005 U				0.005 U					0.005 U			0.005 U	
MW-3S	Trichloroethene		0.005 U				0.005 U					0.005 U			0.005 U	
MW-3S	Vinyl chloride		0.005 U				0.005 U					0.005 U			0.005 U	

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	9/13/2010	9/14/2010	3/21/2011	3/22/2011	9/27/2011	9/28/2011	9/29/2011	3/14/2012	3/15/2012	9/4/2012	9/5/2012	5/2/2013	10/22/2013	10/23/2013	10/24/2013
MW-4D	Iron		0.84			0.6					0.48				0.41	
MW-4D	Manganese		0.54			0.729					0.729				0.52	
MW-4D	Sodium		8.2			7.9					7.6				7.3	
MW-4D	cis-1,2-Dichloroethene		0.61	0.59		0.66				0.38	0.54 D		0.37		0.3	
MW-4D	Trichloroethene		0.025 U	0.025 U		0.025 U				0.013 U	0.013 U		0.013 U		0.013 U	
MW-4D	Vinyl chloride		0.26	0.28		0.22				0.12	0.15		0.14		0.061	
MW-5D	Iron	0.39						1.07			0.33					0.88
MW-5D	Manganese	1.19						0.838			0.484					0.645
MW-5D	Sodium	7						6.2			6.4					5.2
MW-5D	cis-1,2-Dichloroethene	1.1		0.14				0.58		0.94	0.23 D		0.98 D			0.23
MW-5D	Trichloroethene	0.071		0.025				0.037		0.082	0.0095		0.14			0.017
MW-5D	Vinyl chloride	0.13		0.025				0.068		0.11	0.034		0.13			0.024
MW-5S	Iron	0.55						2.53			0.13					1.8
MW-5S	Manganese	0.125						0.236			0.112					0.312
MW-5S	Sodium	6.6						3.4			7					4.9
MW-5S	cis-1,2-Dichloroethene	0.35		1.1				0.005 U	0.2 D		0.3		0.23			0.098
MW-5S	Trichloroethene	0.041		0.099				0.005 U	0.04		0.05		0.044			0.0067
MW-5S	Vinyl chloride	0.06		0.16				0.005 U	0.03		0.042		0.036			0.011

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	4/22/2014	10/21/2014	10/22/2014	10/23/2014	4/7/2015	4/8/2015	10/19/2015	10/20/2015	10/21/2015	10/22/2015	4/25/2016	4/26/2016	10/31/2016	11/1/2016	11/2/2016
CW-3A	Iron		0.1 U					0.1 U							0.1 U	0.1 U
CW-3A	Manganese		0.013					0.034							0.011	0.011
CW-3A	Sodium		34.8					43.2							40.6	40.6
CW-3A	cis-1,2-Dichloroethene		0.049					0.028							0.0065	0.0065
CW-3A	Trichloroethene		0.2 D					0.12							0.033	0.033
CW-3A	Vinyl chloride		0.005 U					0.005 U							0.005 U	0.005 U
CW-3B	Iron		0.59					0.1 U							0.1 U	
CW-3B	Manganese		0.035					0.035							0.031	
CW-3B	Sodium		21.2					20							21.7	
CW-3B	cis-1,2-Dichloroethene		0.094					0.1							0.091	
CW-3B	Trichloroethene		0.34					0.42							0.44	
CW-3B	Vinyl chloride		0.013 U					0.013 U							0.013 U	
CW-4A	Iron		0.1 U					0.1 U							0.32	
CW-4A	Manganese		0.336					0.382							0.515	
CW-4A	Sodium		15.7					13.9							14.3	
CW-4A	cis-1,2-Dichloroethene		0.005 U					0.005 U							0.005 U	
CW-4A	Trichloroethene		0.005 U					0.005 U							0.005 U	
CW-4A	Vinyl chloride		0.005 U					0.005 U							0.005 U	
CW-4B	Iron		0.1 U					0.1 U							0.1 U	
CW-4B	Manganese		0.37					0.667							0.767	
CW-4B	Sodium		15.9					14.8							16	
CW-4B	cis-1,2-Dichloroethene		0.005 U					0.005 U							0.005 U	
CW-4B	Trichloroethene		0.005 U					0.005 U							0.005 U	
CW-4B	Vinyl chloride		0.005 U					0.005 U							0.005 U	
MW-11S	Iron				0.37						0.1 U				0.16	
MW-11S	Manganese				1.13						1.06				0.844	
MW-11S	Sodium				20.6						18.3				21.2	
MW-11S	cis-1,2-Dichloroethene	0.32			0.37	0.35					0.35		0.27		0.35	
MW-11S	Trichloroethene	3.3			3.1	3.2					3.2		2.5		3.5	
MW-11S	Vinyl chloride	0.13 U			0.13 U	0.13 U					0.13 U		0.13 U		0.13 U	

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	4/22/2014	10/21/2014	10/22/2014	10/23/2014	4/7/2015	4/8/2015	10/19/2015	10/20/2015	10/21/2015	10/22/2015	4/25/2016	4/26/2016	10/31/2016	11/1/2016	11/2/2016
MW-17D	Iron			6.37					3.38					8.21		
MW-17D	Manganese			0.587					0.444					0.312		
MW-17D	Sodium			30.8					31.4					33.6		
MW-17D	cis-1,2-Dichloroethene			0.005 U					0.005 U					0.005 U		
MW-17D	Trichloroethene			0.005 U					0.005 U					0.005 U		
MW-17D	Vinyl chloride			0.005 U					0.005 U					0.005 U		
MW-17S	Iron			0.84					0.1 U					0.11		
MW-17S	Manganese			0.314					0.133					0.093		
MW-17S	Sodium			67.5					66.3					68.1		
MW-17S	cis-1,2-Dichloroethene			0.058					0.067					0.054		
MW-17S	Trichloroethene			0.016					0.016					0.016		
MW-17S	Vinyl chloride			0.005 U					0.005 U					0.005 U		
MW-18D	Iron			5.57					2.43					15.1		
MW-18D	Manganese			0.482					0.547					0.857		
MW-18D	Sodium			22.3					20					19.9		
MW-18D	cis-1,2-Dichloroethene			0.005 U					0.005 U					0.005 U		
MW-18D	Trichloroethene			0.005 U					0.005 U					0.005 U		
MW-18D	Vinyl chloride			0.005 U					0.005 U					0.005 U		
MW-18S	Iron			2.7					0.42					0.99		
MW-18S	Manganese			0.15					0.114					0.14		
MW-18S	Sodium			3.5					3.5					2.5		
MW-18S	cis-1,2-Dichloroethene			0.005 U					0.005 U					0.005 U		
MW-18S	Trichloroethene			0.005 U					0.005 U					0.005 U		
MW-18S	Vinyl chloride			0.005 U					0.005 U					0.005 U		
MW-3S	Iron				0.1 U						0.1 U					0.1 U
MW-3S	Manganese				0.01 U						0.014					0.01 U
MW-3S	Sodium				36.1						29.5					47
MW-3S	cis-1,2-Dichloroethene				0.005 U						0.005 U					0.005 U
MW-3S	Trichloroethene				0.005 U						0.005 U					0.005 U
MW-3S	Vinyl chloride				0.005 U						0.005 U					0.005 U

Please see page 24 for notes.

Table D-1

Analytical Results for Time Trend Graphs 1998-2016
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	4/22/2014	10/21/2014	10/22/2014	10/23/2014	4/7/2015	4/8/2015	10/19/2015	10/20/2015	10/21/2015	10/22/2015	4/25/2016	4/26/2016	10/31/2016	11/1/2016	11/2/2016
MW-4D	Iron				1.22					0.73					0.64	
MW-4D	Manganese				1.19					1.25					1.25	
MW-4D	Sodium				6.3					6.1					7.3	
MW-4D	cis-1,2-Dichloroethene	0.35			0.36		0.44			0.41		0.18			0.28 D	
MW-4D	Trichloroethene	0.013 U			0.013 U		0.013 U			0.013 U		0.005 U			0.005 U	
MW-4D	Vinyl chloride	0.15			0.076		0.15			0.1		0.025			0.049	
MW-5D	Iron		0.88							0.27					0.26	
MW-5D	Manganese		1.09							0.279					0.869	
MW-5D	Sodium		8.2							2.4					5.5	
MW-5D	cis-1,2-Dichloroethene	0.96 D	0.75				0.88			0.015			0.73 D		0.31	
MW-5D	Trichloroethene	0.15	0.071				0.13			0.005 U			0.24 D		0.05	
MW-5D	Vinyl chloride	0.12	0.07				0.087			0.005 U			0.067		0.03	
MW-5S	Iron		0.68							1.77					1.1	
MW-5S	Manganese		0.1							0.206					0.153	
MW-5S	Sodium		6.7							4.8					6	
MW-5S	cis-1,2-Dichloroethene	0.21 D	0.23				0.21			0.17			0.19		0.18	
MW-5S	Trichloroethene	0.046	0.025				0.042			0.029			0.038		0.043	
MW-5S	Vinyl chloride	0.033	0.02				0.023			0.019			0.018		0.018	

Notes:
U - Concentration not detected at specified detection limit
E - Concentration exceeded calibration range associated with analysis
B - Analyte detected in associated method blank
D - Diluted sample
J - Estimated value

Please see page 24 for notes.

November 14, 2016 Service Request No:R1611538

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 03, 2016
For your reference, these analyses have been assigned our service request number **R1611538.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, 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) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

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

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Narrative Documents

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

Service Request: R1611538
Date Received: 11/01/16 - 11/03/16

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Any parameters that are not included in the lab's NELAC accreditation are identified on a "Non-Certified Analytes" report in the Miscellaneous Forms Section of this report. Individual analytical results requiring further explanation are flagged with qualifiers and/or discussed below. The flags are explained in the Report Qualifiers and Definitions page in the Miscellaneous Forms section of this report.

Sample Receipt

Thirty two water samples were received for analysis at ALS Environmental on 11/03/2016. Any discrepancies noted upon initial sample inspection are noted on the cooler receipt and preservation form included in this data package. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at ≤6°C upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

Volatile Organic Analyses:

Method 8260c, 11/02/16: 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, 11/02/16: 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) in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Method 8260c, 11/04/16: 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, 11/04/16: 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) in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Method 8260c, 11/04/16: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Method 8260c, 11/07/16: 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.

Approved by  Date 11/14/2016

Method 8260c, 11/07/16: 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) in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Method 8260c, 11/07/16: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate

Method 8260c, 11/7/16: 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) in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Metals Analyses:

No significant anomalies were noted with this analysis.

Approved by _____ Date 11/14/2016

SAMPLE DETECTION SUMMARY

CLIENT ID: SWS1-1016	Lab ID: R1611538-001					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Alkalinity, Total as CaCO3	98.8		1.0	2.0	mg/L	SM 2320 B-
Carbon, Total Organic (TOC)	11.2		0.2	1.0	mg/L	SM 5310 B-
Chemical Oxygen Demand, Total	24.5		3.7	5.0	mg/L	410.4
Chloride	7.0		1.0	2.0	mg/L	300.0
Color, True	84.0			2.0	ColorUnits	SM 2120 B-
Nitrogen, Total Kjeldahl (TKN)	0.64		0.08	0.20	mg/L	351.2
pH of Color Analysis	7.34				pH Units	SM 2120 B-
Phenolics, Total Recoverable	0.0076		0.0010	0.0050	mg/L	420.4
Solids, Total Dissolved (TDS)	138		4	10	mg/L	SM 2540 C-
Sulfate	2.1		0.2	2.0	mg/L	300.0
Barium, Total	21		2	20	ug/L	6010C
Calcium, Total	23800		200	1000	ug/L	6010C
Iron, Total	370		9	100	ug/L	6010C
Magnesium, Total	7900		10	1000	ug/L	6010C
Manganese, Total	12		1.0	10	ug/L	6010C
Potassium, Total	2800		50	2000	ug/L	6010C
Sodium, Total	6900		90	1000	ug/L	6010C

CLIENT ID: SWS1SED-1016	Lab ID: R1611538-002					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Alkalinity, Total as CaCO3	360			250	mg/Kg	SM 2320 B
Chemical Oxygen Demand, Total	75800		140	450	mg/Kg	SM 5220 B
Nitrogen, Total Kjeldahl (TKN)	297		17	26	mg/Kg	351.2
Carbon, Total Organic (TOC)	11000		80	570	mg/Kg	EPA LKahn
Total Solids	77.8				Percent	ALS SOP
Arsenic, Total	8.1		0.3	1.2	mg/Kg	6010C
Barium, Total	57.7		0.2	2.5	mg/Kg	6010C
Calcium, Total	46400		200	1200	mg/Kg	6010C
Chromium, Total	8.7		0.2	1.2	mg/Kg	6010C
Copper, Total	16.2		0.2	2.5	mg/Kg	6010C
Iron, Total	28200		20	120	mg/Kg	6010C
Lead, Total	8.4		0.4	6.2	mg/Kg	6010C
Magnesium, Total	7940		2	120	mg/Kg	6010C
Manganese, Total	571		0.09	1.2	mg/Kg	6010C
Nickel, Total	16.6		0.2	4.9	mg/Kg	6010C
Potassium, Total	800		6	250	mg/Kg	6010C
Zinc, Total	414		2	25	mg/Kg	6010C
Tetrachloroethene	330	D	5.7	32	ug/Kg	8260C

CLIENT ID: LS1-1016	Lab ID: R1611538-003					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total	53		2	20	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: LS1-1016	Lab ID: R1611538-003					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Calcium, Total	57600		700	5000	ug/L	6010C
Iron, Total	1450		9	100	ug/L	6010C
Magnesium, Total	14000		10	1000	ug/L	6010C
Manganese, Total	1290		1.0	10	ug/L	6010C
Potassium, Total	2400		50	2000	ug/L	6010C
Sodium, Total	8000		90	1000	ug/L	6010C
Zinc, Total	151		7	20	ug/L	6010C
cis-1,2-Dichloroethene	240		0.75	13	ug/L	8260C

CLIENT ID: MH33-1016	Lab ID: R1611538-004					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Solids, Total Dissolved (TDS)	208		4	10	mg/L	SM 2540 C-
Barium, Total	44		2	20	ug/L	6010C
Calcium, Total	49000		700	5000	ug/L	6010C
Iron, Total	1090		9	100	ug/L	6010C
Magnesium, Total	13200		10	1000	ug/L	6010C
Manganese, Total	501		1.0	10	ug/L	6010C
Sodium, Total	2800		90	1000	ug/L	6010C
cis-1,2-Dichloroethene	7.1		0.30	5.0	ug/L	8260C

CLIENT ID: MH32-1016	Lab ID: R1611538-005					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Solids, Total Dissolved (TDS)	247		5	13	mg/L	SM 2540 C-
Barium, Total	70		2	20	ug/L	6010C
Calcium, Total	65000		700	5000	ug/L	6010C
Iron, Total	8560		9	100	ug/L	6010C
Magnesium, Total	12100		10	1000	ug/L	6010C
Manganese, Total	1370		1.0	10	ug/L	6010C
Sodium, Total	2500		90	1000	ug/L	6010C
cis-1,2-Dichloroethene	5400		15	250	ug/L	8260C

CLIENT ID: MW15S-1016	Lab ID: R1611538-006					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Calcium, Total	2200		200	1000	ug/L	6010C
Magnesium, Total	1500		10	1000	ug/L	6010C
Sodium, Total	1500		90	1000	ug/L	6010C

CLIENT ID: MW16S-1016	Lab ID: R1611538-007					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Calcium, Total	16200		200	1000	ug/L	6010C
Magnesium, Total	9200		10	1000	ug/L	6010C
Sodium, Total	8900		90	1000	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: MW17S-1016	Lab ID: R1611538-008					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total	40		2	20	ug/L	6010C
Calcium, Total	86700		700	5000	ug/L	6010C
Iron, Total	110		9	100	ug/L	6010C
Magnesium, Total	58800		10	1000	ug/L	6010C
Manganese, Total	93		1.0	10	ug/L	6010C
Potassium, Total	3900		50	2000	ug/L	6010C
Sodium, Total	68100		90	1000	ug/L	6010C
cis-1,2-Dichloroethene	54		0.30	5.0	ug/L	8260C
Trichloroethene	16		0.22	5.0	ug/L	8260C

CLIENT ID: MW17D-1016	Lab ID: R1611538-009					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Calcium, Total	18100		200	1000	ug/L	6010C
Iron, Total	8210		9	100	ug/L	6010C
Magnesium, Total	17300		10	1000	ug/L	6010C
Manganese, Total	312		1.0	10	ug/L	6010C
Potassium, Total	5000		50	2000	ug/L	6010C
Sodium, Total	33600		90	1000	ug/L	6010C

CLIENT ID: MW18S-1016	Lab ID: R1611538-010					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total	37		2	20	ug/L	6010C
Calcium, Total	29500		200	1000	ug/L	6010C
Iron, Total	990		9	100	ug/L	6010C
Magnesium, Total	10700		10	1000	ug/L	6010C
Manganese, Total	140		1.0	10	ug/L	6010C
Sodium, Total	2500		90	1000	ug/L	6010C

CLIENT ID: MW18D-1016	Lab ID: R1611538-011					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total	83		2	20	ug/L	6010C
Calcium, Total	42600		200	1000	ug/L	6010C
Iron, Total	15100		9	100	ug/L	6010C
Magnesium, Total	17500		10	1000	ug/L	6010C
Manganese, Total	857		1.0	10	ug/L	6010C
Potassium, Total	2700		50	2000	ug/L	6010C
Sodium, Total	19900		90	1000	ug/L	6010C

CLIENT ID: DUP1-1016	Lab ID: R1611538-012					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total	39		2	20	ug/L	6010C
Calcium, Total	87400		700	5000	ug/L	6010C
Magnesium, Total	57500		10	1000	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: DUP1-1016	Lab ID: R1611538-012					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Manganese, Total	91		1.0	10	ug/L	6010C
Potassium, Total	3800		50	2000	ug/L	6010C
Sodium, Total	66300		90	1000	ug/L	6010C
cis-1,2-Dichloroethene	52		0.30	5.0	ug/L	8260C
Trichloroethene	16		0.22	5.0	ug/L	8260C

CLIENT ID: WAL2-1016	Lab ID: R1611538-013					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total	32		2	20	ug/L	6010C
Calcium, Total	46200		200	1000	ug/L	6010C
Iron, Total	620		9	100	ug/L	6010C
Magnesium, Total	14800		10	1000	ug/L	6010C
Manganese, Total	700		1.0	10	ug/L	6010C
Sodium, Total	50600		90	1000	ug/L	6010C

CLIENT ID: MW5D-1116	Lab ID: R1611538-015					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total	37		2	20	ug/L	6010C
Calcium, Total	20100		200	1000	ug/L	6010C
Iron, Total	260		9	100	ug/L	6010C
Magnesium, Total	11900		10	1000	ug/L	6010C
Manganese, Total	869		1.0	10	ug/L	6010C
Sodium, Total	5500		90	1000	ug/L	6010C
cis-1,2-Dichloroethene	310		0.75	13	ug/L	8260C
Trichloroethene	50		0.55	13	ug/L	8260C
Vinyl Chloride	30		0.80	13	ug/L	8260C

CLIENT ID: MW5S-1116	Lab ID: R1611538-016					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Calcium, Total	14700		200	1000	ug/L	6010C
Iron, Total	1100		9	100	ug/L	6010C
Magnesium, Total	9500		10	1000	ug/L	6010C
Manganese, Total	153		1.0	10	ug/L	6010C
Sodium, Total	6000		90	1000	ug/L	6010C
cis-1,2-Dichloroethene	180		0.30	5.0	ug/L	8260C
Trichloroethene	43		0.22	5.0	ug/L	8260C
Vinyl Chloride	18		0.32	5.0	ug/L	8260C

CLIENT ID: MW4D-1116	Lab ID: R1611538-017					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Calcium, Total	22200		200	1000	ug/L	6010C
Iron, Total	640		9	100	ug/L	6010C
Magnesium, Total	19700		10	1000	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: MW4D-1116	Lab ID: R1611538-017					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Manganese, Total	1250		1.0	10	ug/L	6010C
Potassium, Total	4200		50	2000	ug/L	6010C
Sodium, Total	7300		90	1000	ug/L	6010C
cis-1,2-Dichloroethene	280	D	1.5	25	ug/L	8260C
Vinyl Chloride	49		0.32	5.0	ug/L	8260C

CLIENT ID: MW11S-1116	Lab ID: R1611538-018					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total	30		2	20	ug/L	6010C
Calcium, Total	58500		700	5000	ug/L	6010C
Iron, Total	160		9	100	ug/L	6010C
Magnesium, Total	35500		10	1000	ug/L	6010C
Manganese, Total	844		1.0	10	ug/L	6010C
Sodium, Total	21200		90	1000	ug/L	6010C
cis-1,2-Dichloroethene	350		7.5	130	ug/L	8260C
Trichloroethene	3500		5.5	130	ug/L	8260C

CLIENT ID: CW4A-1116	Lab ID: R1611538-019					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total	56		2	20	ug/L	6010C
Calcium, Total	31100		200	1000	ug/L	6010C
Iron, Total	320		9	100	ug/L	6010C
Magnesium, Total	16200		10	1000	ug/L	6010C
Manganese, Total	515		1.0	10	ug/L	6010C
Sodium, Total	14300		90	1000	ug/L	6010C

CLIENT ID: CW4B-1116	Lab ID: R1611538-020					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total	39		2	20	ug/L	6010C
Calcium, Total	35900		200	1000	ug/L	6010C
Magnesium, Total	15000		10	1000	ug/L	6010C
Manganese, Total	767		1.0	10	ug/L	6010C
Sodium, Total	16000		90	1000	ug/L	6010C

CLIENT ID: CW3A-1116	Lab ID: R1611538-021					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
cis-1,2-Dichloroethene	6.5		0.30	5.0	ug/L	8260C
Trichloroethene	33		0.22	5.0	ug/L	8260C

CLIENT ID: CW3B-1116	Lab ID: R1611538-022					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total	36		2	20	ug/L	6010C
Calcium, Total	68600		700	5000	ug/L	6010C
Magnesium, Total	33900		10	1000	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: CW3B-1116	Lab ID: R1611538-022					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Manganese, Total	31		1.0	10	ug/L	6010C
Potassium, Total	2500		50	2000	ug/L	6010C
Sodium, Total	21700		90	1000	ug/L	6010C
cis-1,2-Dichloroethene	91		0.75	13	ug/L	8260C
Trichloroethene	440		0.55	13	ug/L	8260C

CLIENT ID: WAL11-1116	Lab ID: R1611538-023					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Calcium, Total	2200		200	1000	ug/L	6010C
Copper, Total	25		3	20	ug/L	6010C
Iron, Total	140		9	100	ug/L	6010C
Magnesium, Total	1100		10	1000	ug/L	6010C
Manganese, Total	13		1.0	10	ug/L	6010C

CLIENT ID: WAL19-Pre-1116	Lab ID: R1611538-026					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
cis-1,2-Dichloroethene	2.6		0.20	0.50	ug/L	524.2
Trichloroethene	2.8		0.20	0.50	ug/L	524.2

CLIENT ID: MW3D-1116	Lab ID: R1611538-027					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total	77		2	20	ug/L	6010C
Calcium, Total	35700		200	1000	ug/L	6010C
Magnesium, Total	19400		10	1000	ug/L	6010C
Manganese, Total	11		1.0	10	ug/L	6010C
Potassium, Total	3900		50	2000	ug/L	6010C
Sodium, Total	17900		90	1000	ug/L	6010C

CLIENT ID: WAL1-1116	Lab ID: R1611538-028					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total	67		2	20	ug/L	6010C
Calcium, Total	41500		200	1000	ug/L	6010C
Magnesium, Total	13400		10	1000	ug/L	6010C
Manganese, Total	78		1.0	10	ug/L	6010C
Sodium, Total	9200		90	1000	ug/L	6010C
Zinc, Total	130		7	20	ug/L	6010C

CLIENT ID: MW3S-1116	Lab ID: R1611538-030					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total	42		2	20	ug/L	6010C
Calcium, Total	42000		200	1000	ug/L	6010C
Magnesium, Total	31500		10	1000	ug/L	6010C
Potassium, Total	3000		50	2000	ug/L	6010C
Sodium, Total	47000		90	1000	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: MW3S-1116	Lab ID: R1611538-030					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**

CLIENT ID: CW3A-1116	Lab ID: R1611538-032					
Analyte	**Results**	**Flag**	**MDL**	**PQL**	**Units**	**Method**
Barium, Total	84		2	20	ug/L	6010C
Calcium, Total	89100		700	5000	ug/L	6010C
Manganese, Total	11		1.0	10	ug/L	6010C
Potassium, Total	14300		50	2000	ug/L	6010C
Sodium, Total	40600		90	1000	ug/L	6010C

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. **Service Request:**R1611538

Project: WAL - Annual Sampling

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1611538-001	SWS1-1016	10/31/2016	0930
R1611538-002	SWS1SED-1016	10/31/2016	0940
R1611538-003	LS1-1016	10/31/2016	1020
R1611538-004	MH33-1016	10/31/2016	1105
R1611538-005	MH32-1016	10/31/2016	1125
R1611538-006	MW15S-1016	10/31/2016	1150
R1611538-007	MW16S-1016	10/31/2016	1350
R1611538-008	MW17S-1016	10/31/2016	1245
R1611538-009	MW17D-1016	10/31/2016	1405
R1611538-010	MW18S-1016	10/31/2016	0950
R1611538-011	MW18D-1016	10/31/2016	1120
R1611538-012	DUP1-1016	10/31/2016	1255
R1611538-013	WAL2-1016	10/28/2016	1200
R1611538-014	TRIP BLANK	10/31/2016	1406
R1611538-015	MW5D-1116	11/1/2016	1005
R1611538-016	MW5S-1116	11/1/2016	1120
R1611538-017	MW4D-1116	11/1/2016	1250
R1611538-018	MW11S-1116	11/1/2016	1415
R1611538-019	CW4A-1116	11/1/2016	0925
R1611538-020	CW4B-1116	11/1/2016	1025
R1611538-021	CW3A-1116	11/1/2016	1210
R1611538-022	CW3B-1116	11/1/2016	1340
R1611538-023	WAL11-1116	11/1/2016	1340
R1611538-024	WAL19-Post-1116	11/1/2016	1340
R1611538-025	WAL19-Inter-1116	11/1/2016	1340
R1611538-026	WAL19-Pre-1116	11/1/2016	1340
R1611538-027	MW3D-1116	11/2/2016	1030
R1611538-028	WAL1-1116	11/2/2016	1035
R1611538-029	EB1-1116	11/2/2016	1025
R1611538-030	MW3S-1116	11/2/2016	1240
R1611538-031	TRIP BLANK	11/2/2016	1240
R1611538-032	CW3A-1116	11/2/2016	0815

CHAIN of CUSTODY

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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**

Project: **WAL - Annual Sampling**

Telephone No.: 585-593-1824

Email: jonb@on-sitehs.com

Method of Shipment: UPS

Special Detection Limit/Reporting

Sample I.D.	Lab Sample No.	No. of Containers	Matrix: Soil	Matrix: Water	Matrix: Air	Matrix: Other	Prsv.: Yes	Prsv.: No	Sampling Date	Sampling Time	GC;MS VOA's 8260 (HCl)	GC;MS VOA's 524.2 (C6H806)	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)
MW5D-1116		4		X			X		11-1-16	1005	X		X						
MW5S-1116		4		X			X		11-1-16	1120	X		X						
MW4D-1116		4		X			X		11-1-16	1250	X		X						
MW11S-1116		4		X			X		11-1-16	1415	X		X						
CW4A-1116		4		X			X		11-1-16	0925	X		X						
CW4B-1116		4		X			X		11-1-16	1025	X		X						
CW3A-1116		3		X			X		11-1-16	1210	X								
CW3B-1116		4		X			X		11-1-16	1340	X		X						
WAL11-1116		4		X			X		11-1-16	1020		X	X						
WAL14-Post-1116		3		X			X		11-1-16	1120		X							
WAL14-Inter-1116		3		X			X		11-1-16	1135		X							
WAL14-Pre-1116		3		X			X		11-1-16	1145		X							
~~WAL8~~-LB																			
MW3D-1116		4		X			X		11-2-16	1030	X		X						

REMARKS

Sample Received Intact: Yes No

Temperature received: Ice No ice

Relinq. by sampler (Sign & Print Name)	Date	Time	Received by (Sign & Print Name)
Kenneth Dye / Kevin Dye	11-2-16	1400	
Relinquished by	Date	Time	Received by
Relinquished by	Date	Time	Received by
Relinquished by	Date	Time	Received by laboratory — Date 11/3/16 Time 0920

Lab Work No.

R1611538 5
On-Site Technical Services, Inc.
WAL - Annual Sampling

ALS-Environmental
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Project Manager: **Jon Brandes**

CHAIN of CUSTODY

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Telephone No.: 585-593-1824

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Method of Shipment: UPS

Special Detection Limit/Reporting

Sample I.D.	Lab Sample No.	No. of Containers	Matrix: Soil	Water	Air	Other	Prsv.: Yes	No	Sampling Date	Sampling Time	GC;MS VOA's 8260 (HCl)	GC;MS VOA's 524.2 (C6H806)	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)
WAL1-1116		4		X			X		11/2/16	1035		X	X						
EB1-1116		4		X			X		11/2/16	1025	X		X						
MW3S-1116		4		X			X		11-2-16	1240	X		X						
Trip Blank		3		X			X		11-2-16	1210	X								
CW3A-1116		1		X			X		11-2-16	0815			X						

REMARKS

Sample Received Intact: Yes No

Temperature received: Ice No ice

Relinq. by sampler (Sign & Print Name)	Date	Time	Received by (Sign & Print Name)
Kevin Dye / Kevin Dye	11-2-16	1400	
Relinquished by	Date	Time	Received by
Relinquished by	Date	Time	Received by
Relinquished by	Date	Time	Received by laboratory: Date 11/3/16 Time 0920

Lab Work No.

R1611538 5
On-Site Technical Services, Inc.
WAL - Annual Sampling

Cooler Receipt and Preservation Check Form

R1611538 5
On-Site Technical Services, Inc.
WAL - Annual Sampling

Project/Client On-Site Folder Number R1611538

Cooler received on 11/3/16 by: [illegible]

COURIER: ALS (UPS) ~~FEDEX~~ VELOCITY CLIENT

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

8. Temperature Readings Date: 11/3/16 Time: 1942 ID: ~~IR#7~~ IR#8 From: ~~Temp Blank~~ Sample Bottle

Observed Temp (°C)	2.3						
Correction Factor (°C)	+0.5						
Corrected Temp (°C)	2.8°						
Within 0-6°C?	(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

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed 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 [illegible] on 11/3/16 at 0945
5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown: Date: 11/3/16 Time: 1340 by: DW

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? ~~YES~~ NO
2. Did all bottle labels and tags agree with custody papers? ~~YES~~ NO
3. Were correct containers used for the tests indicated? ~~YES~~ NO
4. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO ~~N/A~~
5. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated ~~N/A~~

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3	✓		B082616B	8/17				
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	4115022	10/16				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 082216-2AAM, 6-145002

Other Comments:

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
PH	SUB
SO3	MARRS
ALS	REV

PC Secondary Review: [illegible] 11/4/16 *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

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CHAIN of CUSTODY

Project: **WAL - Annual Sampling**

Telephone No. 585-593-1824

Email: jonb@on-sitehs.com

Method of Shipment: UPS

Special Detection Limit/Reporting

Sample I.D.	Lab Sample No.	No. of Containers	Matrix: Soil	Matrix: Water	Matrix: Air	Matrix: Other	Prsv.: Yes	Prsv.: No	Sampling Date	Sampling Time	GC;MS VOA's 8260 (HCl)	GC;MS VOA's 524.2 (C6H806)	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)
SWS1-1016		9		X			X	X	10-31-16	0930	X		X	X	X	X	X	X	
SWS1SED-1016		3	X					X	10-31-16	0940	X		X	X	X	X	X	X	
LS1-1016		4		X			X	X	10-31-16	1020	X		X						
MH33-1016		5		X			X	X	10-31-16	1105	X		X						X
MH32-1016		5		X			X	X	10-31-16	1125	X		X						X
MW15S-1016		4		X			X		10-31-16	1150	X		X						
MW16S-1016		4		X			X		10-31-16	1350	X		X						
MW17S-1016		4		X			X		10-31-16	1245	X		X						
MW17D-1016		4		X			X		10-31-16	1405	X		X						
MW18S-1016		7		X			X		10-31-16	0950	X		X						
MW18D-1016		4		X			X		10-31-16	1120	X		X						
Dup1-1016		4		X			X		10-31-16	1255	X		X						
Wal2-1016		1		X			X		10-28-16	1200			X						
Trip Blank		3		X			X		10-31-16	1405	X								

REMARKS: MS/MSD

Sample Received Intact: Yes No

Temperature received: Ice No ice

Relinq. by sampler (Sign & Print Name) Kevin Dye	Date 10-31-16	Time 1530	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 11/1/16 Time 0930

Lab Work No.

R1611538 5
On-Site Technical Services, Inc.
WAL - Annual Sampling

R1611538 5
On-Site Technical Services, Inc.
WAL - Annual Sampling

Cooler Receipt and Preservation Check Form

Project/Client On-Site Folder Number _____.

Cooler received on 11/1/16 by: a

COURIER: ALS (UPS) FEDEX VELOCITY CLIENT

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

8. Temperature Readings Date: 11/1/16 Time: 0938 ID: (IR#7) IR#8 From: (Temp Blank) Sample Bottle

Observed Temp (°C)	3.8						
Correction Factor (°C)	+0.5						
Corrected Temp (°C)	4.3						
Within 0-6°C?	(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

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed 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 a on 11/1/16 at 0940
5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown: Date: 11-1-16 Time: 1030 by: T.S

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Were 5035 vials acceptable (no extra labels, not leaking)?	YES	NO
5.	Air Samples: Cassettes / Tubes Intact	Canisters Pressurized	Tedlar® Bags Inflated

(N/A) (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3	(Y)		BPD2615613	8/17				
≤2	H_2SO_4	(Y)		CC161001A	8/17				
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522	(Y)		If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**						

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 082216-2AAm, C60616-2A31, 082916-1BMC

Other Comments:

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
PH	SUB
SO3	MARRS
ALS	REV

PC Secondary Review: MM 11/2/16

*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.
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/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
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.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the ñNotesò column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an ñimmediateò hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% (25% for CLP) difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (Ó100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: 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 Certifications[1]

Connecticut ID # PH0556	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Delaware Accredited	Nebraska Accredited	
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047	North Carolina #676	Virginia #460167

[1] Analyses were performed according to our laboratoryôs 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 http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

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. **Service Request:** R1611538
Project: WAL - Annual Sampling

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
350.1M	Soil	Ammonia as Nitrogen, undistilled
351.2 Modified	Soil	Nitrogen, Total Kjeldahl (TKN)
524.2	Water	1,1,1,2-Tetrachloroethane
524.2	Water	1,1,1-Trichloroethane
524.2	Water	1,1,2,2-Tetrachloroethane
524.2	Water	1,1,2-Trichloroethane
524.2	Water	1,1-Dichloroethane
524.2	Water	1,1-Dichloroethene
524.2	Water	1,1-Dichloropropene
524.2	Water	1,2,3-Trichlorobenzene
524.2	Water	1,2,3-Trichloropropane
524.2	Water	1,2,4-Trichlorobenzene
524.2	Water	1,2,4-Trimethylbenzene
524.2	Water	1,2-Dibromo-3-chloropropane
524.2	Water	1,2-Dibromoethane
524.2	Water	1,2-Dichloropropane
524.2	Water	1,3,5-Trimethylbenzene
524.2	Water	1,3-Dichlorobenzene
524.2	Water	1,3-Dichloropropane
524.2	Water	1,4-Dichlorobenzene
524.2	Water	2,2-Dichloropropane
524.2	Water	2-Chlorotoluene
524.2	Water	4-Chlorotoluene
524.2	Water	Bromobenzene
524.2	Water	Bromochloromethane
524.2	Water	Bromodichloromethane
524.2	Water	Bromoform
524.2	Water	Bromomethane
524.2	Water	Carbon Tetrachloride
524.2	Water	Chloroethane
524.2	Water	Chloromethane
524.2	Water	Dibromochloromethane
524.2	Water	Dibromomethane
524.2	Water	Dichlorodifluoromethane
524.2	Water	Ethylbenzene
524.2	Water	Hexachlorobutadiene
524.2	Water	Isopropylbenzene
524.2	Water	Methyl tert-Butyl Ether
524.2	Water	Naphthalene
524.2	Water	Styrene
524.2	Water	Tetrachloroethene
524.2	Water	Trichloroethene
524.2	Water	Trichlorofluoromethane
524.2	Water	Vinyl Chloride
524.2	Water	cis-1,2-Dichloroethene
524.2	Water	cis-1,3-Dichloropropene
524.2	Water	m,p-Xylenes

Client: On-Site Technical Services, Inc. **Service Request:** R1611538
Project: WAL - Annual Sampling

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
524.2	Water	n-Butylbenzene
524.2	Water	n-Propylbenzene
524.2	Water	o-Xylene
524.2	Water	p-Isopropyltoluene
524.2	Water	sec-Butylbenzene
524.2	Water	tert-Butyl Alcohol
524.2	Water	tert-Butylbenzene
524.2	Water	trans-1,2-Dichloroethene
524.2	Water	trans-1,3-Dichloropropene
ALS SOP	Soil	Total Solids
SM 2320 B Modified	Soil	Alkalinity, Total as CaCO3
SM 5220 B Modified	Soil	Chemical Oxygen Demand, Total

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling		

Sample Name:	SWS1-1016	**Date Collected:**	10/31/16
Lab Code:	R1611538-001	**Date Received:**	11/1/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		CWOODS
350.1		GNITAJOUPPI
351.2	TSABO	GNITAJOUPPI
410.4		MLAMBRECHT
420.4		BBOWE
6010C	CBURLESON	NMANSEN
8260C		MCYMBAL
SM 2120 B-2001(2011)		TSABO
SM 2320 B-1997(2011)		TSABO
SM 2540 C-1997(2011)		KWONG
SM 5210 B-2001(2011)		MLAMBRECHT
SM 5310 B-2000(2011)		KABBOTT

Sample Name:	SWS1SED-1016	**Date Collected:**	10/31/16
Lab Code:	R1611538-002	**Date Received:**	11/1/16
Sample Matrix:	Soil		

Analysis Method	Extracted/Digested By	Analyzed By
350.1M	GNITAJOUPPI	GNITAJOUPPI
351.2 Modified	TSABO	LDOLGOS
6010C	CBURLESON	NMANSEN
8260C		FNAEGLER
9056A	CWOODS	GNITAJOUPPI
9066 Modified	KABBOTT	BBOWE
ALS SOP		MLAMBRECHT
EPA LKahn 7-27-1988		KABBOTT
SM 2320 B Modified	MLAMBRECHT	MLAMBRECHT
SM 5220 B Modified		KMENGS

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling		

Sample Name:	LS1-1016	**Date Collected:**	10/31/16
Lab Code:	R1611538-003	**Date Received:**	11/1/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CBURLESON	NMANSEN
8260C		MCYMBAL

Sample Name:	MH33-1016	**Date Collected:**	10/31/16
Lab Code:	R1611538-004	**Date Received:**	11/1/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		CWOODS
6010C	CBURLESON	NMANSEN
8260C		MCYMBAL
SM 2540 C-1997(2011)		KWONG

Sample Name:	MH32-1016	**Date Collected:**	10/31/16
Lab Code:	R1611538-005	**Date Received:**	11/1/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
300.0		CWOODS
6010C	CBURLESON	NMANSEN
8260C		MCYMBAL
SM 2540 C-1997(2011)		KWONG

Sample Name:	MW15S-1016	**Date Collected:**	10/31/16
Lab Code:	R1611538-006	**Date Received:**	11/1/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CBURLESON	NMANSEN
8260C		MCYMBAL

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling		

Sample Name:	MW16S-1016	**Date Collected:**	10/31/16
Lab Code:	R1611538-007	**Date Received:**	11/1/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CBURLESON	NMANSEN
8260C		MCYMBAL

Sample Name:	MW17S-1016	**Date Collected:**	10/31/16
Lab Code:	R1611538-008	**Date Received:**	11/1/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CBURLESON	NMANSEN
8260C		MCYMBAL

Sample Name:	MW17D-1016	**Date Collected:**	10/31/16
Lab Code:	R1611538-009	**Date Received:**	11/1/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CBURLESON	NMANSEN
8260C		MCYMBAL

Sample Name:	MW18S-1016	**Date Collected:**	10/31/16
Lab Code:	R1611538-010	**Date Received:**	11/1/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CBURLESON	NMANSEN
8260C		MCYMBAL

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Analyst Summary report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling		

Sample Name:	MW18D-1016	**Date Collected:**	10/31/16
Lab Code:	R1611538-011	**Date Received:**	11/1/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CBURLESON	NMANSEN
8260C		MCYMBAL

Sample Name:	DUP1-1016	**Date Collected:**	10/31/16
Lab Code:	R1611538-012	**Date Received:**	11/1/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CBURLESON	NMANSEN
8260C		MCYMBAL

Sample Name:	WAL2-1016	**Date Collected:**	10/28/16
Lab Code:	R1611538-013	**Date Received:**	11/1/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	CBURLESON	NMANSEN

Sample Name:	TRIP BLANK	**Date Collected:**	10/31/16
Lab Code:	R1611538-014	**Date Received:**	11/1/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		MCYMBAL

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Analyst Summary report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling		

Sample Name:	MW5D-1116	**Date Collected:**	11/1/16
Lab Code:	R1611538-015	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	SDIRKX	NMANSEN
8260C		MCYMBAL

Sample Name:	MW5S-1116	**Date Collected:**	11/1/16
Lab Code:	R1611538-016	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	SDIRKX	NMANSEN
8260C		MCYMBAL

Sample Name:	MW4D-1116	**Date Collected:**	11/1/16
Lab Code:	R1611538-017	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	SDIRKX	NMANSEN
8260C		MCYMBAL

Sample Name:	MW11S-1116	**Date Collected:**	11/1/16
Lab Code:	R1611538-018	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	SDIRKX	NMANSEN
8260C		MCYMBAL

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Analyst Summary report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling		

Sample Name:	CW4A-1116	**Date Collected:**	11/1/16
Lab Code:	R1611538-019	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	SDIRKX	NMANSEN
8260C		MCYMBAL

Sample Name:	CW4B-1116	**Date Collected:**	11/1/16
Lab Code:	R1611538-020	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	SDIRKX	NMANSEN
8260C		MCYMBAL

Sample Name:	CW3A-1116	**Date Collected:**	11/1/16
Lab Code:	R1611538-021	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		MCYMBAL

Sample Name:	CW3B-1116	**Date Collected:**	11/1/16
Lab Code:	R1611538-022	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	SDIRKX	NMANSEN
8260C		MCYMBAL

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Analyst Summary report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling		

Sample Name:	WAL11-1116	**Date Collected:**	11/1/16
Lab Code:	R1611538-023	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
524.2		DLIPANI
6010C	SDIRKX	NMANSEN

Sample Name:	WAL19-Post-1116	**Date Collected:**	11/1/16
Lab Code:	R1611538-024	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
524.2		DLIPANI

Sample Name:	WAL19-Inter-1116	**Date Collected:**	11/1/16
Lab Code:	R1611538-025	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
524.2		DLIPANI

Sample Name:	WAL19-Pre-1116	**Date Collected:**	11/1/16
Lab Code:	R1611538-026	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
524.2		DLIPANI

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Analyst Summary report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling		

Sample Name:	MW3D-1116	**Date Collected:**	11/2/16
Lab Code:	R1611538-027	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	SDIRKX	NMANSEN
8260C		MCYMBAL

Sample Name:	WAL1-1116	**Date Collected:**	11/2/16
Lab Code:	R1611538-028	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
524.2		DLIPANI
6010C	SDIRKX	NMANSEN

Sample Name:	EB1-1116	**Date Collected:**	11/2/16
Lab Code:	R1611538-029	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	SDIRKX	NMANSEN
8260C		MCYMBAL

Sample Name:	MW3S-1116	**Date Collected:**	11/2/16
Lab Code:	R1611538-030	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	SDIRKX	NMANSEN
8260C		MCYMBAL

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Analyst Summary report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling		

Sample Name:	TRIP BLANK	**Date Collected:**	11/2/16
Lab Code:	R1611538-031	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		MCYMBAL

Sample Name:	CW3A-1116	**Date Collected:**	11/2/16
Lab Code:	R1611538-032	**Date Received:**	11/3/16
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
6010C	SDIRKX	NMANSEN

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
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
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
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
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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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 13:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	WAL11-1116	**Units:**	ug/L
Lab Code:	R1611538-023	**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	11/07/16 14:44	
Bromobenzene	0.50 U	0.50	1	11/07/16 14:44	
Bromochloromethane	0.50 U	0.50	1	11/07/16 14:44	
Bromodichloromethane	0.50 U	0.50	1	11/07/16 14:44	
Bromoform	0.50 U	0.50	1	11/07/16 14:44	
Bromomethane	0.50 U	0.50	1	11/07/16 14:44	
tert-Butyl Alcohol	20 U	20	1	11/07/16 14:44	
Methyl tert-Butyl Ether	0.50 U	0.50	1	11/07/16 14:44	
tert-Butylbenzene	0.50 U	0.50	1	11/07/16 14:44	
sec-Butylbenzene	0.50 U	0.50	1	11/07/16 14:44	
n-Butylbenzene	0.50 U	0.50	1	11/07/16 14:44	
Carbon Tetrachloride	0.50 U	0.50	1	11/07/16 14:44	
Chlorobenzene	0.50 U	0.50	1	11/07/16 14:44	
Chloroethane	0.50 U	0.50	1	11/07/16 14:44	
Chloroform	0.50 U	0.50	1	11/07/16 14:44	
Chloromethane	0.50 U	0.50	1	11/07/16 14:44	
1,2-Dibromo-3-chloropropane	0.50 U	0.50	1	11/07/16 14:44	
2-Chlorotoluene	0.50 U	0.50	1	11/07/16 14:44	
4-Chlorotoluene	0.50 U	0.50	1	11/07/16 14:44	
Dibromochloromethane	0.50 U	0.50	1	11/07/16 14:44	
1,2-Dibromoethane	0.50 U	0.50	1	11/07/16 14:44	
Dibromomethane	0.50 U	0.50	1	11/07/16 14:44	
1,2-Dichlorobenzene	0.50 U	0.50	1	11/07/16 14:44	
1,4-Dichlorobenzene	0.50 U	0.50	1	11/07/16 14:44	
1,3-Dichlorobenzene	0.50 U	0.50	1	11/07/16 14:44	
Dichlorodifluoromethane	0.50 U	0.50	1	11/07/16 14:44	
1,1-Dichloroethane	0.50 U	0.50	1	11/07/16 14:44	
1,2-Dichloroethane	0.50 U	0.50	1	11/07/16 14:44	
1,1-Dichloroethene	0.50 U	0.50	1	11/07/16 14:44	
trans-1,2-Dichloroethene	0.50 U	0.50	1	11/07/16 14:44	
cis-1,2-Dichloroethene	0.50 U	0.50	1	11/07/16 14:44	
2,2-Dichloropropane	0.50 U	0.50	1	11/07/16 14:44	
1,2-Dichloropropane	0.50 U	0.50	1	11/07/16 14:44	
1,3-Dichloropropane	0.50 U	0.50	1	11/07/16 14:44	
1,1-Dichloropropene	0.50 U	0.50	1	11/07/16 14:44	
trans-1,3-Dichloropropene	0.50 U	0.50	1	11/07/16 14:44	
cis-1,3-Dichloropropene	0.50 U	0.50	1	11/07/16 14:44	
Ethylbenzene	0.50 U	0.50	1	11/07/16 14:44	
Hexachlorobutadiene	0.50 U	0.50	1	11/07/16 14:44	
Isopropylbenzene	0.50 U	0.50	1	11/07/16 14:44	
p-Isopropyltoluene	0.50 U	0.50	1	11/07/16 14:44	
Methylene Chloride	0.50 U	0.50	1	11/07/16 14:44	
Naphthalene	0.50 U	0.50	1	11/07/16 14:44	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 13:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	WAL11-1116	**Units:**	ug/L
Lab Code:	R1611538-023	**Basis:**	NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
n-Propylbenzene	0.50 U	0.50	1	11/07/16 14:44	
Styrene	0.50 U	0.50	1	11/07/16 14:44	
1,1,1,2-Tetrachloroethane	0.50 U	0.50	1	11/07/16 14:44	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	1	11/07/16 14:44	
Tetrachloroethene	0.50 U	0.50	1	11/07/16 14:44	
Toluene	0.50 U	0.50	1	11/07/16 14:44	
1,2,4-Trichlorobenzene	0.50 U	0.50	1	11/07/16 14:44	
1,2,3-Trichlorobenzene	0.50 U	0.50	1	11/07/16 14:44	
1,1,1-Trichloroethane	0.50 U	0.50	1	11/07/16 14:44	
1,1,2-Trichloroethane	0.50 U	0.50	1	11/07/16 14:44	
Trichloroethene	0.50 U	0.50	1	11/07/16 14:44	
Trichlorofluoromethane	0.50 U	0.50	1	11/07/16 14:44	
1,2,3-Trichloropropane	0.50 U	0.50	1	11/07/16 14:44	
1,3,5-Trimethylbenzene	0.50 U	0.50	1	11/07/16 14:44	
1,2,4-Trimethylbenzene	0.50 U	0.50	1	11/07/16 14:44	
Vinyl Chloride	0.50 U	0.50	1	11/07/16 14:44	
m,p-Xylenes	1.0 U	1.0	1	11/07/16 14:44	
o-Xylene	0.50 U	0.50	1	11/07/16 14:44	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	70 - 130	11/07/16 14:44	
1,2-Dichlorobenzene-d4	93	70 - 130	11/07/16 14:44	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 13:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	WAL19-Post-1116	**Units:**	ug/L
Lab Code:	R1611538-024	**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	11/07/16 15:17	
Bromobenzene	0.50 U	0.50	1	11/07/16 15:17	
Bromochloromethane	0.50 U	0.50	1	11/07/16 15:17	
Bromodichloromethane	0.50 U	0.50	1	11/07/16 15:17	
Bromoform	0.50 U	0.50	1	11/07/16 15:17	
Bromomethane	0.50 U	0.50	1	11/07/16 15:17	
tert-Butyl Alcohol	20 U	20	1	11/07/16 15:17	
Methyl tert-Butyl Ether	0.50 U	0.50	1	11/07/16 15:17	
tert-Butylbenzene	0.50 U	0.50	1	11/07/16 15:17	
sec-Butylbenzene	0.50 U	0.50	1	11/07/16 15:17	
n-Butylbenzene	0.50 U	0.50	1	11/07/16 15:17	
Carbon Tetrachloride	0.50 U	0.50	1	11/07/16 15:17	
Chlorobenzene	0.50 U	0.50	1	11/07/16 15:17	
Chloroethane	0.50 U	0.50	1	11/07/16 15:17	
Chloroform	0.50 U	0.50	1	11/07/16 15:17	
Chloromethane	0.50 U	0.50	1	11/07/16 15:17	
1,2-Dibromo-3-chloropropane	0.50 U	0.50	1	11/07/16 15:17	
2-Chlorotoluene	0.50 U	0.50	1	11/07/16 15:17	
4-Chlorotoluene	0.50 U	0.50	1	11/07/16 15:17	
Dibromochloromethane	0.50 U	0.50	1	11/07/16 15:17	
1,2-Dibromoethane	0.50 U	0.50	1	11/07/16 15:17	
Dibromomethane	0.50 U	0.50	1	11/07/16 15:17	
1,2-Dichlorobenzene	0.50 U	0.50	1	11/07/16 15:17	
1,4-Dichlorobenzene	0.50 U	0.50	1	11/07/16 15:17	
1,3-Dichlorobenzene	0.50 U	0.50	1	11/07/16 15:17	
Dichlorodifluoromethane	0.50 U	0.50	1	11/07/16 15:17	
1,1-Dichloroethane	0.50 U	0.50	1	11/07/16 15:17	
1,2-Dichloroethane	0.50 U	0.50	1	11/07/16 15:17	
1,1-Dichloroethene	0.50 U	0.50	1	11/07/16 15:17	
trans-1,2-Dichloroethene	0.50 U	0.50	1	11/07/16 15:17	
cis-1,2-Dichloroethene	0.50 U	0.50	1	11/07/16 15:17	
2,2-Dichloropropane	0.50 U	0.50	1	11/07/16 15:17	
1,2-Dichloropropane	0.50 U	0.50	1	11/07/16 15:17	
1,3-Dichloropropane	0.50 U	0.50	1	11/07/16 15:17	
1,1-Dichloropropene	0.50 U	0.50	1	11/07/16 15:17	
trans-1,3-Dichloropropene	0.50 U	0.50	1	11/07/16 15:17	
cis-1,3-Dichloropropene	0.50 U	0.50	1	11/07/16 15:17	
Ethylbenzene	0.50 U	0.50	1	11/07/16 15:17	
Hexachlorobutadiene	0.50 U	0.50	1	11/07/16 15:17	
Isopropylbenzene	0.50 U	0.50	1	11/07/16 15:17	
p-Isopropyltoluene	0.50 U	0.50	1	11/07/16 15:17	
Methylene Chloride	0.50 U	0.50	1	11/07/16 15:17	
Naphthalene	0.50 U	0.50	1	11/07/16 15:17	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 13:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	WAL19-Post-1116	**Units:**	ug/L
Lab Code:	R1611538-024	**Basis:**	NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
n-Propylbenzene	0.50 U	0.50	1	11/07/16 15:17	
Styrene	0.50 U	0.50	1	11/07/16 15:17	
1,1,1,2-Tetrachloroethane	0.50 U	0.50	1	11/07/16 15:17	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	1	11/07/16 15:17	
Tetrachloroethene	0.50 U	0.50	1	11/07/16 15:17	
Toluene	0.50 U	0.50	1	11/07/16 15:17	
1,2,4-Trichlorobenzene	0.50 U	0.50	1	11/07/16 15:17	
1,2,3-Trichlorobenzene	0.50 U	0.50	1	11/07/16 15:17	
1,1,1-Trichloroethane	0.50 U	0.50	1	11/07/16 15:17	
1,1,2-Trichloroethane	0.50 U	0.50	1	11/07/16 15:17	
Trichloroethene	0.50 U	0.50	1	11/07/16 15:17	
Trichlorofluoromethane	0.50 U	0.50	1	11/07/16 15:17	
1,2,3-Trichloropropane	0.50 U	0.50	1	11/07/16 15:17	
1,3,5-Trimethylbenzene	0.50 U	0.50	1	11/07/16 15:17	
1,2,4-Trimethylbenzene	0.50 U	0.50	1	11/07/16 15:17	
Vinyl Chloride	0.50 U	0.50	1	11/07/16 15:17	
m,p-Xylenes	1.0 U	1.0	1	11/07/16 15:17	
o-Xylene	0.50 U	0.50	1	11/07/16 15:17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	70 - 130	11/07/16 15:17	
1,2-Dichlorobenzene-d4	97	70 - 130	11/07/16 15:17	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 13:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	WAL19-Inter-1116	**Units:**	ug/L
Lab Code:	R1611538-025	**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	11/07/16 15:50	
Bromobenzene	0.50 U	0.50	1	11/07/16 15:50	
Bromochloromethane	0.50 U	0.50	1	11/07/16 15:50	
Bromodichloromethane	0.50 U	0.50	1	11/07/16 15:50	
Bromoform	0.50 U	0.50	1	11/07/16 15:50	
Bromomethane	0.50 U	0.50	1	11/07/16 15:50	
tert-Butyl Alcohol	20 U	20	1	11/07/16 15:50	
Methyl tert-Butyl Ether	0.50 U	0.50	1	11/07/16 15:50	
tert-Butylbenzene	0.50 U	0.50	1	11/07/16 15:50	
sec-Butylbenzene	0.50 U	0.50	1	11/07/16 15:50	
n-Butylbenzene	0.50 U	0.50	1	11/07/16 15:50	
Carbon Tetrachloride	0.50 U	0.50	1	11/07/16 15:50	
Chlorobenzene	0.50 U	0.50	1	11/07/16 15:50	
Chloroethane	0.50 U	0.50	1	11/07/16 15:50	
Chloroform	0.50 U	0.50	1	11/07/16 15:50	
Chloromethane	0.50 U	0.50	1	11/07/16 15:50	
1,2-Dibromo-3-chloropropane	0.50 U	0.50	1	11/07/16 15:50	
2-Chlorotoluene	0.50 U	0.50	1	11/07/16 15:50	
4-Chlorotoluene	0.50 U	0.50	1	11/07/16 15:50	
Dibromochloromethane	0.50 U	0.50	1	11/07/16 15:50	
1,2-Dibromoethane	0.50 U	0.50	1	11/07/16 15:50	
Dibromomethane	0.50 U	0.50	1	11/07/16 15:50	
1,2-Dichlorobenzene	0.50 U	0.50	1	11/07/16 15:50	
1,4-Dichlorobenzene	0.50 U	0.50	1	11/07/16 15:50	
1,3-Dichlorobenzene	0.50 U	0.50	1	11/07/16 15:50	
Dichlorodifluoromethane	0.50 U	0.50	1	11/07/16 15:50	
1,1-Dichloroethane	0.50 U	0.50	1	11/07/16 15:50	
1,2-Dichloroethane	0.50 U	0.50	1	11/07/16 15:50	
1,1-Dichloroethene	0.50 U	0.50	1	11/07/16 15:50	
trans-1,2-Dichloroethene	0.50 U	0.50	1	11/07/16 15:50	
cis-1,2-Dichloroethene	0.50 U	0.50	1	11/07/16 15:50	
2,2-Dichloropropane	0.50 U	0.50	1	11/07/16 15:50	
1,2-Dichloropropane	0.50 U	0.50	1	11/07/16 15:50	
1,3-Dichloropropane	0.50 U	0.50	1	11/07/16 15:50	
1,1-Dichloropropene	0.50 U	0.50	1	11/07/16 15:50	
trans-1,3-Dichloropropene	0.50 U	0.50	1	11/07/16 15:50	
cis-1,3-Dichloropropene	0.50 U	0.50	1	11/07/16 15:50	
Ethylbenzene	0.50 U	0.50	1	11/07/16 15:50	
Hexachlorobutadiene	0.50 U	0.50	1	11/07/16 15:50	
Isopropylbenzene	0.50 U	0.50	1	11/07/16 15:50	
p-Isopropyltoluene	0.50 U	0.50	1	11/07/16 15:50	
Methylene Chloride	0.50 U	0.50	1	11/07/16 15:50	
Naphthalene	0.50 U	0.50	1	11/07/16 15:50	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 13:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	WAL19-Inter-1116	**Units:**	ug/L
Lab Code:	R1611538-025	**Basis:**	NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
n-Propylbenzene	0.50 U	0.50	1	11/07/16 15:50	
Styrene	0.50 U	0.50	1	11/07/16 15:50	
1,1,1,2-Tetrachloroethane	0.50 U	0.50	1	11/07/16 15:50	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	1	11/07/16 15:50	
Tetrachloroethene	0.50 U	0.50	1	11/07/16 15:50	
Toluene	0.50 U	0.50	1	11/07/16 15:50	
1,2,4-Trichlorobenzene	0.50 U	0.50	1	11/07/16 15:50	
1,2,3-Trichlorobenzene	0.50 U	0.50	1	11/07/16 15:50	
1,1,1-Trichloroethane	0.50 U	0.50	1	11/07/16 15:50	
1,1,2-Trichloroethane	0.50 U	0.50	1	11/07/16 15:50	
Trichloroethene	0.50 U	0.50	1	11/07/16 15:50	
Trichlorofluoromethane	0.50 U	0.50	1	11/07/16 15:50	
1,2,3-Trichloropropane	0.50 U	0.50	1	11/07/16 15:50	
1,3,5-Trimethylbenzene	0.50 U	0.50	1	11/07/16 15:50	
1,2,4-Trimethylbenzene	0.50 U	0.50	1	11/07/16 15:50	
Vinyl Chloride	0.50 U	0.50	1	11/07/16 15:50	
m,p-Xylenes	1.0 U	1.0	1	11/07/16 15:50	
o-Xylene	0.50 U	0.50	1	11/07/16 15:50	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	70 - 130	11/07/16 15:50	
1,2-Dichlorobenzene-d4	107	70 - 130	11/07/16 15:50	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 13:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	WAL19-Pre-1116	**Units:**	ug/L
Lab Code:	R1611538-026	**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	11/07/16 16:23	
Bromobenzene	0.50 U	0.50	1	11/07/16 16:23	
Bromochloromethane	0.50 U	0.50	1	11/07/16 16:23	
Bromodichloromethane	0.50 U	0.50	1	11/07/16 16:23	
Bromoform	0.50 U	0.50	1	11/07/16 16:23	
Bromomethane	0.50 U	0.50	1	11/07/16 16:23	
tert-Butyl Alcohol	20 U	20	1	11/07/16 16:23	
Methyl tert-Butyl Ether	0.50 U	0.50	1	11/07/16 16:23	
tert-Butylbenzene	0.50 U	0.50	1	11/07/16 16:23	
sec-Butylbenzene	0.50 U	0.50	1	11/07/16 16:23	
n-Butylbenzene	0.50 U	0.50	1	11/07/16 16:23	
Carbon Tetrachloride	0.50 U	0.50	1	11/07/16 16:23	
Chlorobenzene	0.50 U	0.50	1	11/07/16 16:23	
Chloroethane	0.50 U	0.50	1	11/07/16 16:23	
Chloroform	0.50 U	0.50	1	11/07/16 16:23	
Chloromethane	0.50 U	0.50	1	11/07/16 16:23	
1,2-Dibromo-3-chloropropane	0.50 U	0.50	1	11/07/16 16:23	
2-Chlorotoluene	0.50 U	0.50	1	11/07/16 16:23	
4-Chlorotoluene	0.50 U	0.50	1	11/07/16 16:23	
Dibromochloromethane	0.50 U	0.50	1	11/07/16 16:23	
1,2-Dibromoethane	0.50 U	0.50	1	11/07/16 16:23	
Dibromomethane	0.50 U	0.50	1	11/07/16 16:23	
1,2-Dichlorobenzene	0.50 U	0.50	1	11/07/16 16:23	
1,4-Dichlorobenzene	0.50 U	0.50	1	11/07/16 16:23	
1,3-Dichlorobenzene	0.50 U	0.50	1	11/07/16 16:23	
Dichlorodifluoromethane	0.50 U	0.50	1	11/07/16 16:23	
1,1-Dichloroethane	0.50 U	0.50	1	11/07/16 16:23	
1,2-Dichloroethane	0.50 U	0.50	1	11/07/16 16:23	
1,1-Dichloroethene	0.50 U	0.50	1	11/07/16 16:23	
trans-1,2-Dichloroethene	0.50 U	0.50	1	11/07/16 16:23	
cis-1,2-Dichloroethene	**2.6**	0.50	1	11/07/16 16:23	
2,2-Dichloropropane	0.50 U	0.50	1	11/07/16 16:23	
1,2-Dichloropropane	0.50 U	0.50	1	11/07/16 16:23	
1,3-Dichloropropane	0.50 U	0.50	1	11/07/16 16:23	
1,1-Dichloropropene	0.50 U	0.50	1	11/07/16 16:23	
trans-1,3-Dichloropropene	0.50 U	0.50	1	11/07/16 16:23	
cis-1,3-Dichloropropene	0.50 U	0.50	1	11/07/16 16:23	
Ethylbenzene	0.50 U	0.50	1	11/07/16 16:23	
Hexachlorobutadiene	0.50 U	0.50	1	11/07/16 16:23	
Isopropylbenzene	0.50 U	0.50	1	11/07/16 16:23	
p-Isopropyltoluene	0.50 U	0.50	1	11/07/16 16:23	
Methylene Chloride	0.50 U	0.50	1	11/07/16 16:23	
Naphthalene	0.50 U	0.50	1	11/07/16 16:23	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 13:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	WAL19-Pre-1116	**Units:**	ug/L
Lab Code:	R1611538-026	**Basis:**	NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result		MRL	Dil.	Date Analyzed	Q
n-Propylbenzene	0.50	U	0.50	1	11/07/16 16:23	
Styrene	0.50	U	0.50	1	11/07/16 16:23	
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1	11/07/16 16:23	
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1	11/07/16 16:23	
Tetrachloroethene	0.50	U	0.50	1	11/07/16 16:23	
Toluene	0.50	U	0.50	1	11/07/16 16:23	
1,2,4-Trichlorobenzene	0.50	U	0.50	1	11/07/16 16:23	
1,2,3-Trichlorobenzene	0.50	U	0.50	1	11/07/16 16:23	
1,1,1-Trichloroethane	0.50	U	0.50	1	11/07/16 16:23	
1,1,2-Trichloroethane	0.50	U	0.50	1	11/07/16 16:23	
Trichloroethene	**2.8**		0.50	1	11/07/16 16:23	
Trichlorofluoromethane	0.50	U	0.50	1	11/07/16 16:23	
1,2,3-Trichloropropane	0.50	U	0.50	1	11/07/16 16:23	
1,3,5-Trimethylbenzene	0.50	U	0.50	1	11/07/16 16:23	
1,2,4-Trimethylbenzene	0.50	U	0.50	1	11/07/16 16:23	
Vinyl Chloride	0.50	U	0.50	1	11/07/16 16:23	
m,p-Xylenes	1.0	U	1.0	1	11/07/16 16:23	
o-Xylene	0.50	U	0.50	1	11/07/16 16:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	110	70 - 130	11/07/16 16:23	
1,2-Dichlorobenzene-d4	99	70 - 130	11/07/16 16:23	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/02/16 10:35
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	WAL1-1116	**Units:**	ug/L
Lab Code:	R1611538-028	**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	11/07/16 16:55	
Bromobenzene	0.50 U	0.50	1	11/07/16 16:55	
Bromochloromethane	0.50 U	0.50	1	11/07/16 16:55	
Bromodichloromethane	0.50 U	0.50	1	11/07/16 16:55	
Bromoform	0.50 U	0.50	1	11/07/16 16:55	
Bromomethane	0.50 U	0.50	1	11/07/16 16:55	
tert-Butyl Alcohol	20 U	20	1	11/07/16 16:55	
Methyl tert-Butyl Ether	0.50 U	0.50	1	11/07/16 16:55	
tert-Butylbenzene	0.50 U	0.50	1	11/07/16 16:55	
sec-Butylbenzene	0.50 U	0.50	1	11/07/16 16:55	
n-Butylbenzene	0.50 U	0.50	1	11/07/16 16:55	
Carbon Tetrachloride	0.50 U	0.50	1	11/07/16 16:55	
Chlorobenzene	0.50 U	0.50	1	11/07/16 16:55	
Chloroethane	0.50 U	0.50	1	11/07/16 16:55	
Chloroform	0.50 U	0.50	1	11/07/16 16:55	
Chloromethane	0.50 U	0.50	1	11/07/16 16:55	
1,2-Dibromo-3-chloropropane	0.50 U	0.50	1	11/07/16 16:55	
2-Chlorotoluene	0.50 U	0.50	1	11/07/16 16:55	
4-Chlorotoluene	0.50 U	0.50	1	11/07/16 16:55	
Dibromochloromethane	0.50 U	0.50	1	11/07/16 16:55	
1,2-Dibromoethane	0.50 U	0.50	1	11/07/16 16:55	
Dibromomethane	0.50 U	0.50	1	11/07/16 16:55	
1,2-Dichlorobenzene	0.50 U	0.50	1	11/07/16 16:55	
1,4-Dichlorobenzene	0.50 U	0.50	1	11/07/16 16:55	
1,3-Dichlorobenzene	0.50 U	0.50	1	11/07/16 16:55	
Dichlorodifluoromethane	0.50 U	0.50	1	11/07/16 16:55	
1,1-Dichloroethane	0.50 U	0.50	1	11/07/16 16:55	
1,2-Dichloroethane	0.50 U	0.50	1	11/07/16 16:55	
1,1-Dichloroethene	0.50 U	0.50	1	11/07/16 16:55	
trans-1,2-Dichloroethene	0.50 U	0.50	1	11/07/16 16:55	
cis-1,2-Dichloroethene	0.50 U	0.50	1	11/07/16 16:55	
2,2-Dichloropropane	0.50 U	0.50	1	11/07/16 16:55	
1,2-Dichloropropane	0.50 U	0.50	1	11/07/16 16:55	
1,3-Dichloropropane	0.50 U	0.50	1	11/07/16 16:55	
1,1-Dichloropropene	0.50 U	0.50	1	11/07/16 16:55	
trans-1,3-Dichloropropene	0.50 U	0.50	1	11/07/16 16:55	
cis-1,3-Dichloropropene	0.50 U	0.50	1	11/07/16 16:55	
Ethylbenzene	0.50 U	0.50	1	11/07/16 16:55	
Hexachlorobutadiene	0.50 U	0.50	1	11/07/16 16:55	
Isopropylbenzene	0.50 U	0.50	1	11/07/16 16:55	
p-Isopropyltoluene	0.50 U	0.50	1	11/07/16 16:55	
Methylene Chloride	0.50 U	0.50	1	11/07/16 16:55	
Naphthalene	0.50 U	0.50	1	11/07/16 16:55	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/02/16 10:35
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	WAL1-1116	**Units:**	ug/L
Lab Code:	R1611538-028	**Basis:**	NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result	MRL	Dil.	Date Analyzed	Q
n-Propylbenzene	0.50 U	0.50	1	11/07/16 16:55	
Styrene	0.50 U	0.50	1	11/07/16 16:55	
1,1,1,2-Tetrachloroethane	0.50 U	0.50	1	11/07/16 16:55	
1,1,2,2-Tetrachloroethane	0.50 U	0.50	1	11/07/16 16:55	
Tetrachloroethene	0.50 U	0.50	1	11/07/16 16:55	
Toluene	0.50 U	0.50	1	11/07/16 16:55	
1,2,4-Trichlorobenzene	0.50 U	0.50	1	11/07/16 16:55	
1,2,3-Trichlorobenzene	0.50 U	0.50	1	11/07/16 16:55	
1,1,1-Trichloroethane	0.50 U	0.50	1	11/07/16 16:55	
1,1,2-Trichloroethane	0.50 U	0.50	1	11/07/16 16:55	
Trichloroethene	0.50 U	0.50	1	11/07/16 16:55	
Trichlorofluoromethane	0.50 U	0.50	1	11/07/16 16:55	
1,2,3-Trichloropropane	0.50 U	0.50	1	11/07/16 16:55	
1,3,5-Trimethylbenzene	0.50 U	0.50	1	11/07/16 16:55	
1,2,4-Trimethylbenzene	0.50 U	0.50	1	11/07/16 16:55	
Vinyl Chloride	0.50 U	0.50	1	11/07/16 16:55	
m,p-Xylenes	1.0 U	1.0	1	11/07/16 16:55	
o-Xylene	0.50 U	0.50	1	11/07/16 16:55	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	104	70 - 130	11/07/16 16:55	
1,2-Dichlorobenzene-d4	108	70 - 130	11/07/16 16:55	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 09:30
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	SWS1-1016	**Units:**	ug/L
Lab Code:	R1611538-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	Dil.	Date Analyzed	Q
Acetone	10	U	10	1	11/02/16 14:39	
Benzene	5.0	U	5.0	1	11/02/16 14:39	
Bromodichloromethane	5.0	U	5.0	1	11/02/16 14:39	
Bromoform	5.0	U	5.0	1	11/02/16 14:39	
Bromomethane	5.0	U	5.0	1	11/02/16 14:39	
2-Butanone (MEK)	10	U	10	1	11/02/16 14:39	
Carbon Disulfide	10	U	10	1	11/02/16 14:39	
Carbon Tetrachloride	5.0	U	5.0	1	11/02/16 14:39	
Chlorobenzene	5.0	U	5.0	1	11/02/16 14:39	
Chloroethane	5.0	U	5.0	1	11/02/16 14:39	
Chloroform	5.0	U	5.0	1	11/02/16 14:39	
Chloromethane	5.0	U	5.0	1	11/02/16 14:39	
Dibromochloromethane	5.0	U	5.0	1	11/02/16 14:39	
1,2-Dibromoethane	5.0	U	5.0	1	11/02/16 14:39	
1,1-Dichloroethane	5.0	U	5.0	1	11/02/16 14:39	
1,2-Dichloroethane	5.0	U	5.0	1	11/02/16 14:39	
1,1-Dichloroethene	5.0	U	5.0	1	11/02/16 14:39	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 14:39	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 14:39	
1,2-Dichloropropane	5.0	U	5.0	1	11/02/16 14:39	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 14:39	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 14:39	
Ethylbenzene	5.0	U	5.0	1	11/02/16 14:39	
2-Hexanone	10	U	10	1	11/02/16 14:39	
Methylene Chloride	5.0	U	5.0	1	11/02/16 14:39	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/02/16 14:39	
Styrene	5.0	U	5.0	1	11/02/16 14:39	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/02/16 14:39	
Tetrachloroethene	5.0	U	5.0	1	11/02/16 14:39	
Toluene	5.0	U	5.0	1	11/02/16 14:39	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/02/16 14:39	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/02/16 14:39	
Trichloroethene	5.0	U	5.0	1	11/02/16 14:39	
Vinyl Chloride	5.0	U	5.0	1	11/02/16 14:39	
o-Xylene	5.0	U	5.0	1	11/02/16 14:39	
m,p-Xylenes	5.0	U	5.0	1	11/02/16 14:39	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 09:30
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	SWS1-1016	**Units:**	ug/L
Lab Code:	R1611538-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	114	85 - 122	11/02/16 14:39	
Toluene-d8	113	87 - 121	11/02/16 14:39	
Dibromofluoromethane	114	89 - 119	11/02/16 14:39	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 09:40
Sample Matrix:	Soil	**Date Received:**	11/01/16 09:30
Sample Name:	SWS1SED-1016	**Units:**	ug/Kg
Lab Code:	R1611538-002	**Basis:**	Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	Dil.	Date Analyzed	Q
Acetone	6.4	U	6.4	1	11/03/16 17:43	
Benzene	6.4	U	6.4	1	11/03/16 17:43	
Bromodichloromethane	6.4	U	6.4	1	11/03/16 17:43	
Bromoform	6.4	U	6.4	1	11/03/16 17:43	
Bromomethane	6.4	U	6.4	1	11/03/16 17:43	
2-Butanone (MEK)	6.4	U	6.4	1	11/03/16 17:43	
Carbon Disulfide	6.4	U	6.4	1	11/03/16 17:43	
Carbon Tetrachloride	6.4	U	6.4	1	11/03/16 17:43	
Chlorobenzene	6.4	U	6.4	1	11/03/16 17:43	
Chloroethane	6.4	U	6.4	1	11/03/16 17:43	
Chloroform	6.4	U	6.4	1	11/03/16 17:43	
Chloromethane	6.4	U	6.4	1	11/03/16 17:43	
Dibromochloromethane	6.4	U	6.4	1	11/03/16 17:43	
1,2-Dibromoethane	6.4	U	6.4	1	11/03/16 17:43	
1,1-Dichloroethane	6.4	U	6.4	1	11/03/16 17:43	
1,2-Dichloroethane	6.4	U	6.4	1	11/03/16 17:43	
1,1-Dichloroethene	6.4	U	6.4	1	11/03/16 17:43	
cis-1,2-Dichloroethene	6.4	U	6.4	1	11/03/16 17:43	
trans-1,2-Dichloroethene	6.4	U	6.4	1	11/03/16 17:43	
1,2-Dichloropropane	6.4	U	6.4	1	11/03/16 17:43	
cis-1,3-Dichloropropene	6.4	U	6.4	1	11/03/16 17:43	
trans-1,3-Dichloropropene	6.4	U	6.4	1	11/03/16 17:43	
Ethylbenzene	6.4	U	6.4	1	11/03/16 17:43	
2-Hexanone	6.4	U	6.4	1	11/03/16 17:43	
Methylene Chloride	6.4	U	6.4	1	11/03/16 17:43	
4-Methyl-2-pentanone (MIBK)	6.4	U	6.4	1	11/03/16 17:43	
Styrene	6.4	U	6.4	1	11/03/16 17:43	
1,1,2,2-Tetrachloroethane	6.4	U	6.4	1	11/03/16 17:43	
Tetrachloroethene	**330**	**D**	32	5	11/07/16 13:10	
Toluene	6.4	U	6.4	1	11/03/16 17:43	
1,1,1-Trichloroethane	6.4	U	6.4	1	11/03/16 17:43	
1,1,2-Trichloroethane	6.4	U	6.4	1	11/03/16 17:43	
Trichloroethene	6.4	U	6.4	1	11/03/16 17:43	
Vinyl Chloride	6.4	U	6.4	1	11/03/16 17:43	
o-Xylene	6.4	U	6.4	1	11/03/16 17:43	
m,p-Xylenes	13	U	13	1	11/03/16 17:43	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 09:40
Sample Matrix:	Soil	**Date Received:**	11/01/16 09:30
Sample Name:	SWS1SED-1016	**Units:**	ug/Kg
Lab Code:	R1611538-002	**Basis:**	Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	51 - 136	11/03/16 17:43	
Toluene-d8	93	66 - 138	11/03/16 17:43	
Dibromofluoromethane	97	63 - 138	11/03/16 17:43	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 10:20
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	LS1-1016	**Units:**	ug/L
Lab Code:	R1611538-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	Dil.	Date Analyzed	Q
Acetone	25	U	25	2.5	11/02/16 18:01	
Benzene	13	U	13	2.5	11/02/16 18:01	
Bromodichloromethane	13	U	13	2.5	11/02/16 18:01	
Bromoform	13	U	13	2.5	11/02/16 18:01	
Bromomethane	13	U	13	2.5	11/02/16 18:01	
2-Butanone (MEK)	25	U	25	2.5	11/02/16 18:01	
Carbon Disulfide	25	U	25	2.5	11/02/16 18:01	
Carbon Tetrachloride	13	U	13	2.5	11/02/16 18:01	
Chlorobenzene	13	U	13	2.5	11/02/16 18:01	
Chloroethane	13	U	13	2.5	11/02/16 18:01	
Chloroform	13	U	13	2.5	11/02/16 18:01	
Chloromethane	13	U	13	2.5	11/02/16 18:01	
Dibromochloromethane	13	U	13	2.5	11/02/16 18:01	
1,1-Dichloroethane	13	U	13	2.5	11/02/16 18:01	
1,2-Dibromoethane	13	U	13	2.5	11/02/16 18:01	
1,2-Dichloroethane	13	U	13	2.5	11/02/16 18:01	
1,1-Dichloroethene	13	U	13	2.5	11/02/16 18:01	
cis-1,2-Dichloroethene	**240**		13	2.5	11/02/16 18:01	
trans-1,2-Dichloroethene	13	U	13	2.5	11/02/16 18:01	
1,2-Dichloropropane	13	U	13	2.5	11/02/16 18:01	
cis-1,3-Dichloropropene	13	U	13	2.5	11/02/16 18:01	
trans-1,3-Dichloropropene	13	U	13	2.5	11/02/16 18:01	
Ethylbenzene	13	U	13	2.5	11/02/16 18:01	
2-Hexanone	25	U	25	2.5	11/02/16 18:01	
Methylene Chloride	13	U	13	2.5	11/02/16 18:01	
4-Methyl-2-pentanone (MIBK)	25	U	25	2.5	11/02/16 18:01	
Styrene	13	U	13	2.5	11/02/16 18:01	
1,1,2,2-Tetrachloroethane	13	U	13	2.5	11/02/16 18:01	
Tetrachloroethene	13	U	13	2.5	11/02/16 18:01	
Toluene	13	U	13	2.5	11/02/16 18:01	
1,1,1-Trichloroethane	13	U	13	2.5	11/02/16 18:01	
1,1,2-Trichloroethane	13	U	13	2.5	11/02/16 18:01	
Trichloroethene	13	U	13	2.5	11/02/16 18:01	
Vinyl Chloride	13	U	13	2.5	11/02/16 18:01	
o-Xylene	13	U	13	2.5	11/02/16 18:01	
m,p-Xylenes	13	U	13	2.5	11/02/16 18:01	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 10:20
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	LS1-1016	**Units:**	ug/L
Lab Code:	R1611538-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	112	85 - 122	11/02/16 18:01	
Toluene-d8	113	87 - 121	11/02/16 18:01	
Dibromofluoromethane	113	89 - 119	11/02/16 18:01	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 11:05
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MH33-1016	**Units:**	ug/L
Lab Code:	R1611538-004	**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	11/02/16 15:04	
Benzene	5.0	U	5.0	1	11/02/16 15:04	
Bromodichloromethane	5.0	U	5.0	1	11/02/16 15:04	
Bromoform	5.0	U	5.0	1	11/02/16 15:04	
Bromomethane	5.0	U	5.0	1	11/02/16 15:04	
2-Butanone (MEK)	10	U	10	1	11/02/16 15:04	
Carbon Disulfide	10	U	10	1	11/02/16 15:04	
Carbon Tetrachloride	5.0	U	5.0	1	11/02/16 15:04	
Chlorobenzene	5.0	U	5.0	1	11/02/16 15:04	
Chloroethane	5.0	U	5.0	1	11/02/16 15:04	
Chloroform	5.0	U	5.0	1	11/02/16 15:04	
Chloromethane	5.0	U	5.0	1	11/02/16 15:04	
Dibromochloromethane	5.0	U	5.0	1	11/02/16 15:04	
1,2-Dibromoethane	5.0	U	5.0	1	11/02/16 15:04	
1,1-Dichloroethane	5.0	U	5.0	1	11/02/16 15:04	
1,2-Dichloroethane	5.0	U	5.0	1	11/02/16 15:04	
1,1-Dichloroethene	5.0	U	5.0	1	11/02/16 15:04	
cis-1,2-Dichloroethene	**7.1**		5.0	1	11/02/16 15:04	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 15:04	
1,2-Dichloropropane	5.0	U	5.0	1	11/02/16 15:04	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 15:04	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 15:04	
Ethylbenzene	5.0	U	5.0	1	11/02/16 15:04	
2-Hexanone	10	U	10	1	11/02/16 15:04	
Methylene Chloride	5.0	U	5.0	1	11/02/16 15:04	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/02/16 15:04	
Styrene	5.0	U	5.0	1	11/02/16 15:04	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/02/16 15:04	
Tetrachloroethene	5.0	U	5.0	1	11/02/16 15:04	
Toluene	5.0	U	5.0	1	11/02/16 15:04	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/02/16 15:04	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/02/16 15:04	
Trichloroethene	5.0	U	5.0	1	11/02/16 15:04	
Vinyl Chloride	5.0	U	5.0	1	11/02/16 15:04	
o-Xylene	5.0	U	5.0	1	11/02/16 15:04	
m,p-Xylenes	5.0	U	5.0	1	11/02/16 15:04	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 11:05
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MH33-1016	**Units:**	ug/L
Lab Code:	R1611538-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	112	85 - 122	11/02/16 15:04	
Toluene-d8	112	87 - 121	11/02/16 15:04	
Dibromofluoromethane	114	89 - 119	11/02/16 15:04	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 11:25
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MH32-1016	**Units:**	ug/L
Lab Code:	R1611538-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	Dil.	Date Analyzed	Q
Acetone	500	U	500	50	11/02/16 18:26	
Benzene	250	U	250	50	11/02/16 18:26	
Bromodichloromethane	250	U	250	50	11/02/16 18:26	
Bromoform	250	U	250	50	11/02/16 18:26	
Bromomethane	250	U	250	50	11/02/16 18:26	
2-Butanone (MEK)	500	U	500	50	11/02/16 18:26	
Carbon Disulfide	500	U	500	50	11/02/16 18:26	
Carbon Tetrachloride	250	U	250	50	11/02/16 18:26	
Chlorobenzene	250	U	250	50	11/02/16 18:26	
Chloroethane	250	U	250	50	11/02/16 18:26	
Chloroform	250	U	250	50	11/02/16 18:26	
Chloromethane	250	U	250	50	11/02/16 18:26	
Dibromochloromethane	250	U	250	50	11/02/16 18:26	
1,1-Dichloroethane	250	U	250	50	11/02/16 18:26	
1,2-Dibromoethane	250	U	250	50	11/02/16 18:26	
1,2-Dichloroethane	250	U	250	50	11/02/16 18:26	
1,1-Dichloroethene	250	U	250	50	11/02/16 18:26	
cis-1,2-Dichloroethene	**5400**		250	50	11/02/16 18:26	
trans-1,2-Dichloroethene	250	U	250	50	11/02/16 18:26	
1,2-Dichloropropane	250	U	250	50	11/02/16 18:26	
cis-1,3-Dichloropropene	250	U	250	50	11/02/16 18:26	
trans-1,3-Dichloropropene	250	U	250	50	11/02/16 18:26	
Ethylbenzene	250	U	250	50	11/02/16 18:26	
2-Hexanone	500	U	500	50	11/02/16 18:26	
Methylene Chloride	250	U	250	50	11/02/16 18:26	
4-Methyl-2-pentanone (MIBK)	500	U	500	50	11/02/16 18:26	
Styrene	250	U	250	50	11/02/16 18:26	
1,1,2,2-Tetrachloroethane	250	U	250	50	11/02/16 18:26	
Tetrachloroethene	250	U	250	50	11/02/16 18:26	
Toluene	250	U	250	50	11/02/16 18:26	
1,1,1-Trichloroethane	250	U	250	50	11/02/16 18:26	
1,1,2-Trichloroethane	250	U	250	50	11/02/16 18:26	
Trichloroethene	250	U	250	50	11/02/16 18:26	
Vinyl Chloride	250	U	250	50	11/02/16 18:26	
o-Xylene	250	U	250	50	11/02/16 18:26	
m,p-Xylenes	250	U	250	50	11/02/16 18:26	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 11:25
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MH32-1016	**Units:**	ug/L
Lab Code:	R1611538-005	**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	112	85 - 122	11/02/16 18:26	
Toluene-d8	112	87 - 121	11/02/16 18:26	
Dibromofluoromethane	115	89 - 119	11/02/16 18:26	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 11:50
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW15S-1016	**Units:**	ug/L
Lab Code:	R1611538-006	**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	11/02/16 15:29	
Benzene	5.0	U	5.0	1	11/02/16 15:29	
Bromodichloromethane	5.0	U	5.0	1	11/02/16 15:29	
Bromoform	5.0	U	5.0	1	11/02/16 15:29	
Bromomethane	5.0	U	5.0	1	11/02/16 15:29	
2-Butanone (MEK)	10	U	10	1	11/02/16 15:29	
Carbon Disulfide	10	U	10	1	11/02/16 15:29	
Carbon Tetrachloride	5.0	U	5.0	1	11/02/16 15:29	
Chlorobenzene	5.0	U	5.0	1	11/02/16 15:29	
Chloroethane	5.0	U	5.0	1	11/02/16 15:29	
Chloroform	5.0	U	5.0	1	11/02/16 15:29	
Chloromethane	5.0	U	5.0	1	11/02/16 15:29	
Dibromochloromethane	5.0	U	5.0	1	11/02/16 15:29	
1,1-Dichloroethane	5.0	U	5.0	1	11/02/16 15:29	
1,2-Dibromoethane	5.0	U	5.0	1	11/02/16 15:29	
1,2-Dichloroethane	5.0	U	5.0	1	11/02/16 15:29	
1,1-Dichloroethene	5.0	U	5.0	1	11/02/16 15:29	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 15:29	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 15:29	
1,2-Dichloropropane	5.0	U	5.0	1	11/02/16 15:29	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 15:29	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 15:29	
Ethylbenzene	5.0	U	5.0	1	11/02/16 15:29	
2-Hexanone	10	U	10	1	11/02/16 15:29	
Methylene Chloride	5.0	U	5.0	1	11/02/16 15:29	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/02/16 15:29	
Styrene	5.0	U	5.0	1	11/02/16 15:29	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/02/16 15:29	
Tetrachloroethene	5.0	U	5.0	1	11/02/16 15:29	
Toluene	5.0	U	5.0	1	11/02/16 15:29	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/02/16 15:29	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/02/16 15:29	
Trichloroethene	5.0	U	5.0	1	11/02/16 15:29	
Vinyl Chloride	5.0	U	5.0	1	11/02/16 15:29	
o-Xylene	5.0	U	5.0	1	11/02/16 15:29	
m,p-Xylenes	5.0	U	5.0	1	11/02/16 15:29	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 11:50
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW15S-1016	**Units:**	ug/L
Lab Code:	R1611538-006	**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	113	85 - 122	11/02/16 15:29	
Toluene-d8	113	87 - 121	11/02/16 15:29	
Dibromofluoromethane	115	89 - 119	11/02/16 15:29	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 13:50
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW16S-1016	**Units:**	ug/L
Lab Code:	R1611538-007	**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	11/02/16 15:54	
Benzene	5.0	U	5.0	1	11/02/16 15:54	
Bromodichloromethane	5.0	U	5.0	1	11/02/16 15:54	
Bromoform	5.0	U	5.0	1	11/02/16 15:54	
Bromomethane	5.0	U	5.0	1	11/02/16 15:54	
2-Butanone (MEK)	10	U	10	1	11/02/16 15:54	
Carbon Disulfide	10	U	10	1	11/02/16 15:54	
Carbon Tetrachloride	5.0	U	5.0	1	11/02/16 15:54	
Chlorobenzene	5.0	U	5.0	1	11/02/16 15:54	
Chloroethane	5.0	U	5.0	1	11/02/16 15:54	
Chloroform	5.0	U	5.0	1	11/02/16 15:54	
Chloromethane	5.0	U	5.0	1	11/02/16 15:54	
Dibromochloromethane	5.0	U	5.0	1	11/02/16 15:54	
1,1-Dichloroethane	5.0	U	5.0	1	11/02/16 15:54	
1,2-Dibromoethane	5.0	U	5.0	1	11/02/16 15:54	
1,2-Dichloroethane	5.0	U	5.0	1	11/02/16 15:54	
1,1-Dichloroethene	5.0	U	5.0	1	11/02/16 15:54	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 15:54	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 15:54	
1,2-Dichloropropane	5.0	U	5.0	1	11/02/16 15:54	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 15:54	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 15:54	
Ethylbenzene	5.0	U	5.0	1	11/02/16 15:54	
2-Hexanone	10	U	10	1	11/02/16 15:54	
Methylene Chloride	5.0	U	5.0	1	11/02/16 15:54	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/02/16 15:54	
Styrene	5.0	U	5.0	1	11/02/16 15:54	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/02/16 15:54	
Tetrachloroethene	5.0	U	5.0	1	11/02/16 15:54	
Toluene	5.0	U	5.0	1	11/02/16 15:54	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/02/16 15:54	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/02/16 15:54	
Trichloroethene	5.0	U	5.0	1	11/02/16 15:54	
Vinyl Chloride	5.0	U	5.0	1	11/02/16 15:54	
o-Xylene	5.0	U	5.0	1	11/02/16 15:54	
m,p-Xylenes	5.0	U	5.0	1	11/02/16 15:54	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 13:50
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW16S-1016	**Units:**	ug/L
Lab Code:	R1611538-007	**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	112	85 - 122	11/02/16 15:54	
Toluene-d8	109	87 - 121	11/02/16 15:54	
Dibromofluoromethane	115	89 - 119	11/02/16 15:54	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 12:45
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW17S-1016	**Units:**	ug/L
Lab Code:	R1611538-008	**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	11/02/16 16:20	
Benzene	5.0	U	5.0	1	11/02/16 16:20	
Bromodichloromethane	5.0	U	5.0	1	11/02/16 16:20	
Bromoform	5.0	U	5.0	1	11/02/16 16:20	
Bromomethane	5.0	U	5.0	1	11/02/16 16:20	
2-Butanone (MEK)	10	U	10	1	11/02/16 16:20	
Carbon Disulfide	10	U	10	1	11/02/16 16:20	
Carbon Tetrachloride	5.0	U	5.0	1	11/02/16 16:20	
Chlorobenzene	5.0	U	5.0	1	11/02/16 16:20	
Chloroethane	5.0	U	5.0	1	11/02/16 16:20	
Chloroform	5.0	U	5.0	1	11/02/16 16:20	
Chloromethane	5.0	U	5.0	1	11/02/16 16:20	
Dibromochloromethane	5.0	U	5.0	1	11/02/16 16:20	
1,2-Dibromoethane	5.0	U	5.0	1	11/02/16 16:20	
1,1-Dichloroethane	5.0	U	5.0	1	11/02/16 16:20	
1,2-Dichloroethane	5.0	U	5.0	1	11/02/16 16:20	
1,1-Dichloroethene	5.0	U	5.0	1	11/02/16 16:20	
cis-1,2-Dichloroethene	**54**		5.0	1	11/02/16 16:20	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 16:20	
1,2-Dichloropropane	5.0	U	5.0	1	11/02/16 16:20	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 16:20	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 16:20	
Ethylbenzene	5.0	U	5.0	1	11/02/16 16:20	
2-Hexanone	10	U	10	1	11/02/16 16:20	
Methylene Chloride	5.0	U	5.0	1	11/02/16 16:20	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/02/16 16:20	
Styrene	5.0	U	5.0	1	11/02/16 16:20	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/02/16 16:20	
Tetrachloroethene	5.0	U	5.0	1	11/02/16 16:20	
Toluene	5.0	U	5.0	1	11/02/16 16:20	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/02/16 16:20	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/02/16 16:20	
Trichloroethene	**16**		5.0	1	11/02/16 16:20	
Vinyl Chloride	5.0	U	5.0	1	11/02/16 16:20	
o-Xylene	5.0	U	5.0	1	11/02/16 16:20	
m,p-Xylenes	5.0	U	5.0	1	11/02/16 16:20	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 12:45
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW17S-1016	**Units:**	ug/L
Lab Code:	R1611538-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	110	85 - 122	11/02/16 16:20	
Toluene-d8	111	87 - 121	11/02/16 16:20	
Dibromofluoromethane	112	89 - 119	11/02/16 16:20	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 14:05
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW17D-1016	**Units:**	ug/L
Lab Code:	R1611538-009	**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	11/02/16 16:45	
Benzene	5.0	U	5.0	1	11/02/16 16:45	
Bromodichloromethane	5.0	U	5.0	1	11/02/16 16:45	
Bromoform	5.0	U	5.0	1	11/02/16 16:45	
Bromomethane	5.0	U	5.0	1	11/02/16 16:45	
2-Butanone (MEK)	10	U	10	1	11/02/16 16:45	
Carbon Disulfide	10	U	10	1	11/02/16 16:45	
Carbon Tetrachloride	5.0	U	5.0	1	11/02/16 16:45	
Chlorobenzene	5.0	U	5.0	1	11/02/16 16:45	
Chloroethane	5.0	U	5.0	1	11/02/16 16:45	
Chloroform	5.0	U	5.0	1	11/02/16 16:45	
Chloromethane	5.0	U	5.0	1	11/02/16 16:45	
Dibromochloromethane	5.0	U	5.0	1	11/02/16 16:45	
1,1-Dichloroethane	5.0	U	5.0	1	11/02/16 16:45	
1,2-Dibromoethane	5.0	U	5.0	1	11/02/16 16:45	
1,2-Dichloroethane	5.0	U	5.0	1	11/02/16 16:45	
1,1-Dichloroethene	5.0	U	5.0	1	11/02/16 16:45	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 16:45	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 16:45	
1,2-Dichloropropane	5.0	U	5.0	1	11/02/16 16:45	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 16:45	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 16:45	
Ethylbenzene	5.0	U	5.0	1	11/02/16 16:45	
2-Hexanone	10	U	10	1	11/02/16 16:45	
Methylene Chloride	5.0	U	5.0	1	11/02/16 16:45	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/02/16 16:45	
Styrene	5.0	U	5.0	1	11/02/16 16:45	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/02/16 16:45	
Tetrachloroethene	5.0	U	5.0	1	11/02/16 16:45	
Toluene	5.0	U	5.0	1	11/02/16 16:45	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/02/16 16:45	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/02/16 16:45	
Trichloroethene	5.0	U	5.0	1	11/02/16 16:45	
Vinyl Chloride	5.0	U	5.0	1	11/02/16 16:45	
o-Xylene	5.0	U	5.0	1	11/02/16 16:45	
m,p-Xylenes	5.0	U	5.0	1	11/02/16 16:45	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 14:05
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW17D-1016	**Units:**	ug/L
Lab Code:	R1611538-009	**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	115	85 - 122	11/02/16 16:45	
Toluene-d8	110	87 - 121	11/02/16 16:45	
Dibromofluoromethane	112	89 - 119	11/02/16 16:45	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 09:50
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW18S-1016	**Units:**	ug/L
Lab Code:	R1611538-010	**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	11/02/16 14:14	
Benzene	5.0	U	5.0	1	11/02/16 14:14	
Bromodichloromethane	5.0	U	5.0	1	11/02/16 14:14	
Bromoform	5.0	U	5.0	1	11/02/16 14:14	
Bromomethane	5.0	U	5.0	1	11/02/16 14:14	
2-Butanone (MEK)	10	U	10	1	11/02/16 14:14	
Carbon Disulfide	10	U	10	1	11/02/16 14:14	
Carbon Tetrachloride	5.0	U	5.0	1	11/02/16 14:14	
Chlorobenzene	5.0	U	5.0	1	11/02/16 14:14	
Chloroethane	5.0	U	5.0	1	11/02/16 14:14	
Chloroform	5.0	U	5.0	1	11/02/16 14:14	
Chloromethane	5.0	U	5.0	1	11/02/16 14:14	
Dibromochloromethane	5.0	U	5.0	1	11/02/16 14:14	
1,2-Dibromoethane	5.0	U	5.0	1	11/02/16 14:14	
1,1-Dichloroethane	5.0	U	5.0	1	11/02/16 14:14	
1,2-Dichloroethane	5.0	U	5.0	1	11/02/16 14:14	
1,1-Dichloroethene	5.0	U	5.0	1	11/02/16 14:14	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 14:14	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 14:14	
1,2-Dichloropropane	5.0	U	5.0	1	11/02/16 14:14	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 14:14	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 14:14	
Ethylbenzene	5.0	U	5.0	1	11/02/16 14:14	
2-Hexanone	10	U	10	1	11/02/16 14:14	
Methylene Chloride	5.0	U	5.0	1	11/02/16 14:14	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/02/16 14:14	
Styrene	5.0	U	5.0	1	11/02/16 14:14	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/02/16 14:14	
Tetrachloroethene	5.0	U	5.0	1	11/02/16 14:14	
Toluene	5.0	U	5.0	1	11/02/16 14:14	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/02/16 14:14	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/02/16 14:14	
Trichloroethene	5.0	U	5.0	1	11/02/16 14:14	
Vinyl Chloride	5.0	U	5.0	1	11/02/16 14:14	
o-Xylene	5.0	U	5.0	1	11/02/16 14:14	
m,p-Xylenes	5.0	U	5.0	1	11/02/16 14:14	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 09:50
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW18S-1016	**Units:**	ug/L
Lab Code:	R1611538-010	**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	114	85 - 122	11/02/16 14:14	
Toluene-d8	114	87 - 121	11/02/16 14:14	
Dibromofluoromethane	116	89 - 119	11/02/16 14:14	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 11:20
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW18D-1016	**Units:**	ug/L
Lab Code:	R1611538-011	**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	11/02/16 17:10	
Benzene	5.0	U	5.0	1	11/02/16 17:10	
Bromodichloromethane	5.0	U	5.0	1	11/02/16 17:10	
Bromoform	5.0	U	5.0	1	11/02/16 17:10	
Bromomethane	5.0	U	5.0	1	11/02/16 17:10	
2-Butanone (MEK)	10	U	10	1	11/02/16 17:10	
Carbon Disulfide	10	U	10	1	11/02/16 17:10	
Carbon Tetrachloride	5.0	U	5.0	1	11/02/16 17:10	
Chlorobenzene	5.0	U	5.0	1	11/02/16 17:10	
Chloroethane	5.0	U	5.0	1	11/02/16 17:10	
Chloroform	5.0	U	5.0	1	11/02/16 17:10	
Chloromethane	5.0	U	5.0	1	11/02/16 17:10	
Dibromochloromethane	5.0	U	5.0	1	11/02/16 17:10	
1,2-Dibromoethane	5.0	U	5.0	1	11/02/16 17:10	
1,1-Dichloroethane	5.0	U	5.0	1	11/02/16 17:10	
1,2-Dichloroethane	5.0	U	5.0	1	11/02/16 17:10	
1,1-Dichloroethene	5.0	U	5.0	1	11/02/16 17:10	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 17:10	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 17:10	
1,2-Dichloropropane	5.0	U	5.0	1	11/02/16 17:10	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 17:10	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 17:10	
Ethylbenzene	5.0	U	5.0	1	11/02/16 17:10	
2-Hexanone	10	U	10	1	11/02/16 17:10	
Methylene Chloride	5.0	U	5.0	1	11/02/16 17:10	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/02/16 17:10	
Styrene	5.0	U	5.0	1	11/02/16 17:10	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/02/16 17:10	
Tetrachloroethene	5.0	U	5.0	1	11/02/16 17:10	
Toluene	5.0	U	5.0	1	11/02/16 17:10	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/02/16 17:10	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/02/16 17:10	
Trichloroethene	5.0	U	5.0	1	11/02/16 17:10	
Vinyl Chloride	5.0	U	5.0	1	11/02/16 17:10	
o-Xylene	5.0	U	5.0	1	11/02/16 17:10	
m,p-Xylenes	5.0	U	5.0	1	11/02/16 17:10	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 11:20
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW18D-1016	**Units:**	ug/L
Lab Code:	R1611538-011	**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	112	85 - 122	11/02/16 17:10	
Toluene-d8	108	87 - 121	11/02/16 17:10	
Dibromofluoromethane	111	89 - 119	11/02/16 17:10	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 12:55
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	DUP1-1016	**Units:**	ug/L
Lab Code:	R1611538-012	**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	11/02/16 17:35	
Benzene	5.0	U	5.0	1	11/02/16 17:35	
Bromodichloromethane	5.0	U	5.0	1	11/02/16 17:35	
Bromoform	5.0	U	5.0	1	11/02/16 17:35	
Bromomethane	5.0	U	5.0	1	11/02/16 17:35	
2-Butanone (MEK)	10	U	10	1	11/02/16 17:35	
Carbon Disulfide	10	U	10	1	11/02/16 17:35	
Carbon Tetrachloride	5.0	U	5.0	1	11/02/16 17:35	
Chlorobenzene	5.0	U	5.0	1	11/02/16 17:35	
Chloroethane	5.0	U	5.0	1	11/02/16 17:35	
Chloroform	5.0	U	5.0	1	11/02/16 17:35	
Chloromethane	5.0	U	5.0	1	11/02/16 17:35	
Dibromochloromethane	5.0	U	5.0	1	11/02/16 17:35	
1,2-Dibromoethane	5.0	U	5.0	1	11/02/16 17:35	
1,1-Dichloroethane	5.0	U	5.0	1	11/02/16 17:35	
1,2-Dichloroethane	5.0	U	5.0	1	11/02/16 17:35	
1,1-Dichloroethene	5.0	U	5.0	1	11/02/16 17:35	
cis-1,2-Dichloroethene	**52**		5.0	1	11/02/16 17:35	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 17:35	
1,2-Dichloropropane	5.0	U	5.0	1	11/02/16 17:35	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 17:35	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 17:35	
Ethylbenzene	5.0	U	5.0	1	11/02/16 17:35	
2-Hexanone	10	U	10	1	11/02/16 17:35	
Methylene Chloride	5.0	U	5.0	1	11/02/16 17:35	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/02/16 17:35	
Styrene	5.0	U	5.0	1	11/02/16 17:35	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/02/16 17:35	
Tetrachloroethene	5.0	U	5.0	1	11/02/16 17:35	
Toluene	5.0	U	5.0	1	11/02/16 17:35	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/02/16 17:35	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/02/16 17:35	
Trichloroethene	**16**		5.0	1	11/02/16 17:35	
Vinyl Chloride	5.0	U	5.0	1	11/02/16 17:35	
o-Xylene	5.0	U	5.0	1	11/02/16 17:35	
m,p-Xylenes	5.0	U	5.0	1	11/02/16 17:35	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 12:55
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	DUP1-1016	**Units:**	ug/L
Lab Code:	R1611538-012	**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	114	85 - 122	11/02/16 17:35	
Toluene-d8	110	87 - 121	11/02/16 17:35	
Dibromofluoromethane	115	89 - 119	11/02/16 17:35	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 14:06
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	TRIP BLANK	**Units:**	ug/L
Lab Code:	R1611538-014	**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	11/02/16 12:32	
Benzene	5.0	U	5.0	1	11/02/16 12:32	
Bromodichloromethane	5.0	U	5.0	1	11/02/16 12:32	
Bromoform	5.0	U	5.0	1	11/02/16 12:32	
Bromomethane	5.0	U	5.0	1	11/02/16 12:32	
2-Butanone (MEK)	10	U	10	1	11/02/16 12:32	
Carbon Disulfide	10	U	10	1	11/02/16 12:32	
Carbon Tetrachloride	5.0	U	5.0	1	11/02/16 12:32	
Chlorobenzene	5.0	U	5.0	1	11/02/16 12:32	
Chloroethane	5.0	U	5.0	1	11/02/16 12:32	
Chloroform	5.0	U	5.0	1	11/02/16 12:32	
Chloromethane	5.0	U	5.0	1	11/02/16 12:32	
Dibromochloromethane	5.0	U	5.0	1	11/02/16 12:32	
1,1-Dichloroethane	5.0	U	5.0	1	11/02/16 12:32	
1,2-Dibromoethane	5.0	U	5.0	1	11/02/16 12:32	
1,2-Dichloroethane	5.0	U	5.0	1	11/02/16 12:32	
1,1-Dichloroethene	5.0	U	5.0	1	11/02/16 12:32	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 12:32	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 12:32	
1,2-Dichloropropane	5.0	U	5.0	1	11/02/16 12:32	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 12:32	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 12:32	
Ethylbenzene	5.0	U	5.0	1	11/02/16 12:32	
2-Hexanone	10	U	10	1	11/02/16 12:32	
Methylene Chloride	5.0	U	5.0	1	11/02/16 12:32	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/02/16 12:32	
Styrene	5.0	U	5.0	1	11/02/16 12:32	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/02/16 12:32	
Tetrachloroethene	5.0	U	5.0	1	11/02/16 12:32	
Toluene	5.0	U	5.0	1	11/02/16 12:32	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/02/16 12:32	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/02/16 12:32	
Trichloroethene	5.0	U	5.0	1	11/02/16 12:32	
Vinyl Chloride	5.0	U	5.0	1	11/02/16 12:32	
o-Xylene	5.0	U	5.0	1	11/02/16 12:32	
m,p-Xylenes	5.0	U	5.0	1	11/02/16 12:32	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 14:06
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	TRIP BLANK	**Units:**	ug/L
Lab Code:	R1611538-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	113	85 - 122	11/02/16 12:32	
Toluene-d8	112	87 - 121	11/02/16 12:32	
Dibromofluoromethane	115	89 - 119	11/02/16 12:32	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 10:05
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW5D-1116	**Units:**	ug/L
Lab Code:	R1611538-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	Dil.	Date Analyzed	Q
Acetone	25	U	25	2.5	11/07/16 13:21	
Benzene	13	U	13	2.5	11/07/16 13:21	
Bromodichloromethane	13	U	13	2.5	11/07/16 13:21	
Bromoform	13	U	13	2.5	11/07/16 13:21	
Bromomethane	13	U	13	2.5	11/07/16 13:21	
2-Butanone (MEK)	25	U	25	2.5	11/07/16 13:21	
Carbon Disulfide	25	U	25	2.5	11/07/16 13:21	
Carbon Tetrachloride	13	U	13	2.5	11/07/16 13:21	
Chlorobenzene	13	U	13	2.5	11/07/16 13:21	
Chloroethane	13	U	13	2.5	11/07/16 13:21	
Chloroform	13	U	13	2.5	11/07/16 13:21	
Chloromethane	13	U	13	2.5	11/07/16 13:21	
Dibromochloromethane	13	U	13	2.5	11/07/16 13:21	
1,1-Dichloroethane	13	U	13	2.5	11/07/16 13:21	
1,2-Dibromoethane	13	U	13	2.5	11/07/16 13:21	
1,2-Dichloroethane	13	U	13	2.5	11/07/16 13:21	
1,1-Dichloroethene	13	U	13	2.5	11/07/16 13:21	
cis-1,2-Dichloroethene	**310**		13	2.5	11/07/16 13:21	
trans-1,2-Dichloroethene	13	U	13	2.5	11/07/16 13:21	
1,2-Dichloropropane	13	U	13	2.5	11/07/16 13:21	
cis-1,3-Dichloropropene	13	U	13	2.5	11/07/16 13:21	
trans-1,3-Dichloropropene	13	U	13	2.5	11/07/16 13:21	
Ethylbenzene	13	U	13	2.5	11/07/16 13:21	
2-Hexanone	25	U	25	2.5	11/07/16 13:21	
Methylene Chloride	13	U	13	2.5	11/07/16 13:21	
4-Methyl-2-pentanone (MIBK)	25	U	25	2.5	11/07/16 13:21	
Styrene	13	U	13	2.5	11/07/16 13:21	
1,1,2,2-Tetrachloroethane	13	U	13	2.5	11/07/16 13:21	
Tetrachloroethene	13	U	13	2.5	11/07/16 13:21	
Toluene	13	U	13	2.5	11/07/16 13:21	
1,1,1-Trichloroethane	13	U	13	2.5	11/07/16 13:21	
1,1,2-Trichloroethane	13	U	13	2.5	11/07/16 13:21	
Trichloroethene	**50**		13	2.5	11/07/16 13:21	
Vinyl Chloride	**30**		13	2.5	11/07/16 13:21	
o-Xylene	13	U	13	2.5	11/07/16 13:21	
m,p-Xylenes	13	U	13	2.5	11/07/16 13:21	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 10:05
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW5D-1116	**Units:**	ug/L
Lab Code:	R1611538-015	**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	118	85 - 122	11/07/16 13:21	
Toluene-d8	115	87 - 121	11/07/16 13:21	
Dibromofluoromethane	118	89 - 119	11/07/16 13:21	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 11:20
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW5S-1116	**Units:**	ug/L
Lab Code:	R1611538-016	**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	11/04/16 14:31	
Benzene	5.0	U	5.0	1	11/04/16 14:31	
Bromodichloromethane	5.0	U	5.0	1	11/04/16 14:31	
Bromoform	5.0	U	5.0	1	11/04/16 14:31	
Bromomethane	5.0	U	5.0	1	11/04/16 14:31	
2-Butanone (MEK)	10	U	10	1	11/04/16 14:31	
Carbon Disulfide	10	U	10	1	11/04/16 14:31	
Carbon Tetrachloride	5.0	U	5.0	1	11/04/16 14:31	
Chlorobenzene	5.0	U	5.0	1	11/04/16 14:31	
Chloroethane	5.0	U	5.0	1	11/04/16 14:31	
Chloroform	5.0	U	5.0	1	11/04/16 14:31	
Chloromethane	5.0	U	5.0	1	11/04/16 14:31	
Dibromochloromethane	5.0	U	5.0	1	11/04/16 14:31	
1,2-Dibromoethane	5.0	U	5.0	1	11/04/16 14:31	
1,1-Dichloroethane	5.0	U	5.0	1	11/04/16 14:31	
1,2-Dichloroethane	5.0	U	5.0	1	11/04/16 14:31	
1,1-Dichloroethene	5.0	U	5.0	1	11/04/16 14:31	
cis-1,2-Dichloroethene	**180**		5.0	1	11/04/16 14:31	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 14:31	
1,2-Dichloropropane	5.0	U	5.0	1	11/04/16 14:31	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 14:31	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 14:31	
Ethylbenzene	5.0	U	5.0	1	11/04/16 14:31	
2-Hexanone	10	U	10	1	11/04/16 14:31	
Methylene Chloride	5.0	U	5.0	1	11/04/16 14:31	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/04/16 14:31	
Styrene	5.0	U	5.0	1	11/04/16 14:31	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/04/16 14:31	
Tetrachloroethene	5.0	U	5.0	1	11/04/16 14:31	
Toluene	5.0	U	5.0	1	11/04/16 14:31	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/04/16 14:31	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/04/16 14:31	
Trichloroethene	**43**		5.0	1	11/04/16 14:31	
Vinyl Chloride	**18**		5.0	1	11/04/16 14:31	
o-Xylene	5.0	U	5.0	1	11/04/16 14:31	
m,p-Xylenes	5.0	U	5.0	1	11/04/16 14:31	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 11:20
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW5S-1116	**Units:**	ug/L
Lab Code:	R1611538-016	**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	115	85 - 122	11/04/16 14:31	
Toluene-d8	111	87 - 121	11/04/16 14:31	
Dibromofluoromethane	113	89 - 119	11/04/16 14:31	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 12:50
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW4D-1116	**Units:**	ug/L
Lab Code:	R1611538-017	**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	11/04/16 14:56	
Benzene	5.0	U	5.0	1	11/04/16 14:56	
Bromodichloromethane	5.0	U	5.0	1	11/04/16 14:56	
Bromoform	5.0	U	5.0	1	11/04/16 14:56	
Bromomethane	5.0	U	5.0	1	11/04/16 14:56	
2-Butanone (MEK)	10	U	10	1	11/04/16 14:56	
Carbon Disulfide	10	U	10	1	11/04/16 14:56	
Carbon Tetrachloride	5.0	U	5.0	1	11/04/16 14:56	
Chlorobenzene	5.0	U	5.0	1	11/04/16 14:56	
Chloroethane	5.0	U	5.0	1	11/04/16 14:56	
Chloroform	5.0	U	5.0	1	11/04/16 14:56	
Chloromethane	5.0	U	5.0	1	11/04/16 14:56	
Dibromochloromethane	5.0	U	5.0	1	11/04/16 14:56	
1,2-Dibromoethane	5.0	U	5.0	1	11/04/16 14:56	
1,1-Dichloroethane	5.0	U	5.0	1	11/04/16 14:56	
1,2-Dichloroethane	5.0	U	5.0	1	11/04/16 14:56	
1,1-Dichloroethene	5.0	U	5.0	1	11/04/16 14:56	
cis-1,2-Dichloroethene	**280**	**D**	25	5	11/07/16 13:47	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 14:56	
1,2-Dichloropropane	5.0	U	5.0	1	11/04/16 14:56	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 14:56	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 14:56	
Ethylbenzene	5.0	U	5.0	1	11/04/16 14:56	
2-Hexanone	10	U	10	1	11/04/16 14:56	
Methylene Chloride	5.0	U	5.0	1	11/04/16 14:56	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/04/16 14:56	
Styrene	5.0	U	5.0	1	11/04/16 14:56	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/04/16 14:56	
Tetrachloroethene	5.0	U	5.0	1	11/04/16 14:56	
Toluene	5.0	U	5.0	1	11/04/16 14:56	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/04/16 14:56	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/04/16 14:56	
Trichloroethene	5.0	U	5.0	1	11/04/16 14:56	
Vinyl Chloride	**49**		5.0	1	11/04/16 14:56	
o-Xylene	5.0	U	5.0	1	11/04/16 14:56	
m,p-Xylenes	5.0	U	5.0	1	11/04/16 14:56	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 12:50
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW4D-1116	**Units:**	ug/L
Lab Code:	R1611538-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	114	85 - 122	11/04/16 14:56	
Toluene-d8	113	87 - 121	11/04/16 14:56	
Dibromofluoromethane	118	89 - 119	11/04/16 14:56	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 14:15
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW11S-1116	**Units:**	ug/L
Lab Code:	R1611538-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	Dil.	Date Analyzed	Q
Acetone	250	U	250	25	11/04/16 17:53	
Benzene	130	U	130	25	11/04/16 17:53	
Bromodichloromethane	130	U	130	25	11/04/16 17:53	
Bromoform	130	U	130	25	11/04/16 17:53	
Bromomethane	130	U	130	25	11/04/16 17:53	
2-Butanone (MEK)	250	U	250	25	11/04/16 17:53	
Carbon Disulfide	250	U	250	25	11/04/16 17:53	
Carbon Tetrachloride	130	U	130	25	11/04/16 17:53	
Chlorobenzene	130	U	130	25	11/04/16 17:53	
Chloroethane	130	U	130	25	11/04/16 17:53	
Chloroform	130	U	130	25	11/04/16 17:53	
Chloromethane	130	U	130	25	11/04/16 17:53	
Dibromochloromethane	130	U	130	25	11/04/16 17:53	
1,2-Dibromoethane	130	U	130	25	11/04/16 17:53	
1,1-Dichloroethane	130	U	130	25	11/04/16 17:53	
1,2-Dichloroethane	130	U	130	25	11/04/16 17:53	
1,1-Dichloroethene	130	U	130	25	11/04/16 17:53	
cis-1,2-Dichloroethene	**350**		130	25	11/04/16 17:53	
trans-1,2-Dichloroethene	130	U	130	25	11/04/16 17:53	
1,2-Dichloropropane	130	U	130	25	11/04/16 17:53	
cis-1,3-Dichloropropene	130	U	130	25	11/04/16 17:53	
trans-1,3-Dichloropropene	130	U	130	25	11/04/16 17:53	
Ethylbenzene	130	U	130	25	11/04/16 17:53	
2-Hexanone	250	U	250	25	11/04/16 17:53	
Methylene Chloride	130	U	130	25	11/04/16 17:53	
4-Methyl-2-pentanone (MIBK)	250	U	250	25	11/04/16 17:53	
Styrene	130	U	130	25	11/04/16 17:53	
1,1,2,2-Tetrachloroethane	130	U	130	25	11/04/16 17:53	
Tetrachloroethene	130	U	130	25	11/04/16 17:53	
Toluene	130	U	130	25	11/04/16 17:53	
1,1,1-Trichloroethane	130	U	130	25	11/04/16 17:53	
1,1,2-Trichloroethane	130	U	130	25	11/04/16 17:53	
Trichloroethene	**3500**		130	25	11/04/16 17:53	
Vinyl Chloride	130	U	130	25	11/04/16 17:53	
o-Xylene	130	U	130	25	11/04/16 17:53	
m,p-Xylenes	130	U	130	25	11/04/16 17:53	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 14:15
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW11S-1116	**Units:**	ug/L
Lab Code:	R1611538-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	114	85 - 122	11/04/16 17:53	
Toluene-d8	112	87 - 121	11/04/16 17:53	
Dibromofluoromethane	114	89 - 119	11/04/16 17:53	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 09:25
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	CW4A-1116	**Units:**	ug/L
Lab Code:	R1611538-019	**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	11/04/16 15:22	
Benzene	5.0	U	5.0	1	11/04/16 15:22	
Bromodichloromethane	5.0	U	5.0	1	11/04/16 15:22	
Bromoform	5.0	U	5.0	1	11/04/16 15:22	
Bromomethane	5.0	U	5.0	1	11/04/16 15:22	
2-Butanone (MEK)	10	U	10	1	11/04/16 15:22	
Carbon Disulfide	10	U	10	1	11/04/16 15:22	
Carbon Tetrachloride	5.0	U	5.0	1	11/04/16 15:22	
Chlorobenzene	5.0	U	5.0	1	11/04/16 15:22	
Chloroethane	5.0	U	5.0	1	11/04/16 15:22	
Chloroform	5.0	U	5.0	1	11/04/16 15:22	
Chloromethane	5.0	U	5.0	1	11/04/16 15:22	
Dibromochloromethane	5.0	U	5.0	1	11/04/16 15:22	
1,2-Dibromoethane	5.0	U	5.0	1	11/04/16 15:22	
1,1-Dichloroethane	5.0	U	5.0	1	11/04/16 15:22	
1,2-Dichloroethane	5.0	U	5.0	1	11/04/16 15:22	
1,1-Dichloroethene	5.0	U	5.0	1	11/04/16 15:22	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 15:22	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 15:22	
1,2-Dichloropropane	5.0	U	5.0	1	11/04/16 15:22	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 15:22	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 15:22	
Ethylbenzene	5.0	U	5.0	1	11/04/16 15:22	
2-Hexanone	10	U	10	1	11/04/16 15:22	
Methylene Chloride	5.0	U	5.0	1	11/04/16 15:22	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/04/16 15:22	
Styrene	5.0	U	5.0	1	11/04/16 15:22	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/04/16 15:22	
Tetrachloroethene	5.0	U	5.0	1	11/04/16 15:22	
Toluene	5.0	U	5.0	1	11/04/16 15:22	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/04/16 15:22	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/04/16 15:22	
Trichloroethene	5.0	U	5.0	1	11/04/16 15:22	
Vinyl Chloride	5.0	U	5.0	1	11/04/16 15:22	
o-Xylene	5.0	U	5.0	1	11/04/16 15:22	
m,p-Xylenes	5.0	U	5.0	1	11/04/16 15:22	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 09:25
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	CW4A-1116	**Units:**	ug/L
Lab Code:	R1611538-019	**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	115	85 - 122	11/04/16 15:22	
Toluene-d8	111	87 - 121	11/04/16 15:22	
Dibromofluoromethane	116	89 - 119	11/04/16 15:22	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 10:25
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	CW4B-1116	**Units:**	ug/L
Lab Code:	R1611538-020	**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	11/04/16 15:47	
Benzene	5.0	U	5.0	1	11/04/16 15:47	
Bromodichloromethane	5.0	U	5.0	1	11/04/16 15:47	
Bromoform	5.0	U	5.0	1	11/04/16 15:47	
Bromomethane	5.0	U	5.0	1	11/04/16 15:47	
2-Butanone (MEK)	10	U	10	1	11/04/16 15:47	
Carbon Disulfide	10	U	10	1	11/04/16 15:47	
Carbon Tetrachloride	5.0	U	5.0	1	11/04/16 15:47	
Chlorobenzene	5.0	U	5.0	1	11/04/16 15:47	
Chloroethane	5.0	U	5.0	1	11/04/16 15:47	
Chloroform	5.0	U	5.0	1	11/04/16 15:47	
Chloromethane	5.0	U	5.0	1	11/04/16 15:47	
Dibromochloromethane	5.0	U	5.0	1	11/04/16 15:47	
1,2-Dibromoethane	5.0	U	5.0	1	11/04/16 15:47	
1,1-Dichloroethane	5.0	U	5.0	1	11/04/16 15:47	
1,2-Dichloroethane	5.0	U	5.0	1	11/04/16 15:47	
1,1-Dichloroethene	5.0	U	5.0	1	11/04/16 15:47	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 15:47	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 15:47	
1,2-Dichloropropane	5.0	U	5.0	1	11/04/16 15:47	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 15:47	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 15:47	
Ethylbenzene	5.0	U	5.0	1	11/04/16 15:47	
2-Hexanone	10	U	10	1	11/04/16 15:47	
Methylene Chloride	5.0	U	5.0	1	11/04/16 15:47	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/04/16 15:47	
Styrene	5.0	U	5.0	1	11/04/16 15:47	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/04/16 15:47	
Tetrachloroethene	5.0	U	5.0	1	11/04/16 15:47	
Toluene	5.0	U	5.0	1	11/04/16 15:47	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/04/16 15:47	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/04/16 15:47	
Trichloroethene	5.0	U	5.0	1	11/04/16 15:47	
Vinyl Chloride	5.0	U	5.0	1	11/04/16 15:47	
o-Xylene	5.0	U	5.0	1	11/04/16 15:47	
m,p-Xylenes	5.0	U	5.0	1	11/04/16 15:47	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 10:25
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	CW4B-1116	**Units:**	ug/L
Lab Code:	R1611538-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	116	85 - 122	11/04/16 15:47	
Toluene-d8	111	87 - 121	11/04/16 15:47	
Dibromofluoromethane	118	89 - 119	11/04/16 15:47	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 12:10
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	CW3A-1116	**Units:**	ug/L
Lab Code:	R1611538-021	**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	11/04/16 16:12	
Benzene	5.0	U	5.0	1	11/04/16 16:12	
Bromodichloromethane	5.0	U	5.0	1	11/04/16 16:12	
Bromoform	5.0	U	5.0	1	11/04/16 16:12	
Bromomethane	5.0	U	5.0	1	11/04/16 16:12	
2-Butanone (MEK)	10	U	10	1	11/04/16 16:12	
Carbon Disulfide	10	U	10	1	11/04/16 16:12	
Carbon Tetrachloride	5.0	U	5.0	1	11/04/16 16:12	
Chlorobenzene	5.0	U	5.0	1	11/04/16 16:12	
Chloroethane	5.0	U	5.0	1	11/04/16 16:12	
Chloroform	5.0	U	5.0	1	11/04/16 16:12	
Chloromethane	5.0	U	5.0	1	11/04/16 16:12	
Dibromochloromethane	5.0	U	5.0	1	11/04/16 16:12	
1,2-Dibromoethane	5.0	U	5.0	1	11/04/16 16:12	
1,1-Dichloroethane	5.0	U	5.0	1	11/04/16 16:12	
1,2-Dichloroethane	5.0	U	5.0	1	11/04/16 16:12	
1,1-Dichloroethene	5.0	U	5.0	1	11/04/16 16:12	
cis-1,2-Dichloroethene	**6.5**		5.0	1	11/04/16 16:12	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 16:12	
1,2-Dichloropropane	5.0	U	5.0	1	11/04/16 16:12	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 16:12	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 16:12	
Ethylbenzene	5.0	U	5.0	1	11/04/16 16:12	
2-Hexanone	10	U	10	1	11/04/16 16:12	
Methylene Chloride	5.0	U	5.0	1	11/04/16 16:12	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/04/16 16:12	
Styrene	5.0	U	5.0	1	11/04/16 16:12	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/04/16 16:12	
Tetrachloroethene	5.0	U	5.0	1	11/04/16 16:12	
Toluene	5.0	U	5.0	1	11/04/16 16:12	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/04/16 16:12	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/04/16 16:12	
Trichloroethene	**33**		5.0	1	11/04/16 16:12	
Vinyl Chloride	5.0	U	5.0	1	11/04/16 16:12	
o-Xylene	5.0	U	5.0	1	11/04/16 16:12	
m,p-Xylenes	5.0	U	5.0	1	11/04/16 16:12	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 12:10
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	CW3A-1116	**Units:**	ug/L
Lab Code:	R1611538-021	**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	114	85 - 122	11/04/16 16:12	
Toluene-d8	111	87 - 121	11/04/16 16:12	
Dibromofluoromethane	115	89 - 119	11/04/16 16:12	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 13:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	CW3B-1116	**Units:**	ug/L
Lab Code:	R1611538-022	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result		MRL	Dil.	Date Analyzed	Q
Acetone	25	U	25	2.5	11/04/16 18:19	
Benzene	13	U	13	2.5	11/04/16 18:19	
Bromodichloromethane	13	U	13	2.5	11/04/16 18:19	
Bromoform	13	U	13	2.5	11/04/16 18:19	
Bromomethane	13	U	13	2.5	11/04/16 18:19	
2-Butanone (MEK)	25	U	25	2.5	11/04/16 18:19	
Carbon Disulfide	25	U	25	2.5	11/04/16 18:19	
Carbon Tetrachloride	13	U	13	2.5	11/04/16 18:19	
Chlorobenzene	13	U	13	2.5	11/04/16 18:19	
Chloroethane	13	U	13	2.5	11/04/16 18:19	
Chloroform	13	U	13	2.5	11/04/16 18:19	
Chloromethane	13	U	13	2.5	11/04/16 18:19	
Dibromochloromethane	13	U	13	2.5	11/04/16 18:19	
1,2-Dibromoethane	13	U	13	2.5	11/04/16 18:19	
1,1-Dichloroethane	13	U	13	2.5	11/04/16 18:19	
1,2-Dichloroethane	13	U	13	2.5	11/04/16 18:19	
1,1-Dichloroethene	13	U	13	2.5	11/04/16 18:19	
cis-1,2-Dichloroethene	**91**		13	2.5	11/04/16 18:19	
trans-1,2-Dichloroethene	13	U	13	2.5	11/04/16 18:19	
1,2-Dichloropropane	13	U	13	2.5	11/04/16 18:19	
cis-1,3-Dichloropropene	13	U	13	2.5	11/04/16 18:19	
trans-1,3-Dichloropropene	13	U	13	2.5	11/04/16 18:19	
Ethylbenzene	13	U	13	2.5	11/04/16 18:19	
2-Hexanone	25	U	25	2.5	11/04/16 18:19	
Methylene Chloride	13	U	13	2.5	11/04/16 18:19	
4-Methyl-2-pentanone (MIBK)	25	U	25	2.5	11/04/16 18:19	
Styrene	13	U	13	2.5	11/04/16 18:19	
1,1,2,2-Tetrachloroethane	13	U	13	2.5	11/04/16 18:19	
Tetrachloroethene	13	U	13	2.5	11/04/16 18:19	
Toluene	13	U	13	2.5	11/04/16 18:19	
1,1,1-Trichloroethane	13	U	13	2.5	11/04/16 18:19	
1,1,2-Trichloroethane	13	U	13	2.5	11/04/16 18:19	
Trichloroethene	**440**		13	2.5	11/04/16 18:19	
Vinyl Chloride	13	U	13	2.5	11/04/16 18:19	
o-Xylene	13	U	13	2.5	11/04/16 18:19	
m,p-Xylenes	13	U	13	2.5	11/04/16 18:19	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 13:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	CW3B-1116	**Units:**	ug/L
Lab Code:	R1611538-022	**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	118	85 - 122	11/04/16 18:19	
Toluene-d8	115	87 - 121	11/04/16 18:19	
Dibromofluoromethane	115	89 - 119	11/04/16 18:19	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/02/16 10:30
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW3D-1116	**Units:**	ug/L
Lab Code:	R1611538-027	**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	11/04/16 16:37	
Benzene	5.0	U	5.0	1	11/04/16 16:37	
Bromodichloromethane	5.0	U	5.0	1	11/04/16 16:37	
Bromoform	5.0	U	5.0	1	11/04/16 16:37	
Bromomethane	5.0	U	5.0	1	11/04/16 16:37	
2-Butanone (MEK)	10	U	10	1	11/04/16 16:37	
Carbon Disulfide	10	U	10	1	11/04/16 16:37	
Carbon Tetrachloride	5.0	U	5.0	1	11/04/16 16:37	
Chlorobenzene	5.0	U	5.0	1	11/04/16 16:37	
Chloroethane	5.0	U	5.0	1	11/04/16 16:37	
Chloroform	5.0	U	5.0	1	11/04/16 16:37	
Chloromethane	5.0	U	5.0	1	11/04/16 16:37	
Dibromochloromethane	5.0	U	5.0	1	11/04/16 16:37	
1,2-Dibromoethane	5.0	U	5.0	1	11/04/16 16:37	
1,1-Dichloroethane	5.0	U	5.0	1	11/04/16 16:37	
1,2-Dichloroethane	5.0	U	5.0	1	11/04/16 16:37	
1,1-Dichloroethene	5.0	U	5.0	1	11/04/16 16:37	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 16:37	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 16:37	
1,2-Dichloropropane	5.0	U	5.0	1	11/04/16 16:37	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 16:37	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 16:37	
Ethylbenzene	5.0	U	5.0	1	11/04/16 16:37	
2-Hexanone	10	U	10	1	11/04/16 16:37	
Methylene Chloride	5.0	U	5.0	1	11/04/16 16:37	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/04/16 16:37	
Styrene	5.0	U	5.0	1	11/04/16 16:37	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/04/16 16:37	
Tetrachloroethene	5.0	U	5.0	1	11/04/16 16:37	
Toluene	5.0	U	5.0	1	11/04/16 16:37	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/04/16 16:37	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/04/16 16:37	
Trichloroethene	5.0	U	5.0	1	11/04/16 16:37	
Vinyl Chloride	5.0	U	5.0	1	11/04/16 16:37	
o-Xylene	5.0	U	5.0	1	11/04/16 16:37	
m,p-Xylenes	5.0	U	5.0	1	11/04/16 16:37	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/02/16 10:30
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW3D-1116	**Units:**	ug/L
Lab Code:	R1611538-027	**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	115	85 - 122	11/04/16 16:37	
Toluene-d8	110	87 - 121	11/04/16 16:37	
Dibromofluoromethane	114	89 - 119	11/04/16 16:37	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/02/16 10:25
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	EB1-1116	**Units:**	ug/L
Lab Code:	R1611538-029	**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	11/04/16 12:49	
Benzene	5.0	U	5.0	1	11/04/16 12:49	
Bromodichloromethane	5.0	U	5.0	1	11/04/16 12:49	
Bromoform	5.0	U	5.0	1	11/04/16 12:49	
Bromomethane	5.0	U	5.0	1	11/04/16 12:49	
2-Butanone (MEK)	10	U	10	1	11/04/16 12:49	
Carbon Disulfide	10	U	10	1	11/04/16 12:49	
Carbon Tetrachloride	5.0	U	5.0	1	11/04/16 12:49	
Chlorobenzene	5.0	U	5.0	1	11/04/16 12:49	
Chloroethane	5.0	U	5.0	1	11/04/16 12:49	
Chloroform	5.0	U	5.0	1	11/04/16 12:49	
Chloromethane	5.0	U	5.0	1	11/04/16 12:49	
Dibromochloromethane	5.0	U	5.0	1	11/04/16 12:49	
1,1-Dichloroethane	5.0	U	5.0	1	11/04/16 12:49	
1,2-Dibromoethane	5.0	U	5.0	1	11/04/16 12:49	
1,2-Dichloroethane	5.0	U	5.0	1	11/04/16 12:49	
1,1-Dichloroethene	5.0	U	5.0	1	11/04/16 12:49	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 12:49	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 12:49	
1,2-Dichloropropane	5.0	U	5.0	1	11/04/16 12:49	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 12:49	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 12:49	
Ethylbenzene	5.0	U	5.0	1	11/04/16 12:49	
2-Hexanone	10	U	10	1	11/04/16 12:49	
Methylene Chloride	5.0	U	5.0	1	11/04/16 12:49	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/04/16 12:49	
Styrene	5.0	U	5.0	1	11/04/16 12:49	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/04/16 12:49	
Tetrachloroethene	5.0	U	5.0	1	11/04/16 12:49	
Toluene	5.0	U	5.0	1	11/04/16 12:49	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/04/16 12:49	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/04/16 12:49	
Trichloroethene	5.0	U	5.0	1	11/04/16 12:49	
Vinyl Chloride	5.0	U	5.0	1	11/04/16 12:49	
o-Xylene	5.0	U	5.0	1	11/04/16 12:49	
m,p-Xylenes	5.0	U	5.0	1	11/04/16 12:49	

ALS Group USA, Corp.
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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/02/16 10:25
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	EB1-1116	**Units:**	ug/L
Lab Code:	R1611538-029	**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	112	85 - 122	11/04/16 12:49	
Toluene-d8	106	87 - 121	11/04/16 12:49	
Dibromofluoromethane	116	89 - 119	11/04/16 12:49	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/02/16 12:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW3S-1116	**Units:**	ug/L
Lab Code:	R1611538-030	**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	11/04/16 17:03	
Benzene	5.0	U	5.0	1	11/04/16 17:03	
Bromodichloromethane	5.0	U	5.0	1	11/04/16 17:03	
Bromoform	5.0	U	5.0	1	11/04/16 17:03	
Bromomethane	5.0	U	5.0	1	11/04/16 17:03	
2-Butanone (MEK)	10	U	10	1	11/04/16 17:03	
Carbon Disulfide	10	U	10	1	11/04/16 17:03	
Carbon Tetrachloride	5.0	U	5.0	1	11/04/16 17:03	
Chlorobenzene	5.0	U	5.0	1	11/04/16 17:03	
Chloroethane	5.0	U	5.0	1	11/04/16 17:03	
Chloroform	5.0	U	5.0	1	11/04/16 17:03	
Chloromethane	5.0	U	5.0	1	11/04/16 17:03	
Dibromochloromethane	5.0	U	5.0	1	11/04/16 17:03	
1,1-Dichloroethane	5.0	U	5.0	1	11/04/16 17:03	
1,2-Dibromoethane	5.0	U	5.0	1	11/04/16 17:03	
1,2-Dichloroethane	5.0	U	5.0	1	11/04/16 17:03	
1,1-Dichloroethene	5.0	U	5.0	1	11/04/16 17:03	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 17:03	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 17:03	
1,2-Dichloropropane	5.0	U	5.0	1	11/04/16 17:03	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 17:03	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 17:03	
Ethylbenzene	5.0	U	5.0	1	11/04/16 17:03	
2-Hexanone	10	U	10	1	11/04/16 17:03	
Methylene Chloride	5.0	U	5.0	1	11/04/16 17:03	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/04/16 17:03	
Styrene	5.0	U	5.0	1	11/04/16 17:03	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/04/16 17:03	
Tetrachloroethene	5.0	U	5.0	1	11/04/16 17:03	
Toluene	5.0	U	5.0	1	11/04/16 17:03	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/04/16 17:03	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/04/16 17:03	
Trichloroethene	5.0	U	5.0	1	11/04/16 17:03	
Vinyl Chloride	5.0	U	5.0	1	11/04/16 17:03	
o-Xylene	5.0	U	5.0	1	11/04/16 17:03	
m,p-Xylenes	5.0	U	5.0	1	11/04/16 17:03	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/02/16 12:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW3S-1116	**Units:**	ug/L
Lab Code:	R1611538-030	**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	113	85 - 122	11/04/16 17:03	
Toluene-d8	108	87 - 121	11/04/16 17:03	
Dibromofluoromethane	113	89 - 119	11/04/16 17:03	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/02/16 12:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	TRIP BLANK	**Units:**	ug/L
Lab Code:	R1611538-031	**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	11/04/16 12:24	
Benzene	5.0	U	5.0	1	11/04/16 12:24	
Bromodichloromethane	5.0	U	5.0	1	11/04/16 12:24	
Bromoform	5.0	U	5.0	1	11/04/16 12:24	
Bromomethane	5.0	U	5.0	1	11/04/16 12:24	
2-Butanone (MEK)	10	U	10	1	11/04/16 12:24	
Carbon Disulfide	10	U	10	1	11/04/16 12:24	
Carbon Tetrachloride	5.0	U	5.0	1	11/04/16 12:24	
Chlorobenzene	5.0	U	5.0	1	11/04/16 12:24	
Chloroethane	5.0	U	5.0	1	11/04/16 12:24	
Chloroform	5.0	U	5.0	1	11/04/16 12:24	
Chloromethane	5.0	U	5.0	1	11/04/16 12:24	
Dibromochloromethane	5.0	U	5.0	1	11/04/16 12:24	
1,1-Dichloroethane	5.0	U	5.0	1	11/04/16 12:24	
1,2-Dibromoethane	5.0	U	5.0	1	11/04/16 12:24	
1,2-Dichloroethane	5.0	U	5.0	1	11/04/16 12:24	
1,1-Dichloroethene	5.0	U	5.0	1	11/04/16 12:24	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 12:24	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 12:24	
1,2-Dichloropropane	5.0	U	5.0	1	11/04/16 12:24	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 12:24	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 12:24	
Ethylbenzene	5.0	U	5.0	1	11/04/16 12:24	
2-Hexanone	10	U	10	1	11/04/16 12:24	
Methylene Chloride	5.0	U	5.0	1	11/04/16 12:24	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/04/16 12:24	
Styrene	5.0	U	5.0	1	11/04/16 12:24	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/04/16 12:24	
Tetrachloroethene	5.0	U	5.0	1	11/04/16 12:24	
Toluene	5.0	U	5.0	1	11/04/16 12:24	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/04/16 12:24	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/04/16 12:24	
Trichloroethene	5.0	U	5.0	1	11/04/16 12:24	
Vinyl Chloride	5.0	U	5.0	1	11/04/16 12:24	
o-Xylene	5.0	U	5.0	1	11/04/16 12:24	
m,p-Xylenes	5.0	U	5.0	1	11/04/16 12:24	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/02/16 12:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	TRIP BLANK	**Units:**	ug/L
Lab Code:	R1611538-031	**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	113	85 - 122	11/04/16 12:24	
Toluene-d8	107	87 - 121	11/04/16 12:24	
Dibromofluoromethane	115	89 - 119	11/04/16 12:24	

Metals

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 09:30
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	SWS1-1016	**Basis:**	NA
Lab Code:	R1611538-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/07/16 19:32	11/03/16	
Barium, Total	6010C	**21**		ug/L	20	1	11/07/16 19:32	11/03/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/07/16 19:32	11/03/16	
Calcium, Total	6010C	**23800**		ug/L	1000	1	11/07/16 19:32	11/03/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/07/16 19:32	11/03/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/07/16 19:32	11/03/16	
Iron, Total	6010C	**370**		ug/L	100	1	11/07/16 19:32	11/03/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/07/16 19:32	11/03/16	
Magnesium, Total	6010C	**7900**		ug/L	1000	1	11/07/16 19:32	11/03/16	
Manganese, Total	6010C	**12**		ug/L	10	1	11/07/16 19:32	11/03/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/07/16 19:32	11/03/16	
Potassium, Total	6010C	**2800**		ug/L	2000	1	11/07/16 19:32	11/03/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/07/16 19:32	11/03/16	
Sodium, Total	6010C	**6900**		ug/L	1000	1	11/07/16 19:32	11/03/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/07/16 19:32	11/03/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 09:40
Sample Matrix:	Soil	**Date Received:**	11/01/16 09:30
Sample Name:	SWS1SED-1016	**Basis:**	Dry
Lab Code:	R1611538-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	**8.1**	mg/Kg	1.2	1	11/04/16 19:47	11/03/16	
Barium, Total	6010C	**57.7**	mg/Kg	2.5	1	11/04/16 19:47	11/03/16	
Cadmium, Total	6010C	0.62 U	mg/Kg	0.62	1	11/04/16 19:47	11/03/16	
Calcium, Total	6010C	**46400**	mg/Kg	1200	10	11/07/16 14:40	11/03/16	
Chromium, Total	6010C	**8.7**	mg/Kg	1.2	1	11/04/16 19:47	11/03/16	
Copper, Total	6010C	**16.2**	mg/Kg	2.5	1	11/04/16 19:47	11/03/16	
Iron, Total	6010C	**28200**	mg/Kg	120	10	11/07/16 14:40	11/03/16	
Lead, Total	6010C	**8.4**	mg/Kg	6.2	1	11/04/16 19:47	11/03/16	
Magnesium, Total	6010C	**7940**	mg/Kg	120	1	11/04/16 19:47	11/03/16	
Manganese, Total	6010C	**571**	mg/Kg	1.2	1	11/04/16 19:47	11/03/16	
Nickel, Total	6010C	**16.6**	mg/Kg	4.9	1	11/04/16 19:47	11/03/16	
Potassium, Total	6010C	**800**	mg/Kg	250	1	11/04/16 19:47	11/03/16	
Selenium, Total	6010C	1.2 U	mg/Kg	1.2	1	11/04/16 19:47	11/03/16	
Sodium, Total	6010C	120 U	mg/Kg	120	1	11/04/16 19:47	11/03/16	
Zinc, Total	6010C	**414**	mg/Kg	25	10	11/07/16 14:40	11/03/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 10:20
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	LS1-1016	**Basis:**	NA
Lab Code:	R1611538-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/07/16 19:35	11/03/16	
Barium, Total	6010C	**53**		ug/L	20	1	11/07/16 19:35	11/03/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/07/16 19:35	11/03/16	
Calcium, Total	6010C	**57600**		ug/L	5000	5	11/09/16 17:48	11/03/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/07/16 19:35	11/03/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/07/16 19:35	11/03/16	
Iron, Total	6010C	**1450**		ug/L	100	1	11/07/16 19:35	11/03/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/07/16 19:35	11/03/16	
Magnesium, Total	6010C	**14000**		ug/L	1000	1	11/07/16 19:35	11/03/16	
Manganese, Total	6010C	**1290**		ug/L	10	1	11/07/16 19:35	11/03/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/07/16 19:35	11/03/16	
Potassium, Total	6010C	**2400**		ug/L	2000	1	11/07/16 19:35	11/03/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/07/16 19:35	11/03/16	
Sodium, Total	6010C	**8000**		ug/L	1000	1	11/07/16 19:35	11/03/16	
Zinc, Total	6010C	**151**		ug/L	20	1	11/07/16 19:35	11/03/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 11:05
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MH33-1016	**Basis:**	NA
Lab Code:	R1611538-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/07/16 19:39	11/03/16	
Barium, Total	6010C	**44**		ug/L	20	1	11/07/16 19:39	11/03/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/07/16 19:39	11/03/16	
Calcium, Total	6010C	**49000**		ug/L	5000	5	11/09/16 17:51	11/03/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/07/16 19:39	11/03/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/07/16 19:39	11/03/16	
Iron, Total	6010C	**1090**		ug/L	100	1	11/07/16 19:39	11/03/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/07/16 19:39	11/03/16	
Magnesium, Total	6010C	**13200**		ug/L	1000	1	11/07/16 19:39	11/03/16	
Manganese, Total	6010C	**501**		ug/L	10	1	11/07/16 19:39	11/03/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/07/16 19:39	11/03/16	
Potassium, Total	6010C	2000	U	ug/L	2000	1	11/07/16 19:39	11/03/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/07/16 19:39	11/03/16	
Sodium, Total	6010C	**2800**		ug/L	1000	1	11/07/16 19:39	11/03/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/07/16 19:39	11/03/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 11:25
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MH32-1016	**Basis:**	NA
Lab Code:	R1611538-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/07/16 19:42	11/03/16	
Barium, Total	6010C	**70**		ug/L	20	1	11/07/16 19:42	11/03/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/07/16 19:42	11/03/16	
Calcium, Total	6010C	**65000**		ug/L	5000	5	11/09/16 17:54	11/03/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/07/16 19:42	11/03/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/07/16 19:42	11/03/16	
Iron, Total	6010C	**8560**		ug/L	100	1	11/07/16 19:42	11/03/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/07/16 19:42	11/03/16	
Magnesium, Total	6010C	**12100**		ug/L	1000	1	11/07/16 19:42	11/03/16	
Manganese, Total	6010C	**1370**		ug/L	10	1	11/07/16 19:42	11/03/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/07/16 19:42	11/03/16	
Potassium, Total	6010C	2000	U	ug/L	2000	1	11/07/16 19:42	11/03/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/07/16 19:42	11/03/16	
Sodium, Total	6010C	**2500**		ug/L	1000	1	11/07/16 19:42	11/03/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/07/16 19:42	11/03/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 11:50
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW15S-1016	**Basis:**	NA
Lab Code:	R1611538-006		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	11/07/16 19:45	11/03/16	
Barium, Total	6010C	20 U	ug/L	20	1	11/07/16 19:45	11/03/16	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/07/16 19:45	11/03/16	
Calcium, Total	6010C	**2200**	ug/L	1000	1	11/07/16 19:45	11/03/16	
Chromium, Total	6010C	10 U	ug/L	10	1	11/07/16 19:45	11/03/16	
Copper, Total	6010C	20 U	ug/L	20	1	11/07/16 19:45	11/03/16	
Iron, Total	6010C	100 U	ug/L	100	1	11/07/16 19:45	11/03/16	
Lead, Total	6010C	50 U	ug/L	50	1	11/07/16 19:45	11/03/16	
Magnesium, Total	6010C	**1500**	ug/L	1000	1	11/07/16 19:45	11/03/16	
Manganese, Total	6010C	10 U	ug/L	10	1	11/07/16 19:45	11/03/16	
Nickel, Total	6010C	40 U	ug/L	40	1	11/07/16 19:45	11/03/16	
Potassium, Total	6010C	2000 U	ug/L	2000	1	11/07/16 19:45	11/03/16	
Selenium, Total	6010C	10 U	ug/L	10	1	11/07/16 19:45	11/03/16	
Sodium, Total	6010C	**1500**	ug/L	1000	1	11/07/16 19:45	11/03/16	
Zinc, Total	6010C	20 U	ug/L	20	1	11/07/16 19:45	11/03/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 13:50
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW16S-1016	**Basis:**	NA
Lab Code:	R1611538-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	11/07/16 19:48	11/03/16	
Barium, Total	6010C	20 U	ug/L	20	1	11/07/16 19:48	11/03/16	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/07/16 19:48	11/03/16	
Calcium, Total	6010C	**16200**	ug/L	1000	1	11/07/16 19:48	11/03/16	
Chromium, Total	6010C	10 U	ug/L	10	1	11/07/16 19:48	11/03/16	
Copper, Total	6010C	20 U	ug/L	20	1	11/07/16 19:48	11/03/16	
Iron, Total	6010C	100 U	ug/L	100	1	11/07/16 19:48	11/03/16	
Lead, Total	6010C	50 U	ug/L	50	1	11/07/16 19:48	11/03/16	
Magnesium, Total	6010C	**9200**	ug/L	1000	1	11/07/16 19:48	11/03/16	
Manganese, Total	6010C	10 U	ug/L	10	1	11/07/16 19:48	11/03/16	
Nickel, Total	6010C	40 U	ug/L	40	1	11/07/16 19:48	11/03/16	
Potassium, Total	6010C	2000 U	ug/L	2000	1	11/07/16 19:48	11/03/16	
Selenium, Total	6010C	10 U	ug/L	10	1	11/07/16 19:48	11/03/16	
Sodium, Total	6010C	**8900**	ug/L	1000	1	11/07/16 19:48	11/03/16	
Zinc, Total	6010C	20 U	ug/L	20	1	11/07/16 19:48	11/03/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 12:45
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW17S-1016	**Basis:**	NA
Lab Code:	R1611538-008		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/07/16 19:51	11/03/16	
Barium, Total	6010C	**40**		ug/L	20	1	11/07/16 19:51	11/03/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/07/16 19:51	11/03/16	
Calcium, Total	6010C	**86700**		ug/L	5000	5	11/09/16 18:11	11/03/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/07/16 19:51	11/03/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/07/16 19:51	11/03/16	
Iron, Total	6010C	**110**		ug/L	100	1	11/07/16 19:51	11/03/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/07/16 19:51	11/03/16	
Magnesium, Total	6010C	**58800**		ug/L	1000	1	11/07/16 19:51	11/03/16	
Manganese, Total	6010C	**93**		ug/L	10	1	11/07/16 19:51	11/03/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/07/16 19:51	11/03/16	
Potassium, Total	6010C	**3900**		ug/L	2000	1	11/07/16 19:51	11/03/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/07/16 19:51	11/03/16	
Sodium, Total	6010C	**68100**		ug/L	1000	1	11/07/16 19:51	11/03/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/07/16 19:51	11/03/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 14:05
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW17D-1016	**Basis:**	NA
Lab Code:	R1611538-009		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/07/16 19:54	11/03/16	
Barium, Total	6010C	20	U	ug/L	20	1	11/07/16 19:54	11/03/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/07/16 19:54	11/03/16	
Calcium, Total	6010C	**18100**		ug/L	1000	1	11/07/16 19:54	11/03/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/07/16 19:54	11/03/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/07/16 19:54	11/03/16	
Iron, Total	6010C	**8210**		ug/L	100	1	11/07/16 19:54	11/03/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/07/16 19:54	11/03/16	
Magnesium, Total	6010C	**17300**		ug/L	1000	1	11/07/16 19:54	11/03/16	
Manganese, Total	6010C	**312**		ug/L	10	1	11/07/16 19:54	11/03/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/07/16 19:54	11/03/16	
Potassium, Total	6010C	**5000**		ug/L	2000	1	11/07/16 19:54	11/03/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/07/16 19:54	11/03/16	
Sodium, Total	6010C	**33600**		ug/L	1000	1	11/07/16 19:54	11/03/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/07/16 19:54	11/03/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 09:50
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW18S-1016	**Basis:**	NA
Lab Code:	R1611538-010		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/07/16 20:04	11/03/16	
Barium, Total	6010C	**37**		ug/L	20	1	11/07/16 20:04	11/03/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/07/16 20:04	11/03/16	
Calcium, Total	6010C	**29500**		ug/L	1000	1	11/07/16 20:04	11/03/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/07/16 20:04	11/03/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/07/16 20:04	11/03/16	
Iron, Total	6010C	**990**		ug/L	100	1	11/07/16 20:04	11/03/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/07/16 20:04	11/03/16	
Magnesium, Total	6010C	**10700**		ug/L	1000	1	11/07/16 20:04	11/03/16	
Manganese, Total	6010C	**140**		ug/L	10	1	11/07/16 20:04	11/03/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/07/16 20:04	11/03/16	
Potassium, Total	6010C	2000	U	ug/L	2000	1	11/07/16 20:04	11/03/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/07/16 20:04	11/03/16	
Sodium, Total	6010C	**2500**		ug/L	1000	1	11/07/16 20:04	11/03/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/07/16 20:04	11/03/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 11:20
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MW18D-1016	**Basis:**	NA
Lab Code:	R1611538-011		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/07/16 20:20	11/03/16	
Barium, Total	6010C	**83**		ug/L	20	1	11/07/16 20:20	11/03/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/07/16 20:20	11/03/16	
Calcium, Total	6010C	**42600**		ug/L	1000	1	11/07/16 20:20	11/03/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/07/16 20:20	11/03/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/07/16 20:20	11/03/16	
Iron, Total	6010C	**15100**		ug/L	100	1	11/07/16 20:20	11/03/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/07/16 20:20	11/03/16	
Magnesium, Total	6010C	**17500**		ug/L	1000	1	11/07/16 20:20	11/03/16	
Manganese, Total	6010C	**857**		ug/L	10	1	11/07/16 20:20	11/03/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/07/16 20:20	11/03/16	
Potassium, Total	6010C	**2700**		ug/L	2000	1	11/07/16 20:20	11/03/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/07/16 20:20	11/03/16	
Sodium, Total	6010C	**19900**		ug/L	1000	1	11/07/16 20:20	11/03/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/07/16 20:20	11/03/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 12:55
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	DUP1-1016	**Basis:**	NA
Lab Code:	R1611538-012		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/07/16 20:23	11/03/16	
Barium, Total	6010C	**39**		ug/L	20	1	11/07/16 20:23	11/03/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/07/16 20:23	11/03/16	
Calcium, Total	6010C	**87400**		ug/L	5000	5	11/09/16 18:14	11/03/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/07/16 20:23	11/03/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/07/16 20:23	11/03/16	
Iron, Total	6010C	100	U	ug/L	100	1	11/07/16 20:23	11/03/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/07/16 20:23	11/03/16	
Magnesium, Total	6010C	**57500**		ug/L	1000	1	11/07/16 20:23	11/03/16	
Manganese, Total	6010C	**91**		ug/L	10	1	11/07/16 20:23	11/03/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/07/16 20:23	11/03/16	
Potassium, Total	6010C	**3800**		ug/L	2000	1	11/07/16 20:23	11/03/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/07/16 20:23	11/03/16	
Sodium, Total	6010C	**66300**		ug/L	1000	1	11/07/16 20:23	11/03/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/07/16 20:23	11/03/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/28/16 12:00
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	WAL2-1016	**Basis:**	NA
Lab Code:	R1611538-013		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/07/16 20:26	11/03/16	
Barium, Total	6010C	**32**		ug/L	20	1	11/07/16 20:26	11/03/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/07/16 20:26	11/03/16	
Calcium, Total	6010C	**46200**		ug/L	1000	1	11/07/16 20:26	11/03/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/07/16 20:26	11/03/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/07/16 20:26	11/03/16	
Iron, Total	6010C	**620**		ug/L	100	1	11/07/16 20:26	11/03/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/07/16 20:26	11/03/16	
Magnesium, Total	6010C	**14800**		ug/L	1000	1	11/07/16 20:26	11/03/16	
Manganese, Total	6010C	**700**		ug/L	10	1	11/07/16 20:26	11/03/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/07/16 20:26	11/03/16	
Potassium, Total	6010C	2000	U	ug/L	2000	1	11/07/16 20:26	11/03/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/07/16 20:26	11/03/16	
Sodium, Total	6010C	**50600**		ug/L	1000	1	11/07/16 20:26	11/03/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/07/16 20:26	11/03/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 10:05
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW5D-1116	**Basis:**	NA
Lab Code:	R1611538-015		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/11/16 09:58	11/07/16	
Barium, Total	6010C	**37**		ug/L	20	1	11/11/16 09:58	11/07/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/11/16 09:58	11/07/16	
Calcium, Total	6010C	**20100**		ug/L	1000	1	11/11/16 09:58	11/07/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/11/16 09:58	11/07/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/11/16 09:58	11/07/16	
Iron, Total	6010C	**260**		ug/L	100	1	11/11/16 09:58	11/07/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/11/16 09:58	11/07/16	
Magnesium, Total	6010C	**11900**		ug/L	1000	1	11/11/16 09:58	11/07/16	
Manganese, Total	6010C	**869**		ug/L	10	1	11/11/16 09:58	11/07/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/11/16 09:58	11/07/16	
Potassium, Total	6010C	2000	U	ug/L	2000	1	11/11/16 09:58	11/07/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/11/16 09:58	11/07/16	
Sodium, Total	6010C	**5500**		ug/L	1000	1	11/11/16 09:58	11/07/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/11/16 09:58	11/07/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 11:20
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW5S-1116	**Basis:**	NA
Lab Code:	R1611538-016		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/11/16 10:01	11/07/16	
Barium, Total	6010C	20	U	ug/L	20	1	11/11/16 10:01	11/07/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/11/16 10:01	11/07/16	
Calcium, Total	6010C	**14700**		ug/L	1000	1	11/11/16 10:01	11/07/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/11/16 10:01	11/07/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/11/16 10:01	11/07/16	
Iron, Total	6010C	**1100**		ug/L	100	1	11/11/16 10:01	11/07/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/11/16 10:01	11/07/16	
Magnesium, Total	6010C	**9500**		ug/L	1000	1	11/11/16 10:01	11/07/16	
Manganese, Total	6010C	**153**		ug/L	10	1	11/11/16 10:01	11/07/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/11/16 10:01	11/07/16	
Potassium, Total	6010C	2000	U	ug/L	2000	1	11/11/16 10:01	11/07/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/11/16 10:01	11/07/16	
Sodium, Total	6010C	**6000**		ug/L	1000	1	11/11/16 10:01	11/07/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/11/16 10:01	11/07/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 12:50
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW4D-1116	**Basis:**	NA
Lab Code:	R1611538-017		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/11/16 10:04	11/07/16	
Barium, Total	6010C	20	U	ug/L	20	1	11/11/16 10:04	11/07/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/11/16 10:04	11/07/16	
Calcium, Total	6010C	**22200**		ug/L	1000	1	11/11/16 10:04	11/07/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/11/16 10:04	11/07/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/11/16 10:04	11/07/16	
Iron, Total	6010C	**640**		ug/L	100	1	11/11/16 10:04	11/07/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/11/16 10:04	11/07/16	
Magnesium, Total	6010C	**19700**		ug/L	1000	1	11/11/16 10:04	11/07/16	
Manganese, Total	6010C	**1250**		ug/L	10	1	11/11/16 10:04	11/07/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/11/16 10:04	11/07/16	
Potassium, Total	6010C	**4200**		ug/L	2000	1	11/11/16 10:04	11/07/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/11/16 10:04	11/07/16	
Sodium, Total	6010C	**7300**		ug/L	1000	1	11/11/16 10:04	11/07/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/11/16 10:04	11/07/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 14:15
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW11S-1116	**Basis:**	NA
Lab Code:	R1611538-018		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/11/16 11:49	11/07/16	
Barium, Total	6010C	**30**		ug/L	20	1	11/11/16 11:49	11/07/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/11/16 11:49	11/07/16	
Calcium, Total	6010C	**58500**		ug/L	5000	5	11/11/16 10:08	11/07/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/11/16 11:49	11/07/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/11/16 11:49	11/07/16	
Iron, Total	6010C	**160**		ug/L	100	1	11/11/16 11:49	11/07/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/11/16 11:49	11/07/16	
Magnesium, Total	6010C	**35500**		ug/L	1000	1	11/11/16 11:49	11/07/16	
Manganese, Total	6010C	**844**		ug/L	10	1	11/11/16 11:49	11/07/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/11/16 11:49	11/07/16	
Potassium, Total	6010C	2000	U	ug/L	2000	1	11/11/16 11:49	11/07/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/11/16 11:49	11/07/16	
Sodium, Total	6010C	**21200**		ug/L	1000	1	11/11/16 11:49	11/07/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/11/16 11:49	11/07/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 09:25
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	CW4A-1116	**Basis:**	NA
Lab Code:	R1611538-019		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/11/16 10:11	11/07/16	
Barium, Total	6010C	**56**		ug/L	20	1	11/11/16 10:11	11/07/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/11/16 10:11	11/07/16	
Calcium, Total	6010C	**31100**		ug/L	1000	1	11/11/16 10:11	11/07/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/11/16 10:11	11/07/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/11/16 10:11	11/07/16	
Iron, Total	6010C	**320**		ug/L	100	1	11/11/16 10:11	11/07/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/11/16 10:11	11/07/16	
Magnesium, Total	6010C	**16200**		ug/L	1000	1	11/11/16 10:11	11/07/16	
Manganese, Total	6010C	**515**		ug/L	10	1	11/11/16 10:11	11/07/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/11/16 10:11	11/07/16	
Potassium, Total	6010C	2000	U	ug/L	2000	1	11/11/16 10:11	11/07/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/11/16 10:11	11/07/16	
Sodium, Total	6010C	**14300**		ug/L	1000	1	11/11/16 10:11	11/07/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/11/16 10:11	11/07/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 10:25
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	CW4B-1116	**Basis:**	NA
Lab Code:	R1611538-020		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/11/16 10:14	11/07/16	
Barium, Total	6010C	**39**		ug/L	20	1	11/11/16 10:14	11/07/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/11/16 10:14	11/07/16	
Calcium, Total	6010C	**35900**		ug/L	1000	1	11/11/16 10:14	11/07/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/11/16 10:14	11/07/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/11/16 10:14	11/07/16	
Iron, Total	6010C	100	U	ug/L	100	1	11/11/16 10:14	11/07/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/11/16 10:14	11/07/16	
Magnesium, Total	6010C	**15000**		ug/L	1000	1	11/11/16 10:14	11/07/16	
Manganese, Total	6010C	**767**		ug/L	10	1	11/11/16 10:14	11/07/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/11/16 10:14	11/07/16	
Potassium, Total	6010C	2000	U	ug/L	2000	1	11/11/16 10:14	11/07/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/11/16 10:14	11/07/16	
Sodium, Total	6010C	**16000**		ug/L	1000	1	11/11/16 10:14	11/07/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/11/16 10:14	11/07/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 13:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	CW3B-1116	**Basis:**	NA
Lab Code:	R1611538-022		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/11/16 11:53	11/07/16	
Barium, Total	6010C	**36**		ug/L	20	1	11/11/16 11:53	11/07/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/11/16 11:53	11/07/16	
Calcium, Total	6010C	**68600**		ug/L	5000	5	11/11/16 10:17	11/07/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/11/16 11:53	11/07/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/11/16 11:53	11/07/16	
Iron, Total	6010C	100	U	ug/L	100	1	11/11/16 11:53	11/07/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/11/16 11:53	11/07/16	
Magnesium, Total	6010C	**33900**		ug/L	1000	1	11/11/16 11:53	11/07/16	
Manganese, Total	6010C	**31**		ug/L	10	1	11/11/16 11:53	11/07/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/11/16 11:53	11/07/16	
Potassium, Total	6010C	**2500**		ug/L	2000	1	11/11/16 11:53	11/07/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/11/16 11:53	11/07/16	
Sodium, Total	6010C	**21700**		ug/L	1000	1	11/11/16 11:53	11/07/16	
Zinc, Total	6010C	20	U	ug/L	20	1	11/11/16 11:53	11/07/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/01/16 13:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	WAL11-1116	**Basis:**	NA
Lab Code:	R1611538-023		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	11/11/16 10:20	11/07/16	
Barium, Total	6010C	20 U	ug/L	20	1	11/11/16 10:20	11/07/16	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/11/16 10:20	11/07/16	
Calcium, Total	6010C	**2200**	ug/L	1000	1	11/11/16 10:20	11/07/16	
Chromium, Total	6010C	10 U	ug/L	10	1	11/11/16 10:20	11/07/16	
Copper, Total	6010C	**25**	ug/L	20	1	11/11/16 10:20	11/07/16	
Iron, Total	6010C	**140**	ug/L	100	1	11/11/16 10:20	11/07/16	
Lead, Total	6010C	50 U	ug/L	50	1	11/11/16 10:20	11/07/16	
Magnesium, Total	6010C	**1100**	ug/L	1000	1	11/11/16 10:20	11/07/16	
Manganese, Total	6010C	**13**	ug/L	10	1	11/11/16 10:20	11/07/16	
Nickel, Total	6010C	40 U	ug/L	40	1	11/11/16 10:20	11/07/16	
Potassium, Total	6010C	2000 U	ug/L	2000	1	11/11/16 10:20	11/07/16	
Selenium, Total	6010C	10 U	ug/L	10	1	11/11/16 10:20	11/07/16	
Sodium, Total	6010C	1000 U	ug/L	1000	1	11/11/16 10:20	11/07/16	
Zinc, Total	6010C	20 U	ug/L	20	1	11/11/16 10:20	11/07/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/02/16 10:30
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW3D-1116	**Basis:**	NA
Lab Code:	R1611538-027		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	11/11/16 10:30	11/07/16	
Barium, Total	6010C	**77**	ug/L	20	1	11/11/16 10:30	11/07/16	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/11/16 10:30	11/07/16	
Calcium, Total	6010C	**35700**	ug/L	1000	1	11/11/16 10:30	11/07/16	
Chromium, Total	6010C	10 U	ug/L	10	1	11/11/16 10:30	11/07/16	
Copper, Total	6010C	20 U	ug/L	20	1	11/11/16 10:30	11/07/16	
Iron, Total	6010C	100 U	ug/L	100	1	11/11/16 10:30	11/07/16	
Lead, Total	6010C	50 U	ug/L	50	1	11/11/16 10:30	11/07/16	
Magnesium, Total	6010C	**19400**	ug/L	1000	1	11/11/16 10:30	11/07/16	
Manganese, Total	6010C	**11**	ug/L	10	1	11/11/16 10:30	11/07/16	
Nickel, Total	6010C	40 U	ug/L	40	1	11/11/16 10:30	11/07/16	
Potassium, Total	6010C	**3900**	ug/L	2000	1	11/11/16 10:30	11/07/16	
Selenium, Total	6010C	10 U	ug/L	10	1	11/11/16 10:30	11/07/16	
Sodium, Total	6010C	**17900**	ug/L	1000	1	11/11/16 10:30	11/07/16	
Zinc, Total	6010C	20 U	ug/L	20	1	11/11/16 10:30	11/07/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/02/16 10:35
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	WAL1-1116	**Basis:**	NA
Lab Code:	R1611538-028		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10	U	ug/L	10	1	11/11/16 10:33	11/07/16	
Barium, Total	6010C	**67**		ug/L	20	1	11/11/16 10:33	11/07/16	
Cadmium, Total	6010C	5.0	U	ug/L	5.0	1	11/11/16 10:33	11/07/16	
Calcium, Total	6010C	**41500**		ug/L	1000	1	11/11/16 10:33	11/07/16	
Chromium, Total	6010C	10	U	ug/L	10	1	11/11/16 10:33	11/07/16	
Copper, Total	6010C	20	U	ug/L	20	1	11/11/16 10:33	11/07/16	
Iron, Total	6010C	100	U	ug/L	100	1	11/11/16 10:33	11/07/16	
Lead, Total	6010C	50	U	ug/L	50	1	11/11/16 10:33	11/07/16	
Magnesium, Total	6010C	**13400**		ug/L	1000	1	11/11/16 10:33	11/07/16	
Manganese, Total	6010C	**78**		ug/L	10	1	11/11/16 10:33	11/07/16	
Nickel, Total	6010C	40	U	ug/L	40	1	11/11/16 10:33	11/07/16	
Potassium, Total	6010C	2000	U	ug/L	2000	1	11/11/16 10:33	11/07/16	
Selenium, Total	6010C	10	U	ug/L	10	1	11/11/16 10:33	11/07/16	
Sodium, Total	6010C	**9200**		ug/L	1000	1	11/11/16 10:33	11/07/16	
Zinc, Total	6010C	**130**		ug/L	20	1	11/11/16 10:33	11/07/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/02/16 10:25
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	EB1-1116	**Basis:**	NA
Lab Code:	R1611538-029		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	11/11/16 10:36	11/07/16	
Barium, Total	6010C	20 U	ug/L	20	1	11/11/16 10:36	11/07/16	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/11/16 10:36	11/07/16	
Calcium, Total	6010C	1000 U	ug/L	1000	1	11/11/16 10:36	11/07/16	
Chromium, Total	6010C	10 U	ug/L	10	1	11/11/16 10:36	11/07/16	
Copper, Total	6010C	20 U	ug/L	20	1	11/11/16 10:36	11/07/16	
Iron, Total	6010C	100 U	ug/L	100	1	11/11/16 10:36	11/07/16	
Lead, Total	6010C	50 U	ug/L	50	1	11/11/16 10:36	11/07/16	
Magnesium, Total	6010C	1000 U	ug/L	1000	1	11/11/16 10:36	11/07/16	
Manganese, Total	6010C	10 U	ug/L	10	1	11/11/16 10:36	11/07/16	
Nickel, Total	6010C	40 U	ug/L	40	1	11/11/16 10:36	11/07/16	
Potassium, Total	6010C	2000 U	ug/L	2000	1	11/11/16 10:36	11/07/16	
Selenium, Total	6010C	10 U	ug/L	10	1	11/11/16 10:36	11/07/16	
Sodium, Total	6010C	1000 U	ug/L	1000	1	11/11/16 10:36	11/07/16	
Zinc, Total	6010C	20 U	ug/L	20	1	11/11/16 10:36	11/07/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/02/16 12:40
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	MW3S-1116	**Basis:**	NA
Lab Code:	R1611538-030		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	11/11/16 10:39	11/07/16	
Barium, Total	6010C	**42**	ug/L	20	1	11/11/16 10:39	11/07/16	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/11/16 10:39	11/07/16	
Calcium, Total	6010C	**42000**	ug/L	1000	1	11/11/16 10:39	11/07/16	
Chromium, Total	6010C	10 U	ug/L	10	1	11/11/16 10:39	11/07/16	
Copper, Total	6010C	20 U	ug/L	20	1	11/11/16 10:39	11/07/16	
Iron, Total	6010C	100 U	ug/L	100	1	11/11/16 10:39	11/07/16	
Lead, Total	6010C	50 U	ug/L	50	1	11/11/16 10:39	11/07/16	
Magnesium, Total	6010C	**31500**	ug/L	1000	1	11/11/16 10:39	11/07/16	
Manganese, Total	6010C	10 U	ug/L	10	1	11/11/16 10:39	11/07/16	
Nickel, Total	6010C	40 U	ug/L	40	1	11/11/16 10:39	11/07/16	
Potassium, Total	6010C	**3000**	ug/L	2000	1	11/11/16 10:39	11/07/16	
Selenium, Total	6010C	10 U	ug/L	10	1	11/11/16 10:39	11/07/16	
Sodium, Total	6010C	**47000**	ug/L	1000	1	11/11/16 10:39	11/07/16	
Zinc, Total	6010C	20 U	ug/L	20	1	11/11/16 10:39	11/07/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	11/02/16 08:15
Sample Matrix:	Water	**Date Received:**	11/03/16 09:20
Sample Name:	CW3A-1116	**Basis:**	NA
Lab Code:	R1611538-032		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	11/11/16 11:56	11/07/16	
Barium, Total	6010C	**84**	ug/L	20	1	11/11/16 11:56	11/07/16	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/11/16 11:56	11/07/16	
Calcium, Total	6010C	**89100**	ug/L	5000	5	11/11/16 10:43	11/07/16	
Chromium, Total	6010C	10 U	ug/L	10	1	11/11/16 11:56	11/07/16	
Copper, Total	6010C	20 U	ug/L	20	1	11/11/16 11:56	11/07/16	
Iron, Total	6010C	100 U	ug/L	100	1	11/11/16 11:56	11/07/16	
Lead, Total	6010C	50 U	ug/L	50	1	11/11/16 11:56	11/07/16	
Magnesium, Total	6010C	1000 U	ug/L	1000	1	11/11/16 11:56	11/07/16	
Manganese, Total	6010C	**11**	ug/L	10	1	11/11/16 11:56	11/07/16	
Nickel, Total	6010C	40 U	ug/L	40	1	11/11/16 11:56	11/07/16	
Potassium, Total	6010C	**14300**	ug/L	2000	1	11/11/16 11:56	11/07/16	
Selenium, Total	6010C	10 U	ug/L	10	1	11/11/16 11:56	11/07/16	
Sodium, Total	6010C	**40600**	ug/L	1000	1	11/11/16 11:56	11/07/16	
Zinc, Total	6010C	20 U	ug/L	20	1	11/11/16 11:56	11/07/16	

General Chemistry

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 09:30
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	SWS1-1016	**Basis:**	NA
Lab Code:	R1611538-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**98.8**		mg/L	2.0	1	11/08/16 20:50	NA	
Ammonia as Nitrogen, undistilled	350.1	0.050	U	mg/L	0.050	1	11/03/16 13:38	NA	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	2.0	U	mg/L	2.0	1	11/02/16 08:35	NA	
Bromide	300.0	1.0	U	mg/L	1.0	10	11/01/16 19:53	NA	
Carbon, Total Organic (TOC)	SM 5310 B-2000(2011)	**11.2**		mg/L	1.0	1	11/04/16 17:07	NA	
Chemical Oxygen Demand, Total	410.4	**24.5**		mg/L	5.0	1	11/04/16 07:53	NA	
Chloride	300.0	**7.0**		mg/L	2.0	10	11/01/16 19:53	NA	
Color, True	SM 2120 B-2001(2011)	**84.0**		ColorUnits	2.0	2	11/01/16 12:50	NA	
Nitrate as Nitrogen	300.0	1.0	U	mg/L	1.0	10	11/01/16 19:53	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.64**		mg/L	0.20	1	11/07/16 13:28	11/02/16	
pH of Color Analysis	SM 2120 B-2001(2011)	**7.34**		pH Units	-	2	11/01/16 12:50	NA	
Phenolics, Total Recoverable	420.4	**0.0076**		mg/L	0.0050	1	11/03/16 09:05	NA	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	**138**		mg/L	10	1	11/07/16 10:30	NA	
Sulfate	300.0	**2.1**		mg/L	2.0	10	11/01/16 19:53	NA	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 09:40
Sample Matrix:	Soil	**Date Received:**	11/01/16 09:30
Sample Name:	SWS1SED-1016	**Basis:**	Dry
Lab Code:	R1611538-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B Modified	**360**		mg/Kg	250	1	11/12/16 06:13	11/11/16	
Ammonia as Nitrogen, undistilled	350.1M	6.4	U	mg/Kg	6.4	1	11/03/16 13:59	11/03/16	
Bromide	9056A	13	U	mg/Kg	13	1	11/08/16 18:08	11/08/16	
Chemical Oxygen Demand, Total	SM 5220 B Modified	**75800**		mg/Kg	450	1	11/08/16 08:50	NA	
Chloride	9056A	39	U	mg/Kg	39	1	11/08/16 18:08	11/08/16	
Nitrate as Nitrogen	9056A	13	U	mg/Kg	13	1	11/08/16 18:08	11/08/16	
Nitrogen, Total Kjeldahl (TKN)	351.2 Modified	**297**		mg/Kg	26	1	11/09/16 18:16	11/08/16	
Phenolics, Total Recoverable	9066 Modified	0.13	U	mg/Kg	0.13	1	11/08/16 09:20	11/07/16	
Sulfate	9056A	39	U	mg/Kg	39	1	11/08/16 18:08	11/08/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 09:40
Sample Matrix:	Soil	**Date Received:**	11/01/16 09:30
Sample Name:	SWS1SED-1016	**Basis:**	Dry, per Method
Lab Code:	R1611538-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	**11000**	mg/Kg	570	1	11/10/16 18:08	NA	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 09:40
Sample Matrix:	Soil	**Date Received:**	11/01/16 09:30
Sample Name:	SWS1SED-1016	**Basis:**	NA
Lab Code:	R1611538-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Total Solids	ALS SOP	**77.8**	Percent	-	1	11/01/16 18:26	NA	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 11:05
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MH33-1016	**Basis:**	NA
Lab Code:	R1611538-004		

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	11/01/16 18:45	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	**208**	mg/L	10	1	11/07/16 10:30	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16 11:25
Sample Matrix:	Water	**Date Received:**	11/01/16 09:30
Sample Name:	MH32-1016	**Basis:**	NA
Lab Code:	R1611538-005		

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	11/01/16 18:58	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	**247**	mg/L	13	1	11/07/16 10:30	

QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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Volatile Organic Compounds by GC/MS

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QA/QC Report

Client: On-Site Technical Services, Inc. **Service Request:** R1611538

Project: WAL - Annual Sampling

Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Sample Name	Lab Code	4-Bromofluorobenzene 70 - 130	1,2-Dichlorobenzene-d4 70 - 130
WAL11-1116	R1611538-023	102	93
WAL19-Post-1116	R1611538-024	92	97
WAL19-Inter-1116	R1611538-025	96	107
WAL19-Pre-1116	R1611538-026	110	99
WAL1-1116	R1611538-028	104	108
Lab Control Sample	RQ1613585-03	94	92
Method Blank	RQ1613585-04	108	107

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1613585-04	**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	11/07/16 12:30	
Bromobenzene	0.50 U	0.50	1	11/07/16 12:30	
Bromochloromethane	0.50 U	0.50	1	11/07/16 12:30	
Bromodichloromethane	0.50 U	0.50	1	11/07/16 12:30	
Bromoform	0.50 U	0.50	1	11/07/16 12:30	
Bromomethane	0.50 U	0.50	1	11/07/16 12:30	
tert-Butyl Alcohol	20 U	20	1	11/07/16 12:30	
Methyl tert-Butyl Ether	0.50 U	0.50	1	11/07/16 12:30	
tert-Butylbenzene	0.50 U	0.50	1	11/07/16 12:30	
sec-Butylbenzene	0.50 U	0.50	1	11/07/16 12:30	
n-Butylbenzene	0.50 U	0.50	1	11/07/16 12:30	
Carbon Tetrachloride	0.50 U	0.50	1	11/07/16 12:30	
Chlorobenzene	0.50 U	0.50	1	11/07/16 12:30	
Chloroethane	0.50 U	0.50	1	11/07/16 12:30	
Chloroform	0.50 U	0.50	1	11/07/16 12:30	
Chloromethane	0.50 U	0.50	1	11/07/16 12:30	
1,2-Dibromo-3-chloropropane	0.50 U	0.50	1	11/07/16 12:30	
2-Chlorotoluene	0.50 U	0.50	1	11/07/16 12:30	
4-Chlorotoluene	0.50 U	0.50	1	11/07/16 12:30	
Dibromochloromethane	0.50 U	0.50	1	11/07/16 12:30	
1,2-Dibromoethane	0.50 U	0.50	1	11/07/16 12:30	
Dibromomethane	0.50 U	0.50	1	11/07/16 12:30	
1,2-Dichlorobenzene	0.50 U	0.50	1	11/07/16 12:30	
1,4-Dichlorobenzene	0.50 U	0.50	1	11/07/16 12:30	
1,3-Dichlorobenzene	0.50 U	0.50	1	11/07/16 12:30	
Dichlorodifluoromethane	0.50 U	0.50	1	11/07/16 12:30	
1,1-Dichloroethane	0.50 U	0.50	1	11/07/16 12:30	
1,2-Dichloroethane	0.50 U	0.50	1	11/07/16 12:30	
1,1-Dichloroethene	0.50 U	0.50	1	11/07/16 12:30	
trans-1,2-Dichloroethene	0.50 U	0.50	1	11/07/16 12:30	
cis-1,2-Dichloroethene	0.50 U	0.50	1	11/07/16 12:30	
2,2-Dichloropropane	0.50 U	0.50	1	11/07/16 12:30	
1,2-Dichloropropane	0.50 U	0.50	1	11/07/16 12:30	
1,3-Dichloropropane	0.50 U	0.50	1	11/07/16 12:30	
1,1-Dichloropropene	0.50 U	0.50	1	11/07/16 12:30	
trans-1,3-Dichloropropene	0.50 U	0.50	1	11/07/16 12:30	
cis-1,3-Dichloropropene	0.50 U	0.50	1	11/07/16 12:30	
Ethylbenzene	0.50 U	0.50	1	11/07/16 12:30	
Hexachlorobutadiene	0.50 U	0.50	1	11/07/16 12:30	
Isopropylbenzene	0.50 U	0.50	1	11/07/16 12:30	
p-Isopropyltoluene	0.50 U	0.50	1	11/07/16 12:30	
Methylene Chloride	0.50 U	0.50	1	11/07/16 12:30	
Naphthalene	0.50 U	0.50	1	11/07/16 12:30	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1613585-04	**Basis:**	NA

Purgeable Organic Compounds by GC/MS

Analysis Method: 524.2

Analyte Name	Result		MRL	Dil.	Date Analyzed	Q
n-Propylbenzene	0.50	U	0.50	1	11/07/16 12:30	
Styrene	0.50	U	0.50	1	11/07/16 12:30	
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1	11/07/16 12:30	
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1	11/07/16 12:30	
Tetrachloroethene	0.50	U	0.50	1	11/07/16 12:30	
Toluene	0.50	U	0.50	1	11/07/16 12:30	
1,2,4-Trichlorobenzene	0.50	U	0.50	1	11/07/16 12:30	
1,2,3-Trichlorobenzene	0.50	U	0.50	1	11/07/16 12:30	
1,1,1-Trichloroethane	0.50	U	0.50	1	11/07/16 12:30	
1,1,2-Trichloroethane	0.50	U	0.50	1	11/07/16 12:30	
Trichloroethene	0.50	U	0.50	1	11/07/16 12:30	
Trichlorofluoromethane	0.50	U	0.50	1	11/07/16 12:30	
1,2,3-Trichloropropane	0.50	U	0.50	1	11/07/16 12:30	
1,3,5-Trimethylbenzene	0.50	U	0.50	1	11/07/16 12:30	
1,2,4-Trimethylbenzene	0.50	U	0.50	1	11/07/16 12:30	
Vinyl Chloride	0.50	U	0.50	1	11/07/16 12:30	
m,p-Xylenes	1.0	U	1.0	1	11/07/16 12:30	
o-Xylene	0.50	U	0.50	1	11/07/16 12:30	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	70 - 130	11/07/16 12:30	
1,2-Dichlorobenzene-d4	107	70 - 130	11/07/16 12:30	

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QA/QC Report

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

Service Request: R1611538
Date Analyzed: 11/07/16

Lab Control Sample Summary
Purgeable Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1613585-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Benzene	524.2	4.99	5.00	100	70-130
Bromobenzene	524.2	5.25	5.00	105	70-130
Bromochloromethane	524.2	4.94	5.00	99	70-130
Bromodichloromethane	524.2	4.08	5.00	82	70-130
Bromoform	524.2	4.70	5.00	94	70-130
Bromomethane	524.2	4.78	5.00	96	70-130
tert-Butyl Alcohol	524.2	108	100	108	70-130
Methyl tert-Butyl Ether	524.2	4.77	5.00	95	70-130
tert-Butylbenzene	524.2	5.50	5.00	110	70-130
sec-Butylbenzene	524.2	5.66	5.00	113	70-130
n-Butylbenzene	524.2	5.36	5.00	107	70-130
Carbon Tetrachloride	524.2	4.58	5.00	92	70-130
Chlorobenzene	524.2	5.38	5.00	108	70-130
Chloroethane	524.2	4.89	5.00	98	70-130
Chloroform	524.2	4.87	5.00	97	70-130
Chloromethane	524.2	4.52	5.00	90	70-130
1,2-Dibromo-3-chloropropane	524.2	5.09	5.00	102	70-130
2-Chlorotoluene	524.2	5.16	5.00	103	70-130
4-Chlorotoluene	524.2	5.50	5.00	110	70-130
Dibromochloromethane	524.2	4.00	5.00	80	70-130
1,2-Dibromoethane	524.2	5.27	5.00	105	70-130
Dibromomethane	524.2	4.83	5.00	97	70-130
1,2-Dichlorobenzene	524.2	5.49	5.00	110	70-130
1,4-Dichlorobenzene	524.2	5.49	5.00	110	70-130
1,3-Dichlorobenzene	524.2	5.54	5.00	111	70-130
Dichlorodifluoromethane	524.2	5.28	5.00	106	70-130
1,1-Dichloroethane	524.2	5.04	5.00	101	70-130
1,2-Dichloroethane	524.2	4.95	5.00	99	70-130
1,1-Dichloroethene	524.2	4.95	5.00	99	70-130
trans-1,2-Dichloroethene	524.2	4.85	5.00	97	70-130
cis-1,2-Dichloroethene	524.2	5.09	5.00	102	70-130
2,2-Dichloropropane	524.2	5.13	5.00	103	70-130
1,2-Dichloropropane	524.2	4.92	5.00	98	70-130

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QA/QC Report

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

Service Request: R1611538
Date Analyzed: 11/07/16

Lab Control Sample Summary
Purgeable Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1613585-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,3-Dichloropropane	524.2	4.91	5.00	98	70-130
1,1-Dichloropropene	524.2	4.67	5.00	93	70-130
trans-1,3-Dichloropropene	524.2	3.59	5.00	72	70-130
cis-1,3-Dichloropropene	524.2	3.69	5.00	74	70-130
Ethylbenzene	524.2	5.43	5.00	109	70-130
Hexachlorobutadiene	524.2	5.13	5.00	103	70-130
Isopropylbenzene	524.2	5.36	5.00	107	70-130
p-Isopropyltoluene	524.2	5.47	5.00	109	70-130
Methylene Chloride	524.2	4.59	5.00	92	70-130
Naphthalene	524.2	5.68	5.00	114	70-130
n-Propylbenzene	524.2	5.46	5.00	109	70-130
Styrene	524.2	5.39	5.00	108	70-130
1,1,1,2-Tetrachloroethane	524.2	4.87	5.00	97	70-130
1,1,2,2-Tetrachloroethane	524.2	4.95	5.00	99	70-130
Tetrachloroethene	524.2	5.18	5.00	104	70-130
Toluene	524.2	5.13	5.00	103	70-130
1,2,4-Trichlorobenzene	524.2	5.73	5.00	115	70-130
1,2,3-Trichlorobenzene	524.2	5.41	5.00	108	70-130
1,1,1-Trichloroethane	524.2	5.16	5.00	103	70-130
1,1,2-Trichloroethane	524.2	5.02	5.00	100	70-130
Trichloroethene	524.2	5.14	5.00	103	70-130
Trichlorofluoromethane	524.2	4.94	5.00	99	70-130
1,2,3-Trichloropropane	524.2	4.86	5.00	97	70-130
1,3,5-Trimethylbenzene	524.2	5.47	5.00	109	70-130
1,2,4-Trimethylbenzene	524.2	5.42	5.00	108	70-130
Vinyl Chloride	524.2	5.43	5.00	109	70-130
m,p-Xylenes	524.2	10.5	10.0	105	70-130
o-Xylene	524.2	5.39	5.00	108	70-130

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QA/QC Report

Client: On-Site Technical Services, Inc. **Service Request:** R1611538
Project: WAL - Annual Sampling
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85 - 122	Toluene-d8 87 - 121	Dibromofluoromethane 89 - 119
SWS1-1016	R1611538-001	114	113	114
LS1-1016	R1611538-003	112	113	113
MH33-1016	R1611538-004	112	112	114
MH32-1016	R1611538-005	112	112	115
MW15S-1016	R1611538-006	113	113	115
MW16S-1016	R1611538-007	112	109	115
MW17S-1016	R1611538-008	110	111	112
MW17D-1016	R1611538-009	115	110	112
MW18S-1016	R1611538-010	114	114	116
MW18D-1016	R1611538-011	112	108	111
DUP1-1016	R1611538-012	114	110	115
TRIP BLANK	R1611538-014	113	112	115
MW5D-1116	R1611538-015	118	115	118
MW5S-1116	R1611538-016	115	111	113
MW4D-1116	R1611538-017	114	113	118
MW11S-1116	R1611538-018	114	112	114
CW4A-1116	R1611538-019	115	111	116
CW4B-1116	R1611538-020	116	111	118
CW3A-1116	R1611538-021	114	111	115
CW3B-1116	R1611538-022	118	115	115
MW3D-1116	R1611538-027	115	110	114
EB1-1116	R1611538-029	112	106	116
MW3S-1116	R1611538-030	113	108	113
TRIP BLANK	R1611538-031	113	107	115
Lab Control Sample	RQ1613362-03	116	114	118
Method Blank	RQ1613362-04	115	115	116
MW18S-1016 MS	RQ1613362-05	117	114	116
MW18S-1016 DMS	RQ1613362-06	121	116	116
Lab Control Sample	RQ1613497-03	116	114	117
Method Blank	RQ1613497-04	113	113	116
Lab Control Sample	RQ1613565-03	121	113	115
Method Blank	RQ1613565-04	117	115	116

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QA/QC Report

Client: On-Site Technical Services, Inc. **Service Request:** R1611538
Project: WAL - Annual Sampling
Sample Matrix: Soil

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 51 - 136	Toluene-d8 66 - 138	Dibromofluoromethane 63 - 138
SWS1SED-1016	R1611538-002	94	93	97
Method Blank	RQ1613524-01	95	94	95
Lab Control Sample	RQ1613524-02	102	97	100
Method Blank	RQ1613642-01	101	95	97
Lab Control Sample	RQ1613642-02	102	97	99

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QA/QC Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16
Sample Matrix:	Water	**Date Received:**	11/01/16
		Date Analyzed:	11/4/16
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	MW18S-1016	**Units:**	ug/L
Lab Code:	R1611538-010	**Basis:**	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

		Matrix Spike RQ1613362-05			Duplicate Matrix Spike RQ1613362-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Acetone	10 U	49.9	50.0	100	48.4	50.0	97	29-151	3	30
Benzene	5.0 U	49.7	50.0	99	51.2	50.0	102	76-129	3	30
Bromodichloromethane	5.0 U	51.5	50.0	103	53.5	50.0	107	76-127	4	30
Bromoform	5.0 U	43.1	50.0	86	46.2	50.0	92	58-133	7	30
Bromomethane	5.0 U	22.2	50.0	44	30.0	50.0	60	10-162	30	30
2-Butanone (MEK)	10 U	57.9	50.0	116	56.9	50.0	114	46-141	2	30
Carbon Disulfide	10 U	51.9	50.0	104	49.1	50.0	98	34-162	6	30
Carbon Tetrachloride	5.0 U	54.1	50.0	108	54.7	50.0	109	65-135	1	30
Chlorobenzene	5.0 U	51.8	50.0	104	52.6	50.0	105	76-125	1	30
Chloroethane	5.0 U	52.8	50.0	106	52.5	50.0	105	70-140	<1	30
Chloroform	5.0 U	52.2	50.0	104	53.8	50.0	108	75-130	3	30
Chloromethane	5.0 U	63.7	50.0	127	62.6	50.0	125	55-160	2	30
Dibromochloromethane	5.0 U	47.3	50.0	95	49.5	50.0	99	72-128	5	30
1,1-Dichloroethane	5.0 U	54.3	50.0	109	56.8	50.0	114	74-132	4	30
1,2-Dibromoethane	5.0 U	49.4	50.0	99	50.4	50.0	101	80-117	2	30
1,2-Dichloroethane	5.0 U	59.8	50.0	120	61.1	50.0	122	68-130	2	30
1,1-Dichloroethene	5.0 U	51.4	50.0	103	54.7	50.0	109	74-139	6	30
cis-1,2-Dichloroethene	5.0 U	49.2	50.0	98	50.2	50.0	100	72-133	2	30
trans-1,2-Dichloroethene	5.0 U	50.7	50.0	101	52.0	50.0	104	77-125	3	30
1,2-Dichloropropane	5.0 U	50.9	50.0	102	52.3	50.0	105	79-124	3	30
cis-1,3-Dichloropropene	5.0 U	47.8	50.0	96	49.8	50.0	100	52-134	4	30
trans-1,3-Dichloropropene	5.0 U	49.9	50.0	100	51.6	50.0	103	50-142	3	30
Ethylbenzene	5.0 U	54.7	50.0	109	54.1	50.0	108	72-134	1	30
2-Hexanone	10 U	61.7	50.0	123	59.2	50.0	118	56-132	4	30
Methylene Chloride	5.0 U	45.4	50.0	91	46.9	50.0	94	75-121	3	30
4-Methyl-2-pentanone (MIBK)	10 U	63.8	50.0	128	60.4	50.0	121	60-141	6	30
Styrene	5.0 U	5.36	50.0	11 *	9.90	50.0	20 *	34-156	60*	30
1,1,2,2-Tetrachloroethane	5.0 U	47.0	50.0	94	46.9	50.0	94	72-122	<1	30
Tetrachloroethene	5.0 U	54.5	50.0	109	56.1	50.0	112	67-137	3	30
Toluene	5.0 U	51.5	50.0	103	53.7	50.0	107	79-125	4	30
1,1,1-Trichloroethane	5.0 U	59.6	50.0	119	61.5	50.0	123	74-127	3	30
1,1,2-Trichloroethane	5.0 U	49.2	50.0	98	52.2	50.0	104	79-119	6	30
Trichloroethene	5.0 U	54.6	50.0	109	55.9	50.0	112	62-142	2	30
Vinyl Chloride	5.0 U	61.8	50.0	124	63.3	50.0	127	60-157	2	30
o-Xylene	5.0 U	52.7	50.0	105	53.5	50.0	107	68-134	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	10/31/16
Sample Matrix:	Water	**Date Received:**	11/01/16
		Date Analyzed:	11/4/16
		Date Extracted:	NA

Duplicate Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name:	MW18S-1016	**Units:**	ug/L
Lab Code:	R1611538-010	**Basis:**	NA
Analysis Method:	8260C		
Prep Method:	EPA 5030C		

		Matrix Spike RQ1613362-05			Duplicate Matrix Spike RQ1613362-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
m,p-Xylenes	5.0 U	107	100	107	107	100	107	68-138	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1613362-04	**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	11/02/16 11:04	
Benzene	5.0	U	5.0	1	11/02/16 11:04	
Bromodichloromethane	5.0	U	5.0	1	11/02/16 11:04	
Bromoform	5.0	U	5.0	1	11/02/16 11:04	
Bromomethane	5.0	U	5.0	1	11/02/16 11:04	
2-Butanone (MEK)	10	U	10	1	11/02/16 11:04	
Carbon Disulfide	10	U	10	1	11/02/16 11:04	
Carbon Tetrachloride	5.0	U	5.0	1	11/02/16 11:04	
Chlorobenzene	5.0	U	5.0	1	11/02/16 11:04	
Chloroethane	5.0	U	5.0	1	11/02/16 11:04	
Chloroform	5.0	U	5.0	1	11/02/16 11:04	
Chloromethane	5.0	U	5.0	1	11/02/16 11:04	
Dibromochloromethane	5.0	U	5.0	1	11/02/16 11:04	
1,1-Dichloroethane	5.0	U	5.0	1	11/02/16 11:04	
1,2-Dibromoethane	5.0	U	5.0	1	11/02/16 11:04	
1,2-Dichloroethane	5.0	U	5.0	1	11/02/16 11:04	
1,1-Dichloroethene	5.0	U	5.0	1	11/02/16 11:04	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 11:04	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/02/16 11:04	
1,2-Dichloropropane	5.0	U	5.0	1	11/02/16 11:04	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 11:04	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/02/16 11:04	
Ethylbenzene	5.0	U	5.0	1	11/02/16 11:04	
2-Hexanone	10	U	10	1	11/02/16 11:04	
Methylene Chloride	5.0	U	5.0	1	11/02/16 11:04	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/02/16 11:04	
Styrene	5.0	U	5.0	1	11/02/16 11:04	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/02/16 11:04	
Tetrachloroethene	5.0	U	5.0	1	11/02/16 11:04	
Toluene	5.0	U	5.0	1	11/02/16 11:04	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/02/16 11:04	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/02/16 11:04	
Trichloroethene	5.0	U	5.0	1	11/02/16 11:04	
Vinyl Chloride	5.0	U	5.0	1	11/02/16 11:04	
o-Xylene	5.0	U	5.0	1	11/02/16 11:04	
m,p-Xylenes	5.0	U	5.0	1	11/02/16 11:04	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1613362-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	115	85 - 122	11/02/16 11:04	
Toluene-d8	115	87 - 121	11/02/16 11:04	
Dibromofluoromethane	116	89 - 119	11/02/16 11:04	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1613497-04	**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	11/04/16 11:59	
Benzene	5.0	U	5.0	1	11/04/16 11:59	
Bromodichloromethane	5.0	U	5.0	1	11/04/16 11:59	
Bromoform	5.0	U	5.0	1	11/04/16 11:59	
Bromomethane	5.0	U	5.0	1	11/04/16 11:59	
2-Butanone (MEK)	10	U	10	1	11/04/16 11:59	
Carbon Disulfide	10	U	10	1	11/04/16 11:59	
Carbon Tetrachloride	5.0	U	5.0	1	11/04/16 11:59	
Chlorobenzene	5.0	U	5.0	1	11/04/16 11:59	
Chloroethane	5.0	U	5.0	1	11/04/16 11:59	
Chloroform	5.0	U	5.0	1	11/04/16 11:59	
Chloromethane	5.0	U	5.0	1	11/04/16 11:59	
Dibromochloromethane	5.0	U	5.0	1	11/04/16 11:59	
1,2-Dibromoethane	5.0	U	5.0	1	11/04/16 11:59	
1,1-Dichloroethane	5.0	U	5.0	1	11/04/16 11:59	
1,2-Dichloroethane	5.0	U	5.0	1	11/04/16 11:59	
1,1-Dichloroethene	5.0	U	5.0	1	11/04/16 11:59	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 11:59	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/04/16 11:59	
1,2-Dichloropropane	5.0	U	5.0	1	11/04/16 11:59	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 11:59	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/04/16 11:59	
Ethylbenzene	5.0	U	5.0	1	11/04/16 11:59	
2-Hexanone	10	U	10	1	11/04/16 11:59	
Methylene Chloride	5.0	U	5.0	1	11/04/16 11:59	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/04/16 11:59	
Styrene	5.0	U	5.0	1	11/04/16 11:59	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/04/16 11:59	
Tetrachloroethene	5.0	U	5.0	1	11/04/16 11:59	
Toluene	5.0	U	5.0	1	11/04/16 11:59	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/04/16 11:59	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/04/16 11:59	
Trichloroethene	5.0	U	5.0	1	11/04/16 11:59	
Vinyl Chloride	5.0	U	5.0	1	11/04/16 11:59	
o-Xylene	5.0	U	5.0	1	11/04/16 11:59	
m,p-Xylenes	5.0	U	5.0	1	11/04/16 11:59	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1613497-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	113	85 - 122	11/04/16 11:59	
Toluene-d8	113	87 - 121	11/04/16 11:59	
Dibromofluoromethane	116	89 - 119	11/04/16 11:59	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	RQ1613524-01	**Basis:**	Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result		MRL	Dil.	Date Analyzed	Q
Acetone	5.0	U	5.0	1	11/03/16 15:17	
Benzene	5.0	U	5.0	1	11/03/16 15:17	
Bromodichloromethane	5.0	U	5.0	1	11/03/16 15:17	
Bromoform	5.0	U	5.0	1	11/03/16 15:17	
Bromomethane	5.0	U	5.0	1	11/03/16 15:17	
2-Butanone (MEK)	5.0	U	5.0	1	11/03/16 15:17	
Carbon Disulfide	5.0	U	5.0	1	11/03/16 15:17	
Carbon Tetrachloride	5.0	U	5.0	1	11/03/16 15:17	
Chlorobenzene	5.0	U	5.0	1	11/03/16 15:17	
Chloroethane	5.0	U	5.0	1	11/03/16 15:17	
Chloroform	5.0	U	5.0	1	11/03/16 15:17	
Chloromethane	5.0	U	5.0	1	11/03/16 15:17	
Dibromochloromethane	5.0	U	5.0	1	11/03/16 15:17	
1,2-Dibromoethane	5.0	U	5.0	1	11/03/16 15:17	
1,1-Dichloroethane	5.0	U	5.0	1	11/03/16 15:17	
1,2-Dichloroethane	5.0	U	5.0	1	11/03/16 15:17	
1,1-Dichloroethene	5.0	U	5.0	1	11/03/16 15:17	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/03/16 15:17	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/03/16 15:17	
1,2-Dichloropropane	5.0	U	5.0	1	11/03/16 15:17	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/03/16 15:17	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/03/16 15:17	
Ethylbenzene	5.0	U	5.0	1	11/03/16 15:17	
2-Hexanone	5.0	U	5.0	1	11/03/16 15:17	
Methylene Chloride	5.0	U	5.0	1	11/03/16 15:17	
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1	11/03/16 15:17	
Styrene	5.0	U	5.0	1	11/03/16 15:17	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/03/16 15:17	
Tetrachloroethene	5.0	U	5.0	1	11/03/16 15:17	
Toluene	5.0	U	5.0	1	11/03/16 15:17	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/03/16 15:17	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/03/16 15:17	
Trichloroethene	5.0	U	5.0	1	11/03/16 15:17	
Vinyl Chloride	5.0	U	5.0	1	11/03/16 15:17	
o-Xylene	5.0	U	5.0	1	11/03/16 15:17	
m,p-Xylenes	10	U	10	1	11/03/16 15:17	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	RQ1613524-01	**Basis:**	Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	51 - 136	11/03/16 15:17	
Toluene-d8	94	66 - 138	11/03/16 15:17	
Dibromofluoromethane	95	63 - 138	11/03/16 15:17	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1613565-04	**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	11/07/16 11:46	
Benzene	5.0	U	5.0	1	11/07/16 11:46	
Bromodichloromethane	5.0	U	5.0	1	11/07/16 11:46	
Bromoform	5.0	U	5.0	1	11/07/16 11:46	
Bromomethane	5.0	U	5.0	1	11/07/16 11:46	
2-Butanone (MEK)	10	U	10	1	11/07/16 11:46	
Carbon Disulfide	10	U	10	1	11/07/16 11:46	
Carbon Tetrachloride	5.0	U	5.0	1	11/07/16 11:46	
Chlorobenzene	5.0	U	5.0	1	11/07/16 11:46	
Chloroethane	5.0	U	5.0	1	11/07/16 11:46	
Chloroform	5.0	U	5.0	1	11/07/16 11:46	
Chloromethane	5.0	U	5.0	1	11/07/16 11:46	
Dibromochloromethane	5.0	U	5.0	1	11/07/16 11:46	
1,2-Dibromoethane	5.0	U	5.0	1	11/07/16 11:46	
1,1-Dichloroethane	5.0	U	5.0	1	11/07/16 11:46	
1,2-Dichloroethane	5.0	U	5.0	1	11/07/16 11:46	
1,1-Dichloroethene	5.0	U	5.0	1	11/07/16 11:46	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/07/16 11:46	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/07/16 11:46	
1,2-Dichloropropane	5.0	U	5.0	1	11/07/16 11:46	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/07/16 11:46	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/07/16 11:46	
Ethylbenzene	5.0	U	5.0	1	11/07/16 11:46	
2-Hexanone	10	U	10	1	11/07/16 11:46	
Methylene Chloride	5.0	U	5.0	1	11/07/16 11:46	
4-Methyl-2-pentanone (MIBK)	10	U	10	1	11/07/16 11:46	
Styrene	5.0	U	5.0	1	11/07/16 11:46	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/07/16 11:46	
Tetrachloroethene	5.0	U	5.0	1	11/07/16 11:46	
Toluene	5.0	U	5.0	1	11/07/16 11:46	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/07/16 11:46	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/07/16 11:46	
Trichloroethene	5.0	U	5.0	1	11/07/16 11:46	
Vinyl Chloride	5.0	U	5.0	1	11/07/16 11:46	
o-Xylene	5.0	U	5.0	1	11/07/16 11:46	
m,p-Xylenes	5.0	U	5.0	1	11/07/16 11:46	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1613565-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	117	85 - 122	11/07/16 11:46	
Toluene-d8	115	87 - 121	11/07/16 11:46	
Dibromofluoromethane	116	89 - 119	11/07/16 11:46	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	RQ1613642-01	**Basis:**	Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Analyte Name	Result		MRL	Dil.	Date Analyzed	Q
Acetone	5.0	U	5.0	1	11/07/16 11:09	
Benzene	5.0	U	5.0	1	11/07/16 11:09	
Bromodichloromethane	5.0	U	5.0	1	11/07/16 11:09	
Bromoform	5.0	U	5.0	1	11/07/16 11:09	
Bromomethane	5.0	U	5.0	1	11/07/16 11:09	
2-Butanone (MEK)	5.0	U	5.0	1	11/07/16 11:09	
Carbon Disulfide	5.0	U	5.0	1	11/07/16 11:09	
Carbon Tetrachloride	5.0	U	5.0	1	11/07/16 11:09	
Chlorobenzene	5.0	U	5.0	1	11/07/16 11:09	
Chloroethane	5.0	U	5.0	1	11/07/16 11:09	
Chloroform	5.0	U	5.0	1	11/07/16 11:09	
Chloromethane	5.0	U	5.0	1	11/07/16 11:09	
Dibromochloromethane	5.0	U	5.0	1	11/07/16 11:09	
1,2-Dibromoethane	5.0	U	5.0	1	11/07/16 11:09	
1,1-Dichloroethane	5.0	U	5.0	1	11/07/16 11:09	
1,2-Dichloroethane	5.0	U	5.0	1	11/07/16 11:09	
1,1-Dichloroethene	5.0	U	5.0	1	11/07/16 11:09	
cis-1,2-Dichloroethene	5.0	U	5.0	1	11/07/16 11:09	
trans-1,2-Dichloroethene	5.0	U	5.0	1	11/07/16 11:09	
1,2-Dichloropropane	5.0	U	5.0	1	11/07/16 11:09	
cis-1,3-Dichloropropene	5.0	U	5.0	1	11/07/16 11:09	
trans-1,3-Dichloropropene	5.0	U	5.0	1	11/07/16 11:09	
Ethylbenzene	5.0	U	5.0	1	11/07/16 11:09	
2-Hexanone	5.0	U	5.0	1	11/07/16 11:09	
Methylene Chloride	5.0	U	5.0	1	11/07/16 11:09	
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1	11/07/16 11:09	
Styrene	5.0	U	5.0	1	11/07/16 11:09	
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1	11/07/16 11:09	
Tetrachloroethene	5.0	U	5.0	1	11/07/16 11:09	
Toluene	5.0	U	5.0	1	11/07/16 11:09	
1,1,1-Trichloroethane	5.0	U	5.0	1	11/07/16 11:09	
1,1,2-Trichloroethane	5.0	U	5.0	1	11/07/16 11:09	
Trichloroethene	5.0	U	5.0	1	11/07/16 11:09	
Vinyl Chloride	5.0	U	5.0	1	11/07/16 11:09	
o-Xylene	5.0	U	5.0	1	11/07/16 11:09	
m,p-Xylenes	10	U	10	1	11/07/16 11:09	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	RQ1613642-01	**Basis:**	Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5035A

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	51 - 136	11/07/16 11:09	
Toluene-d8	95	66 - 138	11/07/16 11:09	
Dibromofluoromethane	97	63 - 138	11/07/16 11:09	

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QA/QC Report

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

Service Request: R1611538
Date Analyzed: 11/02/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1613362-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	21.8	20.0	109	40-161
Benzene	8260C	19.6	20.0	98	76-118
Bromodichloromethane	8260C	20.4	20.0	102	78-126
Bromoform	8260C	16.6	20.0	83	71-136
Bromomethane	8260C	11.7	20.0	58	42-166
2-Butanone (MEK)	8260C	25.2	20.0	126	61-137
Carbon Disulfide	8260C	21.2	20.0	106	65-127
Carbon Tetrachloride	8260C	20.1	20.0	100	68-125
Chlorobenzene	8260C	20.4	20.0	102	80-121
Chloroethane	8260C	20.0	20.0	100	70-127
Chloroform	8260C	20.1	20.0	100	76-120
Chloromethane	8260C	19.3	20.0	97	69-145
Dibromochloromethane	8260C	18.7	20.0	93	77-128
1,1-Dichloroethane	8260C	21.6	20.0	108	78-117
1,2-Dibromoethane	8260C	19.1	20.0	96	81-125
1,2-Dichloroethane	8260C	23.9	20.0	119	71-127
1,1-Dichloroethene	8260C	19.7	20.0	99	74-135
cis-1,2-Dichloroethene	8260C	19.5	20.0	98	80-121
trans-1,2-Dichloroethene	8260C	19.6	20.0	98	80-120
1,2-Dichloropropane	8260C	20.4	20.0	102	80-119
cis-1,3-Dichloropropene	8260C	19.2	20.0	96	74-126
trans-1,3-Dichloropropene	8260C	20.2	20.0	101	67-135
Ethylbenzene	8260C	20.7	20.0	103	76-120
2-Hexanone	8260C	24.5	20.0	123	63-124
Methylene Chloride	8260C	18.8	20.0	94	73-122
4-Methyl-2-pentanone (MIBK)	8260C	26.4	20.0	132 *	66-124
Styrene	8260C	20.7	20.0	104	80-124
1,1,2,2-Tetrachloroethane	8260C	19.2	20.0	96	78-122
Tetrachloroethene	8260C	20.2	20.0	101	78-124
Toluene	8260C	20.6	20.0	103	77-120
1,1,1-Trichloroethane	8260C	22.8	20.0	114	74-120
1,1,2-Trichloroethane	8260C	20.3	20.0	102	82-118
Trichloroethene	8260C	20.8	20.0	104	78-123

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: R1611538
Date Analyzed: 11/02/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1613362-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	8260C	22.3	20.0	112	69-133
o-Xylene	8260C	20.5	20.0	102	80-120
m,p-Xylenes	8260C	43.0	40.0	107	78-123

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QA/QC Report

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

Service Request: R1611538
Date Analyzed: 11/04/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1613497-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	25.4	20.0	127	40-161
Benzene	8260C	19.4	20.0	97	76-118
Bromodichloromethane	8260C	21.8	20.0	109	78-126
Bromoform	8260C	19.0	20.0	95	71-136
Bromomethane	8260C	12.9	20.0	65	42-166
2-Butanone (MEK)	8260C	24.8	20.0	124	61-137
Carbon Disulfide	8260C	20.5	20.0	103	65-127
Carbon Tetrachloride	8260C	16.9	20.0	85	68-125
Chlorobenzene	8260C	21.6	20.0	108	80-121
Chloroethane	8260C	20.2	20.0	101	70-127
Chloroform	8260C	21.4	20.0	107	76-120
Chloromethane	8260C	21.3	20.0	107	69-145
Dibromochloromethane	8260C	20.1	20.0	101	77-128
1,1-Dichloroethane	8260C	21.3	20.0	106	78-117
1,2-Dibromoethane	8260C	20.9	20.0	105	81-125
1,2-Dichloroethane	8260C	25.5	20.0	128 *	71-127
1,1-Dichloroethene	8260C	18.5	20.0	92	74-135
cis-1,2-Dichloroethene	8260C	19.8	20.0	99	80-121
trans-1,2-Dichloroethene	8260C	19.5	20.0	97	80-120
1,2-Dichloropropane	8260C	21.4	20.0	107	80-119
cis-1,3-Dichloropropene	8260C	20.5	20.0	102	74-126
trans-1,3-Dichloropropene	8260C	21.0	20.0	105	67-135
Ethylbenzene	8260C	21.3	20.0	107	76-120
2-Hexanone	8260C	24.4	20.0	122	63-124
Methylene Chloride	8260C	19.8	20.0	99	73-122
4-Methyl-2-pentanone (MIBK)	8260C	24.6	20.0	123	66-124
Styrene	8260C	21.8	20.0	109	80-124
1,1,2,2-Tetrachloroethane	8260C	20.6	20.0	103	78-122
Tetrachloroethene	8260C	19.8	20.0	99	78-124
Toluene	8260C	20.2	20.0	101	77-120
1,1,1-Trichloroethane	8260C	22.3	20.0	112	74-120
1,1,2-Trichloroethane	8260C	21.1	20.0	105	82-118
Trichloroethene	8260C	20.3	20.0	101	78-123

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QA/QC Report

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

Service Request: R1611538
Date Analyzed: 11/04/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1613497-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	8260C	22.3	20.0	112	69-133
o-Xylene	8260C	21.9	20.0	109	80-120
m,p-Xylenes	8260C	43.3	40.0	108	78-123

ALS Group USA, Corp.
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QA/QC Report

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

Service Request: R1611538
Date Analyzed: 11/03/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/Kg
Basis: Dry

Lab Control Sample
RQ1613524-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	22.1	20.0	111	40-140
Benzene	8260C	14.1	20.0	70	40-140
Bromodichloromethane	8260C	13.9	20.0	70	40-140
Bromoform	8260C	18.4	20.0	92	40-140
Bromomethane	8260C	13.5	20.0	68	40-140
2-Butanone (MEK)	8260C	16.3	20.0	82	40-140
Carbon Disulfide	8260C	20.6	20.0	103	40-140
Carbon Tetrachloride	8260C	12.5	20.0	63	40-140
Chlorobenzene	8260C	15.2	20.0	76	40-140
Chloroethane	8260C	12.8	20.0	64	40-140
Chloroform	8260C	13.3	20.0	66	40-140
Chloromethane	8260C	12.8	20.0	64	40-140
Dibromochloromethane	8260C	15.7	20.0	79	40-140
1,1-Dichloroethane	8260C	13.1	20.0	66	40-140
1,2-Dibromoethane	8260C	15.1	20.0	75	40-140
1,2-Dichloroethane	8260C	14.1	20.0	70	40-140
1,1-Dichloroethene	8260C	13.3	20.0	67	40-140
cis-1,2-Dichloroethene	8260C	15.3	20.0	76	40-140
trans-1,2-Dichloroethene	8260C	14.2	20.0	71	40-140
1,2-Dichloropropane	8260C	13.9	20.0	69	40-140
cis-1,3-Dichloropropene	8260C	14.3	20.0	72	40-140
trans-1,3-Dichloropropene	8260C	14.6	20.0	73	40-140
Ethylbenzene	8260C	13.1	20.0	65	40-140
2-Hexanone	8260C	16.8	20.0	84	40-140
Methylene Chloride	8260C	14.4	20.0	72	40-140
4-Methyl-2-pentanone (MIBK)	8260C	17.0	20.0	85	40-140
Styrene	8260C	15.2	20.0	76	40-140
1,1,2,2-Tetrachloroethane	8260C	14.8	20.0	74	40-140
Tetrachloroethene	8260C	12.9	20.0	64	40-140
Toluene	8260C	13.9	20.0	70	40-140
1,1,1-Trichloroethane	8260C	12.4	20.0	62	40-140
1,1,2-Trichloroethane	8260C	15.8	20.0	79	40-140
Trichloroethene	8260C	15.2	20.0	76	40-140

ALS Group USA, Corp.
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QA/QC Report

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

Service Request: R1611538
Date Analyzed: 11/03/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/Kg
Basis: Dry

Lab Control Sample
RQ1613524-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	8260C	14.3	20.0	71	40-140
o-Xylene	8260C	13.9	20.0	70	40-140
m,p-Xylenes	8260C	26.9	40.0	67	40-140

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: R1611538
Date Analyzed: 11/07/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1613565-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	31.5	20.0	158	40-161
Benzene	8260C	20.6	20.0	103	76-118
Bromodichloromethane	8260C	22.2	20.0	111	78-126
Bromoform	8260C	16.9	20.0	84	71-136
Bromomethane	8260C	13.8	20.0	69	42-166
2-Butanone (MEK)	8260C	27.1	20.0	136	61-137
Carbon Disulfide	8260C	21.6	20.0	108	65-127
Carbon Tetrachloride	8260C	16.6	20.0	83	68-125
Chlorobenzene	8260C	22.1	20.0	111	80-121
Chloroethane	8260C	20.7	20.0	103	70-127
Chloroform	8260C	22.5	20.0	112	76-120
Chloromethane	8260C	22.9	20.0	114	69-145
Dibromochloromethane	8260C	19.6	20.0	98	77-128
1,1-Dichloroethane	8260C	22.7	20.0	114	78-117
1,2-Dibromoethane	8260C	20.8	20.0	104	81-125
1,2-Dichloroethane	8260C	27.3	20.0	136 *	71-127
1,1-Dichloroethene	8260C	21.0	20.0	105	74-135
cis-1,2-Dichloroethene	8260C	21.0	20.0	105	80-121
trans-1,2-Dichloroethene	8260C	20.6	20.0	103	80-120
1,2-Dichloropropane	8260C	21.4	20.0	107	80-119
cis-1,3-Dichloropropene	8260C	19.7	20.0	99	74-126
trans-1,3-Dichloropropene	8260C	19.5	20.0	97	67-135
Ethylbenzene	8260C	21.0	20.0	105	76-120
2-Hexanone	8260C	26.7	20.0	134 *	63-124
Methylene Chloride	8260C	21.0	20.0	105	73-122
4-Methyl-2-pentanone (MIBK)	8260C	26.0	20.0	130 *	66-124
Styrene	8260C	22.0	20.0	110	80-124
1,1,2,2-Tetrachloroethane	8260C	20.7	20.0	104	78-122
Tetrachloroethene	8260C	19.5	20.0	98	78-124
Toluene	8260C	21.4	20.0	107	77-120
1,1,1-Trichloroethane	8260C	22.1	20.0	111	74-120
1,1,2-Trichloroethane	8260C	22.4	20.0	112	82-118
Trichloroethene	8260C	21.4	20.0	107	78-123

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QA/QC Report

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

Service Request: R1611538
Date Analyzed: 11/07/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1613565-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	8260C	23.2	20.0	116	69-133
o-Xylene	8260C	20.7	20.0	104	80-120
m,p-Xylenes	8260C	43.5	40.0	109	78-123

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QA/QC Report

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

Service Request: R1611538
Date Analyzed: 11/07/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/Kg
Basis: Dry

Lab Control Sample
RQ1613642-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Acetone	8260C	23.1	20.0	116	40-140
Benzene	8260C	19.3	20.0	96	40-140
Bromodichloromethane	8260C	19.0	20.0	95	40-140
Bromoform	8260C	23.8	20.0	119	40-140
Bromomethane	8260C	17.4	20.0	87	40-140
2-Butanone (MEK)	8260C	16.3	20.0	81	40-140
Carbon Disulfide	8260C	22.8	20.0	114	40-140
Carbon Tetrachloride	8260C	19.9	20.0	100	40-140
Chlorobenzene	8260C	20.4	20.0	102	40-140
Chloroethane	8260C	17.5	20.0	88	40-140
Chloroform	8260C	18.5	20.0	92	40-140
Chloromethane	8260C	17.4	20.0	87	40-140
Dibromochloromethane	8260C	20.8	20.0	104	40-140
1,1-Dichloroethane	8260C	18.7	20.0	94	40-140
1,2-Dibromoethane	8260C	19.5	20.0	98	40-140
1,2-Dichloroethane	8260C	18.2	20.0	91	40-140
1,1-Dichloroethene	8260C	20.0	20.0	100	40-140
cis-1,2-Dichloroethene	8260C	20.6	20.0	103	40-140
trans-1,2-Dichloroethene	8260C	20.2	20.0	101	40-140
1,2-Dichloropropane	8260C	18.8	20.0	94	40-140
cis-1,3-Dichloropropene	8260C	19.6	20.0	98	40-140
trans-1,3-Dichloropropene	8260C	20.0	20.0	100	40-140
Ethylbenzene	8260C	20.1	20.0	101	40-140
2-Hexanone	8260C	17.7	20.0	88	40-140
Methylene Chloride	8260C	19.1	20.0	95	40-140
4-Methyl-2-pentanone (MIBK)	8260C	17.1	20.0	85	40-140
Styrene	8260C	21.0	20.0	105	40-140
1,1,2,2-Tetrachloroethane	8260C	18.4	20.0	92	40-140
Tetrachloroethene	8260C	21.2	20.0	106	40-140
Toluene	8260C	19.7	20.0	99	40-140
1,1,1-Trichloroethane	8260C	18.9	20.0	95	40-140
1,1,2-Trichloroethane	8260C	20.6	20.0	103	40-140
Trichloroethene	8260C	21.4	20.0	107	40-140

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QA/QC Report

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

Service Request: R1611538
Date Analyzed: 11/07/16

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/Kg
Basis: Dry

Lab Control Sample
RQ1613642-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	8260C	21.7	20.0	108	40-140
o-Xylene	8260C	20.4	20.0	102	40-140
m,p-Xylenes	8260C	41.1	40.0	103	40-140

Metals

ALS Environmental—Rochester Laboratory
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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	Dry
Lab Code:	R1611538-MB1		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	1.0 U	mg/Kg	1.0	1	11/04/16 19:17	11/03/16	
Barium, Total	6010C	2.0 U	mg/Kg	2.0	1	11/04/16 19:17	11/03/16	
Cadmium, Total	6010C	0.50 U	mg/Kg	0.50	1	11/04/16 19:17	11/03/16	
Calcium, Total	6010C	100 U	mg/Kg	100	1	11/07/16 14:33	11/03/16	
Chromium, Total	6010C	1.0 U	mg/Kg	1.0	1	11/04/16 19:17	11/03/16	
Copper, Total	6010C	2.0 U	mg/Kg	2.0	1	11/04/16 19:17	11/03/16	
Iron, Total	6010C	10 U	mg/Kg	10	1	11/07/16 14:33	11/03/16	
Lead, Total	6010C	5.0 U	mg/Kg	5.0	1	11/04/16 19:17	11/03/16	
Magnesium, Total	6010C	100 U	mg/Kg	100	1	11/04/16 19:17	11/03/16	
Manganese, Total	6010C	**1.9**	mg/Kg	1.0	1	11/04/16 19:17	11/03/16	
Nickel, Total	6010C	4.0 U	mg/Kg	4.0	1	11/04/16 19:17	11/03/16	
Potassium, Total	6010C	200 U	mg/Kg	200	1	11/04/16 19:17	11/03/16	
Selenium, Total	6010C	1.0 U	mg/Kg	1.0	1	11/04/16 19:17	11/03/16	
Sodium, Total	6010C	100 U	mg/Kg	100	1	11/04/16 19:17	11/03/16	
Zinc, Total	6010C	2.0 U	mg/Kg	2.0	1	11/04/16 19:17	11/03/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1611538-MB2		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	11/07/16 19:26	11/03/16	
Barium, Total	6010C	20 U	ug/L	20	1	11/07/16 19:26	11/03/16	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/07/16 19:26	11/03/16	
Calcium, Total	6010C	1000 U	ug/L	1000	1	11/07/16 19:26	11/03/16	
Chromium, Total	6010C	10 U	ug/L	10	1	11/07/16 19:26	11/03/16	
Copper, Total	6010C	20 U	ug/L	20	1	11/07/16 19:26	11/03/16	
Iron, Total	6010C	100 U	ug/L	100	1	11/07/16 19:26	11/03/16	
Lead, Total	6010C	50 U	ug/L	50	1	11/07/16 19:26	11/03/16	
Magnesium, Total	6010C	1000 U	ug/L	1000	1	11/07/16 19:26	11/03/16	
Manganese, Total	6010C	10 U	ug/L	10	1	11/07/16 19:26	11/03/16	
Nickel, Total	6010C	40 U	ug/L	40	1	11/07/16 19:26	11/03/16	
Potassium, Total	6010C	2000 U	ug/L	2000	1	11/07/16 19:26	11/03/16	
Selenium, Total	6010C	10 U	ug/L	10	1	11/07/16 19:26	11/03/16	
Sodium, Total	6010C	1000 U	ug/L	1000	1	11/07/16 19:26	11/03/16	
Zinc, Total	6010C	20 U	ug/L	20	1	11/07/16 19:26	11/03/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1611538-MB3		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic, Total	6010C	10 U	ug/L	10	1	11/11/16 09:52	11/07/16	
Barium, Total	6010C	20 U	ug/L	20	1	11/11/16 09:52	11/07/16	
Cadmium, Total	6010C	5.0 U	ug/L	5.0	1	11/11/16 09:52	11/07/16	
Calcium, Total	6010C	1000 U	ug/L	1000	1	11/11/16 09:52	11/07/16	
Chromium, Total	6010C	10 U	ug/L	10	1	11/11/16 09:52	11/07/16	
Copper, Total	6010C	20 U	ug/L	20	1	11/11/16 09:52	11/07/16	
Iron, Total	6010C	100 U	ug/L	100	1	11/11/16 09:52	11/07/16	
Lead, Total	6010C	50 U	ug/L	50	1	11/11/16 09:52	11/07/16	
Magnesium, Total	6010C	1000 U	ug/L	1000	1	11/11/16 09:52	11/07/16	
Manganese, Total	6010C	10 U	ug/L	10	1	11/11/16 09:52	11/07/16	
Nickel, Total	6010C	40 U	ug/L	40	1	11/11/16 09:52	11/07/16	
Potassium, Total	6010C	2000 U	ug/L	2000	1	11/11/16 09:52	11/07/16	
Selenium, Total	6010C	10 U	ug/L	10	1	11/11/16 09:52	11/07/16	
Sodium, Total	6010C	1000 U	ug/L	1000	1	11/11/16 09:52	11/07/16	
Zinc, Total	6010C	20 U	ug/L	20	1	11/11/16 09:52	11/07/16	

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QA/QC Report

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

Service Request:R1611538
Date Collected:10/31/16
Date Received:11/01/16
Date Analyzed:11/04/16 - 11/07/16

Matrix Spike Summary
Inorganic Parameters

Sample Name: SWS1SED-1016
Lab Code: R1611538-002

Units:mg/Kg
Basis: Dry

Matrix Spike
R1611538-002MS

Analyte Name	Method	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic, Total	6010C	8.1	15.2	4.9	143 *	75-125
Barium, Total	6010C	57.7	326	247	109	75-125
Calcium, Total	6010C	46400	54700	200	3354 #	75-125
Cadmium, Total	6010C	0.62 U	6.47	6.18	105	75-125
Chromium, Total	6010C	8.7	33.0	24.7	98	75-125
Copper, Total	6010C	16.2	53.2	30.9	120	75-125
Iron, Total	6010C	28200	34000	120	4627 #	75-125
Potassium, Total	6010C	800	3460	2470	108	75-125
Magnesium, Total	6010C	7940	9740	250	726 #	75-125
Manganese, Total	6010C	571	910	61.8	549 #	75-125
Sodium, Total	6010C	120 U	2730	2470	111	75-125
Nickel, Total	6010C	16.6	76.5	61.8	97	75-125
Lead, Total	6010C	8.4	69.5	61.8	99	75-125
Selenium, Total	6010C	1.2 U	122	125	98	75-125
Zinc, Total	6010C	414	701	62	465 #	75-125

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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:R1611538
Date Collected:10/31/16
Date Received:11/01/16
Date Analyzed:11/7/16

Matrix Spike Summary
Inorganic Parameters

Sample Name: MW18S-1016
Lab Code: R1611538-010

Units:ug/L
Basis:NA

Matrix Spike
R1611538-010MS

Analyte Name	Method	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic, Total	6010C	10 U	42	40	105	75-125
Barium, Total	6010C	37	2110	2000	104	75-125
Calcium, Total	6010C	29500	31900	2000	122 #	75-125
Cadmium, Total	6010C	5.0 U	51.0	50.0	102	75-125
Chromium, Total	6010C	10 U	201	200	100	75-125
Copper, Total	6010C	20 U	261	250	105	75-125
Iron, Total	6010C	990	2030	1000	104	75-125
Potassium, Total	6010C	2000 U	20800	20000	104	75-125
Magnesium, Total	6010C	10700	12500	2000	89 #	75-125
Manganese, Total	6010C	140	642	500	100	75-125
Sodium, Total	6010C	2500	22200	20000	98	75-125
Nickel, Total	6010C	40 U	509	500	102	75-125
Lead, Total	6010C	50 U	514	500	103	75-125
Selenium, Total	6010C	10 U	933	1010	92	75-125
Zinc, Total	6010C	20 U	492	500	98	75-125

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QA/QC Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project	WAL - Annual Sampling	**Date Collected:**	10/31/16
Sample Matrix:	Soil	**Date Received:**	11/01/16
		Date Analyzed:	11/04/16 - 11/07/16

Replicate Sample Summary
Inorganic Parameters

Sample Name:	SWS1SED-1016	**Units:**	mg/Kg
Lab Code:	R1611538-002	**Basis:**	Dry

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R1611538-002DUP Result	Average	RPD	RPD Limit
Arsenic, Total	6010C	1.3	8.1	8.9	8.51	9	20
Barium, Total	6010C	2.5	57.7	61.3	59.5	6	20
Cadmium, Total	6010C	0.63	0.63 U	0.65	NC	NC	20
Calcium, Total	6010C	1300	46400	51700	49000	11	20
Chromium, Total	6010C	1.3	8.7	9.4	9.02	8	20
Copper, Total	6010C	2.5	16.2	22.5	19.3	33 *	20
Iron, Total	6010C	130	28200	33600	30900	17	20
Lead, Total	6010C	6.3	8.4	10.1	9.24	18	20
Magnesium, Total	6010C	130	7940	11500	9710	36 *	20
Manganese, Total	6010C	1.3	571	863	717	41 *	20
Nickel, Total	6010C	5.0	16.6	17.4	17.0	5	20
Potassium, Total	6010C	250	800	780	789	3	20
Selenium, Total	6010C	1.3	1.3 U	1.3 U	NC	NC	20
Sodium, Total	6010C	130	130 U	130 U	NC	NC	20
Zinc, Total	6010C	25	414	593	503	35 *	20

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QA/QC Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project	WAL - Annual Sampling	**Date Collected:**	10/31/16
Sample Matrix:	Water	**Date Received:**	11/01/16
		Date Analyzed:	11/07/16

Replicate Sample Summary
Inorganic Parameters

Sample Name:	MW18S-1016	**Units:**	ug/L
Lab Code:	R1611538-010	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R1611538-010DUP Result	Average	RPD	RPD Limit
Arsenic, Total	6010C	10	10 U	10 U	NC	NC	20
Barium, Total	6010C	20	37	37	37.1	<1	20
Cadmium, Total	6010C	5.0	5.0 U	5.0 U	NC	NC	20
Calcium, Total	6010C	1000	29500	29300	29400	<1	20
Chromium, Total	6010C	10	10 U	10 U	NC	NC	20
Copper, Total	6010C	20	20 U	20 U	NC	NC	20
Iron, Total	6010C	100	990	1060	1020	7	20
Lead, Total	6010C	50	50 U	50 U	NC	NC	20
Magnesium, Total	6010C	1000	10700	10700	10700	<1	20
Manganese, Total	6010C	10	140	141	141	<1	20
Nickel, Total	6010C	40	40 U	40 U	NC	NC	20
Potassium, Total	6010C	2000	2000 U	2000 U	NC	NC	20
Selenium, Total	6010C	10	10 U	10 U	NC	NC	20
Sodium, Total	6010C	1000	2500	2500	2520	<1	20
Zinc, Total	6010C	20	20 U	20 U	NC	NC	20

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QA/QC Report

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

Service Request: R1611538
Date Analyzed: 11/04/16 - 11/07/16

Lab Control Sample Summary
Inorganic Parameters

Units:mg/Kg
Basis: Dry

Lab Control Sample
R1611538-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic, Total	6010C	3.6	4.0	90	80-120
Barium, Total	6010C	209	200	104	80-120
Cadmium, Total	6010C	4.87	5.00	97	80-120
Calcium, Total	6010C	190	200	97	80-120
Chromium, Total	6010C	20.5	20.0	102	80-120
Copper, Total	6010C	26.1	25.0	104	80-120
Iron, Total	6010C	98	100	98	80-120
Lead, Total	6010C	49.6	50.0	99	80-120
Magnesium, Total	6010C	180	200	92	80-120
Manganese, Total	6010C	51.6	50.0	103	80-120
Nickel, Total	6010C	50.7	50.0	101	80-120
Potassium, Total	6010C	1670	2000	83	80-120
Selenium, Total	6010C	93.3	101	92	80-120
Sodium, Total	6010C	1820	2000	91	80-120
Zinc, Total	6010C	49.9	50.0	100	80-120

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QA/QC Report

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

Service Request: R1611538
Date Analyzed: 11/07/16

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R1611538-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic, Total	6010C	38	40	96	80-120
Barium, Total	6010C	2090	2000	105	80-120
Cadmium, Total	6010C	51.6	50.0	103	80-120
Calcium, Total	6010C	1900	2000	96	80-120
Chromium, Total	6010C	199	200	100	80-120
Copper, Total	6010C	250	250	100	80-120
Iron, Total	6010C	990	1000	99	80-120
Lead, Total	6010C	519	500	104	80-120
Magnesium, Total	6010C	1900	2000	94	80-120
Manganese, Total	6010C	499	500	100	80-120
Nickel, Total	6010C	513	500	103	80-120
Potassium, Total	6010C	18800	20000	94	80-120
Selenium, Total	6010C	918	1010	91	80-120
Sodium, Total	6010C	19400	20000	97	80-120
Zinc, Total	6010C	487	500	97	80-120

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QA/QC Report

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

Service Request: R1611538
Date Analyzed: 11/11/16

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R1611538-LCS3

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic, Total	6010C	43	40	107	80-120
Barium, Total	6010C	2050	2000	103	80-120
Cadmium, Total	6010C	50.4	50.0	101	80-120
Calcium, Total	6010C	1800	2000	90	80-120
Chromium, Total	6010C	197	200	99	80-120
Copper, Total	6010C	239	250	96	80-120
Iron, Total	6010C	970	1000	97	80-120
Lead, Total	6010C	505	500	101	80-120
Magnesium, Total	6010C	1800	2000	92	80-120
Manganese, Total	6010C	491	500	98	80-120
Nickel, Total	6010C	498	500	100	80-120
Potassium, Total	6010C	18400	20000	92	80-120
Selenium, Total	6010C	928	1010	92	80-120
Sodium, Total	6010C	19000	20000	95	80-120
Zinc, Total	6010C	476	500	95	80-120

General Chemistry

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1611538-MB1		

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	11/08/16 20:50	NA	
Ammonia as Nitrogen, undistilled	350.1	0.050	U	mg/L	0.050	1	11/03/16 13:21	NA	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	2.0	U	mg/L	2.0	1	11/02/16 21:35	NA	
Bromide	300.0	0.10	U	mg/L	0.10	1	11/01/16 16:41	NA	
Carbon, Total Organic (TOC)	SM 5310 B-2000(2011)	1.0	U	mg/L	1.0	1	11/04/16 15:17	NA	
Chemical Oxygen Demand, Total	410.4	5.0	U	mg/L	5.0	1	11/04/16 07:53	NA	
Chloride	300.0	0.20	U	mg/L	0.20	1	11/01/16 16:41	NA	
Nitrate as Nitrogen	300.0	0.10	U	mg/L	0.10	1	11/01/16 16:41	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.20	U	mg/L	0.20	1	11/07/16 12:43	11/02/16	
Phenolics, Total Recoverable	420.4	0.0050	U	mg/L	0.0050	1	11/03/16 09:05	NA	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	10	U	mg/L	10	1	11/07/16 10:30	NA	
Sulfate	300.0	0.20	U	mg/L	0.20	1	11/01/16 16:41	NA	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	Dry
Lab Code:	R1611538-MB2		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B Modified	200	U	mg/Kg	200	1	11/12/16 06:13	11/11/16	
Ammonia as Nitrogen, undistilled	350.1M	5.0	U	mg/Kg	5.0	1	11/03/16 13:57	11/03/16	
Bromide	9056A	10	U	mg/Kg	10	1	11/08/16 15:40	11/08/16	
Chemical Oxygen Demand, Total	SM 5220 B Modified	100	U	mg/Kg	100	1	11/08/16 08:50	NA	
Chloride	9056A	30	U	mg/Kg	30	1	11/08/16 15:40	11/08/16	
Nitrate as Nitrogen	9056A	10	U	mg/Kg	10	1	11/08/16 15:40	11/08/16	
Nitrogen, Total Kjeldahl (TKN)	351.2 Modified	20	U	mg/Kg	20	1	11/09/16 18:13	11/08/16	
Phenolics, Total Recoverable	9066 Modified	0.10	U	mg/Kg	0.10	1	11/08/16 09:20	11/07/16	
Sulfate	9056A	30	U	mg/Kg	30	1	11/08/16 15:40	11/08/16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project:	WAL - Annual Sampling	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	Dry, per Method
Lab Code:	R1611538-MB2		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	300 U	mg/Kg	300	1	11/10/16 15:27	NA	

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QA/QC Report

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

Service Request:R1611538
Date Collected:10/31/16
Date Received:11/01/16
Date Analyzed:11/03/16 - 11/12/16

Matrix Spike Summary
General Chemistry Parameters

Sample Name: SWS1SED-1016
Lab Code: R1611538-002

Units:mg/Kg
Basis: Dry

Matrix Spike
R1611538-002MS

Analyte Name	Method	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B Modified	360	18800	50000	37	10-162
Ammonia as Nitrogen, undistilled	350.1M	6.4 U	32.9	32.1	102	17-163
Bromide	9056A	13 U	125	129	97	54-121
Chloride	9056A	39 U	265	257	103	69-146
Chemical Oxygen Demand, Total	SM 5220 B Modified	75800	62400	45100	-30 *	49-153
Phenolics, Total Recoverable	9066 Modified	0.12 U	0.88	0.99	89	72-113
Sulfate	9056A	39 U	263	257	102	38-181
Nitrogen, Total Kjeldahl (TKN)	351.2 Modified	297	576	321	87	17-187
Nitrate as Nitrogen	9056A	13 U	129	129	100	45-150

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QA/QC Report

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

Service Request:R1611538
Date Collected:10/31/16
Date Received:11/01/16
Date Analyzed:11/1/16

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: SWS1-1016
Lab Code: R1611538-001

Units:mg/L
Basis:NA

			Matrix Spike R1611538-001MS			Duplicate Matrix Spike R1611538-001DMS					
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Bromide	300.0	1.0 U	8.1	10.0	81 *	8.1	10.0	81 *	90-110	<1	20
Chloride	300.0	7.0	24.0	20.0	85 *	24.0	20.0	85 *	90-110	<1	20
Nitrate as Nitrogen	300.0	1.0 U	8.4	10.0	84 *	8.4	10.0	84 *	90-110	<1	20
Sulfate	300.0	2.1	18.4	20.0	82 *	18.5	20.0	82 *	90-110	<1	20

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QA/QC Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project	WAL - Annual Sampling	**Date Collected:**	10/31/16
Sample Matrix:	Water	**Date Received:**	11/01/16
		Date Analyzed:	11/02/16

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	SWS1-1016	**Units:**	mg/L
Lab Code:	R1611538-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R1611538-001DUP 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

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QA/QC Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project	WAL - Annual Sampling	**Date Collected:**	10/31/16
Sample Matrix:	Water	**Date Received:**	11/01/16
		Date Analyzed:	11/01/16

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	SWS1-1016	**Units:**	ColorUnits
Lab Code:	R1611538-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R1611538-001DUP Result	Average	RPD	RPD Limit
Color, True	SM 2120 B-2001(2011)	2.0	84.0	84.0	84.0	<1	5

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QA/QC Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project	WAL - Annual Sampling	**Date Collected:**	10/31/16
Sample Matrix:	Water	**Date Received:**	11/01/16
		Date Analyzed:	11/01/16

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	SWS1-1016	**Units:**	pH Units
Lab Code:	R1611538-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R1611538-001DUP Result	Average	RPD	RPD Limit
pH of Color Analysis	SM 2120 B-2001(2011)	-	7.34	7.34	7.34	<1	

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QA/QC Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1611538
Project	WAL - Annual Sampling	**Date Collected:**	10/31/16
Sample Matrix:	Soil	**Date Received:**	11/01/16
		Date Analyzed:	11/03/16 - 11/12/16

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	SWS1SED-1016	**Units:**	mg/Kg
Lab Code:	R1611538-002	**Basis:**	Dry

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R1611538-002DUP Result	Average	RPD	RPD Limit
Alkalinity, Total as CaCO3	SM 2320 B Modified	260	360	360	358	<1	20
Ammonia as Nitrogen, undistilled	350.1M	6.4	6.4 U	6.4 U	NC	NC	30
Bromide	9056A	13	13 U	13 U	NC	NC	15
Chemical Oxygen Demand, Total	SM 5220 B Modified	450	75800	55600	65700	31 *	30
Chloride	9056A	39	39 U	39 U	NC	NC	15
Nitrogen, Total Kjeldahl (TKN)	351.2 Modified	26	297	342	319	14	30
Phenolics, Total Recoverable	9066 Modified	0.12	0.12 U	0.12 U	NC	NC	30
Sulfate	9056A	39	39 U	45	NC	NC	15
Nitrate as Nitrogen	9056A	13	13 U	13 U	NC	NC	15

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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: Soil

Service Request: R1611538
Date Analyzed: 11/03/16 - 11/12/16

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/Kg
Basis: Dry

Lab Control Sample
R1611538-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B Modified	1880	2000	94	76-110
Ammonia as Nitrogen, undistilled	350.1M	24.6	25.0	98	69-142
Bromide	9056A	107	100	107	80-120
Carbon, Total Organic (TOC)	EPA LKahn 7-27-1988	300 U	2000	0 *	75-127
Chemical Oxygen Demand, Total	SM 5220 B Modified	640	800	80	50-143
Chloride	9056A	219	200	110	80-120
Nitrate as Nitrogen	9056A	109	100	109	80-120
Nitrogen, Total Kjeldahl (TKN)	351.2 Modified	233	250	93	64-126
Phenolics, Total Recoverable	9066 Modified	0.72	0.80	90	59-128
Sulfate	9056A	215	200	107	80-120

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QA/QC Report

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

Service Request: R1611538
Date Analyzed: 11/01/16 - 11/08/16

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1611538-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	19.2	20.0	96	81-112
Ammonia as Nitrogen, undistilled	350.1	0.266	0.250	106	90-110
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	207	198	104	85-115
Bromide	300.0	0.91	1.00	91	90-110
Carbon, Total Organic (TOC)	SM 5310 B-2000(2011)	9.5	10.0	95	81-118
Chemical Oxygen Demand, Total	410.4	49.9	50.0	100	90-110
Chloride	300.0	1.90	2.00	95	90-110
Nitrate as Nitrogen	300.0	0.93	1.00	93	90-110
Nitrogen, Total Kjeldahl (TKN)	351.2	2.56	2.50	103	90-110
Phenolics, Total Recoverable	420.4	0.0390	0.0400	97	90-110
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	902	914	99	90-110
Sulfate	300.0	1.84	2.00	92	90-110