Prepared for:

Village of Wellsville

Department of Public Works

200 Bolivar Road

Wellsville, NY 14895

2014 ANNUAL PERIODIC REVIEW REPORT

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

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1.0 OVERVIEW

1.1 Introduction

This report presents the 2014 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, 2014. Starting in 2009 the NYSDEC is requiring a Periodic Review Report (PRR) be completed for the Site annually. This report is the 2014 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 it 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 2014 Monitoring, Inspection and Maintenance Activities

This section provides an overview of the monitoring, inspection and maintenance activities completed in 2014.

On-Site completed the required 2014 monitoring events in accordance with procedures set forth in the Approved O&M Plan (Appendix B). Semiannual groundwater and residential water supply monitoring events were conducted in April and October 2014. The 2014 monitoring events show consistent results as compared to historic monitoring indicating the landfill cap 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. 2014 Quarterly inspections resulted in no unresolved problems with the exception of the water level gauges within the leachate storage tanks not functioning properly. Manual tank measurements are being made and a corrective action plan is in development. 2014 maintenance activities included annual mowing of the cap vegetation (completed October 2014), leachate disposal, leachate collection system gauge troubleshooting and maintenance of the water treatment unit at the LaDue residence (WAL-19). Completed quarterly inspection and maintenance checklists are included in Appendix C.

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.

- Five monitoring wells and one residential water supply are sampled for Volatile Organic Compounds (VOCs) during an annual spring sampling event. During the annual 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.
- 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-annual basis 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.
- 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 2014 static water elevations along with well construction information.
- Landfill gas monitoring and perimeter air monitoring are completed during the fall monitoring event for Volatile Organic Compounds (VOCs), Lower Explosive Level (LEL) and Oxygen (O_2). The 2014 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 2014. The spring event includes five monitoring wells for VOC analysis, while the fall event is an annual Site wide monitoring event.

3.1 Spring Monitoring Event Summary

Spring 2014 groundwater sampling was conducted on April 21 and 22, 2014. Monitoring wells MW-5D, MW-5S, MW-4D, MW-11S and MW-16S were sampled and analyzed for VOCs.

April 2014 Groundwater results are typical of historical data with several monitoring wells exceeding Class GA Standards for cis-1,2-Dichloroethene (cDCE), trans-1,2-Dichloroethene, Trichloroethene (TCE) and Vinyl chloride. Monitoring well MW-16S is the furthest downgradient well. April 2014 MW-16S VOC concentrations are reported as non-detect.

Four residential water supply samples were collected from locations WAL-5 and WAL-19 during this sampling event. WAL-5 was sampled in spring 2014 (normally sampled in fall) as the water was shut off for winter during the fall 2013 sampling event. A sample for VOC analysis and Metals was collected from WAL-5 on April 23, 2014. Samples were collected from WAL-19 for VOC analysis before filters, between filters, and after filters on April 23, 2014.

WAL-5 April 2014 results are below Class GA Standards and NYSDOH MCLs with VOCs reported as non-detect. Residential location WAL-19 results are typical of historic results with cDCE and TCE detected before filters at concentrations below Class GA standards and NYSDOH MCLs, and non-detect after filtration.

For further details regarding the April 2014 monitoring event, refer to the *April 2014 Monitoring Event Summary* dated September 16, 2014.

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 2014 data were utilized to develop separate potentiometric maps for wells screened in overburden and wells screened in bedrock. The potentiometric maps for 2014 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 2014 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 October 2014. 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 2013 and 2014. Table 3-2 lists the 2014 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 2014. 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 October 2014 sampling event (Table 2-2). As shown in Table 3-1, eight metals (Barium, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium and Zinc) were detected in 2014. The same metals were detected in 2013. Iron, Manganese and Sodium exceeded Class GA standards in 2013 and 2014 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 2014, 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. In general, 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 April and October 2014 sampling events were analyzed for VOCs, which include 36 compounds (Table 2-2). Twenty-two groundwater samples were analyzed for VOCs in 2013 while 21 groundwater samples were tested for VOCs in 2014. In 2013 and 2014 cis-1,2-dichloroethene (cDCE), trichloroethylene (TCE) and Vinyl chloride were detected and exceeded Class GA Standard. Trans-1,2-Dichloroethen was also detected and exceeded Class Ga Standards in 2014. 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 2014 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. The VOC graphs show some trends as discussed below.

- Downgradient well CW-3A exhibited TCE at anomalous high results in June 2005, but has returned to lower levels the last 14 samplings. cDCE has been stable with the exception of an increase in June 2005, while Vinyl chloride has been non-detect except for in June 2005.
- Downgradient well CW-3B shows a potential increasing trend in TCE concentration. cDCE concentrations have generally leveled off and Vinyl chloride has been mainly non-detect.
- Downgradient well CW-4A shows results as non-detect for TCE and Vinyl chloride the last 17 samplings, while cDCE results have been non-detect the last 4 samplings.
- Downgradient well CW-4B shows TCE and Vinyl chloride results as non-detect the last 19 samplings and cDCE has been non-detect the last 13 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 present since 2009. Both cDCE and Vinyl Chloride have been stable or slight decreasing trend since 2009. TCE has been non-detect the last 14 samplings.

- Prior to 2005, cross gradient well MW-5S exhibits an overall slight decreasing trend in cDCE, TCE and Vinyl chloride. Since 2005 these compounds appear mainly stable.
- 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 the decrease in 2009, TCE does not seem to be following an increasing or decreasing trend. However, TCE concentration appears to be inversely proportional to groundwater elevation, similar to MW-4D.
- 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 near or below detection limits.
- Cross gradient well MW-17S does not seem to follow a time trend but does show a correlation between TCE and Vinyl chloride, while cDCE has shown results of non-detect to 0.13 mg/L.
- 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. SWS-1 was sampled on October 23, 2014. Present and historic surface water and sediment results are presented in Tables 4-1 and 4-2. The 2014 surface water results are below Class C Standards, with the exception of Iron (1.49 mg/L). VOCs are non-detect in 2014. Sediment was not present at SWS-1 at the time of sampling in 2014; therefore a sediment sample was not collected.

5.0 LEACHATE SUMP AND MANHOLE MONITORING RESULTS

Water samples are required to be collected at 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 2013 and 2014. 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. Wet Chemistry parameters are no longer required to be analyzed at the Leachate Sump. Nitrate Nitrogen and Total Dissolved Solids (TDS) are required for groundwater cut-off system manhole samples. 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 2014. Metals detected in 2014 include Barium, Calcium, Iron, Magnesium, Manganese, Potassium and Sodium. The same metals were detected in 2013. 2014 results are consistent of historic data.

VOCs

VOCs were analyzed in one leachate sump sample during 2014 with cDCE 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 2014. Metals detected in 2014 at MH-32 include Barium, Calcium, Iron, Magnesium, Manganese, Potassium and Sodium. The same metals were detected at MH-33 and with the exception of Potassium. 2014 Metals results are consistent with historic data. Iron consistently exceeds Class C Standards.

VOCs

VOCs were analyzed in two manhole samples in 2014. cDCE was detected at MH-32 and MH-33, while TCE was detected at MH-33. 2014 VOC results are generally consistent with previous analyses.

Wet Chemistry

Nitrate Nitrogen was not detected in MH-32 and MH-33 samples during the last three samplings. TDS has been reported at concentrations ranging from 253 mg/L to 601 mg/L the last three samplings with five of the six results below the 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 2014 event utilizing a Photo Ionization Detector (PID) and an Oxygen (O_2)/Lower Explosive Limit (LEL) meter (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 83.9 ppm, O_2 levels range from 8.5% to 20.9%, and 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 were not above background readings indicating no measurable landfill gas at the landfill perimeter. O_2 readings at the landfill perimeter were within normal range. All readings were recorded in tabular form and are presented in Table 6-1.

7.0 RESIDENTIAL WATER SUPPLY MONITORING RESULTS

Two residential water supply sampling events were completed during 2014. The sampling events were conducted in April and October 2014. The current monitoring schedule requires that one water supply (WAL-19) be sampled semi-annually (spring and fall) and the remaining two locations (WAL-2 and WAL-5) be sampled annually.

Table 7-1 presents an overview of residential sampling locations and sampling frequencies during 2014. Figure 2 shows the approximate sampling locations.

A total of eight residential water samples were collected in 2014. 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 2013 and 2014. Table 7-3 is a tabular listing of 2014 residential water analytical results. A discussion of the analytical results is provided below.

Metals

Metals detected in 2014 include Barium, Calcium, Iron, Magnesium, Manganese, Sodium and Zinc. In 2014, metals with either or both exceedances of the NYSDEC Class GA Standards and the NYSDOH MCLs include Iron, Manganese and Sodium.

VOCs

During 2012 and 2014, 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 2013 and 2014.

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 27, September 30 and December 31, 2014. No unresolved problems were noted on inspection forms with the exception of the water level gauges within the leachate storage tanks not functioning properly. Manual readings, using a measuring stick, are currently being conducted and a corrective action plan is being developed. The 2014 completed inspection forms are included as Appendix C.

A description of maintenance activities performed during 2014 is provided below.

- Village of Wellsville personnel mowed the landfill cap in October 2014.
- The Village of Wellsville continues to maintain a water treatment unit at the LaDue (WAL-19) residence.
- A total of approximately 1,441,683 gallons of leachate was hauled from the Landfill to the Village of Wellsville POTW during 2014. The table below lists the total leachate gallons by year for the previous six years. The increased volume observed during 2011 is directly related to the increase in precipitation during 2011.

Year/Gallons	2009	2010	2011	2012	2013	2014
	1,623,591	1,581,614	2,359,104	1,643,350	1,690,269	1,441,683

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 16 years following completion of the remedial action. Monitoring will continued as required by the approved plan.

Maintenance activities planned for 2015 include scheduled annual mowing and evaluating and determining appropriate corrective action relating to the improperly functioning leachate holding tanks water level gauges.

This 2014 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]
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			
SWS-1	Annual - Fall	NR	Field, VOCs, Metals, Wet Chem[3]
Sediment			
SWS-1	Annual - Fall	NR	Field, VOCs, Metals, Wet Chem[3]
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 prorgram 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 reports will include details of the previous years monitoring and O&M activities along with potentiometric maps and comparison of results to standards and historic results

[6] Residential VOCs are tested using method 524.2

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

Well Construction and 2014 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	4/21/2014 DTW From TOC (ft)	4/21/2014 Static Water Elevation (ft amsl)	10/20/2014 DTW From TOC (ft)	10/20/2014 Static Water Elevation (ft amsl)
MW-1D	2	2193.32	2193.75	2190.6	77.39	64 - 74	Bedrock	70.21	2123.11	69.50	2123.82
MW-3D	2	2095.80	2096.07	2092.4	46.75	30 - 40	Bedrock	19.75	2076.05	21.22	2074.58
MW-3S	2	2095.70	2095.96	2093.1	25.92	9 - 19	Overburden	12.34	2083.36	12.49	2083.21
MW-4D	2	2092.22	2092.39	2090.3	24.63	12 - 22	Bedrock	10.72	2081.50	15.58	2076.64
MW-5D	2	2066.87	2067.26	2065.4	37.74	26.5 - 36.5	Bedrock	1.85	2065.02	3.50	2063.37
MW-5S	2	2067.30	2067.59	2065.5	21.20	10 - 20	Overburden	2.27	2065.03	3.32	2063.98
MW-7D	2	2012.13	2012.69	2009.6	47.97	35 - 45	Bedrock	37.24	1974.89	37.41	1974.72
MW-11S	2	2003.52	2003.86	2001.6	20.40	8 - 18	Overburden	5.53	1997.99	7.12	1996.40
MW-15S	2	2022.88	2023.05	2020.2	22.10	9 - 19	Overburden	Dry	<2000.80	21.50	2001.38
MW-15DA	2	2022.67	2023.08	2020.4	56.28	43 - 53	Bedrock	56.10	1966.57	56.11	1966.56
MW-16D	2	1924.73	1925.25	1922.0	53.00	40 - 50	Bedrock	28.78	1895.95	28.90	1895.83
MW-16S	2	1924.98	1925.15	1922.2	18.67	6 - 16	Overburden	9.79	1915.19	14.20	1910.78
MW-17D	4	2037.36	NA	2034.9	65.1	48 - 63 (open hole)	Bedrock	32.66	2004.70	32.81	2004.55
MW-17S	2	2037.59	2037.68	2034.6	26.94	9 - 24	Overburden	8.82	2028.77	8.92	2028.67
MW-18D	4	2066.19	NA	2062.6	28.50	24.5 - 39.5 (open hole)	Bedrock	14.84	2051.35	14.28	2051.91
MW-18S	2	2064.60	2065.72	2063.0	20.49	4 - 19	Overburden	4.93	2059.67	10.08	2054.52
CW-3A	2	2013.75	2013.90	2012.9	27.47	21 - 26	Overburden	10.39	2003.36	8.59	2005.16
CW-3B	2	2013.90	2014.10	2012.9	37.70	33.5 - 38.5	Overburden	22.16	1991.74	21.25	1992.65
CW-4A	2	2006.11	2006.35	2004.7	19.12	13 - 18	Overburden	3.93	2002.18	5.62	2000.49
CW-4B	2	2005.84	2005.93	2004.7	30.16	25.5 - 30.5	Overburden	3.38	2002.46	5.06	2000.78
PZ-1	2	2095.11	2095.27	2092.2	NM	6 - 13	Overburden/ Refuse	14.73	2080.38	13.59	2081.52
PZ-2	2	2095.83	2096.13	2092.9	NM	14 - 24	Overburden/ Refuse	23.68	2072.15	21.27	2074.56
PZ-3R	2	2085.50	2085.79	2084.0	NM	22.5 - 32.5	Overburden/ Refuse	Decommissioned October 2012			
PZ-4	2	2067.13	2067.38	2064.4	NM	12 - 22	Overburden/ Refuse	26.19	2040.94	26.15	2040.98
PZ-5	2	2059.71	2059.71	2056.7	NM	8 - 18	Overburden/ Refuse	9.72	2049.99	11.25	2048.46
PZ-6	2	2042.18	2042.31	2039.2	NM	8 - 18	Overburden/ Refuse	22.63	2019.55	21.20	2020.98

Notes:

Dry - Water not present
NM - Not Measured
NA - Not Applicable

Table 3-1

Summary of 2013 and 2014 Groundwater Detection Frequencies
Wellsville/Andover Landfill
Wellsville, New York

Parameter	2013 Detection Frequency	2013 Minimum	2013 Maximum	2014 Detection Frequency	2014 Minimum	2014 Maximum	Class GA Standard	2013 Class GA Exceedances	2014 Class GA Exceedances
Inorganic Compounds									
Arsenic	0/17			0/16			0.025	0	0
Barium	15/17	0.022	0.085	13/16	0.021	0.108	1	0	0
Cadmium	0/17			0/16			0.005	0	0
Calcium	17/17	2.8	125	16/16	13.5	115			
Chromium	0/17			0/16			0.05	0	0
Copper	0/17			0/16			0.2	0	0
Iron	12/17	0.11	7.58	11/16	0.25	6.37	0.3	8	10
Lead	0/17			0/16			0.025	0	0
Magnesium	16/17	2.2	64.6	15/16	9.6	61.4			
Manganese	15/17	0.011	1.17	15/16	0.013	1.19	0.3	9	8
Nickel	0/17			0/16			0.1	0	0
Potassium	9/17	2.3	16.1	10/16	2.2	14.2			
Selenium	0/17			0/16			0.01	0	0
Sodium	17/17	1.8	64.6	16/16	3.5	67.5	20	6	8
Zinc	1/17	0.056	0.056	1/16	0.045	0.045			
Volatile Organic Compounds									
1,1,1-Trichloroethane	0/22			0/21			0.005	0	0
1,1,2,2-Tetrachloroethane	0/22			0/21			0.005	0	0
1,1,2-Trichloroethane	0/22			0/21			0.001	0	0
1,1-Dichloroethane	0/22			0/21			0.005	0	0
1,1-Dichloroethene	0/22			0/21			0.005	0	0
1,2-Dibromoethane	0/22			0/21					
1,2-Dichloroethane	0/22			0/21			0.0006	0	0
1,2-Dichloropropane	0/22			0/21			0.001	0	0
2-Butanone (MEK)	1/22	0.29	0.29	0/21					
2-Hexanone	0/22			0/21					
4-Methyl-2-pentanone	0/22			0/21					
Acetone	1/22	3.9	3.9	0/21					
Benzene	0/22			0/21			0.001	0	0
Bromodichloromethane	0/22			0/21					
Bromoform	0/22			0/21					
Bromomethane	0/22			0/21			0.005	0	0
Carbon disulfide	0/22			0/21					
Carbon tetrachloride	0/22			0/21			0.005	0	0
Chlorobenzene	0/22			0/21			0.005	0	0
Chloroethane	0/22			0/21			0.005	0	0
Chloroform	0/22			0/21			0.007	0	0
Chloromethane	0/22			0/21			0.005	0	0
cis-1,2-Dichloroethene	13/22	0.012	0.98	12/21	0.013	0.96	0.005	13	12
cis-1,3-Dichloropropene	0/22			0/21					
Dibromochloromethane	0/22			0/21					
Dichloromethane (Methylene chloride)	0/22			0/21			0.005	0	0
Ethyl benzene	0/22			0/21			0.005	0	0
m&p-Xylene	0/22			0/21					
o-Xylene	0/22			0/21					
Styrene	0/22			0/21			0.005	0	0
Tetrachloroethene	0/22			0/21			0.005	0	0
Toluene	0/22			0/21			0.005	0	0
trans-1,2-Dichloroethene	0/22			1/21	0.019	0.019	0.005	0	1
trans-1,3-Dichloropropene	0/22			0/21					
Trichloroethene	11/22	0.0067	3.6	9/21	0.016	3.3	0.005	11	9
Vinyl chloride	6/22	0.011	0.14	6/21	0.02	0.15	0.002	6	6
Wet Chemistry									
Alkalinity	1/1	127	127	1/1	139	139			
Ammonia Nitrogen	0/1			0/1					
Biochemical Oxygen Demand	0/1			0/1					
Bromide	0/1			0/1					
Chemical Oxygen Demand	1/1	33.6	33.6	1/1	30.3	30.3			
Chloride	1/1	11.8	11.8	1/1	33.5	33.5	250	0	0
Color (True) (C.U.)	1/1	86	86	1/1	88	88	15	1	1
Nitrate Nitrogen	0/1			0/1					
Sulfate	1/1	2.7	2.7	1/1	4.8	4.8	250	0	0
Total Dissolved Solids	1/1	180	180	1/1	223	223	500	0	0
Total Kjeldahl Nitrogen	1/1	0.85	0.85	1/1	0.74	0.74			
Total Organic Carbon (TOC)	1/1	9.9	9.9	1/1	10.3	10.3			
Total Phenolics	0/1			0/1			0.001	0	0

Note:
Class GA Standard - NYSDEC Class GA Groundwater Standards

Table 3-2

2014 Groundwater NYSDEC and NYSDOH Standards Exceedances
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Location	Parameter	April 2014 Results	October 2014 Results	Class GA Standard	NYSDOH MCL
CW-3A	Sodium		34.8	20	
CW-3A	cis-1,2-Dichloroethene		0.049	0.005	0.005
CW-3A	Trichloroethene		0.2 D	0.005	0.005
CW-3B	Iron		0.59	0.3	0.3
CW-3B	Sodium		21.2	20	
CW-3B	cis-1,2-Dichloroethene		0.094	0.005	0.005
CW-3B	Trichloroethene		0.34	0.005	0.005
CW-4A	Manganese		0.336	0.3	0.3
CW-4B	Manganese		0.37	0.3	0.3
MW-11S	Iron		0.37	0.3	0.3
MW-11S	Manganese		1.13	0.3	0.3
MW-11S	Sodium		20.6	20	
MW-11S	cis-1,2-Dichloroethene	0.32	0.37	0.005	0.005
MW-11S	Trichloroethene	3.3	3.1	0.005	0.005
MW-17D	Iron		6.37	0.3	0.3
MW-17D	Manganese		0.587	0.3	0.3
MW-17D	Sodium		30.8	20	
MW-17S	Iron		0.84	0.3	0.3
MW-17S	Manganese		0.314	0.3	0.3
MW-17S	Sodium		67.5	20	
MW-17S	cis-1,2-Dichloroethene		0.058	0.005	0.005
MW-17S	Trichloroethene		0.016	0.005	0.005
MW-18D	Iron		5.57	0.3	0.3
MW-18D	Manganese		0.482	0.3	0.3
MW-18D	Sodium		22.3	20	
MW-18S	Iron		2.7	0.3	0.3
MW-3D	cis-1,2-Dichloroethene		0.013	0.005	0.005
MW-3S	Sodium		36.1	20	
MW-4D	Iron		1.22	0.3	0.3
MW-4D	Manganese		1.19	0.3	0.3
MW-4D	cis-1,2-Dichloroethene	0.35	0.36	0.005	0.005
MW-4D	Vinyl chloride	0.15	0.076	0.002	0.002
MW-5D	Iron		0.88	0.3	0.3
MW-5D	Manganese		1.09	0.3	0.3
MW-5D	cis-1,2-Dichloroethene	0.96 D	0.75	0.005	0.005
MW-5D	trans-1,2-Dichloroethene	0.019		0.005	0.005
MW-5D	Trichloroethene	0.15	0.071	0.005	0.005
MW-5D	Vinyl chloride	0.12	0.07	0.002	0.002
MW-5S	Iron		0.68	0.3	0.3
MW-5S	cis-1,2-Dichloroethene	0.21 D	0.23	0.005	0.005
MW-5S	Trichloroethene	0.046	0.025	0.005	0.005
MW-5S	Vinyl chloride	0.033	0.02	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 the result of a laboratory dilution

Table 3-3

2014 Groundwater Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	CW-3A 10/21/2014	CW-3B 10/21/2014	MW-3D 10/23/2014	MW-3S 10/23/2014	CW-4A 10/21/2014	CW-4B 10/21/2014	MW-4D 4/22/2014	MW-4D 10/23/2014	MW-5D 4/22/2014	MW-5D 10/21/2014
Inorganic Compounds										
Arsenic	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NR	0.01 U	NR	0.01 U
Barium	0.082	0.041	0.108	0.044	0.053	0.035	NR	0.021	NR	0.06
Cadmium	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NR	0.005 U	NR	0.005 U
Calcium	115	66.8	66.2	43.3	25.7	36.9	NR	19.1	NR	22.8
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NR	0.01 U	NR	0.01 U
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NR	0.02 U	NR	0.02 U
Iron	0.1 U	0.59	0.1 U	0.1 U	0.1 U	0.1 U	NR	1.22	NR	0.88
Lead	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	NR	0.05 U	NR	0.05 U
Magnesium	1 U	35.8	36.1	33.6	16.3	16.5	NR	18.8	NR	18.7
Manganese	0.013	0.035	0.021	0.01 U	0.336	0.37	NR	1.19	NR	1.09
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NR	0.04 U	NR	0.04 U
Potassium	14.2	2.7	2.2	3.1	2 U	2 U	NR	2.8	NR	2 U
Selenium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NR	0.01 U	NR	0.01 U
Sodium	34.8	21.2	16	36.1	15.7	15.9	NR	6.3	NR	8.2
Zinc	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NR	0.02 U	NR	0.02 U
Volatile Organic Compounds										
1,1,1-Trichloroethane	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
1,1,2,2-Tetrachloroethane	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
1,1,2-Trichloroethane	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
1,1-Dichloroethane	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
1,1-Dichloroethene	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
1,2-Dibromoethane	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
1,2-Dichloroethane	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
1,2-Dichloropropane	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
2-Butanone (MEK)	0.02 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.02 U	0.05 U
2-Hexanone	0.02 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.02 U	0.05 U
4-Methyl-2-pentanone	0.02 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.02 U	0.05 U
Acetone	0.02 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.02 U	0.05 U
Benzene	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
Bromodichloromethane	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
Bromoform	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
Bromomethane	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
Carbon disulfide	0.02 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.02 U	0.05 U
Carbon tetrachloride	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
Chlorobenzene	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
Chloroethane	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
Chloroform	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
Chloromethane	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
cis-1,2-Dichloroethene	0.049	0.094	0.013	0.005 U	0.005 U	0.005 U	0.35	0.36	0.96 D	0.75
cis-1,3-Dichloropropene	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
Dibromochloromethane	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
Dichloromethane (Methylene chloride)	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
Ethyl benzene	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
m&p-Xylene	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
o-Xylene	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
Styrene	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
Tetrachloroethene	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
Toluene	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
trans-1,2-Dichloroethene	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.019	0.025 U
trans-1,3-Dichloropropene	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.01 U	0.025 U
Trichloroethene	0.2 D	0.34	0.005 U	0.005 U	0.005 U	0.005 U	0.013 U	0.013 U	0.15	0.071
Vinyl chloride	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.15	0.076	0.12	0.07

Please see page 2 for notes.

Table 3-3

2014 Groundwater Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	MW-5S 4/22/2014	MW-5S 10/21/2014	MW-11S 4/22/2014	MW-11S 10/23/2014	MW-16S 4/21/2014	MW-16S 10/27/2014	MW-17D 10/22/2014	MW-17S 10/22/2014	MW-18D 10/22/2014	MW-18S 10/22/2014
Inorganic Compounds										
Arsenic	NR	0.01 U	NR	0.01 U	NR	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Barium	NR	0.02 U	NR	0.03	NR	0.02 U	0.02 U	0.042	0.05	0.047
Cadmium	NR	0.005 U	NR	0.005 U	NR	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Calcium	NR	13.5	NR	59.2	NR	14.1	38.5	88.5	23.5	27.8
Chromium	NR	0.01 U	NR	0.01 U	NR	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	NR	0.02 U	NR	0.02 U	NR	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Iron	NR	0.68	NR	0.37	NR	0.25	6.37	0.84	5.57	2.7
Lead	NR	0.05 U	NR	0.05 U	NR	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Magnesium	NR	11.1	NR	37.7	NR	9.6	19.6	61.4	18.2	11.9
Manganese	NR	0.1	NR	1.13	NR	0.039	0.587	0.314	0.482	0.15
Nickel	NR	0.04 U	NR	0.04 U	NR	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Potassium	NR	2 U	NR	2 U	NR	2 U	3.8	3.6	3.2	2.2
Selenium	NR	0.01 U	NR	0.01 U	NR	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sodium	NR	6.7	NR	20.6	NR	8.7	30.8	67.5	22.3	3.5
Zinc	NR	0.02 U	NR	0.02 U	NR	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Volatile Organic Compounds										
1,1,1-Trichloroethane	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,1,2,2-Tetrachloroethane	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,1,2-Trichloroethane	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,1-Dichloroethane	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,1-Dichloroethene	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,2-Dibromoethane	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,2-Dichloroethane	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,2-Dichloropropane	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Butanone (MEK)	0.01 U	0.02 U	0.25 U	0.25 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Hexanone	0.01 U	0.02 U	0.25 U	0.25 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	0.01 U	0.02 U	0.25 U	0.25 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	0.01 U	0.02 U	0.25 U	0.25 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzene	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Bromodichloromethane	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Bromoform	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Bromomethane	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	0.01 U	0.02 U	0.25 U	0.25 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Carbon tetrachloride	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chlorobenzene	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloroethane	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloroform	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloromethane	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	0.21 D	0.23	0.32	0.37	0.005 U	0.005 U	0.005 U	0.058	0.005 U	0.005 U
cis-1,3-Dichloropropene	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Dibromochloromethane	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Dichloromethane (Methylene chloride)	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethyl benzene	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
m&p-Xylene	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
o-Xylene	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Tetrachloroethene	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Toluene	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
trans-1,2-Dichloroethene	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
trans-1,3-Dichloropropene	0.005 U	0.01 U	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Trichloroethene	0.046	0.025	3.3	3.1	0.005 U	0.005 U	0.005 U	0.016	0.005 U	0.005 U
Vinyl chloride	0.033	0.02	0.13 U	0.13 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U

Notes:
U - Concentration not detected at specified detection limit
NR - Not Required
D - Concentration is the result of a laboratory dilution

Please see page 2 for notes.

Table 4-1

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

Parameter	SWS-1 9/28/2011	SWS-1 10/22/2013	SWS-1 10/23/2014	Class C Standard
Inorganic Compounds				
Arsenic	0.01 U	0.01 U	0.01 U	
Barium	0.036	0.027	0.037	
Cadmium	0.005 U	0.005 U	0.005 U	
Calcium	33.1	30.3	36.5	
Chromium	0.01 U	0.01 U	0.01 U	
Copper	0.02 U	0.02 U	0.02 U	
Iron	**0.78**	**1.02**	**1.49**	0.3
Lead	0.005 U	0.005 U	0.05 U	0.008
Magnesium	10.2	10.1	12.3	
Manganese	0.06	0.028	0.032	
Nickel	0.04 U	0.04 U	0.04 U	0.0082
Potassium	2 U	2.7	2.4	
Selenium	0.01 U	0.01 U	0.01 U	
Sodium	25.8	11.7	21.6	
Zinc	0.054	0.02 U	0.045	
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	0.02 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 Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L except where noted)

Parameter	SWS-1 9/28/2011	SWS-1 10/22/2013	SWS-1 10/23/2014	Class C Standard
Wet Chemistry				
Alkalinity	152	127	139	
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	38	33.6	30.3	
Chloride	20.8	11.8	33.5	
Color (True) (C.U.)	58	86	88	
Nitrate Nitrogen	1 U	1 U	1 U	
Sulfate	6.7	2.7	4.8	
Total Dissolved Solids	218	180	223	500
Total Kjeldahl Nitrogen	0.62	0.85	0.74	
Total Organic Carbon (TOC)	12.9	9.9	10.3	
Total Phenolics	0.005 U	0.005 U	0.005 U	

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
Inorganic Compounds		
Arsenic	8	10.6
Barium	114	113
Cadmium	1.6 U	1.3 U
Calcium	3790	12400
Chromium	14.9	13.5
Copper	20.7	22.5
Iron	22500	23700
Lead	16 U	15
Magnesium	3810	3640
Manganese	1120	1020
Nickel	23	21
Potassium	2220	2060
Selenium	3.2 U	2.5 U
Sodium	380 U	300
Zinc	273	5340
Volatile Organic Compounds		
1,1,1-Trichloroethane	0.017 U	0.013 U
1,1,2,2-Tetrachloroethane	0.017 U	0.013 U
1,1,2-Trichloroethane	0.017 U	0.013 U
1,1-Dichloroethane	0.017 U	0.013 U
1,1-Dichloroethene	0.017 U	0.013 U
1,2-Dibromoethane	0.017 U	0.013 U
1,2-Dichloroethane	0.017 U	0.013 U
1,2-Dichloropropane	0.017 U	0.013 U
2-Butanone (MEK)	0.017 U	0.013 U
2-Hexanone	0.017 U	0.013 U
4-Methyl-2-pentanone	0.017 U	0.013 U
Acetone	0.017 U	0.013 U
Benzene	0.017 U	0.013 U
Bromodichloromethane	0.017 U	0.013 U
Bromoform	0.017 U	0.013 U
Bromomethane	0.017 U	0.013 U
Carbon disulfide	0.017 U	0.013 U
Carbon tetrachloride	0.017 U	0.013 U
Chlorobenzene	0.017 U	0.013 U
Chloroethane	0.017 U	0.013 U
Chloroform	0.017 U	0.013 U
Chloromethane	0.017 U	0.013 U
cis-1,2-Dichloroethene	0.017 U	0.013 U
cis-1,3-Dichloropropene	0.017 U	0.013 U
Dibromochloromethane	0.017 U	0.013 U
Dichloromethane (Methylene chloride)	0.017 U	0.013 U
Ethyl benzene	0.017 U	0.013 U

Parameter	SWS-1 9/28/2011	SWS-1 10/22/2013
VOCs Continued		
m&p-Xylene	0.034 U	0.026 U
o-Xylene	0.017 U	0.013 U
Styrene	0.017 U	0.013 U
Tetrachloroethene	0.017 U	0.013 U
Toluene	0.017 U	0.013 U
trans-1,2-Dichloroethene	0.017 U	0.013 U
trans-1,3-Dichloropropene	0.017 U	0.013 U
Trichloroethene	0.017 U	0.013 U
Vinyl chloride	0.017 U	0.013 U
Wet Chemistry		
Alkalinity	5220	3390
Ammonia Nitrogen	56	25
Bromide	34 U	26 U
Chemical Oxygen Demand	165000	96900
Chloride	420	224
Nitrate Nitrogen	34 U	26 U
Sulfate	119	79 U
Total Kjeldahl Nitrogen	5050	3430
Total Organic Carbon (TOC)	32300	32300
Total Phenolics	0.33 U	0.26 U
Total Solids %	29.5	37.8

Note:
U - Concentration not detected at specified detection limit

Table 5-1

Summary of 2013 and 2014 Leachate Sump and Manhole Detection Frequencies
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	2013 Detection Frequency	2013 Minimum	2013 Maximum	2014 Detection Frequency	2014 Minimum	2014 Maximum
Inorganic Compounds						
Arsenic	0/3			0/3		
Barium	3/3	0.048	0.087	3/3	0.061	0.101
Cadmium	0/3			0/3		
Calcium	3/3	60.8	83.7	3/3	77.2	104
Chromium	0/3			0/3		
Copper	0/3			0/3		
Iron	3/3	2.7	14.6	3/3	1.5	11.7
Lead	0/3			0/3		
Magnesium	3/3	15	21.7	3/3	15	27.3
Manganese	3/3	0.918	2.4	3/3	1.55	2.79
Nickel	0/3			0/3		
Potassium	2/3	2.2	3.1	2/3	2.8	3.8
Selenium	0/3			0/3		
Sodium	3/3	3.9	12.6	3/3	4.3	23.7
Zinc	0/3			0/3		
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	0.025	6.6	3/3	0.012	6.7
cis-1,3-Dichloropropene	0/3			0/3		
Dibromochloromethane	0/3			0/3		
Dichloromethane (Methylene chloride)	0/3			0/3		
Ethyl benzene	1/3	0.018	0.018	0/3		
m&p-Xylene	1/3	0.012	0.012	0/3		
o-Xylene	0/3			0/3		
Styrene	0/3			0/3		
Tetrachloroethene	0/3			0/3		
Toluene	1/3	0.061	0.061	0/3		
trans-1,2-Dichloroethene	1/3	0.092	0.092	0/3		
trans-1,3-Dichloropropene	0/3			0/3		
Trichloroethene	2/3	0.014	0.36	1/3	0.0051	0.0051
Vinyl chloride	1/3	0.19	0.19	0/3		
Wet Chemistry						
Nitrate Nitrogen	0/2			0/2		
Total Dissolved Solids	2/2	253	273	2/2	290	389

Table 5-2

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

Parameter	LS-1 9/6/2012	LS-1 10/23/2013	LS-1 10/27/2014	Class C Standard
Inorganic Compounds				
Arsenic	0.104	0.01 U	0.01 U	
Barium	0.245	0.077	0.101	
Cadmium	0.005 U	0.005 U	0.005 U	
Calcium	158	83.7	104	
Chromium	0.01 U	0.01 U	0.01 U	
Copper	0.02 U	0.02 U	0.02 U	
Iron	**88.8**	**2.7**	**1.5**	0.3
Lead	0.025	0.005 U	0.05 U	0.008
Magnesium	39.6	21.7	27.3	
Manganese	6.39	1.79	2.79	
Nickel	0.04 U	0.04 U	0.04 U	0.0082
Potassium	6.4	3.1	3.8	
Selenium	0.01 U	0.01 U	0.01 U	
Sodium	31.2	12.6	23.7	
Zinc	0.035	0.02 U	0.02 U	
Volatile Organic Compounds				
1,1,1-Trichloroethane	0.005 U	0.005 U	0.005 U	
1,1,2,2-Tetrachloroethane	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	0.005 U	0.005 U	0.005 U	
1,1-Dichloroethane	0.005 U	0.005 U	0.005 U	
1,1-Dichloroethene	0.005 U	0.005 U	0.005 U	
1,2-Dibromoethane	0.005 U	0.005 U	0.005 U	
1,2-Dichloroethane	0.005 U	0.005 U	0.005 U	
1,2-Dichloropropane	0.005 U	0.005 U	0.005 U	
2-Butanone (MEK)	0.01 U	0.01 U	0.01 U	
2-Hexanone	0.01 U	0.01 U	0.01 U	
4-Methyl-2-pentanone	0.01 U	0.01 U	0.01 U	
Acetone	0.01 U	0.01 U	0.01 U	
Benzene	0.005 U	0.005 U	0.005 U	
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	0.077	0.052	0.041	
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	0.0082	0.005 U	0.005 U	

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 5-3

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

Parameter	MH-32 9/5/2012	MH-32 10/22/2013	MH-32 10/23/2014	MH-33 9/5/2012	MH-33 10/22/2013	MH-33 10/23/2014	Class C Standard
Inorganic Compounds							
Arsenic	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Barium	0.107	0.087	0.1	0.041	0.048	0.061	
Cadmium	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	
Calcium	131	60.8	79.6	113	60.8	77.2	
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	**16**	**14.6**	**11.7**	**0.41**	**3.79**	**2.36**	0.3
Lead	0.005 U	0.005 U	0.05 U	0.005 U	0.005 U	0.05 U	0.008
Magnesium	30.5	15.6	15	22.3	15	17.6	
Manganese	2.88	2.4	1.84	0.838	0.918	1.55	
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.0082
Potassium	10.2	2.2	2.8	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	23.6	3.9	4.3	11.9	3.9	4.4	
Zinc	0.053	0.02 U	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	0.25 U	0.005 U	0.005 U	0.005 U	
1,1,2,2-Tetrachloroethane	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
1,1,2-Trichloroethane	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
1,1-Dichloroethane	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
1,1-Dichloroethene	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
1,2-Dibromoethane	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
1,2-Dichloroethane	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
1,2-Dichloropropane	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
2-Butanone (MEK)	0.01 U	0.01 U	0.5 U	0.01 U	0.01 U	0.01 U	
2-Hexanone	0.01 U	0.01 U	0.5 U	0.01 U	0.01 U	0.01 U	
4-Methyl-2-pentanone	0.01 U	0.01 U	0.5 U	0.01 U	0.01 U	0.01 U	
Acetone	0.01 U	0.01 U	0.5 U	0.01 U	0.01 U	0.01 U	
Benzene	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
Bromodichloromethane	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
Bromoform	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
Bromomethane	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
Carbon disulfide	0.01 U	0.01 U	0.5 U	0.01 U	0.01 U	0.01 U	
Carbon tetrachloride	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
Chlorobenzene	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	0.005
Chloroethane	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
Chloroform	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
Chloromethane	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
cis-1,2-Dichloroethene	0.065	6.6 D	6.7	0.005 U	0.025	0.012	
cis-1,3-Dichloropropene	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
Dibromochloromethane	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
Dichloromethane (Methylene chloride)	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	0.2
Ethyl benzene	0.005 U	0.018	0.25 U	0.005 U	0.005 U	0.005 U	
m&p-Xylene	0.005 U	0.012	0.25 U	0.005 U	0.005 U	0.005 U	
o-Xylene	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
Styrene	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
Tetrachloroethene	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
Toluene	0.005 U	0.061	0.25 U	0.005 U	0.005 U	0.005 U	6
trans-1,2-Dichloroethene	0.005 U	0.092	0.25 U	0.005 U	0.005 U	0.005 U	
trans-1,3-Dichloropropene	0.005 U	0.005 U	0.25 U	0.005 U	0.005 U	0.005 U	
Trichloroethene	0.005 U	**0.36 E**	0.25 U	0.005 U	0.014	0.0051	0.04
Vinyl chloride	0.0071	0.19	0.25 U	0.005 U	0.005 U	0.005 U	
Wet Chemistry							
Nitrate Nitrogen	1 U	1 U	1 U	1 U	1 U	1 U	
Total Dissolved Solids	**601**	273	389	429	253	290	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 2014 Air Monitoring Results
Wellsville/Andover Landfill
Wellsville, New York

Monitoring Point	Date	PID (ppm)	O_2 (%)	LEL (%)
V-1[4]	11/24/2014	0.8	20.9	0
V-2	11/24/2014	0.0	20.9	0
V-3[4]	11/24/2014	1.2	20.9	32
V-4[3]	11/24/2014	3.1	20.0	85
V-5[2]	11/24/2014	1.5	20.9	7
V-6[3]	11/24/2014	2.7	20.9	0
V-7[4]	11/24/2014	0.8	20.9	0
V-8[4]	11/24/2014	7.9	20.0	> 100
V-9[3]	11/24/2014	14.7	20.5	42
V-10[2]	11/24/2014	1.1	20.9	0
V-11[2]	11/24/2014	3.3	20.5	32
V-12[3]	11/24/2014	0.9	20.9	0
V-13[3]	11/24/2014	1.1	20.0	> 100
V-14[4]	11/24/2014	1.0	20.1	> 100
V-15[4]	11/24/2014	1.0	20.9	38
V-16[2]	11/24/2014	1.1	20.9	4
V-17[2]	11/24/2014	1.2	20.5	15
V-18	11/24/2014	0.8	20.9	79
V-19	11/24/2014	0.0	20.9	0
V-20	11/24/2014	0.0	20.9	0
V-21	11/24/2014	0.0	20.9	0
L-16[1,2]	11/24/2014	1.3	20.9	0
L-17[1]	11/24/2014	0.0	10.3	>100
L-19	11/24/2014	4.9	10.3	>100
L-21	11/24/2014	0.0	9.2	>100
L-23	11/24/2014	0.0	9.2	>100
L-25	11/24/2014	1.9	8.5	>100
L-27	11/24/2014	0.4	10.5	>100
L-29	11/24/2014	83.9	9.7	>100
L-31	11/24/2014	18.8	9.8	>100
MH-6[4]	11/24/2014	15.9	20.9	35
MH-7	11/24/2014	0.3	14.8	>100
MH-8[3]	11/24/2014	4.4	20.4	10
MH-9[3]	11/24/2014	12.8	20.4	18
MH-10[4]	11/24/2014	27.1	19.6	> 100
MH-11[3]	11/24/2014	18.8	19.7	77
MH-12[4]	11/24/2014	21.6	15.2	> 100
MH-13[3]	11/24/2014	33.5	11.6	> 100
MH-32	11/24/2014	2.2	20.9	7
MH-33	11/24/2014	1.2	20.9	0
Upwind	11/24/2014	0.0	20.9	0
Downwind-1	11/24/2014	0.0	20.9	0
Downwind-2	11/24/2014	0.0	20.9	0
Downwind-3	11/24/2014	0.0	20.9	0

Notes:
Meters: Rae Systems MiniRAE 3000, QRAEII
Background Readings:
O_2 = 21.9 LEL = 0 PID = 0.0
[1] Cap Ajar [2] PID BG of 1.1
[3] PID BG of 0.9 [4] PID BG of 0.8
Weather: Partly Cloudy 59° F, 10-20 mph winds
Monitored By: K. Dye/ T. Reed

Table 7-1

Summary of 2014 Residential Water Supply Sampling
Wellsville/Andover Landfill
Wellsville, New York

Location	Name	Water Source	Sampled April 2014	Sampled October 2014
WAL-2	Mr. Phil Rosini & Ms. Rosalie Rosini 210 East Linden Ave E. Rochester, NY 14445	Well[1,2] 105 ft.	NR	10/23/2014
WAL -5	Mr. Shawn Howard 4011 Duffy Hollow Road Wellsville, NY 14895	Spring[1,2]	4/23/2014	NR
WAL-19	Mr. Daniel & Mrs. Barbara LaDue 3914 Snyder Road Wellsville, NY 14895	Spring[1]	4/23/2014	10/23/2014

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

NR - Not Required

Table 7-2

Summary of 2013 and 2014 Residential Water Supply Detection Frequencies
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	2013 Detection Frequency	2013 Minimum	2013 Maximum	2014 Detection Frequency	2014 Minimum	2014 Maximum	NYSDOH MCL	2013 MCL Exceedances	2014 MCL Exceedances	Class GA Standard	2013 Class GA Exceedances	2014 Class GA Exceedances
Inorganic Compounds												
Arsenic	0/0			0/2			0.05		0	0.025		0
Barium	0/0			1/2	0.034	0.034	1		0	1		0
Cadmium	0/0			0/2			0.01		0	0.005		0
Calcium	0/0			2/2	5	48.2						
Chromium	0/0			0/2			0.05		0	0.05		0
Copper	0/0			0/2			1		0	0.2		0
Iron	0/0			1/2	0.89	0.89	0.3		1	0.3		1
Lead	0/0			0/2			0.05		0	0.025		0
Magnesium	0/0			2/2	2.1	16.8						
Manganese	0/0			1/2	0.891	0.891	0.3		1	0.3		1
Nickel	0/0			0/2						0.1		0
Potassium	0/0			0/2								
Selenium	0/0			0/2			0.01		0	0.01		0
Sodium	0/0			2/2	1.2	48.3				20		1
Zinc	0/0			1/2	0.028	0.028						
Volatile Organic Compounds												
1,1,1,2-Tetrachloroethane	0/6			0/7			0.005	0	0	0.005	0	0
1,1,1-Trichloroethane	0/6			0/7			0.005	0	0	0.005	0	0
1,1,2,2-Tetrachloroethane	0/6			0/7			0.005	0	0	0.005	0	0
1,1,2-Trichloroethane	0/6			0/7			0.005	0	0	0.001	0	0
1,1-Dichloroethane	0/6			0/7			0.005	0	0	0.005	0	0
1,1-Dichloroethene	0/6			0/7			0.005	0	0	0.005	0	0
1,1-Dichloropropene	0/6			0/7								
1,2,3-Trichlorobenzene	0/6			0/7			0.005	0	0	0.005	0	0
1,2,3-Trichloropropane	0/6			0/7						0.00004	0	0
1,2,4-Trichlorobenzene	0/6			0/7			0.005	0	0	0.005	0	0
1,2,4-Trimethylbenzene	0/6			0/7			0.005	0	0	0.005	0	0
1,2-Dibromo-3-chloropropane	0/6			0/7						0.00004	0	0
1,2-Dibromoethane	0/6			0/7								
1,2-Dichlorobenzene	0/6			0/7			0.005	0	0	0.003	0	0
1,2-Dichloroethane	0/6			0/7						0.0006	0	0
1,2-Dichloropropane	0/6			0/7						0.001	0	0
1,3,5-Trimethylbenzene	0/6			0/7			0.005	0	0	0.005	0	0
1,3-Dichlorobenzene	0/6			0/7			0.005	0	0	0.003	0	0
1,3-Dichloropropane	0/6			0/7			0.005	0	0	0.005	0	0
1,4-Dichlorobenzene	0/6			0/7			0.005	0	0	0.003	0	0
2,2-Dichloropropane	0/6			0/7			0.005	0	0	0.005	0	0
2-Chlorotoluene	0/6			0/7			0.005	0	0	0.005	0	0
4-Chlorotoluene	0/6			0/7			0.005	0	0	0.005	0	0
Benzene	0/6			0/7			0.005	0	0	0.001	0	0
Bromobenzene	0/6			0/7			0.005	0	0	0.005	0	0
Bromochloromethane	0/6			0/7			0.005	0	0	0.005	0	0
Bromodichloromethane	0/6			0/7								
Bromoform	0/6			0/7								
Bromomethane	0/6			0/7			0.005	0	0	0.005	0	0
Carbon tetrachloride	0/6			0/7			0.005	0	0	0.005	0	0

Please see page 2 for notes.

Table 7-2

Summary of 2013 and 2014 Residential Water Supply Detection Frequencies
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	2013 Detection Frequency	2013 Minimum	2013 Maximum	2014 Detection Frequency	2014 Minimum	2014 Maximum	NYSDOH MCL	2013 MCL Exceedances	2014 MCL Exceedances	Class GA Standard	2013 Class GA Exceedances	2014 Class GA Exceedances
VOCs Continued												
Chlorobenzene	0/6			0/7			0.005	0	0	0.005	0	0
Chloroethane	0/6			0/7			0.005	0	0	0.005	0	0
Chloroform	0/6			0/7			0.005	0	0	0.007	0	0
Chloromethane	0/6			0/7						0.005	0	0
cis-1,2-Dichloroethene	2/6	0.0025	0.0025	2/7	0.0024	0.0027				0.005	0	0
cis-1,3-Dichloropropene	0/6			0/7								
Dibromochloromethane	0/6			0/7								
Dibromomethane	0/6			0/7			0.005	0	0	0.005	0	0
Dichlorodifluoromethane	0/6			0/7			0.005	0	0	0.005	0	0
Dichloromethane (Methylene chloride)	0/6			0/7			0.005	0	0	0.005	0	0
Ethyl benzene	0/6			0/7			0.005	0	0	0.005	0	0
Hexachlorobutadiene	0/6			0/7						0.0005	0	0
Isopropylbenzene	0/6			0/7			0.005	0	0	0.005	0	0
m&p-Xylene	0/6			0/7								
Methyl tert-butyl ether (MTBE)	0/6			0/7								
Naphthalene	0/6			0/7								
n-Butylbenzene	0/6			0/7			0.005	0	0	0.005	0	0
n-Propylbenzene	0/6			0/7			0.005	0	0	0.005	0	0
o-Xylene	0/6			0/7								
p-Isopropyltoluene	0/6			0/7						0.005	0	0
sec-Butylbenzene	0/6			0/7						0.005	0	0
Styrene	0/6			0/7			0.005	0	0	0.005	0	0
Tert-Butyl Alcohol	0/6			0/7								
tert-Butylbenzene	0/6			0/7						0.005	0	0
Tetrachloroethene	0/6			0/7			0.005	0	0	0.005	0	0
Toluene	0/6			0/7			0.005	0	0	0.005	0	0
trans-1,2-Dichloroethene	0/6			0/7						0.005	0	0
trans-1,3-Dichloropropene	0/6			0/7								
Trichloroethene	2/6	0.0019	0.0024	2/7	0.0021	0.0027	0.005	0	0	0.005	0	0
Trichlorofluoromethane	0/6			0/7			0.005	0	0	0.005	0	0
Vinyl chloride	0/6			0/7			0.005	0	0	0.002	0	0

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

Please see page 2 for notes.

Table 7-3

2014 Residential Water Supply Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	WAL19PRE-0414 4/23/2014	WAL19PRE-1014 10/23/2014	WAL19INTER-0414 4/23/2014	WAL19INTER-1014 10/23/2014
Inorganic Compounds				
Arsenic	NR	NR	NR	NR
Barium	NR	NR	NR	NR
Cadmium	NR	NR	NR	NR
Calcium	NR	NR	NR	NR
Chromium	NR	NR	NR	NR
Copper	NR	NR	NR	NR
Iron	NR	NR	NR	NR
Lead	NR	NR	NR	NR
Magnesium	NR	NR	NR	NR
Manganese	NR	NR	NR	NR
Nickel	NR	NR	NR	NR
Potassium	NR	NR	NR	NR
Selenium	NR	NR	NR	NR
Sodium	NR	NR	NR	NR
Zinc	NR	NR	NR	NR
Volatile Organic Compounds				
1,1,1,2-Tetrachloroethane	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
1,1,2,2-Tetrachloroethane	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
1,1-Dichloroethane	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
1,1-Dichloropropene	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
1,2,3-Trichloropropane	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
1,2,4-Trimethylbenzene	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
1,2-Dibromoethane	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
1,2-Dichloroethane	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
1,3,5-Trimethylbenzene	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
1,3-Dichloropropane	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
2,2-Dichloropropane	0.0005 U	0.0005 U	0.0005 U	0.0005 U
2-Chlorotoluene	0.0005 U	0.0005 U	0.0005 U	0.0005 U
4-Chlorotoluene	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Benzene	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Bromobenzene	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
Bromodichloromethane	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
Bromomethane	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
Chlorobenzene	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
Chloroform	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Chloromethane	0.0005 U	0.0005 U	0.0005 U	0.0005 U
cis-1,2-Dichloroethene	0.0024	0.0027	0.0005 U	0.0005 U
cis-1,3-Dichloropropene	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Dibromochloromethane	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Dibromomethane	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Dichlorodifluoromethane	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
Ethyl benzene	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
Isopropylbenzene	0.0005 U	0.0005 U	0.0005 U	0.0005 U

Please see page 4 for notes.

Table 7-3

2014 Residential Water Supply Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	WAL19PRE-0414 4/23/2014	WAL19PRE-1014 10/23/2014	WAL19INTER-0414 4/23/2014	WAL19INTER-1014 10/23/2014
VOCs Continued				
m&p-Xylene	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
Naphthalene	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
n-Propylbenzene	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
p-Isopropyltoluene	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
Styrene	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
tert-Butylbenzene	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
Toluene	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
trans-1,3-Dichloropropene	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Trichloroethene	0.0021	0.0027	0.0005 U	0.0005 U
Trichlorofluoromethane	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

Please see page 4 for notes.

Table 7-3

2014 Residential Water Supply Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	WAL19POST-0414 4/23/2014	WAL19POST-1014 10/23/2014	WAL5-0414 4/23/2014	WAL2-1014 10/23/2014
Inorganic Compounds				
Arsenic	NR	NR	0.01 U	0.01 U
Barium	NR	NR	0.02 U	0.034
Cadmium	NR	NR	0.005 U	0.005 U
Calcium	NR	NR	5	48.2
Chromium	NR	NR	0.01 U	0.01 U
Copper	NR	NR	0.02 U	0.02 U
Iron	NR	NR	0.1 U	0.89
Lead	NR	NR	0.05 U	0.05 U
Magnesium	NR	NR	2.1	16.8
Manganese	NR	NR	0.01 U	0.891
Nickel	NR	NR	0.04 U	0.04 U
Potassium	NR	NR	2 U	2 U
Selenium	NR	NR	0.01 U	0.01 U
Sodium	NR	NR	1.2	48.3
Zinc	NR	NR	0.02 U	0.028
Volatile Organic Compounds				
1,1,1,2-Tetrachloroethane	0.0005 U	0.0005 U	0.0005 U	NR
1,1,1-Trichloroethane	0.0005 U	0.0005 U	0.0005 U	NR
1,1,2,2-Tetrachloroethane	0.0005 U	0.0005 U	0.0005 U	NR
1,1,2-Trichloroethane	0.0005 U	0.0005 U	0.0005 U	NR
1,1-Dichloroethane	0.0005 U	0.0005 U	0.0005 U	NR
1,1-Dichloroethene	0.0005 U	0.0005 U	0.0005 U	NR
1,1-Dichloropropene	0.0005 U	0.0005 U	0.0005 U	NR
1,2,3-Trichlorobenzene	0.0005 U	0.0005 U	0.0005 U	NR
1,2,3-Trichloropropane	0.0005 U	0.0005 U	0.0005 U	NR
1,2,4-Trichlorobenzene	0.0005 U	0.0005 U	0.0005 U	NR
1,2,4-Trimethylbenzene	0.0005 U	0.0005 U	0.0005 U	NR
1,2-Dibromo-3-chloropropane	0.0005 U	0.0005 U	0.0005 U	NR
1,2-Dibromoethane	0.0005 U	0.0005 U	0.0005 U	NR
1,2-Dichlorobenzene	0.0005 U	0.0005 U	0.0005 U	NR
1,2-Dichloroethane	0.0005 U	0.0005 U	0.0005 U	NR
1,2-Dichloropropane	0.0005 U	0.0005 U	0.0005 U	NR
1,3,5-Trimethylbenzene	0.0005 U	0.0005 U	0.0005 U	NR
1,3-Dichlorobenzene	0.0005 U	0.0005 U	0.0005 U	NR
1,3-Dichloropropane	0.0005 U	0.0005 U	0.0005 U	NR
1,4-Dichlorobenzene	0.0005 U	0.0005 U	0.0005 U	NR
2,2-Dichloropropane	0.0005 U	0.0005 U	0.0005 U	NR
2-Chlorotoluene	0.0005 U	0.0005 U	0.0005 U	NR
4-Chlorotoluene	0.0005 U	0.0005 U	0.0005 U	NR
Benzene	0.0005 U	0.0005 U	0.0005 U	NR
Bromobenzene	0.0005 U	0.0005 U	0.0005 U	NR
Bromochloromethane	0.0005 U	0.0005 U	0.0005 U	NR
Bromodichloromethane	0.0005 U	0.0005 U	0.0005 U	NR
Bromoform	0.0005 U	0.0005 U	0.0005 U	NR
Bromomethane	0.0005 U	0.0005 U	0.0005 U	NR
Carbon tetrachloride	0.0005 U	0.0005 U	0.0005 U	NR
Chlorobenzene	0.0005 U	0.0005 U	0.0005 U	NR
Chloroethane	0.0005 U	0.0005 U	0.0005 U	NR
Chloroform	0.0005 U	0.0005 U	0.0005 U	NR
Chloromethane	0.0005 U	0.0005 U	0.0005 U	NR
cis-1,2-Dichloroethene	0.0005 U	0.0005 U	0.0005 U	NR
cis-1,3-Dichloropropene	0.0005 U	0.0005 U	0.0005 U	NR
Dibromochloromethane	0.0005 U	0.0005 U	0.0005 U	NR
Dibromomethane	0.0005 U	0.0005 U	0.0005 U	NR
Dichlorodifluoromethane	0.0005 U	0.0005 U	0.0005 U	NR
Dichloromethane (Methylene chloride)	0.0005 U	0.0005 U	0.0005 U	NR
Ethyl benzene	0.0005 U	0.0005 U	0.0005 U	NR
Hexachlorobutadiene	0.0005 U	0.0005 U	0.0005 U	NR
Isopropylbenzene	0.0005 U	0.0005 U	0.0005 U	NR

Please see page 4 for notes.

Table 7-3

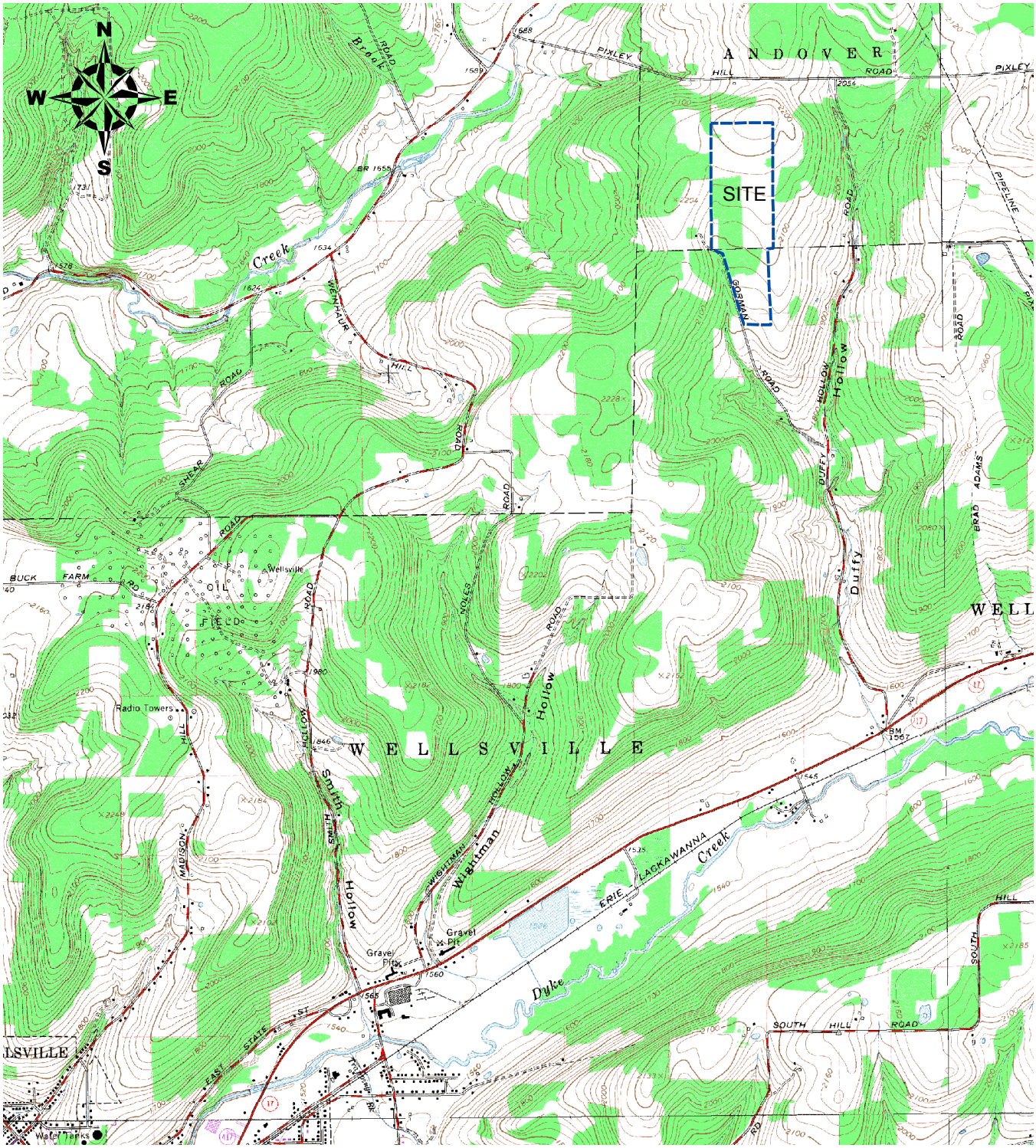
2014 Residential Water Supply Analytical Results
Wellsville/Andover Landfill
Wellsville, New York
(mg/L)

Parameter	WAL19POST-0414 4/23/2014	WAL19POST-1014 10/23/2014	WAL5-0414 4/23/2014	WAL2-1014 10/23/2014
VOCs Continued				
m&p-Xylene	0.001 U	0.001 U	0.001 U	NR
Methyl tert-butyl ether (MTBE)	0.0005 U	0.0005 U	0.0005 U	NR
Naphthalene	0.0005 U	0.0005 U	0.0005 U	NR
n-Butylbenzene	0.0005 U	0.0005 U	0.0005 U	NR
n-Propylbenzene	0.0005 U	0.0005 U	0.0005 U	NR
o-Xylene	0.0005 U	0.0005 U	0.0005 U	NR
p-Isopropyltoluene	0.0005 U	0.0005 U	0.0005 U	NR
sec-Butylbenzene	0.0005 U	0.0005 U	0.0005 U	NR
Styrene	0.0005 U	0.0005 U	0.0005 U	NR
Tert-Butyl Alcohol	0.02 U	0.02 U	0.02 U	NR
tert-Butylbenzene	0.0005 U	0.0005 U	0.0005 U	NR
Tetrachloroethene	0.0005 U	0.0005 U	0.0005 U	NR
Toluene	0.0005 U	0.0005 U	0.0005 U	NR
trans-1,2-Dichloroethene	0.0005 U	0.0005 U	0.0005 U	NR
trans-1,3-Dichloropropene	0.0005 U	0.0005 U	0.0005 U	NR
Trichloroethene	0.0005 U	0.0005 U	0.0005 U	NR
Trichlorofluoromethane	0.0005 U	0.0005 U	0.0005 U	NR
Vinyl chloride	0.0005 U	0.0005 U	0.0005 U	NR

Notes:
U - Concentrations not detected at specified limit
NR - Not Required

Please see page 4 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

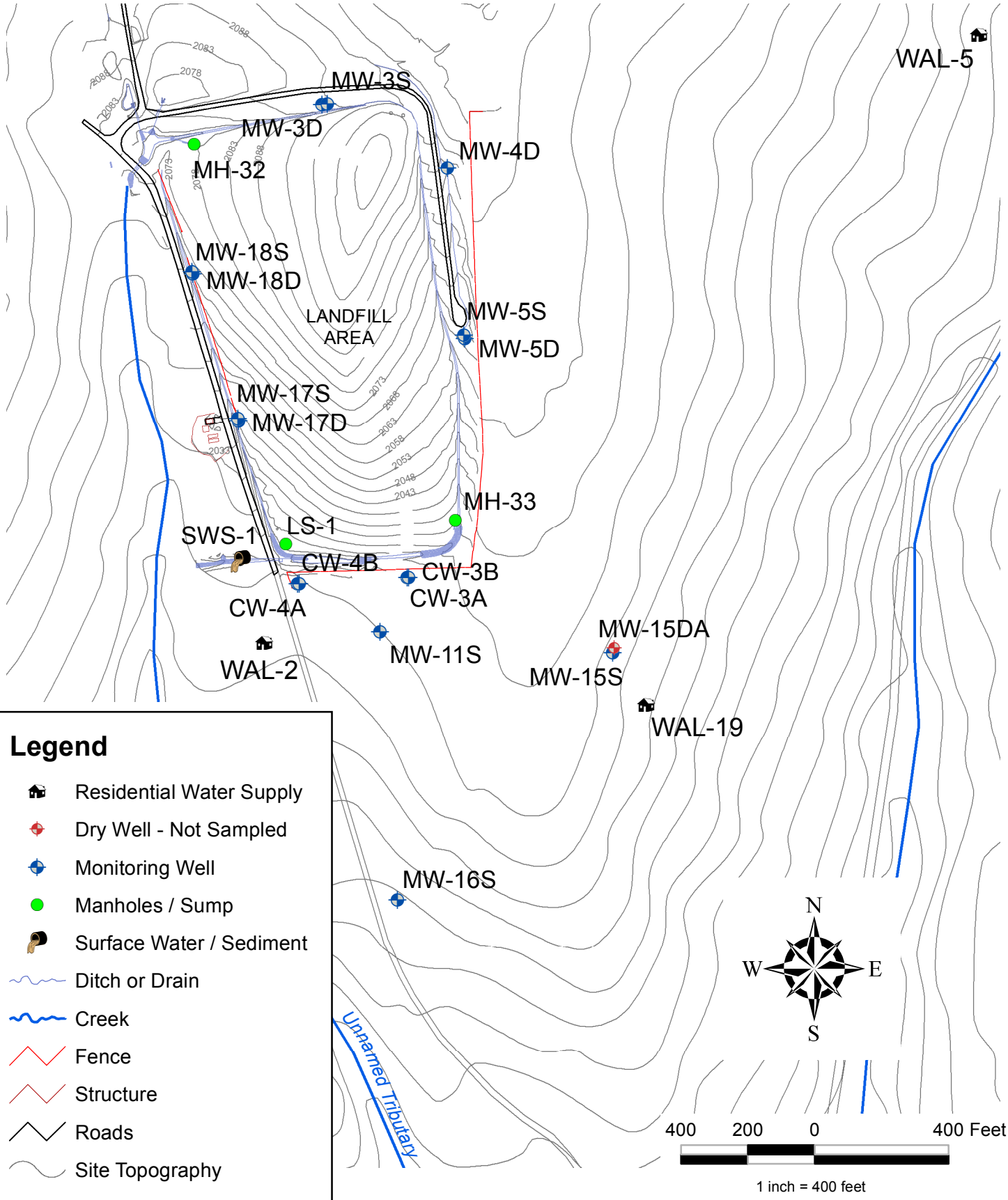
Approximate Site Boundary

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

FIGURE NO.	1
PROJECT	WAL
DOCUMENT	2014 Annual Report
FILE NO.	Fig 1.mxd

N:\WAL\ANNUAL REPORTS\2014 ANNUAL REPORT\FIGURES\FIG 1.MXD

2014 SAMPLING LOCATIONS



Legend

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

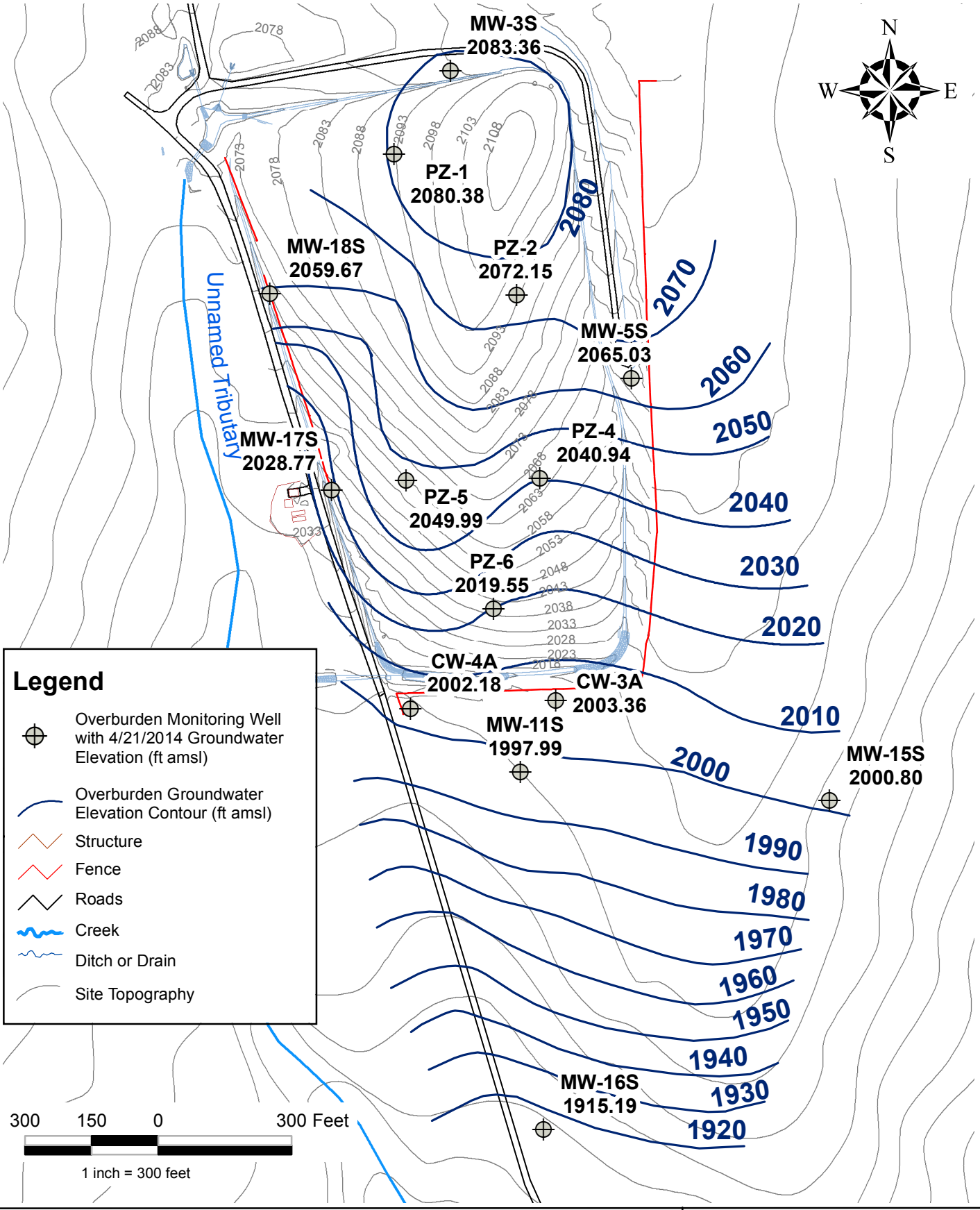
ON-SITE TECHNICAL SERVICES, INC.

72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	2
PROJECT	WAL
DOCUMENT	2014 Annual Report
FILE NO.	Fig 2.mxd

N:\WAL\ANNUAL REPORTS\2014 ANNUAL REPORT\FIGURES\FIG 2.MXD

APRIL 21, 2014 OVERBURDEN MONITORING WELL POTENTIOMETRIC MAP

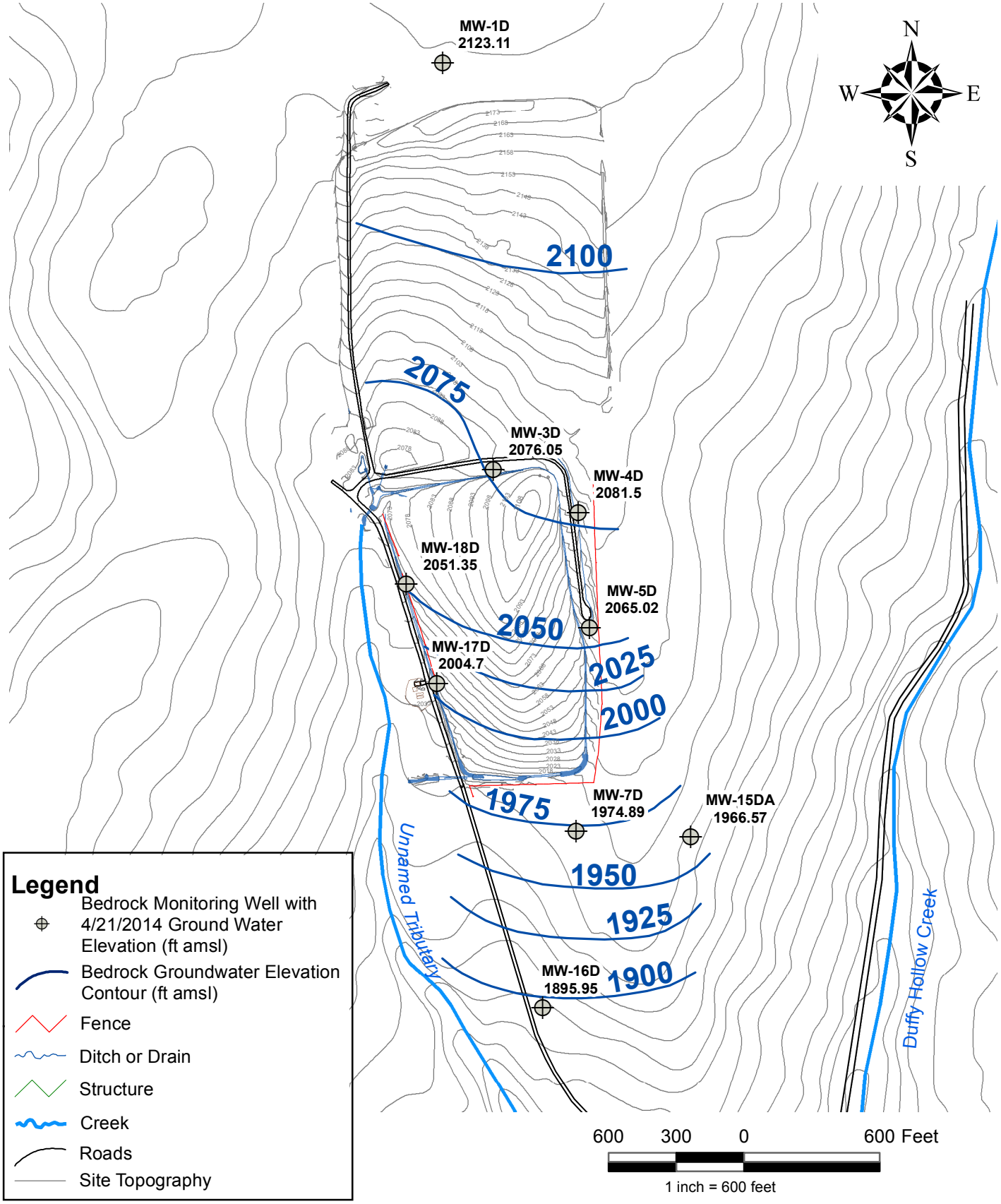


ON-SITE TECHNICAL SERVICES, INC.
72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	3
PROJECT	WAL
DOCUMENT	2014 Annual Report
FILE NO	Fig 3 0514 OB.mxd

N:\WAL\ANNUALREPORTS\2014ANNUALREPORT\FIGURES\FIG 3 0514 OB.MXD

APRIL 21, 2014 BEDROCK MONITORING WELL POTENTIOMETRIC MAP



Legend

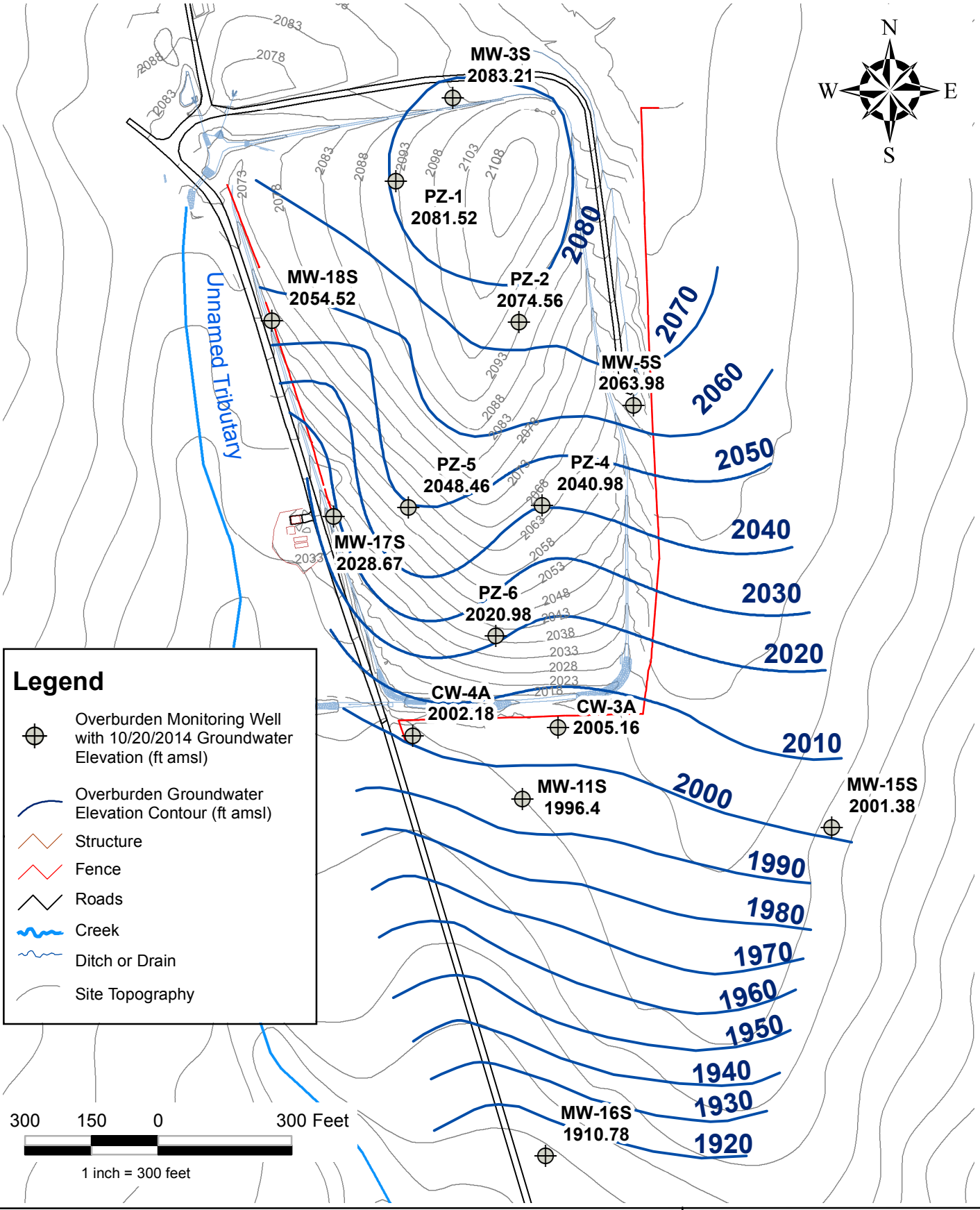
- Bedrock Monitoring Well with 4/21/2014 Ground Water Elevation (ft amsl)
- Bedrock Groundwater Elevation Contour (ft amsl)
- Fence
- Ditch or Drain
- Structure
- Creek
- Roads
- Site Topography

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

FIGURE NO.	4
PROJECT	WAL
DOCUMENT	2014 Annual Report
FILE NO	Fig 4 0514 BR.mxd

N:\WAL\ANNUALREPORTS\2014ANNUALREPORT\FIGURES\FIG 4 0514 BR.MXD

October 20, 2014 OVERBURDEN MONITORING WELL POTENTIOMETRIC MAP

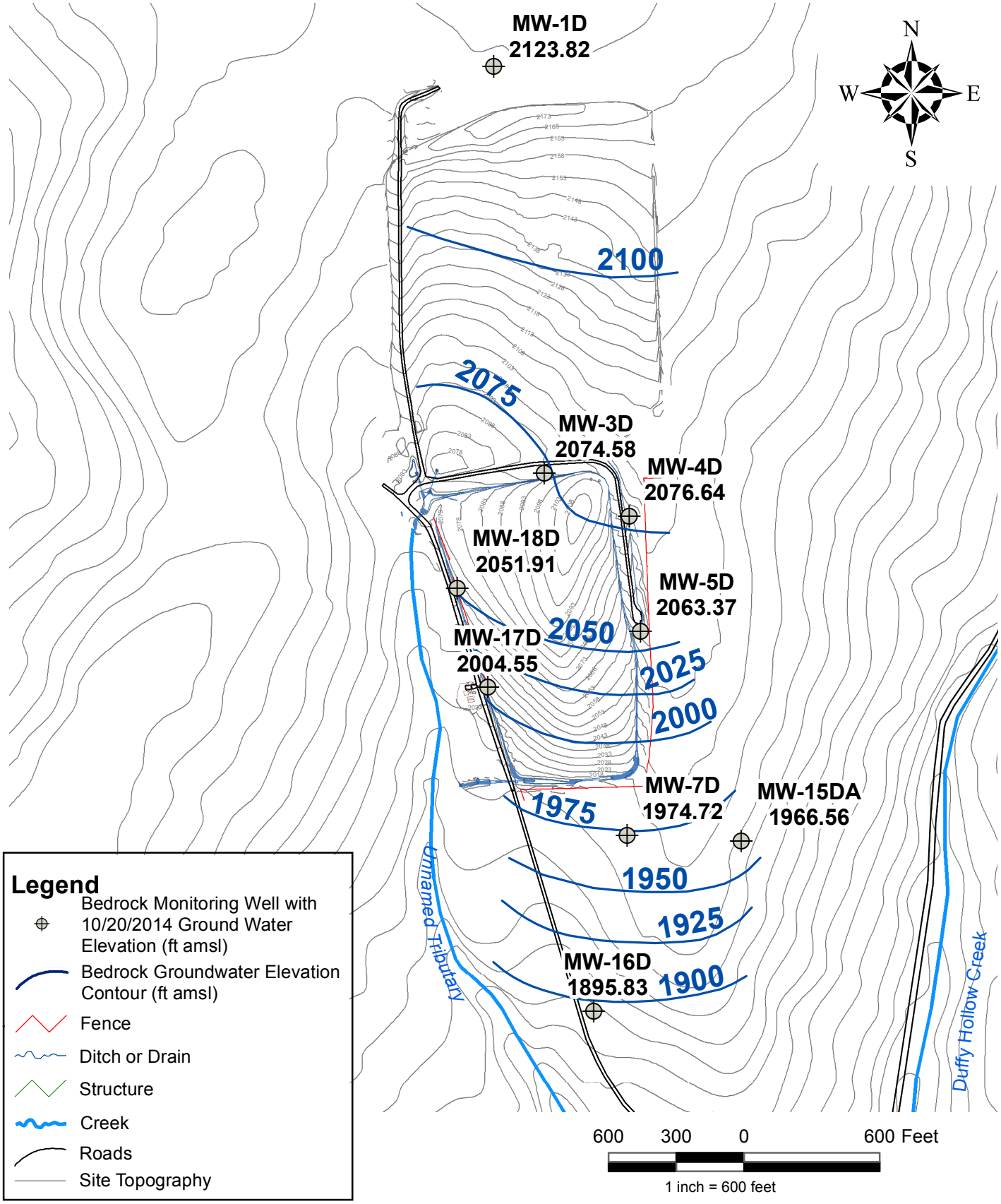


ON-SITE TECHNICAL SERVICES, INC.
72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	5
PROJECT	WAL
DOCUMENT	2014 Annual Report
FILE NO	Fig 5 1014 OB.mxd

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

OCTOBER 20, 2014 BEDROCK MONITORING WELL POTENTIOMETRIC MAP



Legend

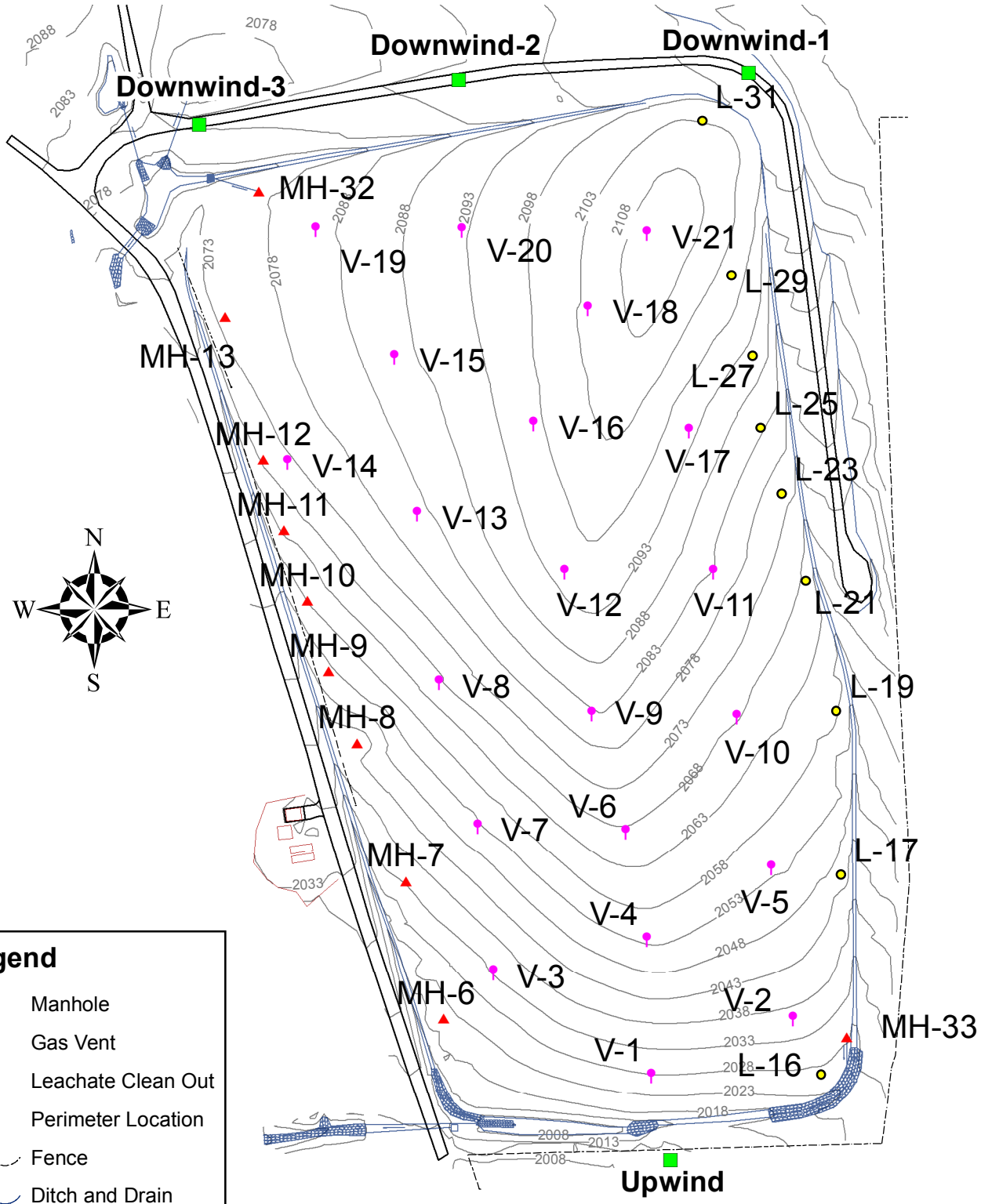
- Bedrock Monitoring Well with 10/20/2014 Ground Water Elevation (ft amsl)
- Bedrock Groundwater Elevation Contour (ft amsl)
- Fence
- Ditch or Drain
- Structure
- Creek
- Roads
- Site Topography

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

FIGURE NO.	6
PROJECT	WAL
DOCUMENT	2014 Annual Report
FILE NO	Fig 6 1014 BR.mxd

N:\WAL\ANNUALREPORTS\2014ANNUALREPORT\FIGURES\FIG 6 1014 BR.MXD

NOVEMBER 24, 2014 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	2014 ANNUAL RPT
FILE NO.	FIG 7.MXD

N:\WAL\ANNUALREPORTS\2014ANNUALREPORT\FIGURES\FIG 7.MXD

New York State Department of Environmental Conservation
Division of Environmental Remediation, 11th Floor
625 Broadway, Albany, New York 12233
Phone: (518) 402-9553 **Fax:** (518) 402-9577
Website: www.dec.ny.gov

Joe Martens
Commissioner

3/6/2015

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 Mr. 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, 2015**. 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 – NYSDEC R9
Martin Doster – NYSDEC R9
Jon Brandes – On-Site Technical Services

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7**):**

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.

- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.

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, 2014 to February 15, 2015

		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

Description of Institutional Controls

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

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.

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

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 Road Wellsville, NY (print business address),

am certifying as Owner (Owner or Remedial Party)

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

Bradley J Matuszak for William Whitfield

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

Date 3/16/15

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, PG (print name) at 72 Railroad Avenue Wellsville, NY (print business address),

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

3/16/15

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

Stamp (Required for PE)

Date

Enclosure 3
Periodic Review Report (PRR) General Guidance

I. Executive Summary: (1/2-page or less)
- A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
- B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
  1. progress made during the reporting period toward meeting the remedial objectives for the site
  2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
- C. Compliance
  1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
  2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
- D. Recommendations
  1. recommend whether any changes to the SMP are needed
  2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
  3. recommend whether the requirements for discontinuing site management have been met.

II. Site Overview (one page or less)

A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.

B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness

Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

IV. IC/EC Plan Compliance Report (if applicable)
- A. IC/EC Requirements and Compliance
  1. Describe each control, its objective, and how performance of the control is evaluated.
  2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
  3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
  4. Conclusions and recommendations for changes.
- B. IC/EC Certification
  1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)

A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.

B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.

C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.

D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.

E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)

A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.

B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.

C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated the ability of each component of the remedy subject to O&M requirements to perform as

designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;

1. whether all requirements of each plan were met during the reporting period
2. any requirements not met
3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals

1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

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.

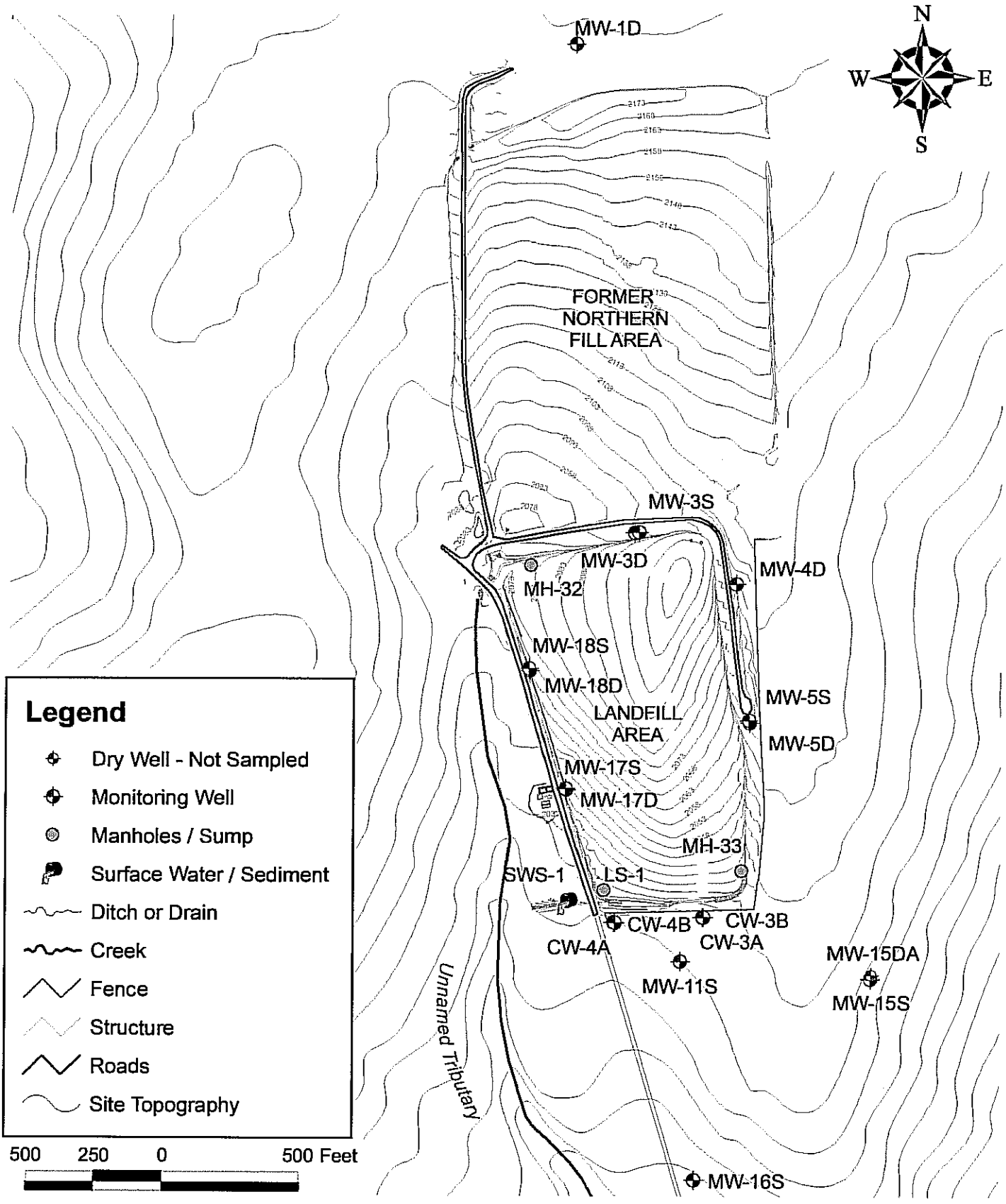
Sincerely,

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

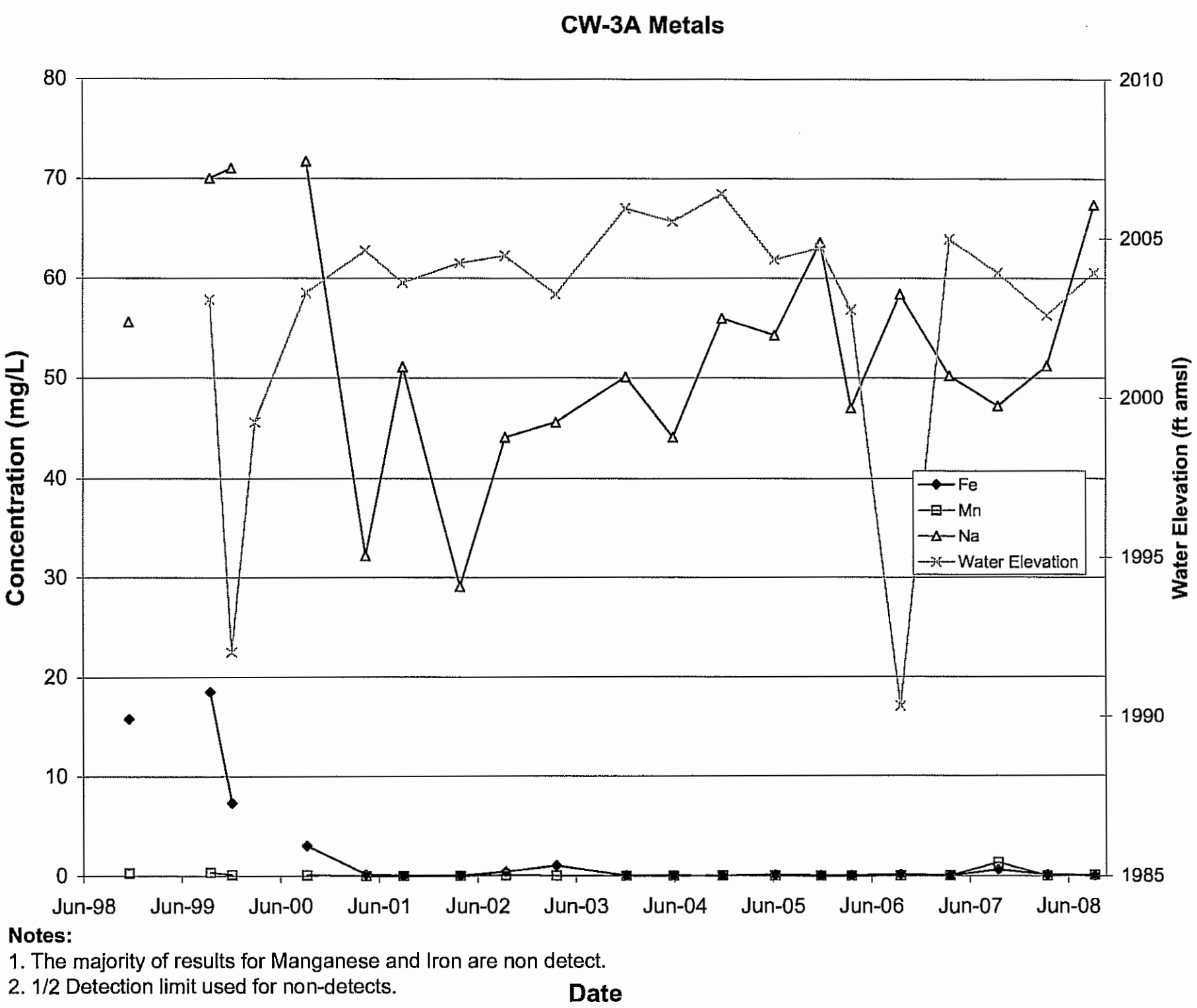


ON-SITE TECHNICAL SERVICES, INC.

72 Railroad Avenue Wellsville, NY 14895

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

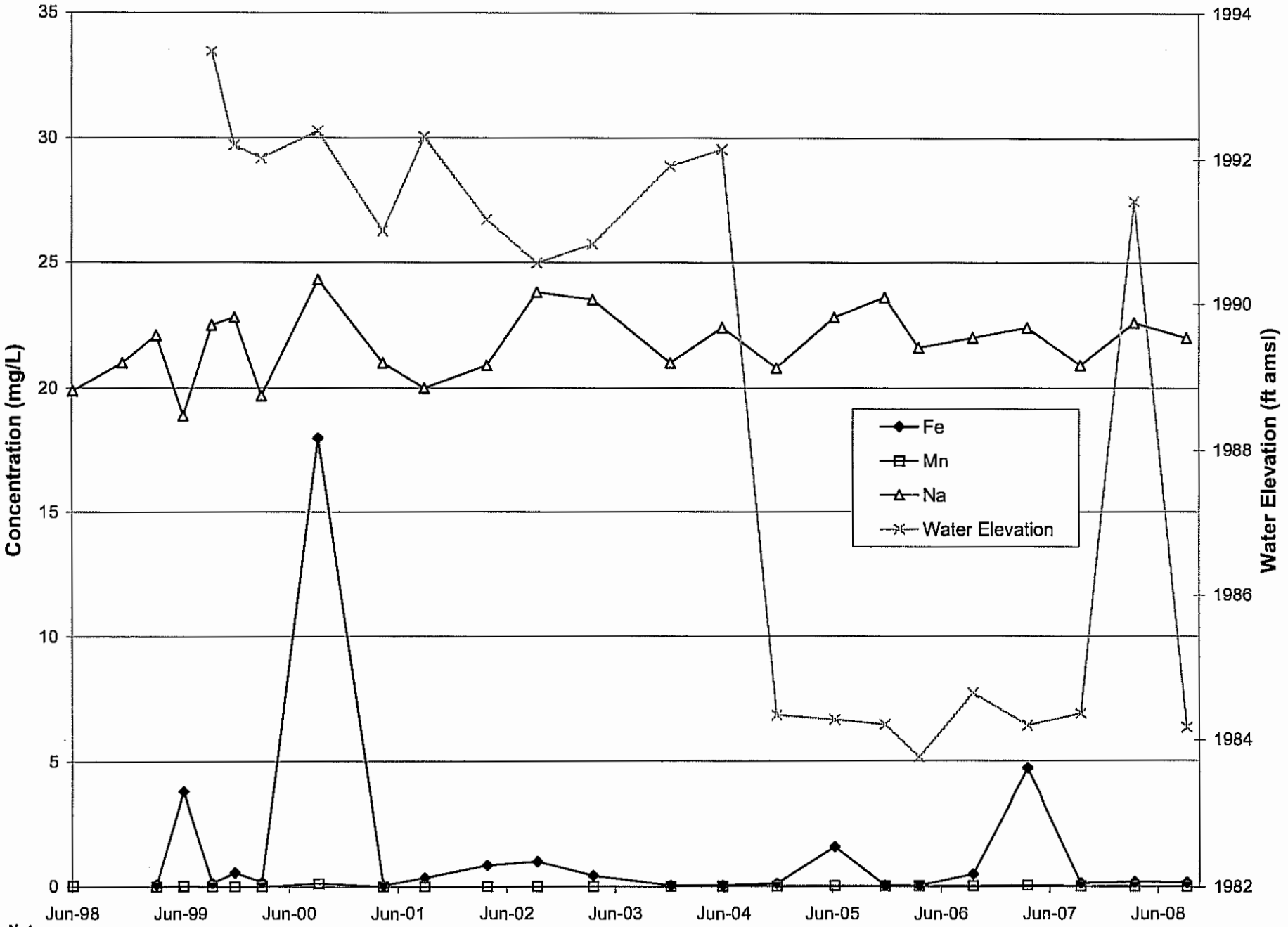
N:\WAL\2009 SITE REVIEW\FIG 1 - SAMP LOCS.MXD



Notes:

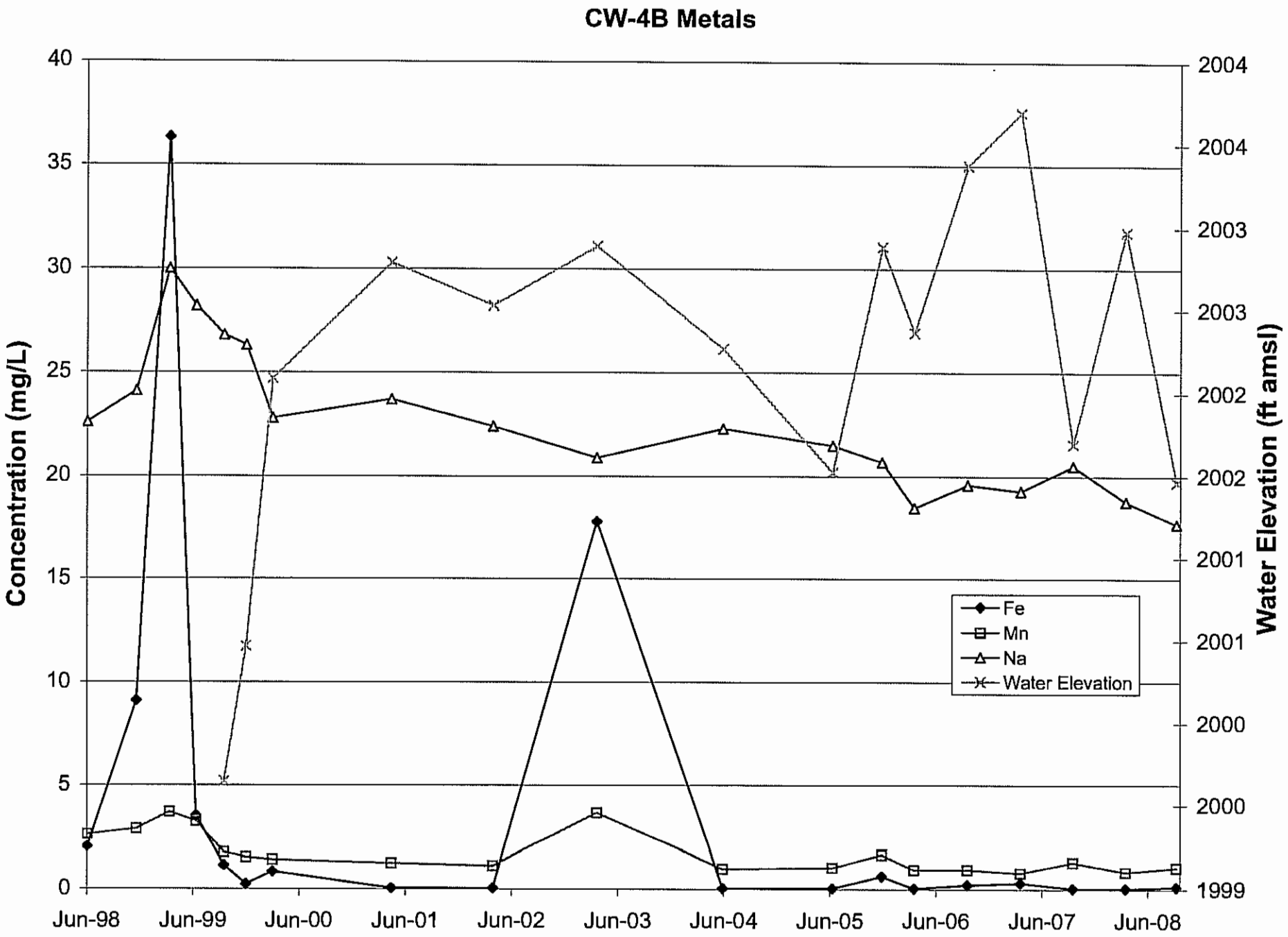
1. The majority of results for Manganese and Iron are non detect.
2. 1/2 Detection limit used for non-detects.

CW-3B Metals



Notes:

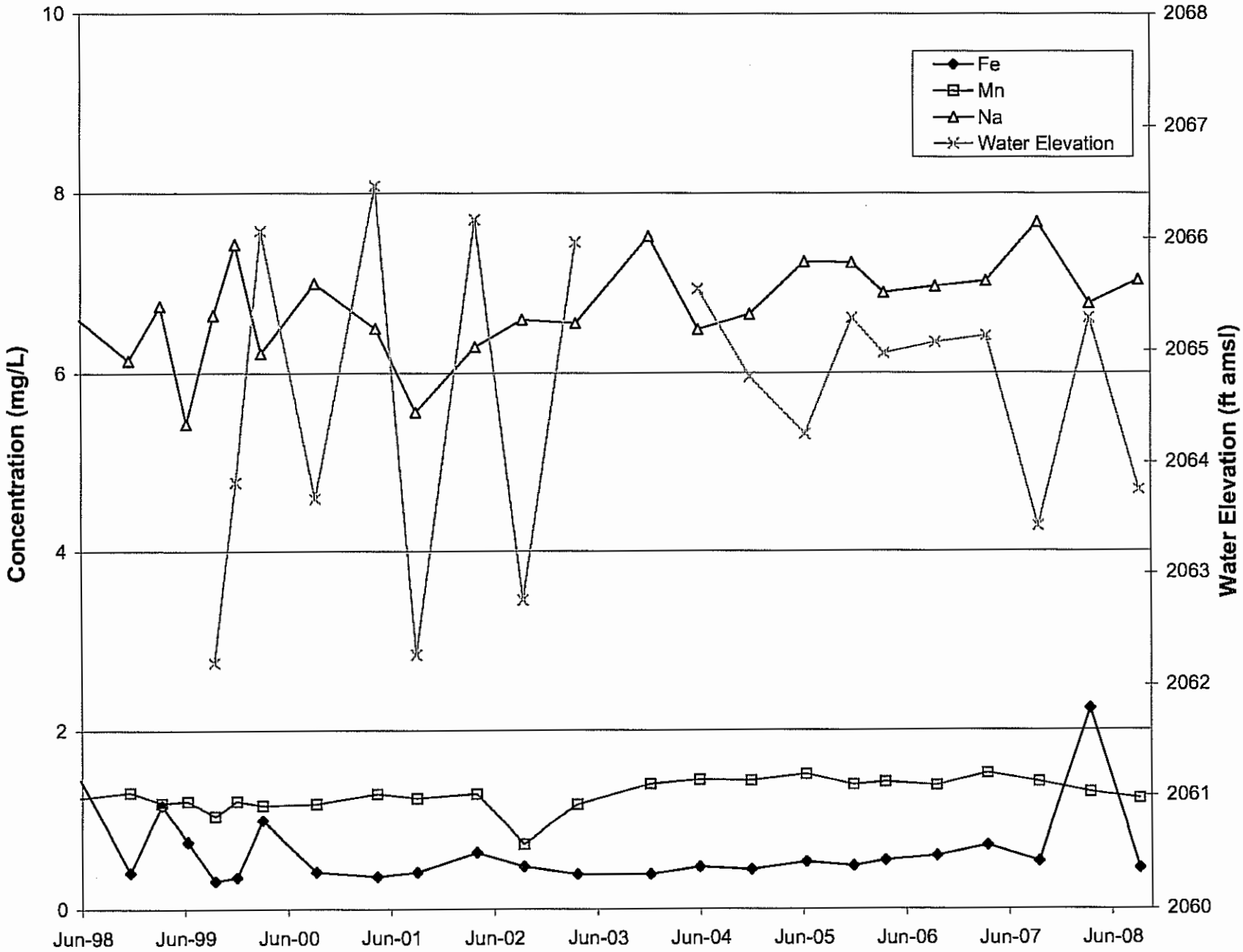
1. A majority of results for Manganese and Iron are non-detects.
2. 1/2 detection limit used for non-detects.



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

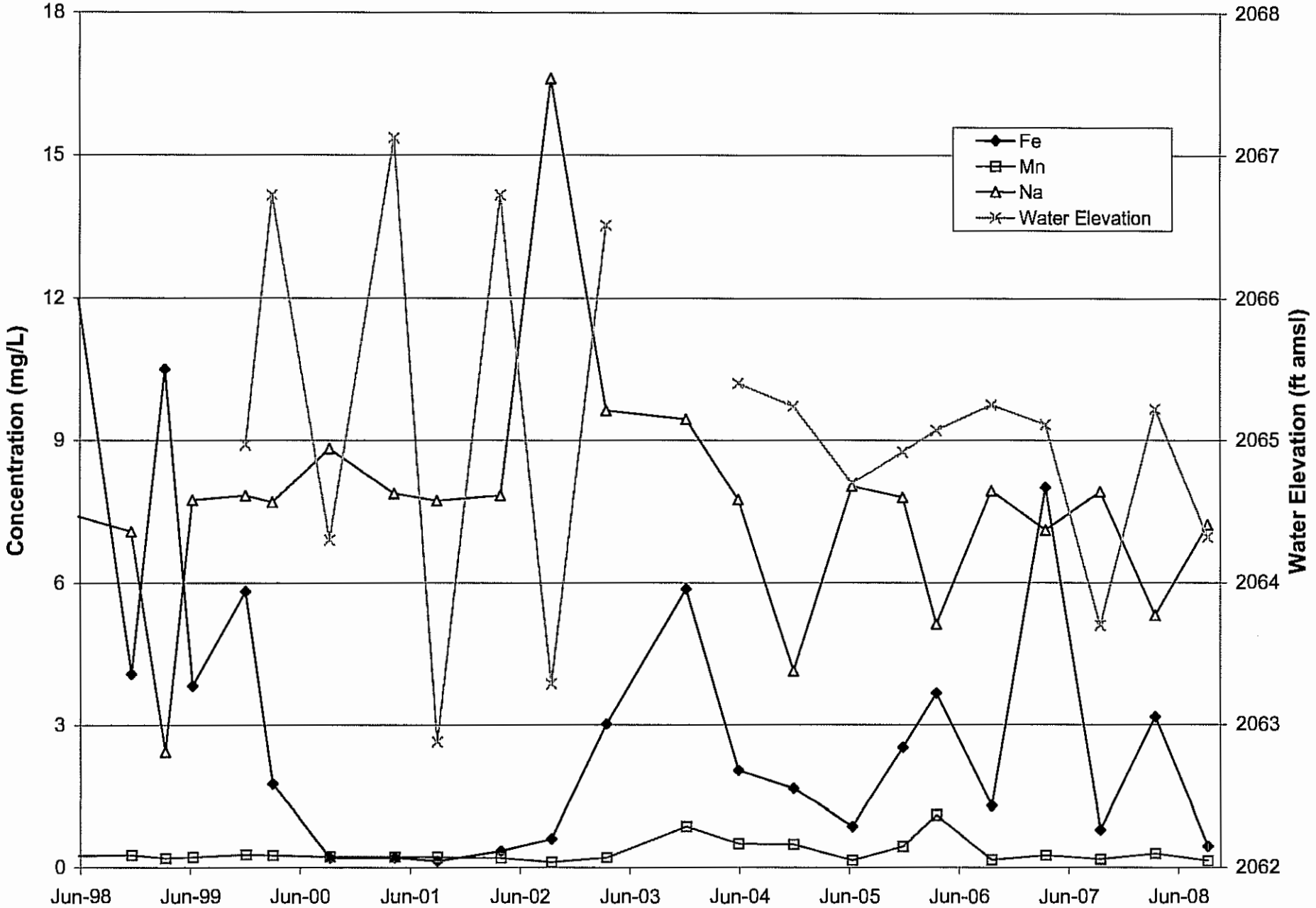
MW-5D Metals



Notes:

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

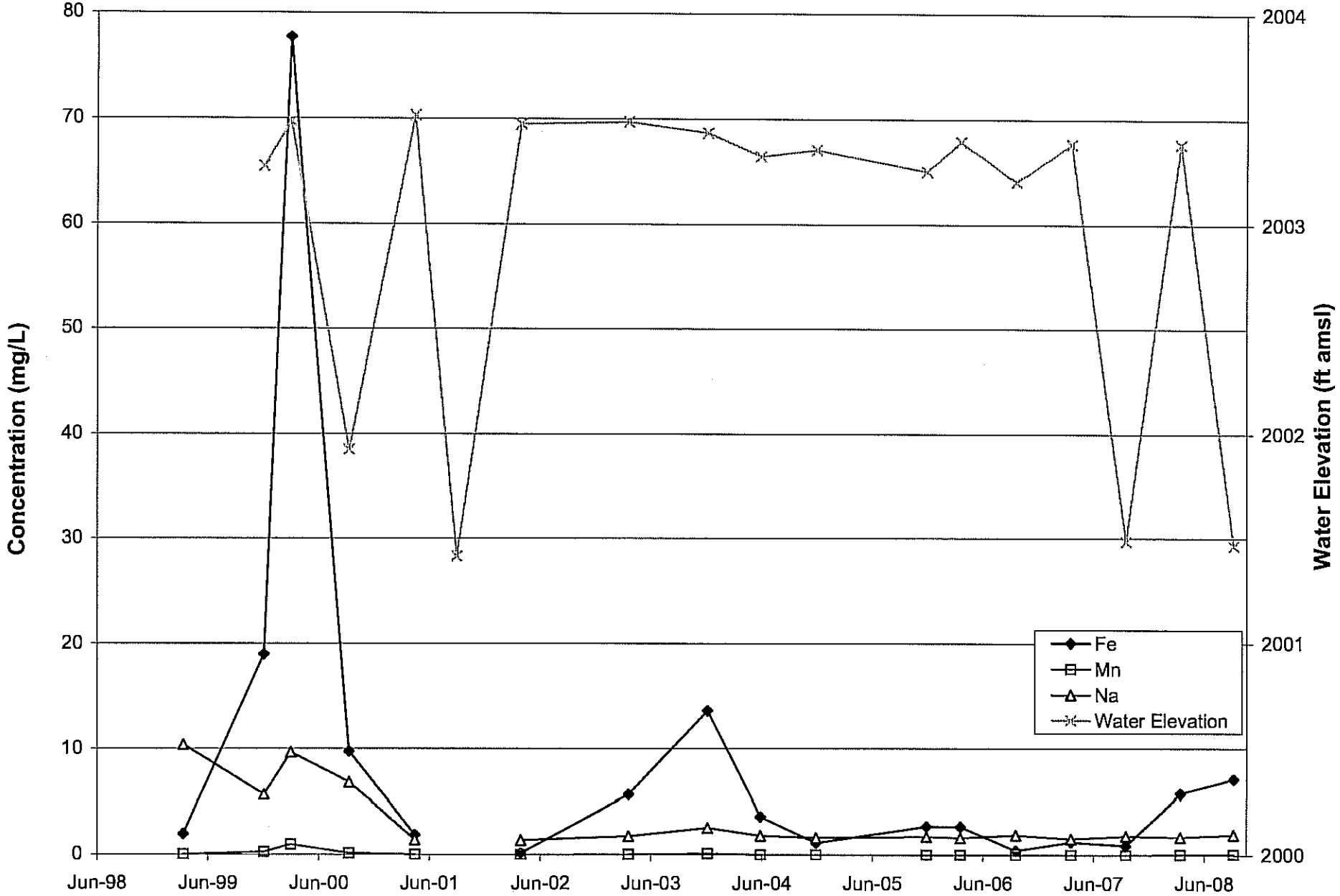
MW-5S Metals



Note:

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

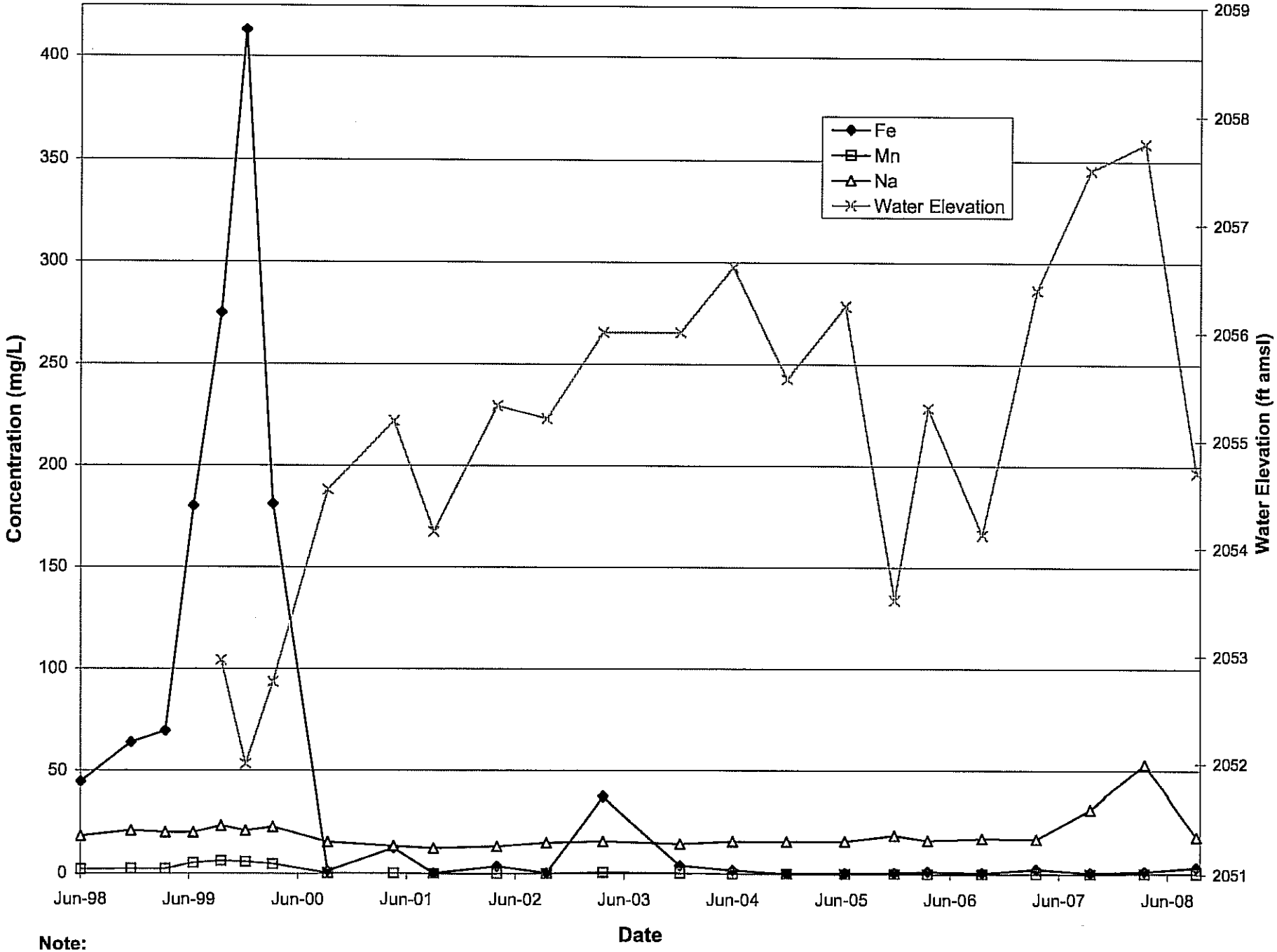
MW-15S Metals



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.

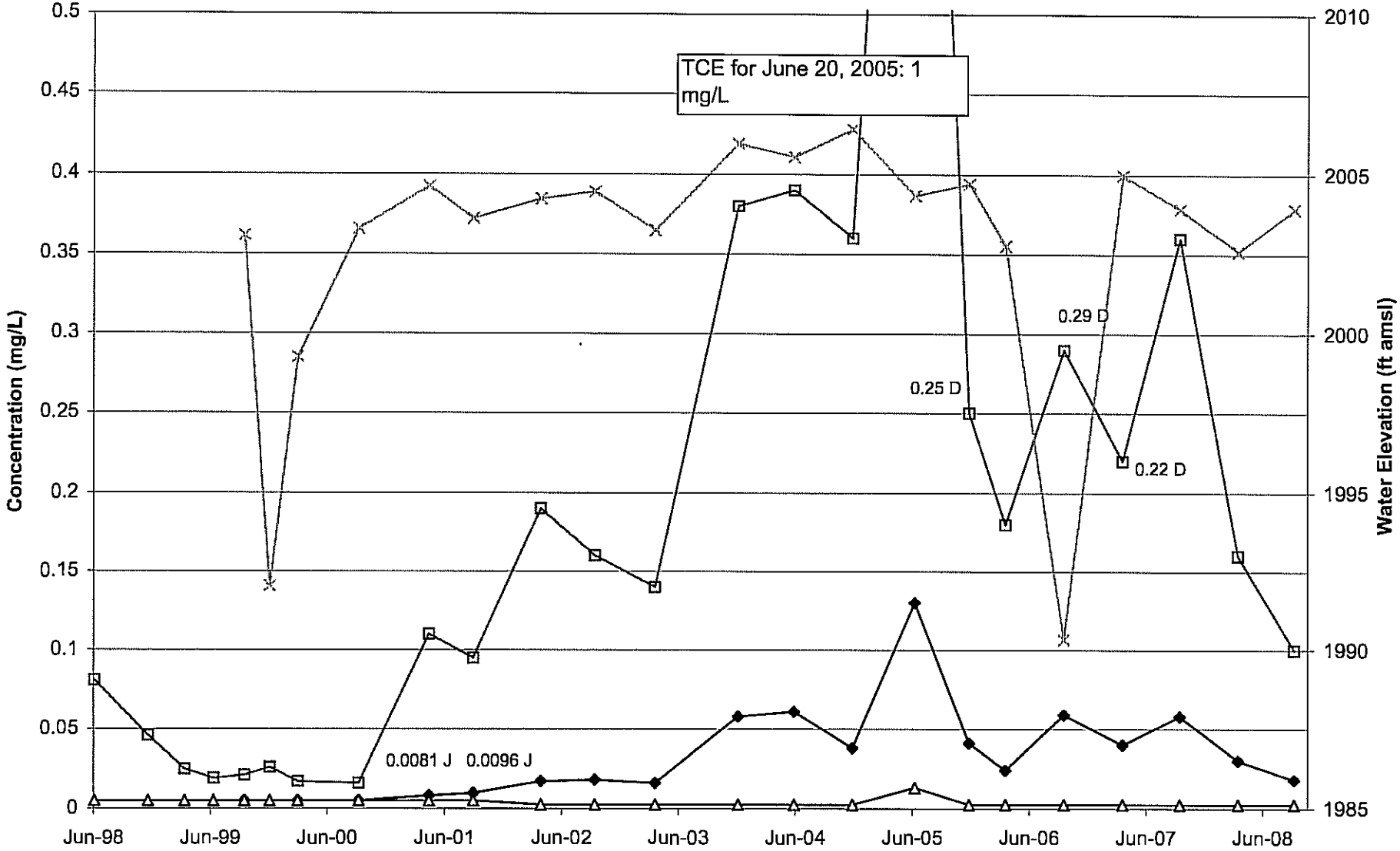
MW-18S Metals



Note:

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

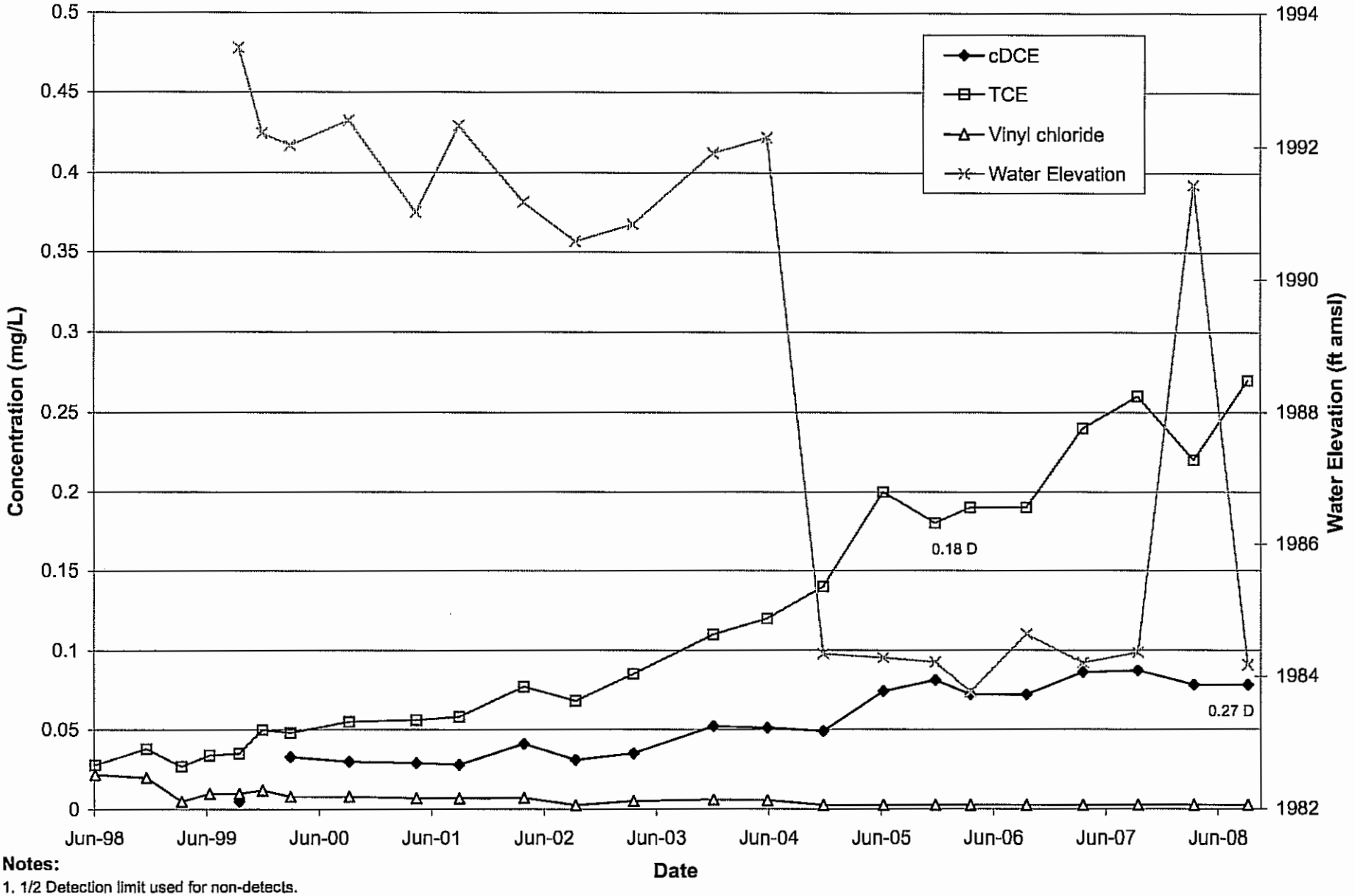
CW-3A VOCs



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.

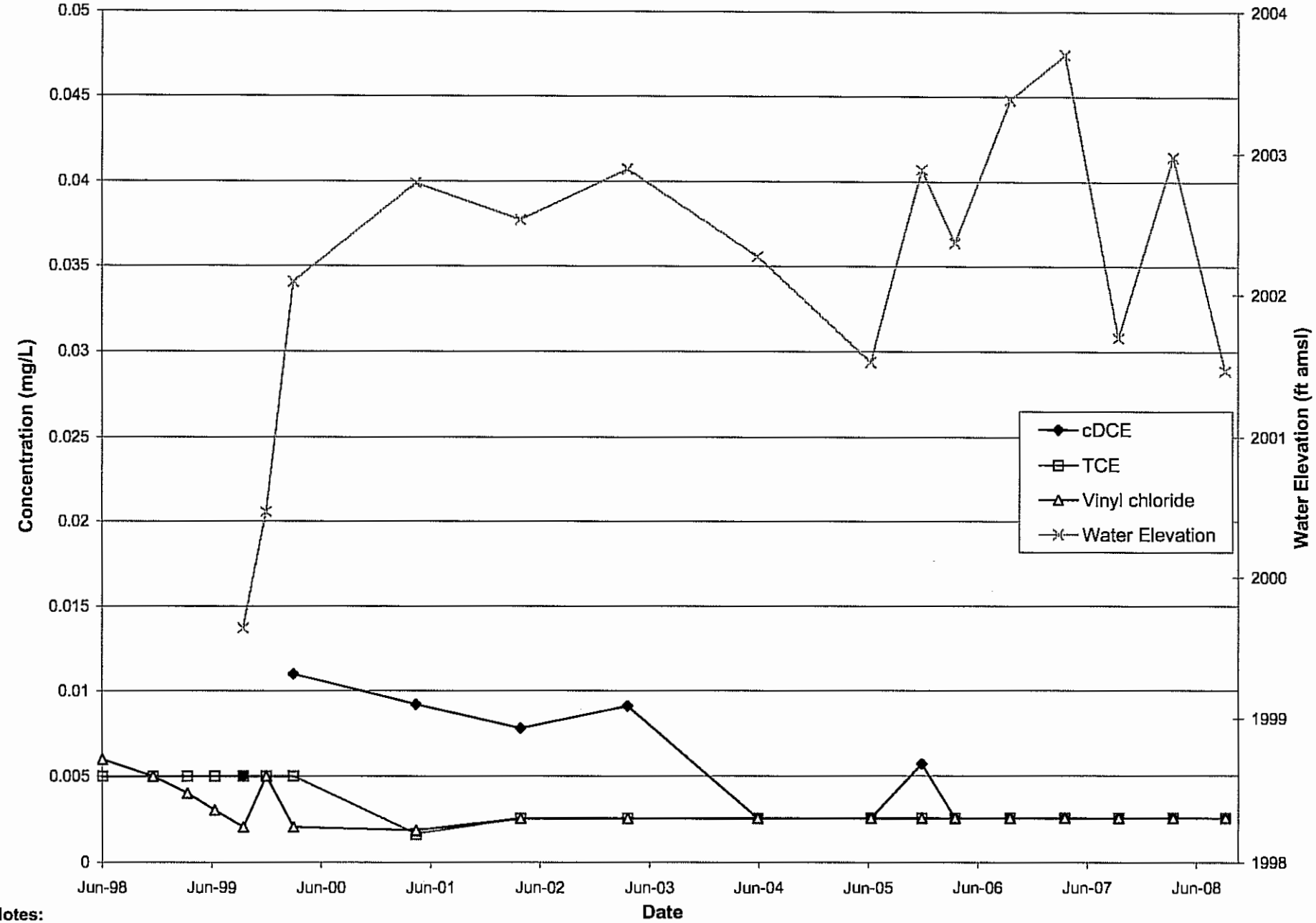
CW-3B VOCs



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 chorlde results are non-detect. Vinyl chorlde 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.

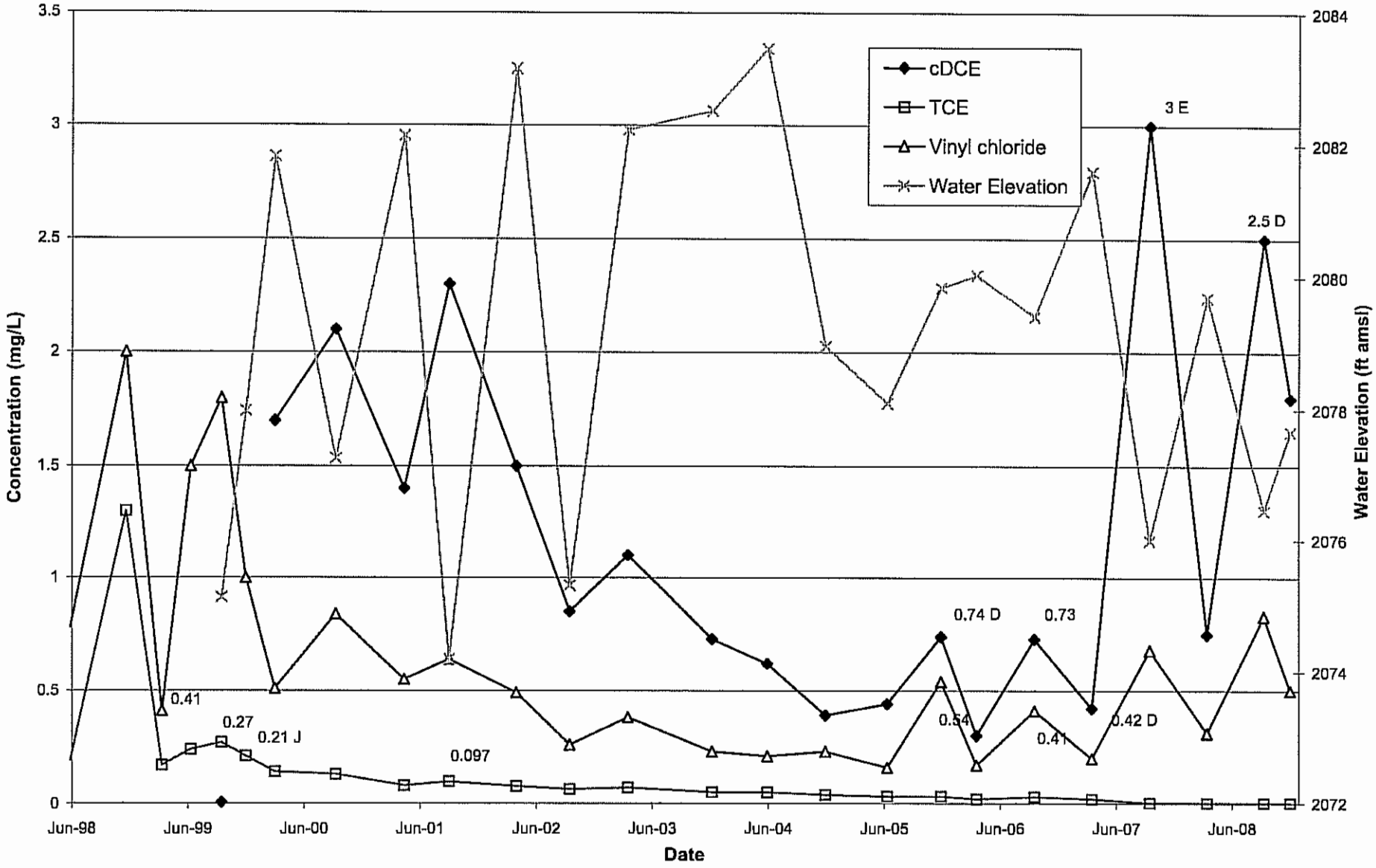
CW-4B VOCs



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 chorlde results are either non-detect or estimated values.
4. A majority of cDCE results are non-detect.

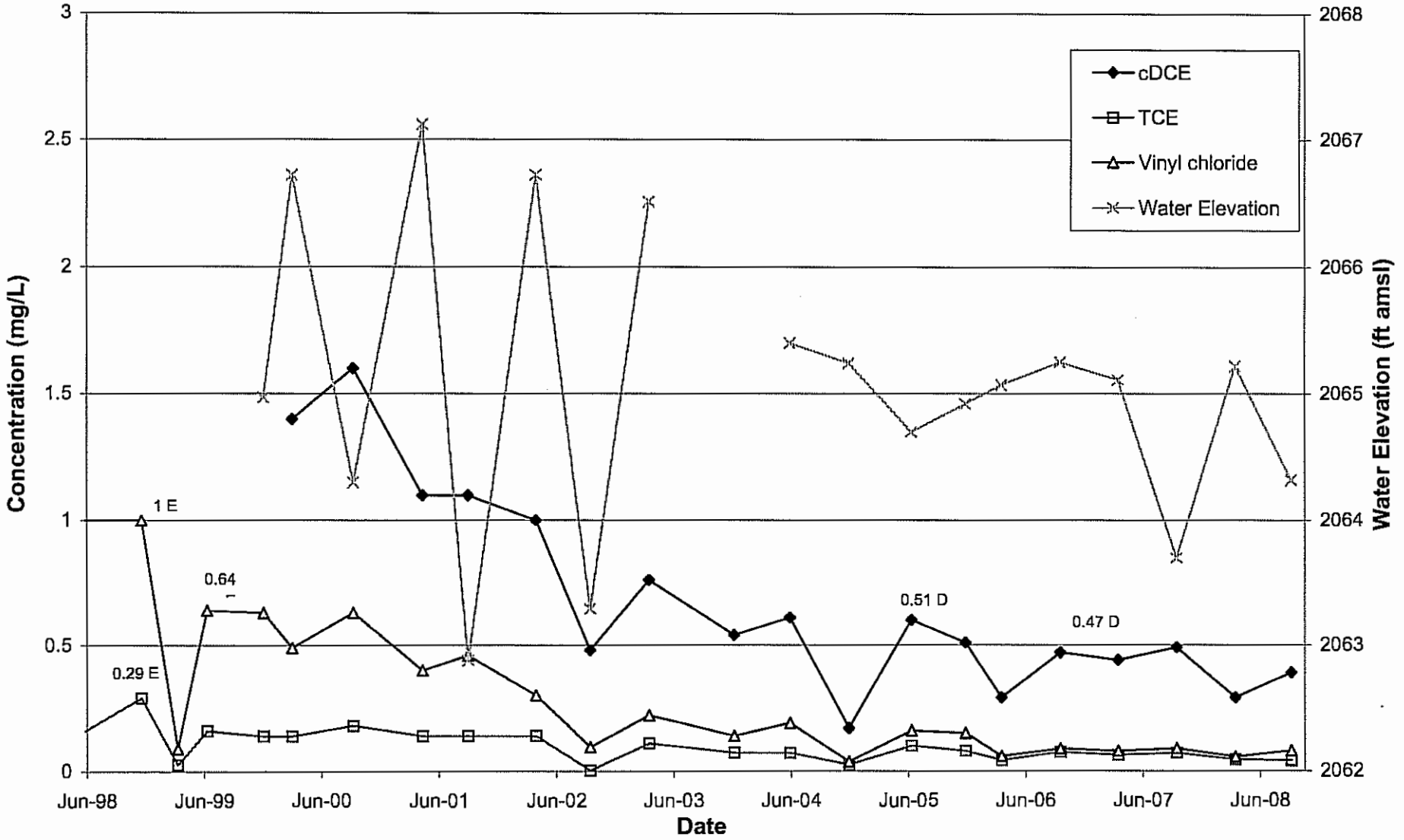
MW-4D VOCs



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.

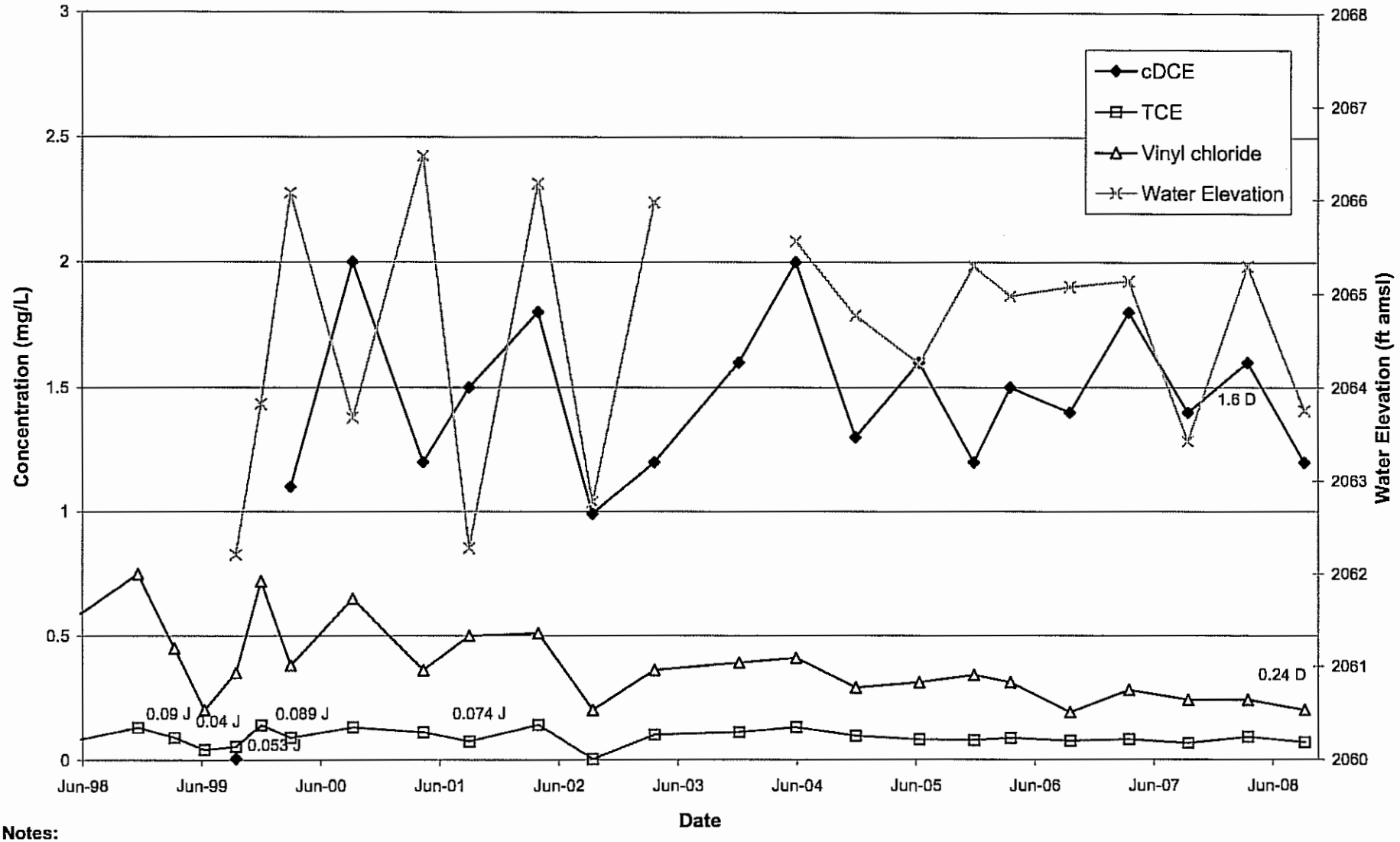
MW-5S VOCs



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.

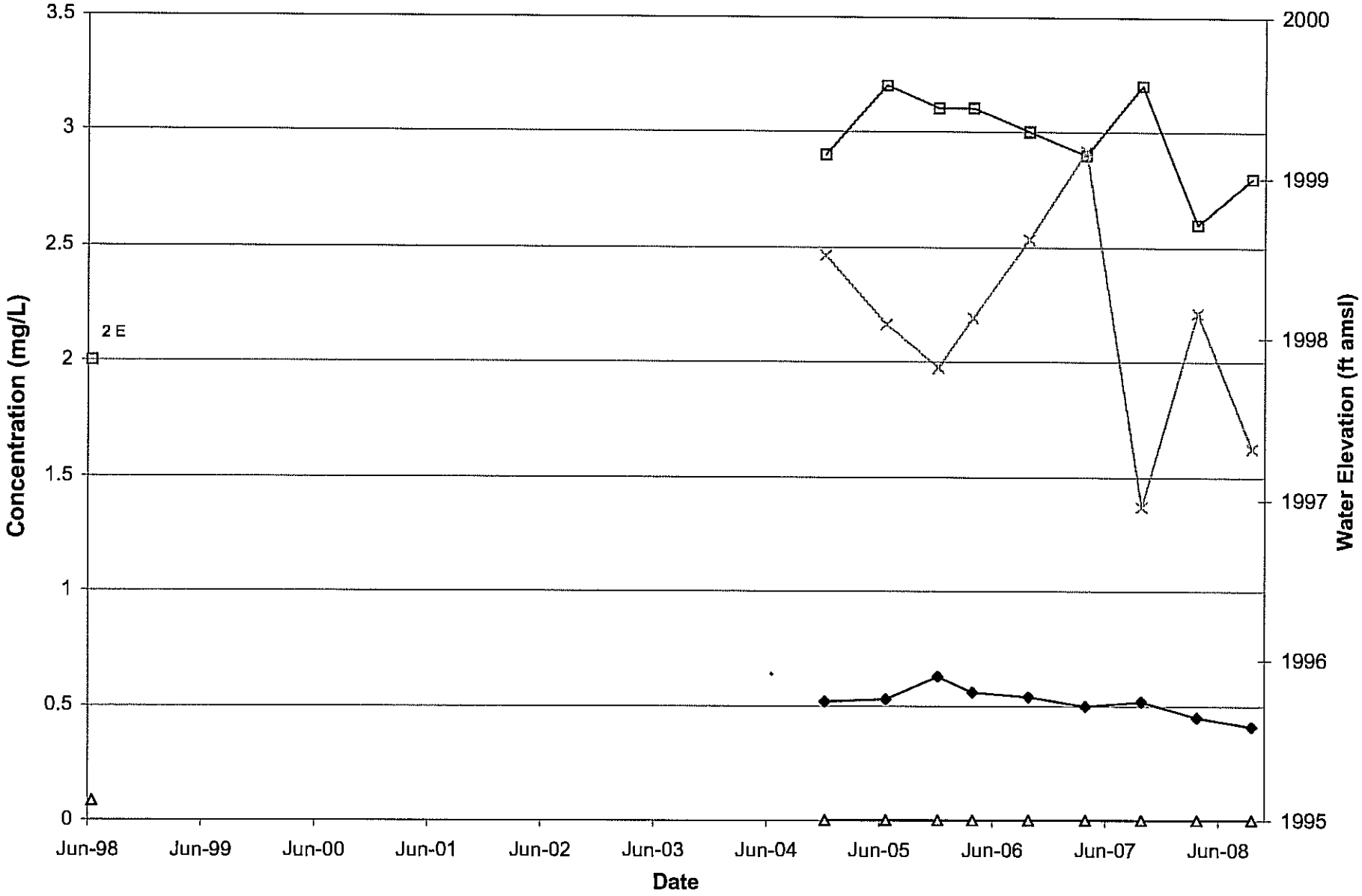
MW-5D VOCs



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.

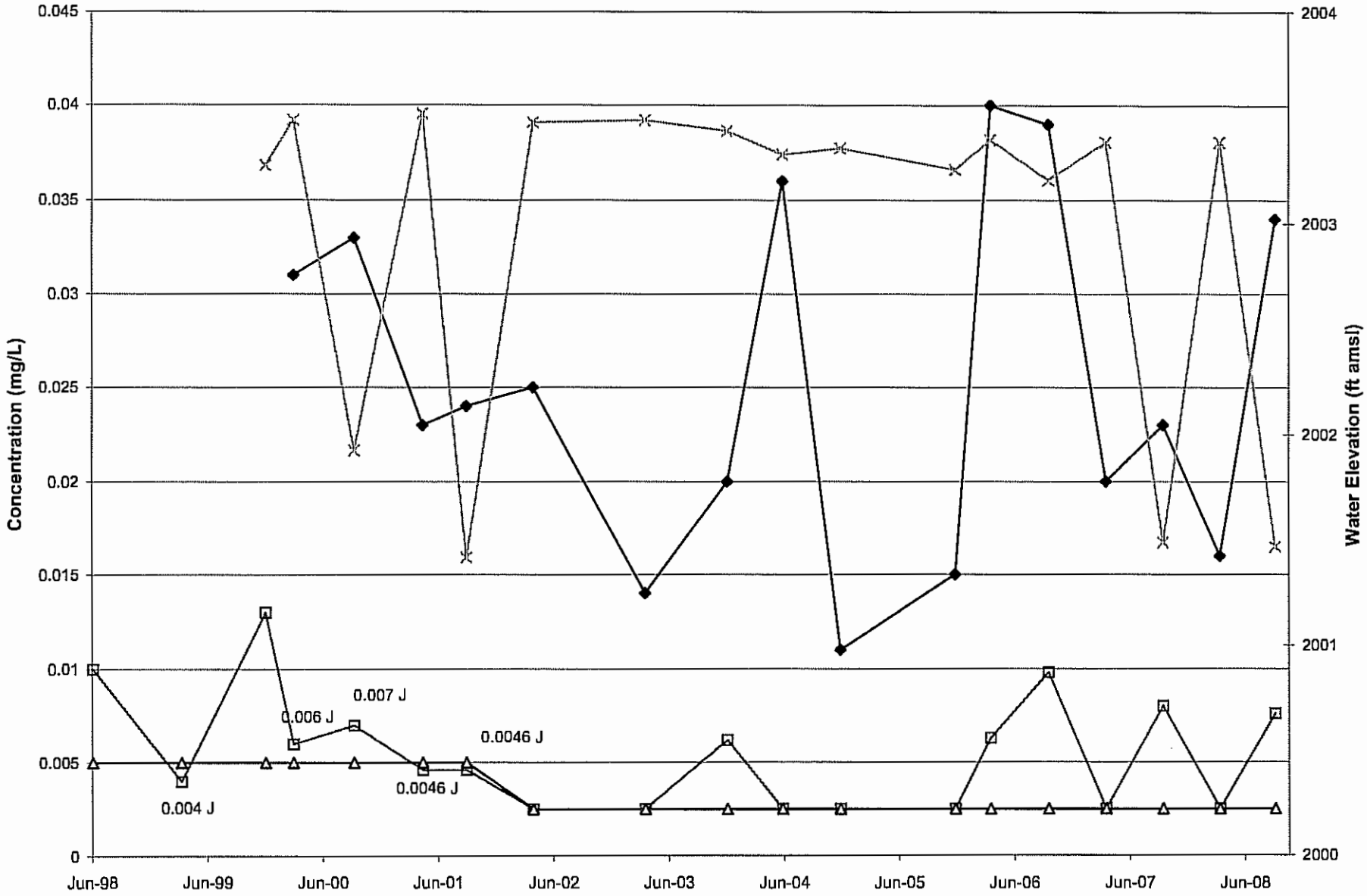
MW-11S VOCs



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.

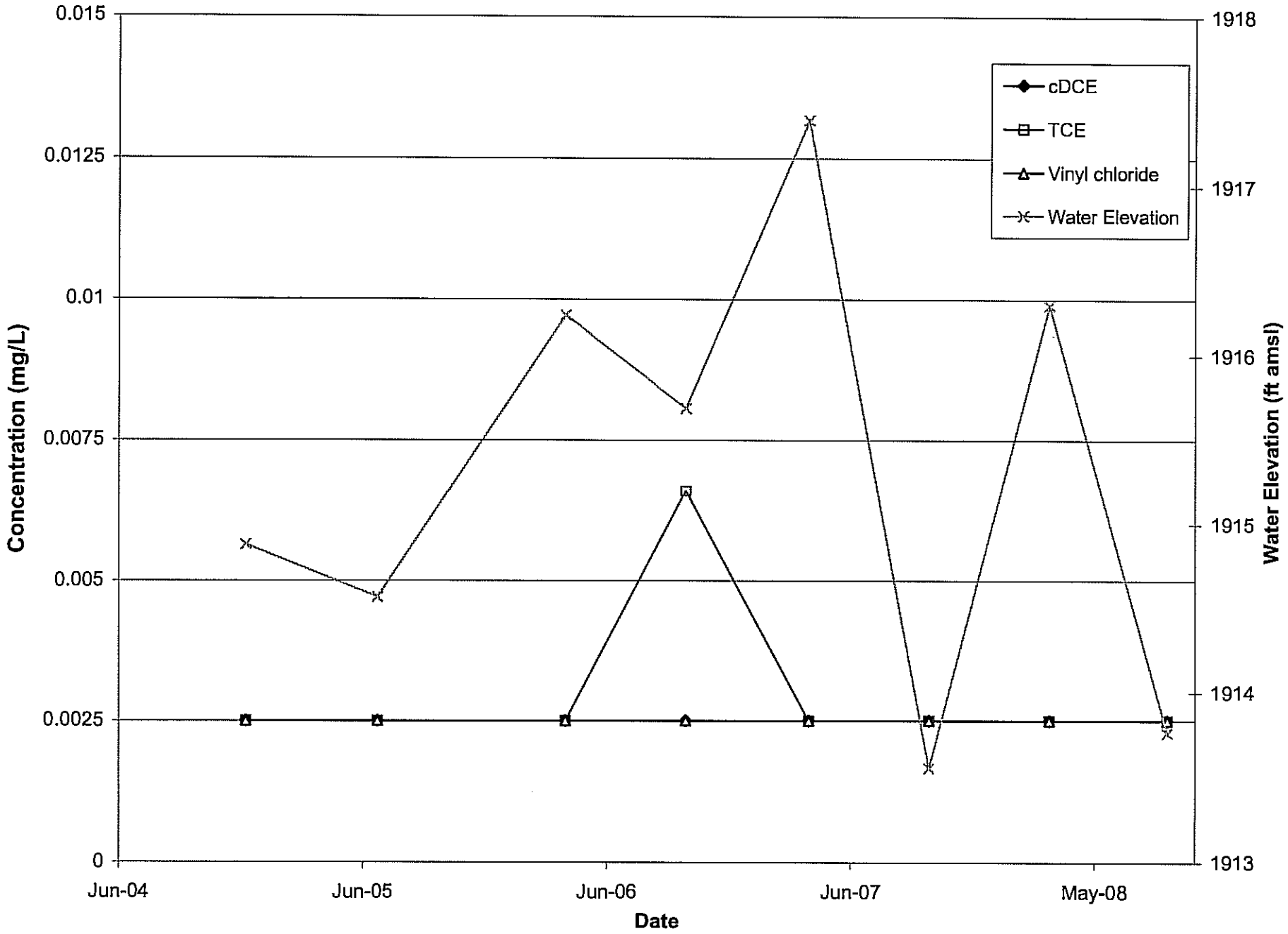
MW-15S VOCs



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.

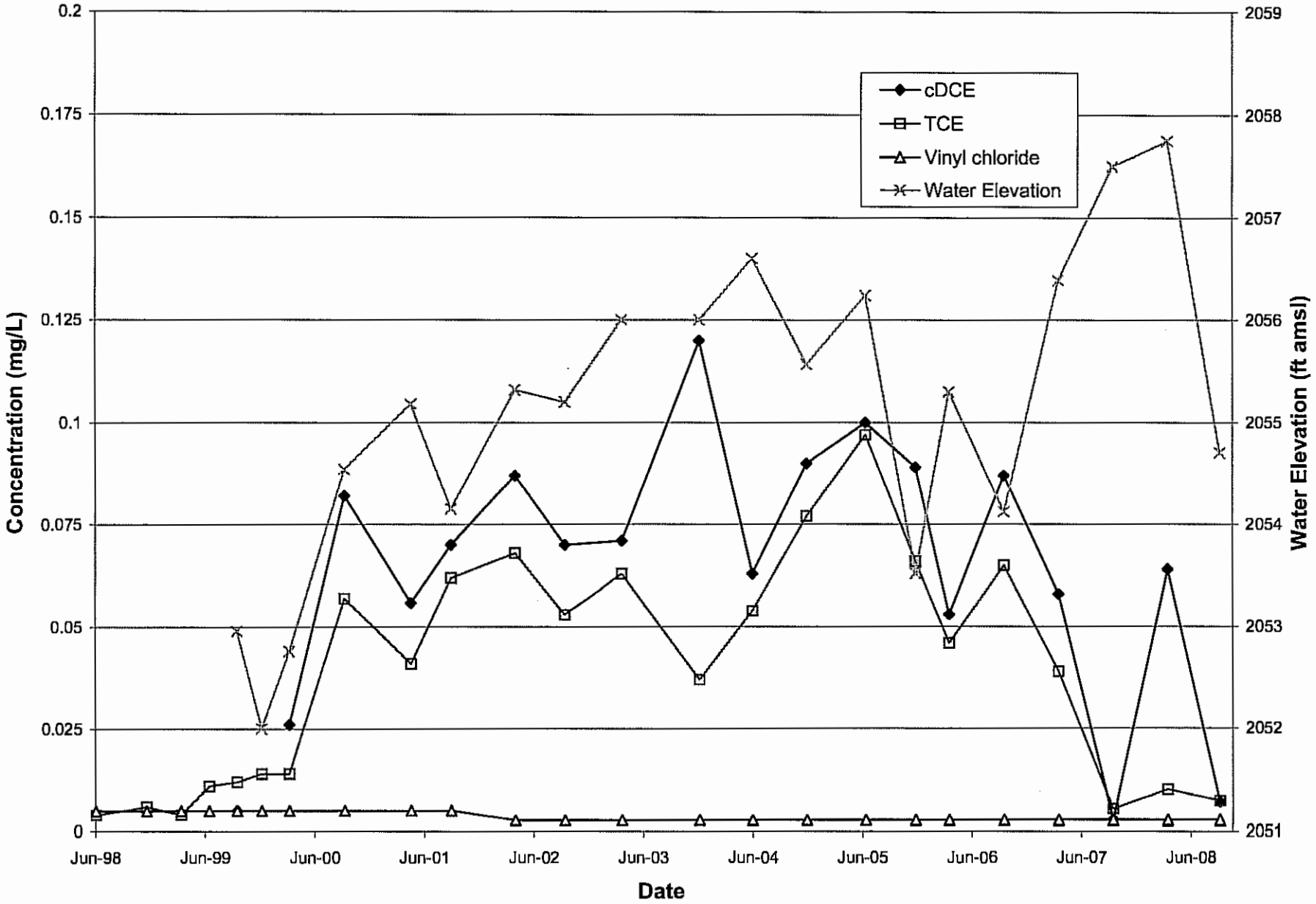
MW-16S VOCs



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.

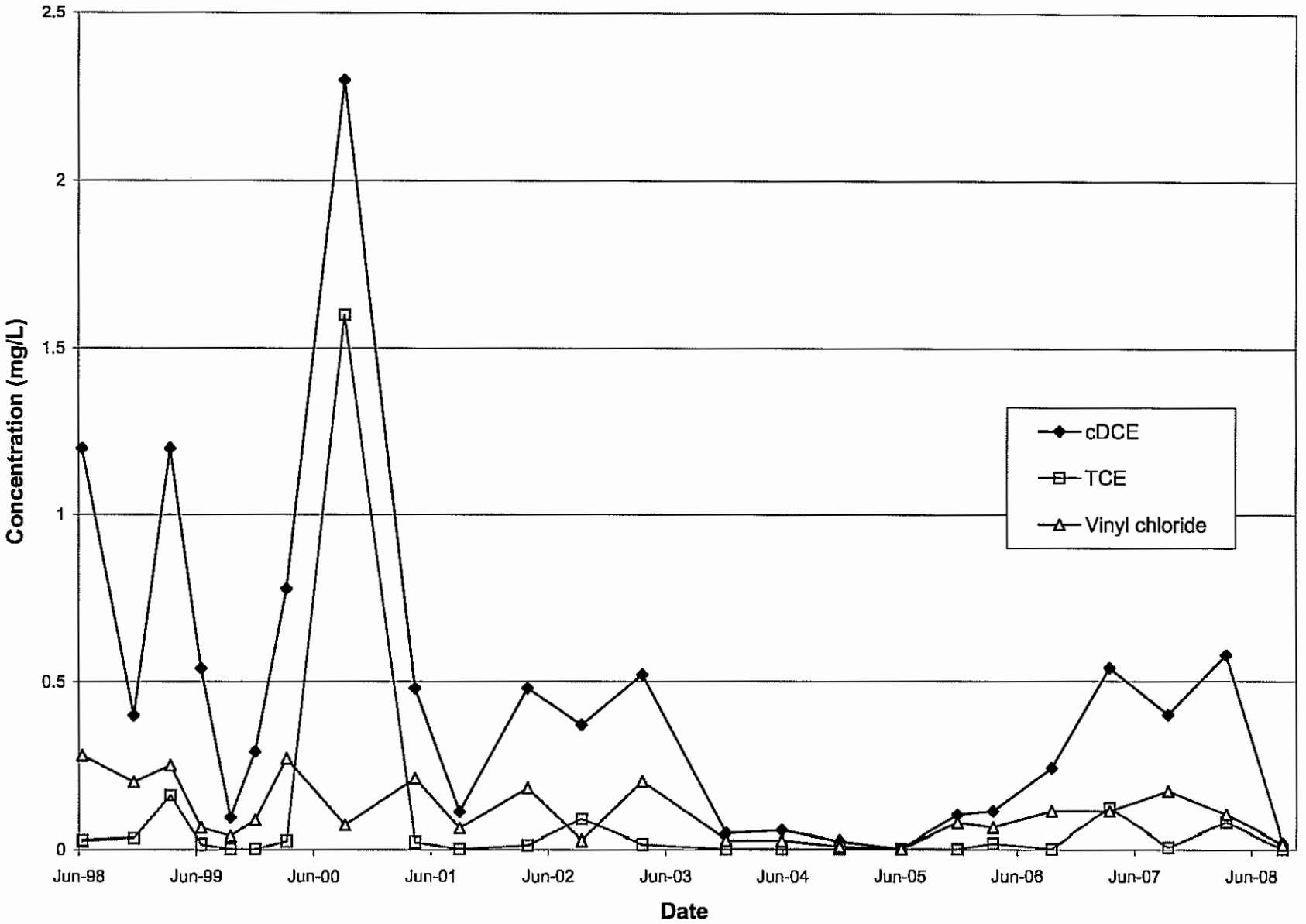
MW-18S VOCs



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.

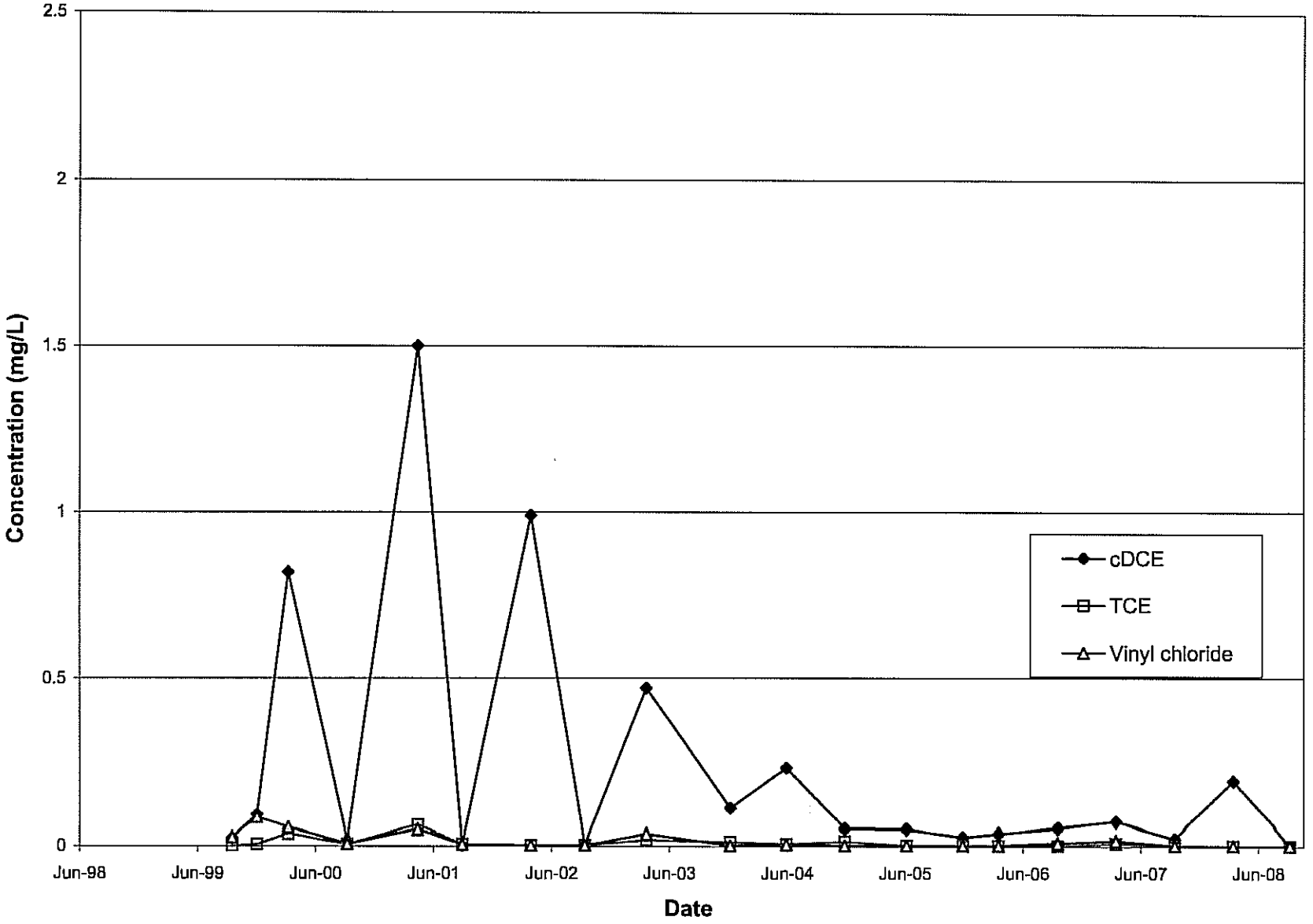
MH-32



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, $z_{0.05}$ (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 > $z_{0.05}$

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																				+	+	+	+	+	+	8	0
1.17																					-	+	-	+	+	3	2
0.651																						+	+	+	+	4	0
3.68																							-	+	-	0	3
1.06																								+	+	2	0
3.33																									-	0	1
																										75	169
																										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_c = 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_c = -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 = ($P(Z > z_c) = 1 - z_p$, 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_c is > $z_{0.95}$

Since absolute value z_c = 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	158
																									Total "+"	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 Total "+"	196 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 $V(S) = 1/18\{n(n-1)(2n+5) - [t_1(t_1-1)(2t_1+5)+[t_2(t_2-1)(2t_2+5)+\ldots$ 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 > $z_{0.05}$

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

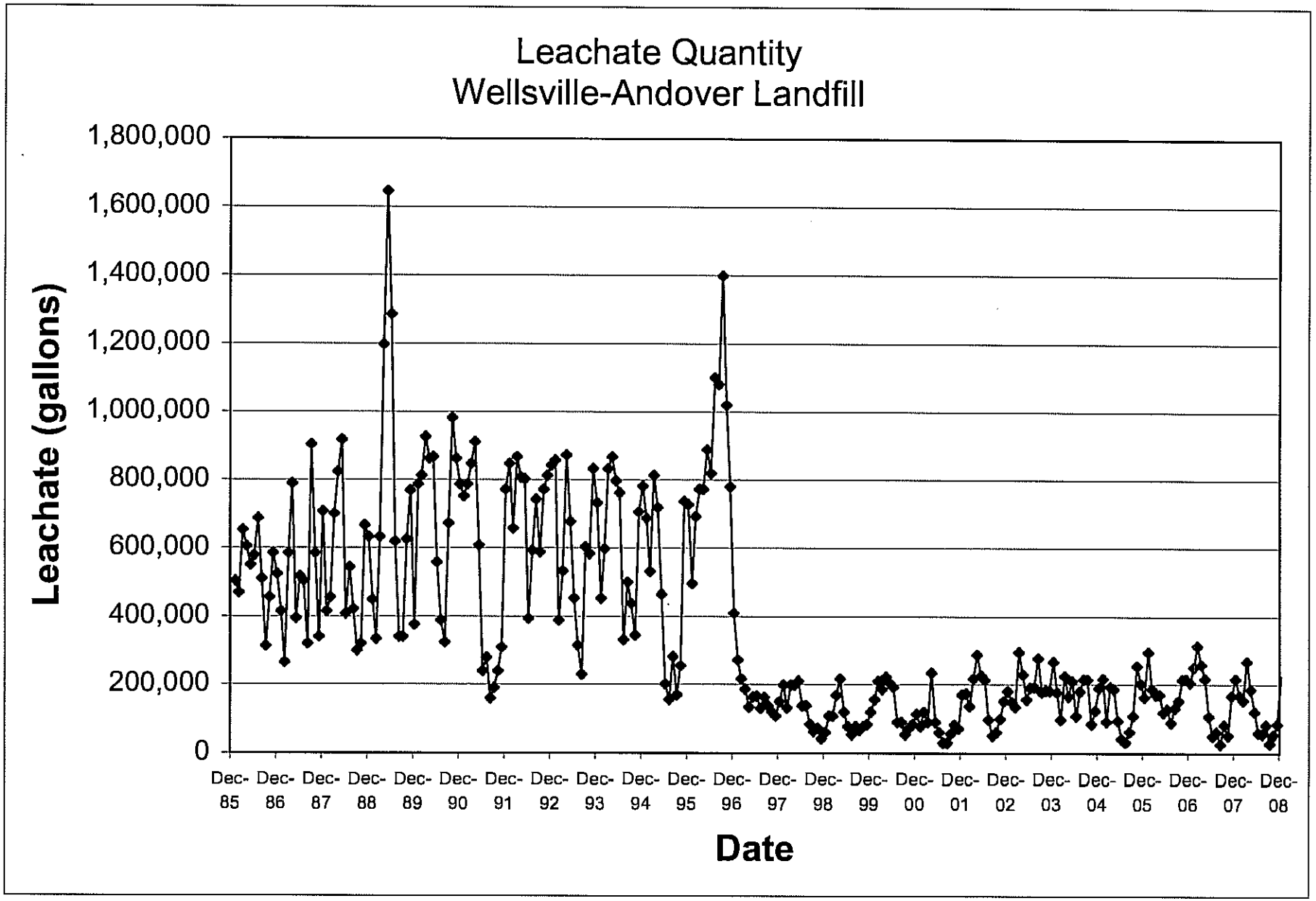
Location	Current Sampling Frequency	Proposed Sampling Frequency	Proposed Analyte List[1]
Residential Water Supply			
WAL-1	Every 3 Years	NR	NR
WAL-2	Semiannual	Annual	Metals
WAL-3	Every 3 Years	NR	NR
WAL-4	Every 3 Years	NR	NR
WAL-5	Semiannual	Annual	VOCs, Metals
WAL-6	Every 3 Years	NR	NR
WAL-7	Every 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: Brad Mattison Date: 3/31/14

Weather: Partly Sunny Temperature 35°

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 2013
		Remove scrubs and trees from cover system and drainage ways.	OK
	Vectors	Check for burrows and backfill with clean soil.	OK
Leachate collection and storage system	USTs	Check leachate levels, check/test leak detection system and auto dialer; check for sediment in bottom of tanks.	Jan, Feb, March 352,765 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.	OK
	Forcemain	Check for leaks.	OK
	Laterals and trunk line	Check for and record VOCs at each manhole and cleanout; check for line blockage visually; lubricate locks.	Performed By on-site
	Groundwater cutoff manholes	Collect and analyze sample of liquid in cutoff trench. Note which line (surface drainage or LCS) is plugged.	Performed By on-site
Gas venting system	Odors	Check for and record VOCs and methane (explosimeter) upwind, at each vent, and at perimeter of property. Check physical condition of vent and screen.	Performed By on-site

Figure 5-3

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

Inspector: Brad Mattson — To: — Date: 3/31/14

Weather: Partly Sunny — Temperature: 35°

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 animal tracks.	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: 3/31/14

Figure 5-3

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

Inspector: Bill Whitfield Date: 6/27/14

Weather: Partly Sunny Temperature: 77°

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.	
		Remove scrubs and trees from cover system and drainage ways.	OK
	Vectors	Check for burrows and backfill with clean soil.	OK
Leachate collection and storage system	USTs	Check leachate levels, check/test leak detection system and auto dialer; check for sediment in bottom of tanks.	April, May, June 522,478 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 Onsite
	Groundwater cutoff manholes	Collect and analyze sample of liquid in cutoff trench. Note which line (surface drainage or LCS) is plugged.	" "
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.	" "

Figure 5-3

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

Inspector: Bill Whitfield   Date: 6/27/14

Weather: Party Sunny   Temperature: 77°

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: [signature]

Date: 6/30/14

02:0C4901_D4778-F53-09/11/95-D1

Figure 5-3

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

Inspector: Brad Mattison | Date: 9/30/14

Weather: Mostly Sunny | Temperature: 73°

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.	Mowed Oct 2013
		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 204,690
	Pump stations	Check pump operation.	OK
		Check float operation. Perform manufacturer's recommended maintenance. Operate/cycle valves. Check sump for floating debris and sediments.	ok
	Forcemain	Check for leaks.	ok
	Laterals and trunk line	Check for and record VOCs at each manhole and cleanout; check for line blockage visually; lubricate locks.	Performed by On-Site
	Groundwater cutoff manholes	Collect and analyze sample of liquid in cutoff trench. Note which line (surface drainage or LCS) is plugged.	Performed by On-Site
Gas venting system	Odors	Check for and record VOCs and methane (explosimeter) upwind, at each vent, and at perimeter of property. Check physical condition of vent and screen.	Performed by On-Site

Figure 5-3

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

Inspector: Brad Mattison | Date: 9/30/14

Weather: Mostly Sunny | Temperature: 73°

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.	OK
Facility access system	Roads	Check condition. Check for erosion, potholes.	OK
	Access gate	Check condition. Lubricate lock.	OK

Other	Comments

Signed: Bradley J Mattison

Date: 9/30/14

Figure 5-3

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

Inspector: Brad V Matti — Date: 12/31/14

Weather: Cloudy — Temperature: 18°

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.	Mowed OCT 2014
		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.	Gauges In Pump House for storage Tank not working — OCT, NOV, DEC — 361,750
	Pump stations	Check pump operation.	OK
		Check float operation. Perform manufacturer's recommended maintenance. Operate/cycle valves. Check sump for floating debris and sediments.	OK
	Forcemain	Check for leaks.	OK
	Laterals and trunk line	Check for and record VOCs at each manhole and cleanout; check for line blockage visually; lubricate locks.	Performed By on-site
	Groundwater cutoff manholes	Collect and analyze sample of liquid in cutoff trench. Note which line (surface drainage or LCS) is plugged.	Performed By on-site
Gas venting system	Odors	Check for and record VOCs and methane (explosimeter) upwind, at each vent, and at perimeter of property. Check physical condition of vent and screen.	Performed By on-site

Figure 5-3

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

Inspector: BRAD MATTISON — Date: 12/31/14

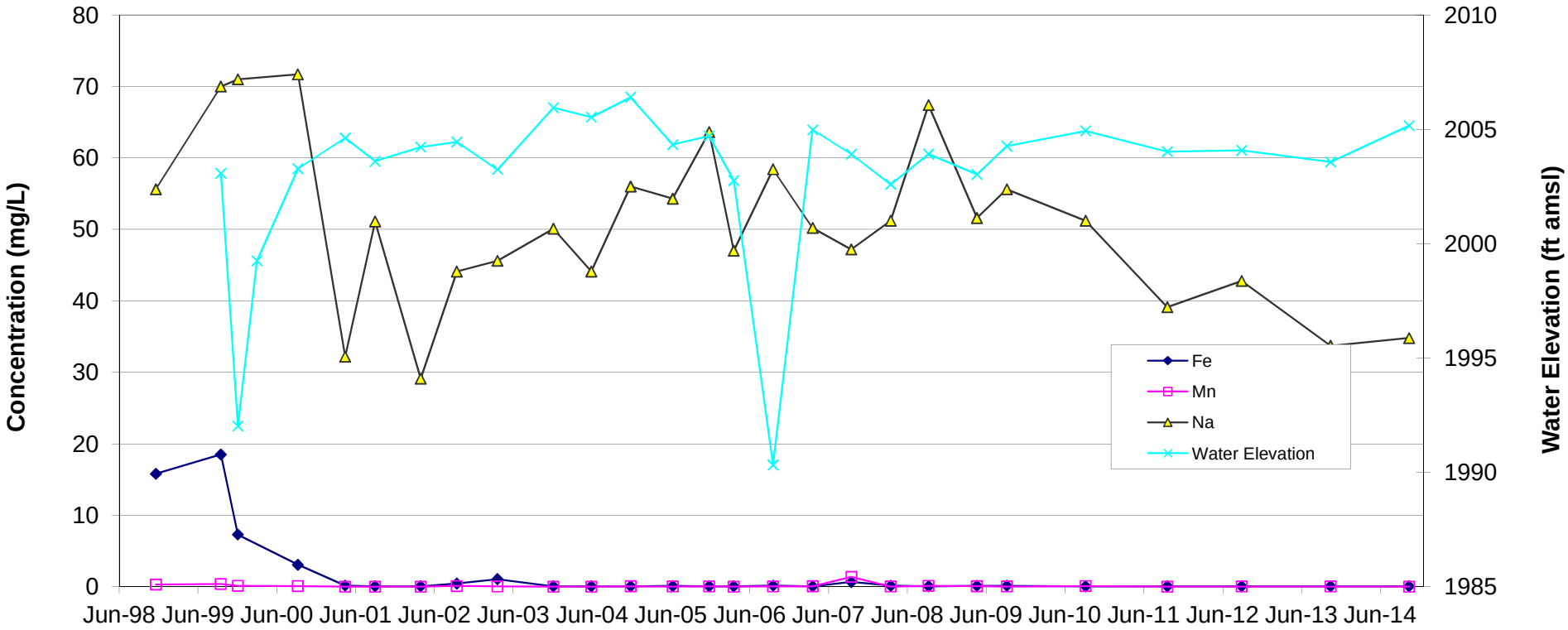
Weather: Cloudy — Temperature: 18°

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	Gauges for Leachate storage tanks not working.

Signed: BRAD MATTISON

Date: 12/31/14

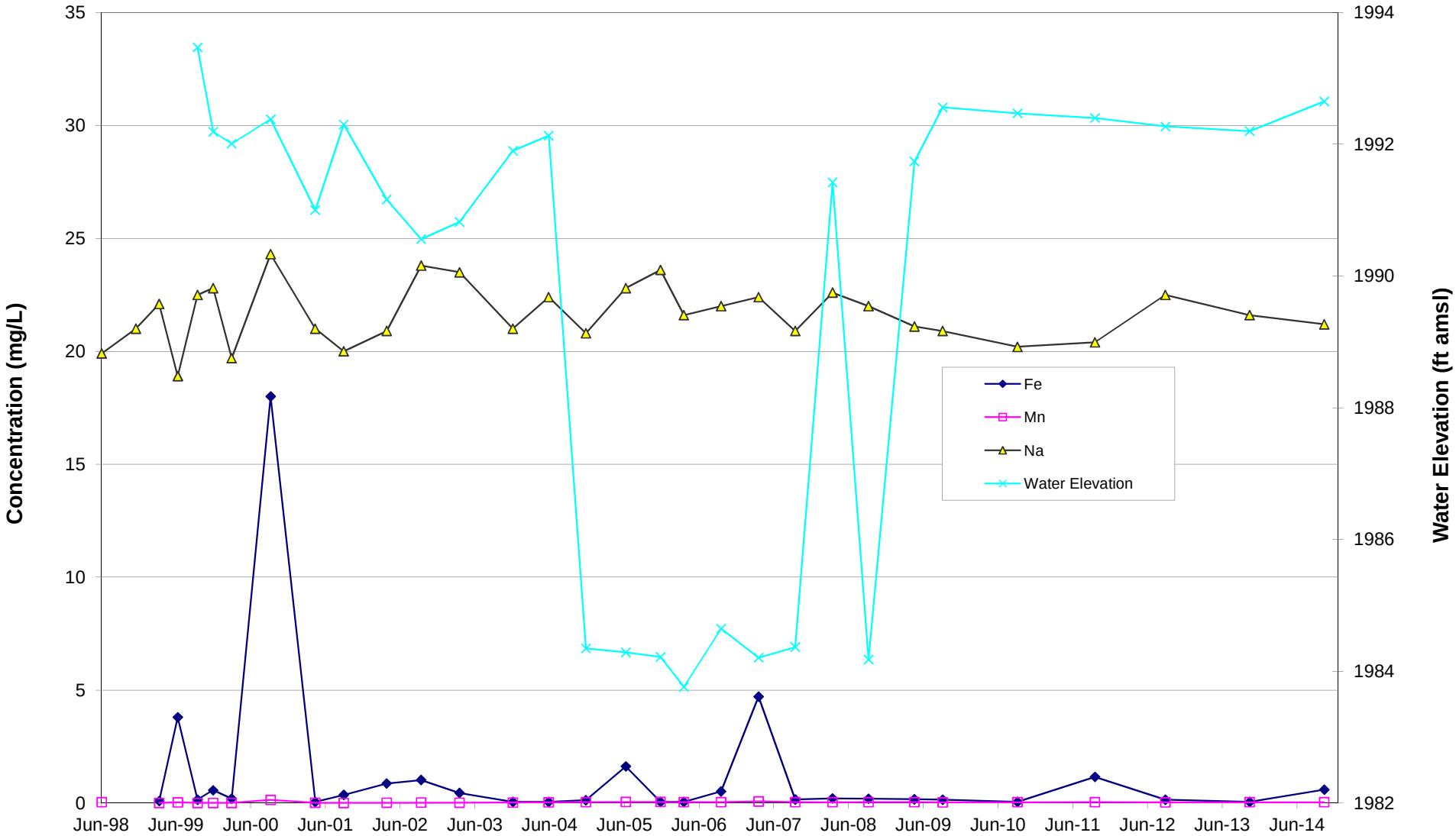
CW-3A Metals



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

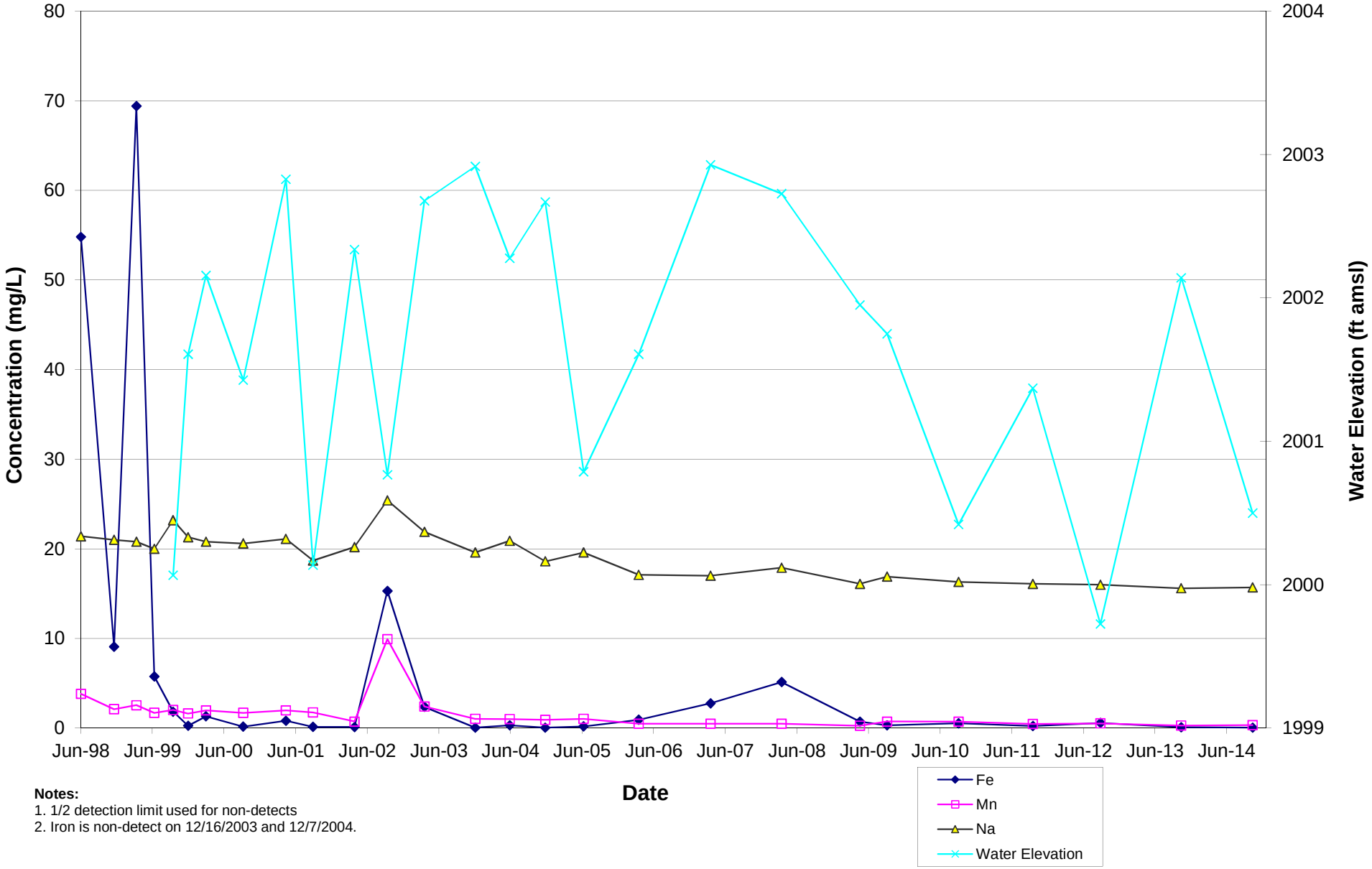
Date

CW-3B Metals



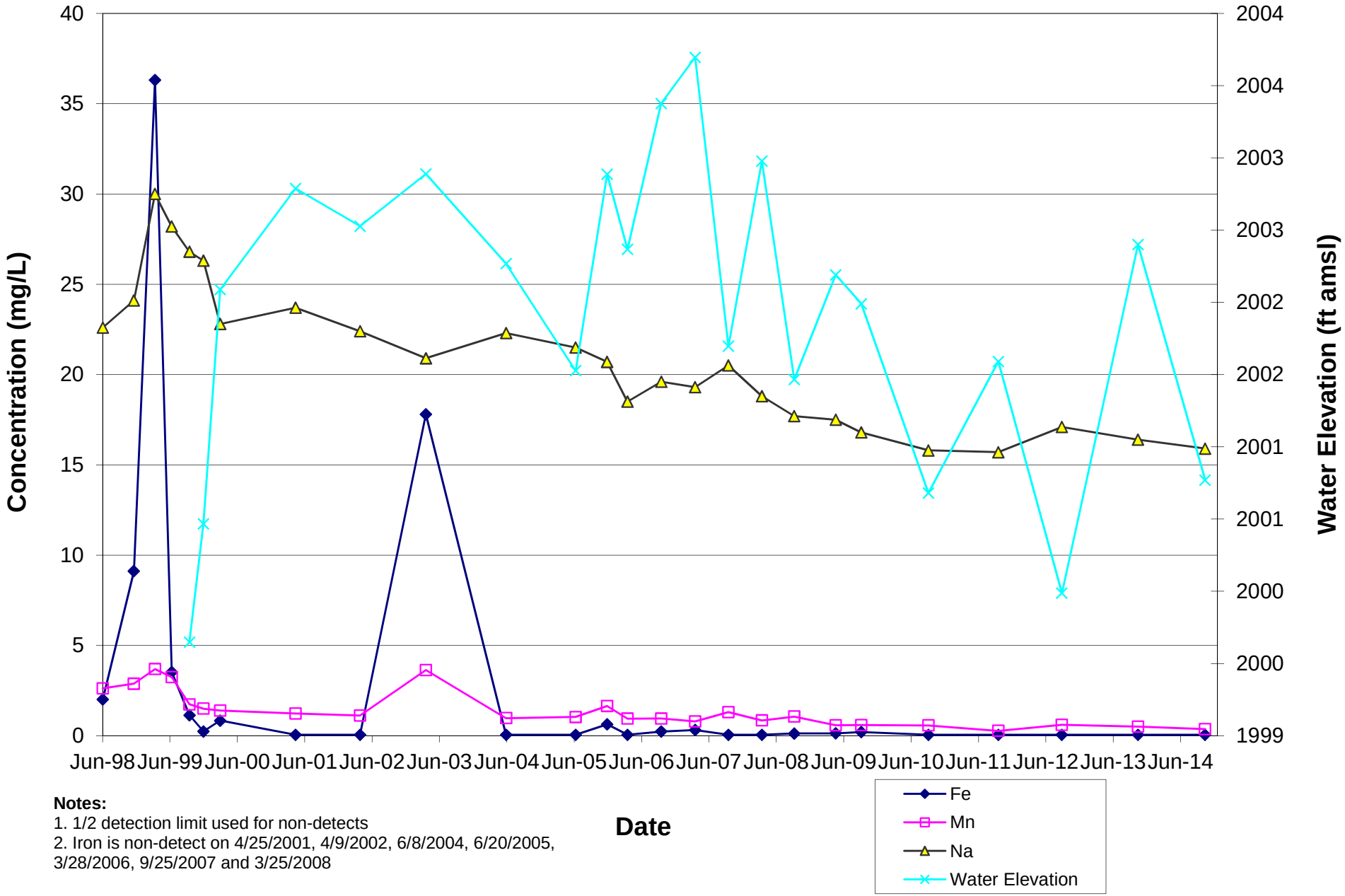
Notes:
1. A majority of results for Manganese and Iron are non-detects.
2. 1/2 detection limit used for non-detects.

CW-4A Metals



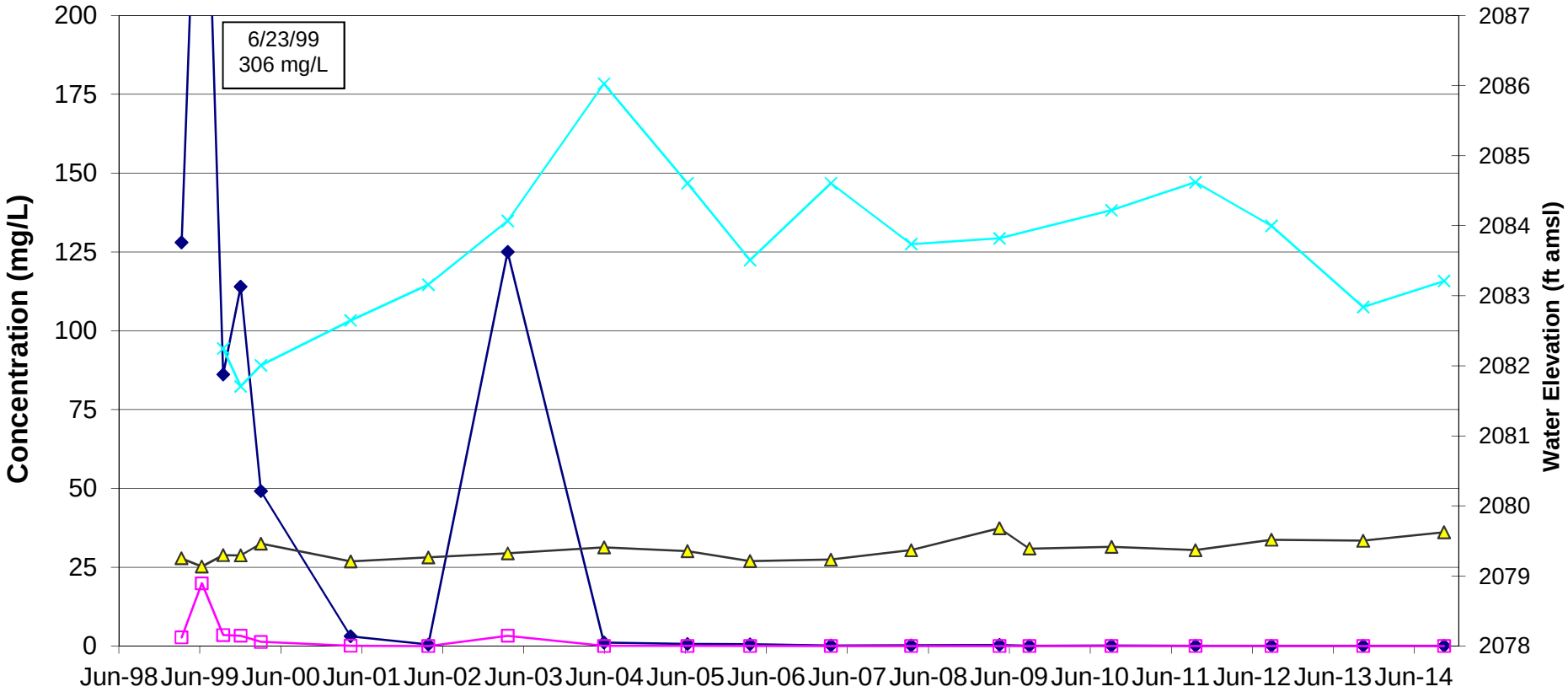
Notes:
1. 1/2 detection limit used for non-detects
2. Iron is non-detect on 12/16/2003 and 12/7/2004.

CW-4B Metals



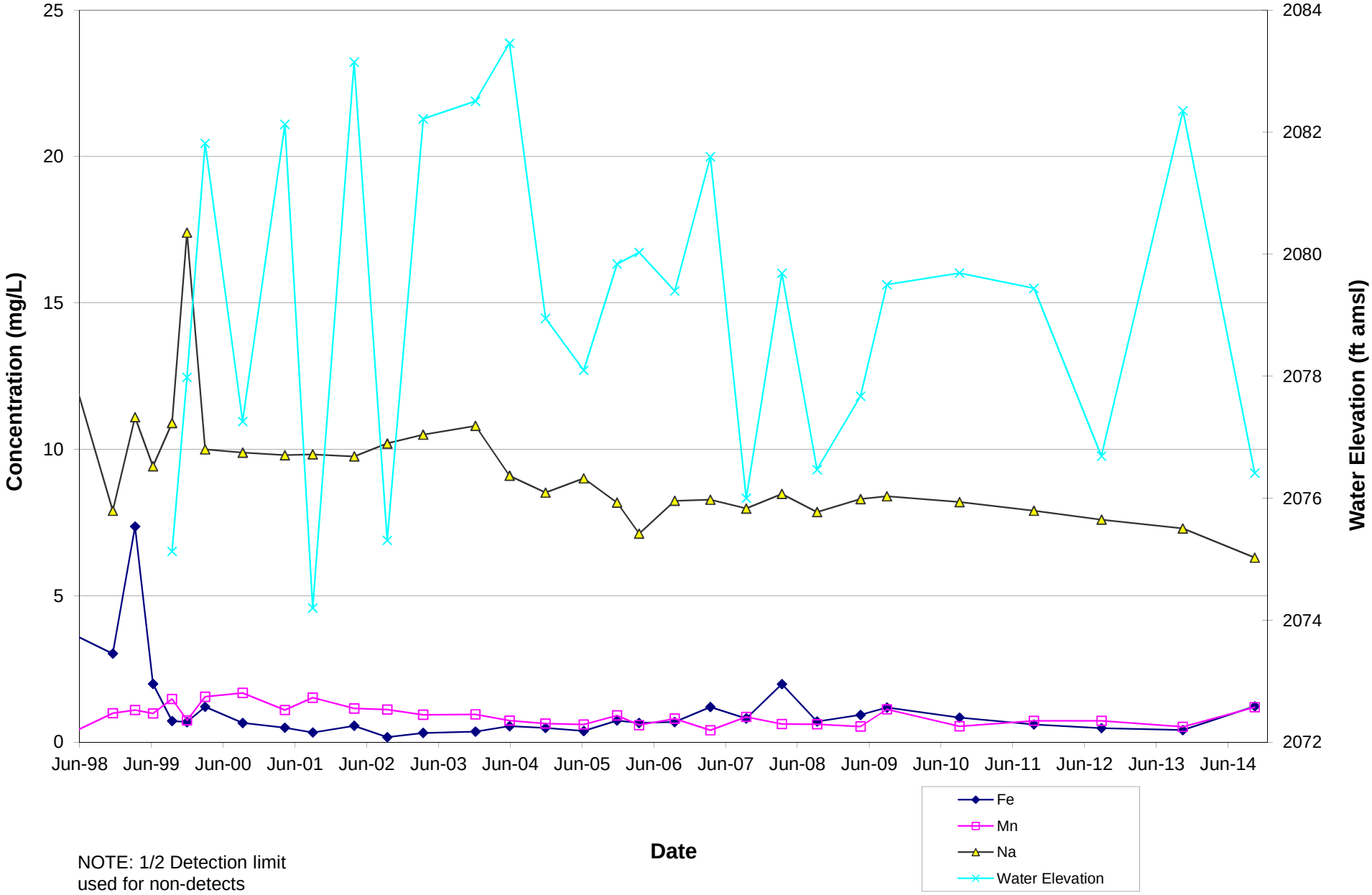
Notes:
1. 1/2 detection limit used for non-detects
2. Iron is non-detect on 4/25/2001, 4/9/2002, 6/8/2004, 6/20/2005, 3/28/2006, 9/25/2007 and 3/25/2008

MW-3S Metals



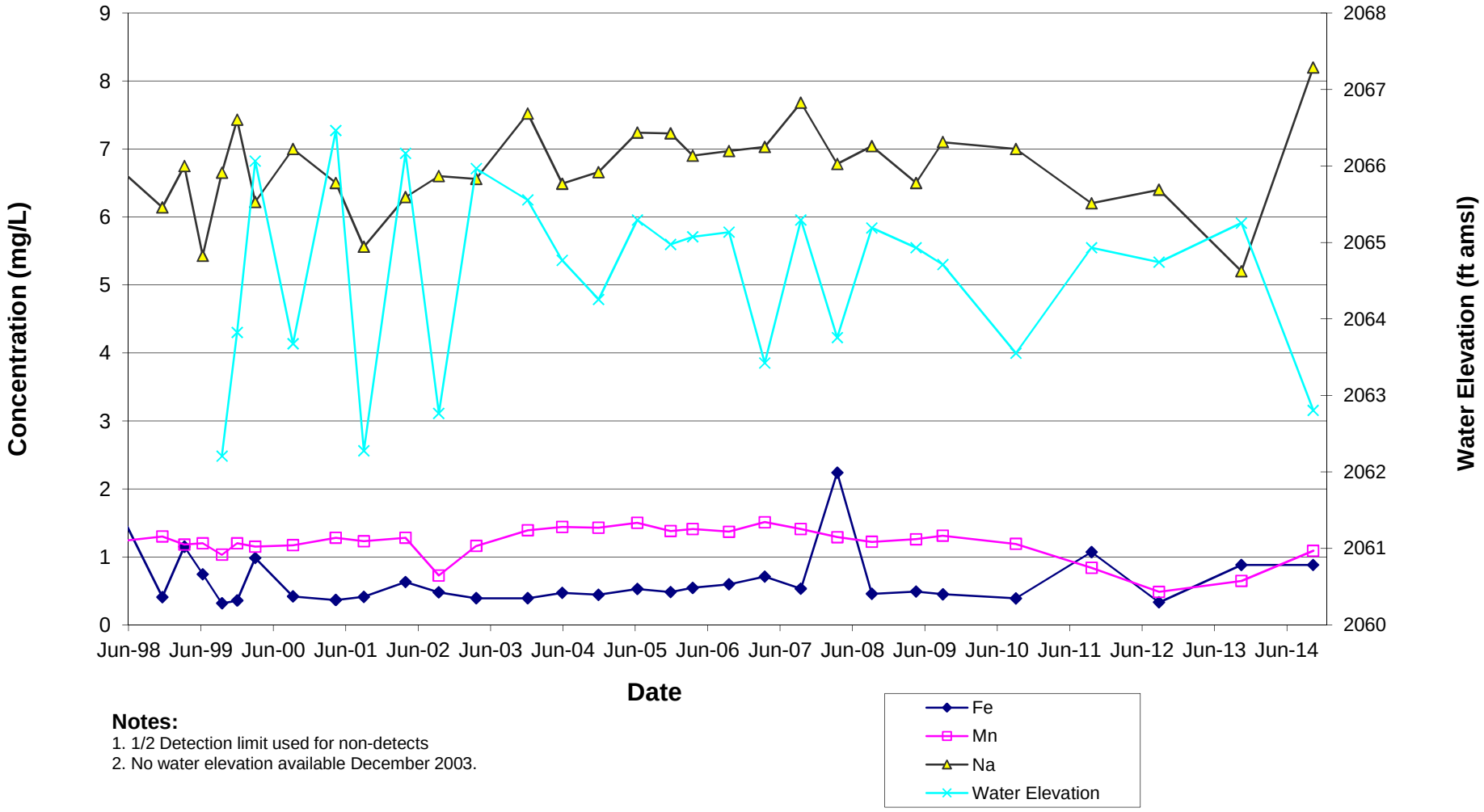
Notes:
1. 1/2 detection limit used for non-detects.
2. Manganese results were non-detect on 3/29/2007 and 3/25/2008.

MW-4D Metals



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

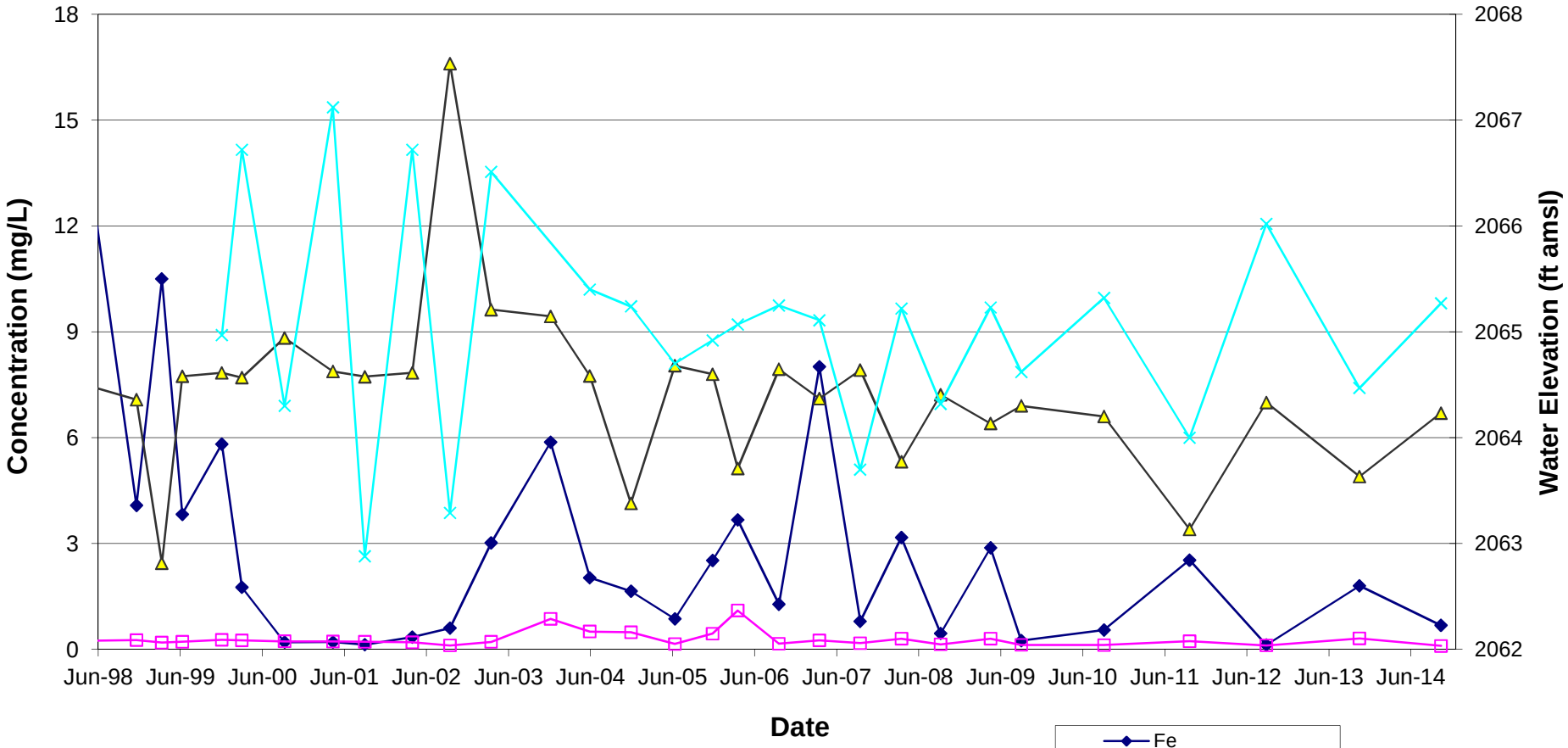
MW-5D Metals



Notes:

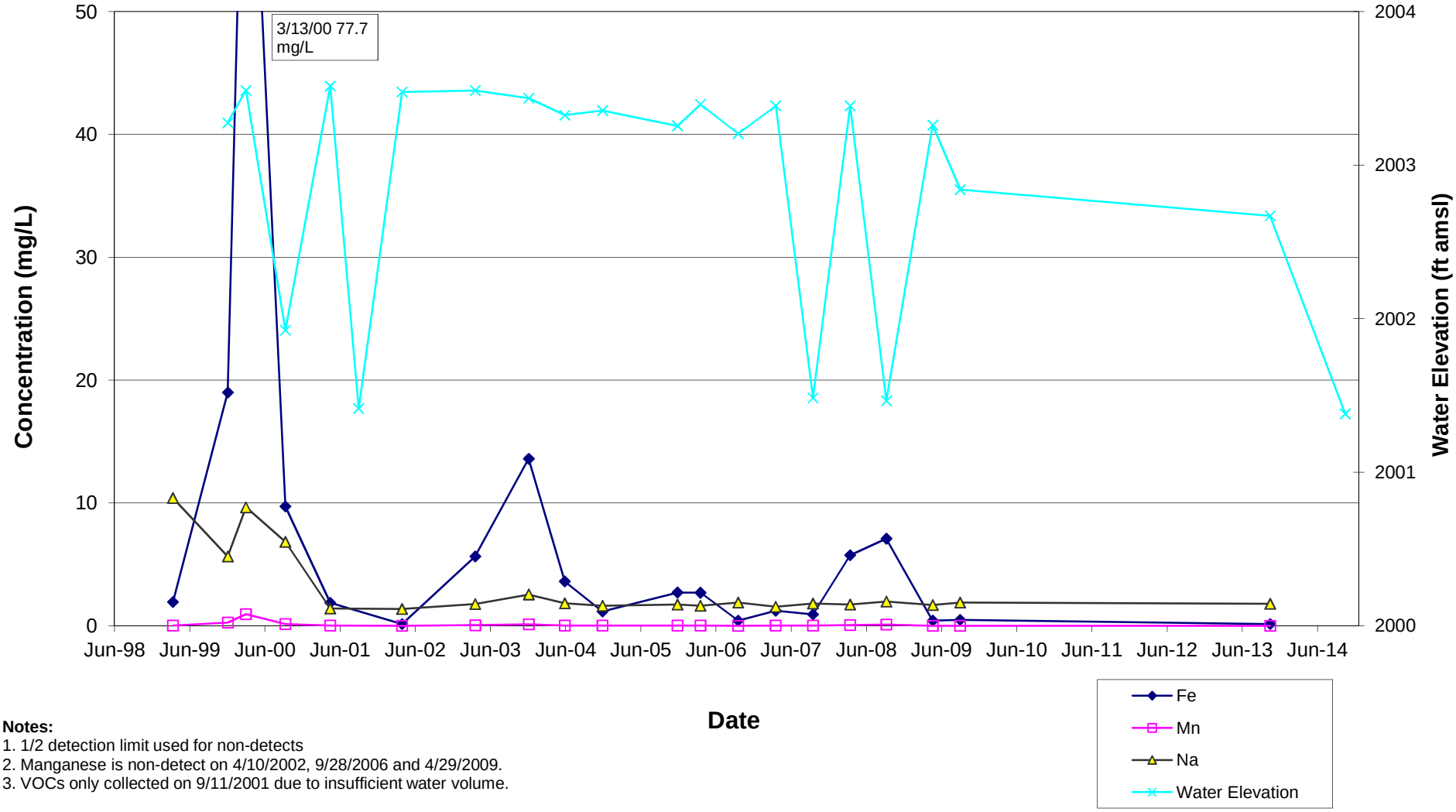
1. 1/2 Detection limit used for non-detects
2. No water elevation available December 2003.

MW-5S Metals



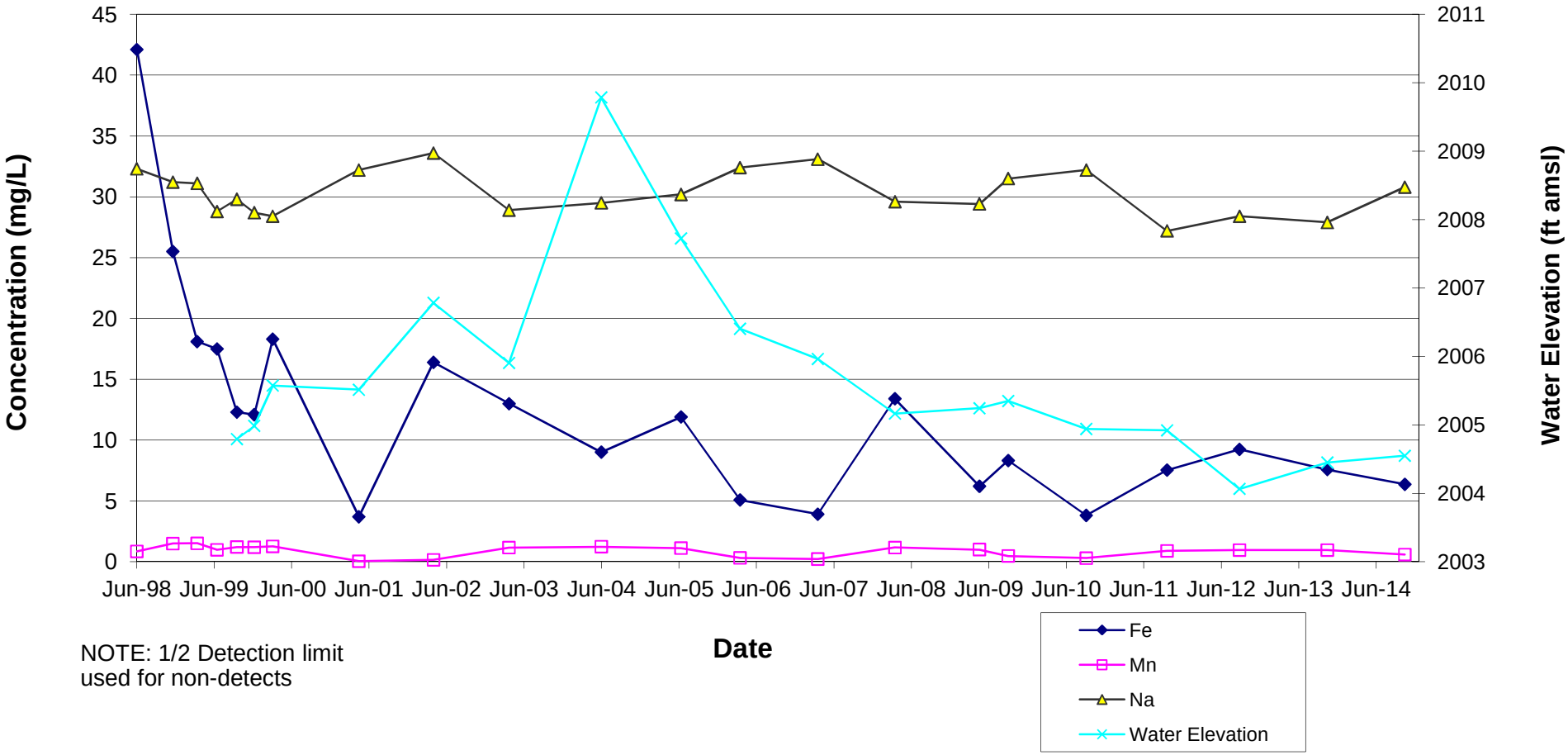
Note:
1. 1/2 detection limit used for non-detects.
2. No water elevation available for December 2003.

MW-15S Metals



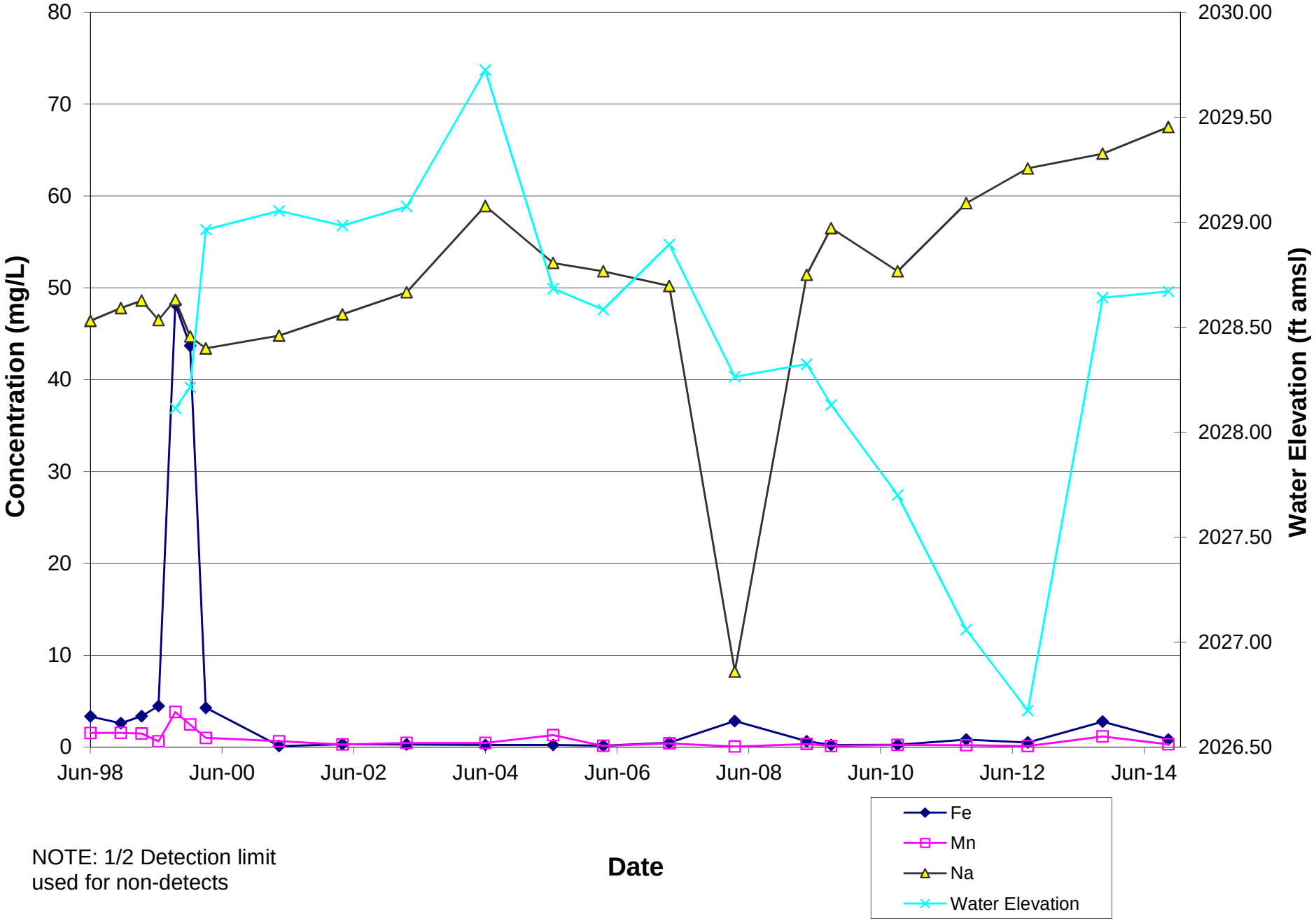
Notes:
1. 1/2 detection limit used for non-detects
2. Manganese is non-detect on 4/10/2002, 9/28/2006 and 4/29/2009.
3. VOCs only collected on 9/11/2001 due to insufficient water volume.

MW-17D Metals



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

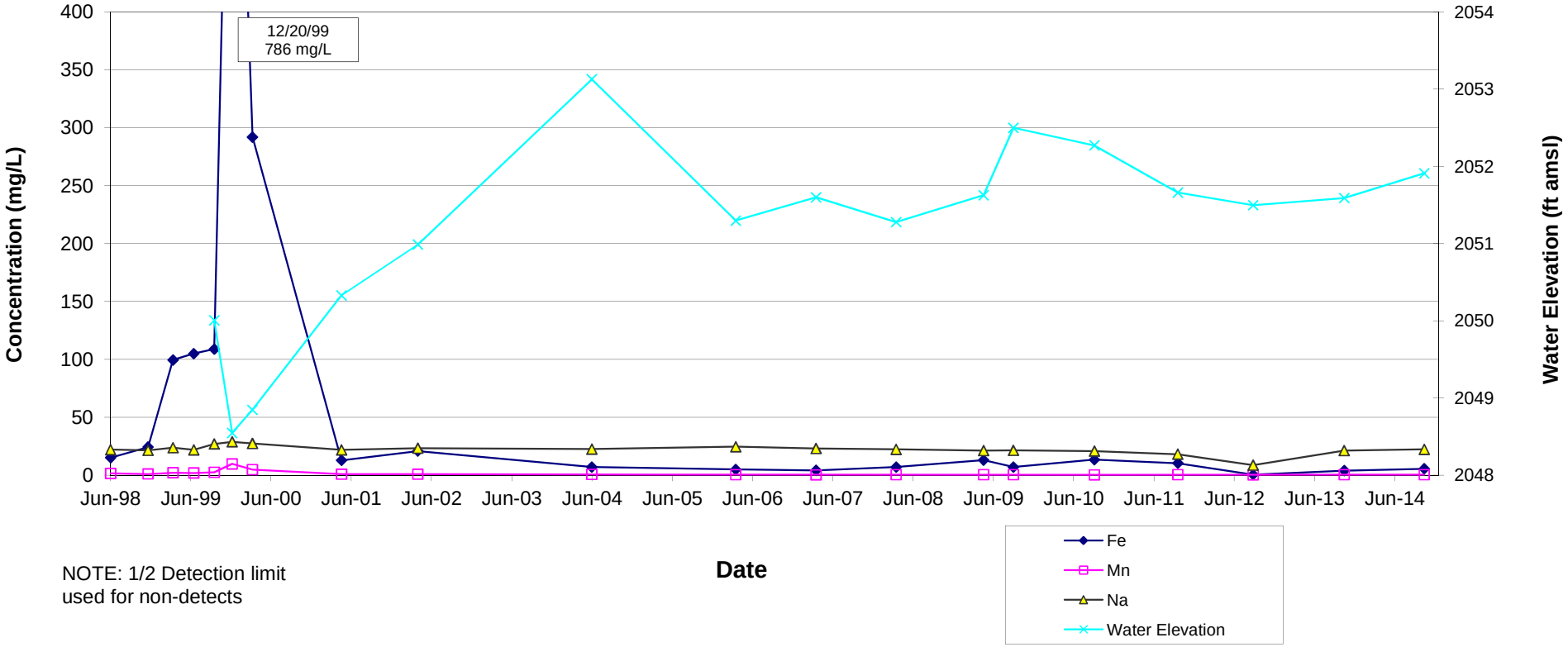
MW-17S Metals



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

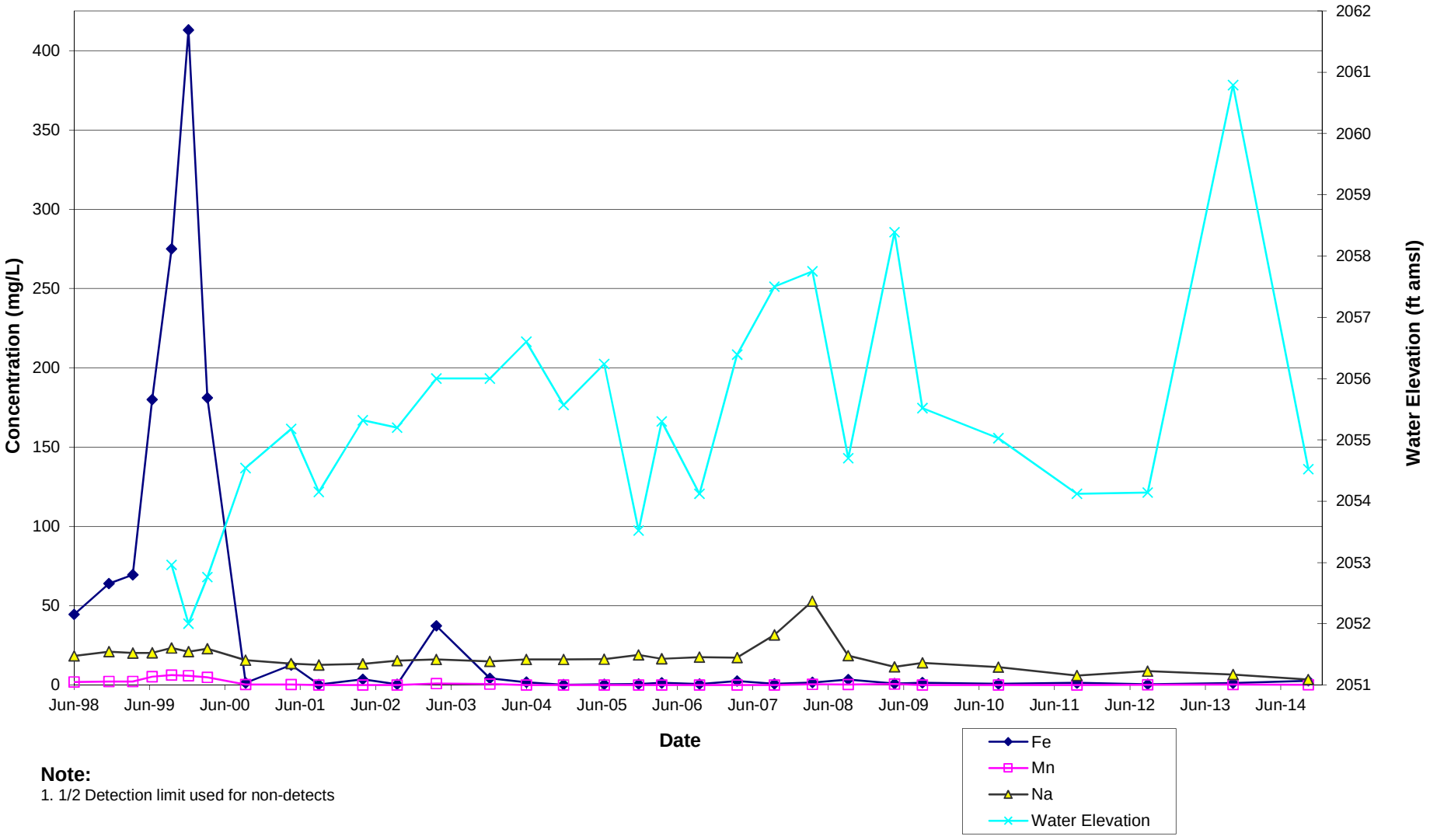
Date

MW-18D Metals



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

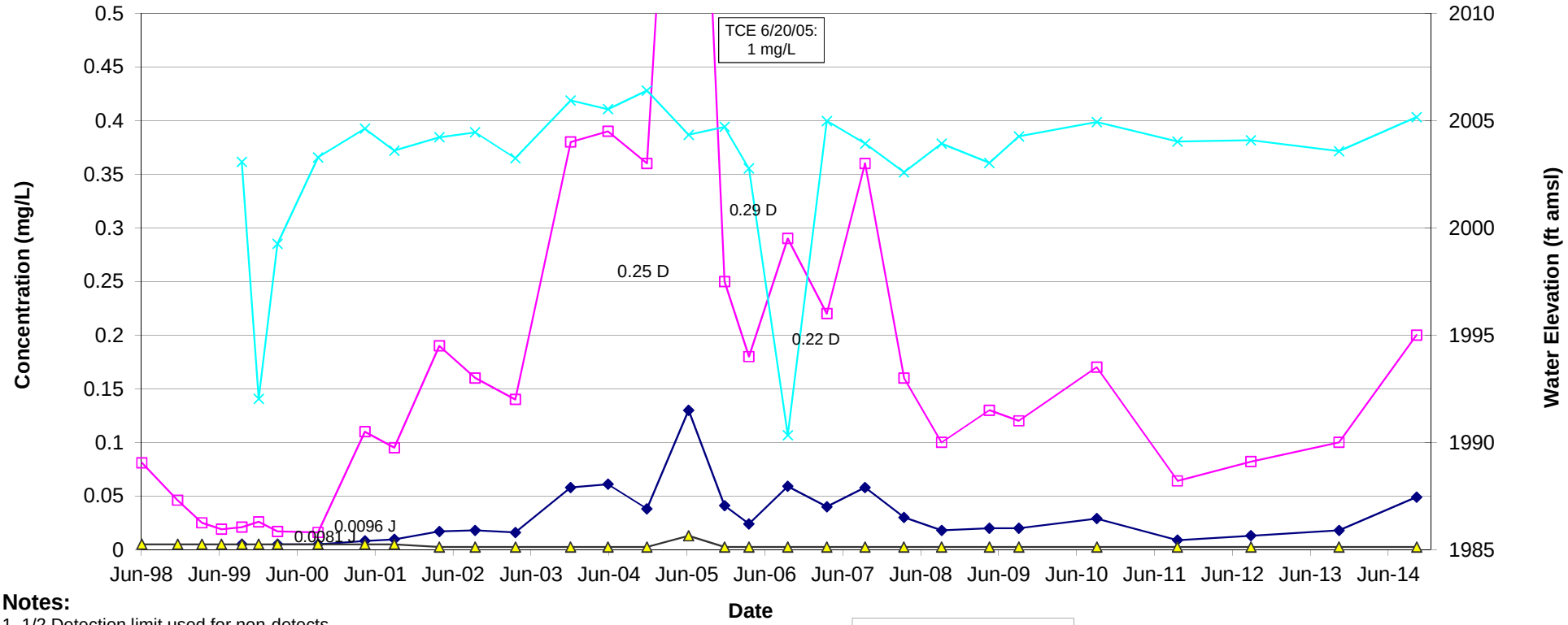
MW-18S Metals



Note:

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

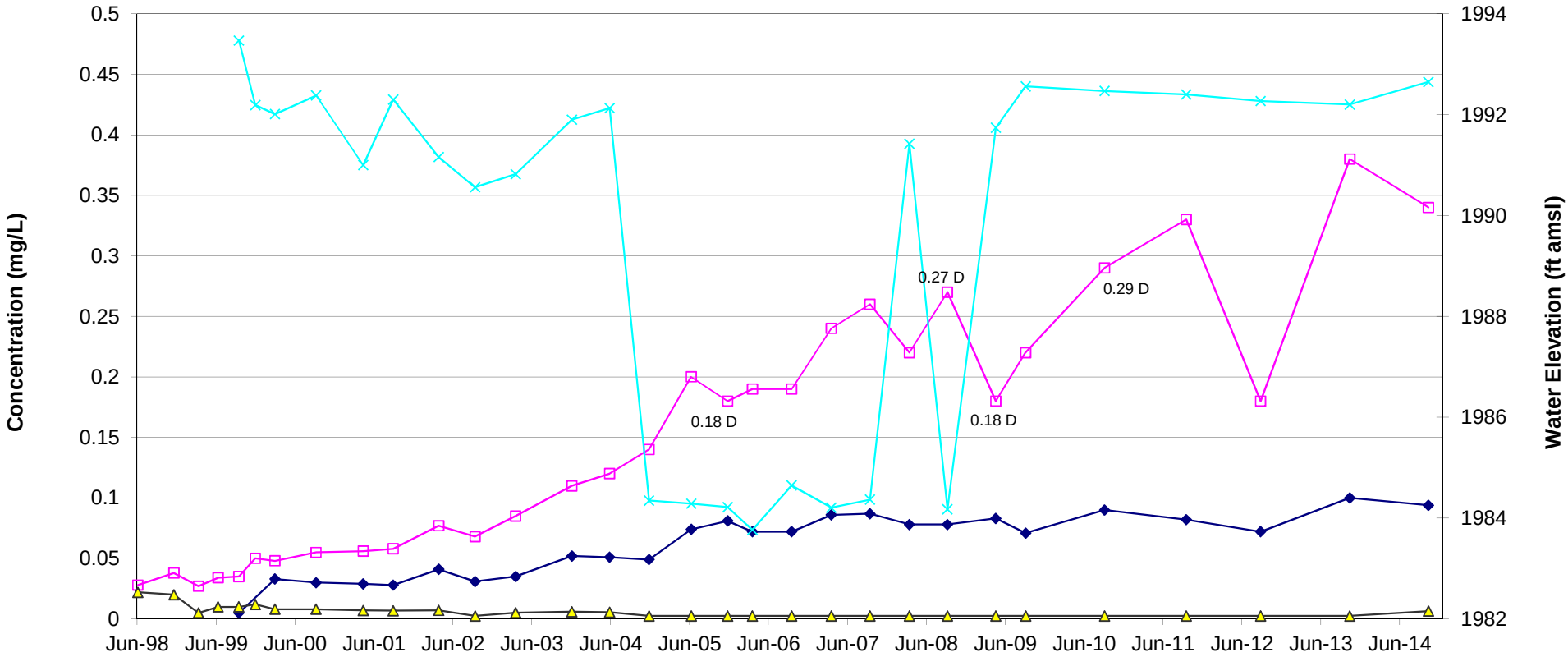
CW-3A VOCs



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.

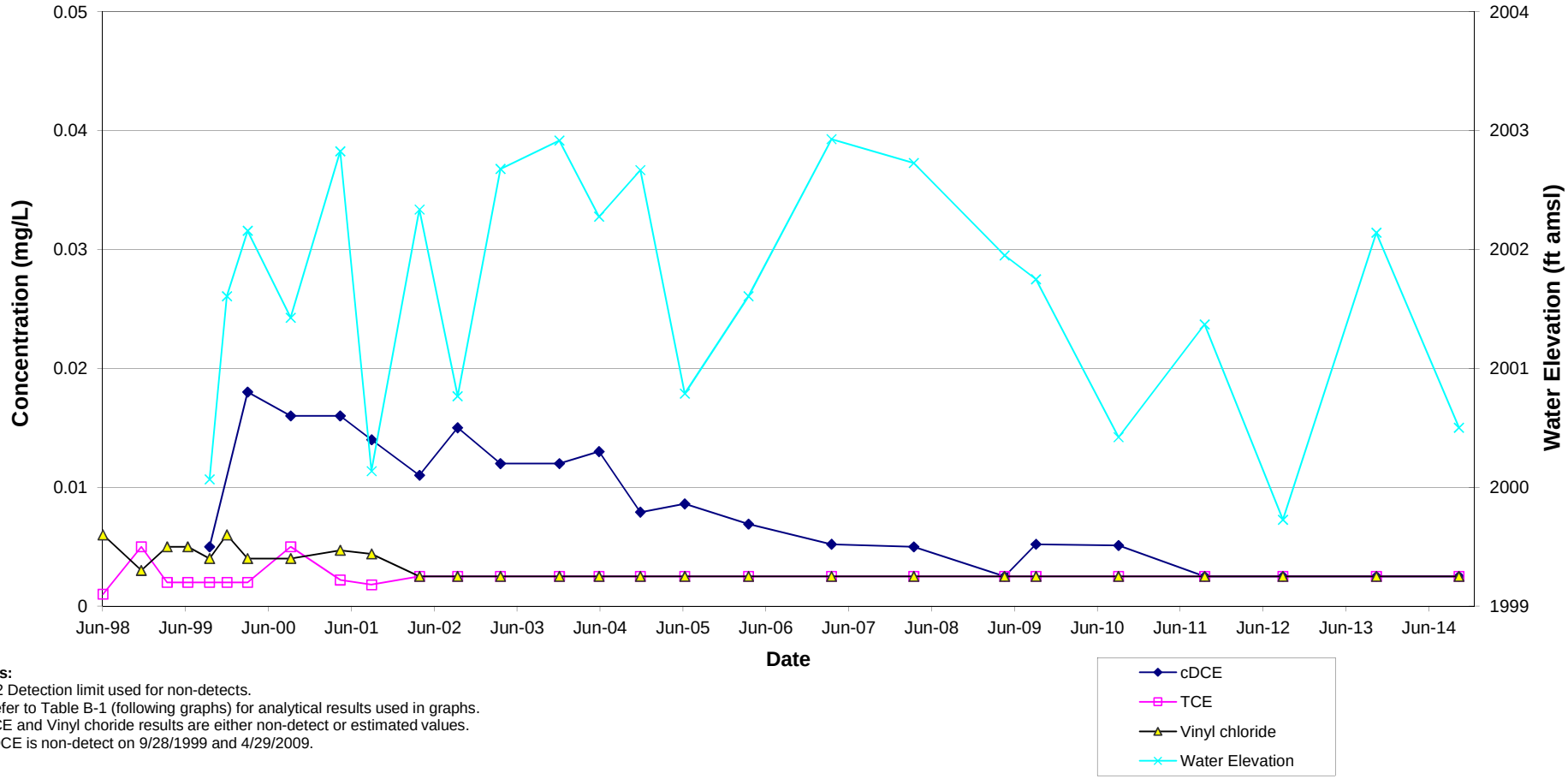
CW-3B VOCs



Notes:

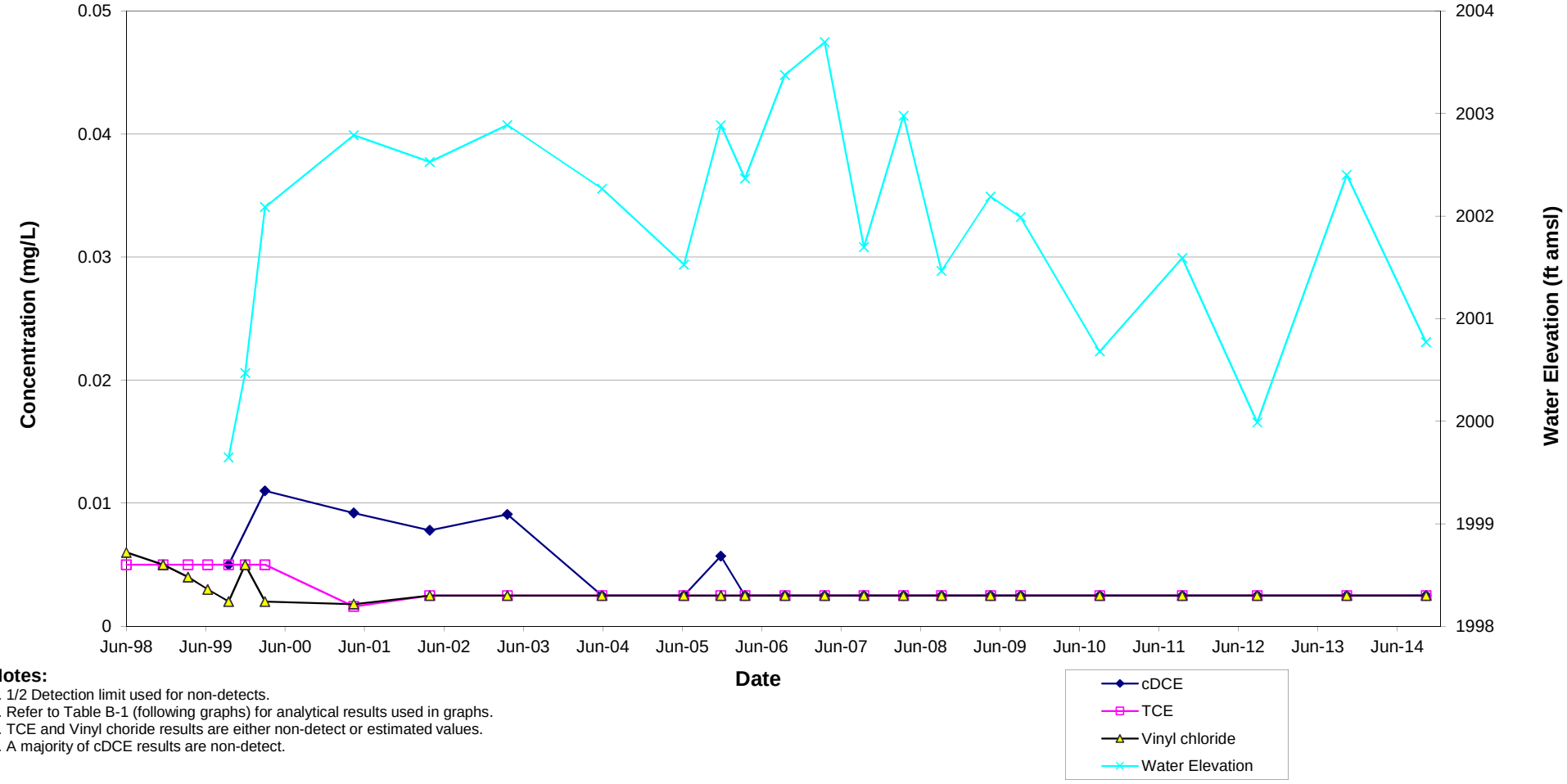
1. 1/2 Detection limit used for non-detects.
2. Refer to Table B-1 (following graphs) for analytical results used in graphs.
3. The majority of Vinyl choride results are non-detect. Vinyl choride results on 3/13/2000, 9/19/2000,4/25/2001and on 9/11/2001 are estimated values.
4. Results for cDCE on 9/28/1999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

CW-4A 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. cDCE is non-detect on 9/28/1999 and 4/29/2009.

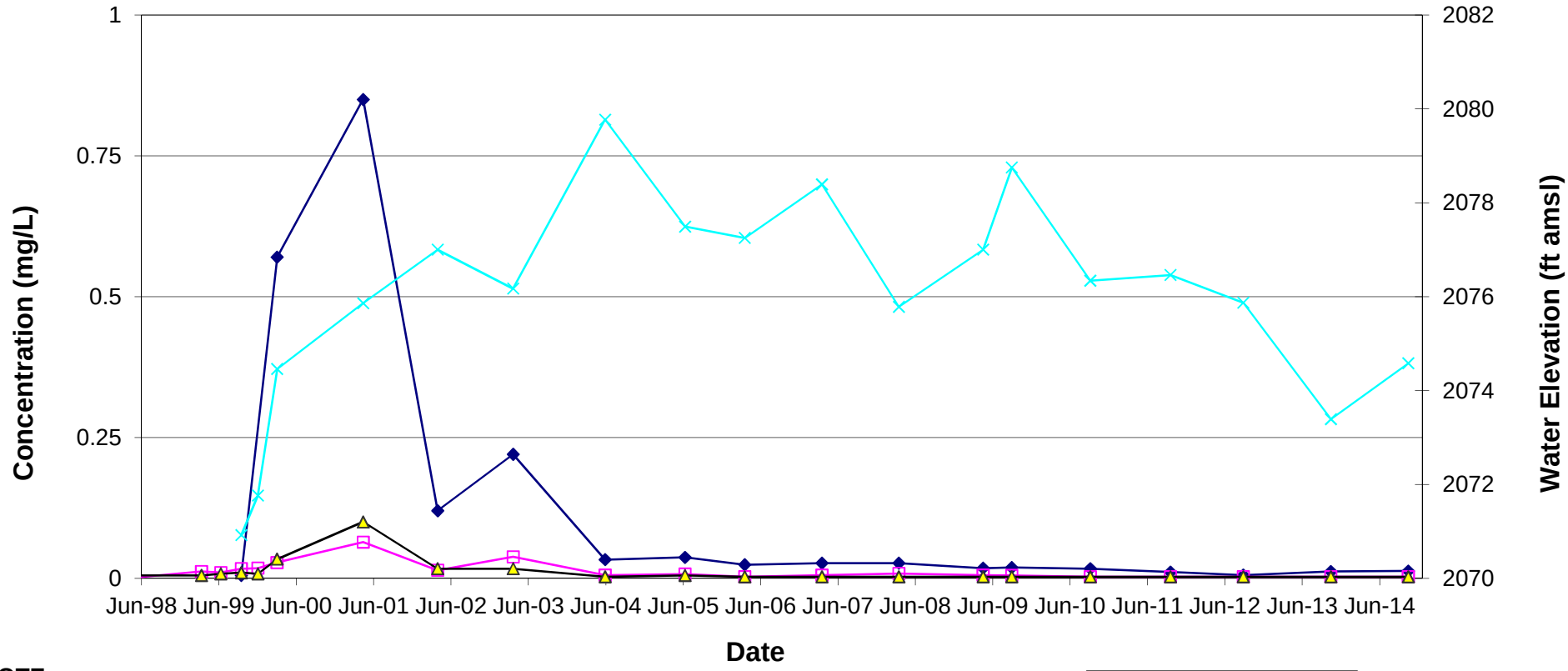
CW-4B VOCs



Notes:

1. 1/2 Detection limit used for non-detects.
2. Refer to Table 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.

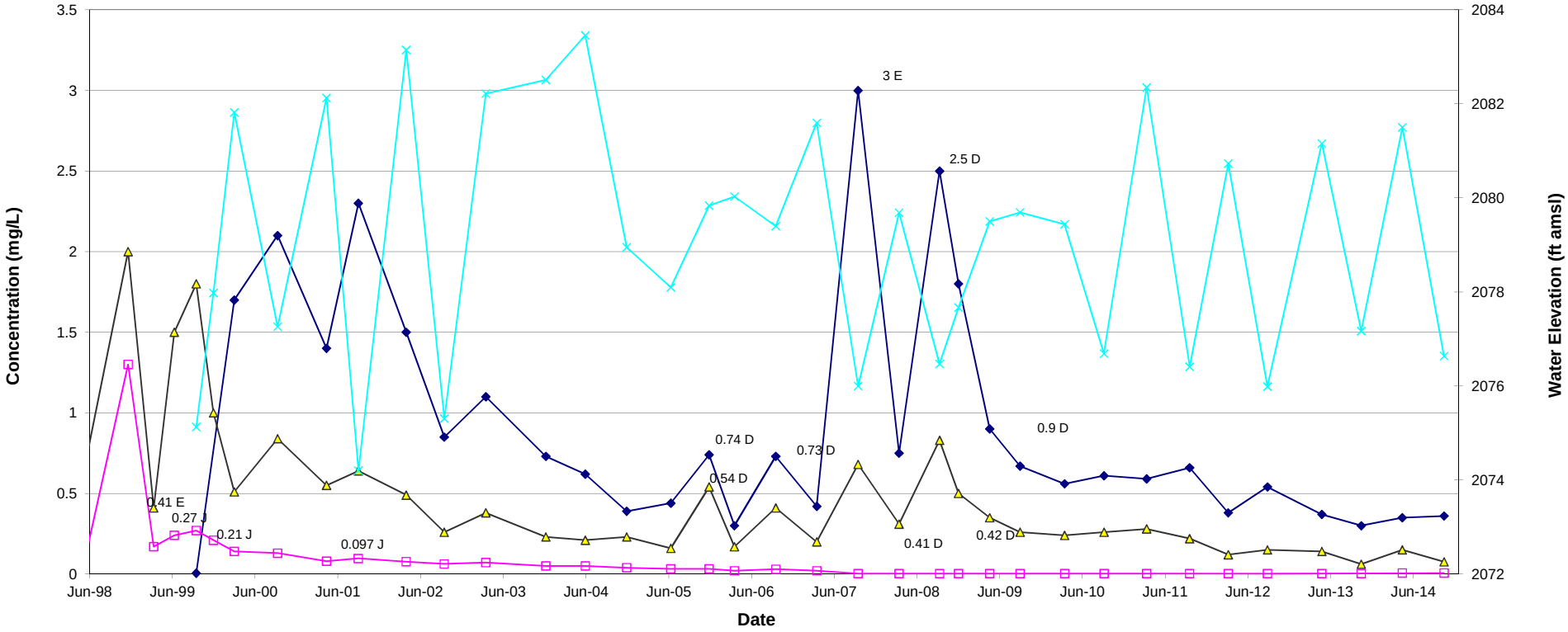
MW-3D VOCs



NOTE:

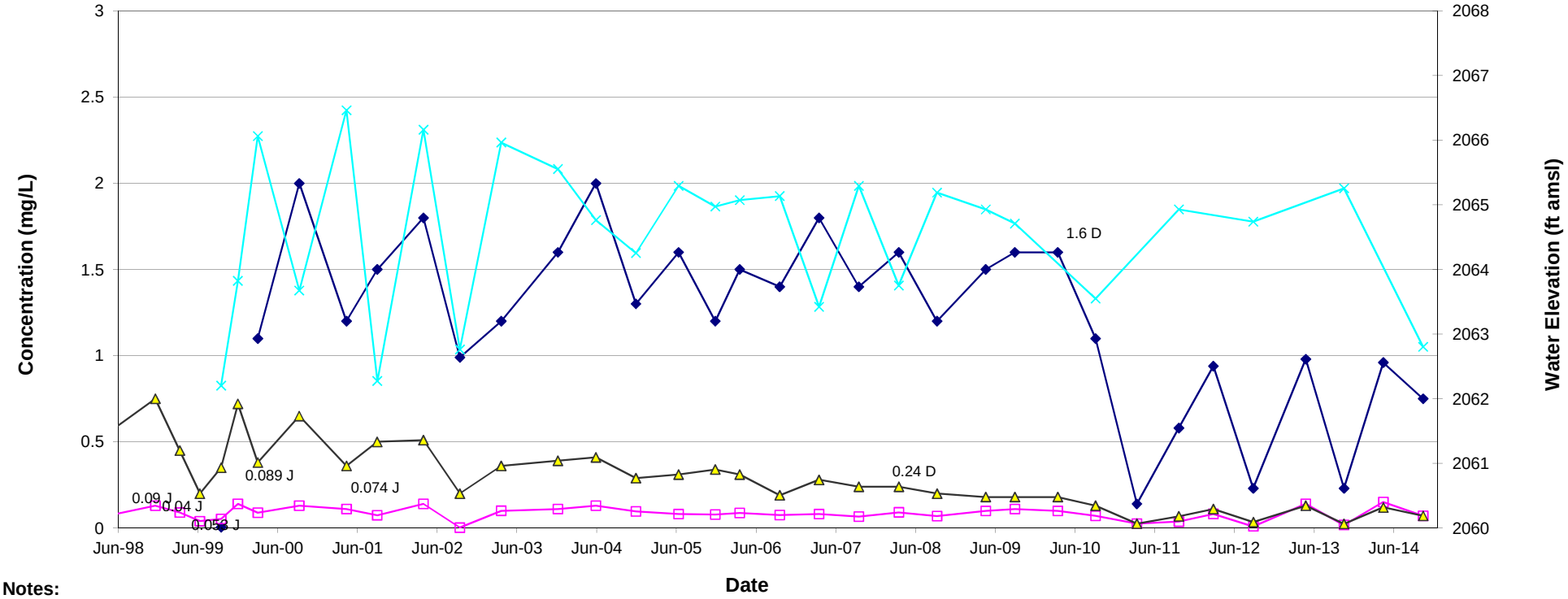
1. 1/2 Detection limit used for non-detects.
2. Refer to Table B-1 (following graphs) for analytical results used in graphs.
3. TCE on 6/9/1998 is estimated value and non-detect on 3/30/2006.
4. Vinyl chloride results on 6/9/1998, 3/24/1999, 6/9/2004, 3/30/2006, 3/29/2007, 3/25/2008 and 4/27/2009 are non-detect. Estimated results are shown on 6/23/1999 and 12/15/1999.
4. Results for cDCE on 9/28/1999 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, 3/24/2008, 9/16/2008, 12/11/2008 and 4/28/2009.
7. Flagged data is labeled on the graph as appropriate.

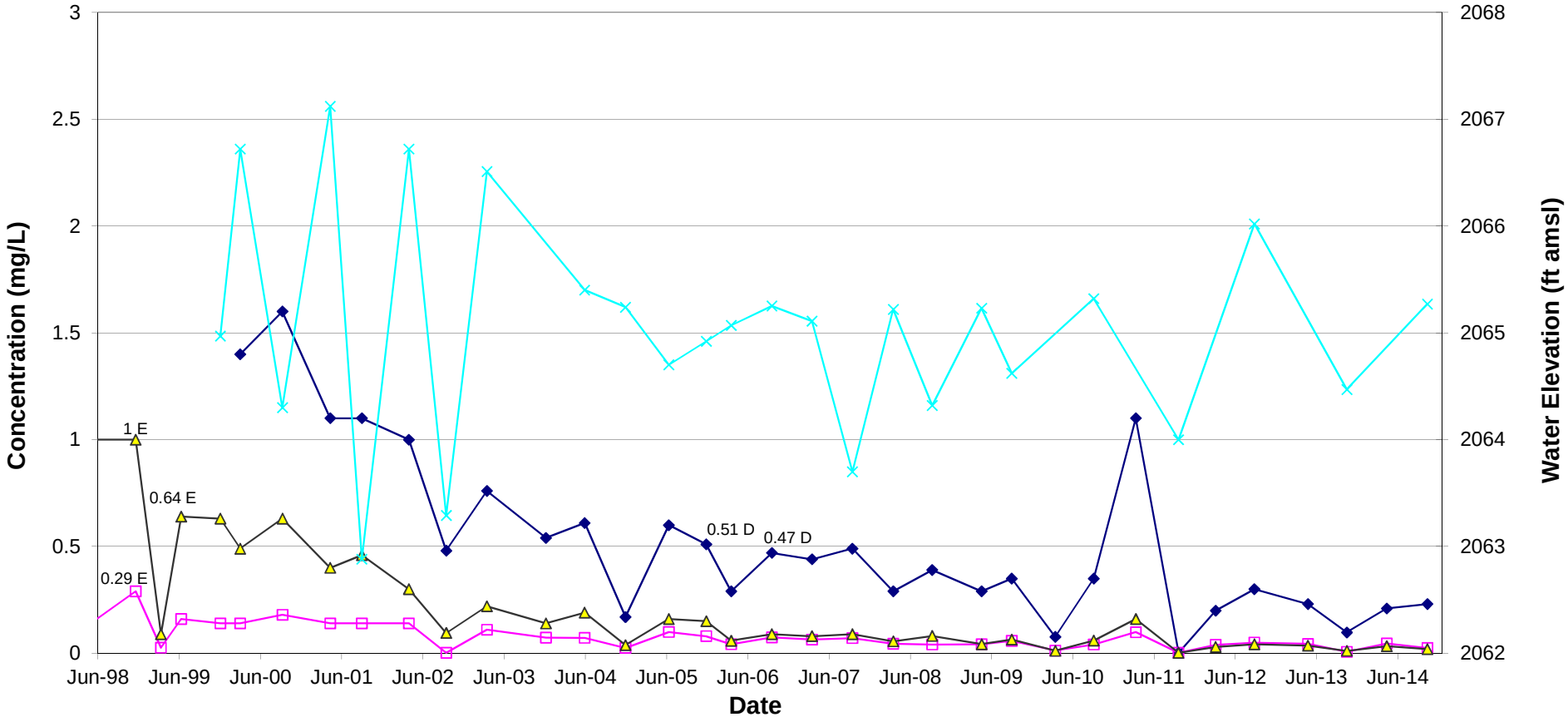
MW-5D VOCs



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.

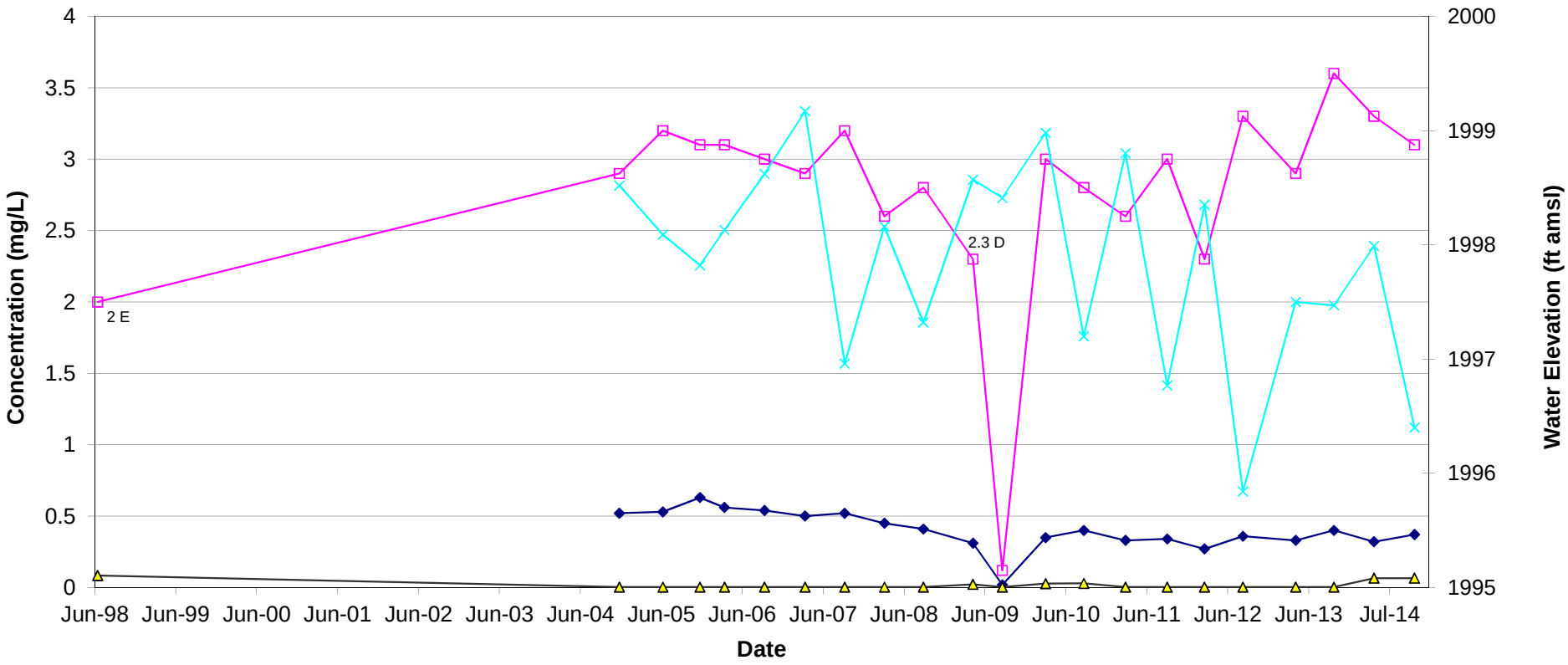
MW-5S VOCs



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.

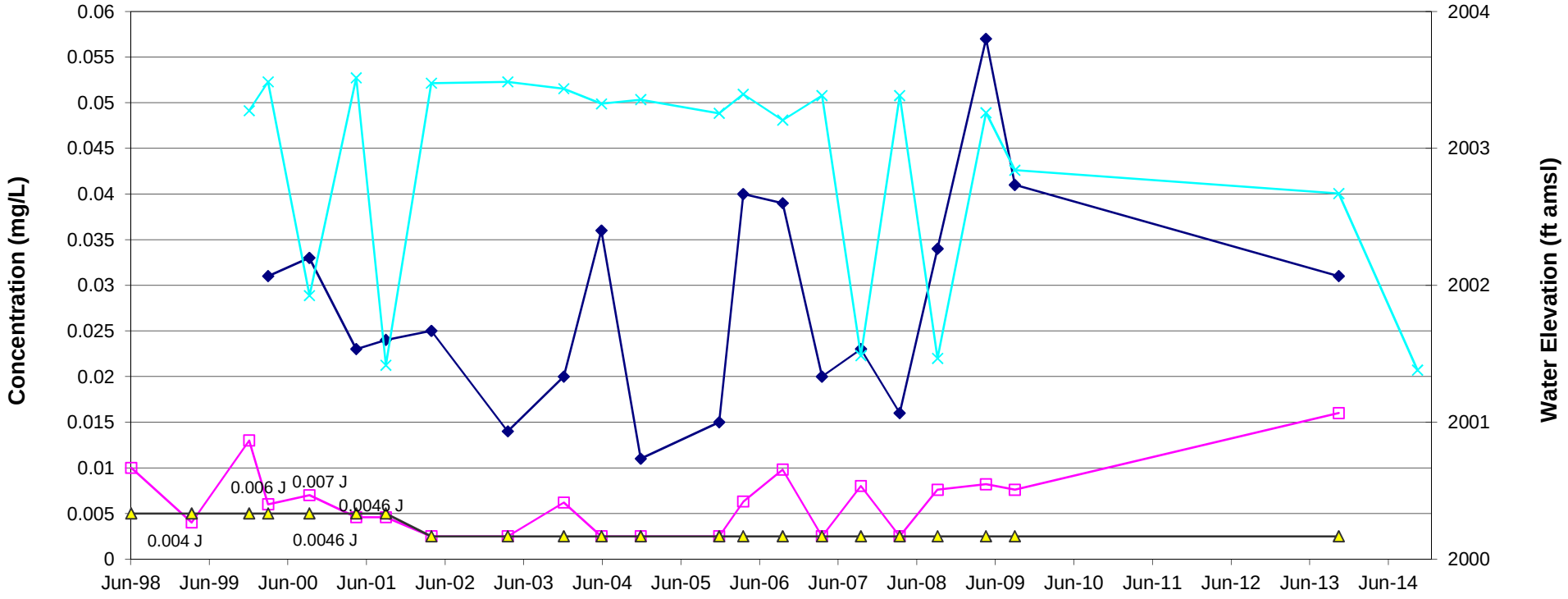
MW-11S VOCs



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 6/17/1998.
5. Flagged data is labeled on the graph as appropriate.

MW-15S VOCs



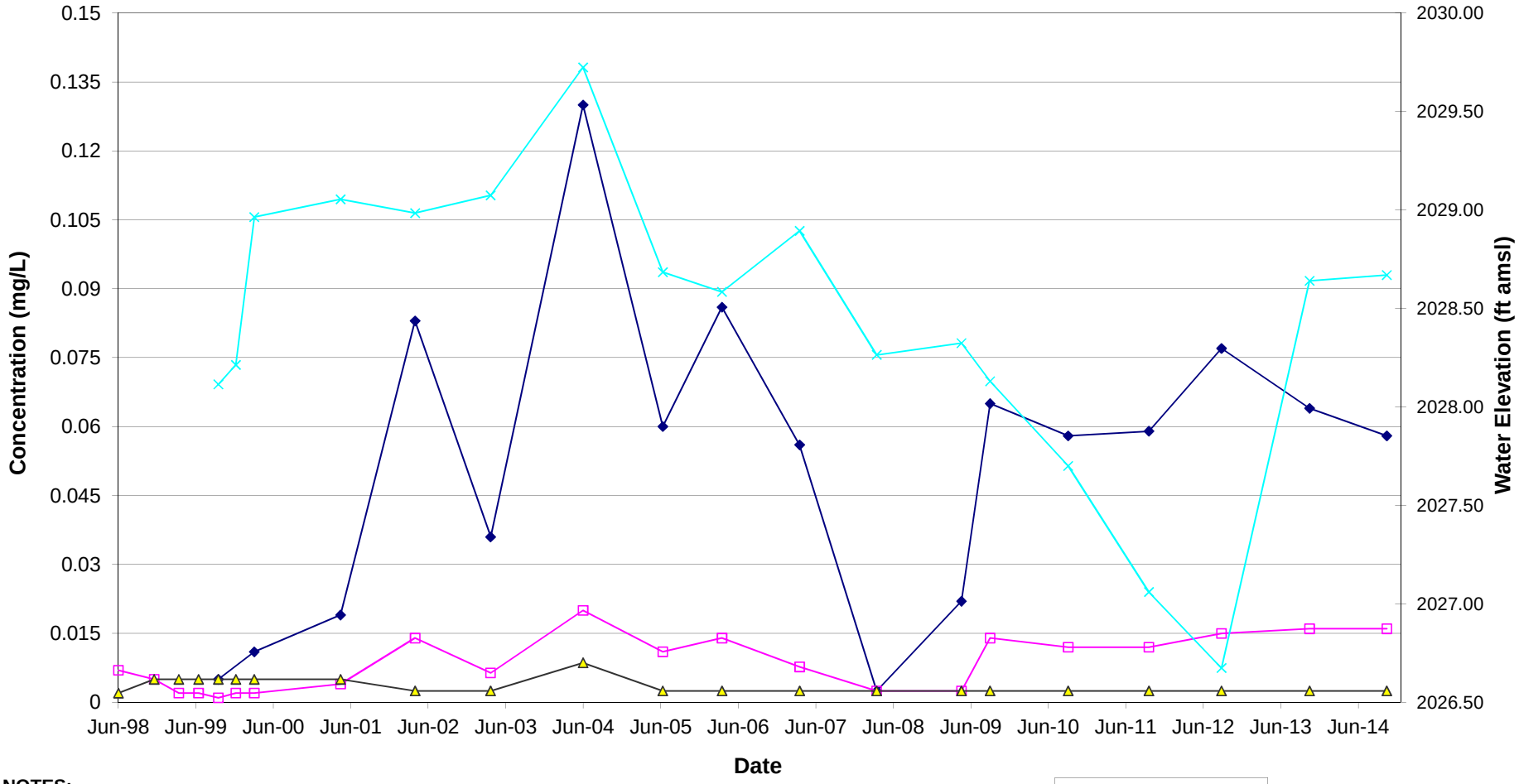
Notes:

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.

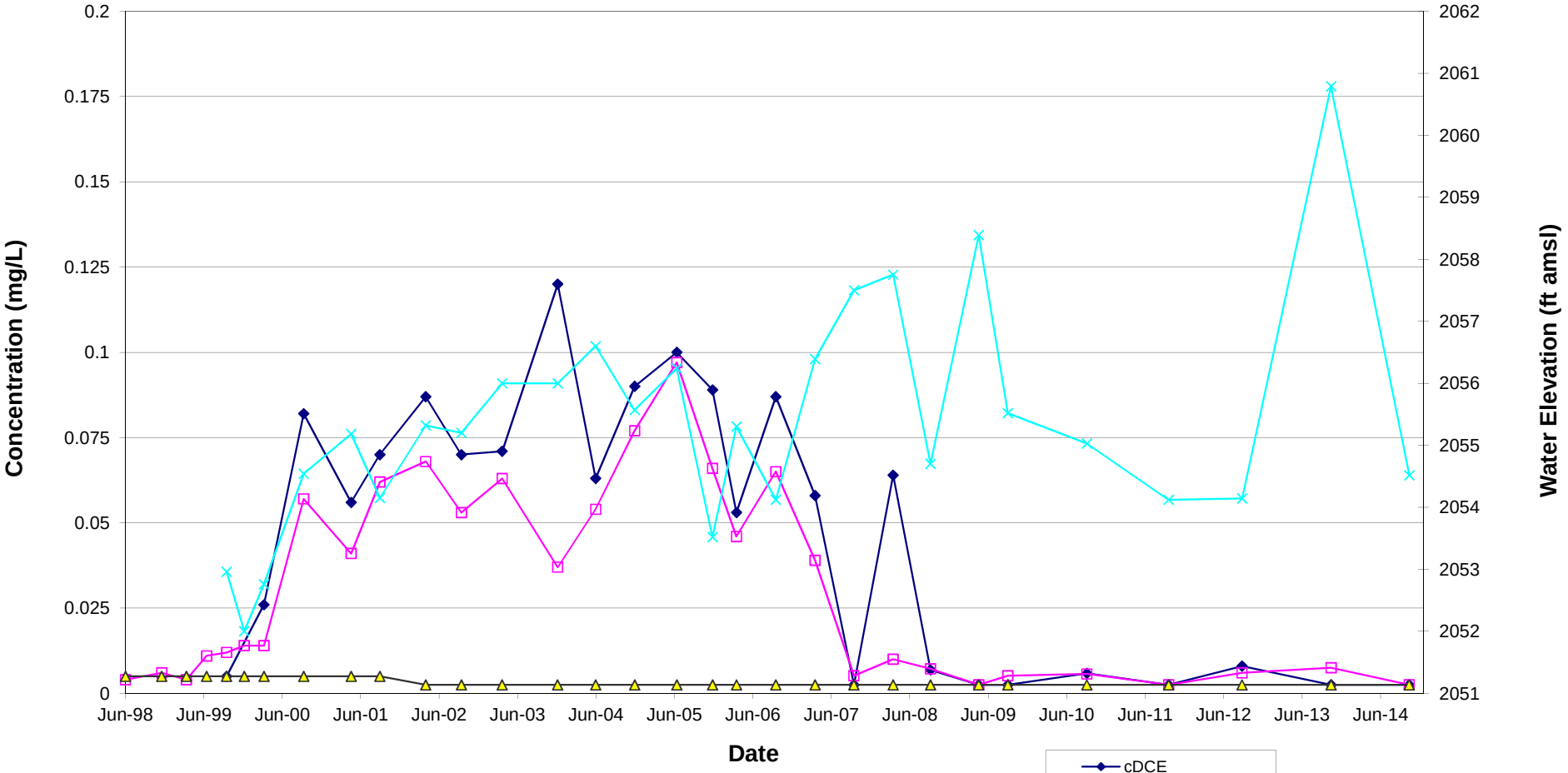
MW-17S VOCs



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 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 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, 9/25/2007 and 4/28/2009.

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November 12, 2014

Analytical Report for Service Request No: R1408445

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

Laboratory Results for: Wellsville-Andover LF

Dear Mr. Brandes:

Enclosed are the results of the sample(s) submitted to our laboratory between October 23, 2014 and October 28, 2014. For your reference, these analyses have been assigned our service request number **R1408445.**

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
Client Services Manager

CASE NARRATIVE

This report contains analytical results for the following samples:
Service Request Number: R1408445

Lab ID	Client ID
R1408445-001	MW5S-1014
R1408445-002	CW3A-1014
R1408445-003	CW4A-1014
R1408445-004	DUP1-1014
R1408445-005	MW5D-1014
R1408445-006	CW4B-1014
R1408445-007	CW3B-1014
R1408445-008	MW18S-1014
R1408445-009	MW-18D-1014
R1408445-010	MW17S-1014
R1408445-011	MW-17D-1014
R1408445-012	MW3S-1014
R1408445-013	MW3D-1014
R1408445-014	MW4D-1014
R1408445-015	SWS1-1014
R1408445-016	MW11S-1014
R1408445-017	WAL19PRE-1014
R1408445-018	WAL19INTER-1014
R1408445-019	WAL19POST-1014
R1408445-020	MH33-1014
R1408445-021	MH32-1014
R1408445-022	WAL2-1014
R1408445-023	TRIP BLANK
R1408445-024	TRIP BLANK 2
R1408445-025	MW16S-1014
R1408445-026	EB1-1014
R1408445-027	LS1-1014
R1408445-028	TRIP BLANK 3

All samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at the end of this report.

All samples were preserved in accordance with approved analytical methods.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.

All sampling activities performed by ALS personnel have been in accordance with "ALS Field Procedures and Measurements Manual" or by client specifications.

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REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

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 "Notes" 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 "immediate" 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 (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
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		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

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	3010A
200.8	ILM05.3
6010C	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	3010A
6010 SPLP (1312) extract	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.

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/21/14 1355
Date Received: 10/23/14

Sample Name: MW5S-1014
Lab Code: R1408445-001

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 20:54	
Barium, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 20:54	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 20:54	
Calcium, Total	6010C	**13500**		µg/L	1000	1	10/29/14	11/6/14 20:54	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 20:54	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 20:54	
Iron, Total	6010C	**680**		µg/L	100	1	10/29/14	11/6/14 20:54	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 20:54	
Magnesium, Total	6010C	**11100**		µg/L	1000	1	10/29/14	11/6/14 20:54	
Manganese, Total	6010C	**100**		µg/L	10	1	10/29/14	11/6/14 20:54	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 20:54	
Potassium, Total	6010C	2000	U	µg/L	2000	1	10/29/14	11/6/14 20:54	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 20:54	
Sodium, Total	6010C	**6700**		µg/L	1000	1	10/29/14	11/6/14 20:54	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 20:54	

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/21/14 1355
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/29/14 15:42
Sample Name:	MW5S-1014	**Units:**	µg/L
Lab Code:	R1408445-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8176.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	20	U	20	
71-43-2	Benzene	10	U	10	
75-27-4	Bromodichloromethane	10	U	10	
75-25-2	Bromoform	10	U	10	
74-83-9	Bromomethane	10	U	10	
78-93-3	2-Butanone (MEK)	20	U	20	
75-15-0	Carbon Disulfide	20	U	20	
56-23-5	Carbon Tetrachloride	10	U	10	
108-90-7	Chlorobenzene	10	U	10	
75-00-3	Chloroethane	10	U	10	
67-66-3	Chloroform	10	U	10	
74-87-3	Chloromethane	10	U	10	
124-48-1	Dibromochloromethane	10	U	10	
75-34-3	1,1-Dichloroethane	10	U	10	
106-93-4	1,2-Dibromoethane	10	U	10	
107-06-2	1,2-Dichloroethane	10	U	10	
75-35-4	1,1-Dichloroethene	10	U	10	
156-59-2	cis-1,2-Dichloroethene	**230**		10	
156-60-5	trans-1,2-Dichloroethene	10	U	10	
78-87-5	1,2-Dichloropropane	10	U	10	
10061-01-5	cis-1,3-Dichloropropene	10	U	10	
10061-02-6	trans-1,3-Dichloropropene	10	U	10	
100-41-4	Ethylbenzene	10	U	10	
591-78-6	2-Hexanone	20	U	20	
75-09-2	Methylene Chloride	10	U	10	
108-10-1	4-Methyl-2-pentanone (MIBK)	20	U	20	
100-42-5	Styrene	10	U	10	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	10	
127-18-4	Tetrachloroethene	10	U	10	
108-88-3	Toluene	10	U	10	
71-55-6	1,1,1-Trichloroethane	10	U	10	
79-00-5	1,1,2-Trichloroethane	10	U	10	
79-01-6	Trichloroethene	**25**		10	
75-01-4	Vinyl Chloride	**20**		10	
95-47-6	o-Xylene	10	U	10	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/21/14 1355
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/29/14 15:42
Sample Name:	MW5S-1014	**Units:**	µg/L
Lab Code:	R1408445-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8176.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	10	U	10	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85-122	10/29/14 15:42	
Toluene-d8	100	87-121	10/29/14 15:42	
Dibromofluoromethane	94	89-119	10/29/14 15:42	

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Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/21/14 1210
Date Received: 10/23/14

Sample Name: CW3A-1014
Lab Code: R1408445-002

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 21:01	
Barium, Total	6010C	**82**		µg/L	20	1	10/29/14	11/6/14 21:01	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 21:01	
Calcium, Total	6010C	**115000**		µg/L	1000	1	10/29/14	11/6/14 21:01	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 21:01	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 21:01	
Iron, Total	6010C	100	U	µg/L	100	1	10/29/14	11/6/14 21:01	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 21:01	
Magnesium, Total	6010C	1000	U	µg/L	1000	1	10/29/14	11/6/14 21:01	
Manganese, Total	6010C	**13**		µg/L	10	1	10/29/14	11/6/14 21:01	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 21:01	
Potassium, Total	6010C	**14200**		µg/L	2000	1	10/29/14	11/6/14 21:01	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 21:01	
Sodium, Total	6010C	**34800**		µg/L	1000	1	10/29/14	11/6/14 21:01	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 21:01	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/21/14 1210
Date Received: 10/23/14
Date Analyzed: 10/29/14 10:43

Sample Name: CW3A-1014
Lab Code: R1408445-002

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\102914\B8163.D\

Analysis Lot: 418594
Instrument Name: R-MS-14
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	**49**		5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	**230**	E	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/21/14 1210
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/29/14 10:43
Sample Name:	CW3A-1014	**Units:**	µg/L
Lab Code:	R1408445-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8163.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85-122	10/29/14 10:43	
Toluene-d8	99	87-121	10/29/14 10:43	
Dibromofluoromethane	95	89-119	10/29/14 10:43	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/21/14 1210
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/31/14 10:07
Sample Name:	CW3A-1014	**Units:**	µg/L
Lab Code:	R1408445-002	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	419120
Data File Name:	I:\ACQUDATA\MSVOA14\Data\103114\B8247.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	20	U	20	
71-43-2	Benzene	10	U	10	
75-27-4	Bromodichloromethane	10	U	10	
75-25-2	Bromoform	10	U	10	
74-83-9	Bromomethane	10	U	10	
78-93-3	2-Butanone (MEK)	20	U	20	
75-15-0	Carbon Disulfide	20	U	20	
56-23-5	Carbon Tetrachloride	10	U	10	
108-90-7	Chlorobenzene	10	U	10	
75-00-3	Chloroethane	10	U	10	
67-66-3	Chloroform	10	U	10	
74-87-3	Chloromethane	10	U	10	
124-48-1	Dibromochloromethane	10	U	10	
75-34-3	1,1-Dichloroethane	10	U	10	
106-93-4	1,2-Dibromoethane	10	U	10	
107-06-2	1,2-Dichloroethane	10	U	10	
75-35-4	1,1-Dichloroethene	10	U	10	
156-59-2	cis-1,2-Dichloroethene	**43**	D	10	
156-60-5	trans-1,2-Dichloroethene	10	U	10	
78-87-5	1,2-Dichloropropane	10	U	10	
10061-01-5	cis-1,3-Dichloropropene	10	U	10	
10061-02-6	trans-1,3-Dichloropropene	10	U	10	
100-41-4	Ethylbenzene	10	U	10	
591-78-6	2-Hexanone	20	U	20	
75-09-2	Methylene Chloride	10	U	10	
108-10-1	4-Methyl-2-pentanone (MIBK)	20	U	20	
100-42-5	Styrene	10	U	10	
79-34-5	1,1,2,2-Tetrachloroethane	10	U	10	
127-18-4	Tetrachloroethene	10	U	10	
108-88-3	Toluene	10	U	10	
71-55-6	1,1,1-Trichloroethane	10	U	10	
79-00-5	1,1,2-Trichloroethane	10	U	10	
79-01-6	Trichloroethene	**200**	D	10	
75-01-4	Vinyl Chloride	10	U	10	
95-47-6	o-Xylene	10	U	10	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/21/14 1210
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/31/14 10:07
Sample Name:	CW3A-1014	**Units:**	µg/L
Lab Code:	R1408445-002	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	419120
Data File Name:	I:\ACQUDATA\MSVOA14\Data\103114\B8247.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	10	U	10	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85-122	10/31/14 10:07	
Toluene-d8	97	87-121	10/31/14 10:07	
Dibromofluoromethane	95	89-119	10/31/14 10:07	

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/21/14 1030
Date Received: 10/23/14

Sample Name: CW4A-1014
Lab Code: R1408445-003

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 21:07	
Barium, Total	6010C	**53**		µg/L	20	1	10/29/14	11/6/14 21:07	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 21:07	
Calcium, Total	6010C	**25700**		µg/L	1000	1	10/29/14	11/6/14 21:07	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 21:07	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 21:07	
Iron, Total	6010C	100	U	µg/L	100	1	10/29/14	11/6/14 21:07	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 21:07	
Magnesium, Total	6010C	**16300**		µg/L	1000	1	10/29/14	11/6/14 21:07	
Manganese, Total	6010C	**336**		µg/L	10	1	10/29/14	11/6/14 21:07	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 21:07	
Potassium, Total	6010C	2000	U	µg/L	2000	1	10/29/14	11/6/14 21:07	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 21:07	
Sodium, Total	6010C	**15700**		µg/L	1000	1	10/29/14	11/6/14 21:07	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 21:07	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/21/14 1030
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/29/14 11:06
Sample Name:	CW4A-1014	**Units:**	µg/L
Lab Code:	R1408445-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8164.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/21/14 1030
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/29/14 11:06
Sample Name:	CW4A-1014	**Units:**	µg/L
Lab Code:	R1408445-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8164.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	85-122	10/29/14 11:06	
Toluene-d8	98	87-121	10/29/14 11:06	
Dibromofluoromethane	92	89-119	10/29/14 11:06	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/21/14 1040
Date Received: 10/23/14

Sample Name: DUP1-1014
Lab Code: R1408445-004

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 21:13	
Barium, Total	6010C	**52**		µg/L	20	1	10/29/14	11/6/14 21:13	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 21:13	
Calcium, Total	6010C	**25300**		µg/L	1000	1	10/29/14	11/6/14 21:13	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 21:13	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 21:13	
Iron, Total	6010C	100	U	µg/L	100	1	10/29/14	11/6/14 21:13	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 21:13	
Magnesium, Total	6010C	**16000**		µg/L	1000	1	10/29/14	11/6/14 21:13	
Manganese, Total	6010C	**332**		µg/L	10	1	10/29/14	11/6/14 21:13	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 21:13	
Potassium, Total	6010C	2000	U	µg/L	2000	1	10/29/14	11/6/14 21:13	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 21:13	
Sodium, Total	6010C	**15700**		µg/L	1000	1	10/29/14	11/6/14 21:13	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 21:13	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/21/14 1040
Date Received: 10/23/14
Date Analyzed: 10/29/14 11:29

Sample Name: DUP1-1014
Lab Code: R1408445-004

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\102914\B8165.D\

Analysis Lot: 418594
Instrument Name: R-MS-14
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/21/14 1040
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/29/14 11:29
Sample Name:	DUP1-1014	**Units:**	µg/L
Lab Code:	R1408445-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8165.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	10/29/14 11:29	
Toluene-d8	99	87-121	10/29/14 11:29	
Dibromofluoromethane	94	89-119	10/29/14 11:29	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/21/14 1430
Sample Matrix:	Water	**Date Received:**	10/23/14
Sample Name:	MW5D-1014		
Lab Code:	R1408445-005	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 21:19	
Barium, Total	6010C	**60**		µg/L	20	1	10/29/14	11/6/14 21:19	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 21:19	
Calcium, Total	6010C	**22800**		µg/L	1000	1	10/29/14	11/6/14 21:19	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 21:19	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 21:19	
Iron, Total	6010C	**880**		µg/L	100	1	10/29/14	11/6/14 21:19	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 21:19	
Magnesium, Total	6010C	**18700**		µg/L	1000	1	10/29/14	11/6/14 21:19	
Manganese, Total	6010C	**1090**		µg/L	10	1	10/29/14	11/6/14 21:19	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 21:19	
Potassium, Total	6010C	2000	U	µg/L	2000	1	10/29/14	11/6/14 21:19	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 21:19	
Sodium, Total	6010C	**8200**		µg/L	1000	1	10/29/14	11/6/14 21:19	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 21:19	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/21/14 1430
Date Received: 10/23/14
Date Analyzed: 10/31/14 10:32

Sample Name: MW5D-1014
Lab Code: R1408445-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\103114\B8248.D\

Analysis Lot: 419120
Instrument Name: R-MS-14
Dilution Factor: 5

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	50	U	50	
71-43-2	Benzene	25	U	25	
75-27-4	Bromodichloromethane	25	U	25	
75-25-2	Bromoform	25	U	25	
74-83-9	Bromomethane	25	U	25	
78-93-3	2-Butanone (MEK)	50	U	50	
75-15-0	Carbon Disulfide	50	U	50	
56-23-5	Carbon Tetrachloride	25	U	25	
108-90-7	Chlorobenzene	25	U	25	
75-00-3	Chloroethane	25	U	25	
67-66-3	Chloroform	25	U	25	
74-87-3	Chloromethane	25	U	25	
124-48-1	Dibromochloromethane	25	U	25	
75-34-3	1,1-Dichloroethane	25	U	25	
106-93-4	1,2-Dibromoethane	25	U	25	
107-06-2	1,2-Dichloroethane	25	U	25	
75-35-4	1,1-Dichloroethene	25	U	25	
156-59-2	cis-1,2-Dichloroethene	**750**		25	
156-60-5	trans-1,2-Dichloroethene	25	U	25	
78-87-5	1,2-Dichloropropane	25	U	25	
10061-01-5	cis-1,3-Dichloropropene	25	U	25	
10061-02-6	trans-1,3-Dichloropropene	25	U	25	
100-41-4	Ethylbenzene	25	U	25	
591-78-6	2-Hexanone	50	U	50	
75-09-2	Methylene Chloride	25	U	25	
108-10-1	4-Methyl-2-pentanone (MIBK)	50	U	50	
100-42-5	Styrene	25	U	25	
79-34-5	1,1,2,2-Tetrachloroethane	25	U	25	
127-18-4	Tetrachloroethene	25	U	25	
108-88-3	Toluene	25	U	25	
71-55-6	1,1,1-Trichloroethane	25	U	25	
79-00-5	1,1,2-Trichloroethane	25	U	25	
79-01-6	Trichloroethene	**71**		25	
75-01-4	Vinyl Chloride	**70**		25	
95-47-6	o-Xylene	25	U	25	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/21/14 1430
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/31/14 10:32
Sample Name:	MW5D-1014	**Units:**	µg/L
Lab Code:	R1408445-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	419120
Data File Name:	I:\ACQUDATA\MSVOA14\Data\103114\B8248.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	5

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	25	U	25	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	10/31/14 10:32	
Toluene-d8	102	87-121	10/31/14 10:32	
Dibromofluoromethane	97	89-119	10/31/14 10:32	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/21/14 1025
Sample Matrix:	Water	**Date Received:**	10/23/14
Sample Name:	CW4B-1014		
Lab Code:	R1408445-006	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 21:26	
Barium, Total	6010C	**35**		µg/L	20	1	10/29/14	11/6/14 21:26	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 21:26	
Calcium, Total	6010C	**36900**		µg/L	1000	1	10/29/14	11/6/14 21:26	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 21:26	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 21:26	
Iron, Total	6010C	100	U	µg/L	100	1	10/29/14	11/6/14 21:26	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 21:26	
Magnesium, Total	6010C	**16500**		µg/L	1000	1	10/29/14	11/6/14 21:26	
Manganese, Total	6010C	**370**		µg/L	10	1	10/29/14	11/6/14 21:26	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 21:26	
Potassium, Total	6010C	2000	U	µg/L	2000	1	10/29/14	11/6/14 21:26	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 21:26	
Sodium, Total	6010C	**15900**		µg/L	1000	1	10/29/14	11/6/14 21:26	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 21:26	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/21/14 1025
Date Received: 10/23/14
Date Analyzed: 10/29/14 11:52

Sample Name: CW4B-1014
Lab Code: R1408445-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\102914\B8166.D\

Analysis Lot: 418594
Instrument Name: R-MS-14
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/21/14 1025
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/29/14 11:52
Sample Name:	CW4B-1014	**Units:**	µg/L
Lab Code:	R1408445-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8166.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85-122	10/29/14 11:52	
Toluene-d8	101	87-121	10/29/14 11:52	
Dibromofluoromethane	95	89-119	10/29/14 11:52	

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/21/14 1210
Date Received: 10/23/14

Sample Name: CW3B-1014
Lab Code: R1408445-007

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:10	
Barium, Total	6010C	**41**		µg/L	20	1	10/29/14	11/6/14 22:10	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 22:10	
Calcium, Total	6010C	**66800**		µg/L	1000	1	10/29/14	11/6/14 22:10	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:10	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:10	
Iron, Total	6010C	**590**		µg/L	100	1	10/29/14	11/6/14 22:10	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 22:10	
Magnesium, Total	6010C	**35800**		µg/L	1000	1	10/29/14	11/6/14 22:10	
Manganese, Total	6010C	**35**		µg/L	10	1	10/29/14	11/6/14 22:10	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 22:10	
Potassium, Total	6010C	**2700**		µg/L	2000	1	10/29/14	11/6/14 22:10	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:10	
Sodium, Total	6010C	**21200**		µg/L	1000	1	10/29/14	11/6/14 22:10	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:10	

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/21/14 1210
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/29/14 16:28
Sample Name:	CW3B-1014	**Units:**	µg/L
Lab Code:	R1408445-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8178.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	25	U	25	
71-43-2	Benzene	13	U	13	
75-27-4	Bromodichloromethane	13	U	13	
75-25-2	Bromoform	13	U	13	
74-83-9	Bromomethane	13	U	13	
78-93-3	2-Butanone (MEK)	25	U	25	
75-15-0	Carbon Disulfide	25	U	25	
56-23-5	Carbon Tetrachloride	13	U	13	
108-90-7	Chlorobenzene	13	U	13	
75-00-3	Chloroethane	13	U	13	
67-66-3	Chloroform	13	U	13	
74-87-3	Chloromethane	13	U	13	
124-48-1	Dibromochloromethane	13	U	13	
75-34-3	1,1-Dichloroethane	13	U	13	
106-93-4	1,2-Dibromoethane	13	U	13	
107-06-2	1,2-Dichloroethane	13	U	13	
75-35-4	1,1-Dichloroethene	13	U	13	
156-59-2	cis-1,2-Dichloroethene	**94**		13	
156-60-5	trans-1,2-Dichloroethene	13	U	13	
78-87-5	1,2-Dichloropropane	13	U	13	
10061-01-5	cis-1,3-Dichloropropene	13	U	13	
10061-02-6	trans-1,3-Dichloropropene	13	U	13	
100-41-4	Ethylbenzene	13	U	13	
591-78-6	2-Hexanone	25	U	25	
75-09-2	Methylene Chloride	13	U	13	
108-10-1	4-Methyl-2-pentanone (MIBK)	25	U	25	
100-42-5	Styrene	13	U	13	
79-34-5	1,1,2,2-Tetrachloroethane	13	U	13	
127-18-4	Tetrachloroethene	13	U	13	
108-88-3	Toluene	13	U	13	
71-55-6	1,1,1-Trichloroethane	13	U	13	
79-00-5	1,1,2-Trichloroethane	13	U	13	
79-01-6	Trichloroethene	**340**		13	
75-01-4	Vinyl Chloride	13	U	13	
95-47-6	o-Xylene	13	U	13	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/21/14 1210
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/29/14 16:28
Sample Name:	CW3B-1014	**Units:**	µg/L
Lab Code:	R1408445-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8178.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	13	U	13	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	10/29/14 16:28	
Toluene-d8	101	87-121	10/29/14 16:28	
Dibromofluoromethane	96	89-119	10/29/14 16:28	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/22/14 0935
Sample Matrix:	Water	**Date Received:**	10/23/14
Sample Name:	MW18S-1014		
Lab Code:	R1408445-008	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:16	
Barium, Total	6010C	**47**		µg/L	20	1	10/29/14	11/6/14 22:16	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 22:16	
Calcium, Total	6010C	**27800**		µg/L	1000	1	10/29/14	11/6/14 22:16	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:16	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:16	
Iron, Total	6010C	**2700**		µg/L	100	1	10/29/14	11/6/14 22:16	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 22:16	
Magnesium, Total	6010C	**11900**		µg/L	1000	1	10/29/14	11/6/14 22:16	
Manganese, Total	6010C	**150**		µg/L	10	1	10/29/14	11/6/14 22:16	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 22:16	
Potassium, Total	6010C	**2200**		µg/L	2000	1	10/29/14	11/6/14 22:16	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:16	
Sodium, Total	6010C	**3500**		µg/L	1000	1	10/29/14	11/6/14 22:16	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:16	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/22/14 0935
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/29/14 12:15
Sample Name:	MW18S-1014	**Units:**	µg/L
Lab Code:	R1408445-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8167.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/22/14 0935
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/29/14 12:15
Sample Name:	MW18S-1014	**Units:**	µg/L
Lab Code:	R1408445-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8167.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	10/29/14 12:15	
Toluene-d8	100	87-121	10/29/14 12:15	
Dibromofluoromethane	96	89-119	10/29/14 12:15	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/22/14 1120
Sample Matrix:	Water	**Date Received:**	10/23/14
Sample Name:	MW-18D-1014		
Lab Code:	R1408445-009	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:23	
Barium, Total	6010C	**50**		µg/L	20	1	10/29/14	11/6/14 22:23	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 22:23	
Calcium, Total	6010C	**23500**		µg/L	1000	1	10/29/14	11/6/14 22:23	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:23	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:23	
Iron, Total	6010C	**5570**		µg/L	100	1	10/29/14	11/6/14 22:23	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 22:23	
Magnesium, Total	6010C	**18200**		µg/L	1000	1	10/29/14	11/6/14 22:23	
Manganese, Total	6010C	**482**		µg/L	10	1	10/29/14	11/6/14 22:23	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 22:23	
Potassium, Total	6010C	**3200**		µg/L	2000	1	10/29/14	11/6/14 22:23	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:23	
Sodium, Total	6010C	**22300**		µg/L	1000	1	10/29/14	11/6/14 22:23	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:23	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/22/14 1120
Date Received: 10/23/14
Date Analyzed: 10/29/14 12:38

Sample Name: MW-18D-1014
Lab Code: R1408445-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\102914\B8168.D\

Analysis Lot: 418594
Instrument Name: R-MS-14
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/22/14 1120
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/29/14 12:38
Sample Name:	MW-18D-1014	**Units:**	µg/L
Lab Code:	R1408445-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8168.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	10/29/14 12:38	
Toluene-d8	101	87-121	10/29/14 12:38	
Dibromofluoromethane	95	89-119	10/29/14 12:38	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/22/14 1250
Date Received: 10/23/14

Sample Name: MW17S-1014
Lab Code: R1408445-010

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:29	
Barium, Total	6010C	**42**		µg/L	20	1	10/29/14	11/6/14 22:29	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 22:29	
Calcium, Total	6010C	**88500**		µg/L	1000	1	10/29/14	11/6/14 22:29	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:29	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:29	
Iron, Total	6010C	**840**		µg/L	100	1	10/29/14	11/6/14 22:29	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 22:29	
Magnesium, Total	6010C	**61400**		µg/L	1000	1	10/29/14	11/6/14 22:29	
Manganese, Total	6010C	**314**		µg/L	10	1	10/29/14	11/6/14 22:29	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 22:29	
Potassium, Total	6010C	**3600**		µg/L	2000	1	10/29/14	11/6/14 22:29	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:29	
Sodium, Total	6010C	**67500**		µg/L	1000	1	10/29/14	11/6/14 22:29	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:29	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/22/14 1250
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/31/14 09:43
Sample Name:	MW17S-1014	**Units:**	µg/L
Lab Code:	R1408445-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	419120
Data File Name:	I:\ACQUDATA\MSVOA14\Data\103114\B8246.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	**58**		5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	**16**		5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/22/14 1250
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/31/14 09:43
Sample Name:	MW17S-1014	**Units:**	µg/L
Lab Code:	R1408445-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	419120
Data File Name:	I:\ACQUDATA\MSVOA14\Data\103114\B8246.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	10/31/14 09:43	
Toluene-d8	100	87-121	10/31/14 09:43	
Dibromofluoromethane	93	89-119	10/31/14 09:43	

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/22/14 1420
Date Received: 10/23/14

Sample Name: MW-17D-1014
Lab Code: R1408445-011

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:35	
Barium, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:35	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 22:35	
Calcium, Total	6010C	**38500**		µg/L	1000	1	10/29/14	11/6/14 22:35	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:35	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:35	
Iron, Total	6010C	**6370**		µg/L	100	1	10/29/14	11/6/14 22:35	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 22:35	
Magnesium, Total	6010C	**19600**		µg/L	1000	1	10/29/14	11/6/14 22:35	
Manganese, Total	6010C	**587**		µg/L	10	1	10/29/14	11/6/14 22:35	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 22:35	
Potassium, Total	6010C	**3800**		µg/L	2000	1	10/29/14	11/6/14 22:35	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:35	
Sodium, Total	6010C	**30800**		µg/L	1000	1	10/29/14	11/6/14 22:35	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:35	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/22/14 1420
Date Received: 10/23/14
Date Analyzed: 10/29/14 13:01

Sample Name: MW-17D-1014
Lab Code: R1408445-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\102914\B8169.D\

Analysis Lot: 418594
Instrument Name: R-MS-14
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/22/14 1420
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/29/14 13:01
Sample Name:	MW-17D-1014	**Units:**	µg/L
Lab Code:	R1408445-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8169.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85-122	10/29/14 13:01	
Toluene-d8	99	87-121	10/29/14 13:01	
Dibromofluoromethane	93	89-119	10/29/14 13:01	

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/23/14 0950
Date Received: 10/24/14

Sample Name: MW3S-1014
Lab Code: R1408445-012

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:42	
Barium, Total	6010C	**44**		µg/L	20	1	10/29/14	11/6/14 22:42	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 22:42	
Calcium, Total	6010C	**43300**		µg/L	1000	1	10/29/14	11/6/14 22:42	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:42	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:42	
Iron, Total	6010C	100	U	µg/L	100	1	10/29/14	11/6/14 22:42	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 22:42	
Magnesium, Total	6010C	**33600**		µg/L	1000	1	10/29/14	11/6/14 22:42	
Manganese, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:42	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 22:42	
Potassium, Total	6010C	**3100**		µg/L	2000	1	10/29/14	11/6/14 22:42	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:42	
Sodium, Total	6010C	**36100**		µg/L	1000	1	10/29/14	11/6/14 22:42	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:42	

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Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/23/14 0950
Date Received: 10/24/14
Date Analyzed: 10/29/14 13:24

Sample Name: MW3S-1014
Lab Code: R1408445-012

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\102914\B8170.D\

Analysis Lot: 418594
Instrument Name: R-MS-14
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 0950
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	10/29/14 13:24
Sample Name:	MW3S-1014	**Units:**	µg/L
Lab Code:	R1408445-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8170.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	10/29/14 13:24	
Toluene-d8	100	87-121	10/29/14 13:24	
Dibromofluoromethane	95	89-119	10/29/14 13:24	

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/23/14 1125
Date Received: 10/24/14

Sample Name: MW3D-1014
Lab Code: R1408445-013

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:48	
Barium, Total	6010C	**108**		µg/L	20	1	10/29/14	11/6/14 22:48	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 22:48	
Calcium, Total	6010C	**66200**		µg/L	1000	1	10/29/14	11/6/14 22:48	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:48	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:48	
Iron, Total	6010C	100	U	µg/L	100	1	10/29/14	11/6/14 22:48	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 22:48	
Magnesium, Total	6010C	**36100**		µg/L	1000	1	10/29/14	11/6/14 22:48	
Manganese, Total	6010C	**21**		µg/L	10	1	10/29/14	11/6/14 22:48	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 22:48	
Potassium, Total	6010C	**2200**		µg/L	2000	1	10/29/14	11/6/14 22:48	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:48	
Sodium, Total	6010C	**16000**		µg/L	1000	1	10/29/14	11/6/14 22:48	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:48	

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Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/23/14 1125
Date Received: 10/24/14
Date Analyzed: 10/29/14 13:47

Sample Name: MW3D-1014
Lab Code: R1408445-013

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\102914\B8171.D\

Analysis Lot: 418594
Instrument Name: R-MS-14
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	**13**		5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 1125
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	10/29/14 13:47
Sample Name:	MW3D-1014	**Units:**	µg/L
Lab Code:	R1408445-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8171.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	85-122	10/29/14 13:47	
Toluene-d8	99	87-121	10/29/14 13:47	
Dibromofluoromethane	93	89-119	10/29/14 13:47	

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Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 1300
Sample Matrix:	Water	**Date Received:**	10/24/14
Sample Name:	MW4D-1014		
Lab Code:	R1408445-014	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:55	
Barium, Total	6010C	**21**		µg/L	20	1	10/29/14	11/6/14 22:55	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 22:55	
Calcium, Total	6010C	**19100**		µg/L	1000	1	10/29/14	11/6/14 22:55	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:55	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:55	
Iron, Total	6010C	**1220**		µg/L	100	1	10/29/14	11/6/14 22:55	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 22:55	
Magnesium, Total	6010C	**18800**		µg/L	1000	1	10/29/14	11/6/14 22:55	
Manganese, Total	6010C	**1190**		µg/L	10	1	10/29/14	11/6/14 22:55	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 22:55	
Potassium, Total	6010C	**2800**		µg/L	2000	1	10/29/14	11/6/14 22:55	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 22:55	
Sodium, Total	6010C	**6300**		µg/L	1000	1	10/29/14	11/6/14 22:55	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 22:55	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/23/14 1300
Date Received: 10/24/14
Date Analyzed: 10/31/14 10:56

Sample Name: MW4D-1014
Lab Code: R1408445-014

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\103114\B8249.D\

Analysis Lot: 419120
Instrument Name: R-MS-14
Dilution Factor: 2.5

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	25	U	25	
71-43-2	Benzene	13	U	13	
75-27-4	Bromodichloromethane	13	U	13	
75-25-2	Bromoform	13	U	13	
74-83-9	Bromomethane	13	U	13	
78-93-3	2-Butanone (MEK)	25	U	25	
75-15-0	Carbon Disulfide	25	U	25	
56-23-5	Carbon Tetrachloride	13	U	13	
108-90-7	Chlorobenzene	13	U	13	
75-00-3	Chloroethane	13	U	13	
67-66-3	Chloroform	13	U	13	
74-87-3	Chloromethane	13	U	13	
124-48-1	Dibromochloromethane	13	U	13	
75-34-3	1,1-Dichloroethane	13	U	13	
106-93-4	1,2-Dibromoethane	13	U	13	
107-06-2	1,2-Dichloroethane	13	U	13	
75-35-4	1,1-Dichloroethene	13	U	13	
156-59-2	cis-1,2-Dichloroethene	**360**		13	
156-60-5	trans-1,2-Dichloroethene	13	U	13	
78-87-5	1,2-Dichloropropane	13	U	13	
10061-01-5	cis-1,3-Dichloropropene	13	U	13	
10061-02-6	trans-1,3-Dichloropropene	13	U	13	
100-41-4	Ethylbenzene	13	U	13	
591-78-6	2-Hexanone	25	U	25	
75-09-2	Methylene Chloride	13	U	13	
108-10-1	4-Methyl-2-pentanone (MIBK)	25	U	25	
100-42-5	Styrene	13	U	13	
79-34-5	1,1,2,2-Tetrachloroethane	13	U	13	
127-18-4	Tetrachloroethene	13	U	13	
108-88-3	Toluene	13	U	13	
71-55-6	1,1,1-Trichloroethane	13	U	13	
79-00-5	1,1,2-Trichloroethane	13	U	13	
79-01-6	Trichloroethene	13	U	13	
75-01-4	Vinyl Chloride	**76**		13	
95-47-6	o-Xylene	13	U	13	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 1300
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	10/31/14 10:56
Sample Name:	MW4D-1014	**Units:**	µg/L
Lab Code:	R1408445-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	419120
Data File Name:	I:\ACQUDATA\MSVOA14\Data\103114\B8249.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	13	U	13	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85-122	10/31/14 10:56	
Toluene-d8	101	87-121	10/31/14 10:56	
Dibromofluoromethane	97	89-119	10/31/14 10:56	

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/23/14 0845
Date Received: 10/24/14

Sample Name: SWS1-1014
Lab Code: R1408445-015

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**139**		mg/L	2.0	1	NA	11/3/14 08:52	
Ammonia as Nitrogen, undistilled	350.1	0.050	U	mg/L	0.050	1	NA	11/1/14 13:20	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	2.0	U	mg/L	2.0	1	NA	10/24/14 12:10	
Bromide	300.0	1.0	U	mg/L	1.0	10	NA	10/27/14 22:12	
Carbon, Total Organic (TOC)	SM 5310B/C-2000(201	**10.3**		mg/L	1.0	1	NA	10/28/14 11:35	
Chemical Oxygen Demand, Total	410.4	**30.3**		mg/L	5.0	1	NA	10/28/14 12:00	
Chloride	300.0	**33.5**		mg/L	2.0	10	NA	10/27/14 16:27	
Color, True	SM 2120 B-2001(2011)	**88.0**		ColorUnits	1.0	1	NA	10/24/14 20:00	
Nitrate as Nitrogen	300.0	1.0	U	mg/L	1.0	10	NA	10/24/14 11:53	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.74**		mg/L	0.20	1	10/27/14	10/28/14 16:30	
Phenolics, Total Recoverable	420.4	0.0050	U	mg/L	0.0050	1	NA	11/6/14 09:50	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	**223**		mg/L	10	1	NA	10/29/14 14:20	
Sulfate	300.0	**4.8**		mg/L	2.0	10	NA	10/27/14 16:27	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 0845
Sample Matrix:	Water	**Date Received:**	10/24/14
Sample Name:	SWS1-1014		
Lab Code:	R1408445-015	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 23:14	
Barium, Total	6010C	**37**		µg/L	20	1	10/29/14	11/6/14 23:14	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 23:14	
Calcium, Total	6010C	**36500**		µg/L	1000	1	10/29/14	11/6/14 23:14	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 23:14	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 23:14	
Iron, Total	6010C	**1490**		µg/L	100	1	10/29/14	11/6/14 23:14	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 23:14	
Magnesium, Total	6010C	**12300**		µg/L	1000	1	10/29/14	11/6/14 23:14	
Manganese, Total	6010C	**32**		µg/L	10	1	10/29/14	11/6/14 23:14	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 23:14	
Potassium, Total	6010C	**2400**		µg/L	2000	1	10/29/14	11/6/14 23:14	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 23:14	
Sodium, Total	6010C	**21600**		µg/L	1000	1	10/29/14	11/6/14 23:14	
Zinc, Total	6010C	**45**		µg/L	20	1	10/29/14	11/6/14 23:14	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/23/14 0845
Date Received: 10/24/14
Date Analyzed: 10/29/14 14:10

Sample Name: SWS1-1014
Lab Code: R1408445-015

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\102914\B8172.D\

Analysis Lot: 418594
Instrument Name: R-MS-14
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 0845
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	10/29/14 14:10
Sample Name:	SWS1-1014	**Units:**	µg/L
Lab Code:	R1408445-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8172.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	10/29/14 14:10	
Toluene-d8	99	87-121	10/29/14 14:10	
Dibromofluoromethane	94	89-119	10/29/14 14:10	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/23/14 1420
Date Received: 10/24/14

Sample Name: MW11S-1014
Lab Code: R1408445-016

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 23:20	
Barium, Total	6010C	**30**		µg/L	20	1	10/29/14	11/6/14 23:20	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 23:20	
Calcium, Total	6010C	**59200**		µg/L	1000	1	10/29/14	11/6/14 23:20	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 23:20	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 23:20	
Iron, Total	6010C	**370**		µg/L	100	1	10/29/14	11/6/14 23:20	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 23:20	
Magnesium, Total	6010C	**37700**		µg/L	1000	1	10/29/14	11/6/14 23:20	
Manganese, Total	6010C	**1130**		µg/L	10	1	10/29/14	11/6/14 23:20	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 23:20	
Potassium, Total	6010C	2000	U	µg/L	2000	1	10/29/14	11/6/14 23:20	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 23:20	
Sodium, Total	6010C	**20600**		µg/L	1000	1	10/29/14	11/6/14 23:20	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 23:20	

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/23/14 1420
Date Received: 10/24/14
Date Analyzed: 10/29/14 23:23

Sample Name: MW11S-1014
Lab Code: R1408445-016

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\102914\B8196.D\

Analysis Lot: 418692
Instrument Name: R-MS-14
Dilution Factor: 25

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	250	U	250	
71-43-2	Benzene	130	U	130	
75-27-4	Bromodichloromethane	130	U	130	
75-25-2	Bromoform	130	U	130	
74-83-9	Bromomethane	130	U	130	
78-93-3	2-Butanone (MEK)	250	U	250	
75-15-0	Carbon Disulfide	250	U	250	
56-23-5	Carbon Tetrachloride	130	U	130	
108-90-7	Chlorobenzene	130	U	130	
75-00-3	Chloroethane	130	U	130	
67-66-3	Chloroform	130	U	130	
74-87-3	Chloromethane	130	U	130	
124-48-1	Dibromochloromethane	130	U	130	
75-34-3	1,1-Dichloroethane	130	U	130	
106-93-4	1,2-Dibromoethane	130	U	130	
107-06-2	1,2-Dichloroethane	130	U	130	
75-35-4	1,1-Dichloroethene	130	U	130	
156-59-2	cis-1,2-Dichloroethene	**370**		130	
156-60-5	trans-1,2-Dichloroethene	130	U	130	
78-87-5	1,2-Dichloropropane	130	U	130	
10061-01-5	cis-1,3-Dichloropropene	130	U	130	
10061-02-6	trans-1,3-Dichloropropene	130	U	130	
100-41-4	Ethylbenzene	130	U	130	
591-78-6	2-Hexanone	250	U	250	
75-09-2	Methylene Chloride	130	U	130	
108-10-1	4-Methyl-2-pentanone (MIBK)	250	U	250	
100-42-5	Styrene	130	U	130	
79-34-5	1,1,2,2-Tetrachloroethane	130	U	130	
127-18-4	Tetrachloroethene	130	U	130	
108-88-3	Toluene	130	U	130	
71-55-6	1,1,1-Trichloroethane	130	U	130	
79-00-5	1,1,2-Trichloroethane	130	U	130	
79-01-6	Trichloroethene	**3100**		130	
75-01-4	Vinyl Chloride	130	U	130	
95-47-6	o-Xylene	130	U	130	

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 1420
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	10/29/14 23:23
Sample Name:	MW11S-1014	**Units:**	µg/L
Lab Code:	R1408445-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418692
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8196.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	25

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	130	U	130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85-122	10/29/14 23:23	
Toluene-d8	101	87-121	10/29/14 23:23	
Dibromofluoromethane	96	89-119	10/29/14 23:23	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/23/14 0905
Date Received: 10/24/14
Date Analyzed: 11/3/14 15:52

Sample Name: WAL19PRE-1014
Lab Code: R1408445-017

Units: µg/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analytical Method: 524.2
Data File Name: I:\ACQUDATA\MSVOA6\DATA\110314\L8540.D\

Analysis Lot: 419323
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-43-2	Benzene	0.50	U	0.50	
108-86-1	Bromobenzene	0.50	U	0.50	
74-97-5	Bromochloromethane	0.50	U	0.50	
75-27-4	Bromodichloromethane	0.50	U	0.50	
75-25-2	Bromoform	0.50	U	0.50	
74-83-9	Bromomethane	0.50	U	0.50	
75-65-0	tert-Butyl Alcohol	20	U	20	
1634-04-4	Methyl tert-Butyl Ether	0.50	U	0.50	
98-06-6	tert-Butylbenzene	0.50	U	0.50	
135-98-8	sec-Butylbenzene	0.50	U	0.50	
104-51-8	n-Butylbenzene	0.50	U	0.50	
56-23-5	Carbon Tetrachloride	0.50	U	0.50	
108-90-7	Chlorobenzene	0.50	U	0.50	
75-00-3	Chloroethane	0.50	U	0.50	
67-66-3	Chloroform	0.50	U	0.50	
74-87-3	Chloromethane	0.50	U	0.50	
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U	0.50	
95-49-8	2-Chlorotoluene	0.50	U	0.50	
106-43-4	4-Chlorotoluene	0.50	U	0.50	
124-48-1	Dibromochloromethane	0.50	U	0.50	
106-93-4	1,2-Dibromoethane	0.50	U	0.50	
74-95-3	Dibromomethane	0.50	U	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	U	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	U	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	U	0.50	
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	
75-34-3	1,1-Dichloroethane	0.50	U	0.50	
107-06-2	1,2-Dichloroethane	0.50	U	0.50	
75-35-4	1,1-Dichloroethene	0.50	U	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.50	
156-59-2	cis-1,2-Dichloroethene	**2.7**		0.50	
594-20-7	2,2-Dichloropropane	0.50	U	0.50	
78-87-5	1,2-Dichloropropane	0.50	U	0.50	
142-28-9	1,3-Dichloropropane	0.50	U	0.50	
563-58-6	1,1-Dichloropropene	0.50	U	0.50	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 0905
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	11/3/14 15:52
Sample Name:	WAL19PRE-1014	**Units:**	µg/L
Lab Code:	R1408445-017	**Basis:**	NA

Purgeable Organic Compounds by GC/MS

Analytical Method:	524.2	**Analysis Lot:**	419323
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\110314\L8540.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
10061-02-6	trans-1,3-Dichloropropene	0.50	U	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.50	
100-41-4	Ethylbenzene	0.50	U	0.50	
87-68-3	Hexachlorobutadiene	0.50	U	0.50	
98-82-8	Isopropylbenzene	0.50	U	0.50	
99-87-6	p-Isopropyltoluene	0.50	U	0.50	
75-09-2	Methylene Chloride	0.50	U	0.50	
91-20-3	Naphthalene	0.50	U	0.50	
103-65-1	n-Propylbenzene	0.50	U	0.50	
100-42-5	Styrene	0.50	U	0.50	
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U	0.50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.50	
127-18-4	Tetrachloroethene	0.50	U	0.50	
108-88-3	Toluene	0.50	U	0.50	
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	
87-61-6	1,2,3-Trichlorobenzene	0.50	U	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	U	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	U	0.50	
79-01-6	Trichloroethene	**2.7**		0.50	
75-69-4	Trichlorofluoromethane	0.50	U	0.50	
96-18-4	1,2,3-Trichloropropane	0.50	U	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	U	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	U	0.50	
75-01-4	Vinyl Chloride	0.50	U	0.50	
179601-23-1	m,p-Xylenes	1.0	U	1.0	
95-47-6	o-Xylene	0.50	U	0.50	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	70-130	11/3/14 15:52	
1,2-Dichlorobenzene-d4	106	70-130	11/3/14 15:52	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 0910
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	11/3/14 15:18
Sample Name:	WAL19INTER-1014	**Units:**	µg/L
Lab Code:	R1408445-018	**Basis:**	NA

Purgeable Organic Compounds by GC/MS

Analytical Method:	524.2	**Analysis Lot:**	419323
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\110314\L8539.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-43-2	Benzene	0.50	U	0.50	
108-86-1	Bromobenzene	0.50	U	0.50	
74-97-5	Bromochloromethane	0.50	U	0.50	
75-27-4	Bromodichloromethane	0.50	U	0.50	
75-25-2	Bromoform	0.50	U	0.50	
74-83-9	Bromomethane	0.50	U	0.50	
75-65-0	tert-Butyl Alcohol	20	U	20	
1634-04-4	Methyl tert-Butyl Ether	0.50	U	0.50	
98-06-6	tert-Butylbenzene	0.50	U	0.50	
135-98-8	sec-Butylbenzene	0.50	U	0.50	
104-51-8	n-Butylbenzene	0.50	U	0.50	
56-23-5	Carbon Tetrachloride	0.50	U	0.50	
108-90-7	Chlorobenzene	0.50	U	0.50	
75-00-3	Chloroethane	0.50	U	0.50	
67-66-3	Chloroform	0.50	U	0.50	
74-87-3	Chloromethane	0.50	U	0.50	
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U	0.50	
95-49-8	2-Chlorotoluene	0.50	U	0.50	
106-43-4	4-Chlorotoluene	0.50	U	0.50	
124-48-1	Dibromochloromethane	0.50	U	0.50	
106-93-4	1,2-Dibromoethane	0.50	U	0.50	
74-95-3	Dibromomethane	0.50	U	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	U	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	U	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	U	0.50	
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	
75-34-3	1,1-Dichloroethane	0.50	U	0.50	
107-06-2	1,2-Dichloroethane	0.50	U	0.50	
75-35-4	1,1-Dichloroethene	0.50	U	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	U	0.50	
594-20-7	2,2-Dichloropropane	0.50	U	0.50	
78-87-5	1,2-Dichloropropane	0.50	U	0.50	
142-28-9	1,3-Dichloropropane	0.50	U	0.50	
563-58-6	1,1-Dichloropropene	0.50	U	0.50	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 0910
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	11/3/14 15:18
Sample Name:	WAL19INTER-1014	**Units:**	µg/L
Lab Code:	R1408445-018	**Basis:**	NA

Purgeable Organic Compounds by GC/MS

Analytical Method:	524.2	**Analysis Lot:**	419323
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\110314\L8539.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
10061-02-6	trans-1,3-Dichloropropene	0.50	U	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.50	
100-41-4	Ethylbenzene	0.50	U	0.50	
87-68-3	Hexachlorobutadiene	0.50	U	0.50	
98-82-8	Isopropylbenzene	0.50	U	0.50	
99-87-6	p-Isopropyltoluene	0.50	U	0.50	
75-09-2	Methylene Chloride	0.50	U	0.50	
91-20-3	Naphthalene	0.50	U	0.50	
103-65-1	n-Propylbenzene	0.50	U	0.50	
100-42-5	Styrene	0.50	U	0.50	
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U	0.50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.50	
127-18-4	Tetrachloroethene	0.50	U	0.50	
108-88-3	Toluene	0.50	U	0.50	
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	
87-61-6	1,2,3-Trichlorobenzene	0.50	U	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	U	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	U	0.50	
79-01-6	Trichloroethene	0.50	U	0.50	
75-69-4	Trichlorofluoromethane	0.50	U	0.50	
96-18-4	1,2,3-Trichloropropane	0.50	U	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	U	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	U	0.50	
75-01-4	Vinyl Chloride	0.50	U	0.50	
179601-23-1	m,p-Xylenes	1.0	U	1.0	
95-47-6	o-Xylene	0.50	U	0.50	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	114	70-130	11/3/14 15:18	
1,2-Dichlorobenzene-d4	108	70-130	11/3/14 15:18	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 0915
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	11/3/14 14:44
Sample Name:	WAL19POST-1014	**Units:**	µg/L
Lab Code:	R1408445-019	**Basis:**	NA

Purgeable Organic Compounds by GC/MS

Analytical Method:	524.2	**Analysis Lot:**	419323
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\110314\L8538.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-43-2	Benzene	0.50	U	0.50	
108-86-1	Bromobenzene	0.50	U	0.50	
74-97-5	Bromochloromethane	0.50	U	0.50	
75-27-4	Bromodichloromethane	0.50	U	0.50	
75-25-2	Bromoform	0.50	U	0.50	
74-83-9	Bromomethane	0.50	U	0.50	
75-65-0	tert-Butyl Alcohol	20	U	20	
1634-04-4	Methyl tert-Butyl Ether	0.50	U	0.50	
98-06-6	tert-Butylbenzene	0.50	U	0.50	
135-98-8	sec-Butylbenzene	0.50	U	0.50	
104-51-8	n-Butylbenzene	0.50	U	0.50	
56-23-5	Carbon Tetrachloride	0.50	U	0.50	
108-90-7	Chlorobenzene	0.50	U	0.50	
75-00-3	Chloroethane	0.50	U	0.50	
67-66-3	Chloroform	0.50	U	0.50	
74-87-3	Chloromethane	0.50	U	0.50	
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U	0.50	
95-49-8	2-Chlorotoluene	0.50	U	0.50	
106-43-4	4-Chlorotoluene	0.50	U	0.50	
124-48-1	Dibromochloromethane	0.50	U	0.50	
106-93-4	1,2-Dibromoethane	0.50	U	0.50	
74-95-3	Dibromomethane	0.50	U	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	U	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	U	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	U	0.50	
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	
75-34-3	1,1-Dichloroethane	0.50	U	0.50	
107-06-2	1,2-Dichloroethane	0.50	U	0.50	
75-35-4	1,1-Dichloroethene	0.50	U	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	U	0.50	
594-20-7	2,2-Dichloropropane	0.50	U	0.50	
78-87-5	1,2-Dichloropropane	0.50	U	0.50	
142-28-9	1,3-Dichloropropane	0.50	U	0.50	
563-58-6	1,1-Dichloropropene	0.50	U	0.50	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 0915
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	11/3/14 14:44
Sample Name:	WAL19POST-1014	**Units:**	µg/L
Lab Code:	R1408445-019	**Basis:**	NA

Purgeable Organic Compounds by GC/MS

Analytical Method:	524.2	**Analysis Lot:**	419323
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\110314\L8538.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
10061-02-6	trans-1,3-Dichloropropene	0.50	U	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.50	
100-41-4	Ethylbenzene	0.50	U	0.50	
87-68-3	Hexachlorobutadiene	0.50	U	0.50	
98-82-8	Isopropylbenzene	0.50	U	0.50	
99-87-6	p-Isopropyltoluene	0.50	U	0.50	
75-09-2	Methylene Chloride	0.50	U	0.50	
91-20-3	Naphthalene	0.50	U	0.50	
103-65-1	n-Propylbenzene	0.50	U	0.50	
100-42-5	Styrene	0.50	U	0.50	
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U	0.50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.50	
127-18-4	Tetrachloroethene	0.50	U	0.50	
108-88-3	Toluene	0.50	U	0.50	
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	
87-61-6	1,2,3-Trichlorobenzene	0.50	U	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	U	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	U	0.50	
79-01-6	Trichloroethene	0.50	U	0.50	
75-69-4	Trichlorofluoromethane	0.50	U	0.50	
96-18-4	1,2,3-Trichloropropane	0.50	U	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	U	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	U	0.50	
75-01-4	Vinyl Chloride	0.50	U	0.50	
179601-23-1	m,p-Xylenes	1.0	U	1.0	
95-47-6	o-Xylene	0.50	U	0.50	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	70-130	11/3/14 14:44	
1,2-Dichlorobenzene-d4	94	70-130	11/3/14 14:44	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 1330
Sample Matrix:	Water	**Date Received:**	10/24/14
Sample Name:	MH33-1014		
Lab Code:	R1408445-020	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Nitrate as Nitrogen	300.0	1.0	U	mg/L	1.0	10	NA	10/24/14 11:30	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	**290**		mg/L	10	1	NA	10/29/14 14:20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/23/14 1330
Date Received: 10/24/14

Sample Name: MH33-1014
Lab Code: R1408445-020

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 23:26	
Barium, Total	6010C	**61**		µg/L	20	1	10/29/14	11/6/14 23:26	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 23:26	
Calcium, Total	6010C	**77200**		µg/L	1000	1	10/29/14	11/6/14 23:26	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 23:26	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 23:26	
Iron, Total	6010C	**2360**		µg/L	100	1	10/29/14	11/6/14 23:26	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 23:26	
Magnesium, Total	6010C	**17600**		µg/L	1000	1	10/29/14	11/6/14 23:26	
Manganese, Total	6010C	**1550**		µg/L	10	1	10/29/14	11/6/14 23:26	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 23:26	
Potassium, Total	6010C	2000	U	µg/L	2000	1	10/29/14	11/6/14 23:26	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 23:26	
Sodium, Total	6010C	**4400**		µg/L	1000	1	10/29/14	11/6/14 23:26	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 23:26	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 1330
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	10/29/14 14:33
Sample Name:	MH33-1014	**Units:**	µg/L
Lab Code:	R1408445-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8173.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	**12**		5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	**5.1**		5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 1330
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	10/29/14 14:33
Sample Name:	MH33-1014	**Units:**	µg/L
Lab Code:	R1408445-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8173.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	10/29/14 14:33	
Toluene-d8	99	87-121	10/29/14 14:33	
Dibromofluoromethane	92	89-119	10/29/14 14:33	

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/23/14 1420
Date Received: 10/24/14

Sample Name: MH32-1014
Lab Code: R1408445-021

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Nitrate as Nitrogen	300.0	1.0	U	mg/L	1.0	10	NA	10/24/14 11:41	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	**389**		mg/L	12	1	NA	10/29/14 14:20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/23/14 1420
Date Received: 10/24/14

Sample Name: MH32-1014
Lab Code: R1408445-021

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 23:33	
Barium, Total	6010C	**100**		µg/L	20	1	10/29/14	11/6/14 23:33	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 23:33	
Calcium, Total	6010C	**79600**		µg/L	1000	1	10/29/14	11/6/14 23:33	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 23:33	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 23:33	
Iron, Total	6010C	**11700**		µg/L	100	1	10/29/14	11/6/14 23:33	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 23:33	
Magnesium, Total	6010C	**15000**		µg/L	1000	1	10/29/14	11/6/14 23:33	
Manganese, Total	6010C	**1840**		µg/L	10	1	10/29/14	11/6/14 23:33	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 23:33	
Potassium, Total	6010C	**2800**		µg/L	2000	1	10/29/14	11/6/14 23:33	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 23:33	
Sodium, Total	6010C	**4300**		µg/L	1000	1	10/29/14	11/6/14 23:33	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 23:33	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 1420
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	10/29/14 23:46
Sample Name:	MH32-1014	**Units:**	µg/L
Lab Code:	R1408445-021	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418692
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8197.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	50

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	500	U	500	
71-43-2	Benzene	250	U	250	
75-27-4	Bromodichloromethane	250	U	250	
75-25-2	Bromoform	250	U	250	
74-83-9	Bromomethane	250	U	250	
78-93-3	2-Butanone (MEK)	500	U	500	
75-15-0	Carbon Disulfide	500	U	500	
56-23-5	Carbon Tetrachloride	250	U	250	
108-90-7	Chlorobenzene	250	U	250	
75-00-3	Chloroethane	250	U	250	
67-66-3	Chloroform	250	U	250	
74-87-3	Chloromethane	250	U	250	
124-48-1	Dibromochloromethane	250	U	250	
75-34-3	1,1-Dichloroethane	250	U	250	
106-93-4	1,2-Dibromoethane	250	U	250	
107-06-2	1,2-Dichloroethane	250	U	250	
75-35-4	1,1-Dichloroethene	250	U	250	
156-59-2	cis-1,2-Dichloroethene	**6700**		250	
156-60-5	trans-1,2-Dichloroethene	250	U	250	
78-87-5	1,2-Dichloropropane	250	U	250	
10061-01-5	cis-1,3-Dichloropropene	250	U	250	
10061-02-6	trans-1,3-Dichloropropene	250	U	250	
100-41-4	Ethylbenzene	250	U	250	
591-78-6	2-Hexanone	500	U	500	
75-09-2	Methylene Chloride	250	U	250	
108-10-1	4-Methyl-2-pentanone (MIBK)	500	U	500	
100-42-5	Styrene	250	U	250	
79-34-5	1,1,2,2-Tetrachloroethane	250	U	250	
127-18-4	Tetrachloroethene	250	U	250	
108-88-3	Toluene	250	U	250	
71-55-6	1,1,1-Trichloroethane	250	U	250	
79-00-5	1,1,2-Trichloroethane	250	U	250	
79-01-6	Trichloroethene	250	U	250	
75-01-4	Vinyl Chloride	250	U	250	
95-47-6	o-Xylene	250	U	250	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 1420
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	10/29/14 23:46
Sample Name:	MH32-1014	**Units:**	µg/L
Lab Code:	R1408445-021	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418692
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8197.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	50

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	250	U	250	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85-122	10/29/14 23:46	
Toluene-d8	100	87-121	10/29/14 23:46	
Dibromofluoromethane	96	89-119	10/29/14 23:46	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/23/14 1240
Date Received: 10/24/14

Sample Name: WAL2-1014
Lab Code: R1408445-022

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 23:39	
Barium, Total	6010C	**34**		µg/L	20	1	10/29/14	11/6/14 23:39	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 23:39	
Calcium, Total	6010C	**48200**		µg/L	1000	1	10/29/14	11/6/14 23:39	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 23:39	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 23:39	
Iron, Total	6010C	**890**		µg/L	100	1	10/29/14	11/6/14 23:39	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 23:39	
Magnesium, Total	6010C	**16800**		µg/L	1000	1	10/29/14	11/6/14 23:39	
Manganese, Total	6010C	**891**		µg/L	10	1	10/29/14	11/6/14 23:39	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 23:39	
Potassium, Total	6010C	2000	U	µg/L	2000	1	10/29/14	11/6/14 23:39	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 23:39	
Sodium, Total	6010C	**48300**		µg/L	1000	1	10/29/14	11/6/14 23:39	
Zinc, Total	6010C	**28**		µg/L	20	1	10/29/14	11/6/14 23:39	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 0905
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	10/29/14 21:28
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R1408445-023	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418692
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8191.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/23/14 0905
Sample Matrix:	Water	**Date Received:**	10/24/14
		Date Analyzed:	10/29/14 21:28
Sample Name:	TRIP BLANK	**Units:**	µg/L
Lab Code:	R1408445-023	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418692
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8191.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85-122	10/29/14 21:28	
Toluene-d8	102	87-121	10/29/14 21:28	
Dibromofluoromethane	95	89-119	10/29/14 21:28	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/21/14
Date Received: 10/23/14
Date Analyzed: 10/29/14 21:51

Sample Name: TRIP BLANK 2
Lab Code: R1408445-024

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\102914\B8192.D\

Analysis Lot: 418692
Instrument Name: R-MS-14
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/21/14
Sample Matrix:	Water	**Date Received:**	10/23/14
		Date Analyzed:	10/29/14 21:51
Sample Name:	TRIP BLANK 2	**Units:**	µg/L
Lab Code:	R1408445-024	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418692
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8192.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	92	85-122	10/29/14 21:51	
Toluene-d8	100	87-121	10/29/14 21:51	
Dibromofluoromethane	95	89-119	10/29/14 21:51	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/27/14 1200
Sample Matrix:	Water	**Date Received:**	10/28/14
Sample Name:	MW16S-1014		
Lab Code:	R1408445-025	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	11/3/14	11/6/14 23:39	
Barium, Total	6010C	20	U	µg/L	20	1	11/3/14	11/6/14 23:39	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	11/3/14	11/6/14 23:39	
Calcium, Total	6010C	**14100**		µg/L	1000	1	11/3/14	11/6/14 23:39	
Chromium, Total	6010C	10	U	µg/L	10	1	11/3/14	11/6/14 23:39	
Copper, Total	6010C	20	U	µg/L	20	1	11/3/14	11/6/14 23:39	
Iron, Total	6010C	**250**		µg/L	100	1	11/3/14	11/6/14 23:39	
Lead, Total	6010C	50	U	µg/L	50	1	11/3/14	11/6/14 23:39	
Magnesium, Total	6010C	**9600**		µg/L	1000	1	11/3/14	11/6/14 23:39	
Manganese, Total	6010C	**39**		µg/L	10	1	11/3/14	11/6/14 23:39	
Nickel, Total	6010C	40	U	µg/L	40	1	11/3/14	11/6/14 23:39	
Potassium, Total	6010C	2000	U	µg/L	2000	1	11/3/14	11/7/14 16:13	
Selenium, Total	6010C	10	U	µg/L	10	1	11/3/14	11/6/14 23:39	
Sodium, Total	6010C	**8700**		µg/L	1000	1	11/3/14	11/7/14 16:13	
Zinc, Total	6010C	20	U	µg/L	20	1	11/3/14	11/6/14 23:39	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/27/14 1200
Date Received: 10/28/14
Date Analyzed: 10/29/14 14:56

Sample Name: MW16S-1014
Lab Code: R1408445-025

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\102914\B8174.D\

Analysis Lot: 418594
Instrument Name: R-MS-14
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/27/14 1200
Sample Matrix:	Water	**Date Received:**	10/28/14
		Date Analyzed:	10/29/14 14:56
Sample Name:	MW16S-1014	**Units:**	µg/L
Lab Code:	R1408445-025	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8174.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	10/29/14 14:56	
Toluene-d8	100	87-121	10/29/14 14:56	
Dibromofluoromethane	93	89-119	10/29/14 14:56	

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/27/14 1000
Date Received: 10/28/14

Sample Name: EB1-1014
Lab Code: R1408445-026

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	11/3/14	11/6/14 23:45	
Barium, Total	6010C	20	U	µg/L	20	1	11/3/14	11/6/14 23:45	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	11/3/14	11/6/14 23:45	
Calcium, Total	6010C	1000	U	µg/L	1000	1	11/3/14	11/6/14 23:45	
Chromium, Total	6010C	10	U	µg/L	10	1	11/3/14	11/6/14 23:45	
Copper, Total	6010C	20	U	µg/L	20	1	11/3/14	11/6/14 23:45	
Iron, Total	6010C	100	U	µg/L	100	1	11/3/14	11/6/14 23:45	
Lead, Total	6010C	50	U	µg/L	50	1	11/3/14	11/6/14 23:45	
Magnesium, Total	6010C	1000	U	µg/L	1000	1	11/3/14	11/6/14 23:45	
Manganese, Total	6010C	10	U	µg/L	10	1	11/3/14	11/6/14 23:45	
Nickel, Total	6010C	40	U	µg/L	40	1	11/3/14	11/6/14 23:45	
Potassium, Total	6010C	2000	U	µg/L	2000	1	11/3/14	11/7/14 16:31	
Selenium, Total	6010C	10	U	µg/L	10	1	11/3/14	11/6/14 23:45	
Sodium, Total	6010C	1000	U	µg/L	1000	1	11/3/14	11/7/14 16:31	
Zinc, Total	6010C	20	U	µg/L	20	1	11/3/14	11/6/14 23:45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/27/14 1000
Sample Matrix:	Water	**Date Received:**	10/28/14
		Date Analyzed:	10/29/14 22:14
Sample Name:	EB1-1014	**Units:**	µg/L
Lab Code:	R1408445-026	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418692
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8193.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/27/14 1000
Sample Matrix:	Water	**Date Received:**	10/28/14
		Date Analyzed:	10/29/14 22:14
Sample Name:	EB1-1014	**Units:**	µg/L
Lab Code:	R1408445-026	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418692
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8193.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85-122	10/29/14 22:14	
Toluene-d8	101	87-121	10/29/14 22:14	
Dibromofluoromethane	94	89-119	10/29/14 22:14	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/27/14 1315
Date Received: 10/28/14

Sample Name: LS1-1014
Lab Code: R1408445-027

Basis: NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	11/3/14	11/7/14 00:04	
Barium, Total	6010C	**101**		µg/L	20	1	11/3/14	11/7/14 00:04	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	11/3/14	11/7/14 00:04	
Calcium, Total	6010C	**104000**		µg/L	1000	1	11/3/14	11/7/14 00:04	
Chromium, Total	6010C	10	U	µg/L	10	1	11/3/14	11/7/14 00:04	
Copper, Total	6010C	20	U	µg/L	20	1	11/3/14	11/7/14 00:04	
Iron, Total	6010C	**1500**		µg/L	100	1	11/3/14	11/7/14 00:04	
Lead, Total	6010C	50	U	µg/L	50	1	11/3/14	11/7/14 00:04	
Magnesium, Total	6010C	**27300**		µg/L	1000	1	11/3/14	11/7/14 00:04	
Manganese, Total	6010C	**2790**		µg/L	10	1	11/3/14	11/7/14 00:04	
Nickel, Total	6010C	40	U	µg/L	40	1	11/3/14	11/7/14 00:04	
Potassium, Total	6010C	**3800**		µg/L	2000	1	11/3/14	11/7/14 16:38	
Selenium, Total	6010C	10	U	µg/L	10	1	11/3/14	11/7/14 00:04	
Sodium, Total	6010C	**23700**		µg/L	1000	1	11/3/14	11/7/14 16:38	
Zinc, Total	6010C	20	U	µg/L	20	1	11/3/14	11/7/14 00:04	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: 10/27/14 1315
Date Received: 10/28/14
Date Analyzed: 10/29/14 15:19

Sample Name: LS1-1014
Lab Code: R1408445-027

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\102914\B8175.D\

Analysis Lot: 418594
Instrument Name: R-MS-14
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	**41**		5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/27/14 1315
Sample Matrix:	Water	**Date Received:**	10/28/14
		Date Analyzed:	10/29/14 15:19
Sample Name:	LS1-1014	**Units:**	µg/L
Lab Code:	R1408445-027	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8175.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	10/29/14 15:19	
Toluene-d8	98	87-121	10/29/14 15:19	
Dibromofluoromethane	91	89-119	10/29/14 15:19	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/27/14 1000
Sample Matrix:	Water	**Date Received:**	10/28/14
		Date Analyzed:	10/29/14 22:37
Sample Name:	TRIP BLANK 3	**Units:**	µg/L
Lab Code:	R1408445-028	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418692
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8194.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	10/27/14 1000
Sample Matrix:	Water	**Date Received:**	10/28/14
		Date Analyzed:	10/29/14 22:37
Sample Name:	TRIP BLANK 3	**Units:**	µg/L
Lab Code:	R1408445-028	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418692
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8194.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85-122	10/29/14 22:37	
Toluene-d8	101	87-121	10/29/14 22:37	
Dibromofluoromethane	95	89-119	10/29/14 22:37	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: R1408445-MB

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	2.0	U	mg/L	2.0	1	NA	11/3/14 08:52	
Ammonia as Nitrogen, undistilled	350.1	0.050	U	mg/L	0.050	1	NA	11/1/14 12:51	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	2.0	U	mg/L	2.0	1	NA	10/24/14 16:38	
Bromide	300.0	0.10	U	mg/L	0.10	1	NA	10/27/14 20:36	
Carbon, Total Organic (TOC)	SM 5310B/C-2000(201	1.0	U	mg/L	1.0	1	NA	10/28/14 08:48	
Chemical Oxygen Demand, Total	410.4	5.0	U	mg/L	5.0	1	NA	10/28/14 12:00	
Chloride	300.0	0.20	U	mg/L	0.20	1	NA	10/27/14 14:47	
Nitrate as Nitrogen	300.0	0.10	U	mg/L	0.10	1	NA	10/24/14 11:07	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.20	U	mg/L	0.20	1	10/27/14	10/28/14 16:12	
Phenolics, Total Recoverable	420.4	0.0050	U	mg/L	0.0050	1	NA	11/6/14 09:50	
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	10	U	mg/L	10	1	NA	10/29/14 14:20	
Sulfate	300.0	0.20	U	mg/L	0.20	1	NA	10/27/14 14:47	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1408445-MB1	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 20:42	
Barium, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 20:42	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	10/29/14	11/6/14 20:42	
Calcium, Total	6010C	1000	U	µg/L	1000	1	10/29/14	11/6/14 20:42	
Chromium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 20:42	
Copper, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 20:42	
Iron, Total	6010C	100	U	µg/L	100	1	10/29/14	11/6/14 20:42	
Lead, Total	6010C	50	U	µg/L	50	1	10/29/14	11/6/14 20:42	
Magnesium, Total	6010C	1000	U	µg/L	1000	1	10/29/14	11/6/14 20:42	
Manganese, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 20:42	
Nickel, Total	6010C	40	U	µg/L	40	1	10/29/14	11/6/14 20:42	
Potassium, Total	6010C	2000	U	µg/L	2000	1	10/29/14	11/6/14 20:42	
Selenium, Total	6010C	10	U	µg/L	10	1	10/29/14	11/6/14 20:42	
Sodium, Total	6010C	1000	U	µg/L	1000	1	10/29/14	11/6/14 20:42	
Zinc, Total	6010C	20	U	µg/L	20	1	10/29/14	11/6/14 20:42	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1408445-MB2	**Basis:**	NA

Inorganic Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Arsenic, Total	6010C	10	U	µg/L	10	1	11/3/14	11/6/14 22:50	
Barium, Total	6010C	20	U	µg/L	20	1	11/3/14	11/6/14 22:50	
Cadmium, Total	6010C	5.0	U	µg/L	5.0	1	11/3/14	11/6/14 22:50	
Calcium, Total	6010C	1000	U	µg/L	1000	1	11/3/14	11/6/14 22:50	
Chromium, Total	6010C	10	U	µg/L	10	1	11/3/14	11/6/14 22:50	
Copper, Total	6010C	20	U	µg/L	20	1	11/3/14	11/6/14 22:50	
Iron, Total	6010C	100	U	µg/L	100	1	11/3/14	11/6/14 22:50	
Lead, Total	6010C	50	U	µg/L	50	1	11/3/14	11/6/14 22:50	
Magnesium, Total	6010C	1000	U	µg/L	1000	1	11/3/14	11/6/14 22:50	
Manganese, Total	6010C	10	U	µg/L	10	1	11/3/14	11/6/14 22:50	
Nickel, Total	6010C	40	U	µg/L	40	1	11/3/14	11/6/14 22:50	
Potassium, Total	6010C	2000	U	µg/L	2000	1	11/3/14	11/7/14 15:23	
Selenium, Total	6010C	10	U	µg/L	10	1	11/3/14	11/6/14 22:50	
Sodium, Total	6010C	1000	U	µg/L	1000	1	11/3/14	11/7/14 15:23	
Zinc, Total	6010C	20	U	µg/L	20	1	11/3/14	11/6/14 22:50	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: NA
Date Received: NA
Date Analyzed: 11/3/14 13:28

Sample Name: Method Blank
Lab Code: RQ1413778-04

Units: µg/L
Basis: NA

Purgeable Organic Compounds by GC/MS

Analytical Method: 524.2
Data File Name: I:\ACQUDATA\MSVOA6\DATA\110314\L8536.D\

Analysis Lot: 419323
Instrument Name: R-MS-06
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
71-43-2	Benzene	0.50	U	0.50	
108-86-1	Bromobenzene	0.50	U	0.50	
74-97-5	Bromochloromethane	0.50	U	0.50	
75-27-4	Bromodichloromethane	0.50	U	0.50	
75-25-2	Bromoform	0.50	U	0.50	
74-83-9	Bromomethane	0.50	U	0.50	
75-65-0	tert-Butyl Alcohol	20	U	20	
1634-04-4	Methyl tert-Butyl Ether	0.50	U	0.50	
98-06-6	tert-Butylbenzene	0.50	U	0.50	
135-98-8	sec-Butylbenzene	0.50	U	0.50	
104-51-8	n-Butylbenzene	0.50	U	0.50	
56-23-5	Carbon Tetrachloride	0.50	U	0.50	
108-90-7	Chlorobenzene	0.50	U	0.50	
75-00-3	Chloroethane	0.50	U	0.50	
67-66-3	Chloroform	0.50	U	0.50	
74-87-3	Chloromethane	0.50	U	0.50	
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U	0.50	
95-49-8	2-Chlorotoluene	0.50	U	0.50	
106-43-4	4-Chlorotoluene	0.50	U	0.50	
124-48-1	Dibromochloromethane	0.50	U	0.50	
106-93-4	1,2-Dibromoethane	0.50	U	0.50	
74-95-3	Dibromomethane	0.50	U	0.50	
95-50-1	1,2-Dichlorobenzene	0.50	U	0.50	
106-46-7	1,4-Dichlorobenzene	0.50	U	0.50	
541-73-1	1,3-Dichlorobenzene	0.50	U	0.50	
75-71-8	Dichlorodifluoromethane	0.50	U	0.50	
75-34-3	1,1-Dichloroethane	0.50	U	0.50	
107-06-2	1,2-Dichloroethane	0.50	U	0.50	
75-35-4	1,1-Dichloroethene	0.50	U	0.50	
156-60-5	trans-1,2-Dichloroethene	0.50	U	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	U	0.50	
594-20-7	2,2-Dichloropropane	0.50	U	0.50	
78-87-5	1,2-Dichloropropane	0.50	U	0.50	
142-28-9	1,3-Dichloropropane	0.50	U	0.50	
563-58-6	1,1-Dichloropropene	0.50	U	0.50	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	11/3/14 13:28
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1413778-04	**Basis:**	NA

Purgeable Organic Compounds by GC/MS

Analytical Method:	524.2	**Analysis Lot:**	419323
Data File Name:	I:\ACQUDATA\MSVOA6\DATA\110314\L8536.D\	**Instrument Name:**	R-MS-06
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
10061-02-6	trans-1,3-Dichloropropene	0.50	U	0.50	
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.50	
100-41-4	Ethylbenzene	0.50	U	0.50	
87-68-3	Hexachlorobutadiene	0.50	U	0.50	
98-82-8	Isopropylbenzene	0.50	U	0.50	
99-87-6	p-Isopropyltoluene	0.50	U	0.50	
75-09-2	Methylene Chloride	0.50	U	0.50	
91-20-3	Naphthalene	0.50	U	0.50	
103-65-1	n-Propylbenzene	0.50	U	0.50	
100-42-5	Styrene	0.50	U	0.50	
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U	0.50	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U	0.50	
127-18-4	Tetrachloroethene	0.50	U	0.50	
108-88-3	Toluene	0.50	U	0.50	
120-82-1	1,2,4-Trichlorobenzene	0.50	U	0.50	
87-61-6	1,2,3-Trichlorobenzene	0.50	U	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	U	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	U	0.50	
79-01-6	Trichloroethene	0.50	U	0.50	
75-69-4	Trichlorofluoromethane	0.50	U	0.50	
96-18-4	1,2,3-Trichloropropane	0.50	U	0.50	
108-67-8	1,3,5-Trimethylbenzene	0.50	U	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	U	0.50	
75-01-4	Vinyl Chloride	0.50	U	0.50	
179601-23-1	m,p-Xylenes	1.0	U	1.0	
95-47-6	o-Xylene	0.50	U	0.50	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	115	70-130	11/3/14 13:28	
1,2-Dichlorobenzene-d4	110	70-130	11/3/14 13:28	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/29/14 09:06
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1413248-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8159.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/29/14 09:06
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1413248-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418594
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8159.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	85-122	10/29/14 09:06	
Toluene-d8	99	87-121	10/29/14 09:06	
Dibromofluoromethane	95	89-119	10/29/14 09:06	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: NA
Date Received: NA
Date Analyzed: 10/29/14 20:19

Sample Name: Method Blank
Lab Code: RQ1413291-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\102914\B8188.D\

Analysis Lot: 418692
Instrument Name: R-MS-14
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/29/14 20:19
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1413291-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	418692
Data File Name:	I:\ACQUDATA\MSVOA14\Data\102914\B8188.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	10/29/14 20:19	
Toluene-d8	100	87-121	10/29/14 20:19	
Dibromofluoromethane	96	89-119	10/29/14 20:19	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Collected: NA
Date Received: NA
Date Analyzed: 10/31/14 09:03

Sample Name: Method Blank
Lab Code: RQ1413431-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA14\Data\103114\B8245.D\

Analysis Lot: 419120
Instrument Name: R-MS-14
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	MRL	Note
67-64-1	Acetone	10	U	10	
71-43-2	Benzene	5.0	U	5.0	
75-27-4	Bromodichloromethane	5.0	U	5.0	
75-25-2	Bromoform	5.0	U	5.0	
74-83-9	Bromomethane	5.0	U	5.0	
78-93-3	2-Butanone (MEK)	10	U	10	
75-15-0	Carbon Disulfide	10	U	10	
56-23-5	Carbon Tetrachloride	5.0	U	5.0	
108-90-7	Chlorobenzene	5.0	U	5.0	
75-00-3	Chloroethane	5.0	U	5.0	
67-66-3	Chloroform	5.0	U	5.0	
74-87-3	Chloromethane	5.0	U	5.0	
124-48-1	Dibromochloromethane	5.0	U	5.0	
75-34-3	1,1-Dichloroethane	5.0	U	5.0	
106-93-4	1,2-Dibromoethane	5.0	U	5.0	
107-06-2	1,2-Dichloroethane	5.0	U	5.0	
75-35-4	1,1-Dichloroethene	5.0	U	5.0	
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	
78-87-5	1,2-Dichloropropane	5.0	U	5.0	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	
100-41-4	Ethylbenzene	5.0	U	5.0	
591-78-6	2-Hexanone	10	U	10	
75-09-2	Methylene Chloride	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	
100-42-5	Styrene	5.0	U	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	
127-18-4	Tetrachloroethene	5.0	U	5.0	
108-88-3	Toluene	5.0	U	5.0	
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	
79-01-6	Trichloroethene	5.0	U	5.0	
75-01-4	Vinyl Chloride	5.0	U	5.0	
95-47-6	o-Xylene	5.0	U	5.0	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	On-Site Technical Services, Inc.	**Service Request:**	R1408445
Project:	Wellsville-Andover LF	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/31/14 09:03
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1413431-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	419120
Data File Name:	I:\ACQUDATA\MSVOA14\Data\103114\B8245.D\	**Instrument Name:**	R-MS-14
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	MRL	Note
179601-23-1	m,p-Xylenes	5.0	U	5.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	91	85-122	10/31/14 09:03	
Toluene-d8	99	87-121	10/31/14 09:03	
Dibromofluoromethane	93	89-119	10/31/14 09:03	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Analyzed: 10/24/14 - 11/ 6/14

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1408445-LCS Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	19.0	20.0	95	81 - 112
Ammonia as Nitrogen, undistilled	350.1	0.512	0.500	102	90 - 110
Biochemical Oxygen Demand (BOD)	SM 5210 B-2001(2011)	183	198	93	85 - 115
Bromide	300.0	1.03	1.00	103	90 - 110
Carbon, Total Organic (TOC)	SM 5310B/C-2000(201	9.87	10.0	99	76 - 123
Chemical Oxygen Demand, Total	410.4	51.9	50.0	104	90 - 110
Chloride	300.0	2.06	2.00	103	90 - 110
Nitrate as Nitrogen	300.0	0.997	1.00	100	90 - 110
Nitrogen, Total Kjeldahl (TKN)	351.2	2.37	2.50	95	90 - 110
Phenolics, Total Recoverable	420.4	0.0404	0.0400	101	90 - 110
Solids, Total Dissolved (TDS)	SM 2540 C-1997(2011)	870	900	97	90 - 110
Sulfate	300.0	1.97	2.00	98	90 - 110

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

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Analyzed: 11/ 6/14

Lab Control Sample Summary
Inorganic Parameters

Units: µg/L
Basis: NA

Lab Control Sample
R1408445-LCS1

Analyte Name	Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic, Total	6010C	39.6	40	99	80 - 120
Barium, Total	6010C	1990	2000	100	80 - 120
Cadmium, Total	6010C	51.2	50.0	102	80 - 120
Calcium, Total	6010C	2020	2000	101	80 - 120
Chromium, Total	6010C	201	200	101	80 - 120
Copper, Total	6010C	258	250	103	80 - 120
Iron, Total	6010C	1020	1000	102	80 - 120
Lead, Total	6010C	520	500	104	80 - 120
Magnesium, Total	6010C	1970	2000	99	80 - 120
Manganese, Total	6010C	505	500	101	80 - 120
Nickel, Total	6010C	523	500	105	80 - 120
Potassium, Total	6010C	19700	20000	99	80 - 120
Selenium, Total	6010C	944	1010	93	80 - 120
Sodium, Total	6010C	19600	20000	98	80 - 120
Zinc, Total	6010C	534	500	107	80 - 120

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

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Analyzed: 11/ 6/14 - 11/ 7/14

Lab Control Sample Summary
Inorganic Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1408445-LCS2 Result	Spike Amount	% Rec	% Rec Limits
Arsenic, Total	6010C	37.0	40	93	80 - 120
Barium, Total	6010C	1980	2000	99	80 - 120
Cadmium, Total	6010C	48.6	50.0	97	80 - 120
Calcium, Total	6010C	2020	2000	101	80 - 120
Chromium, Total	6010C	202	200	101	80 - 120
Copper, Total	6010C	253	250	101	80 - 120
Iron, Total	6010C	986	1000	99	80 - 120
Lead, Total	6010C	491	500	98	80 - 120
Magnesium, Total	6010C	1980	2000	99	80 - 120
Manganese, Total	6010C	491	500	98	80 - 120
Nickel, Total	6010C	505	500	101	80 - 120
Potassium, Total	6010C	19400	20000	97	80 - 120
Selenium, Total	6010C	968	1010	96	80 - 120
Sodium, Total	6010C	19300	20000	97	80 - 120
Zinc, Total	6010C	513	500	103	80 - 120

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

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Analyzed: 11/ 3/14

Lab Control Sample Summary
Purgeable Organic Compounds by GC/MS

Analytical Method: 524.2

Units: µg/L
Basis: NA

Analysis Lot: 419323

Lab Control Sample
RQ1413778-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Benzene	4.37	5.00	87	70 - 130
Bromobenzene	4.50	5.00	90	70 - 130
Bromochloromethane	4.56	5.00	91	70 - 130
Bromodichloromethane	4.56	5.00	91	70 - 130
Bromoform	4.60	5.00	92	70 - 130
Bromomethane	4.37	5.00	87	70 - 130
tert-Butyl Alcohol	86.8	100	87	70 - 130
Methyl tert-Butyl Ether	3.72	5.00	74	70 - 130
tert-Butylbenzene	4.34	5.00	87	70 - 130
sec-Butylbenzene	4.42	5.00	88	70 - 130
n-Butylbenzene	4.51	5.00	90	70 - 130
Carbon Tetrachloride	3.95	5.00	79	70 - 130
Chlorobenzene	4.66	5.00	93	70 - 130
Chloroethane	4.55	5.00	91	70 - 130
Chloroform	4.54	5.00	91	70 - 130
Chloromethane	4.19	5.00	84	70 - 130
1,2-Dibromo-3-chloropropane	4.60	5.00	92	70 - 130
2-Chlorotoluene	4.42	5.00	88	70 - 130
4-Chlorotoluene	4.51	5.00	90	70 - 130
Dibromochloromethane	4.41	5.00	88	70 - 130
1,2-Dibromoethane	4.68	5.00	94	70 - 130
Dibromomethane	4.60	5.00	92	70 - 130
1,2-Dichlorobenzene	4.46	5.00	89	70 - 130
1,4-Dichlorobenzene	4.47	5.00	89	70 - 130
1,3-Dichlorobenzene	4.45	5.00	89	70 - 130
Dichlorodifluoromethane	3.57	5.00	71	70 - 130
1,1-Dichloroethane	4.00	5.00	80	70 - 130
1,2-Dichloroethane	3.73	5.00	75	70 - 130
1,1-Dichloroethene	4.51	5.00	90	70 - 130
trans-1,2-Dichloroethene	3.77	5.00	75	70 - 130
cis-1,2-Dichloroethene	4.09	5.00	82	70 - 130
2,2-Dichloropropane	4.33	5.00	87	70 - 130
1,2-Dichloropropane	4.46	5.00	89	70 - 130

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

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Analyzed: 11/3/14

Lab Control Sample Summary
Purgeable Organic Compounds by GC/MS

Analytical Method: 524.2

Units: µg/L
Basis: NA

Analysis Lot: 419323

Lab Control Sample
RQ1413778-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,3-Dichloropropane	4.62	5.00	92	70 - 130
1,1-Dichloropropene	4.16	5.00	83	70 - 130
trans-1,3-Dichloropropene	4.65	5.00	93	70 - 130
cis-1,3-Dichloropropene	4.62	5.00	92	70 - 130
Ethylbenzene	5.00	5.00	100	70 - 130
Hexachlorobutadiene	5.87	5.00	117	70 - 130
Isopropylbenzene	4.29	5.00	86	70 - 130
p-Isopropyltoluene	4.32	5.00	86	70 - 130
Methylene Chloride	4.76	5.00	95	70 - 130
Naphthalene	4.34	5.00	87	70 - 130
n-Propylbenzene	4.48	5.00	90	70 - 130
Styrene	4.60	5.00	92	70 - 130
1,1,1,2-Tetrachloroethane	4.63	5.00	93	70 - 130
1,1,2,2-Tetrachloroethane	4.54	5.00	91	70 - 130
Tetrachloroethene	4.46	5.00	89	70 - 130
Toluene	4.61	5.00	92	70 - 130
1,2,4-Trichlorobenzene	4.36	5.00	87	70 - 130
1,2,3-Trichlorobenzene	4.60	5.00	92	70 - 130
1,1,1-Trichloroethane	3.54	5.00	71	70 - 130
1,1,2-Trichloroethane	4.63	5.00	93	70 - 130
Trichloroethene	4.47	5.00	89	70 - 130
Trichlorofluoromethane	4.34	5.00	87	70 - 130
1,2,3-Trichloropropane	4.61	5.00	92	70 - 130
1,3,5-Trimethylbenzene	4.39	5.00	88	70 - 130
1,2,4-Trimethylbenzene	4.46	5.00	89	70 - 130
Vinyl Chloride	4.21	5.00	84	70 - 130
m,p-Xylenes	8.96	10.0	90	70 - 130
o-Xylene	4.58	5.00	92	70 - 130

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

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Analyzed: 10/29/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 418594

Analyte Name	Lab Control Sample RQ1413248-03 Result	Spike Amount	% Rec	% Rec Limits
Acetone	14.6	20.0	73	51 - 146
Benzene	18.3	20.0	91	76 - 118
Bromodichloromethane	18.1	20.0	90	79 - 122
Bromoform	20.0	20.0	100	65 - 138
Bromomethane	18.0	20.0	90	41 - 159
2-Butanone (MEK)	17.5	20.0	87	66 - 129
Carbon Disulfide	20.4	20.0	102	63 - 141
Carbon Tetrachloride	17.9	20.0	90	66 - 128
Chlorobenzene	18.2	20.0	91	80 - 121
Chloroethane	17.6	20.0	88	71 - 128
Chloroform	18.3	20.0	92	76 - 120
Chloromethane	17.9	20.0	90	64 - 140
Dibromochloromethane	18.1	20.0	91	79 - 125
1,1-Dichloroethane	18.0	20.0	90	76 - 128
1,2-Dibromoethane	18.0	20.0	90	81 - 123
1,2-Dichloroethane	18.0	20.0	90	72 - 130
1,1-Dichloroethene	17.7	20.0	89	74 - 135
cis-1,2-Dichloroethene	18.6	20.0	93	80 - 121
trans-1,2-Dichloroethene	19.1	20.0	95	78 - 124
1,2-Dichloropropane	18.8	20.0	94	80 - 119
cis-1,3-Dichloropropene	19.3	20.0	97	77 - 125
trans-1,3-Dichloropropene	18.0	20.0	90	72 - 123
Ethylbenzene	17.4	20.0	87	76 - 120
2-Hexanone	17.4	20.0	87	61 - 131
Methylene Chloride	18.0	20.0	90	73 - 122
4-Methyl-2-pentanone (MIBK)	17.8	20.0	89	68 - 129
Styrene	19.0	20.0	95	81 - 122
1,1,2,2-Tetrachloroethane	19.8	20.0	99	74 - 127
Tetrachloroethene	19.4	20.0	97	69 - 124
Toluene	18.5	20.0	92	77 - 120
1,1,1-Trichloroethane	17.8	20.0	89	71 - 123
1,1,2-Trichloroethane	17.8	20.0	89	79 - 117
Trichloroethene	17.5	20.0	87	76 - 123

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

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Analyzed: 10/29/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 418594

Lab Control Sample
RQ1413248-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	17.8	20.0	89	69 - 136
o-Xylene	18.9	20.0	94	77 - 131
m,p-Xylenes	38.3	40.0	96	78 - 123

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

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Analyzed: 10/29/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 418692

Lab Control Sample
RQ1413291-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Acetone	17.9	20.0	89	51 - 146
Benzene	17.6	20.0	88	76 - 118
Bromodichloromethane	17.7	20.0	89	79 - 122
Bromoform	19.1	20.0	96	65 - 138
Bromomethane	17.7	20.0	89	41 - 159
2-Butanone (MEK)	18.9	20.0	95	66 - 129
Carbon Disulfide	18.5	20.0	92	63 - 141
Carbon Tetrachloride	15.4	20.0	77	66 - 128
Chlorobenzene	17.1	20.0	85	80 - 121
Chloroethane	17.0	20.0	85	71 - 128
Chloroform	18.4	20.0	92	76 - 120
Chloromethane	18.5	20.0	92	64 - 140
Dibromochloromethane	17.8	20.0	89	79 - 125
1,1-Dichloroethane	18.0	20.0	90	76 - 128
1,2-Dibromoethane	18.3	20.0	91	81 - 123
1,2-Dichloroethane	18.0	20.0	90	72 - 130
1,1-Dichloroethene	16.4	20.0	82	74 - 135
cis-1,2-Dichloroethene	18.8	20.0	94	80 - 121
trans-1,2-Dichloroethene	17.9	20.0	89	78 - 124
1,2-Dichloropropane	18.5	20.0	92	80 - 119
cis-1,3-Dichloropropene	18.4	20.0	92	77 - 125
trans-1,3-Dichloropropene	17.5	20.0	88	72 - 123
Ethylbenzene	15.3	20.0	76	76 - 120
2-Hexanone	19.2	20.0	96	61 - 131
Methylene Chloride	18.1	20.0	90	73 - 122
4-Methyl-2-pentanone (MIBK)	19.4	20.0	97	68 - 129
Styrene	17.6	20.0	88	81 - 122
1,1,2,2-Tetrachloroethane	19.9	20.0	99	74 - 127
Tetrachloroethene	15.9	20.0	79	69 - 124
Toluene	17.0	20.0	85	77 - 120
1,1,1-Trichloroethane	15.8	20.0	79	71 - 123
1,1,2-Trichloroethane	18.3	20.0	92	79 - 117
Trichloroethene	17.0	20.0	85	76 - 123

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

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Analyzed: 10/29/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 418692

Lab Control Sample
RQ1413291-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	17.4	20.0	87	69 - 136
o-Xylene	17.1	20.0	85	77 - 131
m,p-Xylenes	33.8	40.0	84	78 - 123

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

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Analyzed: 10/31/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 419120

Analyte Name	Lab Control Sample RQ1413431-03 Result	Spike Amount	% Rec	% Rec Limits
Acetone	15.5	20.0	78	51 - 146
Benzene	18.3	20.0	91	76 - 118
Bromodichloromethane	18.3	20.0	92	79 - 122
Bromoform	19.6	20.0	98	65 - 138
Bromomethane	20.1	20.0	101	41 - 159
2-Butanone (MEK)	17.1	20.0	85	66 - 129
Carbon Disulfide	16.9	20.0	85	63 - 141
Carbon Tetrachloride	17.4	20.0	87	66 - 128
Chlorobenzene	18.7	20.0	94	80 - 121
Chloroethane	16.3	20.0	81	71 - 128
Chloroform	18.5	20.0	92	76 - 120
Chloromethane	18.1	20.0	90	64 - 140
Dibromochloromethane	18.0	20.0	90	79 - 125
1,1-Dichloroethane	17.8	20.0	89	76 - 128
1,2-Dibromoethane	18.2	20.0	91	81 - 123
1,2-Dichloroethane	18.1	20.0	91	72 - 130
1,1-Dichloroethene	16.6	20.0	83	74 - 135
cis-1,2-Dichloroethene	18.8	20.0	94	80 - 121
trans-1,2-Dichloroethene	18.2	20.0	91	78 - 124
1,2-Dichloropropane	18.7	20.0	94	80 - 119
cis-1,3-Dichloropropene	19.7	20.0	99	77 - 125
trans-1,3-Dichloropropene	18.5	20.0	92	72 - 123
Ethylbenzene	17.0	20.0	85	76 - 120
2-Hexanone	17.0	20.0	85	61 - 131
Methylene Chloride	18.0	20.0	90	73 - 122
4-Methyl-2-pentanone (MIBK)	17.7	20.0	88	68 - 129
Styrene	19.0	20.0	95	81 - 122
1,1,2,2-Tetrachloroethane	20.8	20.0	104	74 - 127
Tetrachloroethene	18.4	20.0	92	69 - 124
Toluene	18.6	20.0	93	77 - 120
1,1,1-Trichloroethane	17.3	20.0	86	71 - 123
1,1,2-Trichloroethane	18.6	20.0	93	79 - 117
Trichloroethene	17.3	20.0	86	76 - 123

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

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: On-Site Technical Services, Inc.
Project: Wellsville-Andover LF
Sample Matrix: Water

Service Request: R1408445
Date Analyzed: 10/31/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 419120

Lab Control Sample
RQ1413431-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Vinyl Chloride	17.1	20.0	85	69 - 136
o-Xylene	18.9	20.0	94	77 - 131
m,p-Xylenes	37.5	40.0	94	78 - 123

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

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

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

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

Project Manager: Jon Brandes

CHAIN of CUSTODY

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Project: WAL - Annual Sampling

Telephone No.: 585-593-1824

Email: jonb@on-sitehs.com

Method of Shipment

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)							
MW5S-1014		4		X			X		10/21/14	1355	X		X													
CW3A-1014		4		X			X		10/21/14	1210	X		X													
CW4A-1014		4		X			X		10/21/14	1030	X		X													
DUP1-1014		4		X			X		10/21/14	1040	X		X													
MW5D-1014		4		X			X		10/21/14	1430	X		X													
CW4B-1014		7		X			X		10/21/14	1025	X		X													
CW3B-1014		4		X			X		10/21/14	1210	X		X													
MW18S-1014		4		X			X		10/22/14	0935	X		X													
MW18D-1014		4		X			X		10/22/14	1120	X		X													
MW17S-1014		4		X			X		10/22/14	1250	X		X													
MW17D-1014		4		X		X	X		10/22/14	1420	X		X													

REMARKS: MS/MSD

Sample Received Intact: Yes No

Temperature received: Ice No ice

Relinq. by sampler (Sign & Print Name)	Date	Time	Received by (Sign & Print Name)	Date	Time
Travis Reed	10/22/14	1530	Gregory O. Esmerian	10-23-14	08150
Relinquished by	Date	Time	Received by		
Relinquished by	Date	Time	Received by		
Relinquished by	Date	Time	Received by laboratory	Date	Time

Lab Work No.

Cooler Receipt and Preservation Check Form

Project/Client ON-Site Folder Number R14-8445

Cooler received on 10-23-14 by: KE 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: 10-23-14 Time: 09:01 ID: (IR#3) IR#4 From (Temp Blank) Sample Bottle

Observed Temp (°C)	3.6*						
Correction Factor (°C)	-0.5						
Corrected Temp (°C)	3.1°						
Within 0-6°C?	(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 KE on 10-23-14 at 09:06
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: AM

Cooler Breakdown: Date: 10/24/14 Time: 1455 by: AM

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. 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	✓		B082613584	4/15				
≤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	**	**	411370	4/15				

**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: 4-162-002, 080414-2AAC, 060914-2HAN

Other Comments:

*Trip Blank: 2 of 3 vials have Sig. headspace. T.B. was filled at ALS on 7-14-14 KE 10-23-14

PC Secondary Review: AM 10/29/14 *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

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

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

Project Manager: **Jon Brandes**

CHAIN of CUSTODY

Page 1 of 1

Project: **WAL - Annual Sampling**

Telephone No.: 585-593-1824

Email: jonb@on-sitehs.com

Method of Shipment

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)	TOC & Phenols (H_2SO_4)						
MW3S-1014		4		X			X		10-23-14	0950	X		X													
MW3D-1014		4		X			X		10-23-14	1125	X		X													
MW4D-1014		4		X			X		10-23-14	1300	X		X													
SWS1-1014		10		X			X		10-23-14	0845	X		X	X	X	X	X	X		X						
MW11S-1014		4		X			X		10-23-14	1420	X		X													
WAL19Pre-1014		3		X			X		10-23-14	0905		X														
WAL19Inter-1014		3		X			X		10-23-14	0910		X														
WAL19Post-1014		3		X			X		10-23-14	0915		X														
MH33-1014		5		X			X		10-23-14	1330	X		X						X							
MH32-1014		5		X			X		10-23-14	1420	X		X						X							
WAL2-1014		1		X			X		10-23-14	1240			X													
Trip Blank		3					X		10-23-14	1420																

REMARKS

Sample Received Intact: Yes No

Temperature received: Ice No ice

Relinq. by sampler (Sign & Print Name)	Date	Time	Received by (Sign & Print Name)	Date	Time
Kevin Dye / Kevin Dye	10/23/14	1530	Gregory O. Esmerian	10-24-14	09:10
Relinquished by	Date	Time	Received by		
Relinquished by	Date	Time	Received by		
Relinquished by	Date	Time	Received by laboratory	Date	Time

Lab Work No.

R1408445 5
On-Site Technical Services, Inc.
Wellsville-Andover LF

R1408445 5
On-Site Technical Services, Inc.
Wellsville-Andover LF

Cooler Receipt and Preservation Check Form

Project/Client: ON-Site Folder Number: R4-8445

Cooler received on 10-24-14 by: KE COURIER: ALS (UPS) FEDEX VELOCITY CLIENT

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

8. Temperature Readings Date: 10-24-14 Time: 09:21 ID: (IR#3) IR#4 From: (Temp Blank) Sample Bottle

Observed Temp (°C)	4.5						
Correction Factor (°C)	+0.6						
Corrected Temp (°C)	5.1						
Within 0-6°C?	(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 KE on 10-24-14 at 09:27
5035 samples placed in storage location: ________ by ________ on ________ at ________

PC Secondary Review: JMS 10/24/14

Cooler Breakdown: Date: 10/24/14 Time: 1534 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. 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	✓		BDB2L1338H	9/15				
≤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	**	**	4113070	9/15				

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: ________

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

Bottle lot numbers: 4-162-002, ~~4-162-001~~ DW 10/24/14, 070714-~~2AA~~ 2AB5 JMS 10/24/14, 080414-2AA0

Other Comments:

* Trip Blank: All 3 vials have sig. headspace

PC Secondary Review: JMS 10/29/14 *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

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)
MW16S-1014		4		X			X		10-27-14	1200	X		X						
EB1-1014		4		X			X		10-27-14	1000	X		X						
LS1-1014		4		X			X		10-27-14	1315	X		X						
Trip Blank		3		X			X		10-27-14	1315	X								

REMARKS

Sample Received Intact: Yes No

Temperature received: Ice No ice

	Date	Time		
Relinq. by sampler (Sign & Print Name): Kevin Dye / KEVIN DYE	10-27-14	1530	Received by (Sign & Print Name): J. Sawyer	
Relinquished by	Date	Time	Received by	
Relinquished by	Date	Time	Received by	
Relinquished by	Date	Time	Received by laboratory: NS	Date 10/28/14 Time 0950

Lab Work No.

R1408445 5
On-Site Technical Services, Inc.
Wellsville-Andover LF

Cooler Receipt and Preservation Check Form

Project/Client Casella Folder Number R14-8445

Cooler received on 10/28 by: JD 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: 10/28/14 Time: 0900 ID: (IR#3) IR#4 From: (Temp Blank) Sample Bottle

Observed Temp (°C)	2.9						
Correction Factor (°C)	+0.6						
Corrected Temp (°C)	3.5						
Within 0-6°C?	(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: R002 by JH on 10/28 at 0900
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JHM 10/28/14

Cooler Breakdown: Date: 10/29/14 Time: 1244 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. 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	✓		1305261384	9/15				
≤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	**	**	4113070	6/15				

**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: 4-162-002, 062314-ZAAO

Other Comments:

PC Secondary Review: JHM 11/3/14 *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter