

**DES Waste Management Division
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095**

**DRAFT 2014 ANNUAL SUMMARY REPORT
Coakley Landfill
Breakfast Hill Road
North Hampton, NH**

**NHDES Site #: 198712001
Project Type: CERCLA
Project Number: 431
EPA ID# NHD064424153**

**Prepared For:
Coakley Landfill Group
1 Junkins Avenue
Portsmouth, NH 03801
Phone Number: (603) 610-7215
RP Contact Name: Mr. Peter Britz
plbritz@cityofportsmouth.com**

**Prepared By:
CES, Inc.
640 Main Street
Lewiston, ME 04240
Phone Number: (207) 795-6009
Contact Names: Stephen B. Marcotte, PG and Michael A. Deyling, PG
Contact Email: smarcotte@ces-maine.com**

Date of Report: May 20, 2015

Groundwater Monitoring Report Cover Sheet

Site Name: Coakley Landfill

Town: North Hampton

Permit #: GWP-198712001-N-002

Type of Submittal (*Check all that apply*)

☒ Periodic Summary Report (*year*): 2014 Annual Report

☐ Data Submittal (*month and year per Condition #7 of Permit*):

Check each box where the answer to any of the following questions is "YES"

Sampling Results

☐ During the most recent monitoring event, were any new compounds detected at any sampling point?

Well/Compound:

☒ Are there any detections of contamination in drinking water that is untreated prior to use?

Well/Compound: R-3/339BHR (1,4-dioxane and/or toluene) – concentrations are consistent with historical results at both wells.

☐ Do compounds detected exceed AGQS? No

☐ Was free product detected for the first time in any monitoring point?

☐ Surface Water (*visible sheen*)

☐ Groundwater (*1/8" or greater thickness*)

Location/Thickness:

Contaminant Trends

☐ Do sampling results show an increasing concentration trend in any source area monitoring well?

Well/Compound:

☐ Do sampling results indicate an AGQS violation in any of the GMZ boundary wells?

Well/Compound:

Recommendations

☐ Does the report include any recommendations requiring DES action? (*Do not check this box if the only recommendation is to continue with existing permit conditions.*)

This form is to be completed for groundwater monitoring data submittals and periodic summary reports submitted to the New Hampshire Department of Environmental Services Waste Management Division.

SENSIBLE SOLUTIONS



Corporate Office

465 South Main Street
PO Box 639
Brewer, Maine 04412
207.989.4824

www.ces-maine.com



DRAFT 2014 ANNUAL SUMMARY REPORT GROUNDWATER MANAGEMENT PERMIT

Coakley Landfill

North Hampton, New Hampshire
NHDES Site #198712001

FOR

Coakley Landfill Group

1 Junkins Avenue
Portsmouth, NH 03801

**May 21, 2015
JN: 10424.003**

Report Prepared By:

CES, Inc.
640 Main Street
Lewiston, Maine 04240
207.795-6009



Engineers ♦ Environmental Scientists ♦ Surveyors

May 21, 2015

Groundwater Management Permits Coordinator
New Hampshire Department of Environmental Services
29 Hazen Drive
Concord, NH 03302-0095

**Re: DRAFT 2014 ANNUAL SUMMARY REPORT
Coakley Landfill – Breakfast Hill Road, North Hampton, New Hampshire**

On behalf of the Coakley Landfill Group (CLG), CES, Inc. (CES) is hereby submitting the DRAFT 2014 Annual Summary Report describing long-term environmental monitoring activities completed at the closed Coakley Landfill (the Site) in 2014. This report has been prepared to meet the requirements of the August 2014 Sampling and Analysis Plan prepared by CES, which incorporates requirements contained in the New Hampshire Department of Environmental Services (NHDES) Groundwater Management Permit (GMP, GWP-198712001-N-001).

Environmental monitoring results for the 2014 sampling event and trends in groundwater quality parameters are consistent with the conceptual site model, overall trends in groundwater quality, and overall findings discussed in the October 2013 Groundwater Management Permit Renewal Application prepared by Summit Environmental Consultants (a CES, Inc. company). In general, the compounds and locations that exceeded the regulatory thresholds during the 2014 long-term monitoring events are similar to historical monitoring events. Compounds reported at concentrations exceeding regulatory thresholds were limited to arsenic, manganese, tertiary butyl alcohol and 1,4-dioxane.

Groundwater quality is stable or improving at most locations, and 1,4-dioxane concentrations reported in off-site water supply wells R-3 and 339BHR continue to be stable and below regulatory thresholds.

This is the first annual report prepared under August 2014 Sampling and Analysis Plan (SAP). This report was developed based on requirements contained in the SAP and comments from the agencies on the draft 2013 Annual Report. This report includes several components/revisions that were not included in previous annual reports, including a status update and historical data tables for contaminants of concern, reporting metals in milligrams per liter, and additional time series summary plots.

Please contact either of the undersigned with any questions or comments regarding this report.
Sincerely,

CES, Inc.

Stephen B. Marcotte, P.G.
Project Manager

Michael A. Deyling, P.G.
Senior Project Geologist

SBM/MAD/jna
Attachments

cc: Peter Britz, Coakley Landfill Group
Gerardo Millan-Ramos, EPA

Groundwater Management Permits Coordinator | 05.21.15 | 10424.003-01

**2013 ANNUAL SUMMARY REPORT
GROUNDWATER MANAGEMENT PERMIT
COAKLEY LANDFILL – NORTH HAMPTON, NEW HAMPSHIRE
NHDES SITE #198712001**

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**2014 ANNUAL SUMMARY REPORT
GROUNDWATER MANAGEMENT PERMIT
COAKLEY LANDFILL – NORTH HAMPTON, NEW HAMPSHIRE
NHDES SITE #198712001**

SECTION 1 | INTRODUCTION

On behalf of the Coakley Landfill Group (CLG), CES, Inc. (CES) conducted the 2014 semi-annual environmental monitoring event at the closed Coakley Landfill located in North Hampton, New Hampshire. CES conducted the monitoring event in accordance with the August 2014 Sampling and Analysis Plan (SAP) prepared by CES, which incorporates by reference the New Hampshire Department of Environmental Services (NHDES) Hazardous Waste Remediation Bureau Master Quality Assurance Project Plan (HWRB Master QAPP) Revision 1 dated February 2014.

CES performed the field sampling work and reporting, Eastern Analytical, Inc. (EAI) of Concord, New Hampshire performed the laboratory analyses and Kestrel Environmental Technologies of Freeport, Maine completed the Tier 1 Plus Data Validation.

1.1 Background

The closed Coakley Landfill Site consists of approximately 107 acres of land located within the Towns of Greenland and North Hampton, New Hampshire. The actual landfill area is located in the southern portion of the Site and covers approximately 27 acres of land located in North Hampton, as shown on the Site Location Map (Figure 1) and Site Plan (Figure 2). The landfill area is located approximately 700 feet to the west of Lafayette Road (US Route 1), 2,500 feet to the south of Breakfast Hill Road, and 3,800 feet to the north of North Road. The Boston and Maine Railroad rail corridor is situated along the western boundary of the Site. The landfill borders farmland, undeveloped forests and wetlands to the north and west, and commercial and residential properties to the east and south.

Environmental monitoring at the Coakley Landfill is separated into two areas, or Operable Units. Operable Unit 1 (OU-1) includes the area in the immediate vicinity of the landfill where source control actions were completed to reduce impacts to surface water and groundwater quality and eliminate threats possibly posed by direct contact with or ingestion of contaminated media at the Site. Operable Unit 2 (OU-2) includes the area beyond landfill where the objective is to monitor the natural attenuation of water quality impacts and minimize exposure to potential receptors caused by groundwater and surface water migrating away from the Site.

Long-term monitoring at the Coakley Landfill has been ongoing since the remedial actions were completed in Fall 1998. The long-term monitoring of groundwater, surface water and sediment quality following landfill capping and site closure was initially conducted in accordance with the 1999 Environmental Monitoring Plan (Aries, 1999). Over time, the scope of environmental monitoring activities has been modified, and sediment and water quality monitoring is currently performed in accordance with the agency-approved August 2014 SAP (CES, 2014b)

The New Hampshire Department of Environmental Services (NHDES) issued a Groundwater Management Permit (GMP) GWP-198712001-N-001 for the Coakley Landfill site for a five-year term on June 19, 2008. The GMP includes a provision for the long-term monitoring of groundwater and created a Groundwater Management Zone (GMZ) that restricts property owners from extracting groundwater for potable use. NHDES issued a GMP renewal for a five-year term on January 7, 2014 which includes an expanded GMZ and requires the installation of two additional overburden/bedrock monitoring well couplets in the GMZ expansion area (an access agreement to install the wells is being negotiated). The NHDES GMP ("the 2014 GMP") requires that groundwater in the GMZ be monitored at specific locations, that the results be compared to NHDES Ambient Groundwater Quality Standards (AGQs), some of which are different than EPA's site-specific standards (Interim Cleanup Levels [ICLs] and Primary Drinking Water Standard Maximum Contaminant Levels [MCLs]). This report considers both EPA-established ICLs/MCLs and NHDES AGQs.

Two water supply wells (R-3 and 339BHR) were sampled in February and October 2014 in accordance with the 2014 GMP (a semiannual requirement which was incorporated into the August 2014 SAP) for analysis of total arsenic, total manganese, volatile organic compounds (VOCs) and 1,4-dioxane using a low level detection limit methodology (Method 8260B SIM). VOC and 1,4-dioxane results for February and October 2014 were consistent with previous sampling events. No ICL/AGQS exceedances occurred at R-3 and 339BHR. Results for the February 2014 sampling event were previously transmitted to the agencies, and a copy of the report is included as Appendix A. Results of the October 2014 event are described in this report.

This report provides an overview of the sample collection and analyses conducted for the September/October 2014 Annual monitoring event. The information presented in this report includes: sampling locations, sample collection protocols, quality assurance/quality control (QA/QC) procedures and results, summary of the analytical results, summary of ICL/AGQS exceedances, discussion of historical trends, and conclusions and recommendations.

This report was developed based on requirements contained in the SAP and comments from the agencies on the draft 2013 Annual Report. This report include several components/revisions that were not included in previous annual reports, including a status update and historical data tables for contaminants of concern, reporting metals in milligrams per liter, and additional time series summary plots.

The constituents of concern (COCs) and associated NHDES-established AGQS and EPA-established ICLs are summarized in the table below; status updates for the COCs are provided in Section 5.6.

Constituents of Concern and Associated Cleanup Criteria			
PARAMETER	Chemical Abstract Service Registry Number (CAS No.)	NHDES Ambient Groundwater Quality Standard (AGQSSs)	EPA Record of Decision Interim Cleanup Levels (ICLs)
Benzene	71-43-2	5 ug/L	5 ug/L
Chlorobenzene (Monochlorobenzene)	108-90-7	100 ug/L	100 ug/L
Tetrachloroethene (PCE, Tetrachloroethylene)	127-18-4	5 ug/L	3.5 ug/L
Tetrahydrofuran (THF)	109-99-9	154 ug/L	154 ug/L
1,2-Dichloropropane	78-87-5	5 ug/L	5 ug/L
2-Butanone (MEK, Methyl Ethyl Ketone)	78-93-3	4,000 ug/L	200 ug/L
Diethyl phthalate ¹	84-66-2	--	2,800 ug/L
Trans-1,2-dichloroethene (trans DCE)	156-60-5	100 ug/L	100 ug/L
Phenol ¹	108-95-2	4,000 ug/L	280 ug/L
1,4-dioxane	123-91-1	3 ug/L	--
Tertiary butyl alcohol (TBA, tert-butyl alcohol)	75-65-0	40 ug/L	--
Antimony	7440-36-0	6	6
Arsenic	7440-38-2	10	10
Beryllium	7440-41-7	4	4
Chromium	7440-47-3	100	50
Lead	7439-92-1	15	15
Manganese	7439-96-5	840	300
Nickel	7440-02-0	100	100
Vanadium	7440-62-2	--	260

Notes:

ug/L = micrograms per liter (part per billion)

mg/L = milligrams per liter (parts per million)

1. In May 1998 and April 1999, groundwater samples were submitted for analysis of semi-volatile organic compounds (SVOCs) and no exceedances were reported; therefore, SVOCs were removed from the long-term monitoring plan after April 1999.

SECTION 2 | SAMPLE COLLECTION

The August 2014 SAP requires annual sampling and analysis in August of each calendar year at thirty-two groundwater monitoring wells, five off-site water supply wells, three surface water sampling locations, two sediment sampling locations, and one leachate sampling location. In addition, depth to groundwater level measurements are required at five additional monitoring wells during the annual sampling event.

Tables summarizing the sample collection locations, sampling methods and laboratory analyses are included in Appendix B (SAP Tables 3-3 through 3-10). Sampling locations are identified on Figure 2.

The Fall environmental monitoring event, typically completed in August, was completed between September 29 and October 3, 2014 following approval of the August 2014 SAP by EPA/NHDES on September 25, 2014.

NHDES and EPA performed a Technical Systems Audit during equipment calibration and groundwater sampling activities on October 1, 2014. EPA/NHDES audit findings were presented in two separate October 2014 Technical Systems Audit reports transmitted to CLG in an EPA letter dated December 17, 2014. A response to the EPA/NHDES audit findings will be provided under separate cover.

2.1 Groundwater Level Monitoring

Prior to the collection of groundwater samples, CES measured depth to groundwater with an electronic water level meter capable of measuring in 0.01 foot increments. Depth to ground water measurement field sheets and a table summarizing depth to water level measurements and corresponding water level elevation data for the monitoring event are presented in Appendix C. Historical groundwater elevation measurements are summarized in Table 1.

2.2 Well Depth Monitoring

The August 2014 SAP requires measurement of well depths during the sampling event prior to EPA 5-Year Reviews. Well depths were not required to be collected during the 2014 sampling event.

The next round of well depth measurements is scheduled for the August 2015 event which is associated with EPA's 2016 5-Year Review.

2.3 Well Integrity Inspection

CES completed a well integrity inspection during the September/October 2014 sampling event and copy of the well integrity field sheets are included in Appendix B. CES notified CLG of the results of the well integrity inspection in a letter dated October 15, 2014. The following corrective actions were identified.

- ◆ As noted in the 2013 Annual Report, the protective casing caps for the majority of the FPC-series wells needed maintenance. The protective casings for FPC-series wells were repaired during the synoptic water level monitoring event on September 29, 2014, with the exception of FPC-2A, FPC-2B, FPC-9A, FPC-9B and FPC-9C, which were repaired by CES on May 20, 2015
- ◆ A new surface seal should be installed at FPC-2A. This is an inadvertent omission from the August 2013 well integrity inspection reports. Note that the requirement for collecting groundwater samples at well cluster FPC-2 was eliminated prior to the August 2013 event. A new surface seal was installed on FPC-2A and FPC-2B on May 20, 2015.
- ◆ A small nick in the road box at FPC-11C was observed – the nick is presumably due to snow plowing. There was no evidence of surface water / stormwater infiltrating the road box. However, the road box should be repaired. Note that the SAP only requires depth to water level monitoring at FPC-11C. The road box was repaired using a bead of silicon caulking on May 20, 2015.
- ◆ Replacement locks were placed on several wells.

2.4 Field Parameter Monitoring

Field parameter water quality meters were calibrated in accordance with SOP-9 Calibration of YSI and Hach Field Instruments included in the August 2014 SAP. CES measured field parameters including pH, Oxidation Reduction Potential (ORP), Temperature, Specific Conductance, and Dissolved Oxygen using a YSI-600XL water quality meter with a 250 milliliter flow-through cell and turbidity using a Hach 2100Q turbidity meter. Meters were calibrated in the office prior to using at the Site, every day prior to sampling, and a post-sampling check was completed at the end of every sampling day.

Equipment calibration logs are included in Appendix C. Field parameter measurements were recorded on field sheets and final readings were incorporated into Table 2 (OU-1 and OU-2 Groundwater Monitoring Wells), Table 4 (Off-Site Water Supply Wells), and Table 5 (Surface Water).

Erratic pH readings occurred during the sampling at OP-2; however, the post calibration checks were compliant. Stable pH readings of 6.4 were reported for several consecutive intervals prior to the occurrence of erratic readings. A pH of 6.4 (qualified) is provided on Table 2 and is considered representative for well OP-2. A replacement YSI-600XL water quality meter was used for subsequent sampling. The equipment vendor determined that the erratic pH readings which occurred during sampling at OP-2 were due to a failed o-ring seal between the sonde and the meter housing.

2.5 Groundwater Sample Collection

The August 2014 SAP includes the collection of groundwater samples from thirty-two (32) monitoring wells located in OU-1 and OU-2, and five (5) off-site water supply wells. Note that while thirty-two (32) monitoring wells are identified in the SAP as groundwater sampling locations, FPC-5A was not sampled due to well integrity issues and according to conditions stated in the SAP (Appendix A, SAP Table 3-6).

CES collected groundwater samples from eleven (11) monitoring wells located in OU-1, twenty (20) monitoring wells in OU-2 and four (4) off-site water supply wells. The following deviations from the SAP groundwater sampling plan occurred during the September/October 2014 sampling event:

- ◆ Consistent with previous monitoring events, off-site water supply well R-5 was not sampled because the home is not occupied and the water system is out of service.
- ◆ Consistent with the SAP, well FPC-5A was not sampled due to well integrity issues.

Groundwater samples were collected in accordance with the site-specific Standard Operating Procedures (SOPs) listed in the August 2014 SAP. The sampling methodology used at each sampling location is listed in Appendix A (SAP Tables 3-5, 3-6 and 3-7). Methodologies used for collection of groundwater samples are summarized below:

- ◆ Twenty-seven (27) monitoring wells were sampled with a peristaltic pump using a low-flow sampling methodology (*SOP-4 Low Flow Sampling Using a Peristaltic Pump*);

- ◆ One (1) monitoring well (FPC-11B) was interval sampled with a peristaltic pump (*SOP-5 Groundwater Sampling – Peristaltic Pump Interval Sampling*) to determine whether contaminant stratification is present and to determine the appropriate depth of the tubing intake for future monitoring events;
- ◆ Three (3) monitoring wells (AE-1A, AE-1B and MW-4) were sampled with a bailer (*SOP-3 Sampling with a Bailer*). *Note that this was done because the depth to water level at these wells exceeds the suction lift limit of a peristaltic pump;* and
- ◆ Four (4) off-site water supply wells were sampled in accordance with *SOP-7 Drinking Water Supply Well Sampling Procedures*.

In accordance with recommendations made in the Draft 2013 Annual Report (Summit, 2014), new sampling tubing was installed at the wells which were interval sampled in August 2013 and at OP-2. In addition, new (single-use) sample tubing for interval sampling was installed at FPC-11B at least 72-hours prior to sample collection; the tubing placed in FPC-11B was removed immediately after interval sample collection was completed and new sampling tubing will be installed at FPC-11B prior to the next sampling event. In accordance with the SAP, sample tubing consisted of 1/4-inch inner diameter 3/8-inch outer diameter low density polyethylene (LDPE) tubing fitted with Masterflex #15 & #16 silicon tubing at the surface. The LDPE tubing was firmly attached to well risers with zip ties, or equivalent.

Groundwater samples were collected in accordance with site-specific SOPs, placed into laboratory-supplied sampling containers in the order specified in the SOPs, and packed in loose ice for transport under chain-of-custody protocol to EAI. EAI analyzed the samples for the list of parameter identified in Appendix A (SAP Tables 3-3 through 3-10). Copies of groundwater sample collection logs are included in Appendix C.

In the recent past, overburden and bedrock groundwater samples were submitted for total metals analysis, and samples from select locations were filtered at the time of sample collection and submitted for analysis of dissolved manganese and dissolved iron. This practice was modified beginning in 2014, in accordance with the SAP, to report dissolved metal results for overburden groundwater and total metals results for bedrock groundwater. Consistent with historical sampling methodologies, samples collected for analysis of VOCs/1,4-dioxane were not filtered at the time of sample collection.

Analytical laboratory results are presented in Table 2 (OU-1 and OU-2 Groundwater Monitoring Wells), Table 3 (Interval Sampled Wells), and Table 4 (Off-Site Water Supply Wells).

2.6 Surface Water and Sediment Sample Collection

On October 3, 2014, a surface water and sediment sample and associated duplicates were collected at SW-5 and SED-5, and a sediment sample was collected at SED-4. Similar to previous Fall monitoring events, samples were not collected at surface water sampling locations SW-4 and SW-103 due to insufficient water. Samples were collected in accordance with *SOP-6 Surface Water, Leachate and Sediment Sampling Procedures*.

A Sampling Worksheet summarizing weather conditions and field parameter measurements, along with photographic documentation of the conditions at SW-4/SED-4, SW-5/SED-5 and SW-103 is provided in Appendix C.

Sediment and surface water samples were collected in accordance with site-specific SOPs, placed into laboratory-supplied containers in the order specified in the SOPs, and packed in loose ice for transport under chain-of-custody protocol to EAI. EAI analyzed the samples for the list of parameters contained in Appendix B (SAP, Table 3-8).

A description of the conditions at the surface water and sediment sampling locations is provided below (also refer to photographs in Appendix C):

SW-4/SED-4

SW-4/SED-4 is located in a broad and flat pit-and-mound forested wetland approximately 500 feet west of the railroad. The soils at this location are composed predominately of leaf litter and twigs over poorly decomposed organic sediments. No evidence of channelization or the deposition of mineral sediment was observed in the vicinity of SW-5/SED-5. The leaf litter was removed and the underlying organic soils were sampled.

SW-5/SED-5

SW-5/SED-5 is located roughly between the northwestern boundary of the landfill (i.e., leachate seep L-1) and the railroad. The area between the landfill and railroad is wetland with very thick phragmites grass. The ground in the area of SW-5/SED is covered by a thick layer of partially decomposed phragmites grass. Channelization or ponded water was not observed in the area where SW-5/SED-5.

An area of ponded water along the margins of the phragmites stand was observed approximately 50 feet from the rail line in the vicinity of SW-5/SED-5, at the location identified on Figure 2 as SED-5/SW-5 (2014). The leaf litter was removed from the edge of the ponded water area where three to five-inches of organic material were observed above gray clay. There was no visually apparent evidence of mineral sediment deposition at this location. The samples were composed predominately of organic materials; however, some of the underlying clay was incorporated into the samples.

SW-103

SW-103 is located in a dense phragmites stand where no evidence of channelization or standing water was observed. A sample was not collected due to insufficient water in the vicinity of where SW-103 is identified on the Figure 2.

Analytical laboratory results are presented in Table 5 (Surface Water – SW-5) and Table 6 (Sediment SED-4 and SED-5).

2.7 Leachate Seep Sample Collection

The leachate seep sampling point L-1 was not collected due to insufficient water. Photographic documentation is provided in Appendix C.

2.8 Quality Assurance / Quality Control (QA/QC) Samples

The Quality Assurance / Quality Control (QA/QC) sampling requirements are summarized in Appendix B (SAP Table 4-4). QA/QC samples collected during the September/October 2014 sampling event are summarized below.

- ◆ Field Duplicate samples were collected at four monitoring wells (MW-4, AE-3A, GZ-105, and FPC-11B), water supply well R-3, surface water sampling location SW-5 and sediment sampling location SED-5.
- ◆ Additional aliquots for Matrix Spike and Matrix Spike Duplicate analyses were collected at two groundwater monitoring wells (MW-8 and AE-3A) and at surface water sampling location SW-5.
- ◆ Trip Blanks for volatile organic compounds (VOCs) and/or low-level 1,4-dioxane were included in each of the coolers submitted to EAI.
- ◆ A Field Blank (water used for final decontamination rinse) was submitted for analysis of VOCs (8260B and 524.2), target analyte list (TAL) total metals, and 1,4-dioxane (8260B SIM).
- ◆ Five Equipment (Rinsate) Blanks were collected during the September/October 2014 sampling event:
 - An electronic water level meter Equipment Blank was collected after well MW-8 was sampled and the water level meter was decontaminated.
 - The brass water supply well sampling apparatus Equipment Blank was collected prior to sampling water supply wells.
 - The sediment Equipment Blank was collected after all sediment samples were collected and the sediment sampling equipment (stainless steel bowl and spoon) was decontaminated.
 - An Equipment Blank was collected for the single-use inline 0.45 micron filter used to collect samples for analysis of dissolved metals at overburden monitoring wells sampled with a peristaltic pump.
 - An Equipment Blank was collected for the single-use 0.45 micron filter/syringe setup used to collect samples for analysis for dissolved metals at surface water sampling locations and at overburden monitoring wells sampled using a bailer.

Results of QA/QC samples are discussed in Section 3.1 of this report.

SECTION 3 | QUALITY ASSURANCE/QUALITY CONTROL RESULTS

A component of the SAP is the implementation of a QA/QC program, including both field and office elements. Field QA/QC activities were conducted to verify that sample collection, handling, and storage methods are adequate to ensure sample integrity. Office QA/QC activities focus on the data evaluation to assess whether the laboratory data are complete and representative of site conditions.

The data quality objectives and associated validation requirements are specified in the SAP and include:

- ◆ Review of field equipment calibration data and beginning and end of the day checks;
- ◆ Review of raw data and field notes for outliers or inconsistencies that may indicate a problem with the equipment or sampling procedure;
- ◆ Review of the chain of custody forms for correctness and completeness;
- ◆ Review of the chain of custody forms to ensure that each cooler contains temperature blanks and the proper trip blanks for both VOCs and 1,4-Dioxane and to ensure that the correct sample handling protocols are followed;
- ◆ Review of field sampling worksheets to ensure that all field data and parameters were collected and documented correctly and accurately according to proper protocols;
- ◆ Review of relative percent difference (RPD) for duplicate samples to assess whether the sampling methods produce reproducible results;
- ◆ Completion of a US EPA Region I Tier 1 Plus Data Validation to evaluate the laboratory reports for completeness, assess the results of QA/QC samples analyzed with field samples, confirm that all sample tests were performed within method holding times, and the qualification of laboratory data based on EPA guidelines for data validation listed in the SAP.

Results of the QA/QC activities are presented in Sections 3.1 and 3.2. Analytical laboratory reports are provided in Appendix D.

3.1 Field QA/QC Activities

3.1.1 Trip Blanks

Trip Blanks for volatile organic compounds (VOCs) and/or 1,4-dioxane were included in each of the coolers submitted to EAI containing samples for analysis of VOCs or 1,4-dioxane. A total of nine Trip Blanks were analyzed for VOCs, including seven using EPA Method 8260B and two using EPA Method 524. A total of five Trip Blanks were analyzed for 1,4-dioxane. EAI did not detect concentrations of VOCs and/or 1,4-dioxane above the laboratory reporting limits in any Trip Blanks submitted during the September/October 2014 sampling event.

3.1.2 Equipment Blanks and Field Blanks

CES collected one Field Blank and five Equipment Blanks for analysis of parameters identified in Appendix B (SAP Table 4-4). Refer to Section 3.2.3 (Tier 1 Plus Data Validation) for a discussion of Equipment and Field Blank results.

3.1.3 Field Sampling Data Review

Field sampling sheets included in Appendix C were reviewed for completeness and adherence to sampling SOPs included in the SAP. Field sampling data show that objectives were met at sampling points, with the following exceptions:

- ◆ FPC-6A is identified in the SAP as a 1.5-inch diameter well point; however, it is a 2-inch diameter well point. SAP Table 3-3 will be revised accordingly.
- ◆ The pumping rate at FPC-7B was 76 milliliters per minute (ml/min) and drawdown exceeded the goal of 0.3 feet for low-flow purging. The pumping rate minimum of 50 ml/min is stated in the SOP. Attempts to adjust the flow rate down to 50 ml/min failed even though lower flow rates were achieved at other wells with the same pump. Discussions with the equipment vendor where CES purchased the equipment indicate that it may be due to moisture in the throttle (rheostat) or pump head / interior gears lubrication, or a combination of these factors.

Corrective Actions

CES will have a vendor maintain/lubricate the peristaltic pumps utilized at the Site and confirm that the pumps can pump at a rate of 50 ml/min prior to sampling. The well construction information for FPC-6A will be updated in SAP Table 3-3.

3.1.4 Other Field QA/QC Issues

There were no Other QA/QC issues identified during completion of the September/October 2014 sampling event.

3.2 Office QA/QC activities

Office QA/QC activities, as required by the SAP, include verification of chain-of-custody protocols and sample holding times, verification that all field and laboratory analyses were completed, and completion of a Tier I Plus data validation of the laboratory reports in accordance with the EPA's Region I Data Validation Guidelines.

The two analytical laboratory reports associated with the September/October 2014 sampling event are provided in Appendix D.

3.2.1 Chain-of-Custody Forms

CES and Kestrel reviewed the chain-of-custody forms for completeness and/or lapses in custody. The forms were found to be complete and no lapses in chain-of-custody protocol were identified, with the following exception:

- ◆ The temperature of three of the four coolers upon receipt at the lab was missing from the chains of custodies numbered 2 through 6 in data package 136602, although four coolers with separate Temperature Blanks were submitted. However, it is noted in the report that samples were received by the laboratory in a cooler in ice.

Corrective Action

Prior to the next sampling event, CES will notify EAI of their failure to record the temperature blank temperature upon sample receipt and that the temperature for each cooler must be documented on the chain of custody associated with each cooler.

3.2.2 Omitted Field and Laboratory Analyses

CES reviewed field sampling sheets and EAI laboratory reports and found that the required field parameters were collected and the required laboratory analyses for each of the samples collected were completed, with no exceptions.

3.2.3 Tier I Data Validation

Kestrel Environmental Technologies, Inc. (Kestrel) of Freeport, Maine, performed a Tier I Plus validation of the EAI laboratory reports under contract to CES and in accordance with the *EPA Region I Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (EPA, 2013), *National Functional Guidelines for Superfund Organic Methods Data Review* (EPA, 2014a), and *National Functional Guidelines for Superfund Inorganic Methods Data Review* (EPA, 2014b).

Kestrel evaluated the laboratory reports for completeness, assessed the results of QA/QC samples analyzed with field samples, and verified that all sample tests were performed within method holding times. The Tier I Data Validation summary report is provided in Appendix E.

A summary of the finding presented in Kestrel's Data Evaluation Report (Appendix E) is provided below. The laboratory reports were complete, and the data was deemed acceptable for its intended purpose. The following data qualifications were applied based on data validation results:

- ◆ The Method 524.2 vinyl acetate results for samples Trip Blank-524.2 (136376.09), FB-DI WATER, Trip Blank-524 (136602.24), DW-EB-APPARATUS, DW-415BHR, DW-R3, DW-R3-DUP, DW-339BHR and DW-346BHR were reported as non-detect (U) and are qualified as non-detect estimated (UJ) due to the potential for low bias indicated by the laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries.
- ◆ The Method 524.2 dichlorodifluoromethane results for Trip Blank-524 (136602.24), DW-EB-APPARATUS, DW-415BHR, DW-R3, DW-R3-DUP, DW-339BHR and DW-346BHR were reported as non-detected (U) and are qualified as non-detect estimated (UJ) due to the potential for low bias indicated by the LCS recovery.
- ◆ The manganese results for samples GW-FPC-11B-59TOC, GW-FPC-11B-68TOC, GW-FPC-11B-64TOC and GW-FPC-11B-64TOC-DUP were qualified as estimated, biased low (J-) due to the matrix spike recovery for parent sample GW-FPC-11B-59TOC.
- ◆ The calcium, magnesium and sodium results for S-SED-5 and field duplicate S-SED-5-DUP were qualified as estimated (J) due to the precision results for the field duplicate (> 50% relative percent difference [RPD]).

- ◆ All positive sample results for the sediment samples were qualified as estimated (J) and non-detected results were qualified as non-detect estimated (UJ) due to low total solids of 12.2% for S-SED-4, 20.9% for S-SED-5 and 19.2% for S-SED-5-DUP. EPA guidelines require qualification if percent solids are less than 30%.
- ◆ The non-detect (U) results for 1,4-dioxane analyzed by Method 8260B were qualified as non-detect estimated (UJ); the positive results are qualified as estimated (J). The relative response factor (RRF) is below the advisory guidance; however, recoveries of the continuing calibration verification (CCV) standards and the LCS/LCSD samples indicate adequate accuracy to not reject the non-detect results.

The systemic problems detected during the Tier 1 Plus review of this data set involve the vinyl acetate, the 1,4-dioxane method 8260B results, and the total percent solids for the sediment samples. All vinyl acetate results for this data set may have a low bias; the potential for false negative results exists. The 1,4-dioxane results from the method 8260B analysis are all qualified as either non-detected estimated (UJ) or estimated (J) due to RRF results below advisory criteria for initial calibrations and continuing calibrations; the method 8260B SIM results should be used when available. Method 8260B SIM results are available for the majority of the locations where Method 8260B or Method 524 VOC analyses were completed. All results for the sediment samples are qualified as estimated (J) or non-detected estimated (UJ) due to low percent total solids. The Data Evaluation Report recommended that for future sampling efforts, decanting the sediment samples should be considered (samples were decanted see further discussion in Section 4.4).

No additional systemic problems were detected during the Tier 1 Plus data review of this data set completed by Kestrel. None of the data collected for this project was qualified as rejected. Completeness is 100%.

There were 2,575 target analyte results reported for primary and duplicate samples; 96.0% are accepted without qualification. Only 104 primary/duplicate sample results, or 4.0% of the reported data, are qualified due to non-compliant QC sample results. The majority of the sample results qualified due to non-compliant QC results were qualified due to the RRF for 1,4-dioxane by method 8260B (note that QC compliant Method 8260B SIM results for 1,4-dioxane are available for the majority of the locations sampled for VOC analysis) and low percent total solids for sediment samples. No results were qualified as rejected (R).

Corrective Actions:

Systemic problems with the results for vinyl acetate and 1,4-dioxane by 8260B are minor and no corrective actions are warranted.

Sediment sample results were qualified due to low percent solids (< 30%). The sediment samples were decanted during sample collection per SOP-6. Refer to Section 4.4 for additional discussion of sediment sample results.

3.2.4 Field Duplicates

Primary and duplicate samples were collected at monitoring wells MW-4, AE-3A, GZ-105, FPC-11B (64 feet below top of casing), off-site water supply well R-3, surface water sampling location SW-5 and sediment sampling location SED-5 for the purposes of analytical data qualification (as previously discussed in Section 3.2.3) and for field

sampling procedure QA/QC purposes, as discussed below. Table 7 presents the relative percent differences (RPDs) for parameter concentrations detected in the primary and duplicate samples. RPDs were compared to measurement performance criteria goals for aqueous duplicates ($\pm 30\%$ RPD) or solid duplicate ($\pm 50\%$), as listed in SAP/QAPP. A summary of field duplicate results is provided below:

Aqueous Duplicates

- ◆ MW-4: All RPDs met the $\pm 30\%$ measurement performance criteria goal;
- ◆ AE-3A: All RPDs met the $\pm 30\%$ measurement performance criteria goal.
- ◆ GZ-105: RPDs met the $\pm 30\%$ measurement performance criteria goal, with the exception of tetrahydrofuran which had an RPD of 40%. THF concentrations were reported at 20 ug/L and 30 ug/L with a reporting detection limit of 10 ug/L.
- ◆ FPC-11B-64TOC: All RPDs met the $\pm 30\%$ measurement performance criteria goal;
- ◆ R-3: All RPDs met the $\pm 30\%$ measurement performance criteria goal; and
- ◆ SW-5: All RPDs met the $\pm 30\%$ measurement performance criteria goal;

The consistency of aqueous parameter concentration values between primary and duplicate samples for the majority of the parameters analyzed shows that laboratory procedures and analyses, and sampling procedures, produced reproducible values. The RPD for tetrahydrofuran at GZ-105 exceeding 30% is likely due to precision of laboratory analyses when concentrations are reported near the detection limit (results were not qualified by the data validator for this reason). Reported concentration of tetrahydrofuran at GZ-105 (20 and 30 ug/L) are well below the ICL/AGQS (154 ug/L).

Non-Aqueous Duplicate

- ◆ SED-5: RPDs met the $\pm 50\%$ measurement performance criteria goal, with the exception of calcium (65%), magnesium (54%) and sodium (55%).

The majority of non-aqueous parameter values for SED-5 (20 of the 23 analytes - 89%) met the $\pm 50\%$ measurement performance criteria goal. RPD measurement performance criteria exceedances for calcium, magnesium and sodium may be due to sampling matrix inhomogeneity or laboratory methods, which may be biased by the low percent solids as noted during the Tier 1 Plus data validation. Standards for sediment have not been established for calcium, magnesium and sodium. Gray clay was observed during SED-5 sample collection; therefore, it is possible that the RPD measurement performance criteria exceedances and variability of the primary/duplicate results as a whole at SED-5 are due to the incorporation of differing amounts of clay into the original and duplicate samples.

3.2.5 Matrix Spike/Matrix Spike Duplicates

Matrix Spike and Matrix Spike Duplicate (MS/MSD) samples were collected at groundwater monitoring wells MW-8 and AE-3A, and at surface water sampling location SW-5. MS/MSD results were reviewed as part of the Tier 1 Plus data validation (Section 3.2.3). All MS/MSD RPD criteria for field samples were met.

SECTION 4 | SUMMARY OF RESULTS

4.1 Groundwater Elevations

Groundwater potentiometric surface contour maps were developed for overburden groundwater (Figure 3) and bedrock groundwater (Figure 4) using data collected on September 29, 2014. Consistent with data generated during previous monitoring events, the following observations can be made from the overburden and bedrock groundwater potentiometric surface maps:

- ◆ Bedrock and overburden groundwater elevations in proximity to the landfill area support predominantly westward flow away from the landfill area toward a prominent north-northeast/south-southwest trending valley where the Little River and Berry's Brook are located.
- ◆ Bedrock and overburden groundwater elevations in the north-northeast/south-southwest trending valley west of the Site support the presence of a flow divide, with the direction of groundwater flow changing to north-northeast and south-southwest, along the trends of Berry's Brook and Little River, respectively.
- ◆ Water level elevations in overburden wells MW-4 and OP-5 along the eastern boundary of the landfill indicate an east/west shallow overburden flow divide is likely present proximal to the eastern boundary of the landfill.

Upward and downward hydraulic gradients are present at many of the well couplets monitored at the Site. However, the likelihood that the gradients lead to a significant component of vertical flow within the hydrogeological units is dependent on the hydrogeological conditions present at each location. The following general statements are based on groundwater elevation measurements collected on September 29, 2014:

- ◆ Vertical hydraulic gradients at couplets AE-1 are negligible.
- ◆ Vertical hydraulic gradients at couplets GZ-123/125, AE-2, AE-3, FPC-2 and FPC-6 support a component of upward flow.
- ◆ Vertical hydraulic gradients at couplets MW-5, AE-4, FPC-7 and FPC-8 support a component of downward flow.
- ◆ Vertical hydraulic gradients at couplets FPC-9 and FPC-11 support a component of downward flow from outwash overburden through the underlying marine unit, with no significant component of vertical flow between till and bedrock units.
- ◆ Vertical gradient supporting a component of upward flow from bedrock to the till unit are present in proximity of railroad and the wetland area west of the landfill (headwaters of Little River and Berry's Brook). Whereas vertical gradients support a component of downward flow are present in areas to the east and west of the wetland area.

4.2 Groundwater Analytical Results

Analytical results for groundwater monitoring wells sampled during the September/October 2014 sampling event are provided in Table 2 (OU-1 and OU-2

Groundwater Monitoring Wells). Analytical results for off-site water supply wells sampled since January 2008 are provided in Table 4 (Off-site Water Supply Wells).

A historical summary of analytical results for contaminants for concern at groundwater monitoring points (monitoring wells and water supply wells) is provided in Table 9. The August 2014 SAP Section 6.2 states that the contaminants of concern summary table (i.e., Table 9) should include data on detected contaminants of concern since the start of the remedy (September 29, 1999). However, laboratory reports prior to the November 2000 sampling event could not be located by the Group and the period of time summarized included November 2000 to September/October 2014.

Bedrock wells with screened intervals longer than 10 feet were interval sampled in August 2013 to determine whether contaminant stratification is present and to guide the depth of sampling for future events. FPC-11B was not sampled in August 2013 due to potential well integrity issues (damaged road box which may have allowed surface/storm water to enter the well). The road boxes for FPC-11A/B/C were repaired and interval samples were collected at FPC-11B on October 2, 2014. Interval sampling results for FPC-11B are provided in Table 3 and the results are discussed in Section 5.2.

In general, parameter concentrations reported for samples collected during the September/October 2014 sampling event are similar to previous results and no new VOC detections were reported in Site groundwater. 1,4-dioxane was analyzed for the first time at FPC-11B and reported at a concentration below the AGQS. Refer to Section 5.3 for a discussion of groundwater regulatory threshold exceedances.

4.2 Surface Water Analytical Results

A surface water sample was collected at SW-5. Similar to previous August monitoring events, samples at surface water sampling locations SW-4 and SW-103 were not collected due to insufficient water. Analytical results for SW-5 are summarized in Table 5. Results for samples collected in October 2014 indicate that water quality meets NHDES Surface Water Standards for acute and chronic exposure scenarios. Note that reporting detection limit (RDL) for zinc, silver and lead are consistent with RDLs specified in the SAP; however, they exceed the "default" NHDES Surface Water Standards for acute and/or chronic exposure scenarios (refer to Table 5).

Dissolved metal concentrations reported for 2014 were typically lower than results for total metals reported for previous sampling events.

4.3 Leachate Seep Analytical Results

Leachate seep L-1 was not sampled in September/October 2014 due to insufficient water.

4.4 Sediment Analytical Results

Sediment samples were collected at SED-4 and SED-5. A duplicate sample was also collected at SED-5. Analytical results for sediment samples and the National Oceanic and Atmospheric Administration Screening Quick Reference Tables (NOAA SQuiRT Tables) Threshold Effect Concentrations (TEC) standards for freshwater sediment applicable to this Site are summarized in Table 6.

As previously discussed in Section 3.2.3 and 3.2.4, all detections were qualified as estimated and all non-detects were qualified as having estimated detection limits due to

low percent solids in accordance with EPA analytical data validation criteria (i.e., lower than 30% solids by dry weight). Historical data shown in Table 6 indicates that percent solids less than 30% have been commonly reported in the past at SED-4 and SED-5; however, sediment data was not qualified based on the percent solid criteria by the data validator in previous reports.

Sediment at SED-4 and SED-5 is primarily organic material which has a high capacity to retain water. A review of soil taxonomy literature indicates that the saturated water (non-free draining) content in organic soils (fibric or hemic soils) on the basis of percent of oven-dry weight ranges from 450% to 3,000%. On this basis, changes to sampling procedures (i.e., trying to decant more) are not warranted as the low percent solids (by dry weight) are inherent to the matrix itself.

TEC exceedances were reported at SED-4 for cadmium, lead, mercury and zinc. TEC exceedances were reported at SED-5 for arsenic only, whereas TEC exceedances occurred at SED-5 (duplicate) for arsenic, chromium, copper, lead, nickel and zinc. A review of historical data for SED-4 and SED-5 indicates that the TEC exceedances reported for 2014 were similar to previous years. Note that historically, detection limits for cadmium and mercury were greater than TEC criteria.

SECTION 5 | ANNUAL DATA SUMMARY AND DISCUSSION

The SAP requires water quality sampling data be evaluated to identify spatial and temporal trends and the status of remedial objectives. The following evaluations were completed to assess these objectives.

- ◆ Preparation of groundwater potentiometric surface contour maps for overburden and bedrock groundwater.
- ◆ Preparation of time series plots for constituents of concern at wells where concentrations are currently or have recently exceeded ICLs or AGQs.
- ◆ Trend analysis for constituents of concern at wells where concentrations are currently or have recently exceeded ICLs or AGQs.
- ◆ Preparation of figures showing the vertical and lateral distributions of constituents of concern present at the Site that exceed ICLs or AGQs.
- ◆ Evaluation of interval sampling results for evidence of contaminant stratification and to establish the depth of tubing intake for future monitoring events.

5.1 Groundwater Potentiometric Surfaces

Overburden and bedrock groundwater flowing beyond the western margin of the landfill is affected by a flow divide located in a broad topographic saddle to the west of the landfill, which results in the bifurcation of groundwater flow into two distinct flow pathways along a prominent north-northeast/south-southwest trending valley. The north-northeastern flow pathway is situated within the watershed of Berry's Brook, which drains to the northeast across Breakfast Hill Road. The south-southwestern flow pathway is situated within the watershed of the Little River, which drains to the south-southwest across North Road.

In general, groundwater levels, flow direction, and hydraulic gradients determined using water level elevations from September 29, 2014 are consistent with those measured in previous annual sampling events.

5.2 Interval Sampling Results

Discussions with NHDES and EPA prior to the August 2013 sampling event indicated that the preferred sampling methodology for wells with screened intervals longer than 10 feet is a low-flow/low-stress sampling methodology with a tubing intake location selected based upon results of interval sampling for constituents of concern. In August 2013, interval samples were collected at 11 bedrock monitoring wells and submitted for analysis of total arsenic, total manganese, and 1,4-dioxane (the three primary constituents of concern at the Site). Interval sampling was also scheduled for a FPC-11B (the 12th well); however, samples were not collected because field observations indicated that failed seals on the protective road boxes may have allowed surface water from adjacent grassy and paved areas to infiltrate into the well casing. The road boxes for well cluster FPC-11 were repaired on January 10, 2014 and the wells were subsequently redeveloped and left to equilibrate until the September/October 2014 sampling event.

FPC-11B was interval sampled on October 2, 2014 in accordance with the SAP, such that all wells with screened intervals longer than 10 feet have now been interval sampled.

Table 3 presents interval sampling analytical results for FPC-11B, historical maximum depth to water level measurements and a proposed tubing intake location for FPC-11B chosen to coincide with the highest parameter concentrations. The purpose of interval sampling was to select the depth of tubing intake for future sampling events at wells with screened intervals greater than 10 feet. In general, the tubing intake depth for future sampling will be the interval showing highest concentrations for arsenic, manganese, or 1,4-dioxane. Comparing results for interval samples to results for previous low flow sampling is difficult due to: 1) the differences in hydraulic stresses applied during sampling; and 2) uncertainties regarding the locations of hydraulically active fractures, the component of vertical and horizontal flow between fractures, and the effect of the borehole itself on flow (the borehole is a discrete man-made high conductivity fracture). As such, a limited set of observations has been provided for FPC-11B and the comparability of interval sampling data to historic low flow sampling data for FPC-11B was assessed based on best professional judgment.

Conclusions drawn by CES based on the interval sampling results at FPC-11B include:

- 1,4-dioxane: No significant differences in 1,4-dioxane are apparent. 1,4-dioxane analyses using a low level detection limit methodology have not previously been completed at FPC-11B. This is the first detection of 1,4-dioxane at FPC-11B. The range of concentrations reported (1.0 to 1.4 ug/L) is below the AGQS (3 ug/L).
- Total Arsenic: No significant differences in total arsenic are apparent with concentrations ranging from 0.002 to 0.004 mg/L. Total arsenic concentrations in interval samples fall within the lower range of the values reported from low flow sampling in 2008 through 2012. The range of concentrations reported for interval samples is below the AGQS/ICL (0.01 mg/L).
- Total Manganese: Concentrations increase with depth from 0.92 mg/L to 2.3 mg/L. Concentrations were generally higher than the average (0.684 mg/L) and maximum (1.4 mg/L) concentrations reported at FPC-11B from 2008 to 2012.
- Future sampling of the FPC-11B should be conducted with a tubing intake at 68 feet below the top of casing to target the depth in the well with the highest manganese concentrations.

5.3 Groundwater Regulatory Threshold Exceedances

5.3.1 Monitoring Wells

Analytical results from overburden and bedrock monitoring wells (total of 31 monitoring wells) were tabulated and compared to EPA-established Interim Cleanup Levels (ICLs) and NHDES-established Ambient Groundwater Quality Standards (AGQSs). ICL and AGQS exceedances reported in groundwater samples collected during the September/October 2014 sampling event are similar to previous results. The number of ICL/AGQS exceedances in OU-1 and OU-2 are summarized in the right most columns on Table 2 and discussed herein.

Parameters reported at concentrations exceeding ICLs or AGQSS during the September/October 2014 event are summarized below.

Total/Dissolved Arsenic

Groundwater samples from thirty-one (31) monitoring wells were submitted for analysis of total or dissolved arsenic.

The ICL and AGQS for arsenic is 0.01 milligrams per liter (mg/L). ICL/AGQS exceedances occurred at the following sixteen (16) wells:

OU-1: MW-4, MW-5S, MW-9, MW-10, MW-11, OP-2, OP-5 and BP-4

OU-2: AE-1A, AE-2A, AE-2B, AE-3A, AE-3B, FPC-6A, FPC-9A and GZ-105

Total/Dissolved Manganese

Groundwater samples from thirty-one (31) monitoring wells were submitted for analysis of total or dissolved manganese.

The ICL for manganese is 0.3 mg/L. ICL exceedances occurred at the following twenty-two (22) wells:

OU-1: MW-4, MW-5D, MW-5S, MW-6, MW-8, MW-9, MW-10, MW-11, OP-2, OP-5 and BP-4

OU-2: AE-1A, AE-1B, AE-2A, AE-2B, AE-3A, AE-3B, FPC-6A, FPC-6B, FPC-11A, FPC-11B and GZ-105

The AGQS for manganese is 0.84 mg/L. AGQS exceedances occurred at the following thirteen (13) wells:

OU-1: MW-4, MW-5S, MW-6, MW-8, MW-9, MW-10, OP-2 and OP-5

OU-2: AE-2B, AE-3A, AE-3B, FPC-6A and FPC-11B

1,4-Dioxane

Groundwater samples from a subset of monitoring wells in OU-1 and OU-2 were submitted for analysis of 1,4-dioxane using a low level detection limit methodology, including 9 monitoring wells in OU-1 and 11 monitoring wells in OU-2 (including interval sampled well FPC-11B). The EPA has not established an ICL for 1,4-dioxane. The NHDES AGQS for 1,4-dioxane is 3 ug/L.

AGQS exceedances occurred at the following fifteen (15) wells:

OU-1: MW-4, MW-5D, MW-5S, MW-8, MW-9, MW-11 and BP-4

OU-2: AE-2A, AE-2B, AE-3A, AE-3B, FPC-5B, FPC-6A, FPC-6B and GZ-105

Tertiary-butyl alcohol (TBA)

Groundwater samples from a subset of monitoring wells in OU-1 and OU-2 were submitted for analysis VOCs (EPA Method 8260B NHDES Full List), including 5

monitoring wells in OU-1 and 12 monitoring wells in OU-2. The EPA has not established an ICL for TBA. The NHDES AGQS for TBA is 40 ug/L.

AGQS exceedances occurred at the two bedrock wells in OU-1 (MW-5D and MW-8). TBA was reported as Not Detected (ND) above laboratory detection limits at the remaining monitoring wells in OU-1 and OU-2.

The locations of these exceedances are consistent with past events. Reported concentrations are generally consistent with past events, the information provided in the 2013 GMP permit renewal application and results of the last annual sampling event (August 2013).

Other than arsenic, manganese, 1,4-dioxane and TBA, analyzed parameters were not reported at concentrations above their respective regulatory standards. Note that benzene ICL/AGQS exceedances have occurred at MW-8 and GZ-105 in the last five years. However, consistent with decreasing trends in benzene at these locations, no benzene exceedances occurred at monitoring wells sampled in September/October 2014. The highest benzene concentration reported during the September/October 2014 sampling event was at GZ-105 (duplicate sample result of 4 ug/L).

5.3.2 Off-Site Water Supply Wells

Analytical results for VOCs (EPA Method 524 NHDES Full List) and 1,4-dioxane using a low-level detection limit methodology (EPA Method 8260B SIM) for the four off-site water supply wells sampled were tabulated and compared to EPA-established ICLs and NHDES-established AGQSs. Results are summarized in Table 4.

Similar to results from previous monitoring events, no ICL or AGQS exceedances were reported for arsenic, 1,4-dioxane or VOCs at the four off-site water supply wells sampled. The manganese concentration at 339BHR (0.32 mg/L) slightly exceeded the ICL (0.3 mg/L), but is well below the AGQS (0.84 mg/L). The concentration of manganese at 339BHR continues to be consistent with what is considered to be typical of background bedrock water quality in the area, as discussed in previous site groundwater quality reports and assessments.

1,4-dioxane was reported as Not Detected above the laboratory detection limit of 0.25 ug/L in water supply well samples 415BHR and 346BHR. 1,4-dioxane was reported at very low concentrations close to the detection limit in two water supply wells (R-3 and 339BHR) at concentrations of 0.37 and 0.42 ug/L, respectively. 1,4-dioxane concentrations reported at R-3 and 339BHR are essentially equivalent to the concentrations reported in August 2013 and February 2014.

With the exception of a trace detection of toluene (1.8 ug/L) at 339BHR, all other VOCs analyzed by EPA Method 524 (NHDES Full List) were reported as Not Detected above laboratory detection limits. The concentration of toluene at 339BHR reported in September/October 2014 is well below the ICL/AGQS of 1,000 ug/L.

Other than 1,4-dioxane, the only two VOCs reported in off-site water supply wells samples collected since January 2008, were an isolated detection of methyl tert-butyl ether (MTBE) at R-3 in January 2008 and toluene at 339BHR in September/October 2014. Toluene and MTBE are gasoline constituents. Given the proximity of R-3 and 339BHR to Breakfast Hill Road and that 339BHR is located in a grassy parking lot island

downslope of a golf course parking lot, the trace amounts of toluene and MTBE reported at 339BHR and R-3, respectively, are most likely not attributable to the Coakley Landfill. Toluene and MTBE are not considered constituents of concern at the Coakley Landfill Site.

5.4 Parameter Isoconcentration Maps and Cross Sections

CES prepared isoconcentration maps showing the lateral and vertical distributions of arsenic, manganese and 1,4-dioxane concentrations in groundwater. Isoconcentration maps for benzene were not prepared because no ICL/AGQSs exceedances were reported in 2014. Isoconcentration maps for TBA were not prepared because TBA was only detected in two wells located in close proximity to one another in OU-1.

The interpreted lateral distributions of arsenic, manganese and 1,4-dioxane in overburden and bedrock groundwater are shown on Figures 5 to 10. The interpreted vertical distributions of arsenic, manganese and 1,4-dioxane in groundwater are shown on Figures 11 to 16. General conclusions based on a review of Figures 5 through 16 are discussed below.

- ◆ In general, arsenic, manganese and 1,4-dioxane concentrations in bedrock and overburden groundwater decrease with distance from the landfill area.
- ◆ The horizontal and vertical distributions of 1,4-dioxane, arsenic and manganese concentrations in bedrock and overburden groundwater are generally consistent with groundwater flow directions established using groundwater potentiometric surface elevations at wells and well couplets.
- ◆ The pattern of the 1,4-dioxane-impacted groundwater area in bedrock and overburden groundwater is consistent with the predominant direction of groundwater flow being westerly away from the landfill area toward the Berry's Brook valley, where the direction of groundwater flow is to the north-northeast.
- ◆ The extent of the 1,4-dioxane impacted groundwater area extends beyond the area where elevated redox metal (arsenic, iron and manganese) concentrations are observed. This result is consistent with previous interpretations (Summit, 2013) indicating that 1,4-dioxane defines the extent of the impacted groundwater area.
- ◆ A trace concentration of 1,4-dioxane below the AGQS was reported in shallow bedrock at FPC-11B. September/October 2014 is the first sampling event in which samples from FPC-11B were submitted for analysis of 1,4-dioxane using a low level detection limit methodology. This result is not likely indicative of a change in water quality at FPC-11 because the magnitude of the concentration is very low and the presence of 1,4-dioxane at this location is consistent with previous interpretations (Summit, 2013) indicating that residual impacts and/or a minor component of flow from the landfill toward Route 1 may exist.
- ◆ Arsenic and/or manganese exceedances were or have been reported at several monitoring wells (FPC-7, AE-1, AE-4, GZ-123, GZ-125 (interval sampling) and FPC-2) located hydraulically upgradient or cross-gradient of the impacted groundwater area. This result is consistent with previous interpretations (Summit, 2013) indicating the landfill is not considered to be the primary source of arsenic and manganese in groundwater and that a reducing condition in groundwater downgradient of the

landfill, or alternatively reducing conditions caused by alternative sources (e.g., septic systems, wetlands) resulted in the mobilization of naturally occurring arsenic and manganese present in overburden and bedrock.

5.5 Parameter Trend Analysis for Groundwater

Mann-Kendall statistical trend analysis tests were completed for arsenic and manganese at groundwater monitoring points where regulatory threshold exceedances were reported in the last five years, and at wells that were compliant with regulatory thresholds in the last five years, if arsenic or manganese exceedances were reported in the last five years in the associated well couplet. Statistical trend analysis tests were completed for TBA, 1,4-dioxane and benzene at groundwater monitoring points where it has been detected in the last 10 years.

FPC-11B was interval sampled in August 2014 and was excluded from Mann Kendall statistical trend analysis tests because interval sampling data are not readily comparable to data collected by typical purging methods. Interval sampling results for arsenic, manganese and 1,4-dioxane for August 2013 were excluded when completing Mann Kendall statistical trend analysis tests at the associated wells because interval sampling data are not readily comparable to data collected by typical purging methods. However, the average values for interval sampling results from 2013 and 2014 were plotted on the enclosed time series plots for the affected wells. Refer to Section 5.2 for a discussion of FPC-11B interval sampling data in the context of historical results.

The Mann-Kendall test is a statistical method for assessing the probability that an increasing trend exists in a given data set. The test evaluates each data point relative to previous data points to calculate the number of positive and negative differences between constituent concentrations. Based on the number of data points and the sum of the negative and positive differences between adjacent data points, the probability that a statistically significant trend exists is calculated at the confidence limit selected.

Mann-Kendall trend analysis tests were completed using data collected from 2004 to 2014 when four or more data points and two or more detections above the laboratory practical quantitative limit (PQL) were available. For non-detects the detection limit was used to complete the trend test. For the majority of the tests, 10 or more data points were available for this 11 year period (2004-2014); however, fewer than 10 data points are available for TBA and 1,4-dioxane because analysis for these parameters did not begin until 2007 and 2009, respectively. A confidence limit of 95 percent was selected to identify statistically significant trends (i.e., there is a 95 percent probability that the trend calculated by the test exists). The Mann-Kendall trend tests were completed with ProUCL 5.0 (EPA, 2013b).

Time-series trend plots (attached) for each of the data sets were prepared and visually reviewed to verify that the last five years of data in each data set are consistent with statistical trend analysis results and in the context of the complete data set. The average values for interval sampling results from 2013 and 2014 were plotted on time series plots for the affected wells.

The results of CES' statistical analysis and qualitative/visual review of the time series charts for arsenic, manganese, benzene, TBA and 1,4-dioxane are provided on Table 8. Conclusions drawn by CES based on statistical trend analysis and a visual review of time-series plots are summarized below.

1,4-Dioxane

- ◆ All Mann-Kendall tests for 1,4-dioxane at monitoring wells indicate no statistically significant evidence of a decreasing or increasing trend (No Trend).
- ◆ 1,4-dioxane concentrations are stable (do not fluctuate significantly) at the majority of the monitoring wells, including bedrock monitoring wells AE-2B, AE-3B, FPC-8B, MW-5D, MW-8 and BP-4; and overburden monitoring wells screened in the outwash unit (MW-4 & OP-2) and till unit (FPC-8A, AE-2A & AE-3A).
- ◆ A visually apparent decreasing trend in 1,4-dioxane concentration at shallow bedrock well MW-5S is apparent based on a review of time series plots.
- ◆ 1,4-dioxane results for MW-9 (outwash unit) from 2010 to 2014 were 16, 14, 30, 6.1 and 28 ug/L, respectively. 1,4-dioxane concentrations at MW-9 are considered to be fluctuating based on a visual analysis of time series plots. MW-9 is a shallow overburden well screened 5 to 10 feet below the ground surface. Therefore, it is possible that the variation in 1,4-dioxane at this location is due to seasonal changes in recharge (precipitation) from year to year.
- ◆ 1,4-dioxane results for MW-11 (shallow bedrock unit) from 2010 to 2014 were 100, 45, 40, 56, 29.3 (average of August 2013 interval sampling results) and 41 ug/L, respectively. 1,4-dioxane concentrations at MW-11 are considered to be fluctuating based on a visual analysis of time series plots. MW-11 is screened in the upper 20 feet of bedrock and located immediately downgradient from the landfill boundary. The RI for OU-1 (Weston 1988) indicates that wastes were originally placed in trenches left over from sand and gravel and rock quarrying activities and wastes were placed on or in close proximity to the bedrock surface. Therefore, it is likely that the variation in 1,4-dioxane at this location is due to seasonal changes in recharge and amount of infiltration through the landfill cap from year to year.
- ◆ 1,4-dioxane concentrations are stable at the two off-site water supply wells (R-3 and 339BHR) where it has been detected.

Benzene

- ◆ Benzene concentrations at the 8 monitoring wells where it was detected in 2014 are stable or decreasing (i.e., MW-5D, MW-5S, MW-8, MW-11, AE-2B, AE-3A, FPC-6A and GZ-105). A statistically significant increasing trend was reported at one well (MW-8). However, time series plots indicate that concentrations have been stable since April 2001, with concentrations varying from 3 to 6 ug/L.

Tertiary-butyl alcohol

- ◆ TBA concentrations at the two wells where it has been detected (MW-5D and MW-8) are stable or decreasing. At MW-5D, no statistically significant trend is reported and review of time series plots indicates that concentrations are stable. At MW-8, a statistically significant decreasing trend was reported and review of time series plots support the decreasing trend determination.

Arsenic & Manganese (Redox Metals)

- ◆ A stable or decreasing trend in arsenic and manganese concentrations, indicative of stable or improving water quality, is apparent at the majority of groundwater monitoring locations, including: bedrock wells GZ-105, MW-11, MW-5D, MW-5S, BP-4, FPC-6B, AE-2B, AE-4B; overburden (outwash) wells MW-4; and overburden (till) wells AE-2A and AE-4A.
- ◆ At the GMZ boundary well couplet FPC-6, arsenic and manganese concentrations are stable in shallow bedrock well FPC-6B. However, arsenic concentrations are increasing and manganese concentrations have continued to fluctuate in the shallow overburden (till) well FPC-6A.
- ◆ Arsenic and manganese concentrations are stable or increasing at overburden (outwash) wells OP-2 and OP-5. However, arsenic concentrations at both wells remain within the historic ranges reported at each individual well.
- ◆ A stable or decreasing trend in arsenic and an increasing trend in manganese at overburden (outwash) well OP-2 and overburden (till) well AE-1A may suggest a transition toward a more oxidizing environment indicative of an overall improvement in water quality.
- ◆ Arsenic concentrations at FPC-9A appear to be slowly increasing. However, concentrations remain within historical ranges reported at the well. Manganese concentrations are decreasing at FPC-9A.
- ◆ At open borehole well MW-6 manganese concentrations have fluctuated over time. Changes in sampling methodologies (as highlighted on the time series plot) have been accompanied by significant changes in manganese concentrations and likely affect the accuracy of the manganese trend determination. Arsenic concentrations continue to be well below the AGQS/ICL and have remained stable during the transition between different sampling methods.
- ◆ At well couplet AE-1 (AE-1A – till, AE-1B – shallow bedrock), arsenic concentrations are increasing in bedrock, but decreasing in overburden (till). Manganese concentrations are decreasing in bedrock but increasing in overburden (till).

Parameter concentrations at the remaining sampling points did not show significant trends.

5.6 Status of Constituents of Concern

A table summarizing the COCs and associated EPA-established ICLs and/or NHDES-established AGQSs is provided in Section 1.1. Analytical data for each COC from November 2000 to September/October 2014 at groundwater monitoring location identified in the August 2014 SAP are provided in Table 9. A brief summary of the status of each COC in groundwater, based on the data presented in Table 9 and previous annual reports, is provided below:

- ◆ Benzene: Trace concentrations continue to be reported in 8 monitoring wells located in close proximity to or downgradient of the landfill. In the last five years,

exceedances have been reported at 2 wells (MW-8 and GZ-105). No exceedances were reported in 2014.

- ◆ Chlorobenzene: Trace concentrations continue to be reported in 7 monitoring wells located in close proximity to or downgradient of the landfill (same set of wells that benzene is detected in). The last exceedance was reported at MW-9 in 2002.
- ◆ Tetrachloroethylene: No detections have been reported since the start of the long-term monitoring plan in 1999.
- ◆ Tetrahydrofuran: In the last five years, detections have been reported at 6 monitoring wells located in close proximity to or downgradient of the landfill. The last reported exceedance was in 2010 (MW-8).
- ◆ 1,2-dichloropropane: No detections have been reported since the start of the long-term monitoring plan in 1999.
- ◆ 2-butanone: In 1998 and 1999, trace concentrations were reported at MW-11. No detections have been reported since 2000.
- ◆ Diethyl phthalate / Phenol: In May 1998 and April 1999, groundwater samples were submitted for analysis of semi-volatile organic compounds (SVOCs) and no exceedances were reported. Therefore, SVOCs were removed from the long-term monitoring plan.
- ◆ Trans-1,2-dichloroethene: No detections have been reported since the start of the long-term monitoring plan in 1999.
- ◆ 1,4-dioxane: Since August 2009, samples from selected monitoring wells have been analyzed for 1,4-dioxane with a low level detection limit methodology (EPA Method 8260B SIM). 1,4-dioxane is commonly reported above the AGQS in monitoring wells located in close proximity to or downgradient of the landfill. Trace concentrations below the AGQS have been reported at two water supply wells (R-3 and 339BHR) located downgradient of the landfill along Breakfast Hill Road.
- ◆ Tertiary butyl alcohol (TBA): Samples from selected monitoring wells have been analyzed for TBA since 2007. TBA has been reported above detection limits at two wells (MW-5D and MW-8) and exceedances were reported at MW-5D and MW-8 in 2014.
- ◆ Antimony: Antimony is rarely detected in groundwater. The last exceedance was an isolated detection/exceedance reported at AE-4A in 2006.
- ◆ Arsenic/Manganese: Arsenic and manganese are reported above cleanup criteria (ICL/AGQS) at many wells located in close proximity to or downgradient of the landfill. Arsenic and/or manganese exceedances were or have been reported at several monitoring wells (FPC-7, AE-1 and AE-4, and historically at GZ-123, GZ-125 and FPC-2) located hydraulically upgradient or cross-gradient of the impacted groundwater area. This result is consistent with previous interpretations (Summit, 2013) indicating the landfill is not considered to be the primary source of arsenic and manganese in groundwater and that a reducing condition in groundwater

downgradient of the landfill resulted in the mobilization of naturally occurring arsenic and manganese present in overburden and bedrock.

- ◆ Beryllium: Beryllium is rarely detected in groundwater. The last exceedance was an isolated detection/exceedance reported at MW-6, AE-1A and FPC-11A in 2004.
- ◆ Chromium/Lead/Nickel: Chromium, lead and/or nickel exceedances (total metals) were reported at one well (MW-4) in 2006, 2007 and 2008; however, only trace concentrations well below cleanup criteria were reported at MW-4 since 2009.
- ◆ Vanadium: Trace concentrations have been reported at selected monitoring wells. No exceedances have been reported since an exceedance at MW-4 in 2005.

SECTION 6 | CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

Based on a review of analytical results for the September/October 2014 sampling event and historical data, CES concludes the following:

Groundwater

- ◆ Results of Kestrel's Tier I Plus Data Validation and CES' review of the analytical data indicate the laboratory analytical data package is complete, of good quality, meets data quality objectives and only minor data qualification was warranted. Results of Field Duplicate sampling and Matrix Spike/Matrix Spike Duplicate analyses show that the laboratory produced consistent and reproducible results, with few exceptions. Equipment Blank and Trip Blank results show that sample integrity was maintained through sample collection and handling, and equipment decontamination procedures did not affect analytical results.
- ◆ Groundwater quality results for September/October 2014 met EPA-established ICLs and/or NHDES-established AGQSs for benzene, chlorobenzene, tetrachloroethene, tetrahydrofuran, 1,2-dichloropropane, methyl ethyl ketone (2-butanone), trans-1,2-dichloroethene, antimony, beryllium, chromium, lead, nickel and vanadium. Consistent with historical results, tetrachloroethene, 1,2-dichloropropane, methyl ethyl ketone and trans-1,2-dichloroethene were reported as Not Detected above laboratory detection limits in all groundwater and surface water samples collected.
- ◆ Consistent with historical results, ICL and/or AGQS exceedances were reported for 1,4-dioxane, tertiary-butyl alcohol (TBA), arsenic and manganese. In general, the parameters and locations that exceeded the regulatory thresholds are similar to historical monitoring events. Benzene exceedances have historically occurred at several monitoring wells, however, consistent with an overall decreasing trend in benzene concentrations in site groundwater, no benzene exceedances were reported in 2014.
- ◆ Groundwater samples from 20 monitoring wells in OU-1 and OU-2 were submitted for analysis of 1,4-dioxane using a low-level detection limit methodology (8260B SIM). 1,4-dioxane concentrations exceeding the NHDES AGQS were reported in 7 of the 9 monitoring wells sampled in OU-1, and 8 of the 11 monitoring wells sampled in OU-2.

- ◆ A trace concentration (1.0 to 1.4 ug/L) of 1,4-dioxane below the AGQS (3 ug/L) was reported in interval samples collected at shallow bedrock at FPC-11B. September/October 2014 is the first sampling event in which samples from FPC-11B were submitted for analysis of 1,4-dioxane using a low level detection limit methodology. This result is not likely indicative of a change in water quality at FPC-11 because the magnitude of the concentration is very low and the presence of 1,4-dioxane at this location is consistent with previous interpretations (Summit, 2013) indicating that residual impacts and/or a minor component of flow from the landfill toward Route 1 may exist.
- ◆ Similar to results from previous monitoring events, no ICL or AGQS exceedances were reported for arsenic, 1,4-dioxane or VOCs at the four off-site water supply wells sampled. The manganese concentration at 339BHR (0.32 mg/L) slightly exceeded the ICL (0.3 mg/L), but is well below the AGQS (0.84 mg/L). The concentration of manganese at 339BHR continues to be consistent with what is considered to be typical of background bedrock water quality in the area, as discussed in previous site groundwater quality reports and assessments. Consistent with historical results, 1,4-dioxane was Not Detected above the laboratory detection limit of 0.25 ug/L at water supply wells 415BHR and 346BHR. In February and October 2014, 1,4-dioxane was reported at very low concentrations (0.36 to 0.63 ug/L) close to the detection limit of 0.25 ug/L at two water supply wells (R-3 and 339BHR). Trend analyses indicate that 1,4-dioxane concentrations are stable at R-3 and 339BHR and at two monitoring well couplets (FPC-5 and FPC-6) located hydraulically upgradient of R-3 and 339BHR.
- ◆ Arsenic concentrations exceeding the EPA ICL and NHDES AGQS of 0.01 mg/L were reported in 8 of the 11 monitoring wells sampled in OU-1, and 8 of the 20 monitoring wells sampled in OU-2.
- ◆ Manganese concentrations exceeding the EPA ICL (0.3 mg/L) were reported in 11 of the 11 monitoring wells sampled in OU-1, and 11 of the 20 monitoring wells sampled in OU-2 (including interval sampled well FPC-11B). Manganese concentrations exceeding the AGQS (0.84 mg/L) were reported in 8 of the 11 monitoring wells in OU-1, and 5 of the 20 monitoring wells in OU-2 (including FPC-11B).
- ◆ Trend analysis results for arsenic, manganese, benzene, tertiary-butyl alcohol and 1,4-dioxane concentrations in groundwater indicate that water quality is stable at the majority of the wells in OU-1 and OU-2. Trends in arsenic and/or manganese concentrations at AE-1A, AE-2A, AE-2B, BP-4, MW-8 and OP-2 indicate a general trend towards more oxidizing conditions indicative of an improvement in groundwater quality. Trends in arsenic and manganese concentrations at FPC-6A, OP-5 and possibly AE-1B and FPC-9A indicate a general trend towards more reducing conditions. Trends indicative of a change in water quality were not identified at the remaining sampling points.
- ◆ Interval samples were collected in September/October 2014 at shallow bedrock monitoring well FPC-11B (screen interval longer than 10 feet) to determine whether contaminant stratification is present and to establish the depth of tubing intakes for future monitoring events. Significant differences in arsenic and 1,4-dioxane concentrations were not reported. However, manganese concentrations increased with depth. The proposed tubing intake depth for future monitoring events is identified in Table 3.

- ◆ Water quality at wells FPC-4B, FPC-7A, FPC-7B, AE-4A, AE-4B and MW-6 in September/October 2014 continues to be consistent with what is considered to be background conditions, as discussed in Summit (2013). Similarly as discussed in Summit (2013), water quality at GZ-123, GZ-125, FPC-2A and FPC-2B is also considered to be consistent with what is considered to be background conditions.

Leachate Seep

- ◆ The leachate seep sample was not collected in September/October 2014 due to insufficient water.

Surface Water

- ◆ Surface water samples were not collected at two of the three surface water sampling locations (SW-4 and SW-103) in September/October 2014 due to insufficient water. Water quality at SW-5 met applicable regulatory standards.

Sediment

- ◆ Consistent with historical results, sediment standards were exceeded at SED-4 and SED-5 for several metals. The Coakley Landfill cap and surrounding areas within the perimeter fence have been stabilized for many years and no evidence of significant soil erosion has been observed in on-site inspection by CLG. On this basis, CES concludes that the landfill area (OU-1) is not actively contributing significant amounts of sediment to the wetland areas around the landfill.

Based on a review of the results of sampling activities in 2014, the existing monitoring well network and groundwater management zone continue to be adequate for monitoring the natural attenuation remedy, with the following exceptions: 1) well FPC-5A should be abandoned and a replacement well should be installed; and 2) two monitoring well couplets still need to be installed in 2013 GMZ expansion area. CLG is currently negotiating with the landowner to obtain access for installing the two monitoring well couplets in the 2013 GMZ expansion area.

6.2 Recommendations

Based on observations and monitoring results 2014, CES recommends the following:

- ◆ EPA/NHDES approval is requested for the proposed changes to depth of tubing intake for FPC-11B listed in Table 3. New sampling tubing must be installed at FPC-11B prior to the August 2015 sampling event.
- ◆ The sampling program for FPC-11B should be revised to include total metals and 1,4-dioxane by 8260B SIM.
- ◆ Well FPC-5A should be properly abandoned due to well integrity issues and a replacement well should be installed in close proximity to FPC-5B.
- ◆ The top of casing elevations for wells FPC-2A and FPC-2B should be resurveyed because well repair work was completed. FPC-2A and FPC-2B will be resurveyed when surveyors are on-site after the well FPC-5A abandonment/replacement activities are completed.

- ◆ SAP Table 3-3 should be revised to identify FPC-6A as a 2-inch diameter well point.
- ◆ The sediment sampling requirement should be eliminated because the landfill cap and surrounding areas within the perimeter fence have been stabilized for many years and no evidence of significant soil erosion has been observed in on-site inspection. Furthermore, results of sediment toxicity testing for fresh water midges (*Chironomus dilutes*) and amphipods (*Hyalella azteca*) in 2007 documented no significant difference in measured endpoints between the laboratory control and the site (EnviroSystems, 2008a & 2008b).

SECTION 7 | REFERENCES

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FIGURES

FIGURE 1
SITE LOCATION MAP

FIGURE 2

SITE PLAN

FIGURE 3

**GROUNDWATER CONTOURS
SEPTEMBER 2014 – OVERBURDEN WELLS**

FIGURE 4

**GROUNDWATER CONTOURS
SEPTEMBER 2014 – BEDROCK WELLS**

FIGURE 5

LATERAL DISTRIBUTION OF ARSENIC IN OVERBURDEN WELLS

FIGURE 6

LATERAL DISTRIBUTION OF MANGANESE IN OVERBURDEN WELLS

FIGURE 7

LATERAL DISTRIBUTION OF 1,4-DIOXANE IN OVERBURDEN WELLS

FIGURE 8

LATERAL DISTRIBUTION OF ARSENIC IN BEDROCK WELLS

FIGURE 9

LATERAL DISTRIBUTION OF MANGANESE IN BEDROCK WELLS

FIGURE 10

LATERAL DISTRIBUTION OF 1,4-DIOXANE IN BEDROCK WELLS

FIGURE 11

VERTICAL DISTRIBUTION OF ARSENIC IN GROUNDWATER CROSS SECTION A-A'

FIGURE 12

VERTICAL DISTRIBUTION OF ARSENIC IN GROUNDWATER CROSS SECTION B-B'

FIGURE 13

VERTICAL DISTRIBUTION OF MANGANESE IN GROUNDWATER CROSS SECTION A-A'

FIGURE 14

VERTICAL DISTRIBUTION OF MANGANESE IN GROUNDWATER CROSS SECTION B-B'

FIGURE 15

VERTICAL DISTRIBUTION OF 1,4-DIOXANE IN GROUNDWATER CROSS SECTION A-A'

FIGURE 16

VERTICAL DISTRIBUTION OF 1,4-DIOXANE IN GROUNDWATER CROSS SECTION B-B'

TABLES

TABLE 1
GROUNDWATER ELEVATION DATA

TABLE 2

SUMMARY OF OU-1 AND OU-2 GROUNWATER ANALYTICAL RESULTS

TABLE 3

SUMMARY OF INTERVAL SAMPLING ANALYTICAL RESULTS

TABLE 4

SUMMARY OF OFF-SITE WATER SUPPLY WELL MONITORING RESULTS

TABLE 5

SUMMARY OF SURFACT WATER ANALYTICAL RESULTS

TABLE 6

SUMMARY OF SEDIMENT ANALYTICAL RESULTS

TABLE 7
DUPLICATE SAMPLE COMPARISONS

TABLE 8

STATISTICAL AND VISUAL ANALYSIS RESULTS

TABLE 9

**CONTAMINANTS OF CONCERN ANALYTICAL DATA
(NOVEMBER 2000 – SEPTEMBER 2014)**

TIME SERIES PLOTS

ARSENIC SUMMARY PLOTS

MANGANESE SUMMARY PLOTS

BENZENE SUMMARY PLOTS

1,4-DIOXANE SUMMARY PLOTS

TERTIARY-BUTYL ALCOHOL SUMMARY PLOT

ARSENIC, MANGANESE AND BENZENE PLOTS AT SELECT WELLS

APPENDIX A

FEBRUARY 2014 WATER SUPPLY WELL DATA TRANSMITTAL REPORT

APPENDIX B

ENVIRONMENTAL MONITORING PLAN SAMPLING REQUIREMENTS TABLES

APPENDIX C

FIELD SAMPLING/MONITORING AND EQUIPMENT CALIBRATION FORMS

DEPTH TO GROUNDWATER AND ELEVATION

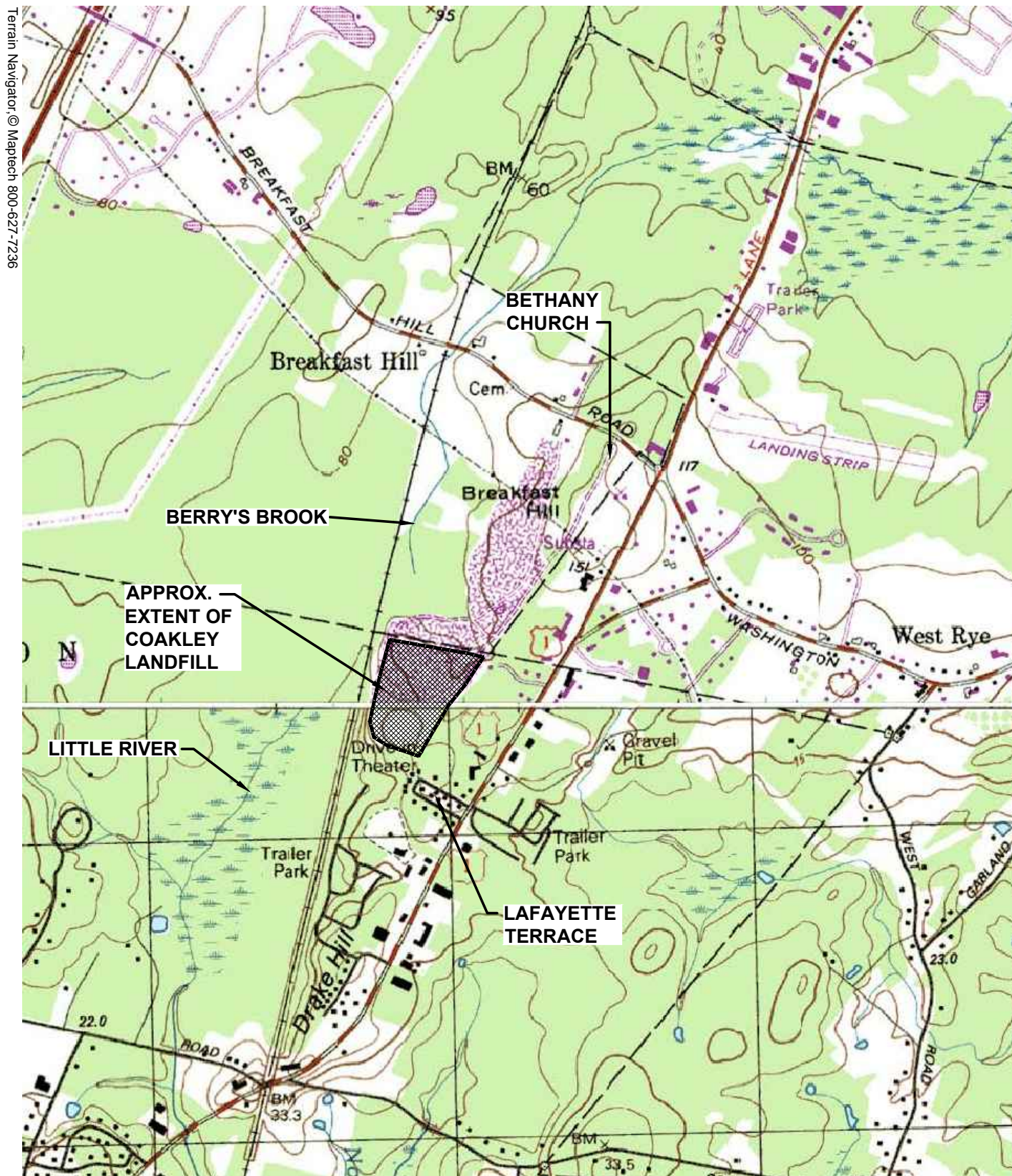
ELEVATION SUMMARY TABLE FOR OCTOBER/SEPTEMBER 2014

APPENDIX D

LABORATORY ANALYTICAL REPORTS (OCTOBER/SEPTEMBER 2014)

APPENDIX E

DATA VALIDATION REPORT (OCTOBER/SEPTEMBER 2014)



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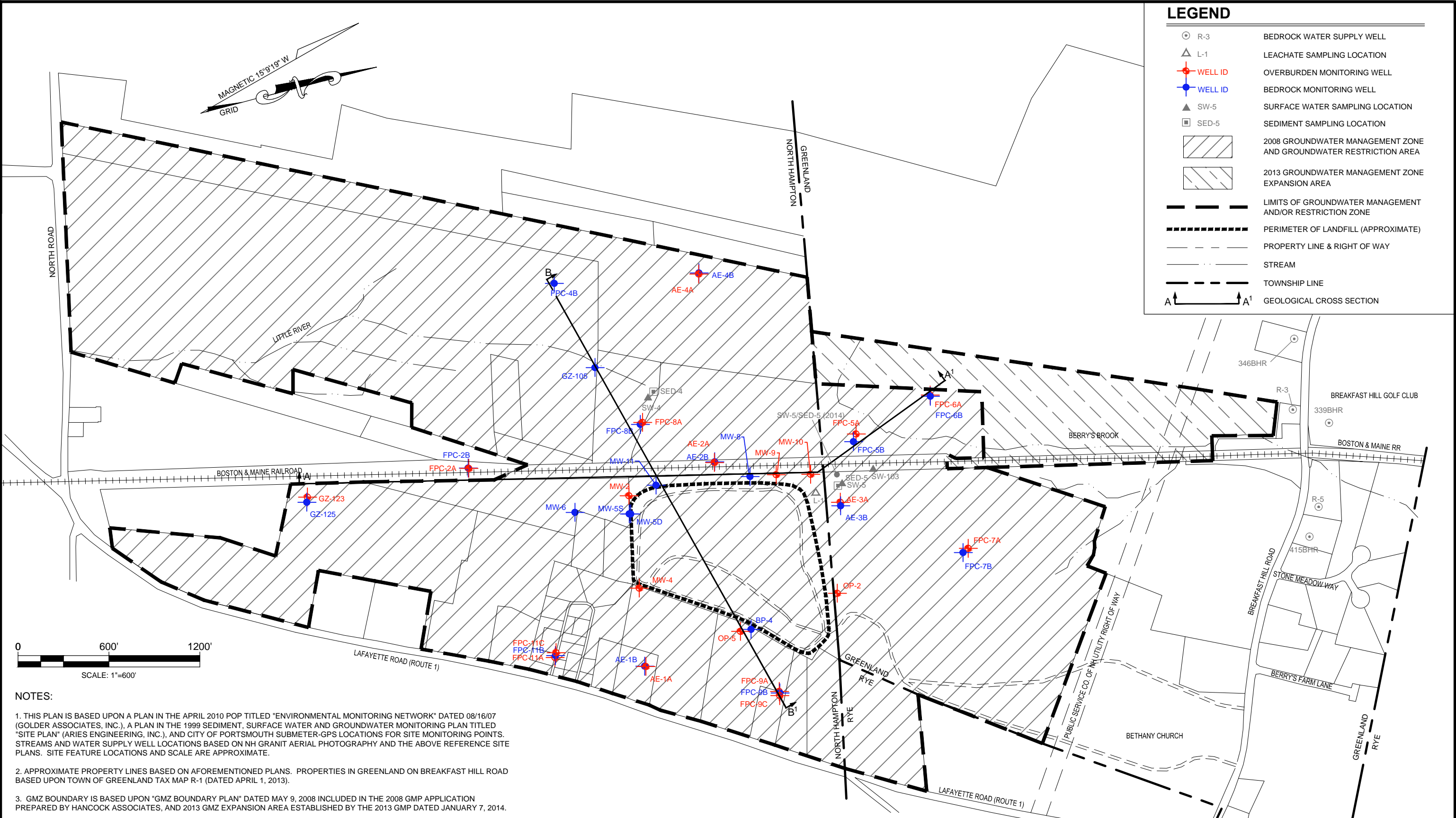


CES INC

COAKLEY LANDFILL NORTH HAMPTON & GREENLAND, NH LOCATION MAP

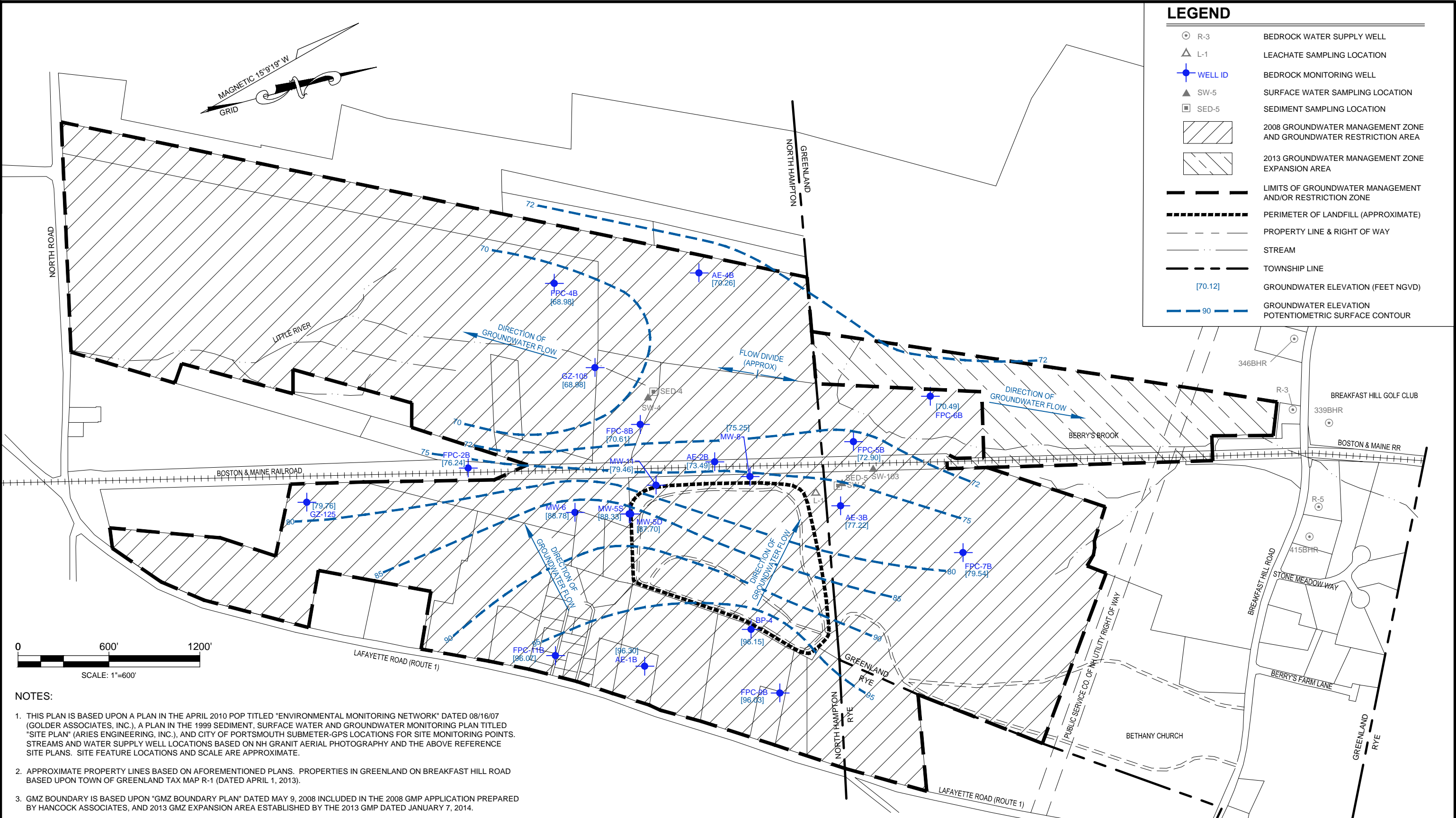
2015-02-11
10424.003

FIGURE 1



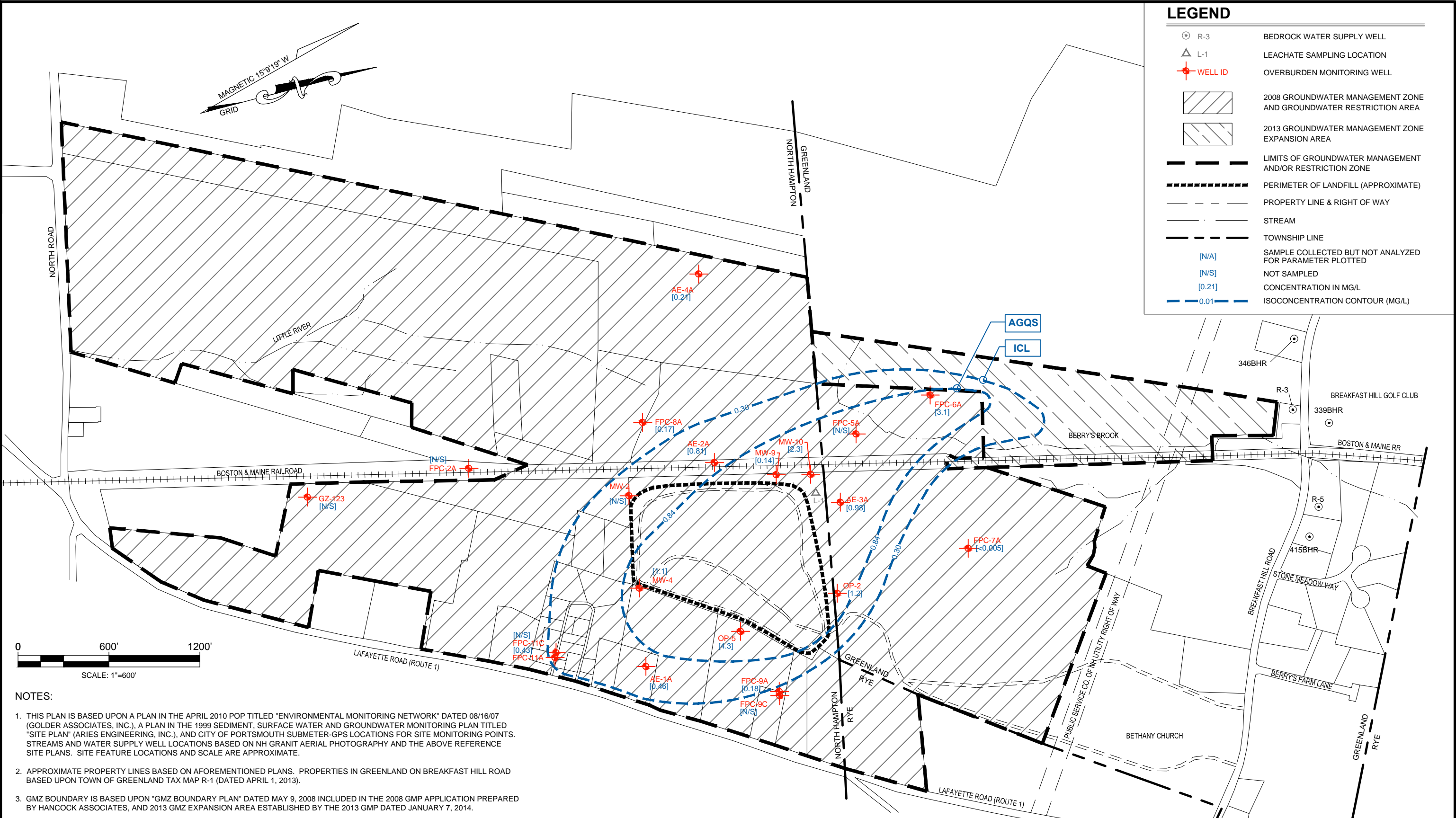
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	JN: 10424.003	DATE: 2015-02-06	REV DATE:	
SHEET TITLE: GROUNDWATER MANAGEMENT ZONE & ENVIRONMENTAL MONITORING NETWORK	SCALE: 1"=600'	APPROVED BY: SBM	ISSUE:	DESCRIPTION:
		CHECKED BY: SBM	ISSUE DATE:	

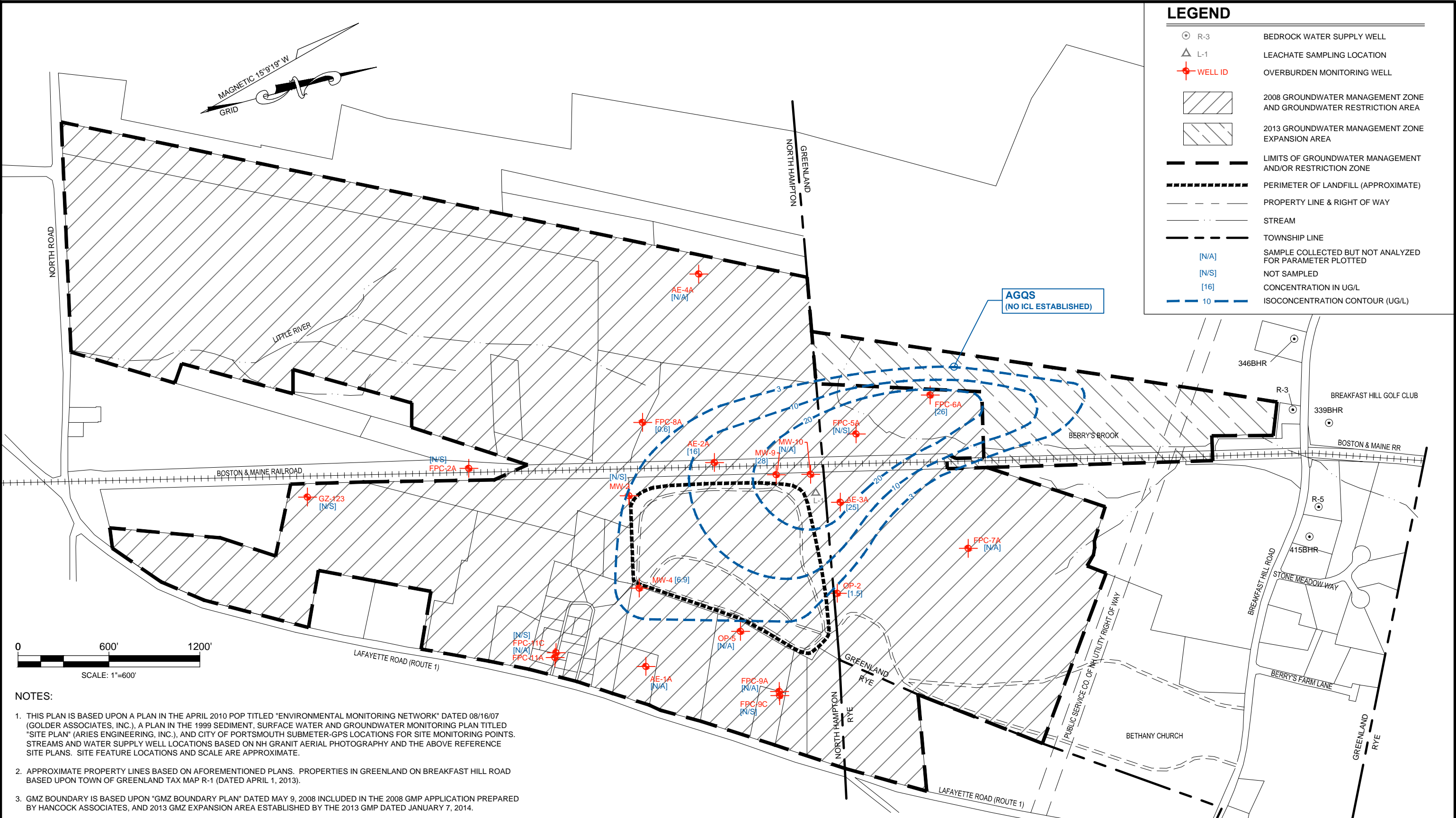
CES INC
Engineers • Environmental Scientists • Surveyors



PROJECT TITLE:	COAKLEY LANDFILL SUPERFUND SITE NORTH HAMPTON & GREENLAND, NEW HAMPSHIRE	DWG:	FIGURE 4	BY:	BLQ	REV:		DESCRIPTION:
		JN:	10424.003	DATE:	2015-02-06	REV DATE:		
SHEET TITLE:	SEPTEMBER 2014 BEDROCK GROUNDWATER POTENTIOMETRIC SURFACE	SCALE:	1"=600'	APPROVED BY:	SBM	ISSUE:		DESCRIPTION:
				CHECKED BY:	SBM	ISSUE DATE:		

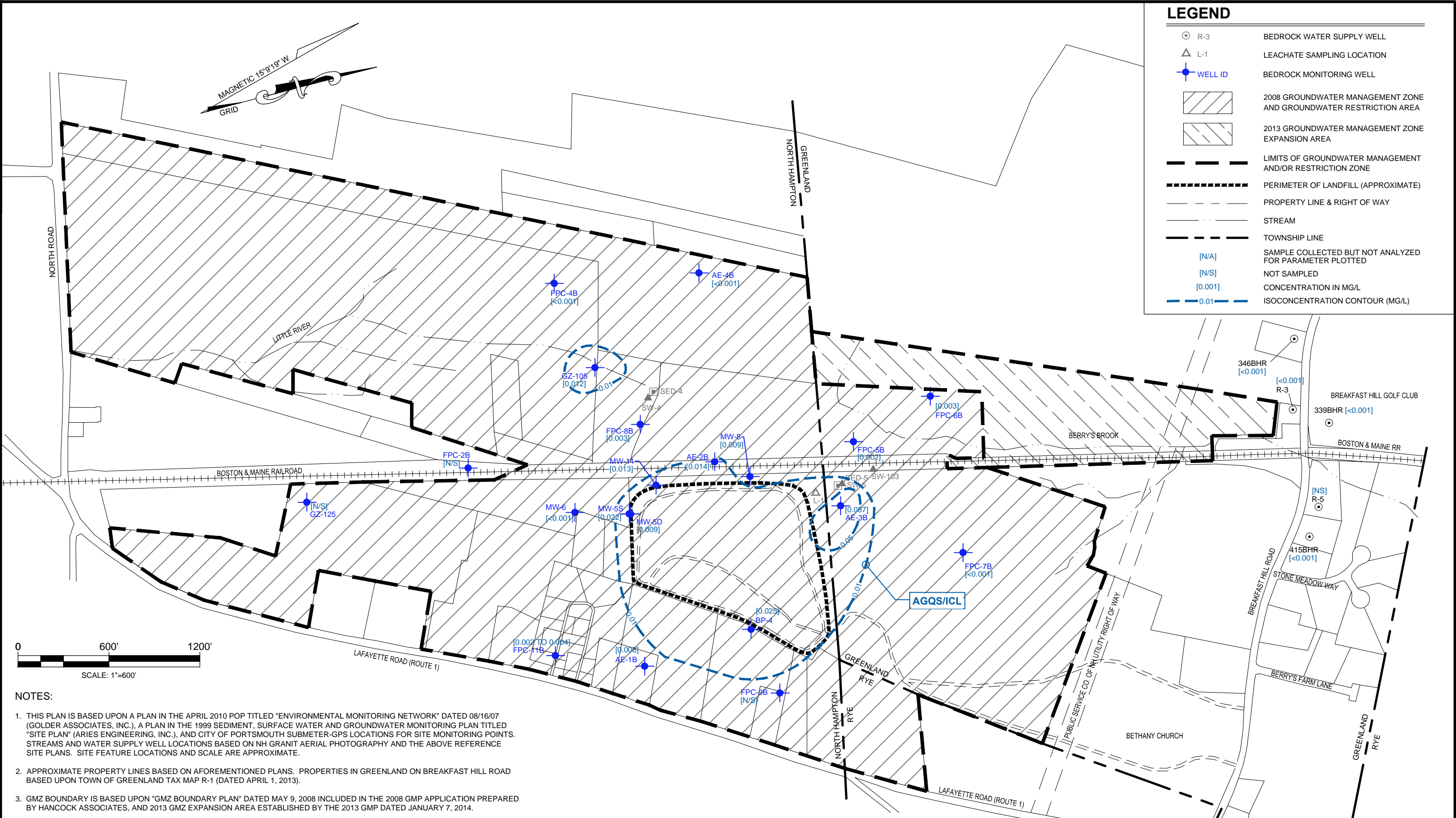
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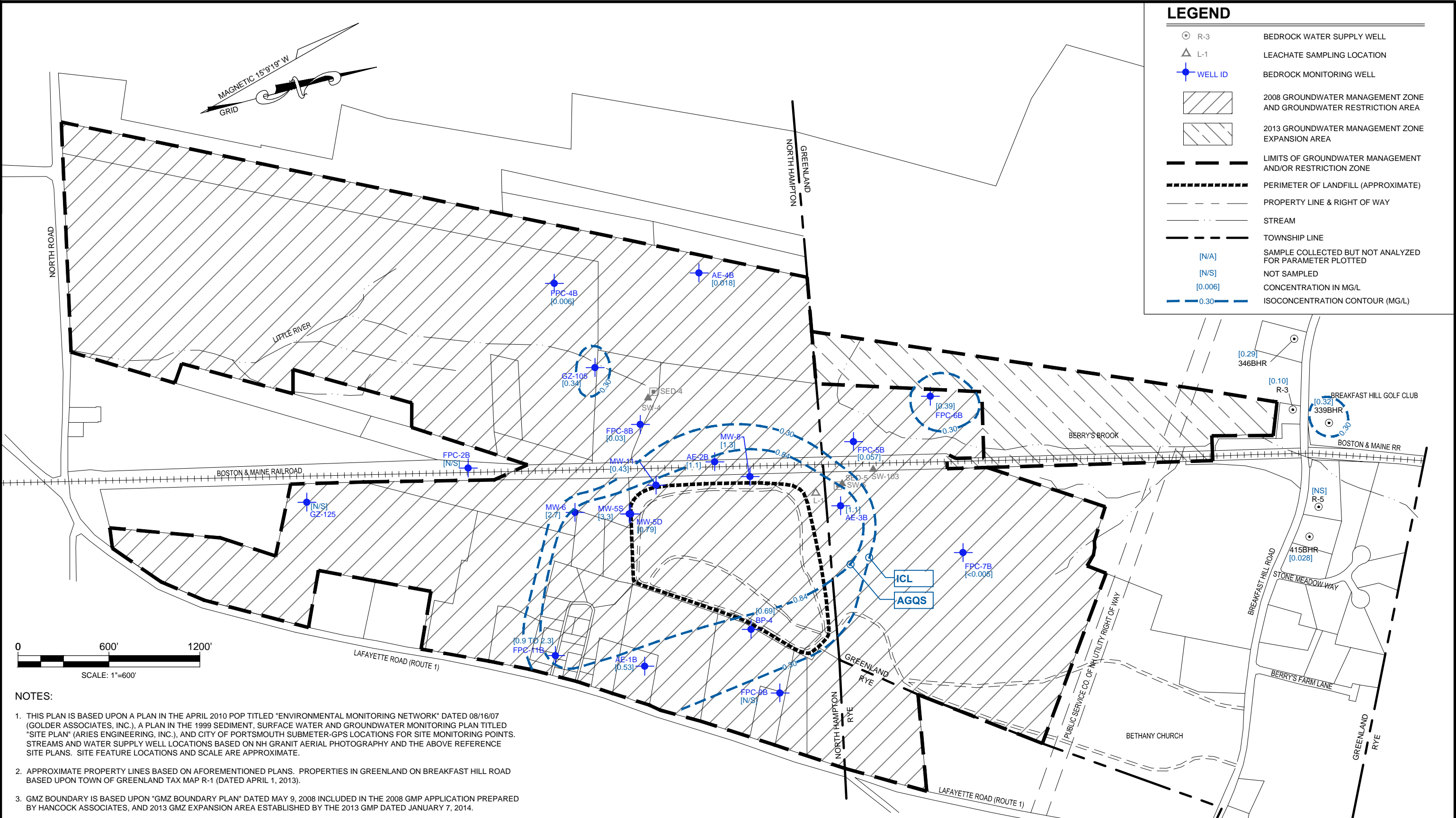




PROJECT TITLE:	COAKLEY LANDFILL SUPERFUND SITE NORTH HAMPTON & GREENLAND, NEW HAMPSHIRE	DWG:	FIGURE 7	BY:	BLQ	REV:		DESCRIPTION:
		JN:	10424.003	DATE:	2015-02-09	REV DATE:		
SHEET TITLE:	SEPTEMBER 2014 LATERAL DISTRIBUTION OF 1,4 - DIOXANE IN OVERBURDEN GROUNDWATER	SCALE:	1"=600'	APPROVED BY:	SBM	ISSUE:		DESCRIPTION:
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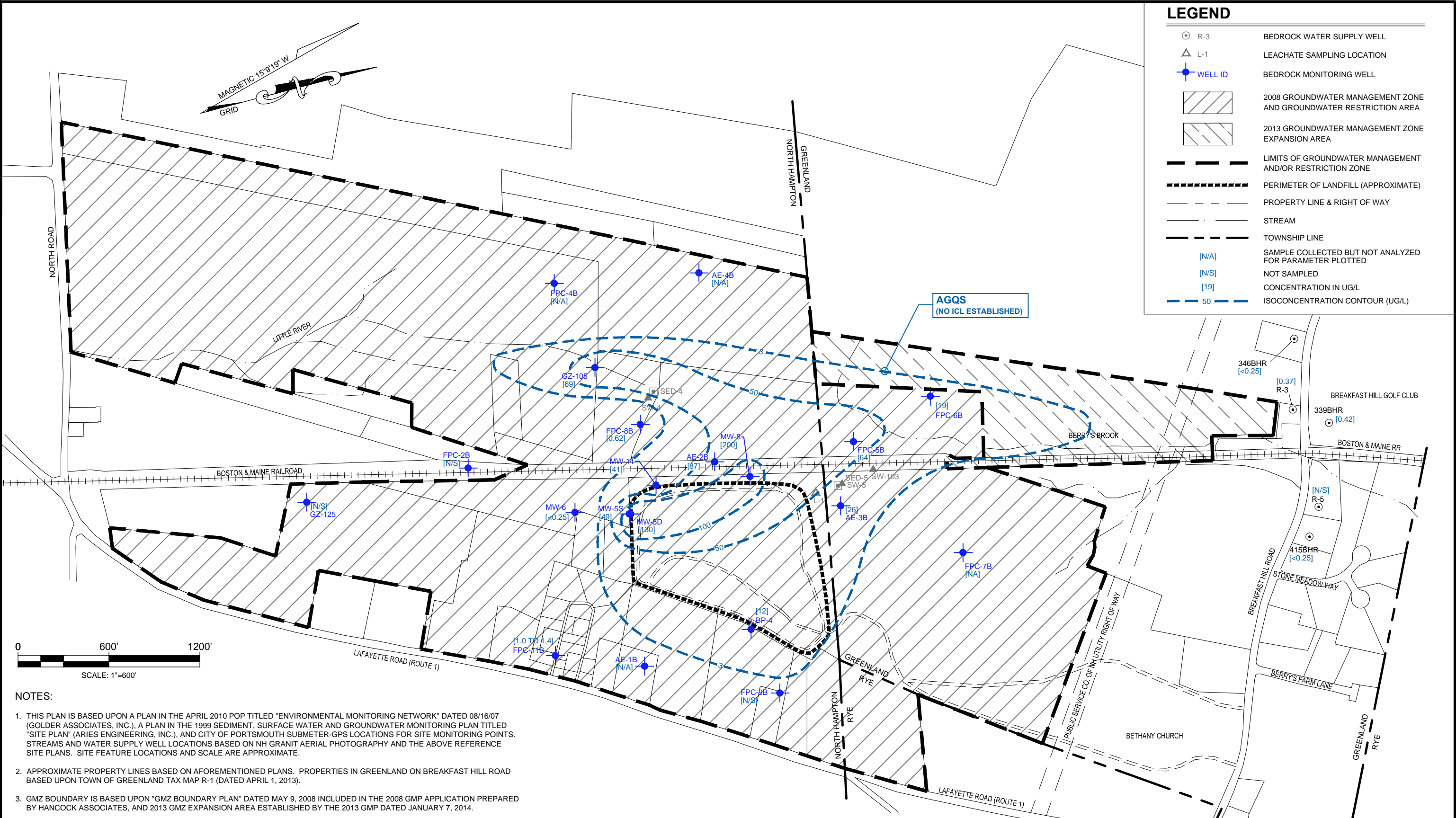
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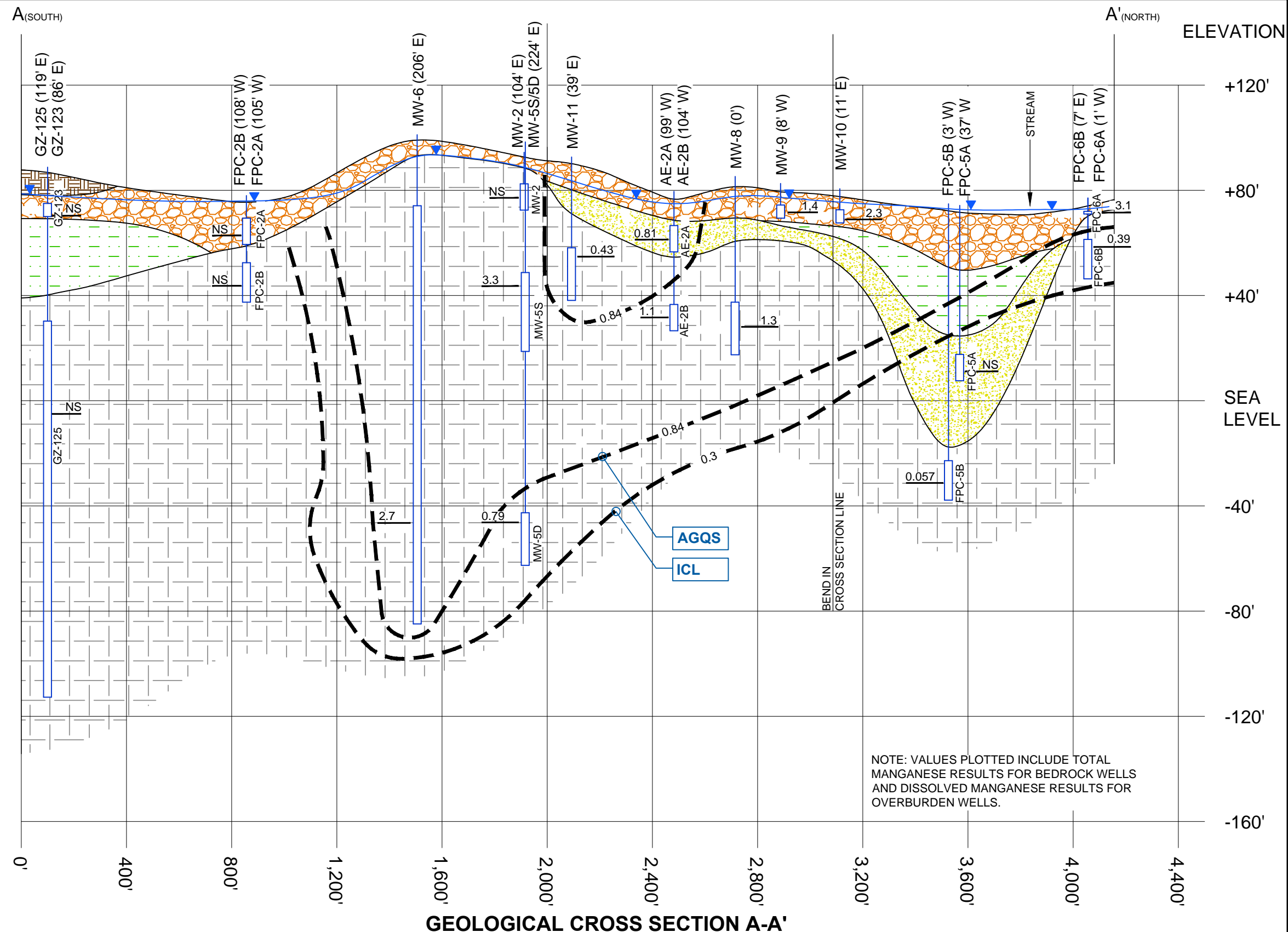
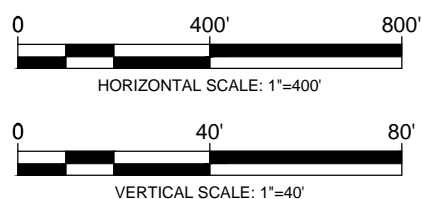
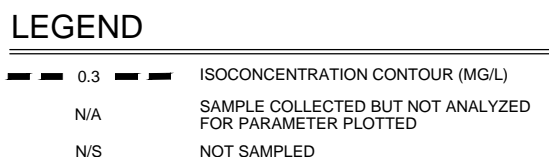
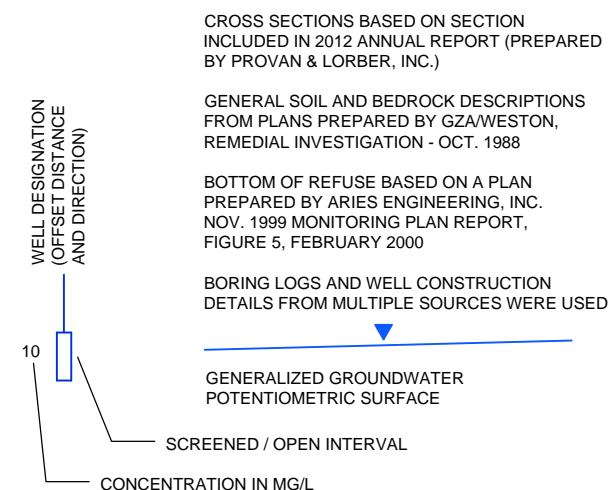
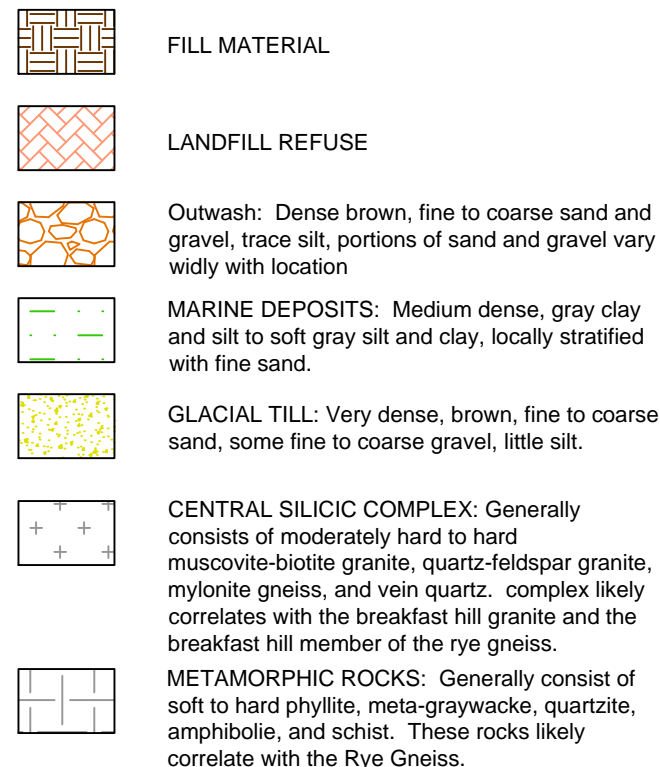
PROJECT TITLE:	COAKLEY LANDFILL SUPERFUND SITE NORTH HAMPTON & GREENLAND, NEW HAMPSHIRE	DWG:	FIGURE 9	BY:	BLQ	REV:		DESCRIPTION:
		JN:	10424.003	DATE:	2015-02-09	REV DATE:		
SHEET TITLE:	SEPTEMBER 2014 LATERAL EXTENT OF TOTAL MANGANESE IN BEDROCK GROUNDWATER	SCALE:	1"=600'	APPROVED BY:	SBM	ISSUE:		DESCRIPTION:
				CHECKED BY:	SBM	ISSUE DATE:		

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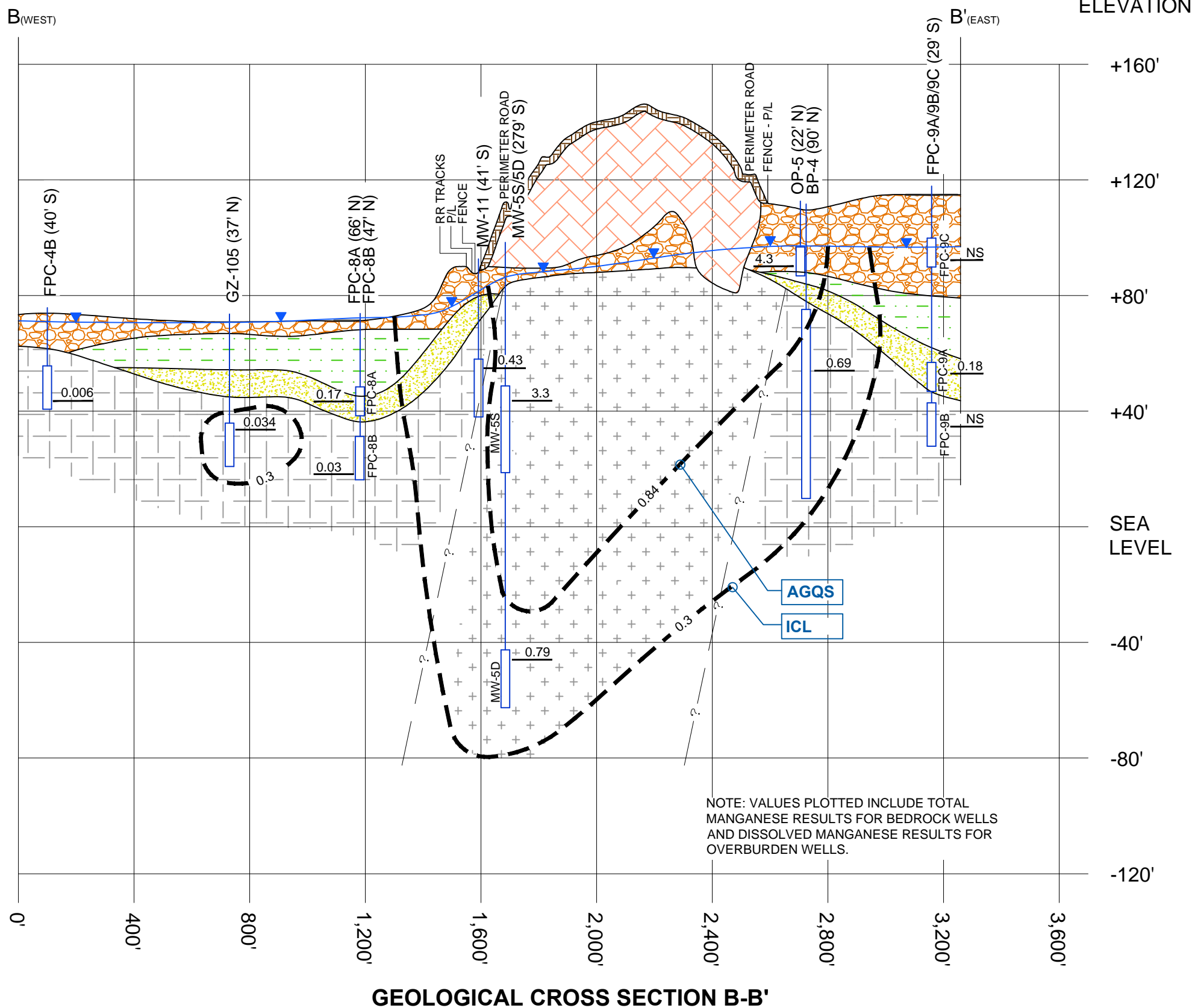
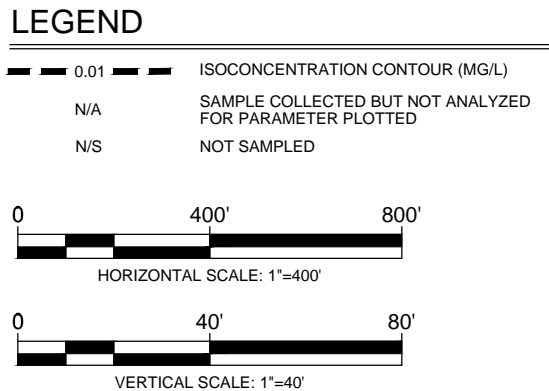
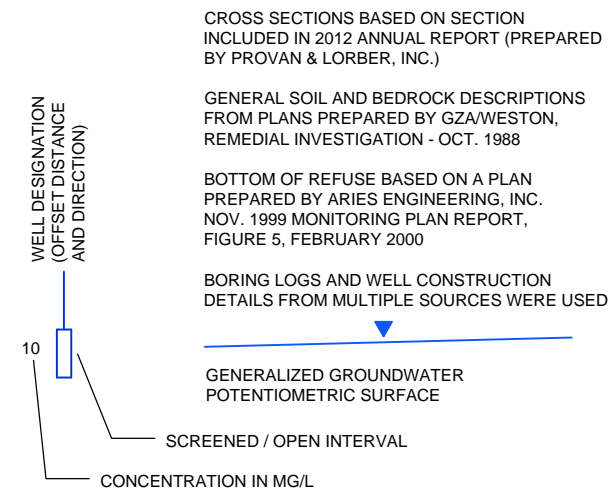
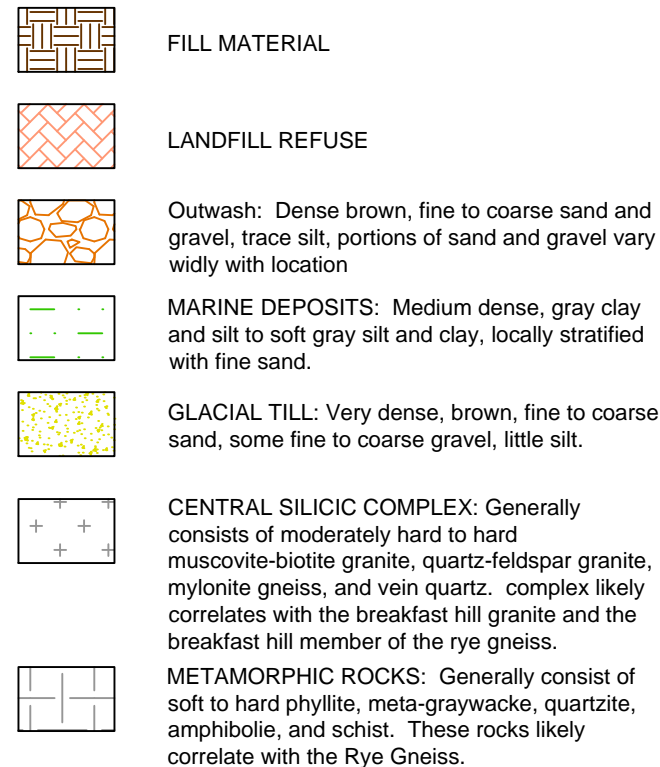
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		JN:	10424.003	DATE:	2015-02-09	REV DATE:		
SHEET TITLE:	SEPTEMBER 2014 LATERAL DISTRIBUTION OF 1,4 - DIOXANE IN BEDROCK GROUNDWATER	SCALE:	1"=600'	APPROVED BY:	SBM	ISSUE:		DESCRIPTION:
				CHECKED BY:	SBM	ISSUE DATE:		

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PROJECT TITLE:	COAKLEY LANDFILL SUPERFUND SITE NORTH HAMPTON & GREENLAND, NEW HAMPSHIRE	DWG:	FIGURE 13	BY:	BLQ	REV:		DESCRIPTION:
		JN:	10424.003	DATE:	2015-02-09	REV DATE:		
SHEET TITLE:	SEPTEMBER 2014 VERTICAL DISTRIBUTION OF MANGANESE IN GROUNDWATER A-A'	SCALE:	1"=600'	APPROVED BY:	SBM	ISSUE:		DESCRIPTION:
				CHECKED BY:	SBM	ISSUE DATE:		

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PROJECT TITLE: **COAKLEY LANDFILL SUPERFUND SITE
NORTH HAMPTON & GREENLAND, NEW HAMPSHIRE**

SHEET TITLE: **SEPTEMBER 2014 VERTICAL DISTRIBUTION OF
MANGANESE IN GROUNDWATER B-B'**

DWG: **FIGURE 14**

JN: 10424.003

SCALE: 1"=600'

BY: BLQ

DATE: 2015-02-09

APPROVED BY: SBM

CHECKED BY: SBM

REV:

REV DATE:

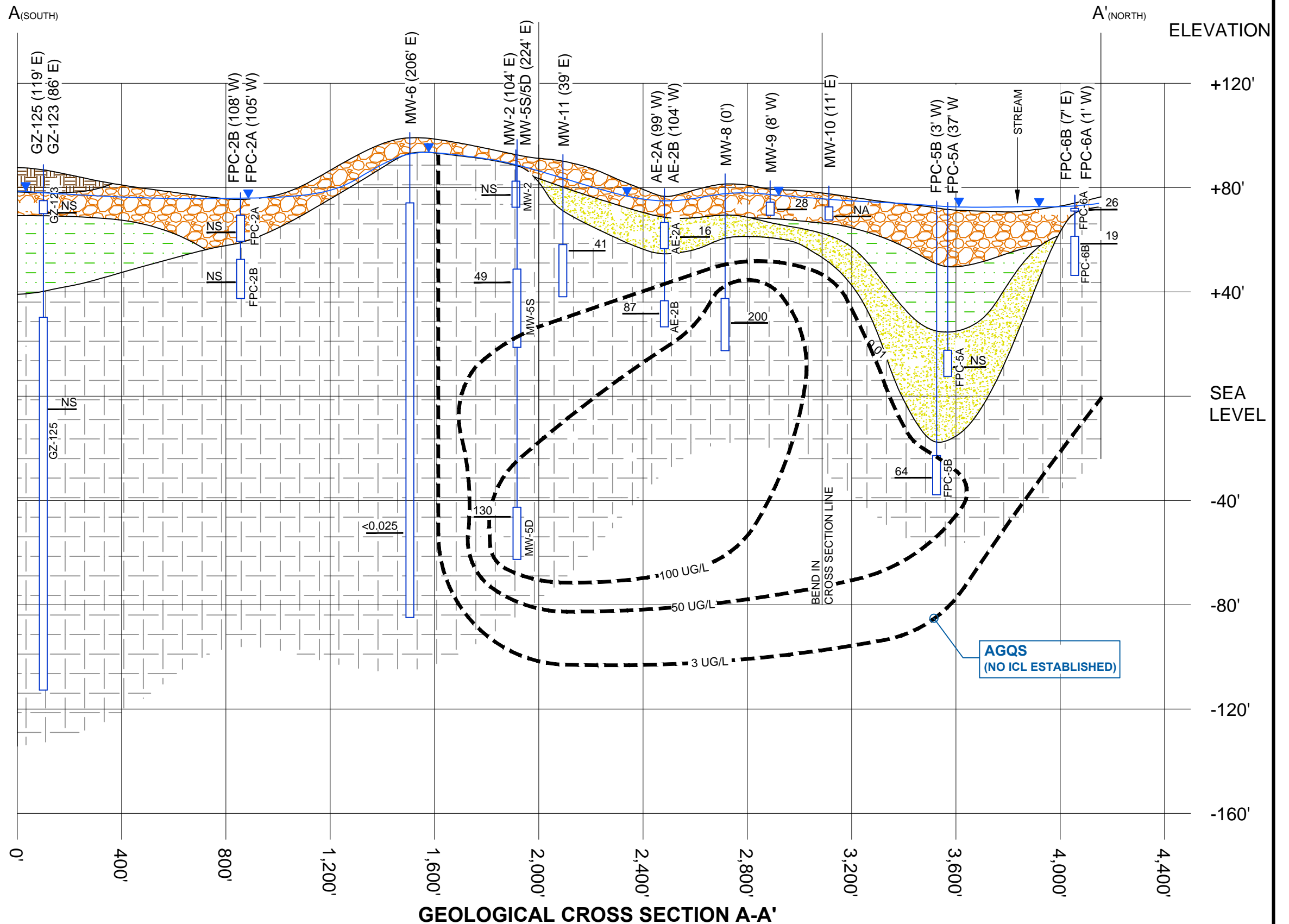
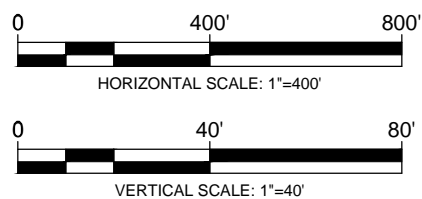
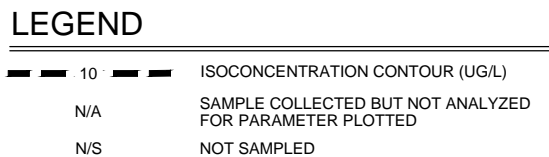
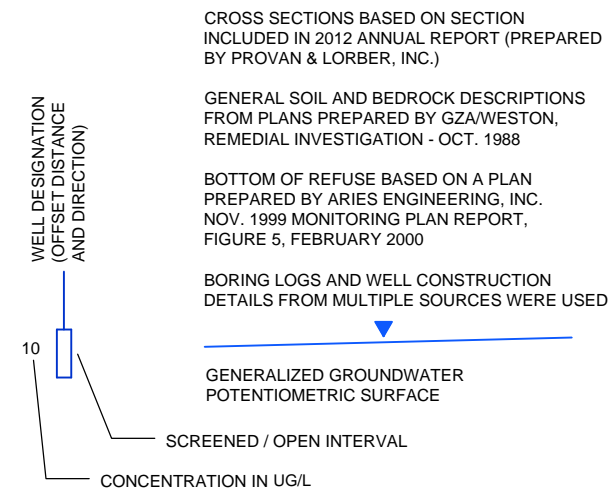
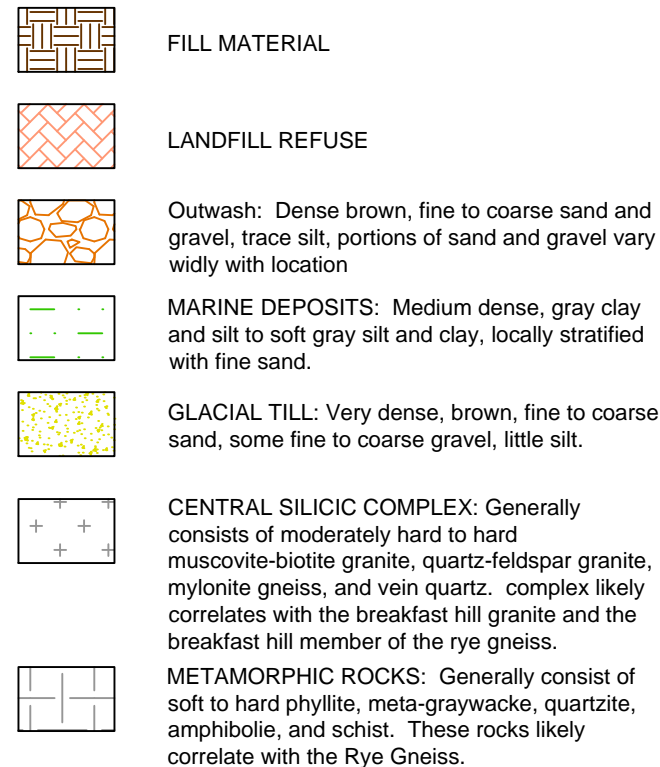
ISSUE:

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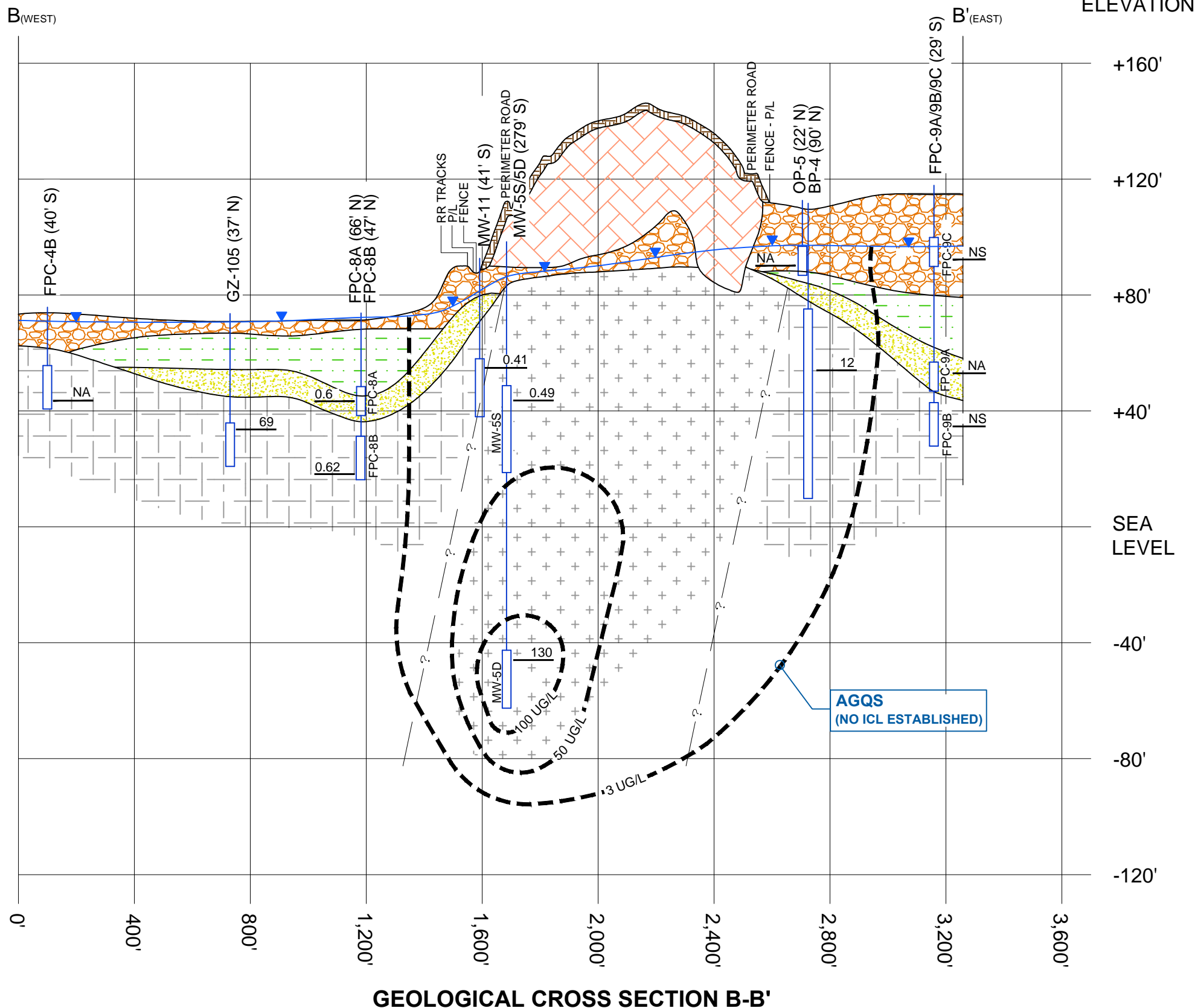
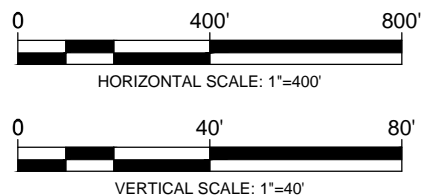
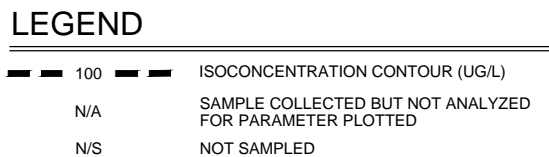
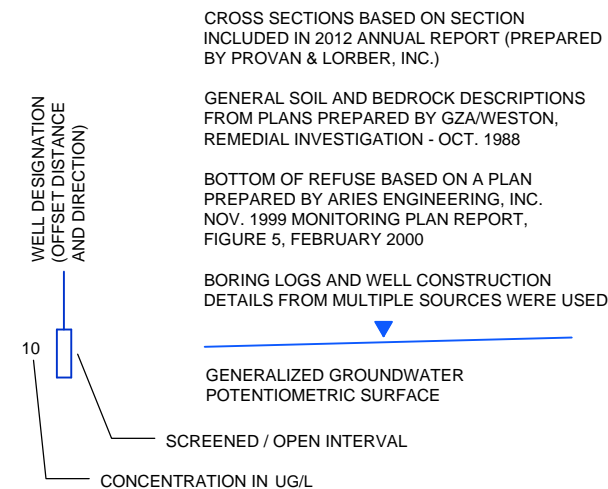
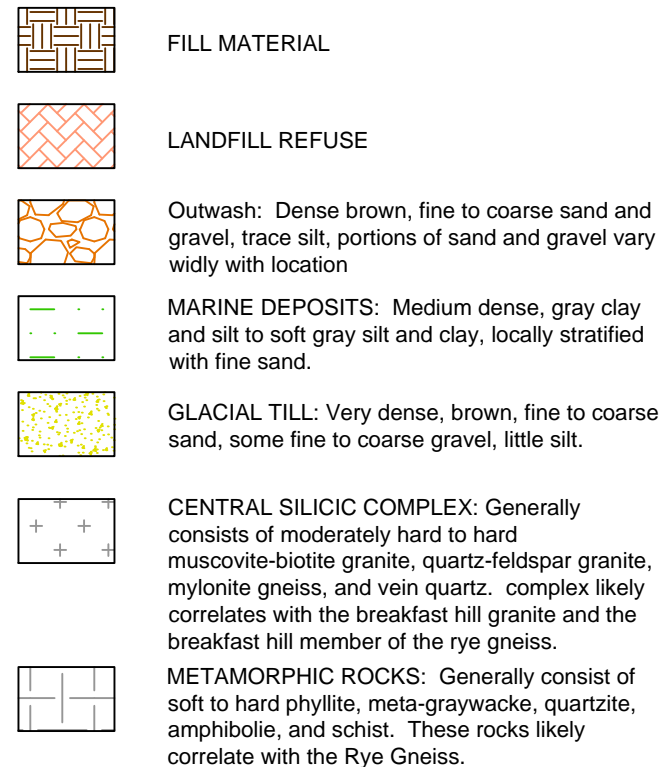
DESCRIPTION:

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PROJECT TITLE:	COAKLEY LANDFILL SUPERFUND SITE NORTH HAMPTON & GREENLAND, NEW HAMPSHIRE	DWG:	FIGURE 15	BY:	BLQ	REV:		DESCRIPTION:
		JN:	10424.003	DATE:	2015-02-09	REV DATE:		
SHEET TITLE:	SEPTEMBER 2014 VERTICAL DISTRIBUTION OF 1,4 - DIOXANE IN GROUNDWATER A-A'	SCALE:	1"=600'	APPROVED BY:	SBM	ISSUE:		DESCRIPTION:
				CHECKED BY:	SBM	ISSUE DATE:		

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PROJECT TITLE:	COAKLEY LANDFILL SUPERFUND SITE NORTH HAMPTON & GREENLAND, NEW HAMPSHIRE	DWG:	FIGURE 16	BY:	BLQ	REV:		DESCRIPTION:
		JN:	10424.003	DATE:	2015-02-09	REV DATE:		
SHEET TITLE:	SEPTEMBER 2014 VERTICAL DISTRIBUTION OF 1,4 - DIOXANE IN GROUNDWATER B-B'	SCALE:	1"=600'	APPROVED BY:	SBM	ISSUE:		DESCRIPTION:
				CHECKED BY:	SBM	ISSUE DATE:		

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TABLE 1
Summart of Groundwater Elevation Data
2014 Annual Summary Report
Coakley Landfull Superfund Site
North Hampton, New Hampshire

MONITORING WELL IDENTIFICATION	Ref. Pt Elev. (FT. NGVD)	Apr-93 GW. EL. FT.	Dec-96 GW. EL. FT.	Apr-97 GW. EL. FT.	Sep-97 GW. EL. FT.	Dec-97 GW. EL. FT.	Jun-98 GW. EL. FT.	Aug-98 GW. EL. FT.	Apr-99 GW. EL. FT.	Aug-99 GW. EL. FT.	Nov-99 GW. EL. FT.	Apr-00 GW. EL. FT.	Aug-00 GW. EL. FT.	Nov-00 GW. EL. FT.	Apr-01 GW. EL. FT.	Aug-01 GW. EL. FT.	Jun-02 GW. EL. FT.	Aug-02 GW. EL. FT.	Aug-03 GW. EL. FT.	Aug-04 GW. EL. FT.	Aug-05 GW. EL. FT.	Aug-06 GW. EL. FT.	Nov-07 GW. EL. FT.	Aug-08 GW. EL. FT.	Aug-09 GW. EL. FT.	Aug-10 GW. EL. FT.	Aug-11 GW. EL. FT.	Aug-12 GW. EL. FT.	Aug-13 GW. EL. FT.	Sep-14 GW. EL. FT.				
Operating Unit 1																																		
BP-4	111.70		98.94	97.83	96.07	95.84	99.55	97.03	97.04	95.26	95.93	97.1	96.93	96.03	99.37	96.29	97.27	96.26	96.51	96.89	96.34	97.71	95.72	97.52	99.00	96.55	96.75	96.48	97.39	96.15				
MW-2	94.54															86.75	89.00						88.61	88.95	88.40	87.88	88.79	86.85	87.69	85.69				
MW-4	129.12	101.52							98.41	95.94	96.78	97.92	97.61	96.65	100.33	96.88	98.01	96.99	97.07	97.35	96.71	98.12	96.17	97.98	98.43	96.93	97.20	96.90	97.75	96.49				
MW-5S (Note 4)	101.96	93.69							91.89	87.81	90.96	91.5	91.11	91.24	92.24	89.33	91.46	88.78	88.71	90.89	88.54	91.42	89.54	91.47	90.99	89.70	89.89	89.02	90.06	88.33				
MW-5D (Note 4)	99.72								91.22	87.17	90.1	90.74	89.92	90.31	91.72	88.60	90.60	88.12	89.22	89.96	88.02	89.82	88.61	90.42	90.35	88.96	89.11	88.25	89.52	87.70				
MW-6	101.15	93.4	93.84	93.44	90.04	92.25	93.44	91.33	92.55	88.03	91.98	92.52	92.20	92.32	93.23	89.79	92.50	89.16	90.09	92.13	89.01	92.46	90.52	92.42	91.93	90.58	90.73	89.66	90.40	88.78				
MW-8 (Note 4)	85.02		81.1	79.46	78.48	78.07	78.71	76.66	78.32	75.04	77.63	78.09	77.70	78.22	78.33	76.02	77.93	75.64	76.32	77.58	75.66	77.90	76.61	78.20	77.61	76.35	77.26	75.70	77.42	75.25				
MW-9	82.62		77.97	78.03	75.87	76.06	77.16	74.47	75.82	73.42	75.46	76.09	76.00	76.86	76.88	74.10	75.74	73.81	73.28	76.13	73.94	75.71	75.80	76.88	75.35	74.64	77.15	74.15	75.22	73.84				
MW-10	80.60		74.56	74.67	73.96	74.07	74.68	73.17	74.51	72.78	74.57	74.63	74.83	75.06	75.22	73.93	74.91	73.45	74.20	74.93	73.99	74.71	74.95	74.86	74.50	74.21	75.46	74.22	74.50	74.05				
MW-11	92.70		87.21	85.36	83.56	83.81	83.69	81.77	83.42	79.17	82.42	82.8	82.35	82.40	83.09	80.59	82.67	80.11	81.24	82.26	79.85	82.89	81.07	82.99	82.58	81.08	81.54	80.36	82.10	79.46				
OP-2 (Note 4)	100.00	91.44	95.86	95.4				92.85	93.62	91.03	92.39	93.37	93.27	92.75	87.25	92.00	93.49	91.85	92.26	93.05	91.94	93.80	92.28	94.04	93.98	92.50	93.17	92.52	77.42	92.28				
OP-5	112.68	94.92	99.26	98.28	96.59	96.41	100.41	100.41	97.39	95.84	96.41	97.58	97.33	96.40	107.29	97.54	97.72	96.82	96.98	97.31	96.78	98.03	96.04	97.81	98.28	96.91	97.22	96.86	97.72	96.48				
Operating Unit 2																																		
AE-1A	127.00								97.95	95.55	96.21	97.37	97.23	96.34	99.67	96.54	97.54	96.53	96.67	97.05	97.35	98.10	95.89	97.74	98.19	96.74	97.00	96.63	97.53	96.32				
AE-1B	126.80								97.91	95.51	96.13	97.35	97.19	96.31	99.65	96.43	97.51	96.51	96.65	97.09	96.49	98.09	95.87	97.73	97.98	96.55	96.93	96.61	97.51	96.30				
AE-2A	79.60									72.49	75.74	75.71	75.67	76.03	75.69	73.58	75.66	72.98	73.75	75.19	73.18	75.70	74.69	75.81	75.29	73.76	75.00	73.52	74.70	72.92				
AE-2B	79.50									72.59	75.79	75.79	75.44	76.04	75.78	73.49	75.65	73.16	74.42	75.33	73.60	75.61	74.22	75.94	76.02	74.35	74.26	74.01	75.30	73.49				
AE-3A	86.10								77.47	76.64	77.74	77.56	77.99	77.92	77.80	77.05	77.70	76.86	76.30	77.90	77.14	78.02	77.90	77.98	78.68	77.30	78.30	77.04	77.50	76.75				
AE-3B	87.30								78.55	77.19	78.38	78.35	78.47	78.61	78.64	78.30	78.49	77.47	77.90	78.58	76.86	78.66	78.47	78.50	78.32	77.76	78.84	77.50	77.84	77.22				
AE-4A	77.20																			73.47	70.75	73.75	72.91	73.10	73.20	71.49	73.10	70.80	72.29	70.42				
AE-4B	77.50																			73.42	70.51	73.30	72.28	73.61	73.01	71.10	72.18	70.58	72.12	70.26				
FPC-2A	78.40											75.69	76.70	76.98	NR		76.66	78.40	76.24	76.31	75.66	76.32	75.90	76.30	76.12	75.62	75.98	75.41	75.89	75.02				
FPC-2B	77.98											77.47	77.30	77.71	77.78		77.38	76.37	76.81	77.28	76.45	77.30	76.90	77.46	77.26	76.45	74.94	76.51	75.22	76.24				
FPC-4B	75.83	71.83																	69.96	71.58	68.21	71.63	70.95	71.81	71.24	69.80	71.01	69.51	70.43	68.98				
FPC-5A	74.30	75.01	74.44	74.44	73.94		74.44	73.29	74.14	72.2	73.93	73.9	73.98	74.18	74.14	73.02	73.10	73.03	73.10	74.30	72.18	73.50	73.50	73.73	73.37	72.73	72.91	72.05	72.11					
FPC-5B	74.90	74.85	74.81	74.81	73.91	74.21	74.81	73.3	74.6	72.38	74.48	74.25	74.60	74.77	74.70	73.43	70.96	73.15	74.23	74.40	73.19	74.66	74.50	74.85	74.46	73.74	74.33	72.95	73.64	72.90				
FPC-6A (Note 5)	79.20	73.23											72.74		72.84	72.85	72.85	73.11	73.01		72.65		75.03	72.91	75.03	74.58	75.22	74.42	70.88	71.87	70.77	71.22	70.12	
FPC-6B	77.10	73.20											72.81	69.86	72.94		72.09	73.21	73.14	70.88	72.33	70.30	71.94	70.32	68.37	70.47	70.19	72.93	72.35	71.26	72.35	71.06	70.49	
FPC-7A	82.08	81.63											81.36								80.12	80.99	80.03	81.46	81.30	81.49	81.16	80.39	81.10	80.20	80.73	79.78		
FPC-7B	82.33	80.53											80.93							79.82	80.72	79.69	81.02	79.43	81.20	80.87	80.14	80.82	79.95	80.42	79.54			
FPC-8A	73.80	73.85	73.67	73.65	71.49	73.15	73.49	71.01	73.04	69.23	72.93	72.93	72.88	73.34	73.20	71.06	72.99	70.36	71.26	72.86	70.63	73.01	72.20	73.09	72.73	71.62	72.46	71.31	72.60	70.75				
FPC-8B	73.60	72.83	73.52	73.49	71.44	73.04	73.33	70.84	72.88	69.14	72.77	72.78	72.63	73.18	72.99	70.93	72.79	70.07	71.22	72.69	70.58	72.83	72.03	72.00	72.68	71.10	72.28	71.16	72.40	70.61				
FPC-9A	117.57	99.87											97.32	95.02	95.72	96.92	96.75	95.90	99.22	96.25	97.05	96.02	96.27	96.40	95.83	97.59	95.48	97.44	97.90	96.37	96.58	96.18	97.23	95.98
FPC-9B	117.87	99.99											97.81	95.07	95.79	96.98	96.83	95.99	99.28	96.15	97.08	96.11	96.37				95.14	97.41	97.93	96.42	96.96	96.21	97.22	96.03
FPC-9C	117.75	100.45											97.87	95.77	96.33		97.25	96.50	99.62		97.52		96.75				96.08	97.62	98.10	96.75	96.65	96.78	97.69	96.53
FPC-11A	117.95	100.4											97.7							96.65	97.01	96.51	97.71	95.81	97.58	97.95	96.50	96.68	96.38	97.45	96.09			
FPC-11B	117.90	96.5											97.74							96.70	96.90	96.34	97.69	95.54	97.57	97.89	96.56	97.10	96.37	97.30	96.07			
FPC-11C (Note 6)	118.10																																	

- NOTES:**
1. Shaded data denotes a bedrock monitoring well.
 2. A blank indicates data was not collected.
 3. GW.EL. indicates groundwater elevation and FT. indicates measurements were in feet.
 4. Summit determined that Reference Point Elevations for MW-5S, MW-5D, MW-8 and OP-2 were incorrect for data collected since 1999. Correct measuring point elevations were identified on an as built survey plan prepared by Richard D. Bartlett and Associates, Inc. dated September 1998. Surveyed "top of cap" elevations for MW-5S, MW-5D and MW-8 were adjusted to top of PVC using field measurements (significant settling is not likely at these wells as they are 2-inch diameter wells install in 6 inch diamter boreholes through 6-inch diameter metal casings. A PVC casing elevation was listed for OP-2. Groundwater elevation data since April 1999 adjustments are as follows: MW-5S (+3.54 ft), MW-5D (+1.33 ft), MW-8 (-0.28 ft) and OP-2 (+1.51 ft).
 5. A replacement well (point) for FPC-6A was installed in August 2003, due to insufficient water for sampling for extended periods of time. However, the reference point elevation was not updated at that time. Therefore, groundwater elevations presented in previous monitoring reports for FPC-6A since August 2003 were incorrect. Summit surveyed the FPC-6A reference point elevation in December 2013 relative to the FPC-6B reference point elevation and determined that the measure point elevation for FPC-6A is 79.20 feet (not 77.00 feet, as identified in previous reports). Groundwater elevations at FPC-6A since August 2004 were corrected by +2.20 feet. In addition, the FPC-6A screened interval was updated based on well depth (9.97 feet), stickup (5.54 feet), and an assumed 1 foot screen interval.
 6. FPC-11C: Well casing was modified during road box repairs at FPC-11A/B/C on 1/10/2014 (Summit Environmental Consultants). Top of PVC casing was resurveyed relative to FPC-11A/B measuring points on 2/27/2014. Original measuring point elevation was 118.04 feet. New measuring point elevation is 118.10.

TABLE 2
Summary of September/October 2014 Groundwater Analytical Data
Coakley Landfill Superfund Site - North Hampton and Greenland, New Hampshire

OPERABLE UNIT 1 (OU-1)																
Sampling Point ID			MW-4	MW-4-DUP	MW-5D	MW-5S	MW-6	MW-8	MW-9	MW-10	MW-11	OP-2	OP-5	BP-4	# of Exceedances	
Monitored Zone / Unit	EPA	NHDES	Till	Till	DBR	SBR	OBH-BR	SBR	Outwash	Outwash	SBR	Outwash	Outwash	OBH-BR	EPA	NHDES
Date of Sample Collection	ICL	AGQS	10/1/14	10/1/14	10/2/14	9/30/14	10/2/14	10/2/14	9/30/14	9/30/14	10/1/14	10/1/14	10/1/14	10/1/14	ICL	AGQS
VOLATILE ORGANIC COMPOUNDS BY 8260B - (ug/L)																
1,2,4-Trimethylbenzene	---	330	N/A	N/A	1 U	1 U	1 U	1 U	N/A	N/A	1 U	N/A	N/A	N/A	---	0
1,2-Dichloropropane	5	5	N/A	N/A	2 U	2 U	2 U	2 U	N/A	N/A	2 U	N/A	N/A	N/A	0	0
1,4-Dichlorobenzene	---	75	N/A	N/A	1 U	1	1 U	1 U	N/A	N/A	1 U	N/A	N/A	N/A	---	0
2-Butanone(MEK)	200	4000	N/A	N/A	10 U	10 U	10 U	10 U	N/A	N/A	10 U	N/A	N/A	N/A	0	0
Benzene	5	5	N/A	N/A	1	2	1 U	3	N/A	N/A	2	N/A	N/A	N/A	0	0
Chlorobenzene	100	100	N/A	N/A	2 U	2 U	2 U	2	N/A	N/A	2 U	N/A	N/A	N/A	0	0
Chloroethane	---	---	N/A	N/A	28	5 U	5 U	11	N/A	N/A	5	N/A	N/A	N/A	---	---
Diethyl Ether	---	1400	N/A	N/A	98	26	5 U	80	N/A	N/A	13	N/A	N/A	N/A	---	0
IsoPropylbenzene	---	800	N/A	N/A	1 U	1	1 U	1 U	N/A	N/A	1 U	N/A	N/A	N/A	---	0
Methyl-t-butyl ether(MTBE)	---	13	N/A	N/A	5 U	5 U	5 U	5 U	N/A	N/A	5 U	N/A	N/A	N/A	---	0
m&p-Xylene	---	10000^	N/A	N/A	1 U	1 U	1 U	1 U	N/A	N/A	2	N/A	N/A	N/A	---	0
o-Xylene	---	10000^	N/A	N/A	1 U	1 U	1 U	1 U	N/A	N/A	1 U	N/A	N/A	N/A	---	0
tert-Butyl Alcohol (TBA)	---	40	N/A	N/A	60	30 U	30 U	50	N/A	N/A	30 U	N/A	N/A	N/A	---	2
Tetrachloroethene	3.5	5	N/A	N/A	2 U	2 U	2 U	2 U	N/A	N/A	2 U	N/A	N/A	N/A	0	0
Tetrahydrofuran(THF)	154	154	N/A	N/A	50	20	10 U	150	N/A	N/A	10	N/A	N/A	N/A	0	0
trans-1,2-Dichloroethene	100	100	N/A	N/A	2 U	2 U	2 U	2 U	N/A	N/A	2 U	N/A	N/A	N/A	0	0
1,4-DIOXANE BY 8260B SIM - (ug/L)																
1,4-Dioxane	---	3	6.7	6.9	130	49	0.25 U	200	28	N/A	41	1.5	N/A	12	---	7
DISSOLVED METALS BY 200.8 - (mg/L)																
Dissolved Antimony	0.006	0.006	0.001 U	0.001 U	N/A	N/A	N/A	N/A	0.001 U	0.001 U	N/A	0.001 U	0.001 U	N/A	0	0
Dissolved Arsenic	0.01	0.01	0.063	0.059	N/A	N/A	N/A	N/A	0.12	0.022	N/A	0.23	0.048	N/A	5	5
Dissolved Barium	---	2	0.056	0.061	N/A	N/A	N/A	N/A	0.12	0.054	N/A	0.016	0.022	N/A	---	0
Dissolved Beryllium	0.004	0.004	0.001 U	0.001 U	N/A	N/A	N/A	N/A	0.001 U	0.001 U	N/A	0.001 U	0.001 U	N/A	0	0
Dissolved Calcium	---	---	56	62	N/A	N/A	N/A	N/A	77	57	N/A	35	17	N/A	---	---
Dissolved Chromium	0.05	0.1	0.001 U	0.001 U	N/A	N/A	N/A	N/A	0.001 U	0.001 U	N/A	0.001 U	0.001 U	N/A	0	0
Dissolved Iron	---	---	21	23	N/A	N/A	N/A	N/A	60	31	N/A	43	25	N/A	---	---
Dissolved Lead	0.015	0.015	0.001 U	0.001 U	N/A	N/A	N/A	N/A	0.001 U	0.001 U	N/A	0.001 U	0.001 U	N/A	0	0
Dissolved Magnesium	---	---	17	18	N/A	N/A	N/A	N/A	21	13	N/A	7.8	3.8	N/A	---	---
Dissolved Manganese	0.3	0.84	1.1	1.2	N/A	N/A	N/A	N/A	1.4	2.3	N/A	1.2	4.3	N/A	5	5
Dissolved Nickel	0.1	0.1	0.006	0.007	N/A	N/A	N/A	N/A	0.009	0.003	N/A	0.01	0.015	N/A	0	0
Dissolved Potassium	---	---	25	28	N/A	N/A	N/A	N/A	17	10	N/A	14	2.6	N/A	---	---
Dissolved Sodium	---	---	19	23	N/A	N/A	N/A	N/A	70	40	N/A	16	7	N/A	---	---
Dissolved Vanadium	0.26	---	0.005 U	0.005 U	N/A	N/A	N/A	N/A	0.005 U	0.005 U	N/A	0.005 U	0.005 U	N/A	0	---
TOTAL METALS BY 200.8																
Total Antimony	0.006	0.006	N/A	N/A	0.001 U	0.001 U	0.001 U	0.001 U	N/A	N/A	0.001 U	N/A	N/A	0.001 U	0	0
Total Arsenic	0.01	0.01	N/A	N/A	0.009	0.022	0.001 U	0.009	N/A	N/A	0.013	N/A	N/A	0.025	3	3
Total Barium	---	2	N/A	N/A	0.1	0.14	0.007	0.18	N/A	N/A	0.07	N/A	N/A	0.04	---	0
Total Beryllium	0.004	0.004	N/A	N/A	0.001 U	0.001 U	0.001 U	0.001 U	N/A	N/A	0.001 U	N/A	N/A	0.001 U	0	0
Total Calcium	---	---	N/A	N/A	32	32	20	30	N/A	N/A	17	N/A	N/A	43	---	---
Total Chromium	0.05	0.1	N/A	N/A	0.001 U	0.001 U	0.001 U	0.001 U	N/A	N/A	0.001 U	N/A	N/A	0.001 U	0	0
Total Iron	---	---	N/A	N/A	13	14	1.7	4.1	N/A	N/A	13	N/A	N/A	30	---	---
Total Lead	0.015	0.015	N/A	N/A	0.001 U	0.001 U	0.001 U	0.001 U	N/A	N/A	0.001 U	N/A	N/A	0.001 U	0	0
Total Magnesium	---	---	N/A	N/A	25	15	7.6	38	N/A	N/A	13	N/A	N/A	17	---	---
Total Manganese	0.3	0.84	N/A	N/A	0.79	3.3	2.7	1.3	N/A	N/A	0.43	N/A	N/A	0.69	6	3
Total Nickel	0.1	0.1	N/A	N/A	0.009	0.013	0.003	0.021	N/A	N/A	0.007	N/A	N/A	0.008	0	0
Total Potassium	---	---	N/A	N/A	18	16	2	11	N/A	N/A	7.9	N/A	N/A	16	---	---
Total Sodium	---	---	N/A	N/A	140	79	14	190	N/A	N/A	77	N/A	N/A	71	---	---
Total Vanadium	0.26	---	N/A	N/A	0.005 U	0.005 U	0.005 U	0.005 U	N/A	N/A	0.005 U	N/A	N/A	0.005 U	0	---
FIELD PARAMETERS																
Dissolved Oxygen (mg/l)	---	---	N/A	N/A	0.9	1.4	0.7	70.5	1.1	1	< 0.5	0.6	0.6	< 0.5	---	---
Oxidation Reduction Potential (mV)	---	---	N/A	N/A	-122	-113	100	-161	-48	-87	-142	-64	-43	-217	---	---
pH (standard units)	---	---	N/A	N/A	7.2	7	6.1	7.4	6.4	6.6	7	6.4 *	6.3	7.5	---	---
Specific Conductance (us/cm)	---	---	N/A	N/A	1478	878	309	1477	1307	770	643	627	322	935	---	---
Temperature (degrees Celcius)	---	---	N/A	N/A	12.8	12.4	11.7	12.2	14	13	12.2	14	11	12.9	---	---
Turbidity (NTU)	---	---	N/A	N/A	11	8	6	6	15	6	9	< 5	< 5	8	---	---

TABLE 2
Summary of September/October 2014 Groundwater Analytical Data
Coakley Landfill Superfund Site - North Hampton and Greenland, New Hampshire

OPERABLE UNIT 2 (OU-2)																										
Sampling Point ID	EPA	NHDES	AE-1A	AE-1B	AE-2A	AE-2B	AE-3A	AE-3A-DUP	AE-3B	AE-4A	AE-4B	FPC-4B	FPC-5B	FPC-6A	FPC-6B	FPC-7A	FPC-7B	FPC-8A	FPC-8B	FPC-9A	FPC-11A	GZ-105	GZ-105-DUP	# of Exceedances		
Monitored Unit			Till	SBR	Till	SBR	Till	Till	SBR	Till	SBR	SBR	Till	SBR	Till	SBR	Till	SBR	Till	SBR	Till	Till	SBR	SBR	EPA	NHDES
Date of Sample Collection			ICL	AGQS	9/30/14	9/29/14	10/3/14	10/3/14	9/30/14	9/30/14	9/30/14	10/2/14	10/2/14	10/2/14	9/30/14	10/2/14	10/2/14	10/3/14	10/3/14	10/3/14	10/3/14	10/2/14	10/2/14	10/3/14	10/3/14	ICL
VOLATILE ORGANIC COMPOUNDS BY 8260B - (ug/L)																										
1,2,4-Trimethylbenzene	---	330	N/A	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	N/A	N/A	1 U	1 U	N/A	N/A	1 U	1 U	---	0	
1,2-Dichloropropane	5	5	N/A	N/A	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A	2 U	2 U	N/A	N/A	2 U	2 U	N/A	N/A	2 U	2 U	0	0	
1,4-Dichlorobenzene	---	75	N/A	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1	1 U	N/A	N/A	1 U	1 U	N/A	N/A	3	3	---	0	
2-Butanone(MEK)	200	4000	N/A	N/A	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	N/A	10 U	10 U	N/A	N/A	10 U	10 U	N/A	N/A	10 U	10 U	0	0	
Benzene	5	5	N/A	N/A	1 U	2	2	2	1 U	1 U	1 U	1 U	N/A	1	1 U	N/A	N/A	1 U	1 U	N/A	N/A	3	4	0	0	
Chlorobenzene	100	100	N/A	N/A	2	2 U	6	6	3	2 U	2 U	2 U	N/A	3	2	N/A	N/A	2 U	2 U	N/A	N/A	6	6	0	0	
Chloroethane	---	---	N/A	N/A	5 U	5	7	7	5 U	5 U	5 U	5 U	N/A	5 U	5 U	N/A	N/A	5 U	5 U	N/A	N/A	6	6	---	---	
Diethyl Ether	---	1400	N/A	N/A	6	26	14	14	9	5 U	5 U	5 U	N/A	13	10	N/A	N/A	5 U	5 U	N/A	N/A	35	36	---	0	
IsoPropylbenzene	---	800	N/A	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	N/A	N/A	1 U	1 U	N/A	N/A	1	1	---	0	
Methyl-t-butyl ether(MTBE)	---	13	N/A	N/A	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	N/A	5 U	5 U	N/A	N/A	5 U	5 U	N/A	N/A	5 U	5 U	---	0	
m&p-Xylene	---	10000^	N/A	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	N/A	N/A	1 U	1 U	N/A	N/A	1 U	1 U	---	0	
o-Xylene	---	10000^	N/A	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	1 U	1 U	N/A	N/A	1 U	1 U	N/A	N/A	1 U	1 U	---	0	
tert-Butyl Alcohol (TBA)	---	40	N/A	N/A	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	N/A	30 U	30 U	N/A	N/A	30 U	30 U	N/A	N/A	30 U	30 U	---	0	
Tetrachloroethene	3.5	5	N/A	N/A	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A	2 U	2 U	N/A	N/A	2 U	2 U	N/A	N/A	2 U	2 U	0	0	
Tetrahydrofuran(THF)	154	154	N/A	N/A	10 U	30	10 U	10 U	10 U	10 U	10 U	10 U	N/A	10 U	10 U	N/A	N/A	10 U	10 U	N/A	N/A	20	30	0	0	
trans-1,2-Dichloroethene	100	100	N/A	N/A	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	N/A	2 U	2 U	N/A	N/A	2 U	2 U	N/A	N/A	2 U	2 U	0	0	
1,4-DIOXANE BY 8260B SIM - (ug/L)																										
1,4-Dioxane	---	3	N/A	N/A	16	87	25	24	26	N/A	N/A	N/A	64	26	19	N/A	N/A	0.6	0.62	N/A	N/A	69	68	---	8	
DISSOLVED METALS BY 200.8 - (mg/L)																										
Dissolved Antimony	0.006	0.006	0.001 U	N/A	0.001 U	N/A	0.001 U	0.001 U	N/A	0.001 U	N/A	N/A	N/A	0.001 U	N/A	0.001 U	N/A	0.001 U	N/A	0.001 U	0.001 U	N/A	N/A	0	0	
Dissolved Arsenic	0.01	0.01	0.014	N/A	0.012	N/A	0.13	0.13	N/A	0.001 U	N/A	N/A	N/A	0.038	N/A	0.001 U	N/A	0.001	N/A	0.058	0.004	N/A	N/A	5	5	
Dissolved Barium	---	2	0.018	N/A	0.016	N/A	0.068	0.068	N/A	0.008	N/A	N/A	N/A	0.038	N/A	0.003	N/A	0.006	N/A	0.1	0.039	N/A	N/A	---	0	
Dissolved Beryllium	0.004	0.004	0.001 U	N/A	0.001 U	N/A	0.001 U	0.001 U	N/A	0.001 U	N/A	N/A	N/A	0.001 U	N/A	0.001 U	N/A	0.001 U	N/A	0.001 U	0.001 U	N/A	N/A	0	0	
Dissolved Calcium	---	---	31	N/A	26	N/A	39	43	N/A	6.3	N/A	N/A	N/A	33	N/A	11	N/A	33	N/A	60	68	N/A	N/A	---	---	
Dissolved Chromium	0.05	0.1	0.001 U	N/A	0.001 U	N/A	0.001 U	0.001 U	N/A	0.001 U	N/A	N/A	N/A	0.001 U	N/A	0.001 U	N/A	0.001 U	N/A	0.001 U	0.001 U	N/A	N/A	0	0	
Dissolved Iron	---	---	0.4	N/A	0.07	N/A	19	20	N/A	0.31	N/A	N/A	N/A	3.3	N/A	0.05 U	N/A	0.13	N/A	7.3	0.42	N/A	N/A	---	---	
Dissolved Lead	0.015	0.015	0.001 U	N/A	0.001 U	N/A	0.001 U	0.001 U	N/A	0.001 U	N/A	N/A	N/A	0.001 U	N/A	0.001 U	N/A	0.001 U	N/A	0.001 U	0.001 U	N/A	N/A	0	0	
Dissolved Magnesium	---	---	10	N/A	7.3	N/A	18	19	N/A	5.2	N/A	N/A	N/A	14	N/A	3.3	N/A	4.6	N/A	26	19	N/A	N/A	---	---	
Dissolved Manganese	0.3	0.84	0.46	N/A	0.81	N/A	0.98	1	N/A	0.21	N/A	N/A	N/A	3.1	N/A	0.005 U	N/A	0.17	N/A	0.18	0.43	N/A	N/A	5	2	
Dissolved Nickel	0.1	0.1	0.001 U	N/A	0.007	N/A	0.007	0.007	N/A	0.001 U	N/A	N/A	N/A	0.006	N/A	0.003	N/A	0.002	N/A	0.006	0.003	N/A	N/A	0	0	
Dissolved Potassium	---	---	3.5	N/A	13	N/A	18	18	N/A	2.3	N/A	N/A	N/A	7.6	N/A	1.8	N/A	2.2	N/A	9.3	5.6	N/A	N/A	---	---	
Dissolved Sodium	---	---	17	N/A	30	N/A	79	76	N/A	8	N/A	N/A	N/A	100	N/A	8	N/A	16	N/A	96	140	N/A	N/A	---	---	
Dissolved Vanadium	0.26	---	0.005 U	N/A	0.005 U	N/A	0.005 U	0.005 U	N/A	0.005 U	N/A	N/A	N/A	0.005 U	N/A	0.005 U	N/A	0.005 U	N/A	0.005 U	0.005 U	N/A	N/A	0	---	
TOTAL METALS BY 200.8																										
Total Antimony	0.006	0.006	N/A	0.001 U	N/A	0.001 U	N/A	N/A	0.001 U	N/A	0.001 U	0.001 U	0.001 U	N/A	0.001 U	N/A	0.001 U	N/A	0.001 U	N/A	N/A	0.001 U	0.001 U	0	0	
Total Arsenic	0.01	0.01	N/A	0.008	N/A	0.014	N/A	N/A	0.087	N/A	0.001 U	0.001 U	0.002	N/A	0.003	N/A	0.001 U	N/A	0.008	N/A	N/A	0.011	0.012	3	3	
Total Barium	---	2	N/A	0.043	N/A	0.12	N/A	N/A	0.16	N/A	0.008	0.005	0.042	N/A	0.079	N/A	0.002	N/A	0.007	N/A	N/A	0.044	0.046	---	0	
Total Beryllium	0.004	0.004	N/A	0.001 U	N/A	0.001 U	N/A	N/A	0.001 U	N/A	0.001 U	0.001 U	0.001 U	N/A	0.001 U	N/A	0.001 U	N/A	0.001 U	N/A	N/A	0.001 U	0.001 U	0	0	
Total Calcium	---	---	N/A	29	N/A	37	N/A	N/A	43	N/A	6.7	4.5	5.3	N/A	18	N/A	13	N/A	19	N/A	N/A	40	43	---	---	
Total Chromium	0.05	0.1	N/A	0.001 U	N/A	0.001 U	N/A	N/A	0.001 U	N/A	0.001 U	0.001 U	0.001 U	N/A	0.001 U	N/A	0.001 U	N/A	0.001 U	N/A	N/A	0.001 U	0.001 U	0	0	
Total Iron	---	---	N/A	2.2	N/A	9.1	N/A	N/A	13	N/A	0.05 U	0.05 U	0.22	N/A	7.2	N/A	0.05 U	N/A	0.11	N/A	N/A	2.9	3.1	---	---	
Total Lead	0.015	0.015	N/A	0.001 U	N/A	0.001 U	N/A	N/A	0.001 U	N/A	0.001 U	0.001 U	0.001 U	N/A	0.001 U	N/A	0.001 U	N/A	0.001 U	N/A	N/A	0.001 U	0.001 U	0	0	
Total Magnesium	---	---	N/A	13	N/A	25	N/A	N/A	18	N/A	5	2.7	2.9	N/A	9	N/A	3.5	N/A	4.1	N/A	N/A	16	16	---	---	
Total Manganese	0.3	0.84	N/A	0.53	N/A	1.1	N/A	N/A	1.1	N/A	0.018	0.006	0.057	N/A	0.39	N/A	0.005 U	N/A	0.03	N/A	N/A	0.32	0.34	5	2	
Total Nickel	0.1	0.1	N/A	0.001 U	N/A	0.007	N/A	N/A	0.008	N/A	0.001 U	0.001 U	0.006	N/A	0.003	N/A	0.001 U	N/A	0.001 U	N/A	N/A	0.006	0.006	0	0	
Total Potassium	---	---	N/A	5.2	N/A	9.7	N/A	N/A	17	N/A	3.3	1.8	5.9	N/A	6.4	N/A	1.6	N/A	2.5	N/A	N/A	5.2	5.5	---	---	
Total Sodium	---	---	N/A	22	N/A	170	N/A	N/A	91	N/A	15	7	270	N/A	89	N/A	8	N/A	16	N/A	N/A	140	140	---	---	
Total Vanadium	0.26	---	N/A	0.005 U	N/A	0.005 U	N/A	N/A	0.005 U	N/A	0.005 U	0.005 U	0.005 U	N/A												

TABLE 2
Summary of September/October 2014 Groundwater Analytical Data
Coakley Landfill Superfund Site - North Hampton and Greenland, New Hampshire

NOTES

1. Monitored Zone / Unit identifies the hydrogeological unit within the screened/open interval. The hydrogeology of the site is comprised of four principle geological units include including bedrock, glacial till, marine sediments consisting of predominately of silt and clay, and sandy outwash. Bedrock well screened intervals vary as follows: "OBH-BR" wells are standard 6-inch diameter wells with steel casing set in bedrock and open boreholes (typical water supply well construction). "SBR" indicates the screen interval is the upper most section of bedrock. "DBR" is used to differentiate a screened interval that is below the uppermost section of bedrock (i.e.; MW-5S versus MW-5D).
2. **Bolded values** denote concentration exceeding the EPA Interim Cleanup Level (ICL)
3. **Shaded values** denote concentration exceeding the NHDES Ambient Groundwater Quality Standard
4. The list of volatile organic compounds (VOCs) provided includes analytes detected in OU-1 or OU-2 since 2006, and all VOCs that have ICLs. ICLs were established for 1,2-dichloropropane and tetrachloroethylene (PCE) however no detections have been reported at groundwater sampling points included in the long-term monitoring events since 1998. An ICL was established for trans-1,2-dichloroethene however no detections have been reported at groundwater sampling points included in the long-term monitoring events since 1999.
5. An ICL was established for the semi-volatile organic compounds (SVOCs) diethyl phthalate and phenol. However, in May 1998 and April 1999, groundwater samples were submitted for analysis of SVOCs and no exceedances were reported; therefore, SVOCs were removed from the long-term monitoring plan.
6. Result for groundwater primary/duplicate samples are provided in this table: MW-4/MW-4-DUP, AE-3A/AE-3A-DUP, and GZ-105/GZ-105-DUP. Interval sampling data from FPC-11B and associated duplicate sample results are provided in a separate table.

ABBREVIATIONS

N/A	Sample was not analyzed/measured for indicated parameter
### U	Not Detected at the reporting detection limit indicated
NHDES AGQS	NH Department of Environmental Services Ambient Groundwater Quality Standard (Env-Or-600, Table 600-1)
EPA ICL	US Environmental Protection Agency Interim Cleanup Level established in 1990/1994 Record of Decisions and subsequent Explanation of Significant Differences
uS/cm	microsiemens per centimeter
ug/L	micrograms per liter, parts per billion
mg/L	milligram per liter, parts per million
NTU	nephelometric turbidity unit
mV	millivolt
*	Field parameter result qualified due to failed QA/QC or suspected issues with measurements, as noted on field forms and
^	The AGQS for xylenes is for total xylene or the sum of all isomers, including: m&p-Xylene and o-Xylene.

TABLE 3
Summary of Analytical Results for Interval Samples at FPC-11B
2014 Annual Report
Coakley Landfill - North Hampton, New Hampshire

Monitoring Well FPC-11B (Sampled Oct. 2, 2014)			Depth of Tubing Intake from Top of PVC Casing (Feet)	Analytical Results			Proposed Depth of Tubing Intake for Future Sampling Events
Top of Screen Interval			57.5				
Sample ID	GW-FPC-11B-59TOC		59.5	1	0.002	0.92 J-	
	GW-FPC-11B-64TOC		64	1.2	0.004	1.6 J-	
	GW-FPC-11B-64TOC-DUP			1.1	0.003	1.4 J-	
	GW-FPC-11B-68TOC		68.5	1.4	0.004	2.3 J-	X
Bottom of Screen Interval			72.5				
Historic Data	Historic Depth of Tubing Intake		65.0				
	Historic Max. Depth to Water		22.36				
	Maximum Concentration			NA	0.010	1.4	
	Average Concentration			NA	0.007	0.684	
	Minimum Concentation			NA	0.003	0.210	

ABBREVIATIONS

ug/L = micrograms per liter (parts per billion)
mg/L = milligrams per liter (parts per million)
< = parameter concentration below detection limit indicated
NA = Not Applicable, no previous 1,4-dioxane data is available

TABLE NOTES

1. Historic total arsenic, total manganese and 1,4-dioxane statistics based on data from last five years (2008-2012); note PFC-11B was not sampled in 2013 due to well integrity issues that have now been repaired.
2. Historic tubing intakes listed in the 2014 Sampling and Analysis Plan.
3. Historic maximum depth to water level from measuring point based on elevation data provided in long-term monitoring reports.
4. Arsenic: The EPA ICL and NHDES AGQS is 0.01 mg/L.
5. Manganese: The EPA ICL is 0.3 mg/L. The NHDES AGQS is 0.84 mg/L.
6. 1,4-dioxane: The EPA ICL has not been established. The NHDES AGQS is 3 ug/L.
7. Arsenic and Manganese analyzed using EPA Method 200.8.
8. 1,4-dioxane analyzed using EPA Method 8260B SIM

TABLE 4
Summary of Analytical Results for Off-Site Water Supply Wells
2014 Annual Report
Coakley Landfill - North Hampton, New Hampshire

SAMPLE IDENTIFICATION	EPA ICL	NHDES AGQS	EPA MCL	R-3	R-3	R-3	R-3	R-3	R-3	R-3	R-3-DUP	R-3	R-3-DUP	R-3	R-3-DUP	R-3	R-3-DUP
DATE SAMPLED				24-Jan-08	13-Aug-08	19-Aug-09	17-Aug-10	18-Aug-11	30-Aug-12	26-Mar-13	26-Mar-13	16-Aug-13	16-Aug-13	27-Feb-14	27-Feb-14	3-Oct-14	3-Oct-14
VOLATILE ORGANIC COMPOUNDS																	
Methyl tert-butyl ether (ug/L)	-	13	-	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene (ug/L)	-	1000	1000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dioxane (ug/L)	-	3	-	NA	NA	NA	NA	NA	0.40	0.45	0.26	0.45	0.41	0.41	0.42	0.37	0.36
METALS																	
Arsenic, total (mg/L)	0.01	0.01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.001	< 0.001	< 0.001	< 0.001
Manganese, total (mg/L)	0.3	0.84	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.13	0.14	0.10	0.098
FIELD PARAMETERS																	
Temperature (degrees Celcius)	-	-	-	13.51	12.51	11.38	12.58	12.62	12.73	NM	NM	13	NA	8	NA	12	NA
pH (standard units)	-	-	-	5.63	5.85	7.92	7.14	8.08	8.54	NM	NM	7	NA	7.9	NA	8.4	NA
Conductivity (uS/cm)	-	-	-	316	423	452	443	238	466	NM	NM	414	NA	NR	NA	417	NA
Dissolved Oxygen (mg/L)	-	-	-	4.16	3.72	4.64	2.19	4.65	4.98	NM	NM	<0.5	NA	<0.5	NA	< 0.5	NA
Turbidity (NTU)	-	-	-	2.0	15.4	2.2	0.5	1.04	0.70	NM	NM	6.00	NA	<5	NA	< 5	NA
Oxidation/Reduction Potential (mV)	-	-	-	157	95	-122	-35	-164.5	22.5	NM	NM	-224	NA	-143	NA	-219	NA

SAMPLE IDENTIFICATION	EPA ICL	NHDES AGQS	EPA MCL	R-5	R-5	R-5	R-5
DATE SAMPLED				24-Jan-08	13-Aug-08	19-Aug-09	19-Aug-10
VOLATILE ORGANIC COMPOUNDS							
Methyl tert-butyl ether (ug/L)	-	13	-	<0.5	<0.5	<0.5	<0.5
Toluene (ug/L)	-	1000	1000	<0.5	<0.5	<0.5	<0.5
1,4-dioxane (ug/L)	-	3	-	NA	NA	NA	NA
METALS							
Arsenic, total (mg/L)	0.01	0.01	0.01	NA	NA	NA	NA
Manganese, total (mg/L)	0.3	0.84	-	NA	NA	NA	NA
FIELD PARAMETERS							
Temperature (degrees Celcius)	-	-	-	14	14	17	19
pH (standard units)	-	-	-	5.8	5.9	6.7	6.0
Conductivity (uS/cm)	-	-	-	243	281	456	222
Dissolved Oxygen (mg/L)	-	-	-	6.4	8.0	6.8	5.5
Turbidity (NTU)	-	-	-	1.4	12.0	2.0	0.2
Oxidation/Reduction Potential (mV)	-	-	-	162	87	194	146

SAMPLE IDENTIFICATION	EPA ICL	NHDES AGQS	EPA MCL	339BHR	339BHR	339BHR	339BHR
DATE SAMPLED				29-Apr-13	16-Aug-13	27-Feb-14	3-Oct-14
VOLATILE ORGANIC COMPOUNDS							
Methyl tert-butyl ether (ug/L)	-	13	-	NA	<0.5	<0.5	< 0.5
Toluene (ug/L)	-	1000	1000	NA	<0.5	<0.5	1.8
1,4-dioxane (ug/L)	-	3	-	0.38	0.42	0.63	0.42
METALS							
Arsenic, total (mg/L)	0.01	0.01	0.01	NA	NA	< 0.001	< 0.001
Manganese, total (mg/L)	0.3	0.84	-	NA	NA	0.25	0.32
FIELD PARAMETERS							
Temperature (degrees Celcius)	-	-	-	NM	NM	11	12
pH (standard units)	-	-	-	NM	NM	7.1	7.1
Conductivity (uS/cm)	-	-	-	NM	NM	NR	394
Dissolved Oxygen (mg/L)	-	-	-	NM	NM	0.7	0.7
Turbidity (NTU)	-	-	-	NM	NM	35	5
Oxidation/Reduction Potential (mV)	-	-	-	NM	NM	-22	-63

Notes on last page of table

TABLE 4
Summary of Analytical Results for Off-Site Water Supply Wells
2014 Annual Report
Coakley Landfill - North Hampton, New Hampshire

SAMPLE IDENTIFICATION	EPA	NHDES	EPA	346BHR	346BHR	346BHR
DATE SAMPLED	ICL	AGQS	MCL	30-Aug-12	16-Aug-13	3-Oct-14
VOLATILE ORGANIC COMPOUNDS						
Methyl tert-butyl ether (ug/L)	-	13	-	<0.5	<0.5	<0.5
Toluene (ug/L)	-	1000	1000	<0.5	<0.5	<0.5
1,4-dioxane (ug/L)	-	3	-	<0.25	<0.25	<0.25
METALS						
Arsenic, total (mg/L)	0.01	0.01	0.01	NA	NA	< 0.001
Manganese, total (mg/L)	0.3	0.84	-	NA	NA	0.29
FIELD PARAMETERS						
Temperature (degrees Celcius)	-	-	-	13	NM	12
pH (standard units)	-	-	-	7.3	NM	6.9
Conductivity (uS/cm)	-	-	-	606	NM	608
Dissolved Oxygen (mg/L)	-	-	-	6.4	NM	0.9
Turbidity (NTU)	-	-	-	18	NM	21
Oxidation/Reduction Potential (mV)	-	-	-	76	NM	-6

SAMPLE IDENTIFICATION	EPA	NHDES	EPA	415BHR	415BHR	415BHR
DATE SAMPLED	ICL	AGQS	MCL	16-Apr-13	16-Aug-13	3-Oct-14
VOLATILE ORGANIC COMPOUNDS						
Methyl tert-butyl ether (ug/L)	0.01	0.01	0.01	NA	<0.5	<0.5
Toluene (ug/L)	-	1000	1000	NA	<0.5	<0.5
1,4-dioxane (ug/L)	0.3	0.84	-	<0.25	<0.25	<0.25
METALS						
Arsenic, total (mg/L)	0.01	0.01	0.01	NA	NA	< 0.001
Manganese, total (mg/L)	0.3	0.84	-	NA	NA	0.028
FIELD PARAMETERS						
Temperature (degrees Celcius)	-	-	-	NM	13.00	13
pH (standard units)	-	-	-	NM	8.10	8.6
Conductivity (uS/cm)	-	-	-	NM	351.00	386
Dissolved Oxygen (mg/L)	-	-	-	NM	0.57	0.6
Turbidity (NTU)	-	-	-	NM	< 5	< 5
Oxidation/Reduction Potential (mV)	-	-	-	NM	-188	-178

TABLE NOTES:

1. R-5 not sampled since Aug. 19, 2010 due to the water system being out of service.
2. Field parameter measurements prior to Aug. 2013 were not collected with a flow cell directly connected to the sampling tap; therefore, dissolved oxygen and oxidation reduction potential measurements may be biased high due to exposure to the atmosphere.
3. Only analytes detected in one or more groundwater samples at water supply wells are listed in this table. Analytical methods include, VOCs by 524.2, 1,4-dioxane by 8260B SIM, and metals by 200.8

TABLE ABBREVIATIONS:

NA = Not Analyzed
NM = Not Measured
NR = Not Recorded - field parameter measurement did not meet QA/QC criteria and were rejected
uS/cm = microsiemens per centimeter
ug/L = micrograms per liter (parts per billion)
mg/L = milligrams per liter (parts per million)
NTU - Nephelometric Turbidity Units
mV = millivolts
< = parameter concentration below detection limit indicated
R-3-DUP = duplicate sample collected at R-3
NHDES AGQS = NHDES Ambient Groundwater Quality Standard
EPA MCL = EPA Primary Drinking Water Standard
EPA ICL = EPA Interim Groundwater Quality Standard

TABLE 5
Summary of Surface Water Analytical Data for SW-5
Coakley Landfill Superfund Site - North Hampton Greenland, New Hampshire

SAMPLE IDENTIFICATION	NHDES Surface Water Standard		SW-5	SW-5	SW-5	SW-5	SW-5	SW-5	SW-5	SW-5	SW-5	SW-5	SW-5 (DUP)	
DATE SAMPLED	Acute	Chronic	27-Aug-03	26-Aug-04	29-Aug-05	30-Aug-06	15-Nov-07	14-Aug-08	19-Aug-09	19-Aug-11	3-Oct-14	3-Oct-14		
VOLATILE ORGANIC COMPOUNDS BY 8260B (ug/L)														
Toluene	---	---	< 2	< 2	< 2	< 2	< 1	< 1	7.2	< 1	< 1	< 1		
METALS BY 200.8 (mg/L)														
TOTAL OR DISSOLVED (METALS ONLY)			Total	Total	Total	Total	Dissolved	Total	Dissolved	Total	Total	Total	Dissolved	Dissolved
Aluminum	0.75	0.087	0.2	240	9.1 J	3	0.08	0.15	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05	< 0.05
Antimony	9	1.6	< 0.004	< 0.004	< 0.05	< 0.004	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Arsenic*	0.34	0.15	0.003	0.72	1.2	0.017	0.019	0.006	0.008	0.002	0.045	0.007	< 0.001	< 0.001
Barium	---	---	0.04	6.1	0.36	0.07	0.056	0.029	0.033	0.053	0.063	0.023	0.013	0.014
Beryllium	0.13	0.0053	< 0.004	0.011	< 0.01	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium*	0.00095	0.0008	< 0.002	0.01	< 0.01	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Calcium	---	---	83	310	54 J	67	66	28	33	43	66	29	29	30
Chromium (Cr+3 + Cr+6)*	0.183 (Cr+3) 0.016 (Cr+6)	0.024 (Cr+3) 0.011 (Cr+6)	0.003	0.38	0.03	0.005	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cobalt	---	---	< 0.002	0.2	0.01	0.003	< 0.004	0.003	0.003	0.002	0.002	0.003	< 0.001	< 0.001
Copper*	0.0036	0.0027	< 0.002	0.14	< 0.01 J	< 0.005	< 0.004	0.003	0.002	< 0.001	0.001	0.003	0.001	0.001
Iron	---	1	2	1,200	250	25	14	5	6	2	30	4.6	1	1
Lead*	0.014	0.00054	< 0.002	0.44	0.01	< 0.002	< 0.002	0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001
Magnesium	---	---	35	90	18	19	17	8	10	10	15	7.3	8	8
Manganese	---	---	0.79	200	6	3	2.6	1	2	1	2	2.1	0	0
Mercury*	0.0014	0.00077	< 0.0004	0.002	< 0.001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel*	0.1449	0.016	0.011	0.27	0.02	0.008	0.005	0.005	0.006	0.005	0.005	0.004	0.002	0.002
Potassium	---	---	40	50	20	20	23	21	24	7	20	14	5	6
Selenium	---	0.0005	< 0.004	0.009	< 0.01 J	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001
Silver*	0.00032	---	< 0.004	< 0.004	< 0.01	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Sodium	---	---	160	22	21	43	52	35	42	36	46	20	28	27
Thallium	1.4	0.04	< 0.002	< 0.004	< 0.01	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	---	---	< 0.002	0.36	0.019	< 0.004	< 0.002	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.005	< 0.005
Zinc*	0.0362	0.0365	0.008	0.53	0.05	0.019	0.019	0.01	0.9	< 0.005	0.089	0.016	< 0.005	< 0.005
GENERAL CHEMISTRY														
Ammonia** (mg/L)	pH Dependent		14.6	9.85	11.3	5.8	2.9	< 0.05	8.7	1.9	0.08	0.08		
FIELD PARAMETERS														
Temperature (degrees C)	---	---	NA	NA	NA	NA	7.46	18.1	19.69	18.48	11.5			
pH (Standard Units)	---	---	NA	NA	NA	NA	6.99	6.45	6.31	6.51	6.8			
Specific Conductance (us/cm)	---	---	NA	NA	NA	NA	675	451	965	178	397			
Dissolved Oxygen (mg/L)	---	---	NA	NA	NA	NA	0.5	3.29	0.84	2.25	3.2			
Turbidity (NTU)	---	---	NA	NA	NA	NA	12.6	8.4	33	5.48	7			
Oxidation Reduction Potential (mV)	---	---	NA	NA	NA	NA	-70	73	-111	-50	41			

NOTES:

1.

VOCs list is limited to analytes detected in samples

2.

--- no standard has been established for the indicated parameter.

3.

NHDES Surface Water Standards are listed in Env Wq 1700, Table 1703.1

4.

There are no ROD ICLs established for surface water.

5.

Highlighting: Bold and gray shaded values denote NHDES Acute or Chronic Surface Water Criteria Exceedances, respectively; Bold and Gray shaded values denote NHDES Acute and Chronic Criteria Exceedances

6.

The reporting detection limit (RDL) for zinc, silver and lead are consistent with RDLs specified in the SAP; however, they exceed the "default" (see footnote *) acute and/or chronic standards.

*

Acute and chronic standards based on "default" values listed in Env Wq 1700, Table 1703.1. Actual standards may vary based on the water effect ratio (WER) value used and/or total hardness.

**

The freshwater and saltwater aquatic life criteria for ammonia are pH dependent. Refer to Env-Wq 1703.25 through Env-Wq 1703.31.

(DUP)

Duplicate sample results for 10/3/2014

TABLE 6
Summary of Sediment Analytical Data for SED-4 & SED-5
Coakley Landfill Superfund Site - North Hampton and Greenland, New Hampshire

Sampling Point ID	SQuiRT TEC	SED-4	SED-4	SED-4	SED-4	SED-4	SED-4	SED-4		S-SED-4
Date of Sample Collection	(Dry Weight)	4/26/2001	8/26/2004	8/29/2005	8/29/2006	11/15/2007	8/14/2008	8/19/2009		10/03/2014
TOTAL METALS BY 6020 - (mg/kg)										
Total Aluminum	---	8100	4400	7900	6700	3800	12000	3100	Sediment Sampling Not Required for 2010-2013	3900 J
Total Antimony	---	5.3	< 12	< 4	< 24	1	< 0.5	0.7		< 1 UJ
Total Arsenic	9.79	40	< 6	< 4	< 6	4.2	2.1	3.1		4 J
Total Barium	---	220	28	60	49	68	71	52		95 J
Total Beryllium	---	1.8	< 12	< 4	< 6	< 0.5	0.6	< 0.5		< 1 UJ
Total Cadmium	0.99	0.8	< 6	< 4	< 6	0.8	< 0.5	0.5		1 J
Total Calcium	---	31000	9200	13000	12000	15000	2000	17000		20000 J
Total Chromium	43.4	69	6	12	< 6	4	14	3.4		5 J
Total Cobalt	---	14	< 3	< 4	< 6	17	1.2	2		5 J
Total Copper	31.6	67	< 6	17	20	2.3	2.5	16		15 J
Total Iron	---	2500	1200	3900	2400	3100	2100	2800		9100 J
Total Lead	35.8	250	15	130	110	68	10	32		91 J
Total Magnesium	---	4400	1500	3500	2400	2000	900	2000		2100 J
Total Manganese	---	500	400	190	160	910	63	980		2100 J
Total Mercury	0.18	0.3	< 0.6	0.4	< 0.6	0.5	< 0.1	0.3		0.5 J
Total Nickel	22.7	53	< 6	14	< 9	7.4	6.3	6.9		9 J
Total Potassium	---	800	370	500	340	300	1700	200		800 J
Total Selenium	---	2.9	< 6	< 4	< 6	< 0.5	< 0.5	2.2		3 J
Total Silver	---	< 1	< 6	< 4	< 6	< 0.5	< 0.5	< 0.5		< 1 UJ
Total Sodium	---	100	230	190	1100	300	200	400		300 J
Total Thallium	---	< 1	< 15	< 4	< 6	< 0.5	< 0.5	< 0.5		< 1 UJ
Total Vanadium	---	71	7	38	29	14	14	10		27 J
Total Zinc	121	220	57	91	74	110	8.3	93		170 J
TOTAL SOLIDS BY 2540G-91 - (Percent - %)										
Solids Total	---	60.5	22.0	20.9	14.5	12.7	54.8	11.4		12.2 J

NOTES:

mg/kg = milligram per kilogram, parts per million

--- = no standard has been established for the indicated parameter.

< = concentration is below reporting detection limit indicated

J, UJ = data qualifiers applied based on EPA's Tier I Plus data validation guidelines. J = estimated, UJ = estimated detection limit

1. Beginning in 2014, sediment data was qualified in accordance with EPA's Tier I Plus data validation guidelines.

2. The EPA has not established a cleanup standard for sediment.

3. Sediment laboratory analytical data are compared to the NHDES Draft Evaluation of Sediment Quality Guidance Document, dated April 2005, that includes the "National Oceanic and Atmospheric Administration Screening Quick Reference Tables (NOAA SQiRT Tables for Inorganics in Sediment - Freshwater). Current SQiRT Tables are located on the NOAA website: http://archive.orr.noaa.gov/bookshelf/122_NEW-SQIRTs.pdf. TEC is Threshold Effect Concentration, which is consensus-based and incorporates the Ontario Ministry of the Environment lowest-observed effect levels (LELs).

4. Shaded values denote concentrations exceeding the NOAA SQiRT TEC standard.

TABLE 6
Summary of Sediment Analytical Data for SED-4 & SED-5
Coakley Landfill Superfund Site - North Hampton and Greenland, New Hampshire

Sampling Point ID	SQuiRT TEC	SED-5	SED-5	SED-5	SED-5	SED-5/SED-3T	SED-5	SED-5		S-SED-5	S-SED-5-DUP
Date of Sample Collection	(Dry Weight)	8/27/2003	8/26/2004	8/29/2005	8/30/2006	11/15/2007	8/14/2008	8/19/2009		10/03/2014	10/3/2014
TOTAL METALS BY 6020 - (mg/kg)											
Total Aluminum	---	18000	17000	6600	34000	9900	11000	17000	Sediment Sampling Not Required for 2010-2013	16000 J	24000 J
Total Antimony	---	< 2	< 12	< 4	< 8	1	< 0.5	< 0.5		0.8 J	0.7 J
Total Arsenic	9.79	19	36	310	17	15	16	15		10 J	12 J
Total Barium	---	88	130	270	150	110	49	110		140 J	210 J
Total Beryllium	---	< 4	< 12	< 4	< 2	< 0.5	< 0.5	1		0.9 J	1.3 J
Total Cadmium	0.99	< 1	< 6	< 4	< 2	2.7	< 0.5	< 0.5		< 0.5 UJ	0.5 J
Total Calcium	---	4700	11000	8900	3600	8700	1700	1700		5600 J	11000 J
Total Chromium	43.4	46	56	13	69	39	23	49		28 J	45 J
Total Cobalt	---	12	13	6	14	55	5.1	11		5.9 J	8 J
Total Copper	31.6	37	20	6	45	9.7	16	28		21 J	34 J
Total Iron	---	31000	37000	210000	40000	54000	13000	29000		18000 J	30000 J
Total Lead	35.8	25	40	20	23	4000	10	18		15 J	22 J
Total Magnesium	---	6500	6000	3200	10000	4500	3800	7700		3900 J	6800 J
Total Manganese	---	840	1400	2500	500	600	240	300		350 J	570 J
Total Mercury	0.18	< 0.2	< 0.6	0.5	< 0.2	0.9	0.2	< 0.1		< 0.1 UJ	0.1 J
Total Nickel	22.7	38	38	9	53	32	14	38		21 J	33 J
Total Potassium	---	4400	2000	1300	8200	1600	1300	5400		5200 J	8200 J
Total Selenium	---	< 2	< 6	< 4	< 2	< 0.5	< 0.5	< 0.5		0.7 J	0.7 J
Total Silver	---	< 2	< 6	< 4	< 2	1.4	< 0.5	< 0.5		< 0.5 UJ	< 0.5 UJ
Total Sodium	---	480	270	240	800	400	200	300		400 J	700 J
Total Thallium	---	< 1	< 6	< 4	< 2	< 0.5	< 0.5	< 0.5		< 0.5 UJ	< 0.5 UJ
Total Vanadium	---	35	38	17	55	24	25	41		34 J	53 J
Total Zinc	121	170	120	38	130	700	28	80		94 J	130 J
TOTAL SOLIDS BY 2540G-91 - (Percent - %)											
Solids Total	---	39.9	22.0	23.4	45.5	32	82.1	60.1		20.9 J	19.2 J

NOTES:

mg/kg = milligram per kilogram, parts per million

--- = no standard has been established for the indicated parameter.

< = concentration is below reporting detection limit indicated

J, UJ = data qualifiers applied based on EPA's Tier I Plus data validation guidelines. J = estimated, UJ = estimated detection limit

1. Beginning in 2014, sediment data was qualified in accordance with EPA's Tier I Plus data validation guidelines.

2. The EPA has not established a cleanup standard for sediment.

3. Sediment laboratory analytical data are compared to the NHDES Draft Evaluation of Sediment Quality Guidance Document, dated April 2005, that includes the "National Oceanic and Atmospheric Administration Screening Quick Reference Tables (NOAA SQiRT Tables for Inorganics in Sediment - Freshwater). Current SQiRT Tables are located on the NOAA website: http://archive.orr.noaa.gov/book_shelf/122_NEW-SQIRTs.pdf. TEC is Threshold Effect Concentration, which is consensus-based and incorporates the Ontario Ministry of the Environment lowest-observed effect levels (LELs).

4. Shaded values denote concentrations exceeding the NOAA SQiRT TEC standard.

Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

DUPLICATE COMPARISON TABLE NOTES

ABBREVIATIONS

U	Not Detected
UJ	Not Detected, detection limit estimated
J	Laboratory estimated value
J-	Laboratory estimated value, biased low
J+	Laboratory estimated value, biased high
EB	Parameter Detected in Equipment Blank

NOTES

1. Primary/Duplicate sample pairs were evaluated for reproducibility to assess whether the sampling methods provide reproducible data. The relative percent difference (RPD) acceptance criteria is described in the August 2014 Sampling and Analysis Plan Table 4-3 (Field Quality Control Requirements).
2. Acceptance criteria for duplicates are $\pm 30\%$ for aqueous samples and $\pm 50\%$ for solid samples.
3. Exceedances of the acceptance criteria are shaded gray.
4. A Tier I Plus data validation was completed on the data set and laboratory results were qualified in accordance with the August 2014 Sampling and Analysis Plan. The flags (Qualifiers) listed in the duplicate comparison tables are based on the results of the Tier 1 Plus data validation.

Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Sample ID			GW-AE-3A			GW-AE-3A-DUP			Relative Percent Difference (RPD)
Sample Collection Date			09/30/2014			09/30/2014			
Laboratory Sample ID			136376.03			136376.04			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
Dissolved Antimony	200.8-Dissolved	mg/L	0.001	U	0	0.001	U	0	0%
Dissolved Arsenic	200.8-Dissolved	mg/L	0.13		0	0.13		0	0%
Dissolved Barium	200.8-Dissolved	mg/L	0.068		0	0.068		0	0%
Dissolved Beryllium	200.8-Dissolved	mg/L	0.001	U	0	0.001	U	0	0%
Dissolved Calcium	200.8-Dissolved	mg/L	39		0.05	43		0.1	10%
Dissolved Chromium	200.8-Dissolved	mg/L	0.001	U	0	0.001	U	0	0%
Dissolved Iron	200.8-Dissolved	mg/L	19		0.05	20		0.05	5%
Dissolved Lead	200.8-Dissolved	mg/L	0.001	U	0	0.001	U	0	0%
Dissolved Magnesium	200.8-Dissolved	mg/L	18		0.1	19		0.1	5%
Dissolved Manganese	200.8-Dissolved	mg/L	0.98		0.01	1		0.01	2%
Dissolved Nickel	200.8-Dissolved	mg/L	0.007		0	0.007		0	0%
Dissolved Potassium	200.8-Dissolved	mg/L	18		0.1	18		0.1	0%
Dissolved Sodium	200.8-Dissolved	mg/L	79		5	76		5	4%
Dissolved Vanadium	200.8-Dissolved	mg/L	0.005	U	0.01	0.005	U	0.01	0%
1,1,1,2-Tetrachloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,1,1-Trichloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,1,2,2-Tetrachloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,1,2-Trichloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,1-Dichloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,1-Dichloroethene	8260B	ug/l	1	U	1	1	U	1	0%
1,1-Dichloropropene	8260B	ug/l	2	U	2	2	U	2	0%
1,2,3-Trichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,2,3-Trichloropropane	8260B	ug/l	2	U	2	2	U	2	0%
1,2,4-Trichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,2,4-Trimethylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,2-Dibromo-3-chloropropane	8260B	ug/l	2	U	2	2	U	2	0%
1,2-Dibromoethane(EDB)	8260B	ug/l	2	U	2	2	U	2	0%
1,2-Dichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,2-Dichloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,2-Dichloropropane	8260B	ug/l	2	U	2	2	U	2	0%
1,3,5-Trichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,3,5-Trimethylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,3-Dichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,3-Dichloropropane	8260B	ug/l	2	U	2	2	U	2	0%
1,4-Dichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,4-Dioxane	8260B	ug/l	50	UJ	50	50	UJ	50	0%
2,2-Dichloropropane	8260B	ug/l	2	U	2	2	U	2	0%

Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Sample ID			GW-AE-3A			GW-AE-3A-DUP			Relative Percent Difference (RPD)
Sample Collection Date			09/30/2014			09/30/2014			
Laboratory Sample ID			136376.03			136376.04			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
2-Butanone(MEK)	8260B	ug/l	10	U	10	10	U	10	0%
2-Chlorotoluene	8260B	ug/l	2	U	2	2	U	2	0%
2-Hexanone	8260B	ug/l	10	U	10	10	U	10	0%
4-Chlorotoluene	8260B	ug/l	2	U	2	2	U	2	0%
4-Methyl-2-pentanone(MIBK)	8260B	ug/l	10	U	10	10	U	10	0%
Acetone	8260B	ug/l	10	U	10	10	U	10	0%
Benzene	8260B	ug/l	2		1	2		1	0%
Bromobenzene	8260B	ug/l	2	U	2	2	U	2	0%
Bromochloromethane	8260B	ug/l	2	U	2	2	U	2	0%
Bromodichloromethane	8260B	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Bromoform	8260B	ug/l	2	U	2	2	U	2	0%
Bromomethane	8260B	ug/l	2	U	2	2	U	2	0%
Carbon disulfide	8260B	ug/l	5	U	5	5	U	5	0%
Carbon tetrachloride	8260B	ug/l	2	U	2	2	U	2	0%
Chlorobenzene	8260B	ug/l	6		2	6		2	0%
Chloroethane	8260B	ug/l	7		5	7		5	0%
Chloroform	8260B	ug/l	2	U	2	2	U	2	0%
Chloromethane	8260B	ug/l	2	U	2	2	U	2	0%
cis-1,2-Dichloroethene	8260B	ug/l	2	U	2	2	U	2	0%
cis-1,3-Dichloropropene	8260B	ug/l	2	U	2	2	U	2	0%
Dibromochloromethane	8260B	ug/l	2	U	2	2	U	2	0%
Dibromomethane	8260B	ug/l	2	U	2	2	U	2	0%
Dichlorodifluoromethane	8260B	ug/l	5	U	5	5	U	5	0%
Diethyl Ether	8260B	ug/l	14		5	14		5	0%
Ethylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
Ethyl-t-butyl ether(ETBE)	8260B	ug/l	5	U	5	5	U	5	0%
Hexachlorobutadiene	8260B	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Isopropyl ether(DIPE)	8260B	ug/l	5	U	5	5	U	5	0%
IsoPropylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
Methylene chloride	8260B	ug/l	5	U	5	5	U	5	0%
Methyl-t-butyl ether(MTBE)	8260B	ug/l	5	U	5	5	U	5	0%
mp-Xylene	8260B	ug/l	1	U	1	1	U	1	0%
Naphthalene	8260B	ug/l	5	U	5	5	U	5	0%
n-Butylbenzene	8260B	ug/l	1	U	1	1	U	1	0%

Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Sample ID			GW-AE-3A			GW-AE-3A-DUP			Relative Percent Difference (RPD)
Sample Collection Date			09/30/2014			09/30/2014			
Laboratory Sample ID			136376.03			136376.04			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
n-Propylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
o-Xylene	8260B	ug/l	1	U	1	1	U	1	0%
p-Isopropyltoluene	8260B	ug/l	1	U	1	1	U	1	0%
sec-Butylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
Styrene	8260B	ug/l	1	U	1	1	U	1	0%
tert-amyl methyl ether(TAME)	8260B	ug/l	5	U	5	5	U	5	0%
tert-Butyl Alcohol (TBA)	8260B	ug/l	30	U	30	30	U	30	0%
tert-Butylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
Tetrachloroethene	8260B	ug/l	2	U	2	2	U	2	0%
Tetrahydrofuran(THF)	8260B	ug/l	10	U	10	10	U	10	0%
Toluene	8260B	ug/l	1	U	1	1	U	1	0%
trans-1,2-Dichloroethene	8260B	ug/l	2	U	2	2	U	2	0%
trans-1,3-Dichloropropene	8260B	ug/l	2	U	2	2	U	2	0%
Trichloroethene	8260B	ug/l	2	U	2	2	U	2	0%
Trichlorofluoromethane	8260B	ug/l	5	U	5	5	U	5	0%
Vinyl chloride	8260B	ug/l	2	U	2	2	U	2	0%
1,4-Dioxane	8260B SIM	ug/l	25		3	24		3	4%

Notes on first page of table

Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Sample ID			GW-FPC-11B-64TOC			GW-FPC-11B-64TOC-DUP			Relative Percent Difference (RPD)
Sample Collection Date			10/02/2014			10/02/2014			
Laboratory Sample ID			136602.13			136602.14			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
Total Antimony	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Total Arsenic	200.8	mg/L	0.004		0.001	0.003		0.001	29%
Total Barium	200.8	mg/L	0.13		0.001	0.12		0.001	8%
Total Beryllium	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Total Calcium	200.8	mg/L	61		0.5	57		0.5	7%
Total Chromium	200.8	mg/L	0.002		0.001	0.002		0.001	0%
Total Iron	200.8	mg/L	7.3		0.05	6.1		0.05	18%
Total Lead	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Total Magnesium	200.8	mg/L	19		0.05	17		0.05	11%
Total Manganese	200.8	mg/L	1.6	J-	0.005	1.4	J-	0.005	13%
Total Nickel	200.8	mg/L	0.004		0.001	0.004		0.001	0%
Total Potassium	200.8	mg/L	14		0.05	12		0.05	15%
Total Sodium	200.8	mg/L	920		10	900		10	2%
Total Vanadium	200.8	mg/L	0.006		0.005	0.005		0.005	18%
1,4-Dioxane	8260B SIM	ug/l	1.2		0.25	1.1		0.25	9%

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Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Sample ID			GW-GZ-105			GW-GZ-105-DUP			Relative Percent Difference (RPD)
Sample Collection Date			10/03/2014			10/03/2014			
Laboratory Sample ID			136602.1			136602.11			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
Total Antimony	200.8-Total	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Total Arsenic	200.8-Total	mg/L	0.011		0.001	0.012		0.001	9%
Total Barium	200.8-Total	mg/L	0.044		0.001	0.046		0.001	4%
Total Beryllium	200.8-Total	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Total Calcium	200.8-Total	mg/L	40		0.05	43		0.05	7%
Total Chromium	200.8-Total	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Total Iron	200.8-Total	mg/L	2.9		0.05	3.1		0.05	7%
Total Lead	200.8-Total	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Total Magnesium	200.8-Total	mg/L	16		0.05	16		0.05	0%
Total Manganese	200.8-Total	mg/L	0.32		0.005	0.34		0.005	6%
Total Nickel	200.8-Total	mg/L	0.006		0.001	0.006		0.001	0%
Total Potassium	200.8-Total	mg/L	5.2		0.05	5.5		0.05	6%
Total Sodium	200.8-Total	mg/L	140		5	140		5	0%
Total Vanadium	200.8-Total	mg/L	0.005	U	0.005	0.005	U	0.005	0%
1,1,1,2-Tetrachloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,1,1-Trichloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,1,2,2-Tetrachloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,1,2-Trichloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,1-Dichloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,1-Dichloroethene	8260B	ug/l	1	U	1	1	U	1	0%
1,1-Dichloropropene	8260B	ug/l	2	U	2	2	U	2	0%
1,2,3-Trichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,2,3-Trichloropropane	8260B	ug/l	2	U	2	2	U	2	0%
1,2,4-Trichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,2,4-Trimethylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,2-Dibromo-3-chloropropane	8260B	ug/l	2	U	2	2	U	2	0%
1,2-Dibromoethane(EDB)	8260B	ug/l	2	U	2	2	U	2	0%
1,2-Dichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,2-Dichloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,2-Dichloropropane	8260B	ug/l	2	U	2	2	U	2	0%
1,3,5-Trichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,3,5-Trimethylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,3-Dichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,3-Dichloropropane	8260B	ug/l	2	U	2	2	U	2	0%
1,4-Dichlorobenzene	8260B	ug/l	3		1	3		1	0%
1,4-Dioxane	8260B	ug/l	50	UJ	50	50	UJ	50	0%
2,2-Dichloropropane	8260B	ug/l	2	U	2	2	U	2	0%
2-Butanone(MEK)	8260B	ug/l	10	U	10	10	U	10	0%
2-Chlorotoluene	8260B	ug/l	2	U	2	2	U	2	0%
2-Hexanone	8260B	ug/l	10	U	10	10	U	10	0%

Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Sample ID			GW-GZ-105			GW-GZ-105-DUP			Relative Percent Difference (RPD)
Sample Collection Date			10/03/2014			10/03/2014			
Laboratory Sample ID			136602.1			136602.11			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
4-Chlorotoluene	8260B	ug/l	2	U	2	2	U	2	0%
4-Methyl-2-pentanone(MIBK)	8260B	ug/l	10	U	10	10	U	10	0%
Acetone	8260B	ug/l	10	U	10	10	U	10	0%
Benzene	8260B	ug/l	3		1	4		1	29%
Bromobenzene	8260B	ug/l	2	U	2	2	U	2	0%
Bromochloromethane	8260B	ug/l	2	U	2	2	U	2	0%
Bromodichloromethane	8260B	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Bromoform	8260B	ug/l	2	U	2	2	U	2	0%
Bromomethane	8260B	ug/l	2	U	2	2	U	2	0%
Carbon disulfide	8260B	ug/l	5	U	5	5	U	5	0%
Carbon tetrachloride	8260B	ug/l	2	U	2	2	U	2	0%
Chlorobenzene	8260B	ug/l	6		2	6		2	0%
Chloroethane	8260B	ug/l	6		5	6		5	0%
Chloroform	8260B	ug/l	2	U	2	2	U	2	0%
Chloromethane	8260B	ug/l	2	U	2	2	U	2	0%
cis-1,2-Dichloroethene	8260B	ug/l	2	U	2	2	U	2	0%
cis-1,3-Dichloropropene	8260B	ug/l	2	U	2	2	U	2	0%
Dibromochloromethane	8260B	ug/l	2	U	2	2	U	2	0%
Dibromomethane	8260B	ug/l	2	U	2	2	U	2	0%
Dichlorodifluoromethane	8260B	ug/l	5	U	5	5	U	5	0%
Diethyl Ether	8260B	ug/l	35		5	36		5	3%
Ethylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
Ethyl-t-butyl ether(ETBE)	8260B	ug/l	5	U	5	5	U	5	0%
Hexachlorobutadiene	8260B	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Isopropyl ether(DIPE)	8260B	ug/l	5	U	5	5	U	5	0%
IsoPropylbenzene	8260B	ug/l	1		1	1		1	0%
Methylene chloride	8260B	ug/l	5	U	5	5	U	5	0%
Methyl-t-butyl ether(MTBE)	8260B	ug/l	5	U	5	5	U	5	0%
mp-Xylene	8260B	ug/l	1	U	1	1	U	1	0%
Naphthalene	8260B	ug/l	5	U	5	5	U	5	0%
n-Butylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
n-Propylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
o-Xylene	8260B	ug/l	1	U	1	1	U	1	0%
p-Isopropyltoluene	8260B	ug/l	1	U	1	1	U	1	0%
sec-Butylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
Styrene	8260B	ug/l	1	U	1	1	U	1	0%
tert-amyl methyl ether(TAME)	8260B	ug/l	5	U	5	5	U	5	0%
tert-Butyl Alcohol (TBA)	8260B	ug/l	30	U	30	30	U	30	0%
tert-Butylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
Tetrachloroethene	8260B	ug/l	2	U	2	2	U	2	0%
Tetrahydrofuran(THF)	8260B	ug/l	20		10	30		10	40%

Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Sample ID			GW-GZ-105			GW-GZ-105-DUP			Relative Percent Difference (RPD)
Sample Collection Date			10/03/2014			10/03/2014			
Laboratory Sample ID			136602.1			136602.11			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
Toluene	8260B	ug/l	1	U	1	1	U	1	0%
trans-1,2-Dichloroethene	8260B	ug/l	2	U	2	2	U	2	0%
trans-1,3-Dichloropropene	8260B	ug/l	2	U	2	2	U	2	0%
Trichloroethene	8260B	ug/l	2	U	2	2	U	2	0%
Trichlorofluoromethane	8260B	ug/l	5	U	5	5	U	5	0%
Vinyl chloride	8260B	ug/l	2	U	2	2	U	2	0%
1,4-Dioxane	8260B SIM	ug/l	69		3	68		3	1%

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Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Sample ID			GW-MW-4			GW-MW-4-DUP			Relative Percent Difference (RPD)
Sample Collection Date			10/01/2014			10/01/2014			
Laboratory Sample ID			136376.06			136376.07			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
Dissolved Antimony	200.8-Dissolved	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Arsenic	200.8-Dissolved	mg/L	0.063		0.001	0.059		0.001	7%
Dissolved Barium	200.8-Dissolved	mg/L	0.056		0.001	0.061		0.001	9%
Dissolved Beryllium	200.8-Dissolved	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Calcium	200.8-Dissolved	mg/L	56		0.1	62		0.1	10%
Dissolved Chromium	200.8-Dissolved	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Iron	200.8-Dissolved	mg/L	21		0.05	23		0.05	9%
Dissolved Lead	200.8-Dissolved	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Magnesium	200.8-Dissolved	mg/L	17		0.1	18		0.1	6%
Dissolved Manganese	200.8-Dissolved	mg/L	1.1		0.005	1.2		0.005	9%
Dissolved Nickel	200.8-Dissolved	mg/L	0.006		0.001	0.007		0.001	15%
Dissolved Potassium	200.8-Dissolved	mg/L	25		0.1	28		0.1	11%
Dissolved Sodium	200.8-Dissolved	mg/L	19		5	23		5	19%
Dissolved Vanadium	200.8-Dissolved	mg/L	0.005	U	0.005	0.005	U	0.005	0%
1,4-Dioxane	8260B SIM	ug/l	6.7		0.25	6.9		0.25	3%

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Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Sample ID			DW-R3			DW-R3-DUP			Relative Percent Difference (RPD)
Sample Collection Date			10/03/2014			10/03/2014			
Laboratory Sample ID			136602.29			136602.3			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
Total Arsenic	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Total Manganese	200.8	mg/L	0.1		0.005	0.098		0.005	2%
1,1,1,2-Tetrachloroethane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,1,1-Trichloroethane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,1,2,2-Tetrachloroethane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,1,2-Trichloroethane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,1-Dichloroethane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,1-Dichloroethene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,1-Dichloropropene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,2,3-Trichlorobenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,2,3-Trichloropropane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,2,4-Trichlorobenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,2,4-Trimethylbenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,2-Dibromo-3-chloropropane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,2-Dibromoethane(EDB)	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,2-Dichlorobenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,2-Dichloroethane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,2-Dichloropropane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,3,5-Trichlorobenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,3,5-Trimethylbenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,3-Dichlorobenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,3-Dichloropropane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,4-Dichlorobenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
2,2-Dichloropropane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
2-Butanone(MEK)	524.2	ug/l	5	U	5	5	U	5	0%
2-Chlorotoluene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
2-Hexanone	524.2	ug/l	5	U	5	5	U	5	0%
4-Chlorotoluene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
4-Methyl-2-pentanone(MIBK)	524.2	ug/l	5	U	5	5	U	5	0%
Acetone	524.2	ug/l	10	U	10	10	U	10	0%
Benzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Bromobenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%

Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Sample ID			DW-R3			DW-R3-DUP			Relative Percent Difference (RPD)
Sample Collection Date			10/03/2014			10/03/2014			
Laboratory Sample ID			136602.29			136602.3			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
Bromochloromethane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Bromodichloromethane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Bromoform	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Bromomethane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Carbon disulfide	524.2	ug/l	2	U	2	2	U	2	0%
Carbon tetrachloride	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Chlorobenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Chloroethane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Chloroform	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Chloromethane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
cis-1,2-Dichloroethene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
cis-1,3-Dichloropropene	524.2	ug/l	0.3	U	0.3	0.3	U	0.3	0%
Dibromochloromethane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Dibromomethane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Dichlorodifluoromethane	524.2	ug/l	0.5	UJ	0.5	0.5	UJ	0.5	0%
Diethyl Ether	524.2	ug/l	5	U	5	5	U	5	0%
Ethylbenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Ethyl-t-butyl ether(ETBE)	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Hexachlorobutadiene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Isopropyl ether(DIPE)	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
IsoPropylbenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Methylene chloride	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Methyl-t-butyl ether(MTBE)	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
mp-Xylene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Naphthalene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
n-Butylbenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
n-Propylbenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
o-Xylene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
p-Isopropyltoluene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
sec-Butylbenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Styrene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
tert-amyl methyl ether(TAME)	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
tert-Butyl Alcohol (TBA)	524.2	ug/l	30	U	30	30	U	30	0%
tert-Butylbenzene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%

Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Sample ID			DW-R3			DW-R3-DUP			Relative Percent Difference (RPD)
Sample Collection Date			10/03/2014			10/03/2014			
Laboratory Sample ID			136602.29			136602.3			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
Tetrachloroethene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Tetrahydrofuran(THF)	524.2	ug/l	5	U	5	5	U	5	0%
Toluene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
trans-1,2-Dichloroethene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
trans-1,3-Dichloropropene	524.2	ug/l	0.3	U	0.3	0.3	U	0.3	0%
Trichloroethene	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Trichlorofluoromethane	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Vinyl acetate	524.2	ug/l	10	UJ	10	10	UJ	10	0%
Vinyl chloride	524.2	ug/l	0.5	U	0.5	0.5	U	0.5	0%
1,4-Dioxane	8260B SIM	ug/l	0.37		0.25	0.36		0.25	3%

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Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Sample ID			SW-SW-5			SW-SW-5-DUP			Relative Percent Difference (RPD)
Sample Collection Date			10/03/2014			10/03/2014			
Laboratory Sample ID			136602.35			136602.36			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
Dissolved Aluminum	200.8	mg/L	0.05	U	0.05	0.05	U	0.05	0%
Dissolved Antimony	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Arsenic	200.8	mg/L	0.001		0.001	0.001		0.001	0%
Dissolved Barium	200.8	mg/L	0.013		0.001	0.014		0.001	7%
Dissolved Beryllium	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Cadmium	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Calcium	200.8	mg/L	29		0.05	30		0.05	3%
Dissolved Chromium	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Cobalt	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Copper	200.8	mg/L	0.001		0.001	0.001		0.001	0%
Dissolved Iron	200.8	mg/L	0.64		0.05	0.62		0.05	3%
Dissolved Lead	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Magnesium	200.8	mg/L	8.3		0.05	8.2		0.05	1%
Dissolved Manganese	200.8	mg/L	0.35		0.005	0.36		0.005	3%
Dissolved Mercury	200.8	mg/L	0.0001	U	0.0001	0.0001	U	0.0001	0%
Dissolved Nickel	200.8	mg/L	0.002		0.001	0.002		0.001	0%
Dissolved Potassium	200.8	mg/L	5.4		0.05	5.5		0.05	2%
Dissolved Selenium	200.8	mg/L	0.001		0.001	0.001		0.001	0%
Dissolved Silver	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Sodium	200.8	mg/L	28		5	27		5	4%
Dissolved Thallium	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Vanadium	200.8	mg/L	0.005	U	0.005	0.005	U	0.005	0%
Dissolved Zinc	200.8	mg/L	0.005	U	0.005	0.005	U	0.005	0%
1,1,1,2-Tetrachloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,1,1-Trichloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,1,2,2-Tetrachloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,1,2-Trichloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,1-Dichloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,1-Dichloroethene	8260B	ug/l	1	U	1	1	U	1	0%
1,1-Dichloropropene	8260B	ug/l	2	U	2	2	U	2	0%
1,2,3-Trichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,2,3-Trichloropropane	8260B	ug/l	2	U	2	2	U	2	0%
1,2,4-Trichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,2,4-Trimethylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,2-Dibromo-3-chloropropane	8260B	ug/l	2	U	2	2	U	2	0%
1,2-Dibromoethane(EDB)	8260B	ug/l	2	U	2	2	U	2	0%
1,2-Dichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,2-Dichloroethane	8260B	ug/l	2	U	2	2	U	2	0%
1,2-Dichloropropane	8260B	ug/l	2	U	2	2	U	2	0%
1,3,5-Trichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,3,5-Trimethylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,3-Dichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,3-Dichloropropane	8260B	ug/l	2	U	2	2	U	2	0%

Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Sample ID			SW-SW-5			SW-SW-5-DUP			Relative Percent Difference (RPD)
Sample Collection Date			10/03/2014			10/03/2014			
Laboratory Sample ID			136602.35			136602.36			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
1,4-Dichlorobenzene	8260B	ug/l	1	U	1	1	U	1	0%
1,4-Dioxane	8260B	ug/l	50	UJ	50	50	UJ	50	0%
2,2-Dichloropropane	8260B	ug/l	2	U	2	2	U	2	0%
2-Butanone(MEK)	8260B	ug/l	10	U	10	10	U	10	0%
2-Chlorotoluene	8260B	ug/l	2	U	2	2	U	2	0%
2-Hexanone	8260B	ug/l	10	U	10	10	U	10	0%
4-Chlorotoluene	8260B	ug/l	2	U	2	2	U	2	0%
4-Methyl-2-pentanone(MIBK)	8260B	ug/l	10	U	10	10	U	10	0%
Acetone	8260B	ug/l	10	U	10	10	U	10	0%
Benzene	8260B	ug/l	1	U	1	1	U	1	0%
Bromobenzene	8260B	ug/l	2	U	2	2	U	2	0%
Bromochloromethane	8260B	ug/l	2	U	2	2	U	2	0%
Bromodichloromethane	8260B	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Bromoform	8260B	ug/l	2	U	2	2	U	2	0%
Bromomethane	8260B	ug/l	2	U	2	2	U	2	0%
Carbon disulfide	8260B	ug/l	5	U	5	5	U	5	0%
Carbon tetrachloride	8260B	ug/l	2	U	2	2	U	2	0%
Chlorobenzene	8260B	ug/l	2	U	2	2	U	2	0%
Chloroethane	8260B	ug/l	5	U	5	5	U	5	0%
Chloroform	8260B	ug/l	2	U	2	2	U	2	0%
Chloromethane	8260B	ug/l	2	U	2	2	U	2	0%
cis-1,2-Dichloroethene	8260B	ug/l	2	U	2	2	U	2	0%
cis-1,3-Dichloropropene	8260B	ug/l	2	U	2	2	U	2	0%
Dibromochloromethane	8260B	ug/l	2	U	2	2	U	2	0%
Dibromomethane	8260B	ug/l	2	U	2	2	U	2	0%
Dichlorodifluoromethane	8260B	ug/l	5	U	5	5	U	5	0%
Diethyl Ether	8260B	ug/l	5	U	5	5	U	5	0%
Ethylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
Ethyl-t-butyl ether(ETBE)	8260B	ug/l	5	U	5	5	U	5	0%
Hexachlorobutadiene	8260B	ug/l	0.5	U	0.5	0.5	U	0.5	0%
Isopropyl ether(DIPE)	8260B	ug/l	5	U	5	5	U	5	0%
IsoPropylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
Methylene chloride	8260B	ug/l	5	U	5	5	U	5	0%
Methyl-t-butyl ether(MTBE)	8260B	ug/l	5	U	5	5	U	5	0%
mp-Xylene	8260B	ug/l	1	U	1	1	U	1	0%
Naphthalene	8260B	ug/l	5	U	5	5	U	5	0%
n-Butylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
n-Propylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
o-Xylene	8260B	ug/l	1	U	1	1	U	1	0%
p-Isopropyltoluene	8260B	ug/l	1	U	1	1	U	1	0%
sec-Butylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
Styrene	8260B	ug/l	1	U	1	1	U	1	0%
tert-amyl methyl ether(TAME)	8260B	ug/l	5	U	5	5	U	5	0%
tert-Butyl Alcohol (TBA)	8260B	ug/l	30	U	30	30	U	30	0%

Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Sample ID			SW-SW-5			SW-SW-5-DUP			Relative Percent Difference (RPD)
Sample Collection Date			10/03/2014			10/03/2014			
Laboratory Sample ID			136602.35			136602.36			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
tert-Butylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
Tetrachloroethene	8260B	ug/l	2	U	2	2	U	2	0%
Tetrahydrofuran(THF)	8260B	ug/l	10	U	10	10	U	10	0%
Toluene	8260B	ug/l	1	U	1	1	U	1	0%
trans-1,2-Dichloroethene	8260B	ug/l	2	U	2	2	U	2	0%
trans-1,3-Dichloropropene	8260B	ug/l	2	U	2	2	U	2	0%
Trichloroethene	8260B	ug/l	2	U	2	2	U	2	0%
Trichlorofluoromethane	8260B	ug/l	5	U	5	5	U	5	0%
Vinyl chloride	8260B	ug/l	2	U	2	2	U	2	0%
Ammonia-N	TM NH3-001	mg/L	0.08		0.05	0.08		0.05	0%

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Table 7
Duplicate Comparisons
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Sample ID			S-SED-5			S-SED-5-DUP			Relative Percent Difference (RPD)
Sample Collection Date			10/03/2014			10/03/2014			
Laboratory Sample ID			136602.37			136602.38			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
Solids Total	2540G-91	Percent	20.9	J	0.1	19.2	J	0.1	8%
Total Aluminum	6020	mg/kg	16000	J	100	24000	J	200	40%
Total Antimony	6020	mg/kg	0.8	J	0.5	0.7	J	0.5	13%
Total Arsenic	6020	mg/kg	10	J	0.5	12	J	0.5	18%
Total Barium	6020	mg/kg	140	J	0.5	210	J	0.5	40%
Total Beryllium	6020	mg/kg	0.9	J	0.5	1.3	J	0.5	36%
Total Cadmium	6020	mg/kg	0.5	UJ	0.5	0.5	J	0.5	0%
Total Calcium	6020	mg/kg	5600	J	100	11000	J	400	65%
Total Chromium	6020	mg/kg	28	J	0.5	45	J	2	47%
Total Cobalt	6020	mg/kg	5.9	J	0.5	8	J	2	30%
Total Copper	6020	mg/kg	21	J	0.5	34	J	2	47%
Total Iron	6020	mg/kg	18000	J	100	30000	J	200	50%
Total Lead	6020	mg/kg	15	J	0.5	22	J	0.5	38%
Total Magnesium	6020	mg/kg	3900	J	100	6800	J	400	54%
Total Manganese	6020	mg/kg	350	J	0.5	570	J	2	48%
Total Mercury	6020	mg/kg	0.1	UJ	0.1	0.1	J	0.1	0%
Total Nickel	6020	mg/kg	21	J	0.5	33	J	2	44%
Total Potassium	6020	mg/kg	5200	J	100	8200	J	400	45%
Total Selenium	6020	mg/kg	0.7	J	0.5	0.7	J	0.5	0%
Total Silver	6020	mg/kg	0.5	UJ	0.5	0.5	UJ	0.5	0%
Total Sodium	6020	mg/kg	400	J	100	700	J	400	55%
Total Thallium	6020	mg/kg	0.5	UJ	0.5	0.5	UJ	0.5	0%
Total Vanadium	6020	mg/kg	34	J	0.5	53	J	2	44%
Total Zinc	6020	mg/kg	94	J	0.5	130	J	2	32%

Notes on first page of table

TABLE 8
Statistical and Visual Trend Analysis Results - Fall 2014
Coakley Landfill Superfund Site

Well	1,4-dioxane		Benzene		Tertiary-butyl Alcohol (TBA)		Arsenic		Manganese	
	Statistical Trend	Visual Trend	Statistical Trend	Visual Trend	Statistical Trend	Visual Trend	Statistical Trend	Visual Trend	Statistical Trend	Visual Trend
Operating Unit 1 Wells										
BP-4	No Trend	Stable	NA	NA	NA	NA	No Trend	Stable	Decreasing	Decreasing
MW-4	No Trend	Stable	NA	NA	NA	NA	No Trend	Stable	Decreasing	Stable
MW-5D	No Trend	Stable	No Trend	Stable	No Trend	Stable	No Trend	Stable	No Trend	Stable
MW-5S	No Trend	Decreasing	No Trend	Decreasing	ND	ND	No Trend	Stable	No Trend	Stable
MW-6	ND	ND	ND	ND	ND	ND	NP	NP	Increasing	Not Stable
MW-8	No Trend	Stable	Increasing	Stable	Decreasing	Decreasing	Increasing	Not Stable	No Trend	Decreasing
MW-9	No Trend	Not Stable	NA	NA	NA	NA	No Trend	Not Stable	No Trend	Not Stable
MW-10	NA	NA	NA	NA	NA	NA	No Trend	Not Stable	Decreasing	Not Stable
MW-11	No Trend	Not Stable	Decreasing	Decreasing	ND	ND	No Trend	Stable	Decreasing	Stable
OP-2	No Trend	Stable	NA	NA	NA	NA	Increasing	Stable	Increasing	Increasing
OP-5	NA	NA	NA	NA	NA	NA	No Trend	Increasing	No Trend	Increasing
Operating Unit 2 Wells										
AE-1A	NA	NA	NA	NA	NA	NA	No Trend	Decreasing	Increasing	Increasing
AE-1B	NA	NA	NA	NA	NA	NA	Increasing	Increasing	No Trend	Decreasing
AE-2A	No Trend	Stable	Decreasing	Stable	ND	ND	Decreasing	Decreasing	Increasing	Stable
AE-2B	No Trend	Stable	Decreasing	Stable	ND	ND	No Trend	Stable	Decreasing	Decreasing
AE-3A	No Trend	Stable	No Trend	Stable	ND	ND	No Trend	Not Stable	Increasing	Stable
AE-3B	No Trend	Stable	Decreasing	Stable	ND	ND	No Trend	Stable	No Trend	Not Stable
AE-4A	NA	NA	ND	ND	ND	ND	NP	NP	No Trend	Stable
AE-4B	NA	NA	ND	ND	ND	ND	NP	NP	Decreasing	Decreasing
FPC-4B	NA	NA	ND	ND	ND	ND	NP	NP	NP	NP
FPC-5B	NP*	NP*	NA	NA	NA	NA	NP	NP	NP	NP
FPC-6A	NP*	NP*	Decreasing	Stable	ND	ND	Increasing	Increasing	Increasing	Not Stable
FPC-6B	NP*	NP*	Decreasing	Stable	ND	ND	Decreasing	Stable	Decreasing	Stable
FPC-7A	NA	NA	NA	NA	NA	NA	NP	NP	NP	NP
FPC-7B	NA	NA	NA	NA	NA	NA	NP	NP	NP	NP
FPC-8A	No Trend	Stable	ND	ND	ND	ND	NP	NP	NP	NP
FPC-8B	No Trend	Stable	ND	ND	ND	ND	NP	NP	NP	NP
FPC-9A	NA	NA	NA	NA	NA	NA	Increasing	Increasing	No Trend	Decreasing
FPC-11A	NA	NA	NA	NA	NA	NA	NP	NP	No Trend	Stable
GZ-105	NP*	NP*	No Trend	Decreasing	ND	ND	Increasing	Stable	No Trend	Stable
Water Supply Wells										
R-3	No Trend	Stable	ND	ND	ND	ND	NP*	NP*	NP*	NP*
339BHR	No Trend	Stable	ND	ND	ND	ND	NP*	NP*	NP*	NP*
346BHR	ND	ND	ND	ND	ND	ND	NP*	NP*	NP*	NP*
415BHR	ND	ND	ND	ND	ND	ND	NP*	NP*	NP*	NP*
Trend Tests Completed	16		11		2		23		24	
Trends Identified	0		7		1		9		13	
Increasing Trends	0		1		0		7		6	
Decreasing Trends	0		6		1		2		7	
No Trend	16		4		1		14		11	

NOTES:

- NA
ND
NP
NP*
- Parameter Not Analyzed
Parameter Not Detected
Not Performed, trend analysis not performed because parameter has not recently exceeded USEPA ICL or NHDES AGQS.
Not Performed, data from at least 4 sampling events are required for Mann Kendall statistical analysis or visual trend analysis.
1. Wells with screened interval longer than 10 feet were interval sampled in August 2013 (MW-5D, MW-5S, MW-8, MW-11, AE-3B, FPC-4B, FPC-5B, FPC-6B, FPC-7B, FPC-8B, GZ-105), or September/October 2014 (FPC-11B). Samples collected using the interval sampling method are not considered to be directly comparable to data from low flow purging sampling methods; therefore, the interval sampling data was excluded from the trends analyses - although it is noted that average concentrations for the interval data were used when plotting time series plots.
2. Mann Kendall trend analysis completed using 95% confidence interval. Possible outcomes include: No Trend, Increasing, or Decreasing.
3. Visual trend analysis focused on data from last 5 years, in the context of complete data set. Possible outcomes include: Stable, Not Stable, Increasing, or Decreasing.
4. FPC-5A: Not sampled in 2014; therefore no trend analysis was completed.
5. FPC-11B - trend analysis was not performed because the well was interval sampled in Fall 2014.

TABLE 9
 Contaminants of Concern Analytical Data (November 2000 – September 2014)
Antimony in Groundwater
 Coakley Landfill Superfund Site
 North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-00	Apr-01	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells																					
BP-4	< 0.005	< 0.001	NA	< 0.002	< 0.002	< 0.004	< 0.04	< 0.002	< 0.001	NS	< 0.001	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	< 0.02	< 0.005	NA	< 0.004	< 0.004	< 0.004	< 0.012	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
MW-5D	< 0.001	< 0.01	NA	< 0.002	< 0.002	< 0.004	< 0.006	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
MW-5S	< 0.02	< 0.001	NA	< 0.002	< 0.004	< 0.004	< 0.006	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
MW-6	< 0.02	< 0.005	NA	< 0.005	< 0.002	< 0.005	< 0.012	< 0.002	< 0.001	NS	< 0.001	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
MW-8	< 0.02	< 0.005	NA	< 0.002	< 0.004	< 0.004	< 0.006	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
MW-9	< 0.02	< 0.005	NA	0.002	< 0.004	0.007	< 0.006	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
MW-10	< 0.02	< 0.005	NA	< 0.002	< 0.002	< 0.004	< 0.006	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
MW-11	< 0.02	< 0.005	NA	< 0.002	< 0.002	< 0.004	< 0.006	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
OP-2	< 0.02	< 0.001	NA	< 0.002	< 0.002	< 0.005	< 0.006	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
OP-5	< 0.005	< 0.001	NA	< 0.002	< 0.002	< 0.004	< 0.016	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
Operating Unit 2 Wells																					
AE-1A	< 0.005	< 0.001	NA	< 0.002	0.002	< 0.004	0.012	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-1B	< 0.02	< 0.005	NA	< 0.002	< 0.002	< 0.004	< 0.006	< 0.002	NS	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-2A	< 0.005	< 0.001	NA	< 0.002	< 0.002	< 0.005	< 0.006	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-2B	< 0.025	< 0.005	NA	< 0.002	< 0.002	< 0.004	< 0.04	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-3A	< 0.025	< 0.005	NA	< 0.002	< 0.002	< 0.004	< 0.04	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-3B	< 0.025	< 0.01	NA	< 0.002	< 0.002	< 0.004	< 0.016	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
AE-4A	NS	NS	NS	NS	0.005	< 0.005	< 0.008	0.008	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-4B	NS	NS	NS	NS	< 0.008	< 0.005	< 0.008	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-2A	NA	< 0.001	NA	NA	< 0.002	< 0.004	< 0.006	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
FPC-2B	NS	NS	NS	NS	< 0.002	0.007	< 0.006	< 0.002	< 0.001	NS	< 0.001	0.002	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
FPC-4B	NS	NS	NS	NS	< 0.004	< 0.004	< 0.004	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-5A	< 0.025	< 0.001	NA	< 0.002	< 0.002	< 0.004	< 0.004	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	NS
FPC-5B	0.006	< 0.005	NA	< 0.002	< 0.004	< 0.004	< 0.006	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-6A	< 0.005	< 0.001	NS	NS	< 0.008	< 0.004	< 0.006	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-6B	< 0.025	< 0.001	NA	< 0.002	< 0.004	< 0.004	< 0.02	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-7A	NS	NS	NS	NS	< 0.004	NA	< 0.006	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-7B	NS	NS	NS	NS	< 0.004	NA	< 0.006	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-8A	< 0.025	0.005	NA	0.002	< 0.004	< 0.004	< 0.008	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-8B	< 0.005	< 0.001	NA	< 0.004	< 0.002	< 0.004	< 0.008	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-9A	< 0.001	< 0.005	NA	< 0.002	< 0.002	< 0.004	< 0.006	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-9B	< 0.02	NS	NS	< 0.005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NS	NS	NS	NS	< 0.002	< 0.004	< 0.016	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	< 0.001
FPC-11B	NS	NS	NS	NS	0.003	< 0.004	< 0.016	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	< 0.001	< 0.005	NA	< 0.002	< 0.004	< 0.004	< 0.04	0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
Water Supply Wells																					
R-3	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NA	NA	NA	NS	NA	NA	NA
R-5	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NA
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA

Table Notes:

1. All data in milligrams per liter (mg/L), parts per million - Analyzed by Method 200.8
2. NHDES Ambient Groundwater Quality Standard (AGQS) for Antimony is 0.006 mg/L. Exceedances are identified with GRAY shading.
3. EPA Interim Cleanup Level (ICL) for Antimony is 0.006 mg/L. Exceedances are identified with BOLD text.
4. All data for Total metals, with the exception of the following overburden wells for Sept. 2014 (MW-4, MW-9, MW-10, OP-2, OP-5, AE-1A, AE-2A, AE-3A, AE-4A, FPC-6A, FPC-7A, FPC-8A, FPC-9A and FPC-11A)

Abbreviations:

NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
 Contaminants of Concern Analytical Data (November 2000 – September 2014)
Arsenic in Groundwater
 Coakley Landfill Superfund Site
 North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-00	Apr-01	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells																					
BP-4	0.035	0.02	0.031	0.036	0.032	0.022	0.011	0.026	0.03	NS	0.023	0.022	NS	0.034	0.033	0.034	NS	NS	0.032	NS	0.025
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	0.06	0.042	0.064	0.041	0.04	0.066	0.13	0.043	0.058	NS	0.069	0.07	0.064	NS	0.081	0.08	NS	NS	0.053	NS	0.063
MW-5D	0.009	0.007	0.008	0.006	0.007	0.005	0.006	0.005	0.011	NS	0.005	0.006	0.01	NS	0.01	0.011	NS	NS	INT	NS	0.009
MW-5S	0.018	0.021	0.023	0.026	0.01	0.015	0.014	0.01	0.026	NS	0.026	0.018	0.016	NS	0.018	0.017	NS	NS	INT	NS	0.022
MW-6	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001 J	< 0.002	< 0.004	< 0.002	< 0.001	NS	< 0.001	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	NS	0.002	NS	< 0.001
MW-8	0.01	0.011	0.043	0.009	0.008	0.006	0.01	0.007	0.01	NS	0.008	0.008	0.013	NS	0.016	0.018	NS	NS	INT	NS	0.009
MW-9	0.069	0.063	0.15	0.14	0.12	0.06	0.28	0.081	0.056	NS	0.057	0.078	0.12	NS	0.13	0.14	NS	NS	0.046	NS	0.12
MW-10	0.01	0.003	0.032	0.028	0.011 J	0.033	0.024	0.011	0.012	NS	0.009	0.017	0.019	NS	0.012	0.019	NS	NS	0.015	NS	0.022
MW-11	0.01	0.014	0.02	0.017	0.015	0.011	0.012	0.01	0.015	NS	0.013	0.011	0.011	NS	0.008	0.009	NS	NS	INT	NS	0.013
OP-2	0.2	0.17	0.29	0.26	0.27	0.19	0.025	0.2	0.19	NS	0.17	0.2	0.22	NS	0.21	0.22	NS	NS	0.2	NS	0.23
OP-5	0.05	0.027	0.043	0.048	0.046	0.033	0.025	0.027	0.033	NS	0.017	0.013	0.019	NS	0.027	0.03	NS	NS	0.03	NS	0.048
Operating Unit 2 Wells																					
AE-1A	0.017	0.018	0.017	0.018	0.02	0.022	0.02	0.015	0.039	NS	0.041	0.029	0.02	NS	0.022	0.018	NS	NS	0.018	NS	0.014
AE-1B	0.004	0.005	0.005	0.005	0.004 J	0.004	0.003	< 0.002	NS	NS	0.003	0.004	0.006	NS	0.006	0.007	NS	NS	0.008	NS	0.008
AE-2A	0.29	0.3	0.34	0.29	0.33	0.29	0.3	0.24	0.28	NS	0.23	0.24	0.24	NS	0.25	0.24	NS	NS	0.19	NS	0.012
AE-2B	0.026	0.013	0.016	0.011	0.018	0.016	0.025	0.024	0.02	NS	0.019	0.026	0.016	NS	0.028	0.02	NS	NS	0.02	NS	0.014
AE-3A	0.1	0.09	0.13	0.11	0.11	0.11	0.12	0.1	0.13	NS	0.15	0.12	0.12	NS	0.11	0.11	NS	NS	0.14	NS	0.13
AE-3B	0.093	0.083	0.11	0.073	0.084 J	0.092	0.078	0.091	0.082	NS	0.095	0.091	0.079	NS	0.083	0.088	NS	NS	INT	NS	0.087
AE-4A	NS	NS	NS	NS	< 0.002 JM	< 0.002	< 0.002	< 0.002	0.003	NS	0.01	0.003	0.002	NS	0.001	0.001	NS	NS	< 0.001	NS	< 0.001
AE-4B	NS	NS	NS	NS	0.003	< 0.002	< 0.002	< 0.002	0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-2A	< 0.005	0.001	< 0.001	NA	0.001	< 0.002	0.005	< 0.002	0.008	NS	0.003	0.002	0.002	NS	0.002	0.002	NS	NS	NS	NS	NS
FPC-2B	NS	NS	NS	NS	0.004	< 0.002	0.004	< 0.002	0.002	NS	0.003	0.003	0.003	NS	0.003	0.002	NS	NS	NS	NS	NS
FPC-4B	NS	NS	NS	NS	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-5A	< 0.001	0.001	0.046	0.054	0.008	0.045	0.065	0.042	0.053	NS	0.054	0.053	0.055	NS	0.051	0.053	NS	NS	0.052	NS	NS
FPC-5B	0.031	0.034	0.002	0.001	0.038 J	< 0.002	0.004	< 0.002	0.004	NS	0.001	0.001	0.003	NS	0.002	0.002	NS	NS	0.002	NS	0.002
FPC-6A	< 0.005	< 0.001	NS	NS	0.009	< 0.002	0.003	< 0.002	0.003	NS	0.002	0.013	0.03	NS	0.009	0.037	NS	NS	0.018	NS	0.038
FPC-6B	0.003	0.006	0.006	0.003	< 0.002 J	0.013	0.05	0.005	0.009	NS	0.014	0.002	0.003	NS	0.005	0.004	NS	NS	INT	NS	0.003
FPC-7A	NS	NS	NS	NS	< 0.001 J	< 0.004	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-7B	NS	NS	NS	NS	< 0.001 J	0.007	0.002	< 0.002	< 0.001	NS	0.002	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-8A	0.003	0.004	0.007	0.008	0.004	< 0.002	0.008	< 0.002	0.004	NS	0.002	0.006	0.007	NS	0.008	0.006	NS	NS	0.002	NS	0.001
FPC-8B	0.007	0.008	0.008	0.008	0.009	0.004	0.005	0.005	0.007	NS	0.007	0.007	0.007	NS	0.008	0.007	NS	NS	INT	NS	0.008
FPC-9A	0.07	0.53	0.065	0.079	0.064	< 0.002	< 0.002	0.044	0.037	NS	0.026	0.034	0.036	NS	0.042	0.041	NS	NS	0.045	NS	0.058
FPC-9B	< 0.002	NS	NS	< 0.001	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NS	NS	NS	NS	0.002 J	< 0.002	< 0.004	< 0.002	0.001	NS	0.001	< 0.001	0.009	NS	0.008	0.007	NS	NS	NS	NS	0.004
FPC-11B	NS	NS	NS	NS	0.03 J	0.008	0.011	0.006	0.009	NS	0.008	0.01	0.01	NS	0.004	0.003	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	0.018	0.008	0.012	0.013	0.009	0.01	0.009	0.006	0.011	NS	0.01	0.013	0.015	NS	0.016	0.015	NS	NS	INT	NS	0.012
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 0.001	NS	< 0.001	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	NS	NS	NS	NS
Water Supply Wells																					
R-3	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NA	NA	NA	NS	NA	< 0.001	< 0.001
R-5	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NA
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	< 0.001
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	< 0.001	< 0.001
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	< 0.001

Table Notes:

1. All data in milligrams per liter (mg/L), parts per million - Analyzed by Method 200.8
2. NHDES Ambient Groundwater Quality Standard (AGQS) for Arsenic is 0.01 mg/L. Exceedances are identified with GRAY shading.
3. EPA Interim Cleanup Level (ICL) for Arsenic is 0.01 mg/L. Exceedances are identified with BOLD text.
4. All data for Total metals, with the exception of the following overburden wells for Sept. 2014 (MW-4, MW-9, MW-10, OP-2, OP-5, AE-1A, AE-2A, AE-3A, AE-4A, FPC-6A, FPC-7A, FPC-8A, FPC-9A and FPC-11A)

Abbreviations:

NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
 Contaminants of Concern Analytical Data (November 2000 – September 2014)
Beryllium in Groundwater
 Coakley Landfill Superfund Site
 North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-00	Apr-01	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells																					
BP-4	< 0.005	< 0.002	NA	< 0.004	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	< 0.001	< 0.002	NA	< 0.004	< 0.004	< 0.002	< 0.002	< 0.002	0.003	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
MW-5D	< 0.01	0.002	NA	< 0.02	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
MW-5S	< 0.01	< 0.02	NA	< 0.02	< 0.02	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
MW-6	< 0.005	< 0.002	NA	< 0.004	< 0.004 J	< 0.002	0.006	< 0.002	< 0.001	NS	< 0.001	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
MW-8	< 0.005	< 0.002	NA	< 0.02	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
MW-9	< 0.001	< 0.002	NA	< 0.004	< 0.004	< 0.002	< 0.002 M	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
MW-10	< 0.005	< 0.002	NA	< 0.004	< 0.004 J	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
MW-11	< 0.005	< 0.002	NA	< 0.02	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
OP-2	< 0.001	< 0.002	NA	< 0.004	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
OP-5	< 0.005	< 0.002	NA	< 0.004	< 0.004	< 0.002	< 0.004	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
Operating Unit 2 Wells																					
AE-1A	< 0.005	< 0.002	NA	< 0.004	< 0.004 J	< 0.002	0.006	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-1B	< 0.005	< 0.002	NA	< 0.004	< 0.004	< 0.002	< 0.002	< 0.002	NS	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-2A	< 0.005	< 0.002	NA	< 0.008	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-2B	< 0.01	< 0.002	NA	< 0.004	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-3A	< 0.001	< 0.004	NA	< 0.004	< 0.004 J	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-3B	< 0.001	< 0.004	NA	< 0.004	< 0.004 J	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
AE-4A	NS	NS	NS	NS	< 0.008 M	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-4B	NS	NS	NS	NS	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-2A	NA	< 0.002	NA	NA	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
FPC-2B	NS	NS	NS	NS	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
FPC-4B	NS	NS	NS	NS	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-5A	< 0.001	< 0.002	NA	< 0.004	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	NS
FPC-5B	< 0.001	< 0.002	NA	< 0.004	< 0.004 J	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-6A	< 0.005	< 0.002	NS	NS	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-6B	< 0.001	< 0.002	NA	< 0.004	< 0.004	< 0.002	< 0.1	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-7A	NS	NS	NS	NS	< 0.004 J	NA	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-7B	NS	NS	NS	NS	< 0.004 J	NA	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-8A	< 0.001	< 0.002	NA	< 0.004	< 0.004 J	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-8B	< 0.005	< 0.002	NA	< 0.008	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-9A	< 0.005	< 0.002	NA	< 0.004	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-9B	< 0.005	NS	NS	< 0.004	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NS	NS	NS	NS	< 0.004 J	< 0.002	0.006	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	< 0.001
FPC-11B	NS	NS	NS	NS	< 0.004 J	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	< 0.005	< 0.002	NA	< 0.008	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
Water Supply Wells																					
R-3	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NA	NA	NA	NS	NA	NA	NA
R-5	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NA
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA

Table Notes:

1. All data in milligrams per liter (mg/L), parts per million - Analyzed by Method 200.8
2. NHDES Ambient Groundwater Quality Standard (AGQS) for Beryllium is 0.004 mg/L. Exceedances are identified with GRAY shading.
3. EPA Interim Cleanup Level (ICL) for Beryllium is 0.004 mg/L. Exceedances are identified with BOLD text.
4. All data for Total metals, with the exception of the following overburden wells for Sept. 2014 (MW-4, MW-9, MW-10, OP-2, OP-5, AE-1A, AE-2A, AE-3A, AE-4A, FPC-6A, FPC-7A, FPC-8A, FPC-9A and FPC-11A)

Abbreviations:

NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
 Contaminants of Concern Analytical Data (November 2000 – September 2014)
Chromium in Groundwater
 Coakley Landfill Superfund Site
 North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-00	Apr-01	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells																					
BP-4	< 0.005	0.002	NA	0.001	0.002	< 0.002	0.015	< 0.002	< 0.001	NS	< 0.001	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	0.042	< 0.002	NA	0.006	0.032	< 0.002	0.6	0.15	0.14	NS	0.19	0.002	< 0.001	NS	0.001	< 0.001	NS	NS	0.003	NS	< 0.001
MW-5D	< 0.005	< 0.02	NA	0.001	0.002	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
MW-5S	< 0.015	0.002	NA	0.002	0.004	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
MW-6	< 0.015	< 0.02	NA	< 0.002	< 0.002	< 0.002	< 0.004	< 0.002	< 0.001	NS	< 0.001	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
MW-8	< 0.015	< 0.02	NA	0.001	0.004	< 0.002	0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
MW-9	< 0.015	< 0.02	NA	0.014	0.007	0.005	0.003	< 0.004	< 0.001	NS	< 0.001	< 0.001	0.001	NS	< 0.001	0.001	NS	NS	< 0.001	NS	< 0.001
MW-10	< 0.015	< 0.02	NA	0.001	0.005	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	0.002	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
MW-11	< 0.015	< 0.02	NA	0.002	0.002	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
OP-2	< 0.015	0.003	NA	0.002	0.003	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
OP-5	< 0.005	< 0.001	NA	< 0.001	< 0.001	< 0.002	0.007	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
Operating Unit 2 Wells																					
AE-1A	< 0.005	0.001	NA	< 0.001	0.016	< 0.002	0.005	< 0.002	0.005	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	0.008	NS	< 0.001
AE-1B	< 0.015	< 0.02	NA	0.003	0.002	< 0.002	< 0.002	< 0.002	NS	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-2A	< 0.005	0.002	NA	< 0.002	0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-2B	0.13	0.03	NA	0.013	0.003	0.002	< 0.01	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-3A	< 0.02	< 0.02	NA	0.017	0.006	< 0.002	< 0.002	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	0.003	NS	< 0.001
AE-3B	< 0.02	< 0.02	NA	0.005	0.009	< 0.002	< 0.004	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
AE-4A	NS	NS	NS	NS	0.0042	< 0.002	0.005	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-4B	NS	NS	NS	NS	0.34	< 0.002	0.004	< 0.004	0.003	NS	0.002	< 0.001	0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-2A	NA	< 0.001	NA	NA	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
FPC-2B	NS	NS	NS	NS	< 0.001	0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
FPC-4B	NS	NS	NS	NS	0.003	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-5A	< 0.02	0.001	NA	0.002	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	NS
FPC-5B	< 0.02	< 0.02	NA	< 0.001	0.005	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-6A	< 0.005	0.001	NS	NS	0.013	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-6B	< 0.02	0.001	NA	< 0.001	0.001	0.008	0.008	< 0.004	0.003	NS	0.002	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-7A	NS	NS	NS	NS	0.003	< 0.004	< 0.002	< 0.002	0.002	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-7B	NS	NS	NS	NS	0.002	0.067	< 0.002	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-8A	0.013	< 0.02	NA	0.023	0.008	< 0.002	0.01	< 0.004	< 0.001	NS	< 0.001	0.006	0.006	NS	0.003	0.003	NS	NS	< 0.001	NS	< 0.001
FPC-8B	< 0.005	< 0.001	NA	< 0.002	< 0.001	< 0.002	0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-9A	< 0.005	< 0.02	NA	< 0.001	0.001	< 0.002	< 0.002	< 0.002	0.002	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-9B	< 0.015	NS	NS	0.002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NS	NS	NS	NS	0.006	< 0.002	0.024	< 0.004	0.002	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	< 0.001
FPC-11B	NS	NS	NS	NS	0.046	< 0.002	0.14	0.016	< 0.001	NS	0.002	< 0.001	< 0.001	NS	0.016	< 0.001	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	< 0.005	< 0.02	NA	0.002	0.004	< 0.002	< 0.002	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
Water Supply Wells																					
R-3	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NA	NA	NA	NS	NA	NA	NA
R-5	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NA
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA

Table Notes:

1. All data in milligrams per liter (mg/L), parts per million - Analyzed by Method 200.8
2. NHDES Ambient Groundwater Quality Standard (AGQS) for Chromium is 0.1 mg/L. Exceedances are identified with GRAY shading.
3. EPA Interim Cleanup Level (ICL) for Chromium is 0.05 mg/L. Exceedances are identified with BOLD text.
4. All data for Total metals, with the exception of the following overburden wells for Sept. 2014 (MW-4, MW-9, MW-10, OP-2, OP-5, AE-1A, AE-2A, AE-3A, AE-4A, FPC-6A, FPC-7A, FPC-8A, FPC-9A and FPC-11A)

Abbreviations:

NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
 Contaminants of Concern Analytical Data (November 2000 – September 2014)
Lead in Groundwater
 Coakley Landfill Superfund Site
 North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-00	Apr-01	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells																					
BP-4	< 0.005	< 0.001	NA	< 0.001	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	NS	0.004	0.01	< 0.001	NS	NS	< 0.001	NS	< 0.001
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	0.002	< 0.005	NA	< 0.001	< 0.002	< 0.002	0.1	0.023	0.037	NS	0.043	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	0.002	NS	< 0.001
MW-5D	< 0.005	< 0.002	NA	< 0.001	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
MW-5S	< 0.002	< 0.001	NA	< 0.01	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
MW-6	< 0.002	< 0.005	NA	< 0.002	< 0.001	< 0.002	< 0.004	< 0.002	< 0.001	NS	< 0.001	< 0.001	NS	0.003	0.001	0.001	NS	NS	< 0.001	NS	< 0.001
MW-8	< 0.002	< 0.01	NA	< 0.001	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
MW-9	< 0.002	< 0.01	NA	0.002	< 0.001	< 0.002	< 0.002	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	0.001	NS	< 0.001
MW-10	< 0.002	< 0.01	NA	< 0.001	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
MW-11	< 0.002	< 0.01	NA	< 0.001	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
OP-2	< 0.002	< 0.001	NA	< 0.001	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	0.006	NS	NS	< 0.001	NS	< 0.001
OP-5	< 0.005	< 0.001	NA	< 0.001	< 0.001	< 0.002	0.003	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
Operating Unit 2 Wells																					
AE-1A	< 0.005	< 0.001	NA	< 0.001	0.001	< 0.002	< 0.004	< 0.002	0.015	NS	0.003	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	0.004	NS	< 0.001
AE-1B	< 0.002	< 0.005	NA	< 0.001	< 0.001	< 0.002	< 0.002	< 0.002	NS	NS	< 0.001	< 0.001	< 0.001	NS	0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-2A	< 0.005	< 0.001	NA	< 0.001	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-2B	0.017	< 0.005	NA	< 0.02	< 0.001	< 0.002	< 0.01	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-3A	< 0.001	< 0.002	NA	0.007	< 0.001	< 0.002	< 0.002	< 0.004	< 0.001	NS	0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-3B	< 0.001	< 0.002	NA	< 0.001	< 0.001	< 0.002	< 0.004	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
AE-4A	NS	NS	NS	NS	0.007	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-4B	NS	NS	NS	NS	0.05	< 0.002	< 0.002	< 0.004	0.002	NS	0.002	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-2A	NA	< 0.001	NA	NA	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
FPC-2B	NS	NS	NS	NS	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	0.003	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
FPC-4B	NS	NS	NS	NS	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-5A	< 0.001	< 0.001	NA	< 0.005	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
FPC-5B	< 0.001	< 0.01	NA	< 0.001	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-6A	< 0.005	< 0.001	NA	NS	< 0.002	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-6B	< 0.001	< 0.001	NA	< 0.001	< 0.001	< 0.002	< 0.01 J	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-7A	NS	NS	NS	NS	< 0.001	< 0.004	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-7B	NS	NS	NS	NS	< 0.001	0.018	< 0.002	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-8A	0.001	< 0.01	NA	0.003	< 0.001	< 0.002	< 0.002	< 0.004	< 0.001	NS	< 0.001	0.001	0.002	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-8B	< 0.005	< 0.001	NA	< 0.002	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-9A	< 0.005	< 0.005	NA	< 0.001	< 0.001	< 0.002	< 0.002	< 0.002	0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-9B	< 0.002	NS	NS	< 0.002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NS	NS	NS	NS	< 0.001	< 0.002	< 0.004	< 0.004	0.002	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	< 0.001
FPC-11B	NS	NS	NS	NS	0.007	< 0.002	< 0.004	0.006	0.001	NS	< 0.001	< 0.001	< 0.001	NS	0.006	< 0.001	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	< 0.005	< 0.01	NA	< 0.002	< 0.001	< 0.002	< 0.002	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 0.001	NS	< 0.001	< 0.001	NS	0.002	0.004	< 0.001	NS	NS	NS	NS	NS
Water Supply Wells																					
R-3	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NA	NA	NA	NS	NA	NA	NA
R-5	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NA
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA

Table Notes:

1. All data in milligrams per liter (mg/L), parts per million - Analyzed by Method 200.8
2. NHDES Ambient Groundwater Quality Standard (AGQS) for Lead is 0.015 mg/L. Exceedances are identified with GRAY shading.
3. EPA Interim Cleanup Level (ICL) for Lead is 0.015 mg/L. Exceedances are identified with BOLD text.
4. All data for Total metals, with the exception of the following overburden wells for Sept. 2014 (MW-4, MW-9, MW-10, OP-2, OP-5, AE-1A, AE-2A, AE-3A, AE-4A, FPC-6A, FPC-7A, FPC-8A, FPC-9A and FPC-11A)

Abbreviations:

NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
 Contaminants of Concern Analytical Data (November 2000 – September 2014)
Manganese in Groundwater
 Coakley Landfill Superfund Site
 North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-00	Apr-01	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells																					
BP-4	1.4	1.7	1.5	1.3	1.4	1.3	1.7	1.3	1.2	NS	1.1	0.094	NS	1.2	1.1	1.2	NS	NS	0.96	NS	0.69
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	1.5	1.6	1.4	1.3	1.7	1.4	13	4.5	5.9	NS	5.8	1.2	1.1	NS	1.3	1.2	NS	NS	0.97	NS	1.2
MW-5D	0.92	1.2	0.92	0.86	0.88	0.87	0.89	0.89	0.86	NS	0.78	0.77	0.73	NS	0.78	0.96	NS	NS	INT	NS	0.79
MW-5S	3.4	3.1	3.2	3.5	4.1	3.8	3.6	3.7	4.4	NS	3.9	3.4	2.9	NS	2.9	3.6	NS	NS	INT	NS	3.3
MW-6	0.08	0.6	1.2	1.2	1.1	0.7	0.97	0.54	0.74	NS	0.52	0.49	NS	1.9	1.8	2.5	NS	NS	0.99	NS	2.7
MW-8	3.6	3.2	9.8	2.8	2.9	2.4	2.5	2.5	1.6	NS	1.9	2	2.1	NS	1.7	2.2	NS	NS	INT	NS	1.3
MW-9	1.1	0.88	1	1.1	1.3	1.1	0.71	2.4	1.2	NS	3.5	2.1	1.4	NS	0.88	1.4	NS	NS	1.3	NS	1.4
MW-10	1.9	0.91	3.9	4.4	8.1	3.9	3.5	3.2	2.8	NS	0.76	2.2	2.7	NS	1.6	3	NS	NS	1.7	NS	2.3
MW-11	0.95	0.78	0.71	0.6	0.6	0.59	0.53	0.45	0.41	NS	0.44	0.39	0.34	NS	0.35	0.41	NS	NS	INT	NS	0.43
OP-2	0.45	0.5	0.29	0.33	0.36	0.38	0.39	0.47	0.62	NS	0.58	0.63	0.76	NS	1	1	NS	NS	0.98	NS	1.2
OP-5	6.7	4.9	5.6	5.2	3.9	3.5	3.8	2.5	3.8	NS	2.3	1.8	2.2	NS	2.7	3.7	NS	NS	3.1	NS	4.3
Operating Unit 2 Wells																					
AE-1A	0.16	0.21	0.31	0.35	0.38	0.28	0.25	0.44	0.13	NS	0.014	0.25	0.38	NS	0.39	0.5	NS	NS	0.47	NS	0.46
AE-1B	0.64	0.62	0.61	0.61	0.66	0.65	0.72	0.64	NS	NS	0.3	0.73	0.53	NS	0.56	0.59	NS	NS	0.49	NS	0.53
AE-2A	0.65	0.83	0.74	0.95	0.83	0.76	0.72	0.51	0.77	NS	0.61	0.65	0.7	NS	0.74	0.82	NS	NS	0.81	NS	0.81
AE-2B	6.4	5.1	4.4	4.4	3.7	3	3.1	2.4	2.1	NS	1.7	1.7	1.3	NS	1.2	1.5	NS	NS	1.2	NS	1.1
AE-3A	1.2	0.89	0.9	0.95	1.3	0.74	0.69	0.69	0.84	NS	0.85	1.3	0.76	NS	0.9	1.2	NS	NS	0.84	NS	1
AE-3B	2.1	2	1.4	1.4	1.5	1.1	1.1	1	0.57	NS	0.48	1.4	0.95	NS	1.4	1.5	NS	NS	INT	NS	1.1
AE-4A	NS	NS	NS	NS	0.93	0.35	0.38	0.31	0.29	NS	0.4	0.32	0.29	NS	0.47	0.42	NS	NS	0.38	NS	0.21
AE-4B	NS	NS	NS	NS	2.2	0.46	0.7	0.22	1.1	NS	0.6	0.26	0.19	NS	0.22	0.013	NS	NS	0.008	NS	0.018
FPC-2A	0.74	0.92	0.68	0.67	0.6	0.59	0.57	0.67	0.8	NS	0.62	0.73	0.5	NS	0.55	0.63	NS	NS	NS	NS	NS
FPC-2B	NS	NS	NS	NS	0.035	0.027	0.012	0.018	< 0.001	NS	0.023	0.084	0.021	NS	0.019	0.015	NS	NS	NS	NS	NS
FPC-4B	NS	NS	NS	NS	0.046	0.003	0.079	< 0.003	0.031	NS	0.066	< 0.005	< 0.005	NS	< 0.005	< 0.005	NS	NS	INT	NS	0.006
FPC-5A	0.05	0.055	0.17	0.16	0.074	0.18	0.15	0.14	0.11	NS	0.11	0.11	0.1	NS	0.11	0.14	NS	NS	0.11	NS	NS
FPC-5B	0.2	0.19	0.055	0.07	0.17	0.073	0.076	0.088	0.095	NS	0.074	0.087	0.07	NS	0.056	0.059	NS	NS	INT	NS	0.057
FPC-6A	0.2	0.15	NS	NS	7.2	0.53	0.61	0.41	0.5	NS	0.36	2.4	3.6	NS	2.1	3.9	NS	NS	2.3	NS	3.1
FPC-6B	0.69	0.62	0.83	0.75	0.6	5.9	6.2	2.1	3.1	NS	3	0.34	0.4	NS	0.38	0.47	NS	NS	INT	NS	0.39
FPC-7A	NS	NS	NS	NS	0.014	NA	0.006	< 0.003	0.11	NS	0.034	< 0.005	< 0.005	NS	< 0.005	< 0.005	NS	NS	< 0.005	NS	< 0.005
FPC-7B	NS	NS	NS	NS	0.34	NA	0.37	0.2	0.076	NS	1.8	0.11	0.014	NS	0.015	0.009	NS	NS	INT	NS	< 0.005
FPC-8A	0.46	0.35	0.44	0.41	0.3	0.31	0.26	0.15	0.15	NS	0.062	0.19	0.21	NS	0.26	0.27	NS	NS	0.21	NS	0.17
FPC-8B	0.023	0.033	0.025	0.033	0.035	0.022	0.03	0.021	0.029	NS	0.028	0.025	0.032	NS	0.032	0.029	NS	NS	INT	NS	0.03
FPC-9A	0.32	0.35	0.3	0.34	0.42	0.04	0.03	0.27	0.41	NS	0.52	0.27	0.22	NS	0.26	0.31	NS	NS	0.24	NS	0.18
FPC-9B	0.08	NS	NS	0.053	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NS	NS	NS	NS	1	0.31	0.5	0.022	0.5	NS	0.036	0.01	0.4	NS	0.35	0.44	NS	NS	NS	NS	0.43
FPC-11B	NS	NS	NS	NS	3	2.2	2.5	0.88	1.3	NS	1.4	0.71	0.52	NS	0.21	0.58	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	0.67	0.67	0.64	0.7	0.68	0.57	0.63	0.48	0.39	NS	0.4	0.5	0.46	NS	0.47	0.52	NS	NS	INT	NS	0.34
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	3.3	NS	2.3	3	2.2	NS	2.4	1.7	NS	NS	NS	NS	NS
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	0.16	NS	0.062	0.081	NS	0.29	0.23	0.31	NS	NS	NS	NS	NS
Water Supply Wells																					
R-3	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NA	NA	NA	NS	NA	0.14	0.1
R-5	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	0.29
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	0.25	0.32
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	0.028

Table Notes:

1. All data in milligrams per liter (mg/L), parts per million - Analyzed by Method 200.8
2. NHDES Ambient Groundwater Quality Standard (AGQS) for Manganese is 0.84 mg/L. Exceedances are identified with GRAY shading.
3. EPA Interim Cleanup Level (ICL) for Manganese is 0.3 mg/L. Exceedances are identified with BOLD text.
4. All data for Total metals, with the exception of the following overburden wells for Sept. 2014 (MW-4, MW-9, MW-10, OP-2, OP-5, AE-1A, AE-2A, AE-3A, AE-4A, FPC-6A, FPC-7A, FPC-8A, FPC-9A and FPC-11A)

Abbreviations:

NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
 Contaminants of Concern Analytical Data (November 2000 – September 2014)
Nickel in Groundwater
 Coakley Landfill Superfund Site
 North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-00	Apr-01	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells																					
BP-4	0.014	0.011	NA	0.009	0.013	0.019	0.15	0.009	0.01	NS	0.013	0.008	NS	0.015	0.009	0.008	NS	NS	0.011	NS	0.008
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	0.039	0.021	NA	0.014	0.032	0.01	0.41	0.099	0.13	NS	0.15	0.009	0.008	NS	0.012	0.006	NS	NS	0.008	NS	0.007
MW-5D	0.021	0.021 J	NA	0.017	0.019	0.016	0.017	< 0.002	0.011	NS	0.012	0.01	0.009	NS	0.009	0.009	NS	NS	INT	NS	0.009
MW-5S	0.027	0.021	NA	0.024	0.023	0.02	0.022	< 0.002	0.022	NS	0.019	0.014	0.011	NS	0.01	0.01	NS	NS	INT	NS	0.013
MW-6	< 0.002	0.003	NA	< 0.005	0.003	< 0.002	< 0.004	< 0.002	0.003	NS	0.001	0.002	NS	0.002	0.002	0.004	NS	NS	0.002	NS	0.003
MW-8	0.018	0.018	NA	0.014	0.018	0.019	0.02	0.018	0.019	NS	0.026	0.022	0.017	NS	0.019	0.02	NS	NS	INT	NS	0.021
MW-9	0.012	0.013	NA	0.028	0.018	0.01	0.014	0.005	0.016	NS	0.007	0.004	0.005	NS	0.005	0.014	NS	NS	0.008	NS	0.009
MW-10	0.01	0.003	NA	0.012	0.029	0.012	0.014	< 0.002	0.008	NS	0.003	0.005	0.006	NS	0.004	0.005	NS	NS	0.002	NS	0.003
MW-11	0.019	0.022	NA	0.015	0.014	0.01	0.018	0.008	0.012	NS	0.018	0.008	0.006	NS	0.005	0.005	NS	NS	INT	NS	0.007
OP-2	0.015	0.012	NA	0.01	0.01	0.008	0.011	0.007	0.007	NS	0.006	0.007	0.009	NS	0.007	0.034	NS	NS	0.006	NS	0.01
OP-5	0.039	0.022	NA	0.031	0.027	0.028	0.031	< 0.002	0.033	NS	0.03	0.025	0.027	NS	0.024	0.026	NS	NS	0.017	NS	0.015
Operating Unit 2 Wells																					
AE-1A	< 0.005	< 0.001	NA	< 0.001	0.011	< 0.002	0.005	< 0.002	0.005	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	0.013	NS	< 0.001
AE-1B	0.003	0.001	NA	0.002	0.001	< 0.002	0.002	< 0.002	NS	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-2A	0.025	0.026	NA	0.03	0.024	0.019	0.018	0.012	0.012	NS	0.012	0.01	0.009	NS	0.008	0.008	NS	NS	0.017	NS	0.007
AE-2B	0.08	0.028	NA	0.02	0.014	0.016	0.03	0.01	0.013	NS	0.01	0.01	0.009	NS	0.007	0.008	NS	NS	0.008	NS	0.007
AE-3A	0.016	0.015	NA	0.025	0.015	0.011	0.013	0.008	0.008	NS	0.009	0.008	0.007	NS	0.006	0.007	NS	NS	0.006	NS	0.007
AE-3B	0.02	0.018	NA	0.014	0.016	0.011	0.014	0.008	0.008	NS	0.009	0.007	0.006	NS	0.005	0.006	NS	NS	INT	NS	0.008
AE-4A	NS	NS	NS	NS	0.04	< 0.002	0.003	< 0.002	0.007	NS	0.002	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
AE-4B	NS	NS	NS	NS	0.084	0.004	0.003	< 0.004	0.003	NS	0.002	0.001	0.001	NS	< 0.001	< 0.001	NS	NS	< 0.001	NS	< 0.001
FPC-2A	< 0.005	< 0.001	NA	NA	< 0.001	< 0.002	0.002	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
FPC-2B	NS	NS	NS	NS	< 0.001	< 0.002	0.002	< 0.002	< 0.001	NS	< 0.001	0.002	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS
FPC-4B	NS	NS	NS	NS	0.002	< 0.002	0.002	< 0.002	0.001	NS	0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-5A	0.01	0.004	NA	0.013	0.006	0.011	0.011	0.008	0.004	NS	0.01	0.007	0.007	NS	0.006	0.006	NS	NS	0.006	NS	NS
FPC-5B	0.02	0.017	NA	0.005	0.014	0.005	0.008	0.005	0.008	NS	0.006	0.007	0.006	NS	0.005	0.005	NS	NS	INT	NS	0.006
FPC-6A	0.008	0.005	NA	NS	0.027	0.004	0.005	< 0.002	0.005	NS	0.002	0.005	0.006	NS	0.005	0.006	NS	NS	0.005	NS	0.006
FPC-6B	< 0.01	0.004	NA	0.007	0.006	0.017	0.019	< 0.004	0.013	NS	0.008	0.003	0.004	NS	0.004	0.004	NS	NS	INT	NS	0.003
FPC-7A	NS	NS	NS	NS	0.006	NA	0.006	0.003	0.013	NS	0.007	0.004	0.004	NS	0.003	0.004	NS	NS	0.003	NS	0.003
FPC-7B	NS	NS	NS	NS	0.003	NA	0.013	< 0.004	0.002	NS	0.018	0.002	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-8A	< 0.01	0.004	NA	0.012	0.005	< 0.002	0.007	< 0.004	0.002	NS	< 0.001	0.004	0.005	NS	0.003	0.003	NS	NS	0.001	NS	0.002
FPC-8B	< 0.005	< 0.001	NA	< 0.002	< 0.001	< 0.002	0.003	< 0.002	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	INT	NS	< 0.001
FPC-9A	0.01	0.012	NA	0.009	0.008	< 0.002	0.002	0.004	0.003	NS	0.004	0.003	0.003	NS	0.003	0.003	NS	NS	0.004	NS	0.006
FPC-9B	< 0.002	NS	NS	< 0.005	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NS	NS	NS	NS	0.016	0.01	0.028	0.003	0.009	NS	0.004	0.003	< 0.001	NS	0.001	< 0.001	NS	NS	NS	NS	0.003
FPC-11B	NS	NS	NS	NS	0.05	0.02	0.15	< 0.002	0.013	NS	0.012	0.003	< 0.001	NS	0.03	0.002	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	0.009	0.014	NA	0.01	0.013	0.01	0.015	0.007	0.008	NS	0.009	0.009	0.009	NS	0.008	0.008	NS	NS	INT	NS	0.006
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	0.005	NS	0.004	0.005	0.004	NS	0.003	0.002	NS	NS	NS	NS	NS
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 0.001	NS	< 0.001	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	NS	NS	NS	NS
Water Supply Wells																					
R-3	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NA	NA	NA	NS	NA	NA	NA
R-5	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NA
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA

Table Notes:

1. All data in milligrams per liter (mg/L), parts per million - Analyzed by Method 200.8
2. NHDES Ambient Groundwater Quality Standard (AGQS) for Nickel is 0.1 mg/L. Exceedances are identified with GRAY shading.
3. EPA Interim Cleanup Level (ICL) for Nickel is 0.1 mg/L. Exceedances are identified with BOLD text.
4. All data for Total metals, with the exception of the following overburden wells for Sept. 2014 (MW-4, MW-9, MW-10, OP-2, OP-5, AE-1A, AE-2A, AE-3A, AE-4A, FPC-6A, FPC-7A, FPC-8A, FPC-9A and FPC-11A)

Abbreviations:

NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
 Contaminants of Concern Analytical Data (November 2000 – September 2014)
Vanadium in Groundwater
 Coakley Landfill Superfund Site
 North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-00	Apr-01	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells																					
BP-4	0.013	0.004	NA	< 0.002	0.006	< 0.002	< 0.002	< 0.004	< 0.001	NS	< 0.001	< 0.001	NS	< 0.001	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	0.007	0.004	NA	0.003	0.008	< 0.002	0.35	0.063	0.082	NS	0.091	0.002	< 0.001	NS	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
MW-5D	0.004	0.002	NA	< 0.002	0.004	< 0.002	0.003	< 0.004	0.001	NS	0.001	0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	INT	NS	< 0.005
MW-5S	0.001	0.004	NA	< 0.04	< 0.002	0.003	0.004	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	INT	NS	< 0.005
MW-6	< 0.001	< 0.001	NA	< 0.001	< 0.002	< 0.002	< 0.002	< 0.004	< 0.001	NS	< 0.001	< 0.001	NS	< 0.001	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
MW-8	0.001	0.001	NA	< 0.002	< 0.002	< 0.002	0.003	< 0.004	0.001	NS	0.002	0.002	0.001	NS	0.002	< 0.005	NS	NS	INT	NS	< 0.005
MW-9	0.004	0.003	NA	0.009	0.004	0.003	0.007	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
MW-10	< 0.001	0.001	NA	0.002	< 0.002	0.003	0.004	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
MW-11	0.002	0.002	NA	0.002	0.006	0.003	0.003	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	INT	NS	< 0.005
OP-2	0.003	0.005	NA	0.003	0.008	< 0.002	0.004	< 0.004	< 0.001	NS	0.001	0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
OP-5	0.009	0.002	NA	< 0.002	0.003	< 0.002	0.002	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
Operating Unit 2 Wells																					
AE-1A	< 0.002	< 0.001	NA	< 0.002	0.005	< 0.002	< 0.002	< 0.004	0.003	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	0.01	NS	< 0.005
AE-1B	< 0.001	< 0.001	NA	< 0.002	< 0.002	< 0.002	< 0.002	< 0.004	NS	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
AE-2A	0.009	0.004	NA	< 0.004	0.006	0.002	0.004	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
AE-2B	0.076	0.007	NA	0.006	0.009	0.005	< 0.01	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
AE-3A	< 0.002	0.002	NA	< 0.002	0.005	< 0.002	< 0.002	< 0.004	< 0.001	NS	0.001	0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
AE-3B	< 0.002	0.002	NA	< 0.002	0.005	0.004	< 0.002	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	INT	NS	< 0.005
AE-4A	NS	NS	NS	NS	0.039	< 0.002	< 0.002	< 0.002	< 0.001	NS	0.002	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
AE-4B	NS	NS	NS	NS	0.12	< 0.002	< 0.002	< 0.004	0.003	NS	0.002	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
FPC-2A	NA	0.001	NA	NA	< 0.001	< 0.002	< 0.002	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	NS	NS	NS
FPC-2B	NS	NS	NS	NS	< 0.002	< 0.002	< 0.002	< 0.004	< 0.001	NS	< 0.001	0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	NS	NS	NS
FPC-4B	NS	NS	NS	NS	< 0.002	< 0.002	< 0.002	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	INT	NS	< 0.005
FPC-5A	< 0.002	0.003	NA	< 0.01	0.002	0.004	< 0.002	< 0.004	< 0.001	NS	0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	< 0.005	NS	NS
FPC-5B	< 0.002	0.003	NA	< 0.002	< 0.002	< 0.002	0.003	< 0.004	0.001	NS	0.001	0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	INT	NS	< 0.005
FPC-6A	< 0.002	0.001	NA	NS	0.006	< 0.002	0.003	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
FPC-6B	< 0.001	0.003	NA	< 0.002	0.004	< 0.002	< 0.004	< 0.004	0.003	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	INT	NS	< 0.005
FPC-7A	NS	NS	NS	NS	< 0.002	NA	< 0.002	< 0.004	0.002	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
FPC-7B	NS	NS	NS	NS	< 0.002	NA	0.002	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	INT	NS	< 0.005
FPC-8A	0.009	0.006	NA	0.016	0.005	< 0.002	0.008	< 0.004	0.001	NS	< 0.001	0.007	0.006	NS	0.002	< 0.005	NS	NS	< 0.005	NS	< 0.005
FPC-8B	< 0.002	< 0.001	NA	< 0.004	< 0.002	< 0.002	< 0.002	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	INT	NS	< 0.005
FPC-9A	0.006	0.001	NA	< 0.002	0.004	< 0.002	< 0.002	< 0.004	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	< 0.005	NS	< 0.005
FPC-9B	< 0.001	NS	NS	< 0.001	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NS	NS	NS	NS	0.004	< 0.002	0.008	< 0.004	0.003	NS	0.001	< 0.001	< 0.001	NS	0.002	< 0.005	NS	NS	NS	NS	< 0.005
FPC-11B	NS	NS	NS	NS	0.019	< 0.002	0.048	< 0.004	0.001	NS	< 0.001	< 0.001	< 0.001	NS	0.012	< 0.005	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	0.005	0.002	NA	< 0.004	< 0.002	< 0.002	< 0.002	< 0.004	< 0.001	NS	0.001	< 0.001	< 0.001	NS	< 0.001	< 0.005	NS	NS	INT	NS	< 0.005
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	< 0.001	NS	0.001	0.001	0.001	NS	< 0.001	< 0.005	NS	NS	NS	NS	NS
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 0.001	NS	0.001	0.001	NS	< 0.001	< 0.001	< 0.005	NS	NS	NS	NS	NS
Water Supply Wells																					
R-3	NS	NA	NS	NS	NA	NA	NA	NS	NS	NA	NA	NA	NA	NS	NA	NA	NA	NS	NA	NA	NA
R-5	NS	NA	NS	NS	NA	NA	NA	NS	NS	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NA
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA

Table Notes:

1. All data in milligrams per liter (mg/L), parts per million - Analyzed by Method 200.8
2. An NHDES Ambient Groundwater Quality Standard (AGQS) for Vanadium has not been established.
3. EPA Interim Cleanup Level (ICL) for Vanadium is 0.26 mg/L. Exceedances are identified with BOLD text.
4. All data for Total metals, with the exception of the following overburden wells for Sept. 2014 (MW-4, MW-9, MW-10, OP-2, OP-5, AE-1A, AE-2A, AE-3A, AE-4A, FPC-6A, FPC-7A, FPC-8A, FPC-9A and FPC-11A)

Abbreviations:

NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
Contaminants of Concern Analytical Data (November 2000 – September 2014)
Benzene in Groundwater
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-00	Apr-01	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells																					
BP-4	2	3	2	2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	< 2	< 2	1	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-5D	6	< 2	3	2	< 2	2	< 2	2	3	NS	2	2	2	NS	2	2	NS	NS	INT	NS	1
MW-5S	8	7	6	6	2	< 2	< 2	< 2	5	NS	4	3	4	NS	4	3	NS	NS	INT	NS	2
MW-6	< 2	< 2	1	< 2	< 2	< 2	< 2	< 2	< 1	NS	< 1	< 1	NA	< 1	< 1	< 1	NS	NS	< 1	NS	< 1
MW-8	8	5	5	3	4	< 2	3	5	3	NS	4	4	6	NS	6	6	NS	NS	INT	NS	3
MW-9	5	3	7	10	5	< 2	5	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-10	< 2	< 2	2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-11	19	22	26	22	14	7	8	5	8	NS	5	4	3	NS	2	2	NS	NS	INT	NS	2
OP-2	5	3	1	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
OP-5	< 2	< 2	1	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
Operating Unit 2 Wells																					
AE-1A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-1B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-2A	3	3	2	3	< 2	< 2	< 2	< 2	2	NS	< 1	< 1	1	NS	1	< 1	NS	NS	< 1	NS	< 1
AE-2B	10	4	6	8	5	3	4	3	5	NS	5	2	2	NS	1	2	NS	NS	2	NS	2
AE-3A	4	2	3	3	2	< 2	< 2	< 2	2	NS	2	2	2	NS	1	1	NS	NS	1	NS	2
AE-3B	4	4	3	3	2	< 2	< 2	< 2	< 1	NS	< 1	1	1	NS	2	1	NS	NS	INT	NS	< 1
AE-4A	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 1	NS	< 1	< 1	< 1	NS	< 1	< 1	NS	NS	< 1	NS	< 1
AE-4B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 1	NS	< 1	< 1	< 1	NS	< 1	< 1	NS	NS	< 1	NS	< 1
FPC-2A	NA	NA	NA	NA	< 2	< 2	< 2	< 2	< 1	NS	< 1	< 1	< 1	NS	< 1	< 1	NS	NS	NS	NS	NS
FPC-2B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 1	NS	< 1	< 1	< 1	NS	< 1	< 1	NS	NS	NS	NS	NS
FPC-4B	NS	NS	NS	NS	< 2	< 2	NA	< 2	< 1	NS	< 1	< 1	< 1	NS	< 1	< 1	NS	NS	INT	NS	< 1
FPC-5A	< 2	< 2	5	5	< 2	3	2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS
FPC-5B	6	5	< 2	< 2	4	< 2	5	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-6A	< 2	< 2	NS	NS	3	< 2	< 2	< 2	2	NS	< 1	< 1	2	NS	1	1	NS	NS	< 1	NS	1
FPC-6B	4	2	4	4	3	3	3	< 2	2	NS	1	< 1	2	NS	1	2	NS	NS	INT	NS	< 1
FPC-7A	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-7B	NS	NS	NS	NS	< 2	< 2	< 2	NA	< 1	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-8A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 1	NS	< 1	< 1	< 1	NS	< 1	< 1	NS	NS	< 1	NS	< 1
FPC-8B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	< 1	< 1	< 1	NS	< 1	< 1	NS	NS	INT	NS	< 1
FPC-9A	4	4	3	3	3	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-9B	< 2	NS	NS	< 2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	NA
FPC-11B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	10	10	10	11	9	7	7	6	6	NS	6	6	7	NS	6	6	NS	NS	INT	NS	4
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	< 1	NS	< 1	< 1	< 1	NS	< 1	< 1	NS	NS	NS	NS	NS
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 1	NS	< 1	< 1	NS	< 1	< 1	< 1	NS	NS	NS	NS	NS
Water Supply Wells																					
R-3	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5
R-5	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	< 0.5	NS	NS	NS	NS	NS	NS	NS	NS
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.5	< 0.5	NS	< 0.5	NS	< 0.5
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.5	< 0.5	NS	< 0.5

Table Notes:
1. All data in micrograms per liter (ug/L), parts per billion - Analyzed by Method 8260B (monitoring well) or Method 524 (water supply wells)
2. NHDES Ambient Groundwater Quality Standard (AGQS) for Benzene is 5 ug/L. Exceedances are identified with GRAY shading.
3. EPA Interim Cleanup Level (ICL) for Benzene is 5 ug/L. Exceedances are identified with BOLD text.

Abbreviations:
NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
Contaminants of Concern Analytical Data (November 2000 – September 2014)
Chlorobenzene in Groundwater
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-00	Apr-01	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells																					
BP-4	< 2	6	5	5	3	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	5	11	7	5	7	5	4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-5D	8	3	4	4	4	4	3	4	5	NS	4	3	4	NS	3	3	NS	NS	INT	NS	< 2
MW-5S	7	7	6	5	3	< 2	< 2	< 2	3	NS	2	2	3	NS	2	< 2	NS	NS	INT	NS	< 2
MW-6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	NA	< 2	< 2	< 2	NS	NS	< 2	NS	< 2
MW-8	3	3	3	< 2	2	2	2	4	3	NS	4	3	7	NS	23	9	NS	NS	INT	NS	2
MW-9	62	66	122	160	80	25	79	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-10	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-11	6	5	4	4	4	3	3	2	3	NS	2	2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
OP-2	9	6	4	4	3	2	2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
OP-5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
Operating Unit 2 Wells																					
AE-1A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-1B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-2A	6	8	5	8	4	3	3	< 2	5	NS	2	2	3	NS	3	< 2	NS	NS	< 2	NS	2
AE-2B	8	4	6	8	5	3	3	3	5	NS	5	3	3	NS	2	< 2	NS	NS	< 2	NS	< 2
AE-3A	12	7	11	9	8	6	5	6	9	NS	8	7	6	NS	6	6	NS	NS	5	NS	6
AE-3B	10	11	9	8	6	4	2	< 2	< 2	NS	< 2	5	5	NS	7	5	NS	NS	INT	NS	3
AE-4A	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
AE-4B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
FPC-2A	NA	NA	NA	NA	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	NS	NS	NS
FPC-2B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	NS	NS	NS
FPC-4B	NS	NS	NS	NS	< 2	< 2	NA	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
FPC-5A	< 2	< 2	16	13	< 2	9	6	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS
FPC-5B	20	17	< 2	< 2	11	< 2	76	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-6A	< 2	< 2	< 2	NS	9	4	3	3	5	NS	< 2	3	5	NS	3	4	NS	NS	3	NS	3
FPC-6B	7	4	9	8	6	7	7	3	7	NS	4	3	5	NS	4	4	NS	NS	INT	NS	2
FPC-7A	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-7B	NS	NS	NS	NS	< 2	< 2	< 2	NA	< 2	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-8A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
FPC-8B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
FPC-9A	11	10	8	9	8	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-9B	< 2	NS	NS	< 2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	NA
FPC-11B	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	9	9	10	13	12	9	10	9	10	NS	10	11	11	NS	11	9	NS	NS	INT	NS	6
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	NS	NS	NS
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 2	NS	< 2	< 2	NS	< 2	< 2	< 2	NS	NS	NS	NS	NS
Water Supply Wells																					
R-3	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5
R-5	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	< 0.5	NS	NS	NS	NS	NS	NS	NS	NS
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.5	< 0.5	NS	< 0.5	NS	NS
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.5	< 0.5	NS	NS

Table Notes:
1. All data in micrograms per liter (ug/L), parts per billion - Analyzed by Method 8260B (monitoring well) or Method 524 (water supply wells)
2. NHDES Ambient Groundwater Quality Standard (AGQS) for Chlorobenzene is 100 ug/L. Exceedances are identified with GRAY shading.
3. EPA Interim Cleanup Level (ICL) for Chlorobenzene is 100 ug/L. Exceedances are identified with BOLD text.

Abbreviations:
NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
Contaminants of Concern Analytical Data (November 2000 – September 2014)
Trans-1,2-Dichloroethene in Groundwater
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-00	Apr-01	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells																					
BP-4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-5D	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
MW-5S	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
MW-6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	NA	< 2	< 2	< 2	NS	NS	< 2	NS	< 2
MW-8	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
MW-9	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-10	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-11	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
OP-2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
OP-5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
Operating Unit 2 Wells																					
AE-1A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-1B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-2A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
AE-2B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
AE-3A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
AE-3B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
AE-4A	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
AE-4B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
FPC-2A	NA	NA	NA	NA	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	NS	NS	NS
FPC-2B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	NS	NS	NS
FPC-4B	NS	NS	NS	NS	< 2	< 2	NA	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
FPC-5A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS
FPC-5B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-6A	< 2	< 2	< 2	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
FPC-6B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
FPC-7A	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-7B	NS	NS	NS	NS	< 2	< 2	< 2	NA	< 2	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-8A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
FPC-8B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
FPC-9A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-9B	< 2	NS	NS	< 2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	NA
FPC-11B	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	NS	NS	NS
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 2	NS	< 2	< 2	NS	< 2	< 2	< 2	NS	NS	NS	NS	NS
Water Supply Wells																					
R-3	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5
R-5	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	< 0.5	NS	NS	NS	NS	NS	NS	NS	NS
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.5	< 0.5	NS	< 0.5	NS	< 0.5
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.5	< 0.5	NS	< 0.5

Table Notes:
1. All data in micrograms per liter (ug/L), parts per billion - Analyzed by Method 8260B (monitoring well) or Method 524 (water supply wells)
2. NHDES Ambient Groundwater Quality Standard (AGQS) for Trans-1,2-dichloroethene (Trans-DCE) is 100 ug/L. Exceedances are identified with GRAY shading.
3. EPA Interim Cleanup Level (ICL) for Trans-1,2-dichloroethene (Trans-DCE) is 100 ug/L. Exceedances are identified with BOLD text.

Abbreviations:
NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
Contaminants of Concern Analytical Data (November 2000 – September 2014)
1,2-Dichloropropane in Groundwater
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-00	Apr-01	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells																					
BP-4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-5D	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
MW-5S	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
MW-6	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	NA	< 2	< 2	< 2	NS	NS	< 2	NS	< 2
MW-8	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
MW-9	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-10	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-11	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
OP-2	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
OP-5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
Operating Unit 2 Wells																					
AE-1A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-1B	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-2A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
AE-2B	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
AE-3A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
AE-3B	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
AE-4A	NS	NS	NS	NS	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
AE-4B	NS	NS	NS	NS	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
FPC-2A	NA	NA	NA	NA	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	NS	NS	NS
FPC-2B	NS	NS	NS	NS	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	NS	NS	NS
FPC-4B	NS	NS	NS	NS	< 4	< 4	NA	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
FPC-5A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS
FPC-5B	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-6A	< 4	< 4	< 4	NS	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
FPC-6B	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
FPC-7A	NS	NS	NS	NS	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-7B	NS	NS	NS	NS	< 4	< 4	< 4	NA	< 2	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-8A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
FPC-8B	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
FPC-9A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-9B	< 4	NS	NS	< 4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NS	NS	NS	NS	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	NA
FPC-11B	NS	NS	NS	NS	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	NS	NS	NS
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 2	NS	< 2	< 2	NS	< 2	< 2	< 2	NS	NS	NS	NS	NS
Water Supply Wells																					
R-3	NS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NS	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5
R-5	NS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NS	< 0.5	< 0.5	< 0.5	< 0.5	NS	NS	NS	NS	NS	NS	NS	NS
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.5	< 0.5	NS	< 0.5	NS	< 0.5
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.5	< 0.5	NS	< 0.5

Table Notes:
1. All data in micrograms per liter (ug/L), parts per billion - Analyzed by Method 8260B (monitoring well) or Method 524 (water supply wells)
2. NHDES Ambient Groundwater Quality Standard (AGQS) for 1,2-dichloropropane is 5 ug/L. Exceedances are identified with GRAY shading.
3. EPA Interim Cleanup Level (ICL) for 1,2-dichloropropane is 5 ug/L. Exceedances are identified with BOLD text.

Abbreviations:
NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
Contaminants of Concern Analytical Data (November 2000 – September 2014)
Tetrachloroethene (PCE) in Groundwater
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-00	Apr-01	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells																					
BP-4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-5D	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
MW-5S	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
MW-6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	NA	< 2	< 2	< 2	NS	NS	< 2	NS	< 2
MW-8	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
MW-9	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-10	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-11	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
OP-2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
OP-5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
Operating Unit 2 Wells																					
AE-1A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-1B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-2A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
AE-2B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
AE-3A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
AE-3B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
AE-4A	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
AE-4B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
FPC-2A	NA	NA	NA	NA	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	NS	NS	NS
FPC-2B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	NS	NS	NS
FPC-4B	NS	NS	NS	NS	< 2	< 2	NA	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
FPC-5A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS
FPC-5B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-6A	< 2	< 2	< 2	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
FPC-6B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
FPC-7A	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-7B	NS	NS	NS	NS	< 2	< 2	< 2	NA	< 2	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-8A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2
FPC-8B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
FPC-9A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-9B	< 2	NS	NS	< 2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	NA
FPC-11B	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 2	NS	< 2	< 2	NS	< 2	< 2	NS	NS	NS	NS	NS
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 2	NS	< 2	< 2	NS	< 2	< 2	NS	NS	NS	NS	NS
Water Supply Wells																					
R-3	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5
R-5	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	< 0.5	NS	NS	NS	NS	NS	NS	NS	NS
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.5	< 0.5	NS	< 0.5	NS	< 0.5
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 0.5	< 0.5	NS	< 0.5

Table Notes:
1. All data in micrograms per liter (ug/L), parts per billion - Analyzed by Method 8260B (monitoring well) or Method 524 (water supply wells)
2. NHDES Ambient Groundwater Quality Standard (AGQS) for tetrachloroethene (PCE) is 5 ug/L. Exceedances are identified with GRAY shading.
3. EPA Interim Cleanup Level (ICL) for tetrachloroethene (PCE) is 3.5 ug/L. Exceedances are identified with BOLD text.

Abbreviations:
NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
Contaminants of Concern Analytical Data (November 2000 – September 2014)
Methyl Ethyl Ketone (MEK) in Groundwater
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-00	Apr-01	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells																					
BP-4	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-5D	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10
MW-5S	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10
MW-6	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	NA	< 10	< 10	< 10	NS	NS	< 10	NS	< 10
MW-8	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10
MW-9	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-10	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-11	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10
OP-2	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
OP-5	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
Operating Unit 2 Wells																					
AE-1A	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-1B	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-2A	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10
AE-2B	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10
AE-3A	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10
AE-3B	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10
AE-4A	NS	NS	NS	NS	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10
AE-4B	NS	NS	NS	NS	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10
FPC-2A	NA	NA	NA	NA	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	NS	NS	NS
FPC-2B	NS	NS	NS	NS	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	NS	NS	NS
FPC-4B	NS	NS	NS	NS	< 50	< 50	NA	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10
FPC-5A	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS
FPC-5B	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-6A	< 50	< 50	< 50	NS	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10
FPC-6B	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10
FPC-7A	NS	NS	NS	NS	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-7B	NS	NS	NS	NS	< 50	< 50	< 50	NA	< 10	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-8A	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10
FPC-8B	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10
FPC-9A	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-9B	< 50	NS	NS	< 50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NS	NS	NS	NS	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	NA
FPC-11B	NS	NS	NS	NS	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	NS	NS	NS
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 10	NS	< 10	< 10	NS	< 10	< 10	< 10	NS	NS	NS	NS	NS
Water Supply Wells																					
R-3	NS	< 12.5	< 12.5	< 12.5	< 12.5	< 12.5	< 12.5	< 12.5	NS	< 5	< 5	< 5	< 5	NS	< 5	< 5	< 5	NS	< 5	< 5	< 5
R-5	NS	< 12.5	< 12.5	< 12.5	< 12.5	< 12.5	< 12.5	< 12.5	NS	< 5	< 5	< 5	< 5	NS	NS	NS	NS	NS	NS	NS	NS
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 5	< 5	NS	< 5	NS	< 5
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 5	< 5	< 5	< 5	< 5
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 5	< 5	NS	< 5

Table Notes:
1. All data in micrograms per liter (ug/L), parts per billion - Analyzed by Method 8260B (monitoring well) or Method 524 (water supply wells)
2. NHDES Ambient Groundwater Quality Standard (AGQS) for methyl ethyl ketone (MEK, 2-butanone) is 4000 ug/L. Exceedances are identified with GRAY shading.
3. EPA Interim Cleanup Level (ICL) for methyl ethyl ketone (MEK, 2-butanone) is 200 ug/L. Exceedances are identified with BOLD text.

Abbreviations:
NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
Contaminants of Concern Analytical Data (November 2000 – September 2014)
Tetrahydrofuran (THF) in Groundwater
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-00	Apr-01	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells																					
BP-4	< 30	< 30	< 30	< 30	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	< 30	< 30	< 30	< 30	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-5D	162	60	< 30	101	85	142	88	110	110	NS	110	90	90	NS	110	90	NS	NS	INT	NS	50
MW-5S	44	35	< 30	46	< 30	34	< 30	< 30	60	NS	40	40	40	NS	40	30	NS	NS	INT	NS	20
MW-6	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	NA	< 10	< 10	< 10	NS	NS	< 10	NS	< 10
MW-8	248	157	< 30	175	184	282	273	239	180	NS	180	180	160	NS	140	100	NS	NS	INT	NS	150
MW-9	< 30	< 30	< 30	137	< 30	< 30	84	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-10	< 30	< 30	< 30	< 30	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-11	246	228	< 30	225	130	114	< 30	50	60	NS	30	30	20	NS	20	10	NS	NS	INT	NS	10
OP-2	< 30	< 30	< 30	< 30	< 30	< 30	87	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
OP-5	< 30	< 30	< 30	< 30	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
Operating Unit 2 Wells																					
AE-1A	< 30	< 30	< 30	< 30	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-1B	< 30	< 30	< 30	< 30	< 30	< 30	< 30	NA	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-2A	30	33	< 30	45	< 30	< 30	< 30	< 30	20	NS	< 10	10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10
AE-2B	157	86	< 30	127	104	92	81	69	60	NS	70	50	30	NS	30	30	NS	NS	30	NS	30
AE-3A	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10
AE-3B	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10
AE-4A	NS	NS	NS	NS	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10
AE-4B	NS	NS	NS	NS	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10
FPC-2A	NA	NA	NA	NA	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	NS	NS	NS
FPC-2B	NS	NS	NS	NS	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	NS	NS	NS
FPC-4B	NS	NS	NS	NS	< 30	< 30	NA	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10
FPC-5A	< 30	< 30	< 30	< 30	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS
FPC-5B	< 30	< 30	< 30	< 30	< 30	< 30	79	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-6A	< 30	< 30	< 30	NS	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10
FPC-6B	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10
FPC-7A	NS	NS	NS	NS	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-7B	NS	NS	NS	NS	< 30	< 30	< 30	NA	< 10	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-8A	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10
FPC-8B	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	NA	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10
FPC-9A	32	< 30	< 30	30	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-9B	< 30	NS	NS	< 30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NS	NS	NS	NS	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	NA
FPC-11B	NS	NS	NS	NS	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	169	120	< 30	112	113	131	151	83	80	NS	70	80	70	NS	70	50	NS	NS	INT	NS	20
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	NS	NS	NS
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 10	NS	< 10	< 10	NS	< 10	< 10	< 10	NS	NS	NS	NS	NS
Water Supply Wells																					
R-3	NS	< 7.5	< 7.5	< 7.5	< 7.5	< 7.5	< 7.5	< 7.5	NS	< 5	< 5	< 5	< 5	NS	< 5	< 5	< 5	NS	< 5	< 5	< 5
R-5	NS	< 7.5	< 7.5	< 7.5	< 7.5	< 7.5	< 7.5	< 7.5	NS	< 5	< 5	< 5	< 5	NS	NS	NS	NS	NS	NS	NS	NS
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 5	< 5	NS	< 5	NS	< 5
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 5	< 5	< 5	< 5	< 5
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 5	< 5	NS	< 5

Table Notes:
1. All data in micrograms per liter (ug/L), parts per billion - Analyzed by Method 8260B (monitoring well) or Method 524 (water supply wells)
2. NHDES Ambient Groundwater Quality Standard (AGQS) for tetrahydrofuran (THF) is 154 ug/L. Exceedances are identified with GRAY shading.
3. EPA Interim Cleanup Level (ICL) for tetrahydrofuran (THF) is 154 ug/L. Exceedances are identified with BOLD text.

Abbreviations:
NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
Contaminants of Concern Analytical Data (November 2000 – September 2014)
Tertiary Butyl Alcohol (TBA) in Groundwater
Coakley Landfill Superfund Site
North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Nov-07	Jan-08	Aug-08	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells													
BP-4	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-5D	60	NS	50	40	40	NS	50	40	NS	NS	INT	NS	60
MW-5S	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	INT	NS	< 30
MW-6	< 30	NS	< 30	< 30	NA	< 30	< 30	< 30	NS	NS	< 30	NS	< 30
MW-8	70	NS	70	60	50	NS	50	40	NS	NS	INT	NS	50
MW-9	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-10	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-11	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	INT	NS	< 30
OP-2	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
OP-5	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
Operating Unit 2 Wells													
AE-1A	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-1B	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
AE-2A	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	< 30	NS	< 30
AE-2B	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	< 30	NS	< 30
AE-3A	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	< 30	NS	< 30
AE-3B	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	INT	NS	< 30
AE-4A	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	< 30	NS	< 30
AE-4B	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	< 30	NS	< 30
FPC-2A	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	NS	NS	NS
FPC-2B	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	NS	NS	NS
FPC-4B	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	INT	NS	< 30
FPC-5A	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS
FPC-5B	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-6A	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	< 30	NS	< 30
FPC-6B	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	INT	NS	< 30
FPC-7A	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-7B	< 30	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA
FPC-8A	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	< 30	NS	< 30
FPC-8B	NA	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	INT	NS	< 30
FPC-9A	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-9B	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	NA
FPC-11B	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	INT	NS	< 30
GZ-123	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	NS	NS	NS
GZ-125	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	NS	NS	NS
Water Supply Wells													
R-3	NS	< 30	< 30	< 30	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	< 30
R-5	NS	< 30	< 30	< 30	< 30	NS	NS	NS	NS	NS	NS	NS	NS
346BHR	NS	NS	NS	NS	NS	NS	NS	< 30	< 30	NS	< 30	NS	< 30
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	< 30	< 30	< 30	< 30	< 30
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 30	< 30	NS	< 30

Table Notes:

1. All data in micrograms per liter (ug/L), parts per billion - Analyzed by Method 8260B (monitoring well) or Method 524 (water supply wells)
2. NHDES Ambient Groundwater Quality Standard (AGQS) for tertiary butyl alcohol (TBA) is 40 ug/L. Exceedances are identified with GRAY shading.
3. An EPA Interim Cleanup Level (ICL) for Chlorobenzene has not been established.
4. Tertiary butyl alcohol (TBA) not included on Method 8260B parameter list prior to November 2007.

Abbreviations:

NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

TABLE 9
 Contaminants of Concern Analytical Data (November 2000 – September 2014)
1,4-Dioxane (Low Level Method) in Groundwater
 Coakley Landfill Superfund Site
 North Hampton and Greenland, New Hampshire

Well ID / Appox. Date	Aug-09	Aug-10	Feb-11	Aug-11	Aug-12	Mar-13	Apr-13	Aug-13	Feb-14	Sep-14
Operating Unit 1 Wells										
BP-4	NA	NA	9	10	13	NS	NS	9.6	NS	12
MW-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	NA	6	NS	6	2.5	NS	NS	4.8	NS	6.9
MW-5D	140	150	NS	140	140	NS	NS	INT	NS	130
MW-5S	70	90	NS	70	61	NS	NS	INT	NS	49
MW-6	< 1	NA	NS	< 1	< 0.25	NS	NS	< 0.25	NS	< 0.25
MW-8	310	230	NS	200	210	NS	NS	INT	NS	200
MW-9	NA	16	NS	14	30	NS	NS	6.1	NS	28
MW-10	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
MW-11	100	45	NS	40	56	NS	NS	INT	NS	41
OP-2	NA	1	NS	1	1	NS	NS	1.2	NS	1.5
OP-5	NA	< 1	NS	< 1	NA	NS	NS	NA	NS	NA
Operating Unit 2 Wells										
AE-1A	NA	NA	NS	< 1	NA	NS	NS	NA	NS	NA
AE-1B	NA	NA	NS	< 1	NA	NS	NS	NA	NS	NA
AE-2A	NA	12	NS	14	16	NS	NS	15	NS	16
AE-2B	NA	110	NS	80	82	NS	NS	88	NS	87
AE-3A	NA	23	NS	19	24	NS	NS	21	NS	25
AE-3B	NA	24	NS	19	27	NS	NS	INT	NS	26
AE-4A	NA	NA	NA	NA	< 0.25	NS	NS	NA	NS	NA
AE-4B	NA	NA	NA	NA	< 0.25	NS	NS	NA	NS	NA
FPC-2A	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS
FPC-2B	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS
FPC-4B	NA	NA	NA	NA	< 0.25	NA	NA	INT	NS	NA
FPC-5A	NA	NA	NS	27	25	NS	NS	29	NS	NS
FPC-5B	NA	NA	NS	50	53	NS	NS	INT	NS	64
FPC-6A	NA	NA	NS	NA	31	NS	NS	21	NS	26
FPC-6B	NA	NA	NS	NA	23	NS	NS	INT	NS	19
FPC-7A	NA	NA	NA	< 1	< 0.25	NA	NA	NA	NS	NA
FPC-7B	NA	NA	NA	< 1	< 0.25	NA	NA	INT	NS	NA
FPC-8A	NA	< 1	NS	< 1	0.51	NS	NS	0.6	NS	0.60
FPC-8B	NA	1	NS	< 1	0.93	NS	NS	INT	NS	0.62
FPC-9A	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-9B	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-9C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
FPC-11A	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA
FPC-11B	NA	NA	NS	NA	NA	NS	NS	NA	NS	INT
FPC-11C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GZ-105	NA	NA	NS	80	98	NS	NS	INT	NS	69
GZ-123	NA	NA	NS	NA	NA	NS	NS	NS	NS	NS
GZ-125	NA	NA	NS	NA	NA	NS	NS	NS	NS	NS
Water Supply Wells										
R-3	NA	NA	NS	NA	0.4	0.45	NS	0.45	0.42	0.37
R-5	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS
346BHR	NS	NS	NS	NS	< 0.25	NS	NS	< 0.25	NS	< 0.25
339BHR	NS	NS	NS	NS	NS	NS	0.38	0.42	0.63	0.42
415BHR	NS	NS	NS	NS	NS	NS	< 0.25	< 0.25	NS	< 0.25

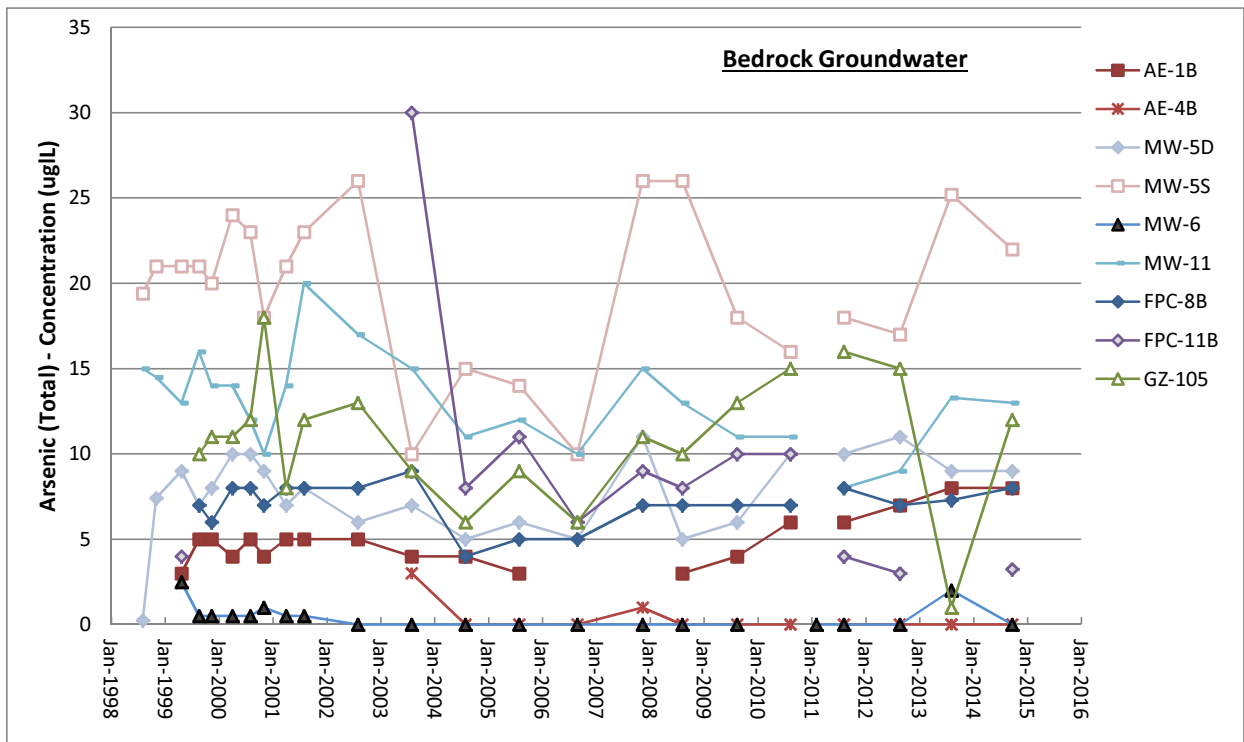
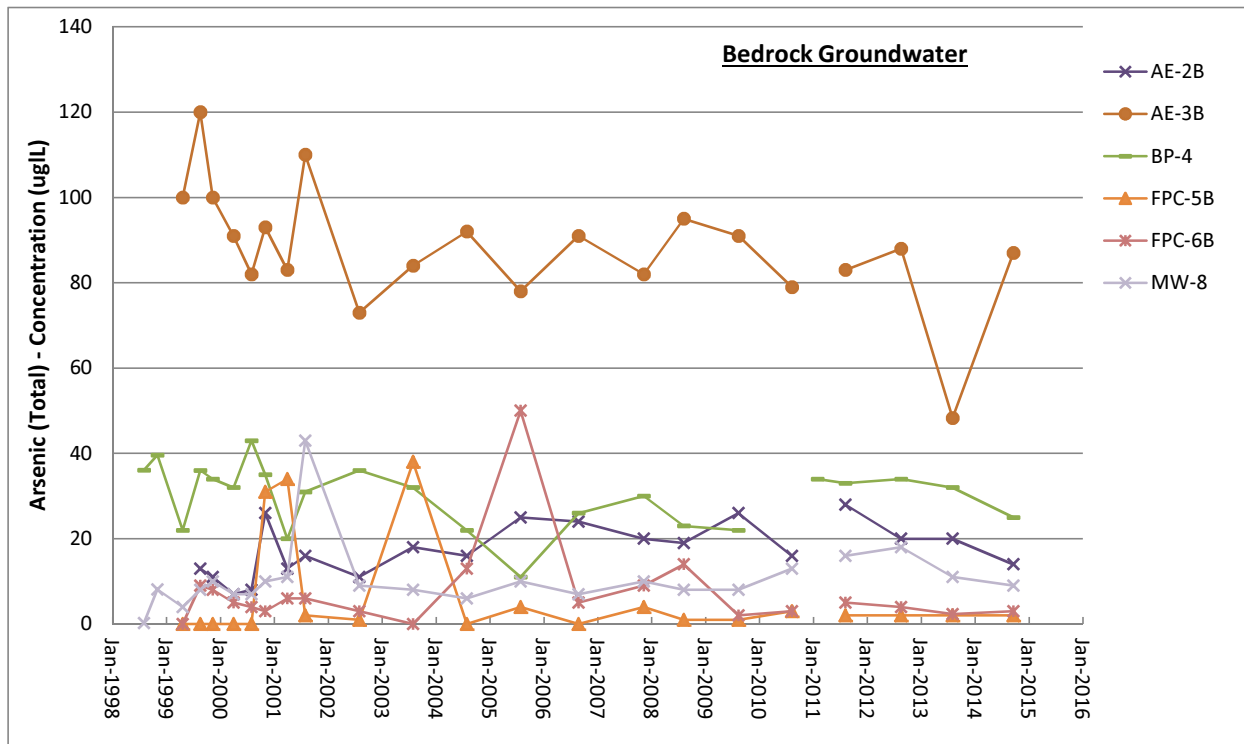
Table Notes:

1. All data in micrograms per liter (ug/L), parts per billion - Analysis by Method 8260B SIM (a low level detection limit methodology)
2. 1,4-dioxane not included on Method 8260B parameter list prior to August 2010. First analyses by 8260B SIM were completed in Aug. 2009.
3. Results for standard Method 8260B (detection limit of 50 ug/L) are not provided in this table
4. NHDES Ambient Groundwater Quality Standard (AGQS) for 1,4-dioxane is 3 ug/L. Exceedances are identified with GRAY shading.
5. An EPA Interim Cleanup Level (ICL) for 1,4-dioxane has not been established.

Abbreviations:

NA = Not Analyzed; NS = Not Sampled; INT = Interval Sampled; < ## = reported concentration is less than the detection limit (##)

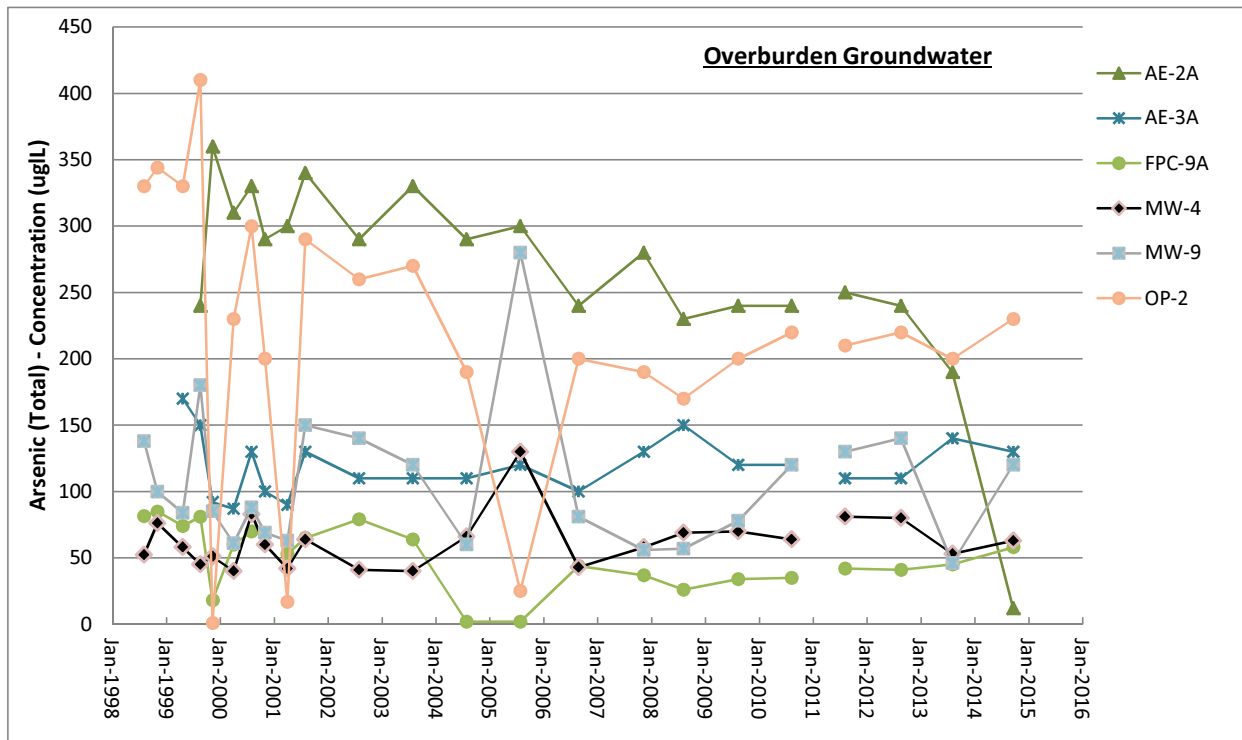
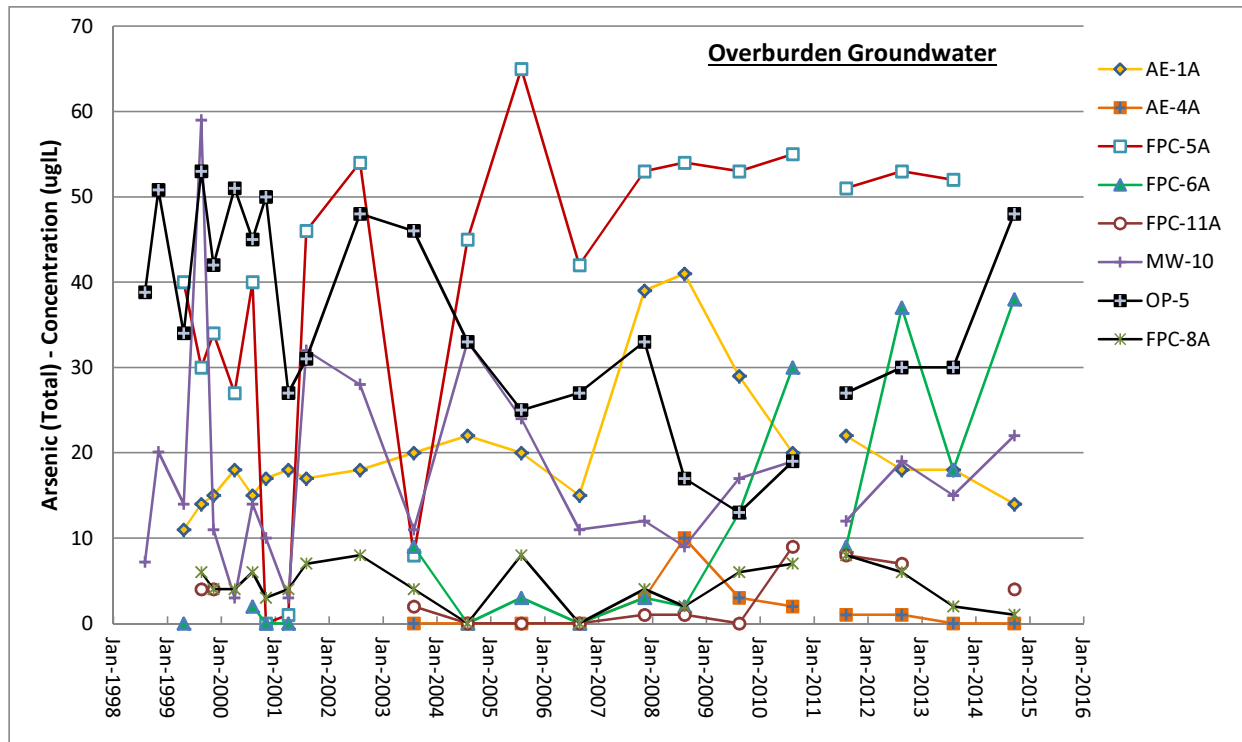
Time Series Plots - Arsenic (Total) in Bedrock Wells
2014 Annual Report
Coakley Landfill - North Hampton, New Hampshire



NOTES:

1. NHDES Ambient Groundwater Quality Standard for Arsenic is 10 ug/L.
2. EPA Interim Cleanup Level for Arsenic 10 ug/L.
3. Non-Detects are plotted at zero.
4. In instances where primary and duplicate samples were collected, the higher value is plotted.
5. Interval samples were collected at MW-5S, MW-5D, MW-8, MW-11, FPC-5B, FPC-6B, FPC-8B, GZ-105 and AE-3B in Aug. 2013 and at FPC-11B in Sept. 2014. The average concentration for interval sample results at each individual well were used to prepare this plot.

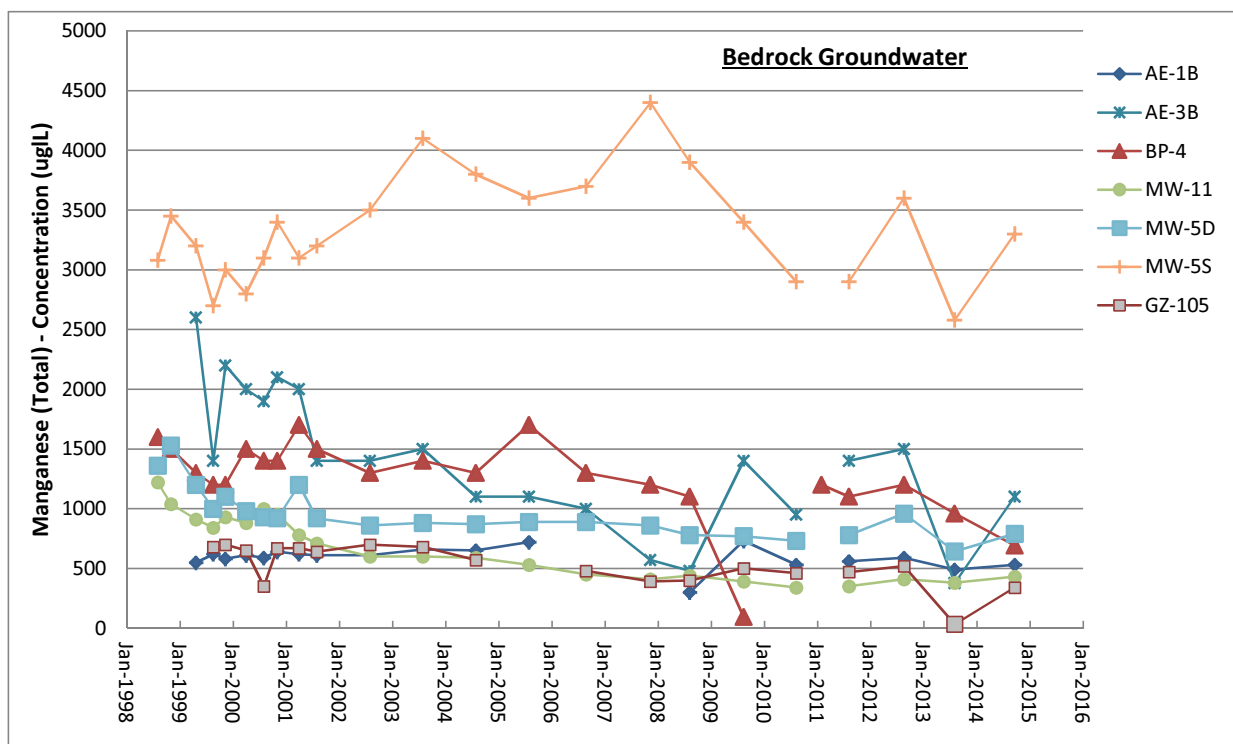
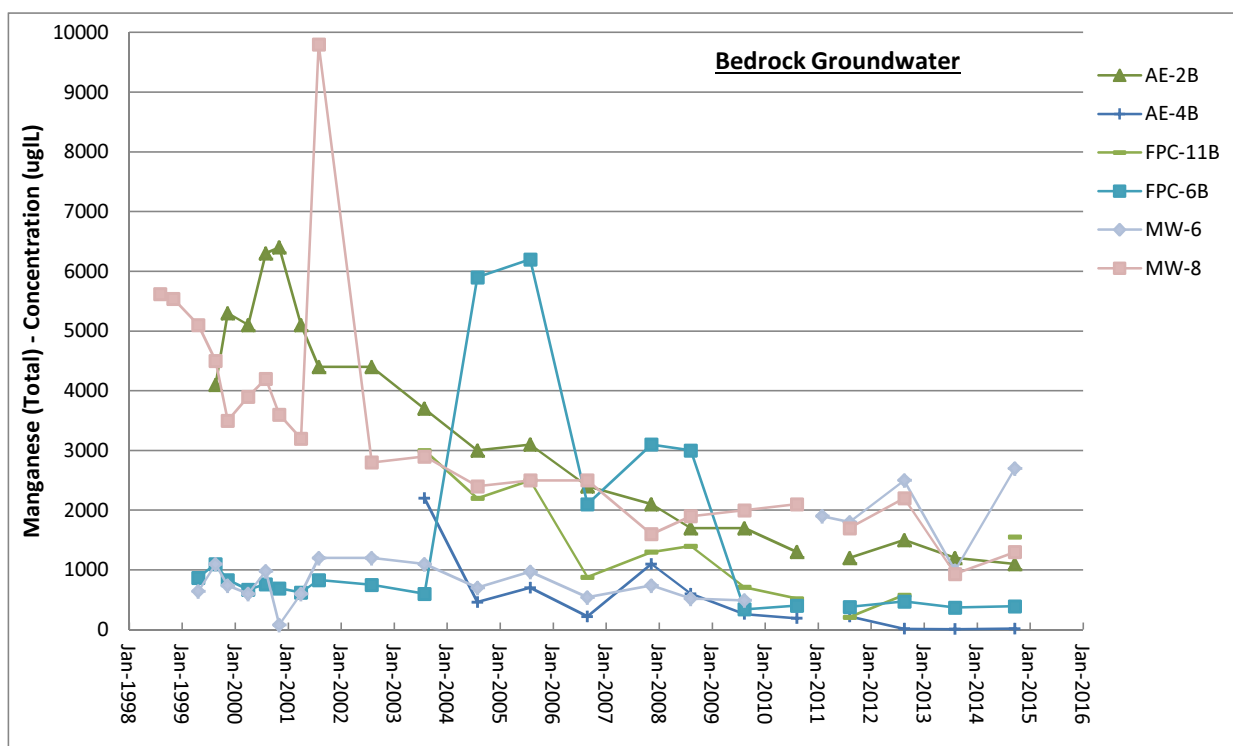
Time Series Plots - Arsenic (Total/Dissolved) in Overburden Wells
2014 Annual Report
Coakley Landfill - North Hampton, New Hampshire



NOTES:

1. NHDES Ambient Groundwater Quality Standard for Arsenic is 10 ug/L.
2. EPA Interim Cleanup Level for Arsenic 10 ug/L.
3. Non-Detects are plotted at zero.
4. In instances where primary and duplicate samples were collected, the higher value is plotted.
5. Total Arsenic results are plotted for events prior to Fall 2014. Beginning in Fall 2014 samples from all overburden wells were filtered (0.45 micron) at the time of sampling and Dissolved Arsenic results are plotted.

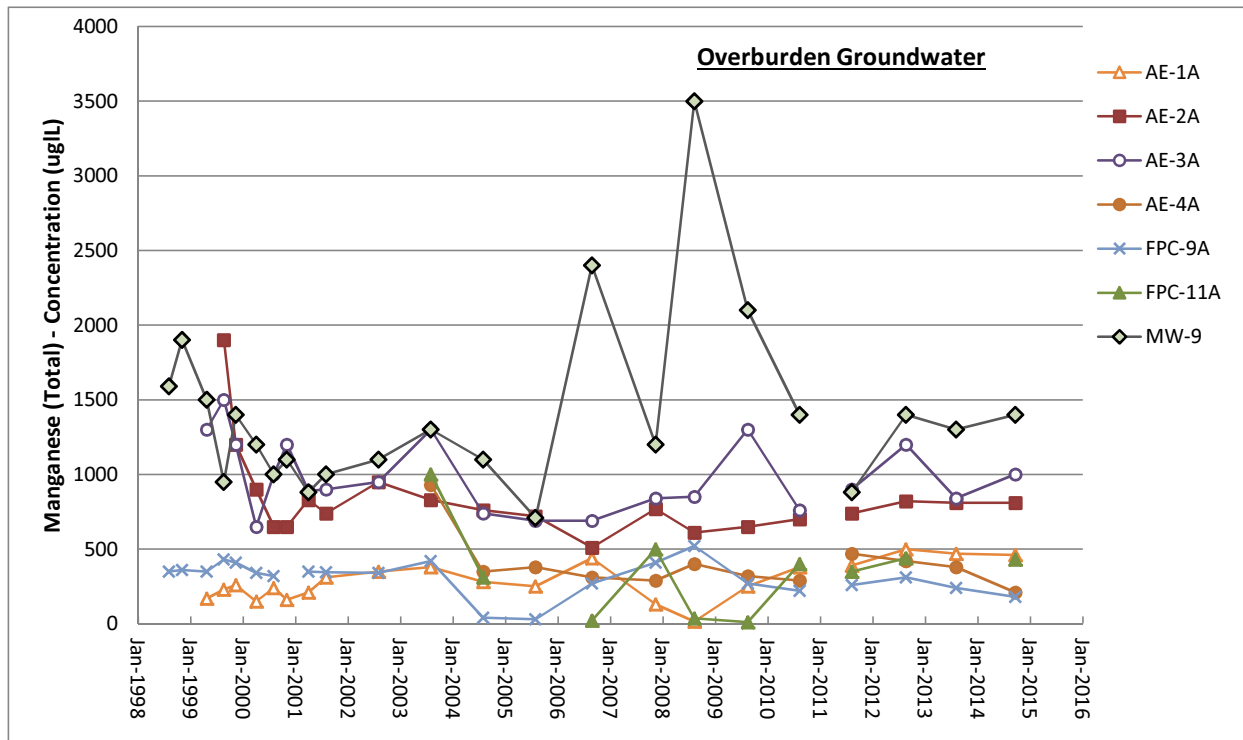
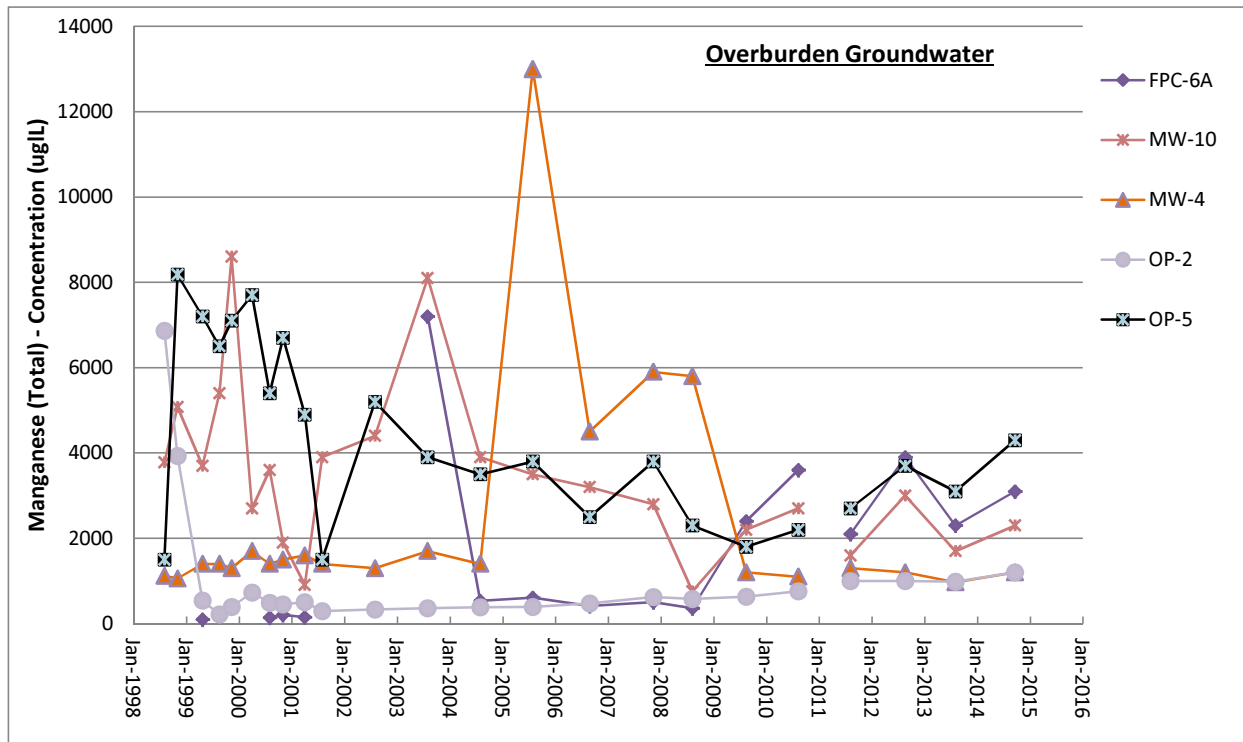
Time Series Plots - Manganese (Total) in Bedrock Wells
2014 Annual Report
Coakley Landfill - North Hampton, New Hampshire



NOTES:

1. NHDES Ambient Groundwater Quality Standard for Manganese is 840 ug/L.
2. EPA Interim Cleanup Level for Manganese is 300 ug/L.
3. Non-Detects are plotted at zero.
4. In instances where primary and duplicate samples were collected, the higher value is plotted.
5. Interval samples were collected at MW-5S, MW-5D, MW-8, MW-11, FPC-5B, FPC-6B, FPC-8B, GZ-105 and AE-3B in Aug. 2013 and at FPC-11B in Sept. 2014. The average concentration for interval sample results at each individual well were used to prepare this plot.

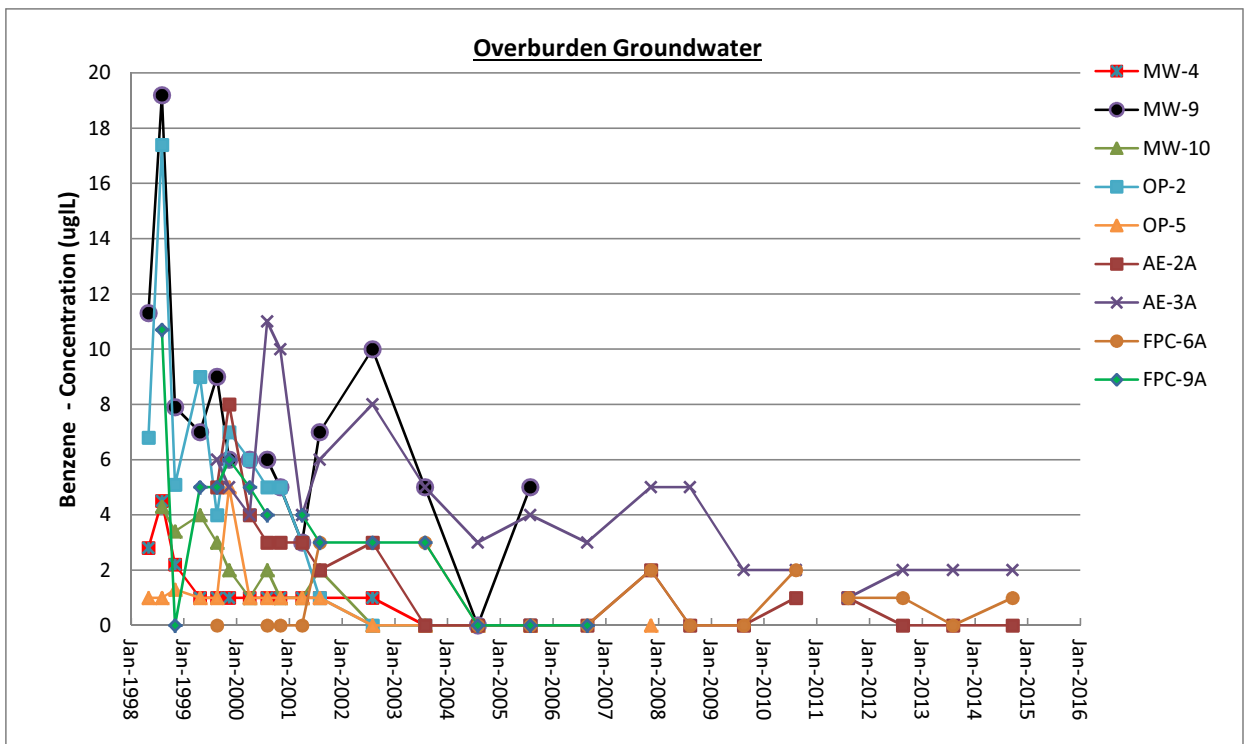
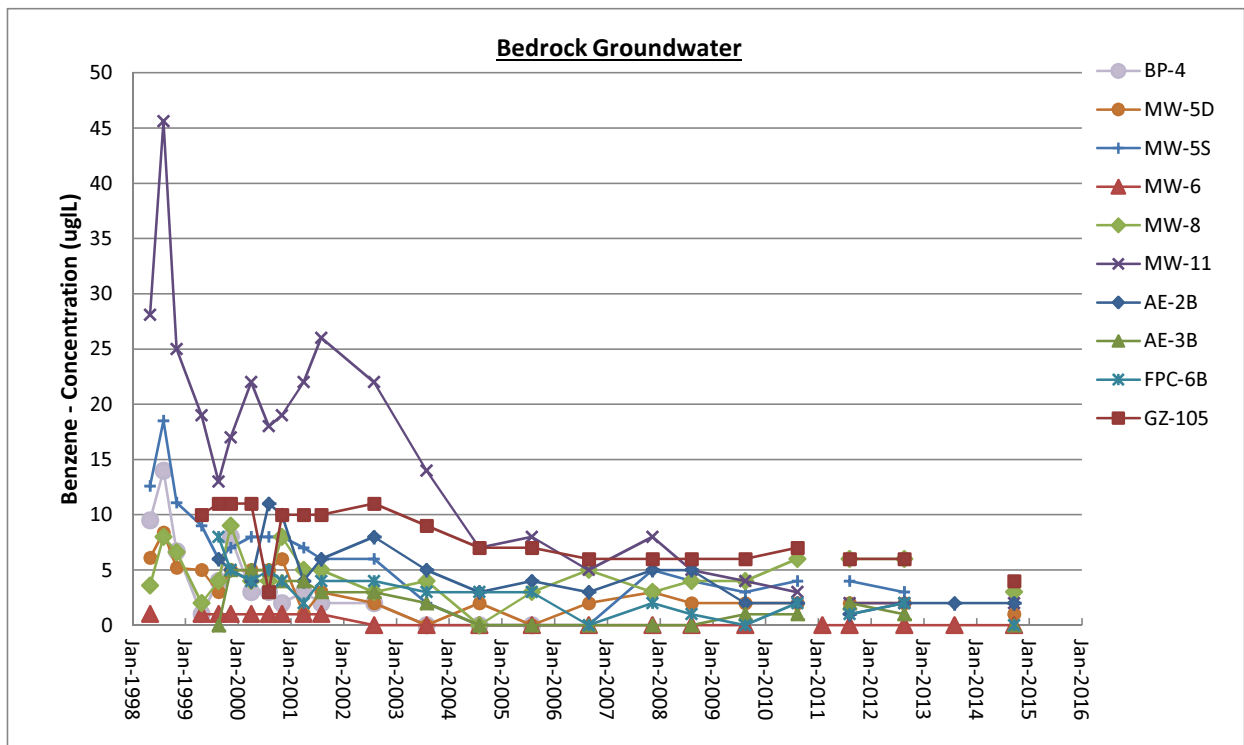
Time Series Plots - Manganese (Total/Dissolved) in Overburden Wells
2014 Annual Report
Coakley Landfill - North Hampton, New Hampshire



NOTES:

1. NHDES Ambient Groundwater Quality Standard for Manganese is 840 ug/L.
2. EPA Interim Cleanup Level for Manganese is 300 ug/L.
3. Non-Detects are plotted at zero.
4. In instances where primary and duplicate samples were collected, the higher value is plotted.
5. Total Manganese results are plotted for events prior to Fall 2014. Beginning in Fall 2014 samples from all overburden wells were filtered (0.45 micron) at the time of sampling and Dissolved Manganese results are plotted.

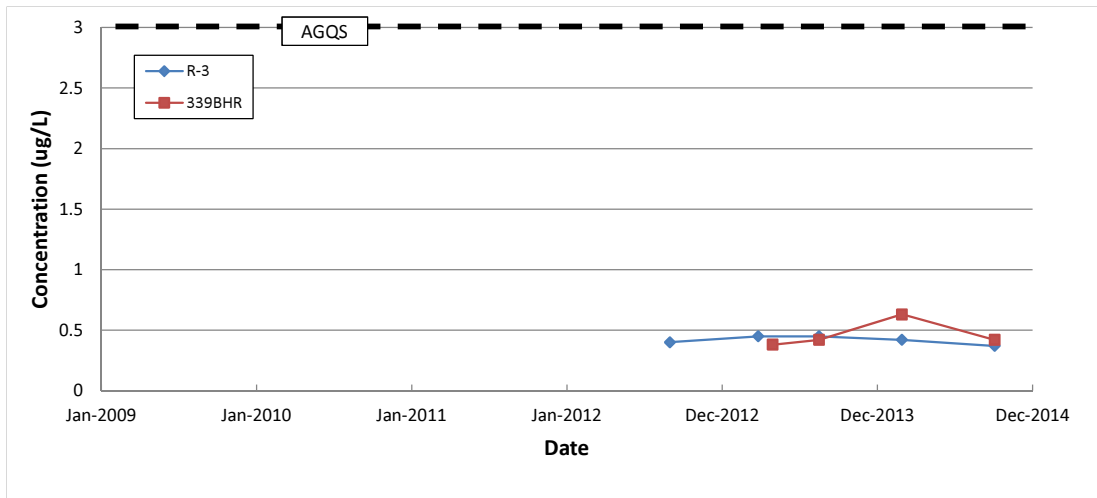
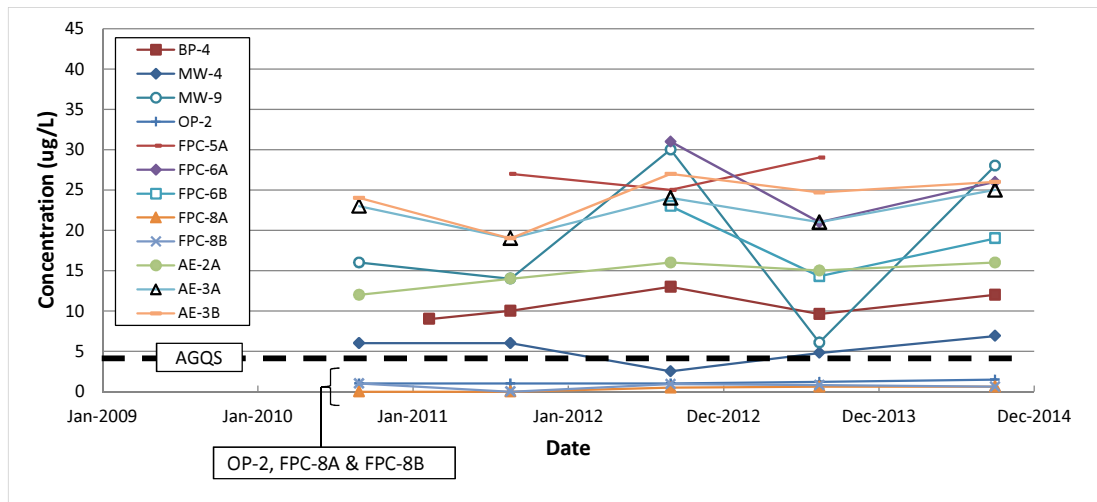
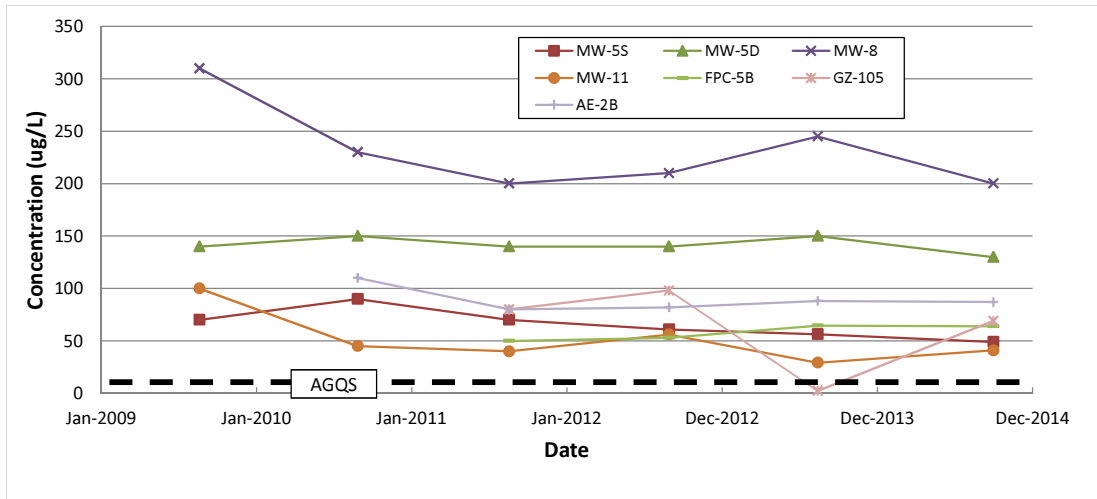
Time Series Plots - Benzene in Groundwater
2014 Annual Report
Coakley Landfill - North Hampton, New Hampshire



NOTES:

1. NHDES Ambient Groundwater Quality Standard for Benzene is 5 ug/L.
2. EPA Interim Cleanup Level for Benzene is 5 ug/L.
3. Non-Detects are plotted at zero.
4. In instances where primary and duplicate samples were collected, the higher value is plotted.

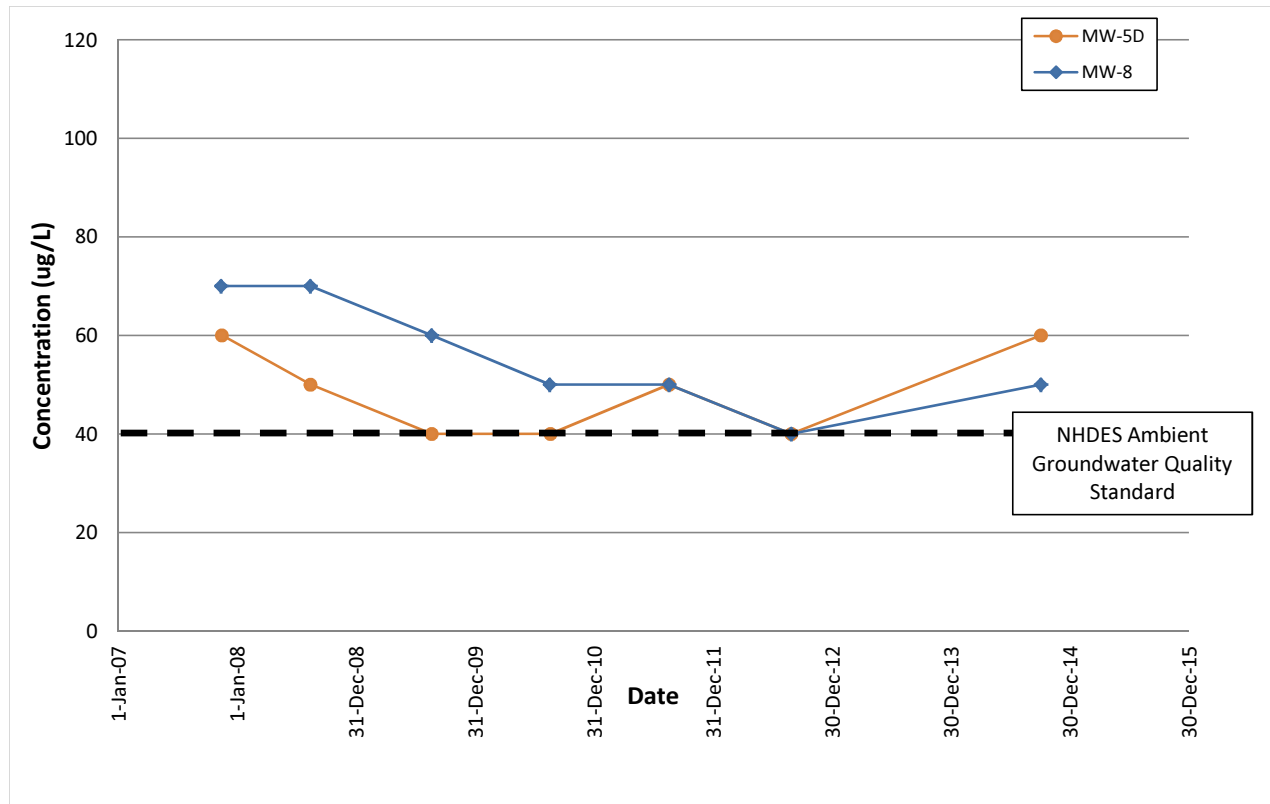
Time vs Concentration Graphs - 1,4-Dioxane
2014 Annual Report
Coakley Landfill - North Hampton, New Hampshire



NOTES:

1. NHDES Ambient Groundwater Quality Standard (AGQS) for 1,4-Dioxane is 3 ug/L
2. Non-Detects are plotted at zero.
3. Interval samples were collected in MW-5S, MW-5D, MW-8, MW-11, FPC-5B, FPC-6B, FPC-8B, GZ-105 and AE-3B in Aug. 2013 and at FPC-11B in Sept. 2014. The average 1,4-dioxane concentration for interval sample results at each individual well were used to prepare this graph.
4. In instances where primary and duplicate samples were collected, the higher value is plotted.

Time vs Concentration Graphs - Tertiary-butyl Alcohol (TBA)
2014 Annual Report
Coakley Landfill - North Hampton, New Hampshire

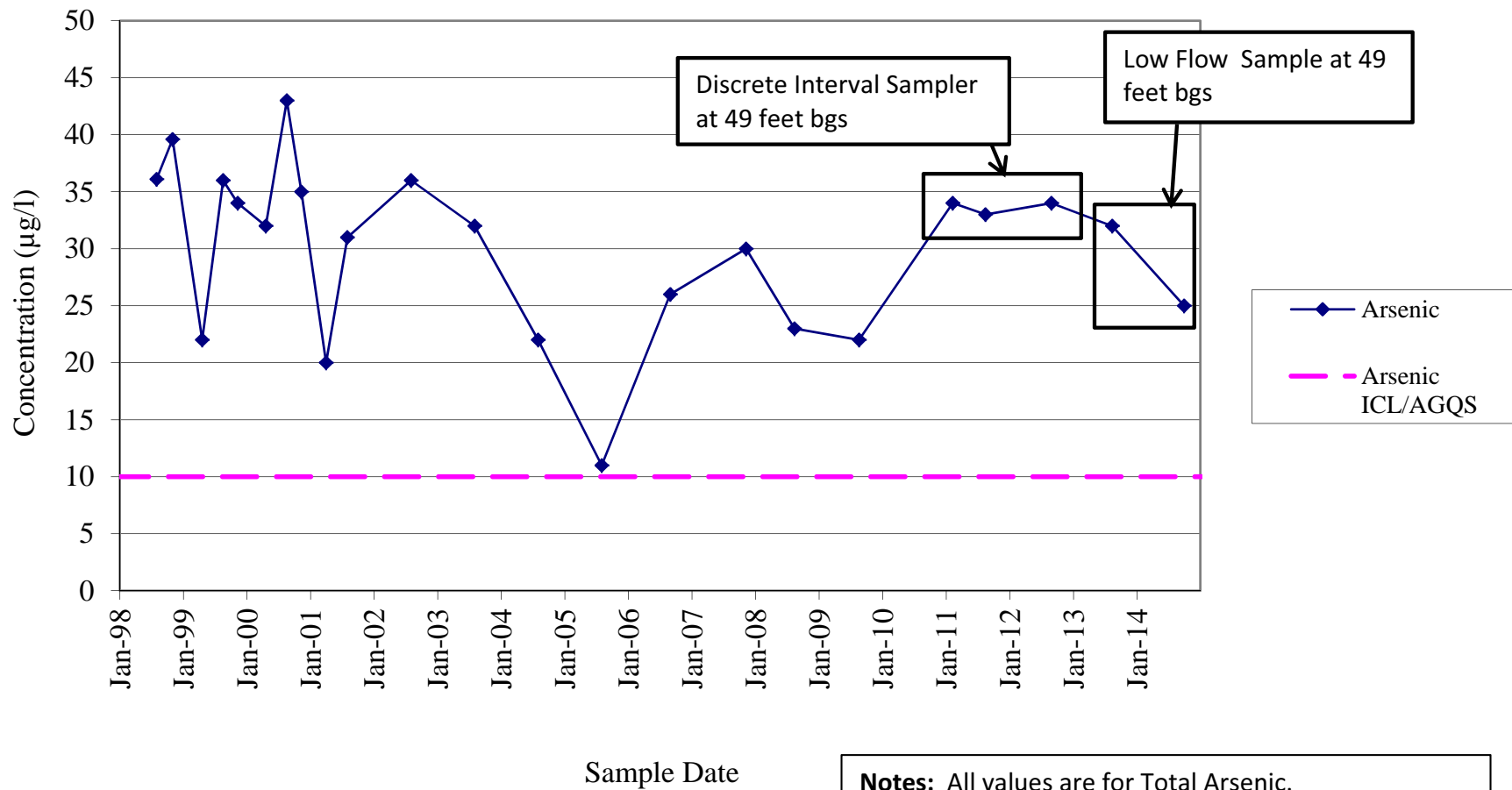


NOTES:

1. NHDES Ambient Groundwater Quality Standard for Tertiary-butyl Alcohol (TBA) is 40 ug/L.
2. EPA has not established an Interim Cleanup Level for Tertiary-butyl Alcohol (TBA).
3. Since 2006, TBA has been reported at groundwater sampling points MW-5D and MW-8, only.

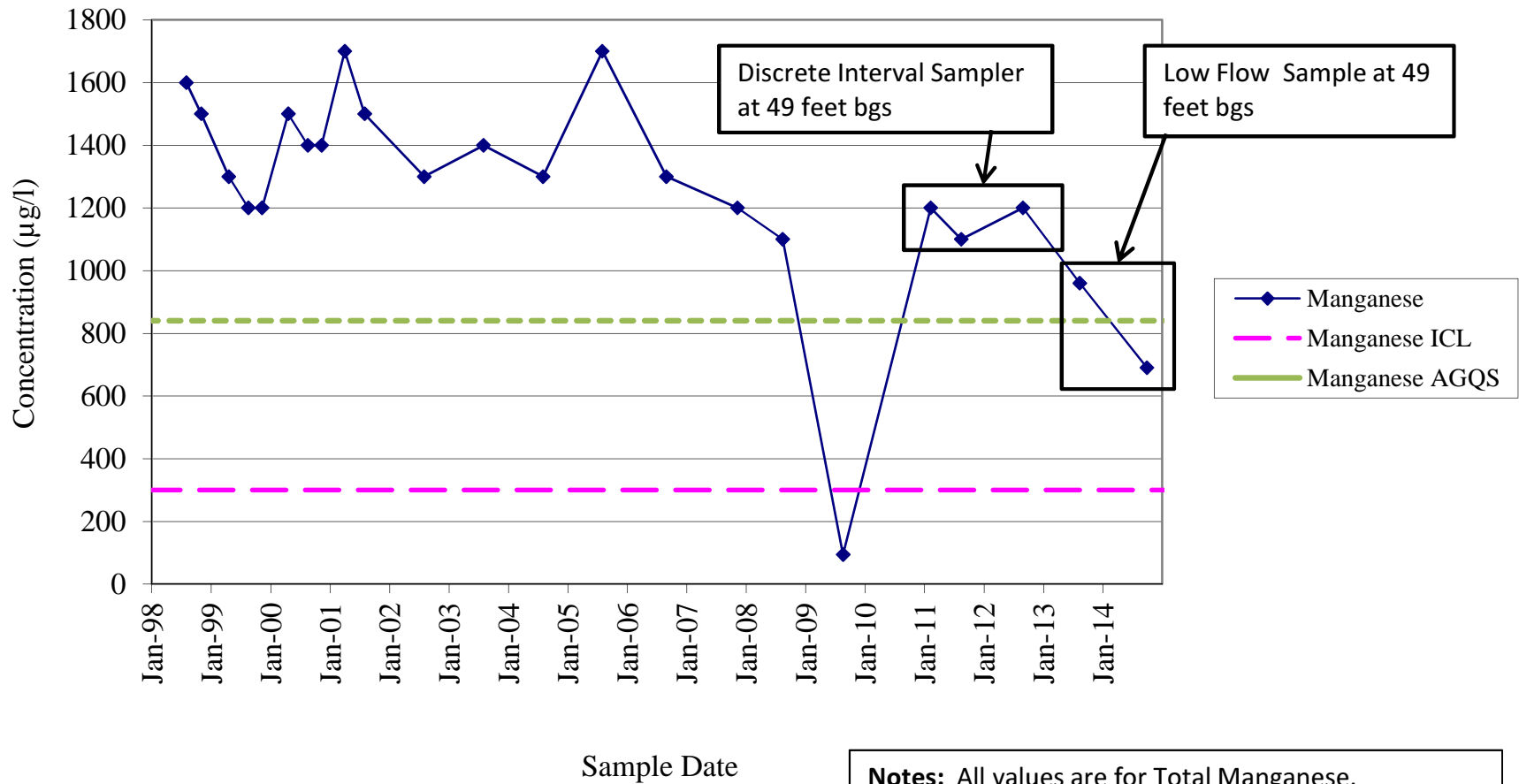
BP-4

Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH

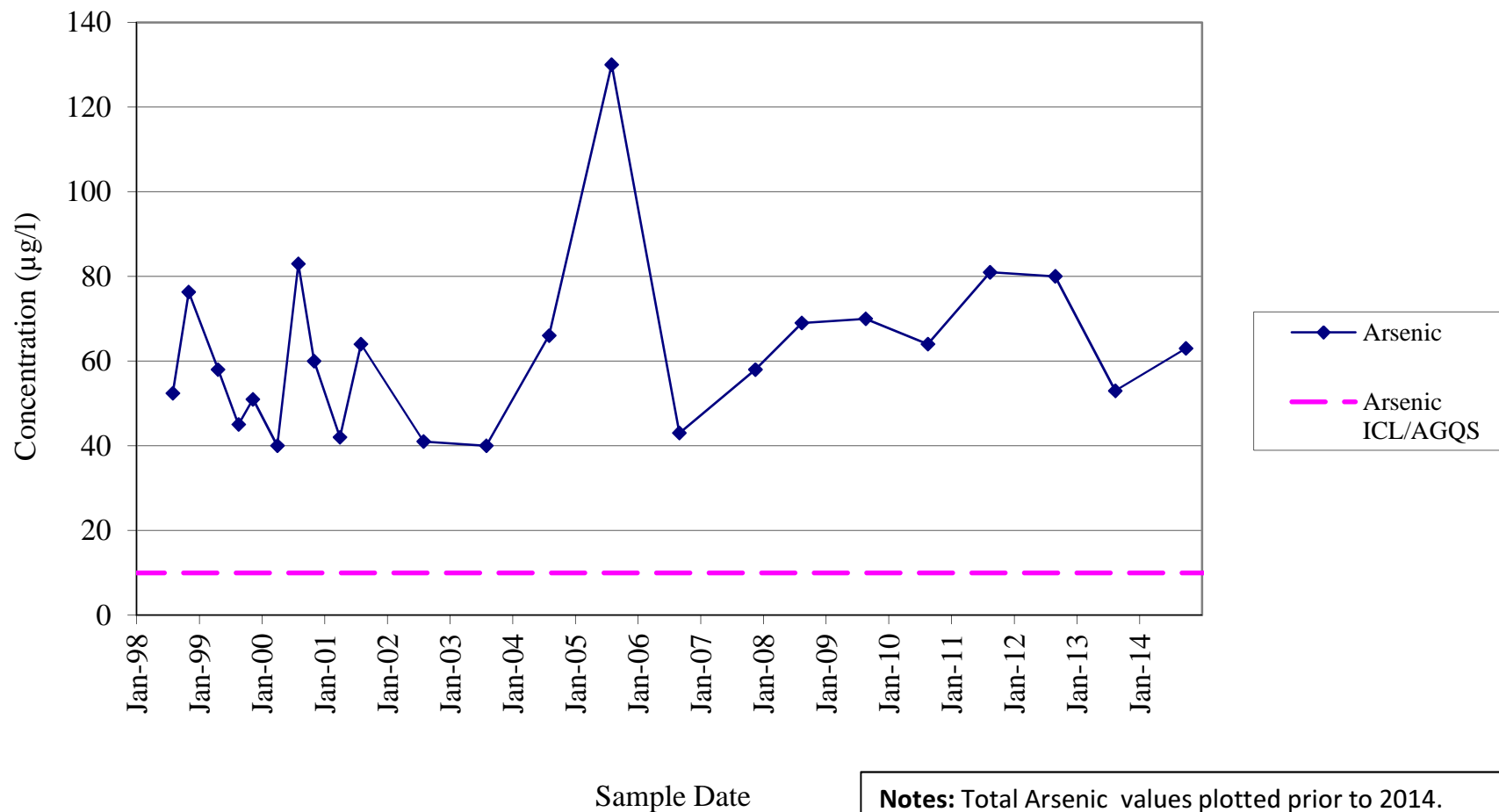


BP-4

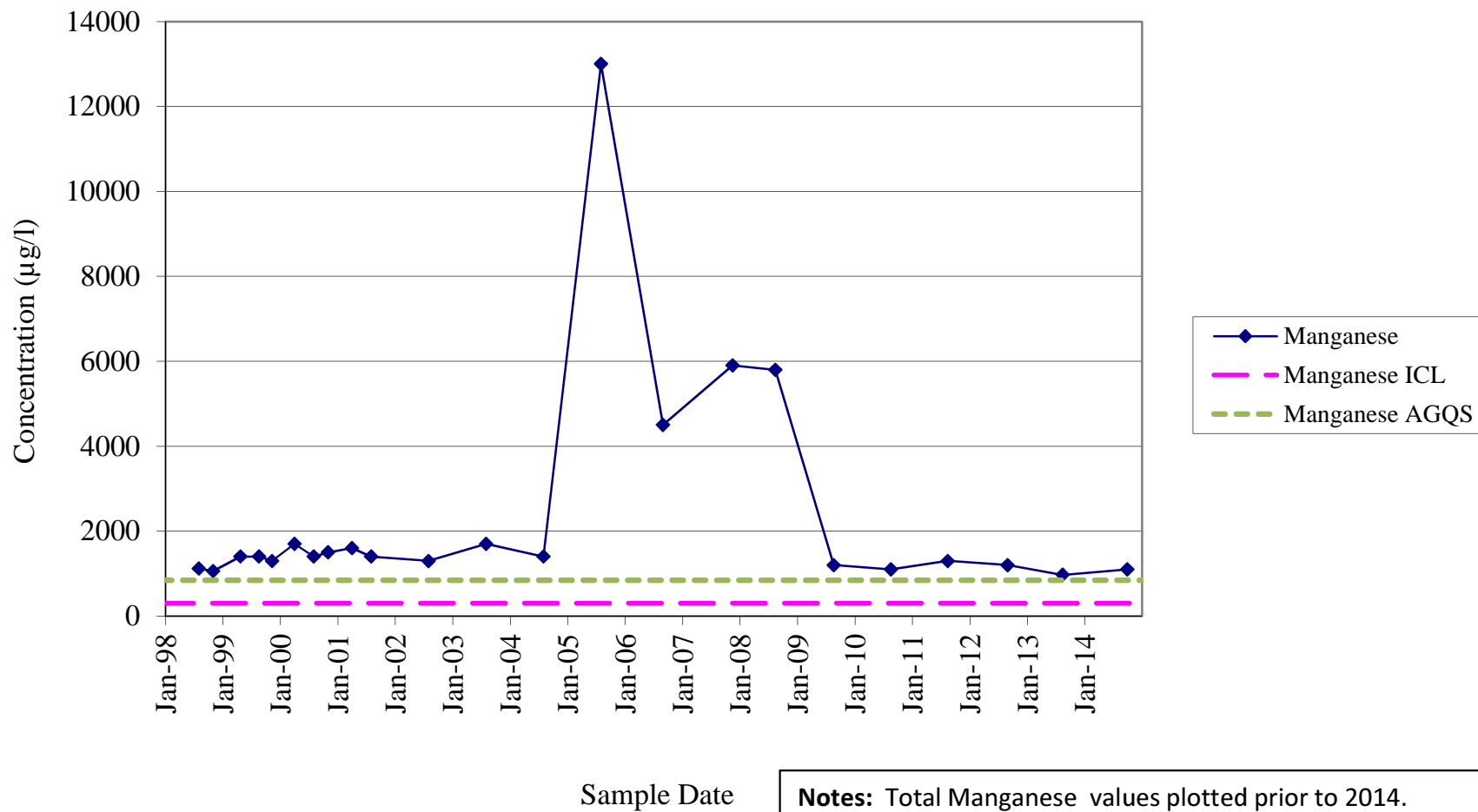
Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



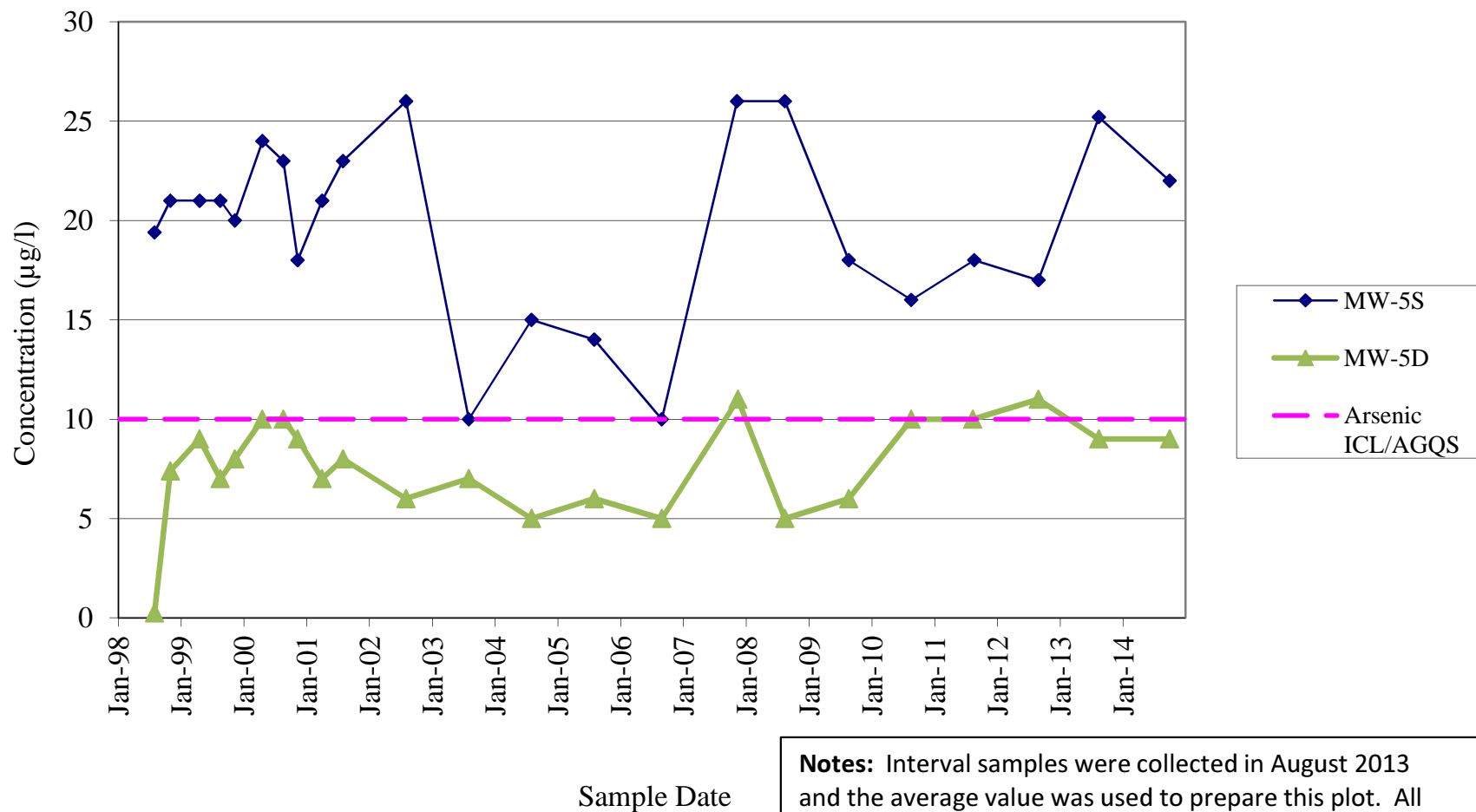
MW-4
Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



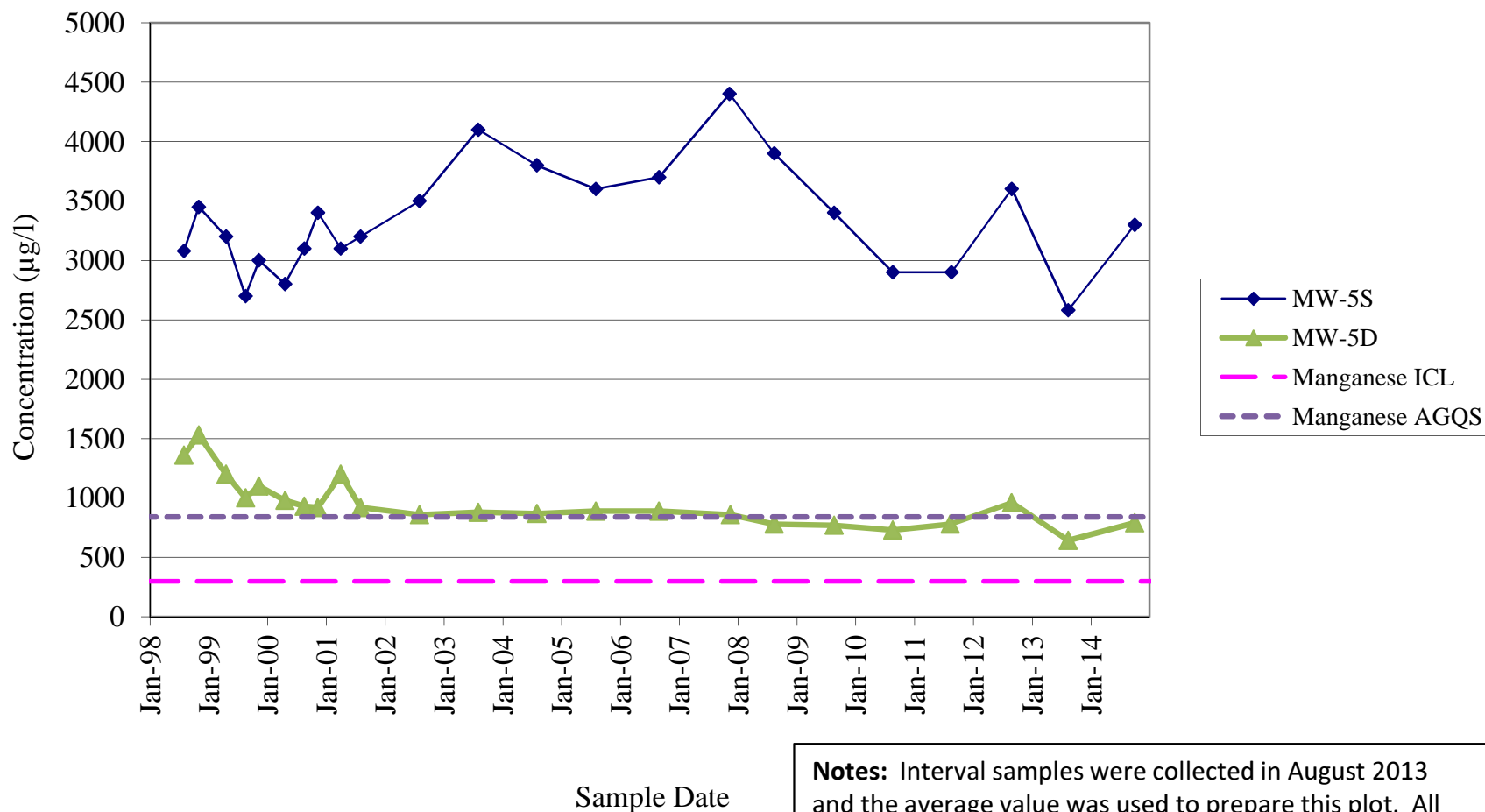
MW-4
Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



MW-5S & MW-5D
Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH

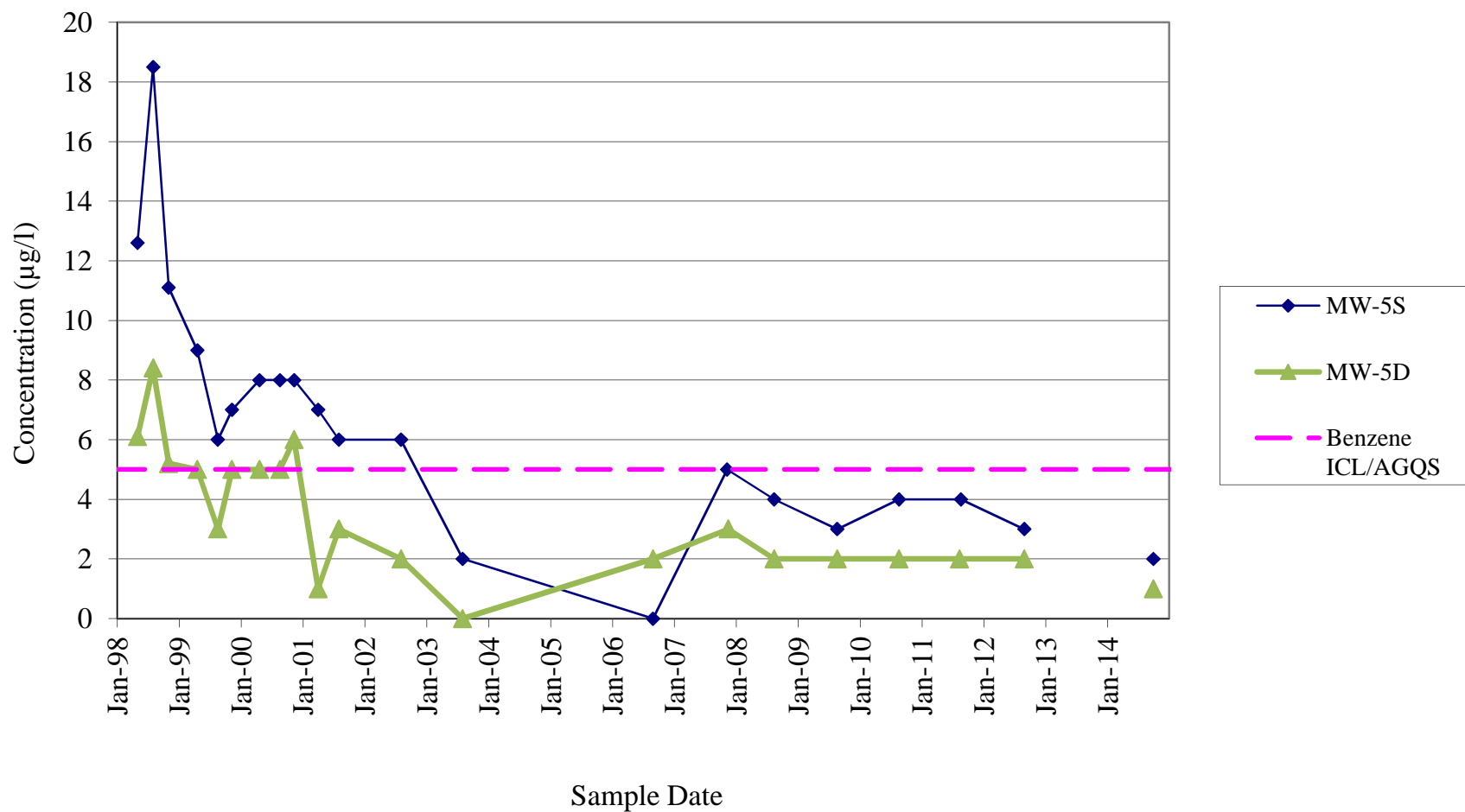


MW-5S & MW-5D
Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH

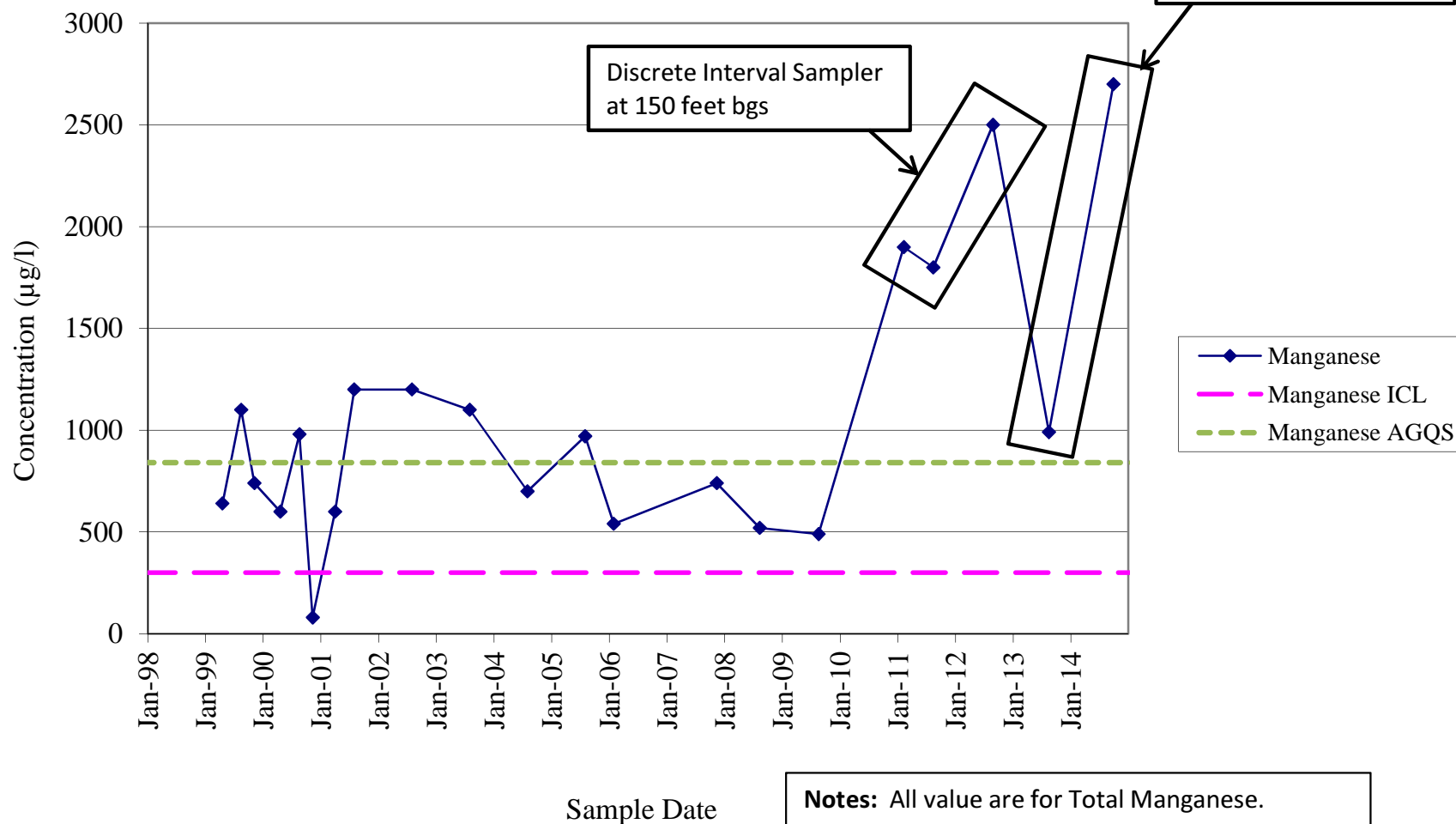


Notes: Interval samples were collected in August 2013 and the average value was used to prepare this plot. All value are for Total Manganese.

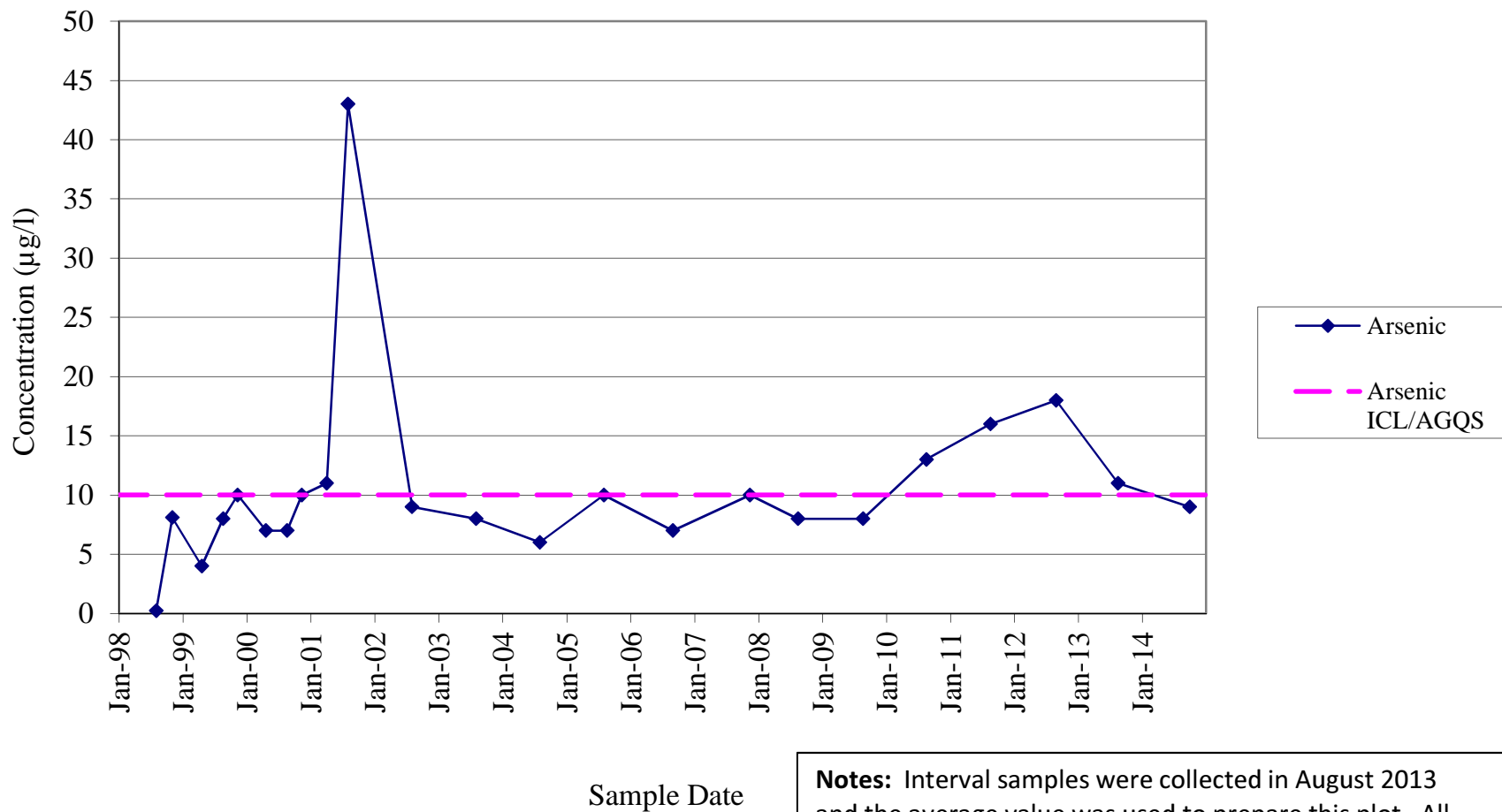
MW-5S & MW-5D
Benzene Concentrations vs. Time
Coakley Landfill, North Hampton, NH



MW-6
Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



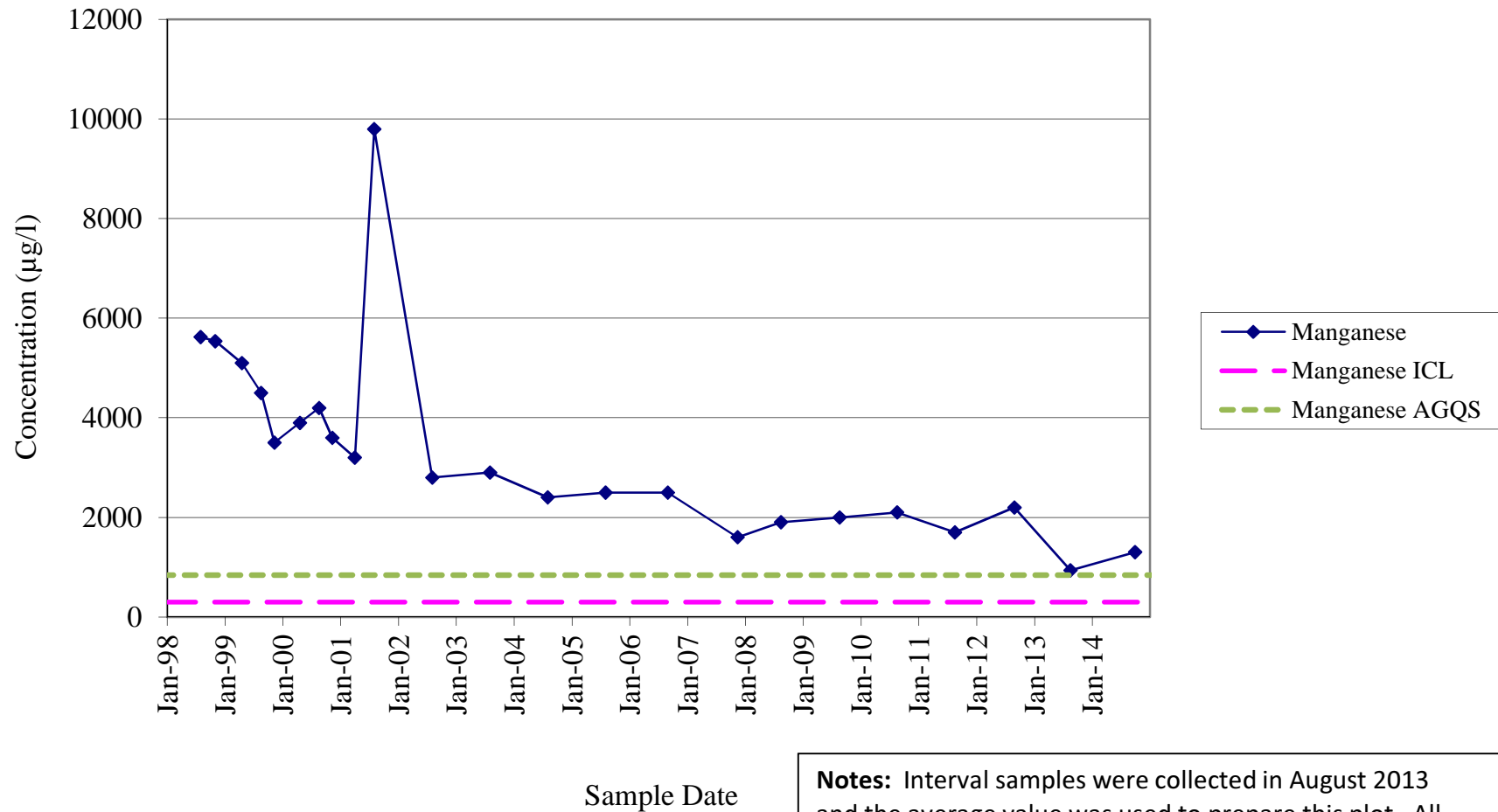
MW-8
Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



Notes: Interval samples were collected in August 2013 and the average value was used to prepare this plot. All value are for Total Arsenic.

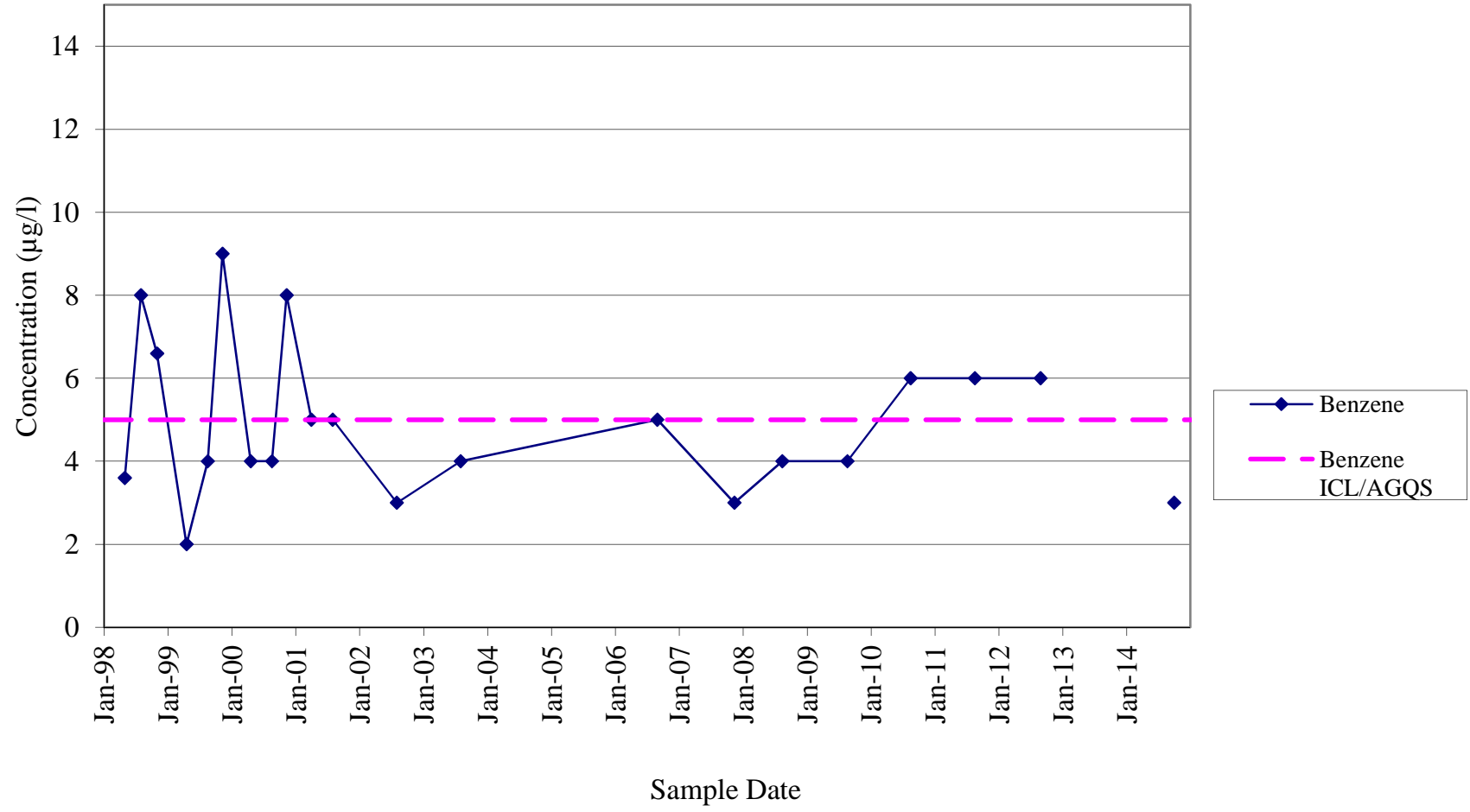
MW-8

Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



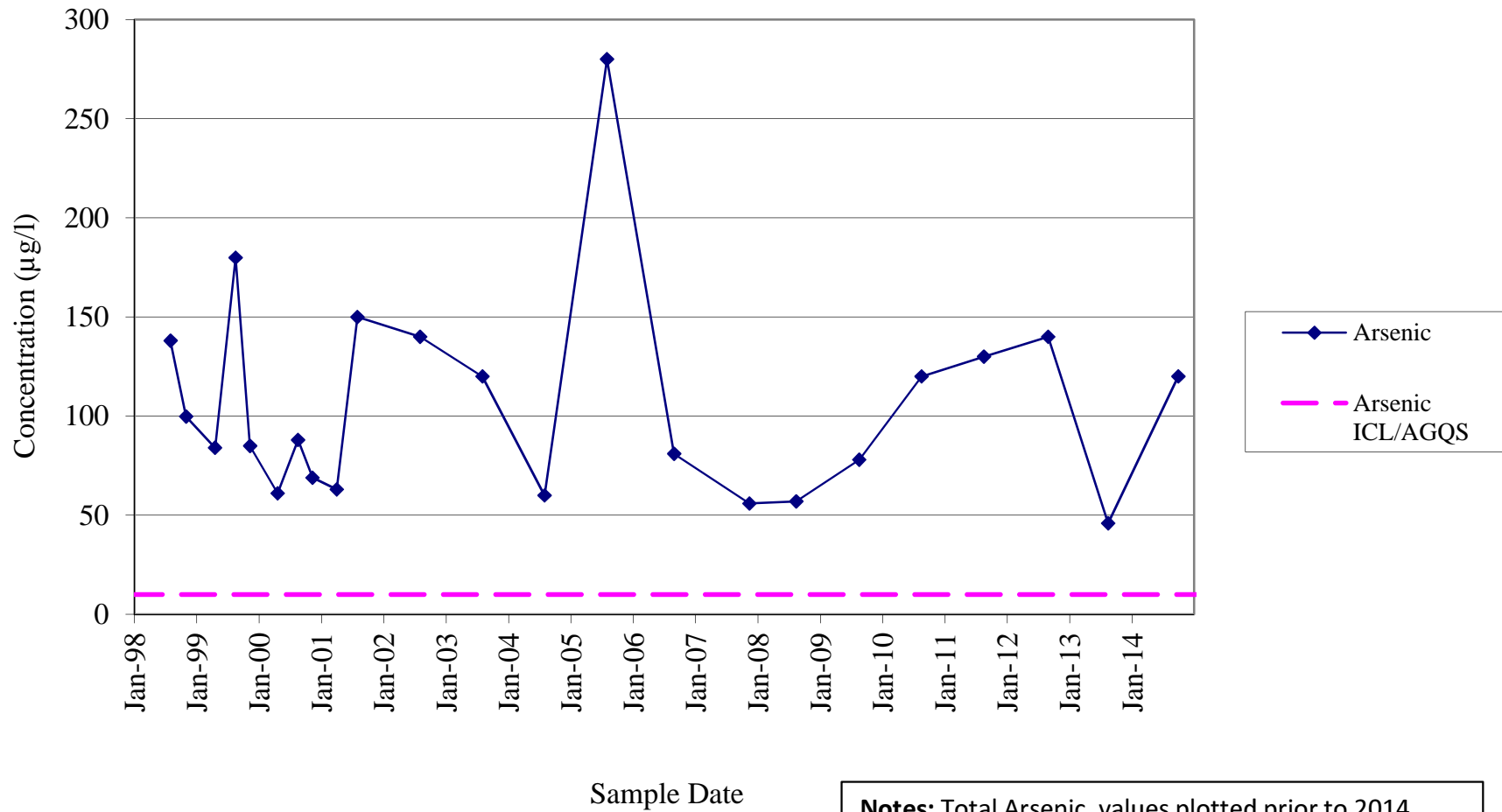
Notes: Interval samples were collected in August 2013 and the average value was used to prepare this plot. All value are for Total Manganese.

MW-8
Benzene Concentrations vs. Time
Coakley Landfill, North Hampton, NH



MW-9

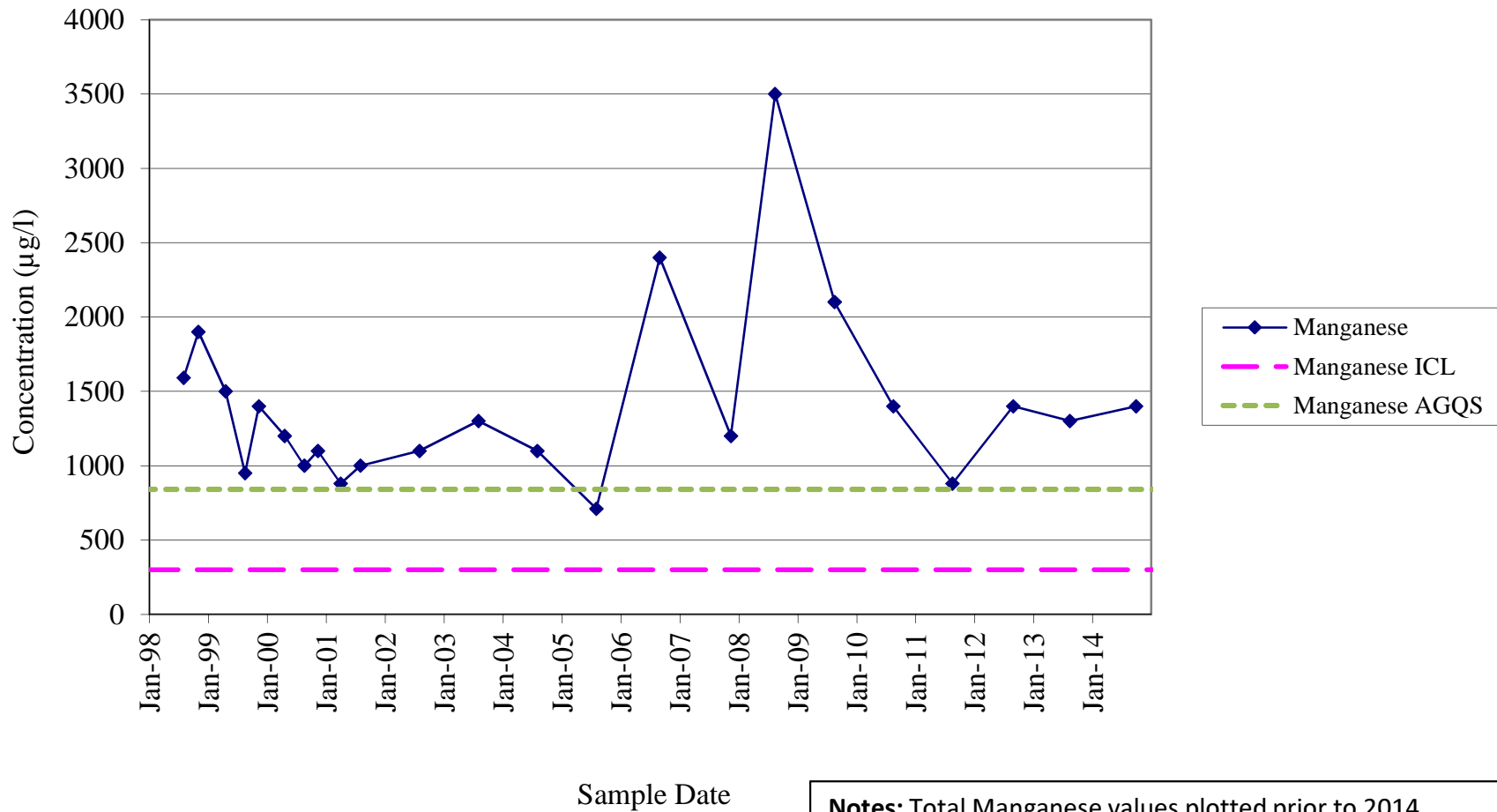
Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



Notes: Total Arsenic values plotted prior to 2014.
Dissolved Arsenic values plotted beginning in 2014.

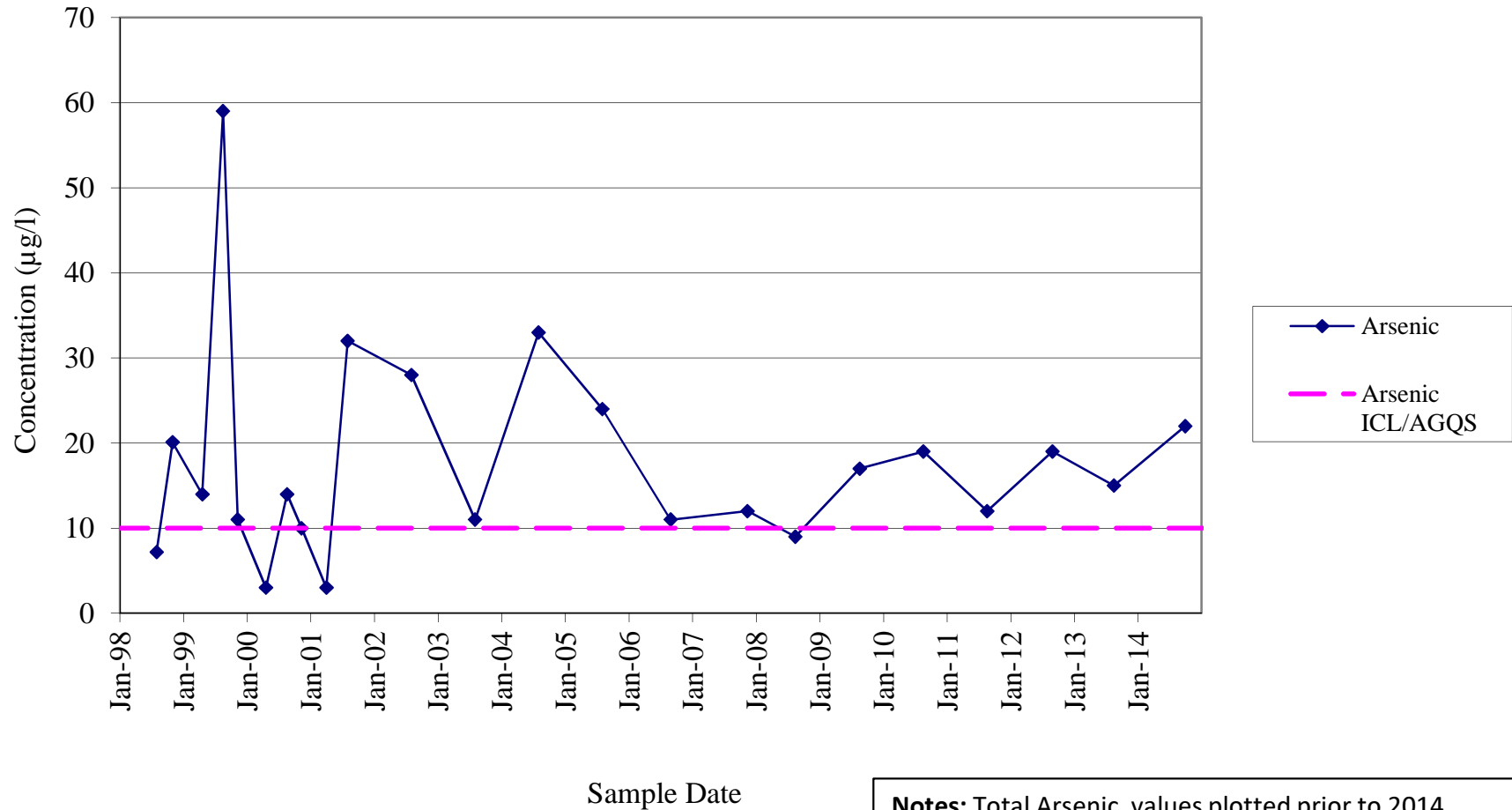
MW-9

Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



Notes: Total Manganese values plotted prior to 2014.
Dissolved Manganese values plotted beginning in 2014.

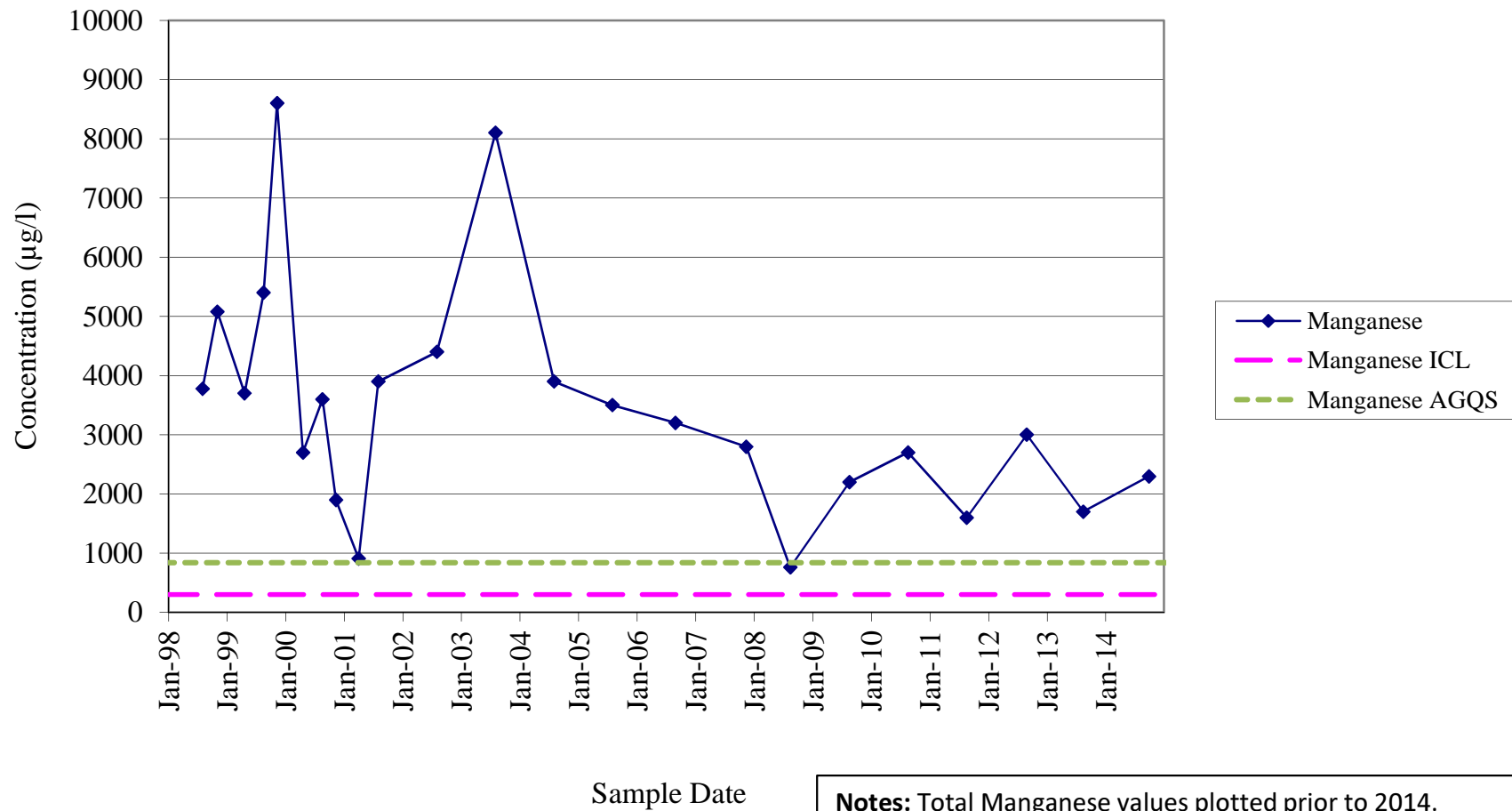
MW-10
Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



Notes: Total Arsenic values plotted prior to 2014.
Dissolved Arsenic values plotted beginning in 2014.

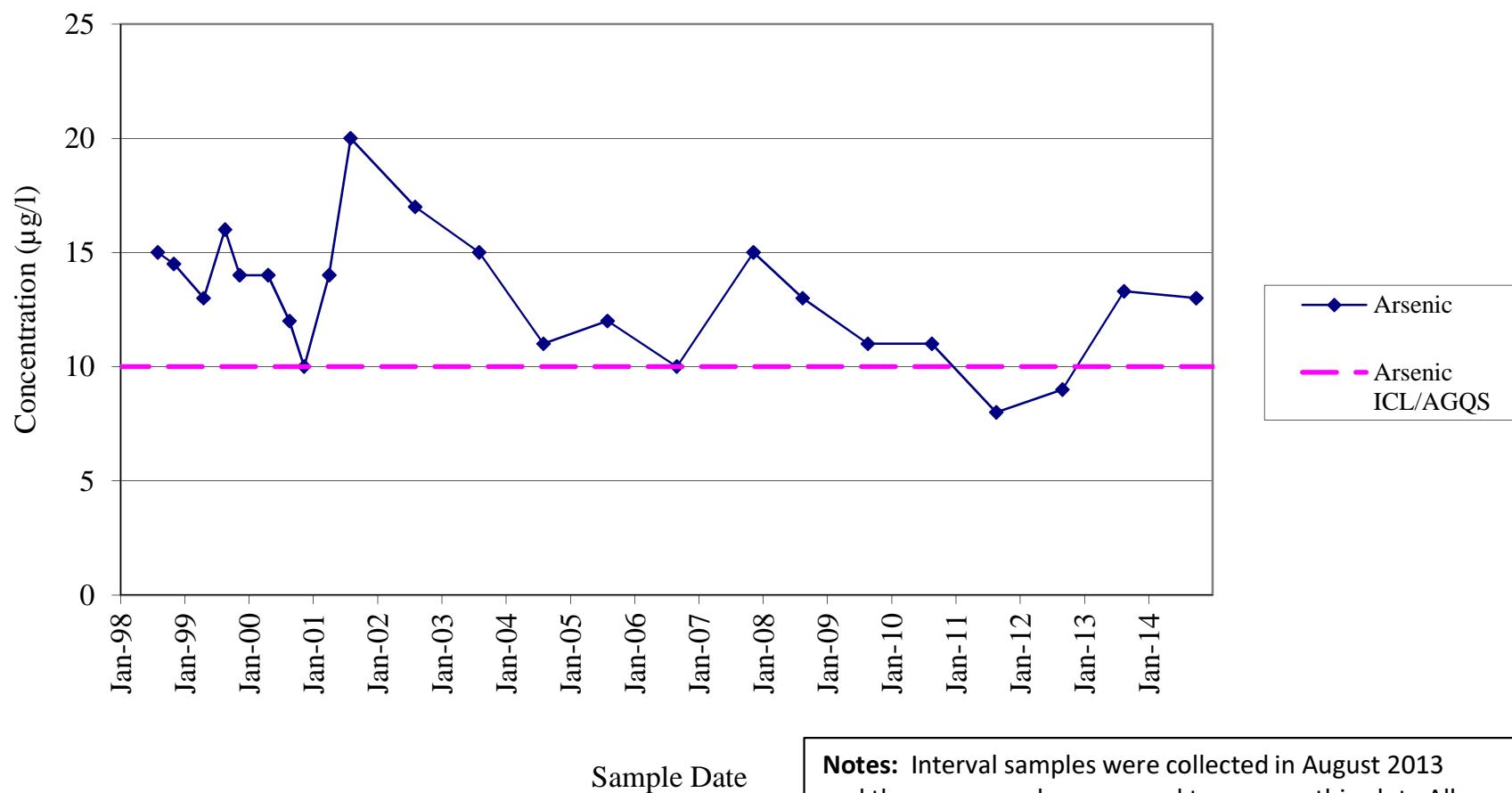
MW-10

Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



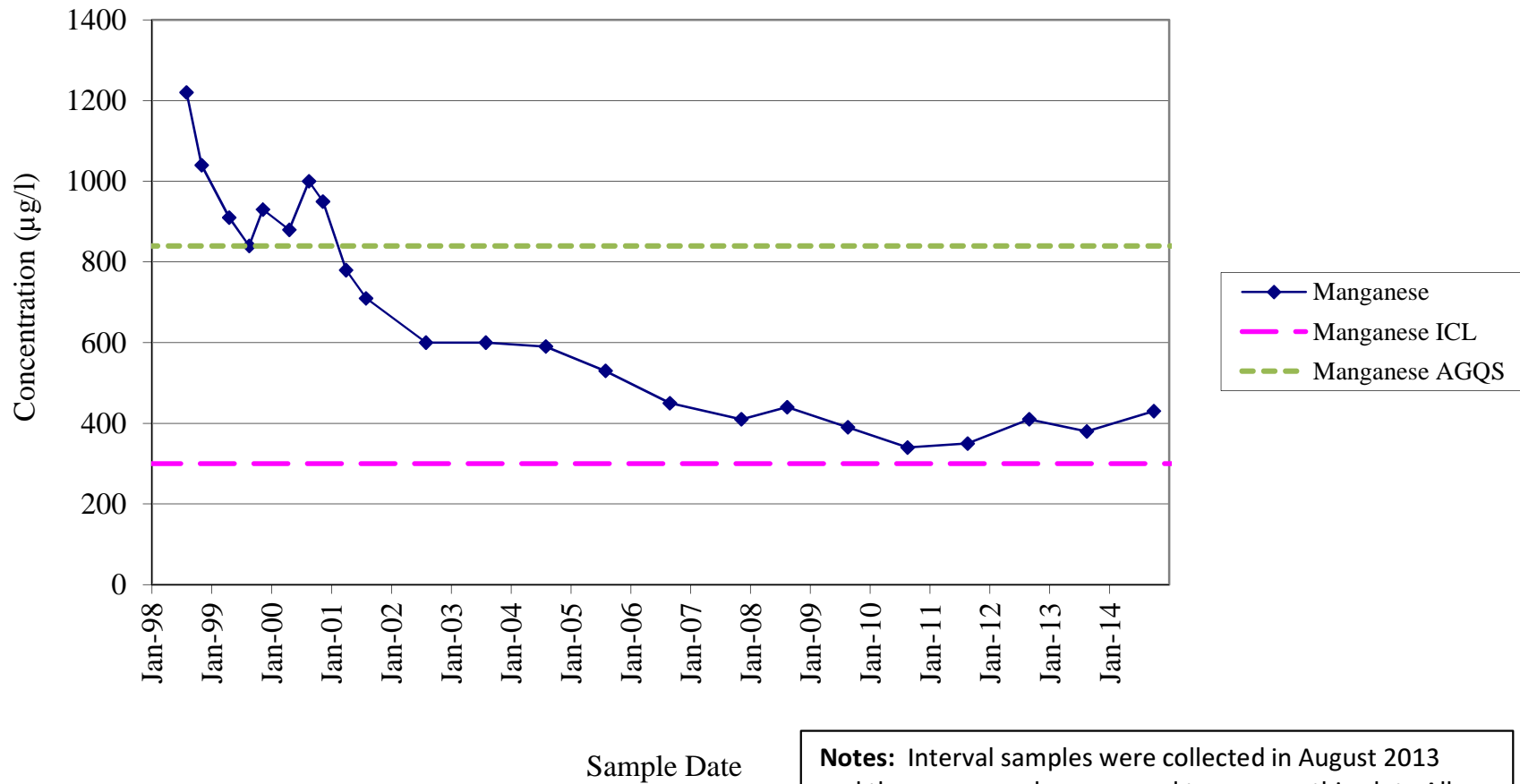
Notes: Total Manganese values plotted prior to 2014.
Dissolved Manganese values plotted beginning in 2014.

MW-11
Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



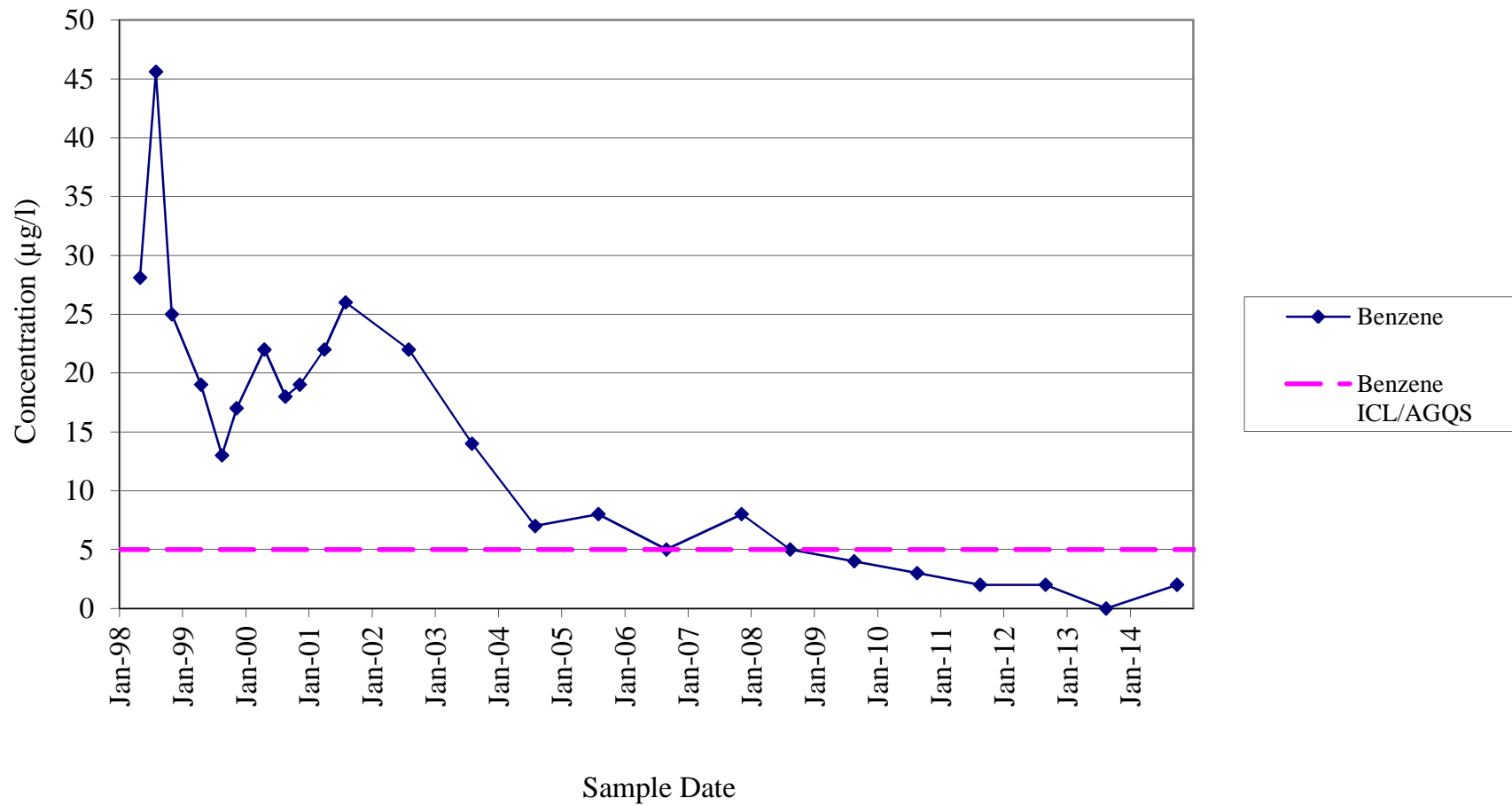
Notes: Interval samples were collected in August 2013 and the average value was used to prepare this plot. All value are for Total Arsenic.

MW-11
Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



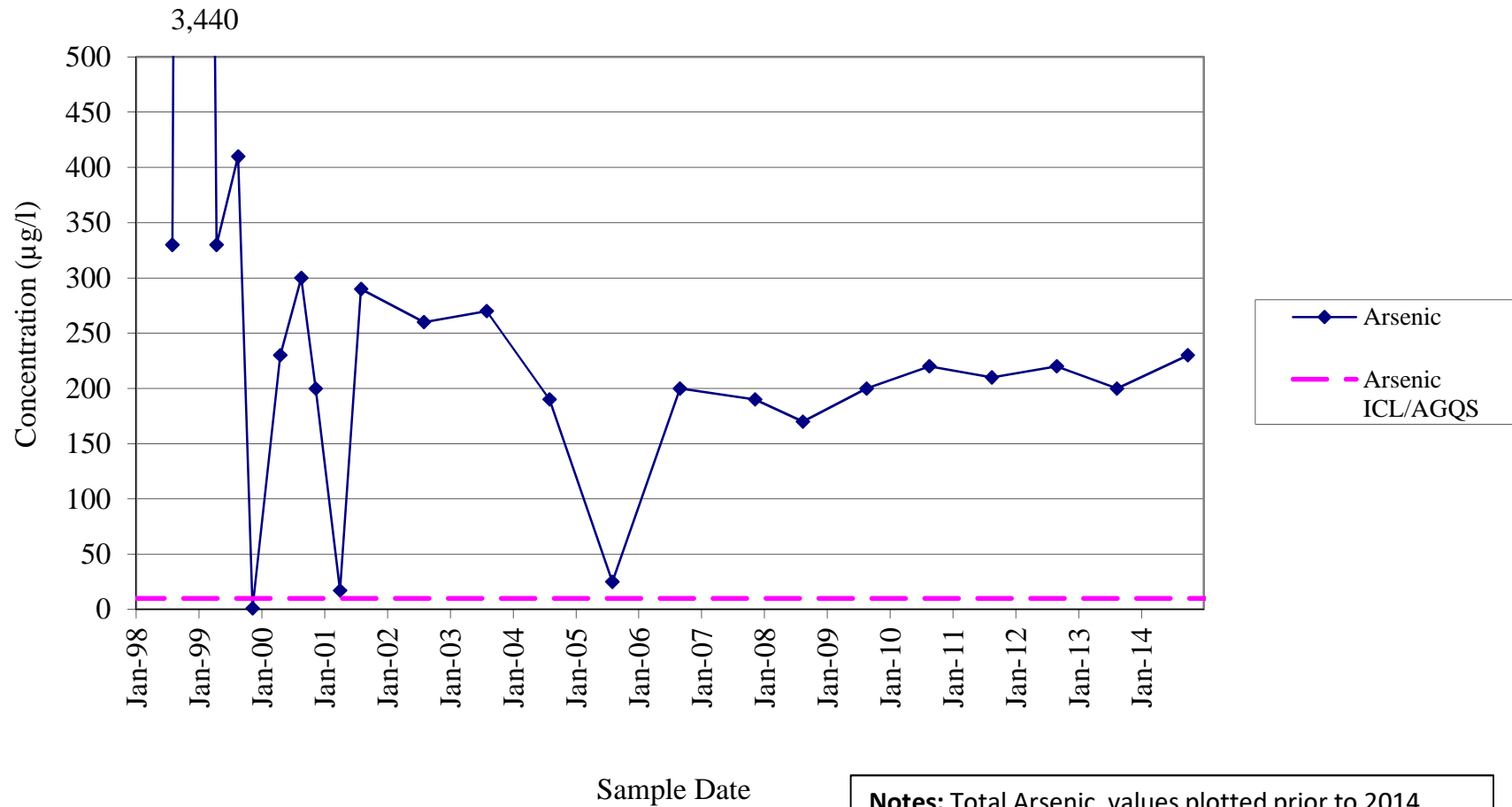
Notes: Interval samples were collected in August 2013 and the average value was used to prepare this plot. All values are for Total Manganese.

MW-11
Benzene Concentrations vs. Time
Coakley Landfill, North Hampton, NH



OP-2

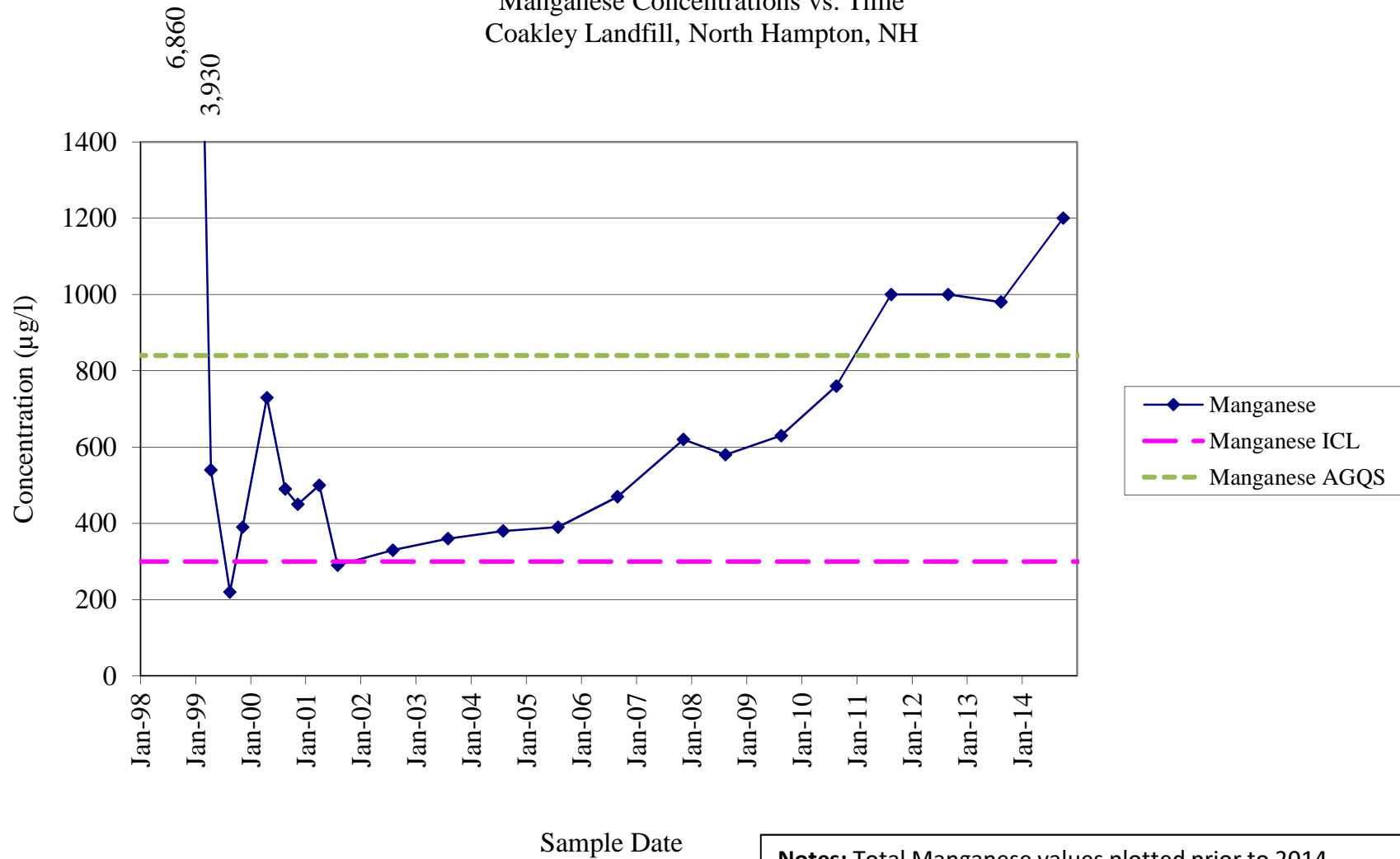
Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



Notes: Total Arsenic values plotted prior to 2014.
Dissolved Arsenic values plotted beginning in 2014.

OP-2

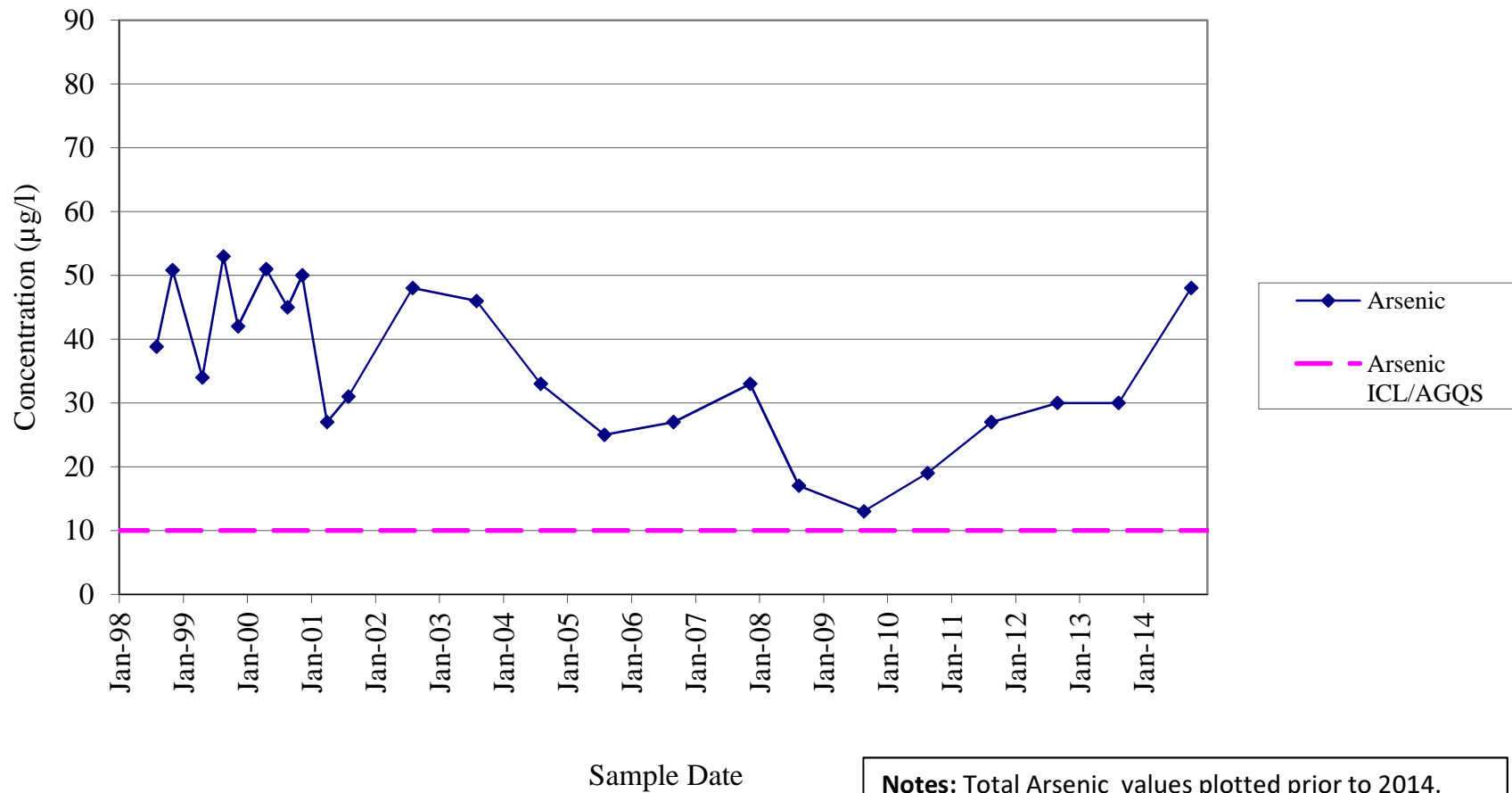
Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



Notes: Total Manganese values plotted prior to 2014.
Dissolved Manganese values plotted beginning in 2014.

OP-5

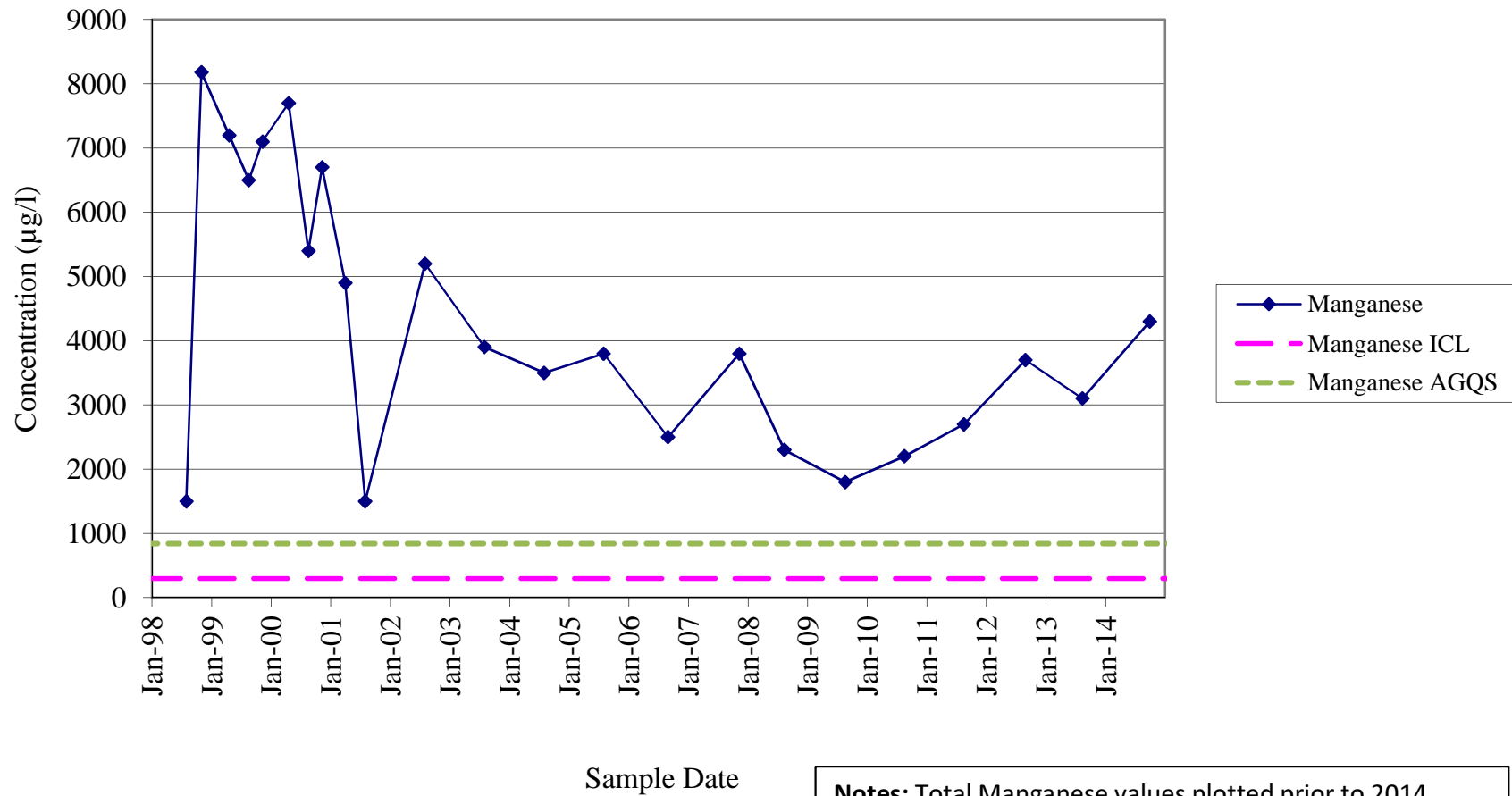
Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



Notes: Total Arsenic values plotted prior to 2014.
Dissolved Arsenic values plotted beginning in 2014.

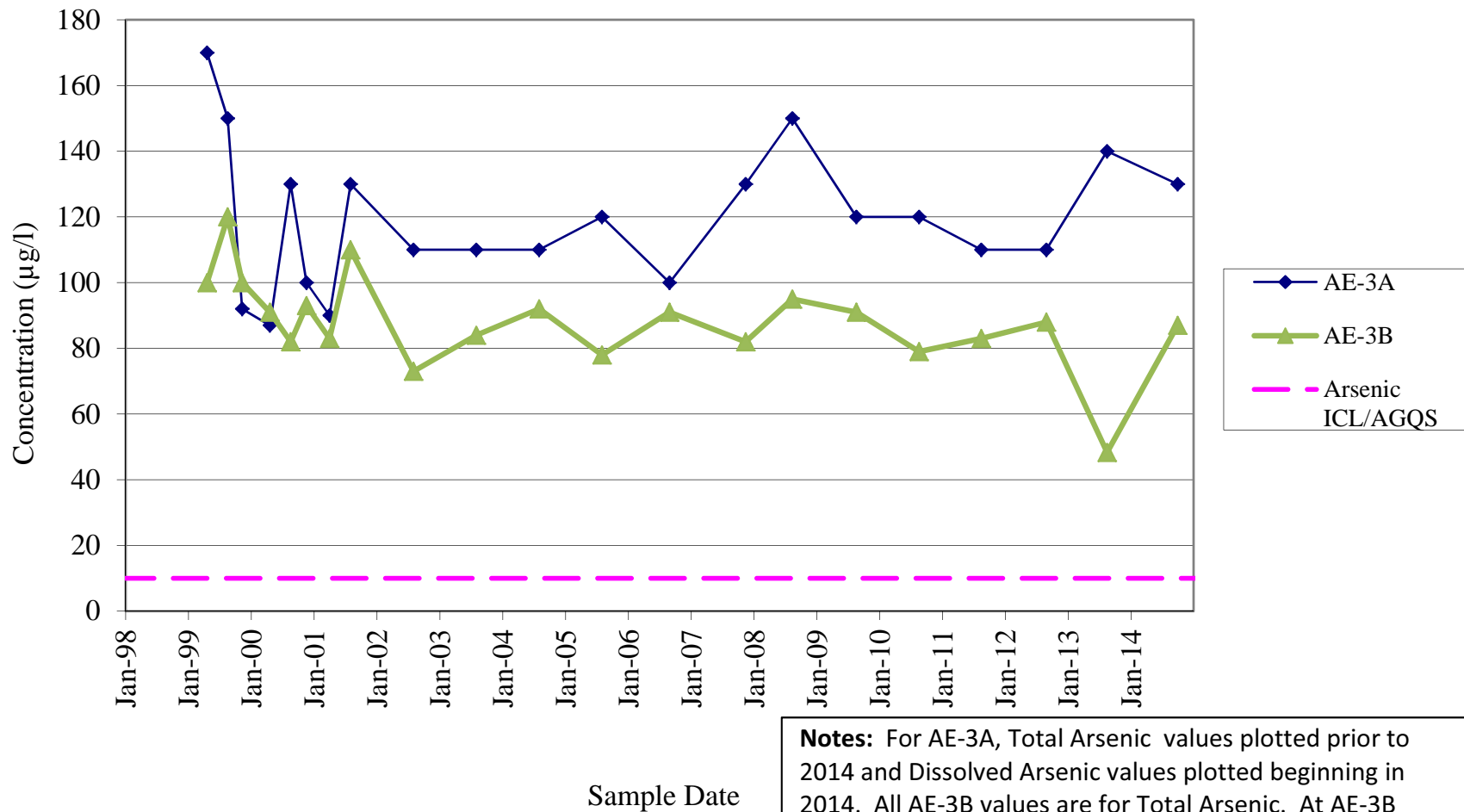
OP-5

Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



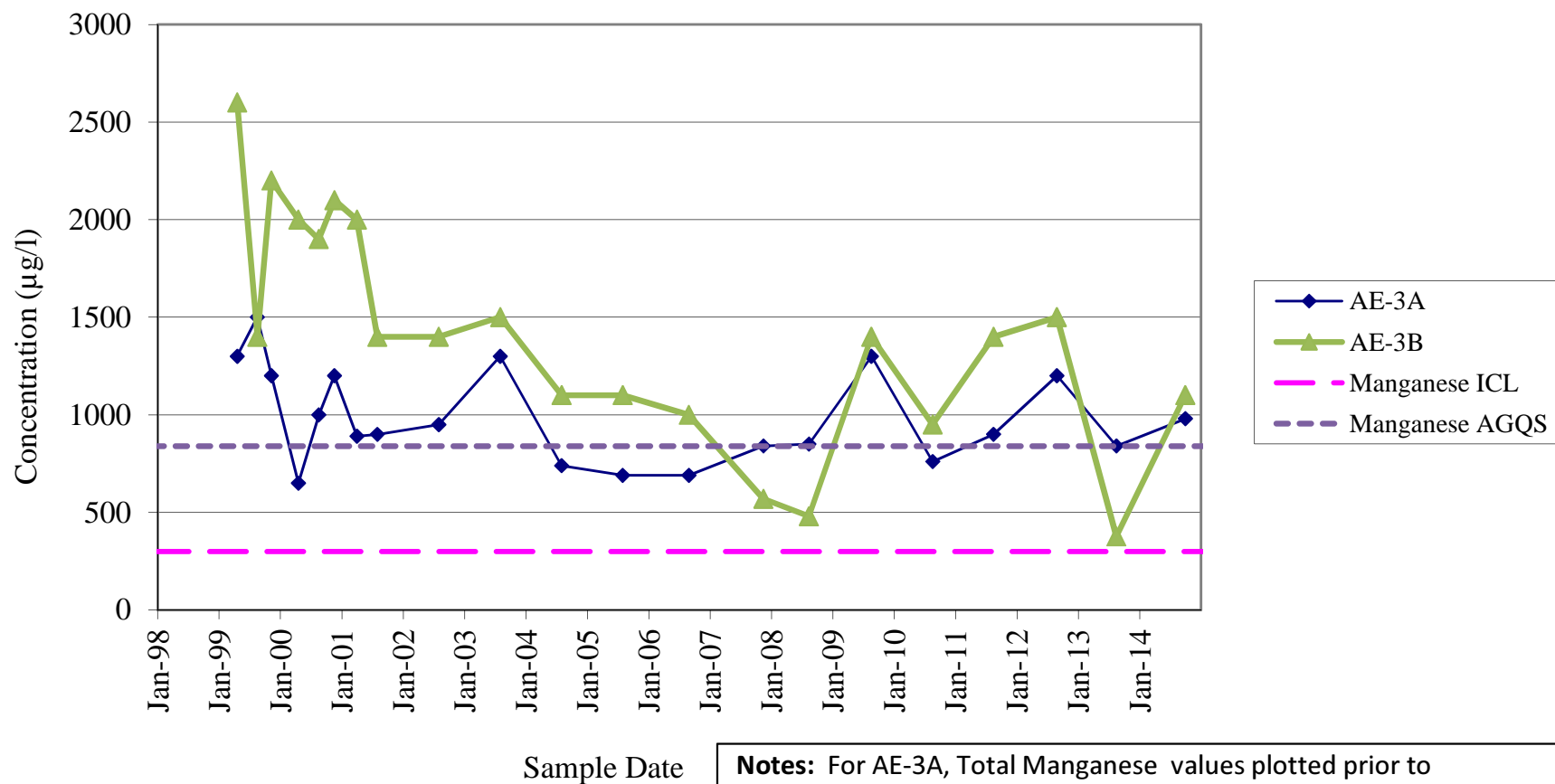
Notes: Total Manganese values plotted prior to 2014.
Dissolved Manganese values plotted beginning in 2014.

AE-3A & AE-3B
Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



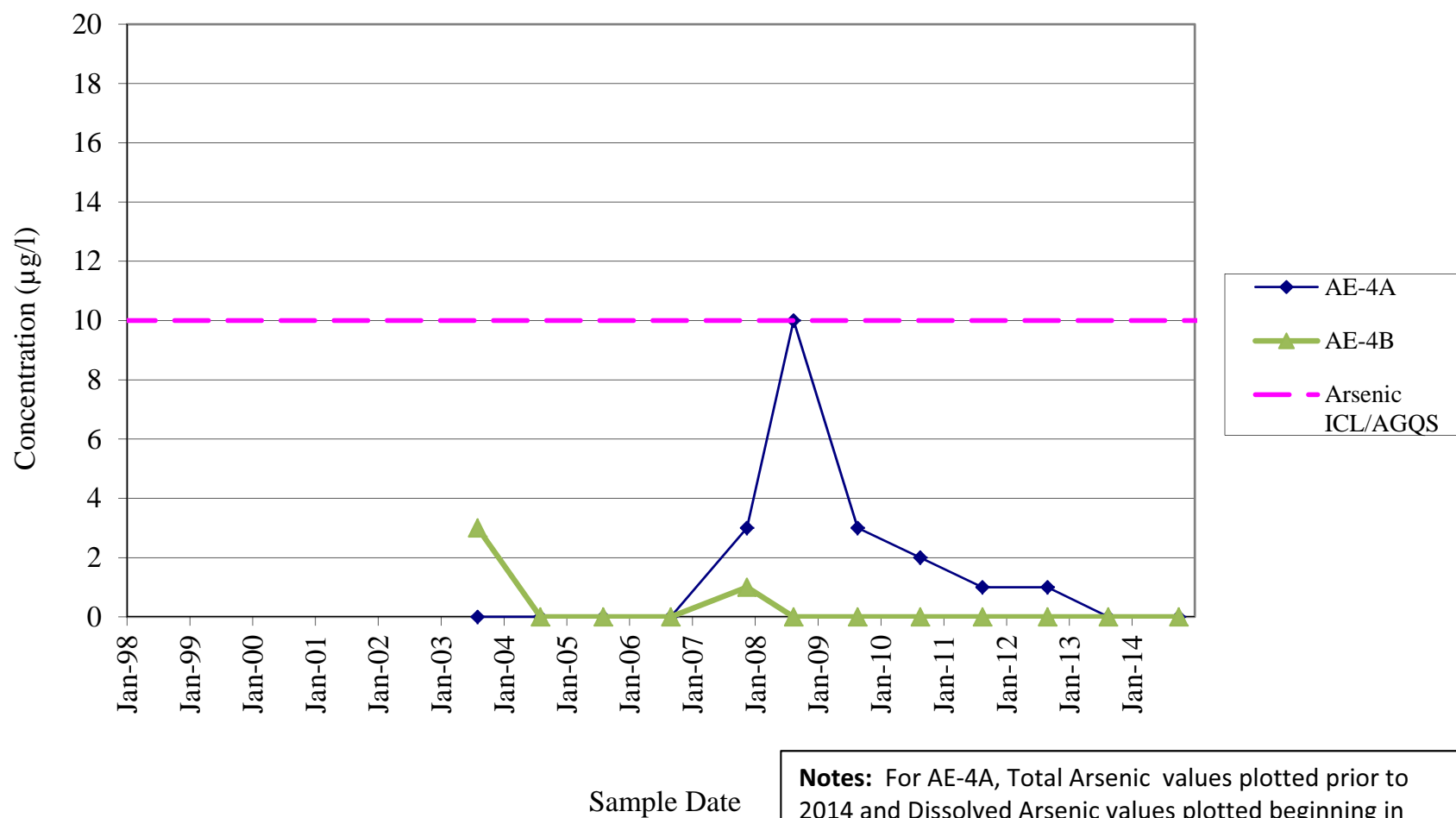
Notes: For AE-3A, Total Arsenic values plotted prior to 2014 and Dissolved Arsenic values plotted beginning in 2014. All AE-3B values are for Total Arsenic. At AE-3B interval samples were collected in August 2013 and the average value was used to prepare this plot.

AE-3A & AE-3B Manganese Concentrations vs. Time Coakley Landfill, North Hampton, NH



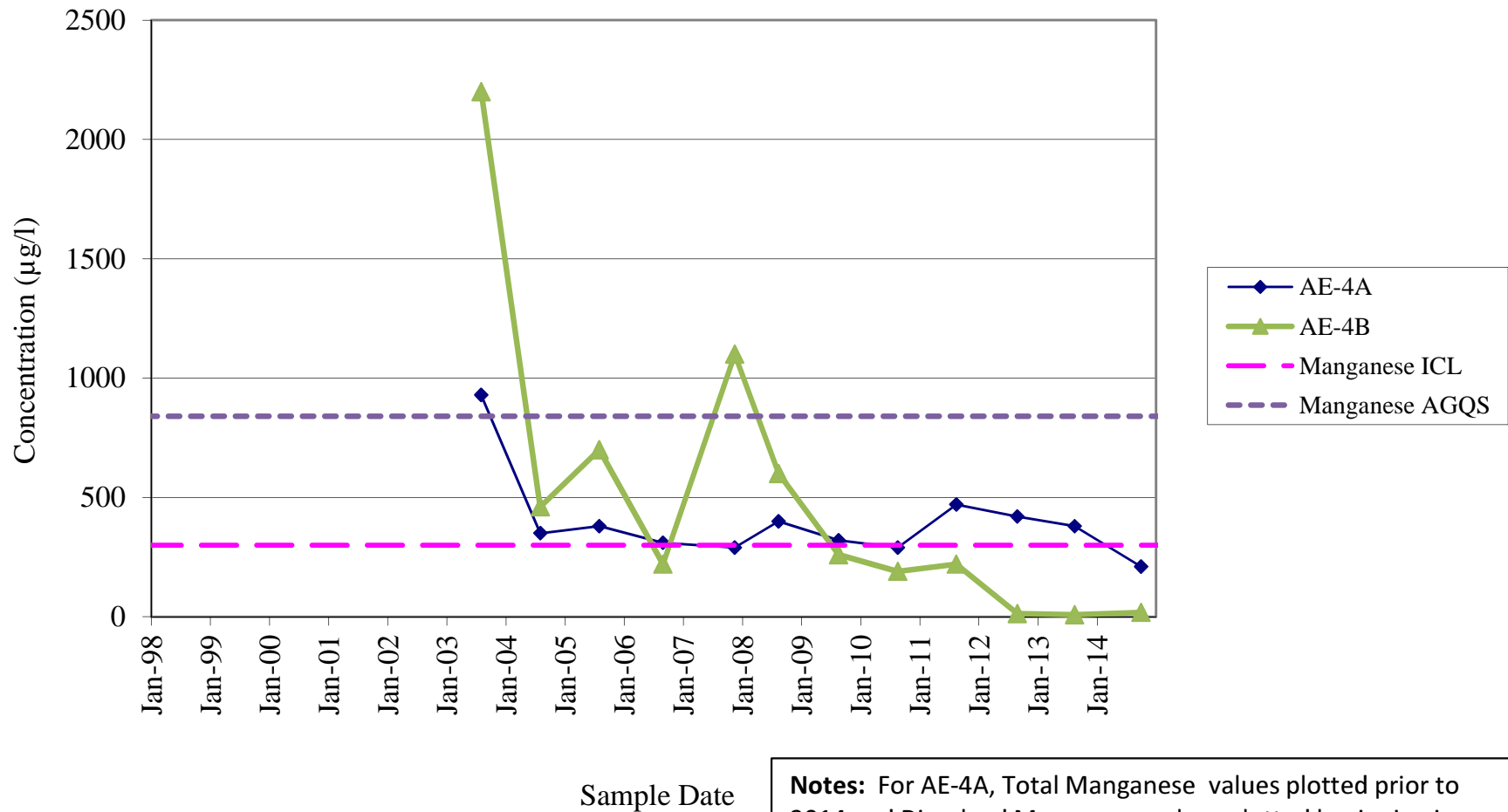
Notes: For AE-3A, Total Manganese values plotted prior to 2014 and Dissolved Manganese values plotted beginning in 2014. All AE-3B values are for Total Manganese. At AE-3B interval samples were collected in August 2013 and the average value was used to prepare this plot.

AE-4A & AE-4B
Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



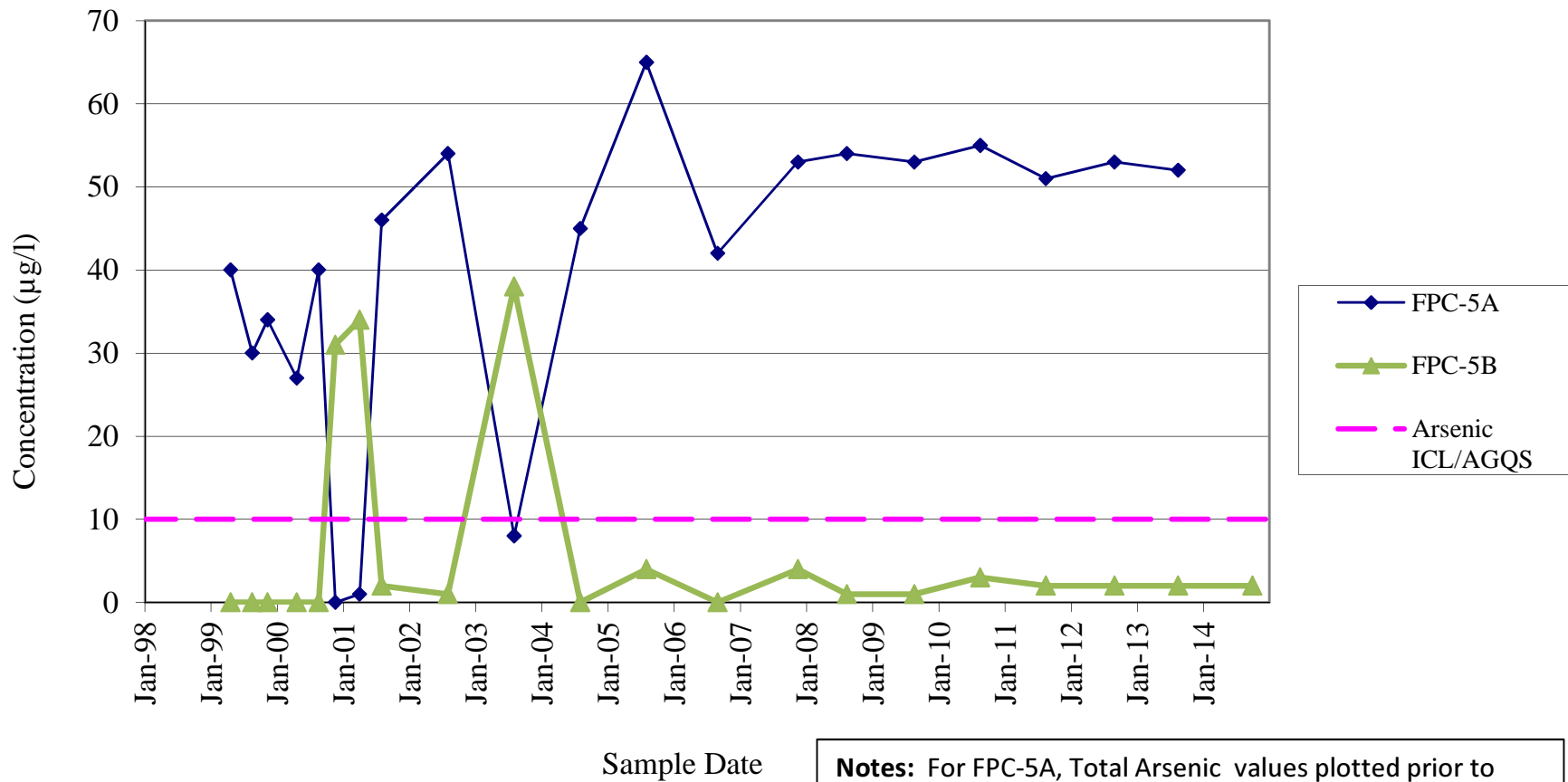
Notes: For AE-4A, Total Arsenic values plotted prior to 2014 and Dissolved Arsenic values plotted beginning in 2014. All AE-4B values are for Total Arsenic

AE-4A & AE-4B
Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



Notes: For AE-4A, Total Manganese values plotted prior to 2014 and Dissolved Manganese values plotted beginning in 2014. All AE-4B values are for Total Manganese.

FPC-5A & FPC-5B
Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH

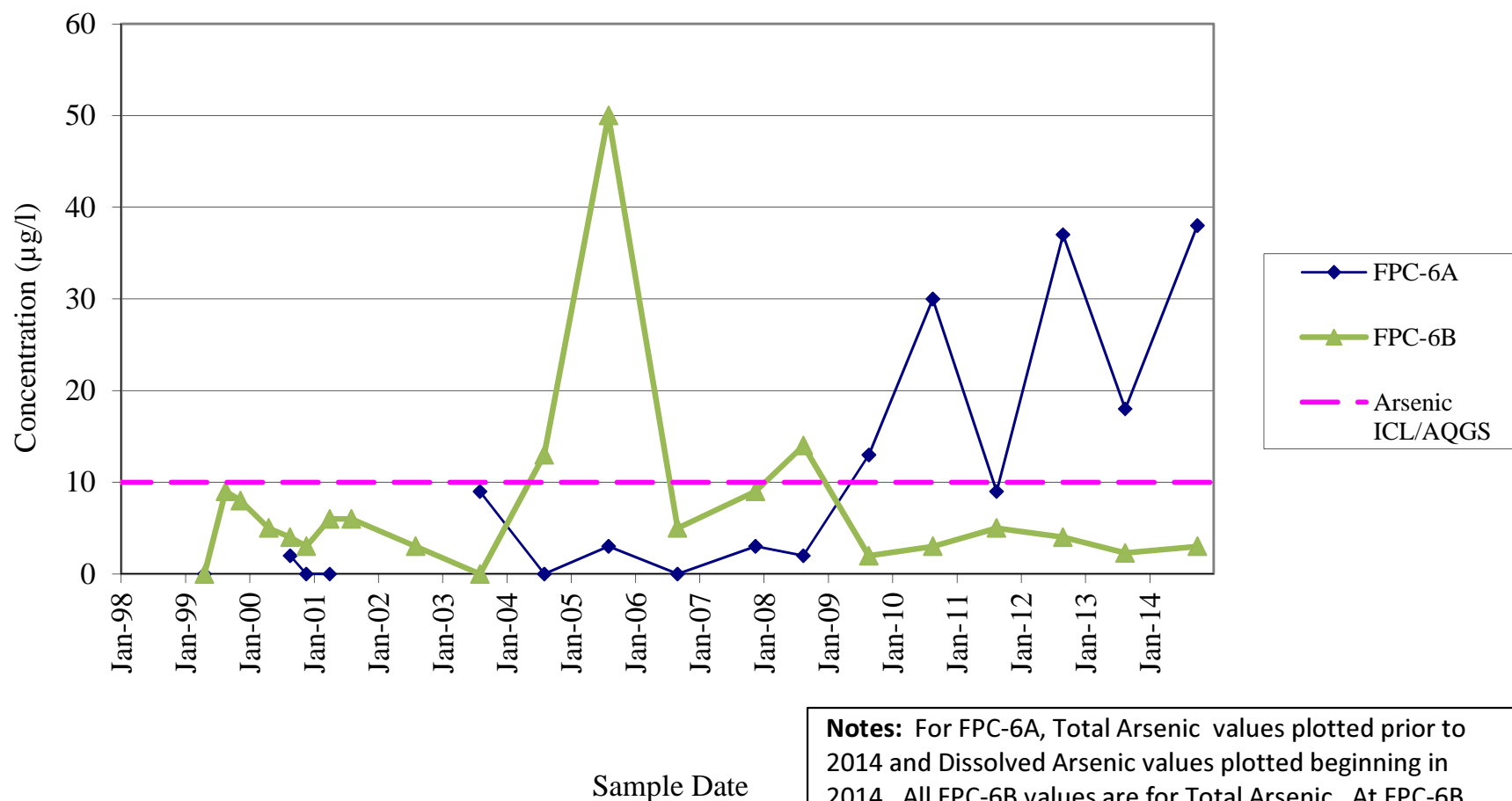


Notes: For FPC-5A, Total Arsenic values plotted prior to 2014 and FPC-5A was not sampled in 2014 due to well integrity issues. All FPC-5B values are for Total Arsenic. At FPC-5B interval samples were collected in August 2013 and the average value was used to prepare this plot.

FPC-6A & FPC-6B

Arsenic Concentrations vs. Time

Coakley Landfill, North Hampton, NH

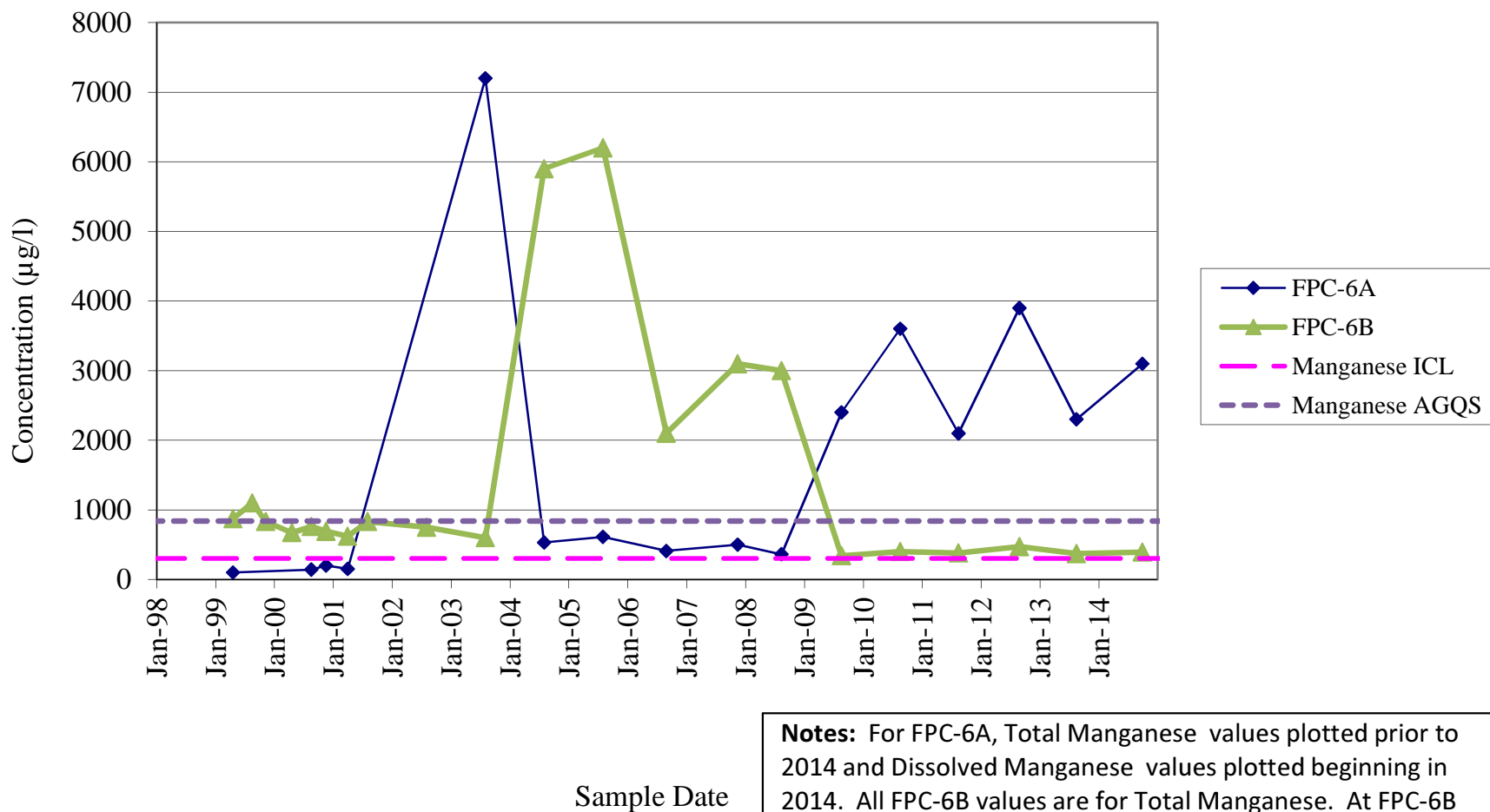


Notes: For FPC-6A, Total Arsenic values plotted prior to 2014 and Dissolved Arsenic values plotted beginning in 2014. All FPC-6B values are for Total Arsenic. At FPC-6B interval samples were collected in August 2013 and the average value was used to prepare this plot.

FPC-6A & FPC-6B

Manganese Concentrations vs. Time

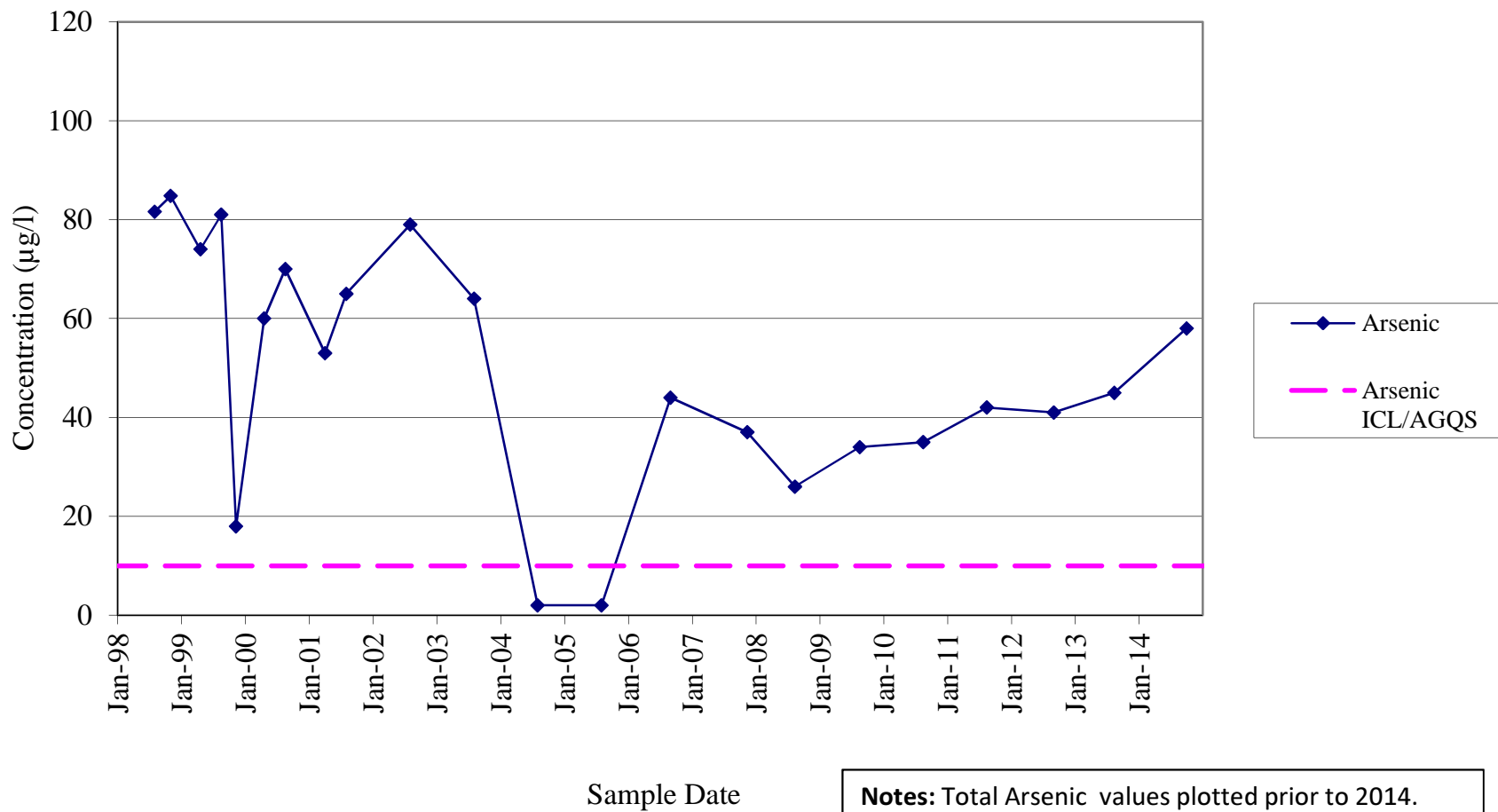
Coakley Landfill, North Hampton, NH



Notes: For FPC-6A, Total Manganese values plotted prior to 2014 and Dissolved Manganese values plotted beginning in 2014. All FPC-6B values are for Total Manganese. At FPC-6B interval samples were collected in August 2013 and the average value was used to prepare this plot.

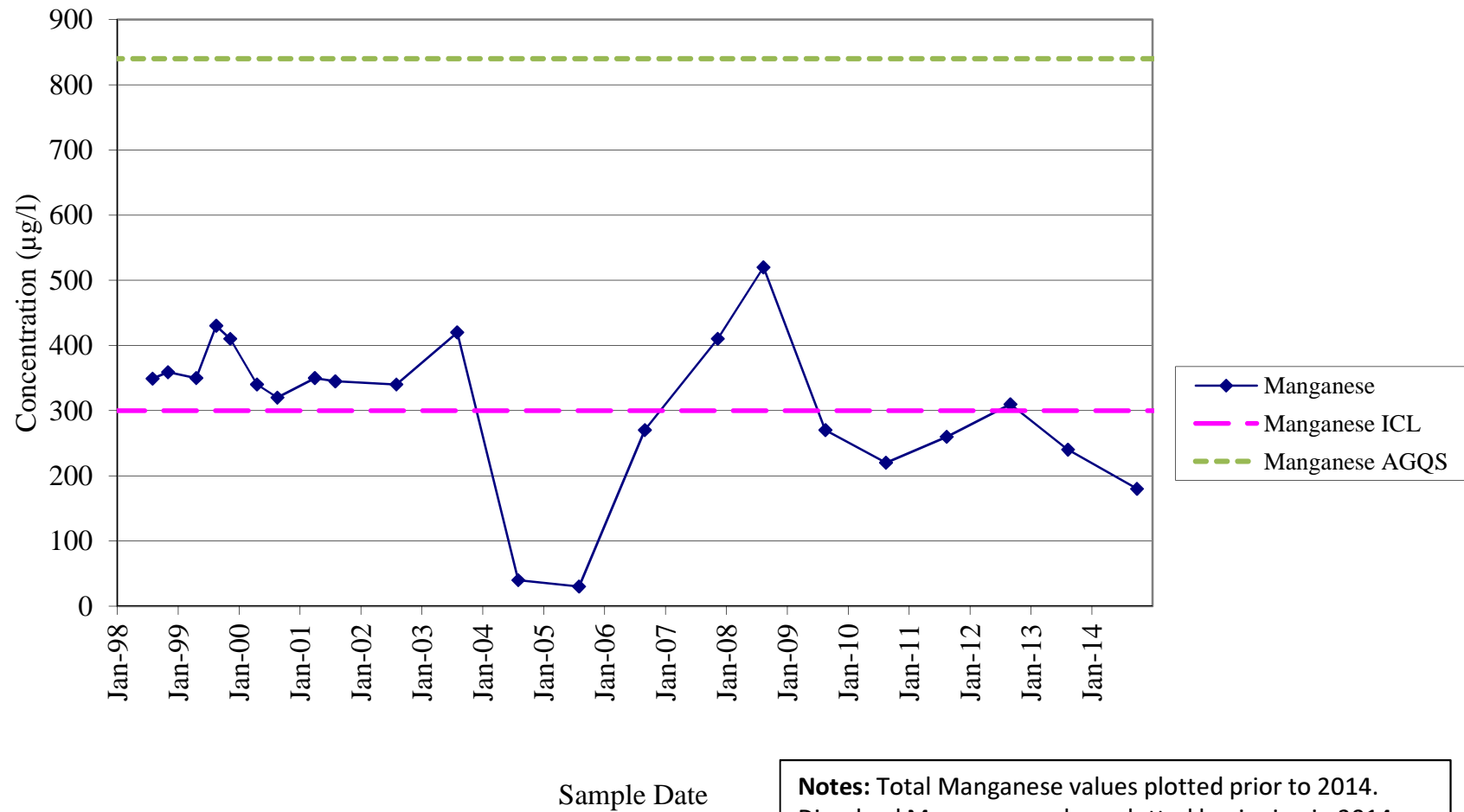
FPC-9A

Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



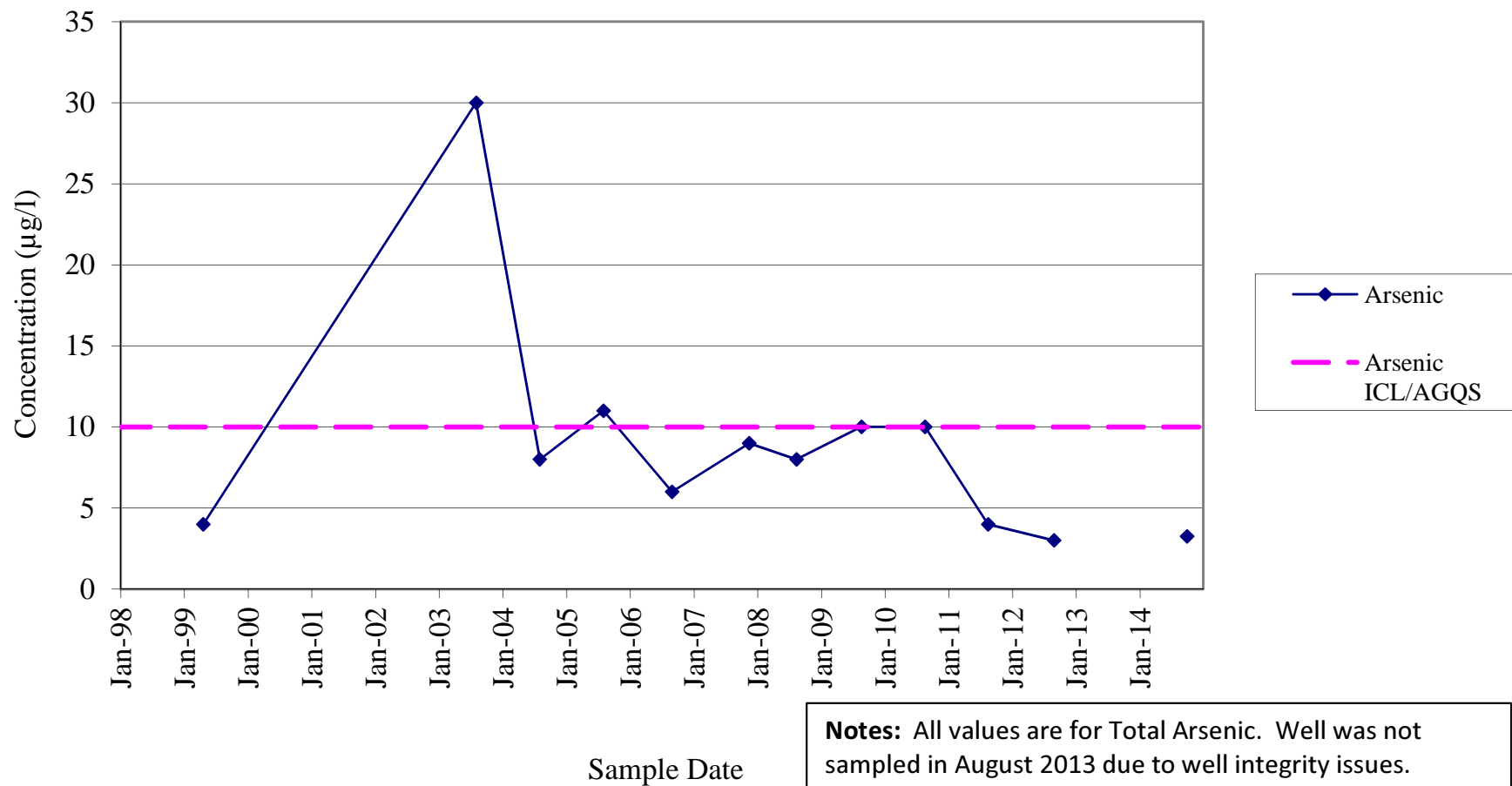
FPC-9A

Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



FPC-11B

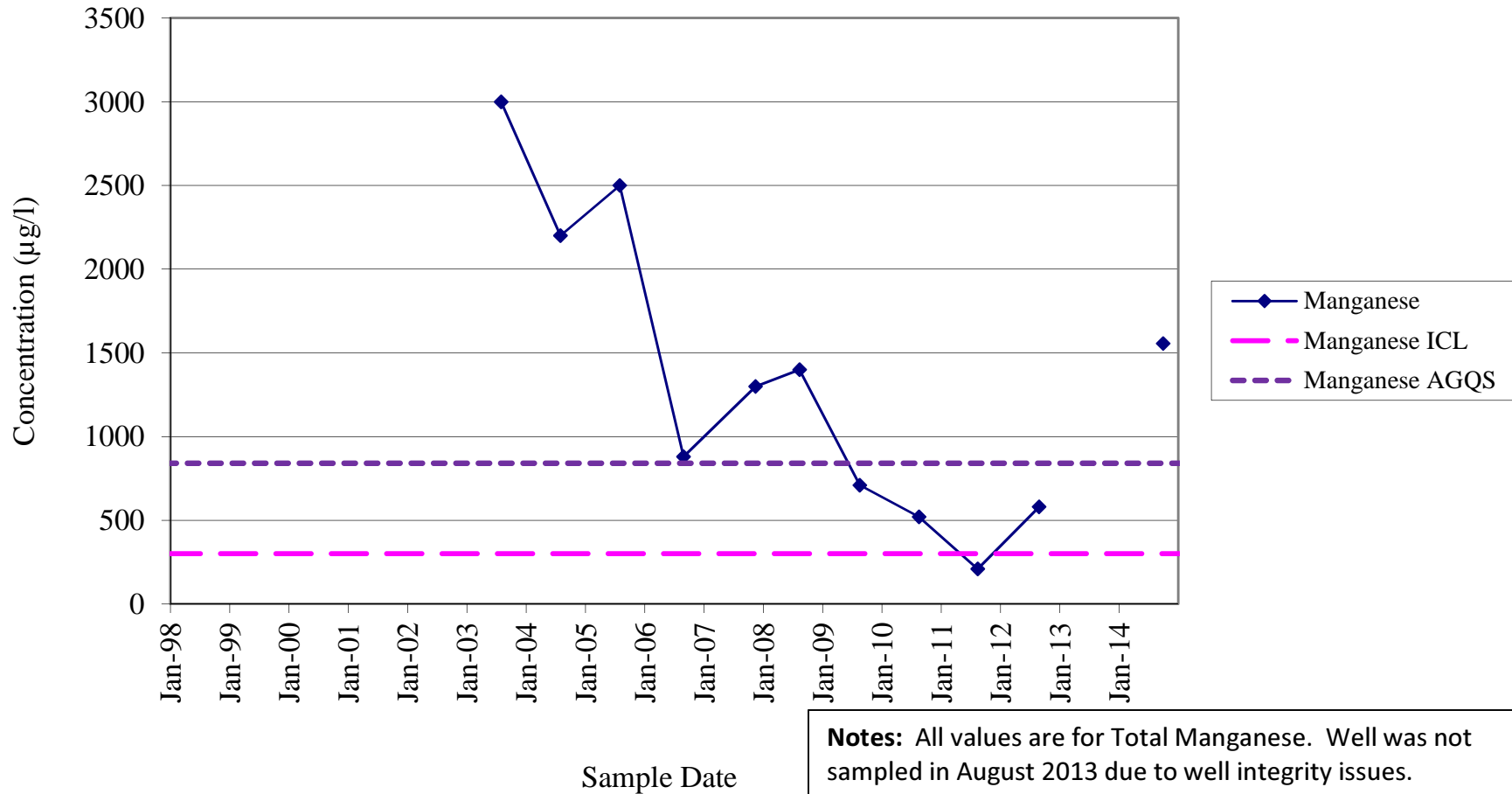
Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



Notes: All values are for Total Arsenic. Well was not sampled in August 2013 due to well integrity issues. Interval samples were collected in September 2014 and the average value was used to prepare this plot.

FPC-11B

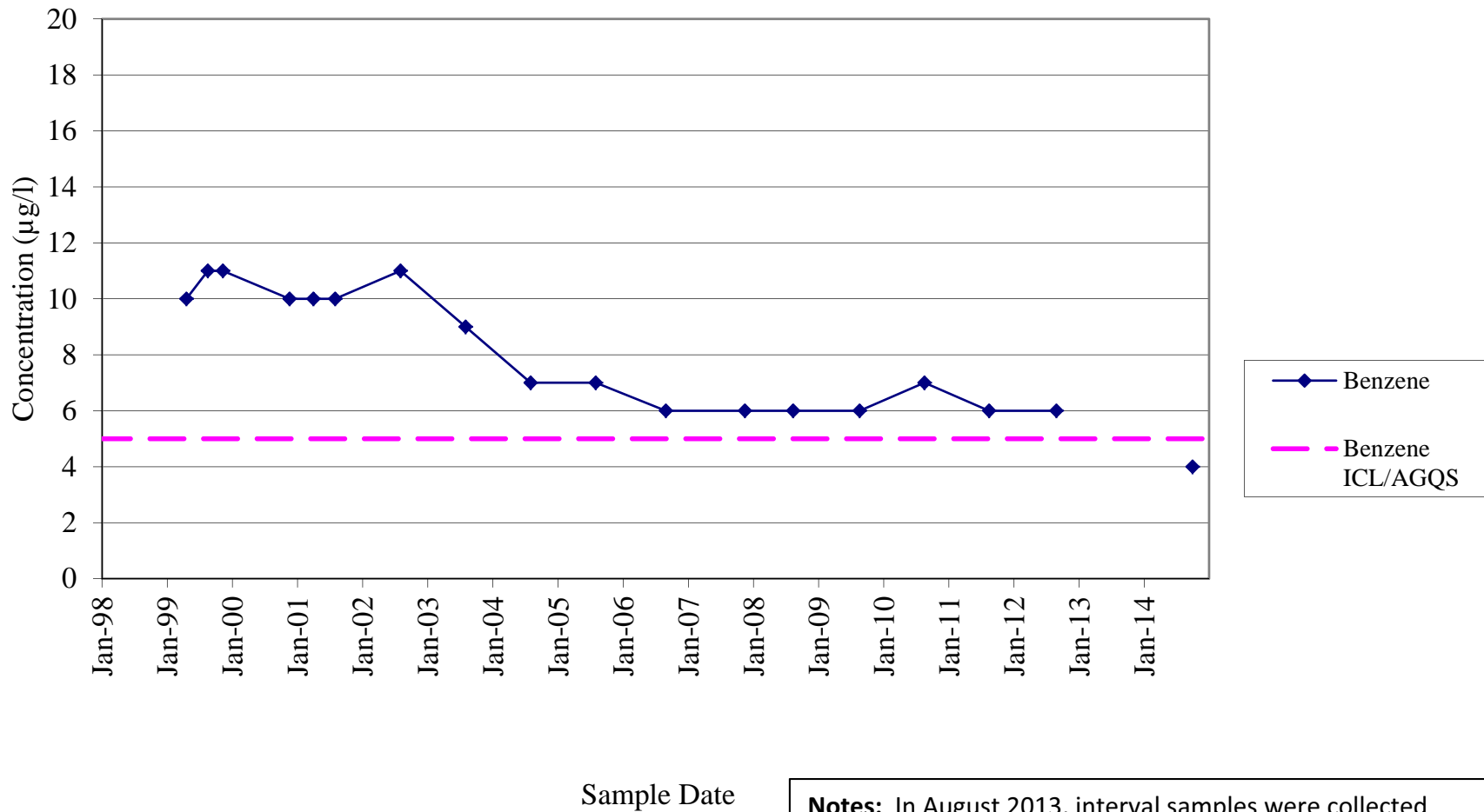
Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



Notes: All values are for Total Manganese. Well was not sampled in August 2013 due to well integrity issues. Interval samples were collected in September 2014 and the average value was used to prepare this plot.

GZ-105

Benzene Concentrations vs. Time
Coakley Landfill, North Hampton, NH



Notes: In August 2013, interval samples were collected and benzene was not included on the paramter list.



**DES Waste Management Division
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095**

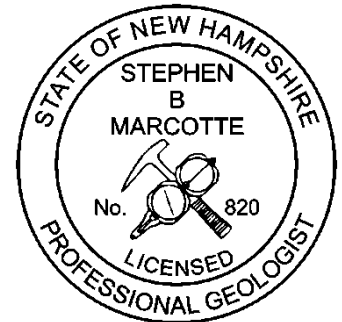
**FEBRUARY 2014 DATA TRANSMITTAL
Coakley Landfill
Breakfast Hill Road
North Hampton, NH**

**NHDES Site #: 198712001
Project Type: CERCLA
Project Number: 431
EPA ID# NHD064424153**

**Prepared For:
Coakley Landfill Group
1 Junkins Avenue
Portsmouth, NH 03801
Phone Number: (603) 610-7215
RP Contact Name: Mr. Peter Britz
plbritz@cityofportsmouth.com**

**Prepared By:
Summit Environmental Consultants/CES, Inc.
640 Main Street
Lewiston, ME 04240
Phone Number: (207) 795-6009**

**Contact Names: Stephen B. Marcotte, PG and Michael A. Deyling, PG
Contact Email: smarcotte@ces-maine.com**



Date of Report: April 25, 2014

Groundwater Monitoring Report Cover Sheet

Site Name: Coakley Landfill

Town: North Hampton

Permit #: GWP-198712001-N-002

Type of Submittal (*Check all that apply*)

☐ Periodic Summary Report (*year*):

☒ Data Submittal (*month and year per Condition #7 of Permit*): February 2014

Check each box where the answer to any of the following questions is "YES"

Sampling Results

☒ During the most recent monitoring event, were any new compounds detected at any sampling point?

Well/Compound: Manganese was analyzed at sampling locations R-3 and 339BHR for the first time. Results for both wells met AGQS.

☒ Are there any detections of contamination in drinking water that is untreated prior to use?

Well/Compound: R-3/339BHR (1,4-dioxane) – concentrations do not exceed AGQS.

☐ Do compounds detected exceed AGQS?

☐ Was free product detected for the first time in any monitoring point?

☐ Surface Water (*visible sheen*)

☐ Groundwater (*1/8" or greater thickness*)

Location/Thickness:

Contaminant Trends

☐ Do sampling results show an increasing concentration trend in any source area monitoring well?

Well/Compound:

☐ Do sampling results indicate an AGQS violation in any of the GMZ boundary wells?

Well/Compound:

Recommendations

☐ Does the report include any recommendations requiring DES action? (*Do not check this box if the only recommendation is to continue with existing permit conditions.*)

**FEBRUARY 2014 DATA TRANSMITTAL REPORT
GROUNDWATER MANAGEMENT PERMIT
COAKLEY LANDFILL – NORTH HAMPTON, NEW HAMPSHIRE
NHDES SITE #198712001**

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**FEBRUARY 2014 DATA TRANSMITTAL REPORT
GROUNDWATER MANAGEMENT PERMIT
COAKLEY LANDFILL – NORTH HAMPTON, NEW HAMPSHIRE
NHDES SITE #198712001**

1.0 INTRODUCTION

On behalf of the Coakley Landfill Group (CLG), Summit Environmental Consultants, a CES, Inc. company (Summit/CES) conducted the February 2014 Environmental Monitoring Plan sampling event at the closed Coakley Landfill located in North Hampton, New Hampshire. A locus map showing the Site and vicinity is presented at Figure 1.

Summit conducted the monitoring event in accordance with the Project Operations Plan (POP) and Environmental Monitoring Plan (EMP) Revision 1.0, dated April 2010 prepared by Golder Associates, Inc.; the Addendum to the EMP (July 2013 Revision 2.0) prepared by Summit, dated September 17, 2013; and the New Hampshire Department of Environmental Services (NHDES) Groundwater Management Permit (GMP, GWP-198712001-N-002), dated January 7, 2014.

Summit performed the field sampling work and reporting, and Eastern Analytical, Inc. (EAI) of Concord, New Hampshire performed the laboratory analyses. The monitoring program for the Site is currently managed by Summit.

This report provides an overview of the sample collection and analyses conducted for the February 2014 monitoring event. The information presented in this report includes: sampling locations, sample collection protocols, quality assurance/quality control (QA/QC) procedures, summary of analytical results, and conclusions and recommendations.

2.0 SAMPLE COLLECTION

The NHDES GMP requires the collection of water quality samples in February (and August) of each calendar year at two off-site water supply wells (R-3 and 339BHR). A Site Plan showing sampling locations is included as Figure 2.

Water quality samples from off-site water supply wells were collected in accordance with SOP #6 Sampling Water Supply Wells included in the Addendum to the EMP (July 2013 Revision 2.0). Samples were collected on February 27, 2014 and submitted to EAI for analysis of 1,4-dioxane, volatile organic compounds (VOCs), total arsenic and total manganese.

2.1 Field Parameter Monitoring

Field parameter water quality meters were calibrated in accordance with SOP #2 Calibration of YSI and Hach Field Instruments included in the Addendum to the EMP (July 2013 Revision 2.0). Summit measured field parameters including pH, Oxidation Reduction Potential (ORP), Temperature, Specific Conductance, and Dissolved Oxygen using a YSI-600XL water quality meter with a 250 milliliter closed flow-through cell and turbidity using a Hach 2100Q turbidimeter. The meters were calibrated in the office prior to the field sampling event. In

addition, the meters were calibrated in the field prior to sampling, and a post-sampling check was completed at the end of sampling.

Equipment calibration logs are included in Appendix A.

Field parameter measurements are presented in Table 1 (Off-Site Water Supply Wells).

2.2 Quality Assurance / Quality Control (QA/QC) Samples

The Quality Assurance / Quality Control (QA/QC) sampling requirements are summarized in Table 2-2 of the Addendum to the EMP (July 2013 Revision 2.0). QA/QC samples collected during the February 2014 sampling event are summarized below.

- One Field Duplicate sample was collected at off-site water supply well R-3.
- Trip Blanks for VOCs and 1,4-dioxane were included in the cooler submitted to EAI.
- One Equipment Blank/Field Blank pair was collected for the brass water supply well sampling apparatus prior to sampling of water supply wells.

Results of QA/QC samples are discussed in Section 3.1 of this report.

3.0 QUALITY ASSURANCE/QUALITY CONTROL RESULTS

A component of the EMP is the implementation of a QA/QC program, including both field and office elements. Field QA/QC activities were conducted to verify that sample collection, handling, and storage methods are adequate to ensure sample integrity. Office QA/QC activities focus on the data evaluation to assess whether the laboratory data are complete and representative of site conditions.

The data quality objectives and associated validation requirements are specified in the EMP and include:

- Identification of parameters present in associated blanks (i.e., trip blanks, method blanks, etc.);
- Evaluation of the data reproducibility by calculating the relative percent difference (RPD) for duplicate samples that meet specific criteria;
- Verification that the chain-of-custody for each sample is continuous and that the laboratory analyzed the samples for the specified parameters; and
- Completion of a US EPA Region I Tier 1 Data Validation to evaluate the laboratory reports for completeness, assess the results of Performance Evaluation samples analyzed with field samples, and confirm that all sample tests were performed within method holding times.

Results of the QA/QC activities are presented in Sections 3.1 and 3.2.

3.1 Field QA/QC Activities

3.1.1 Trip Blanks

Trip Blanks for volatile organic compounds (VOCs) and 1,4-dioxane were included in the cooler containing sampling containers and submitted to EAI. Trip Blanks were submitted for analysis of VOCs and 1,4-dioxane. EAI did not detect concentrations of VOCs or 1,4-dioxane above the laboratory reporting limits in Trip Blanks submitted for the February 2014 sampling event.

3.1.2 Equipment Blanks and Field Blanks

Summit collected an Equipment/Field Blank pair for the brass water supply well sampling apparatus. The Equipment/Field Blank pair was submitted for analysis of VOCs, 1,4-dioxane, total arsenic, and total manganese. EAI reported all parameters as Not Detected above laboratory detection limit.

3.1.3 Field Sampling Data Review

The field sampling sheet included in Appendix A was reviewed for completeness and adherence to sampling SOPs included in Addendum to the EMP (July 2013 Revision 2.0). Field sampling data show that objectives were met at sampling points, with the following exceptions:

- The conductivity meter functioned correctly when calibrated in the field, however, the meter did not function correctly during field parameter monitoring; therefore, conductivity results were not recorded. The post sampling calibration check for conductivity failed. As a result, the conductivity data were flagged as “Not Reported, NR” on Table 1 (Off-Site Water Supply Wells). Subsequent discussions with the equipment rental company indicate the conductivity probe appeared to function normally upon return of the meter after the sampling event; therefore, the poor meter performance in the field was most likely due to the cold field conditions during sampling (15 F) or an intermittent wiring connection problem.

3.1.4 Other Field QA/QC Issues

There were no other field QA/QC issues during completion of the February 2014 sampling event.

3.2 Office QA/QC activities

Office QA/QC activities, as required by the EMP, include verification of chain-of-custody protocols and sample holding times, verification that all field and laboratory analyses were completed, and completion of a Tier I validation of the laboratory reports in accordance with the USEPA’s Region I Data Validation Functional Guidelines (Revised December 1996).

3.2.1 Chain-of-Custody Forms

Summit reviewed the chain-of-custody forms for completeness and/or lapses in custody. Summit found the forms to be complete and did not identify any lapses in chain-of-custody protocol. EAI received each sample cooler within the temperature of +1.0°C.

3.2.2 Omitted Field and Laboratory Analyses

Summit reviewed field sampling sheets and EAI laboratory reports and found that the required field parameters were collected and the required laboratory analyses for each of the samples collected were completed, with the exception of conductivity, as noted in Section 3.1.3.

3.2.3 Tier I Data Validation

Quality Assurance Associates, LLC (QAA) of College Station, Texas, performed a Tier I validation of the EAI laboratory reports under contract to Summit and in accordance with the USEPA's Region I Data Validation Functional Guidelines (Revised December 1996). QAA evaluated the laboratory reports for completeness, assessed the results of Performance Evaluation samples analyzed with field samples, and verified that all sample tests were performed within method holding times. The Tier I Data Validation summary reports are provided in Appendix C.

The Tier I Data Validation completed by QAA found that the laboratory reports were complete and no analytical data qualifications are warranted.

3.2.4 Field Duplicates

An original and a duplicate sample were collected at water supply well R-3. Table 2 presents the relative percent differences (RPDs) for parameter concentrations detected in the original and duplicate samples. RPDs met measurement performance criteria listed in Table 6-1 of the Coakley Landfill Superfund Site Quality Assurance Project Plan (Golder Associates, Inc., April 2010).

The consistency of parameter concentration values between original and duplicate samples for the parameters analyzed shows that field sampling procedures, and laboratory procedures and analyses produced reproducible values.

3.2.5 Matrix Spike/Matrix Spike Duplicates

Matrix Spike and Matrix Spike Duplicate (MS/MSD) samples were not required to be collected.

4.2 Groundwater Analytical Results

Analytical results for the February 2014 semi-annual sampling event and historical results dating back to January 2008 for water supply wells R-3 and 339BHR are provided in Table 1.

Consistent with previous results, 1,4-dioxane was the only VOC detected at water supply wells R-3 and 339BHR. 1,4-dioxane concentrations ranged from 0.41 micrograms per liter (ug/L) at R-3 to 0.63 ug/L at well 339BHR. 1,4-dioxane concentrations reported at R-3 and 339BHR for the February 2014 sampling event are similar to previous results.

Total arsenic and total manganese analyses were completed at water supply wells for the first time in February 2014. Total arsenic at R-3 and BHR339 was reported as Not Detected above the laboratory detection limit (1 ug/L). Total manganese at R-3 and BHR339 was reported at 140 ug/L and 250 ug/L, respectively.

Results indicate the concentration of arsenic and manganese at both wells is well below NHDES Ambient Groundwater Quality Standards (AGQSS) and the site-specific EPA Interim Cleanup Levels (ICLs). Results indicate the concentration of 1,4-dioxane at both wells is below the NHDES AGQS. No groundwater regulatory threshold exceedances at monitoring points were reported.

5.0 CONCLUSIONS AND RECOMMENDATIONS:

Water quality at the two water supply wells (R-3 and 339BHR) sampled during the February 2014 semi-annual long-term monitoring event is consistent with historical data at these monitoring points. Total arsenic and total manganese analyses were completed at water supply wells for the first time in February 2014. Results indicate that concentration of arsenic and manganese are well below applicable NHDES AGQS and the site-specific EPA ICLs. The concentration of 1,4-dioxane reported at both wells continues to be below the NHDES AGQS.

Based on a review of analytical results for the February 2014 semi-annual sampling event, no changes to the long-term monitoring plan are warranted. The next semi-annual sampling event is planned for August 2014.

FIGURES

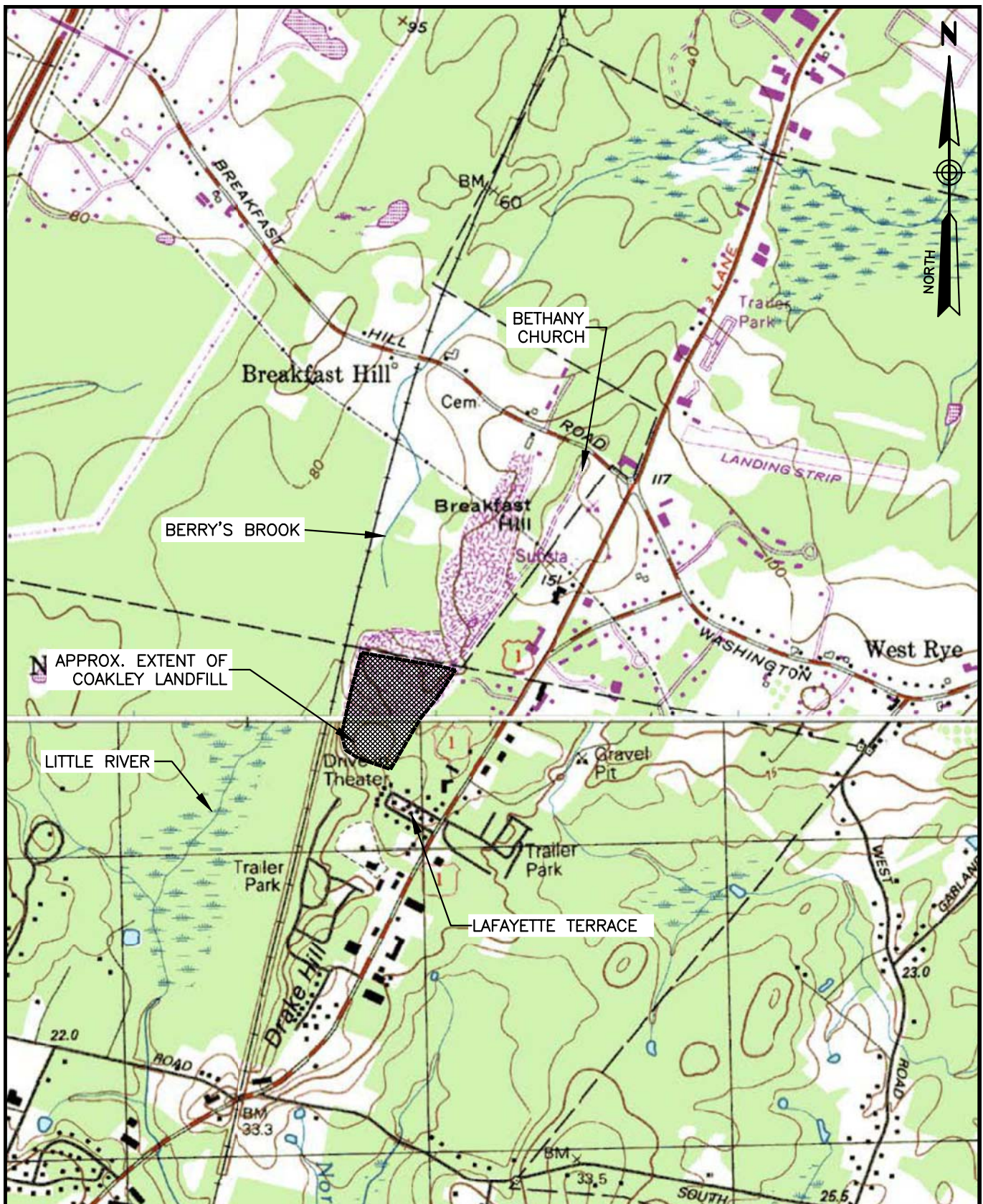


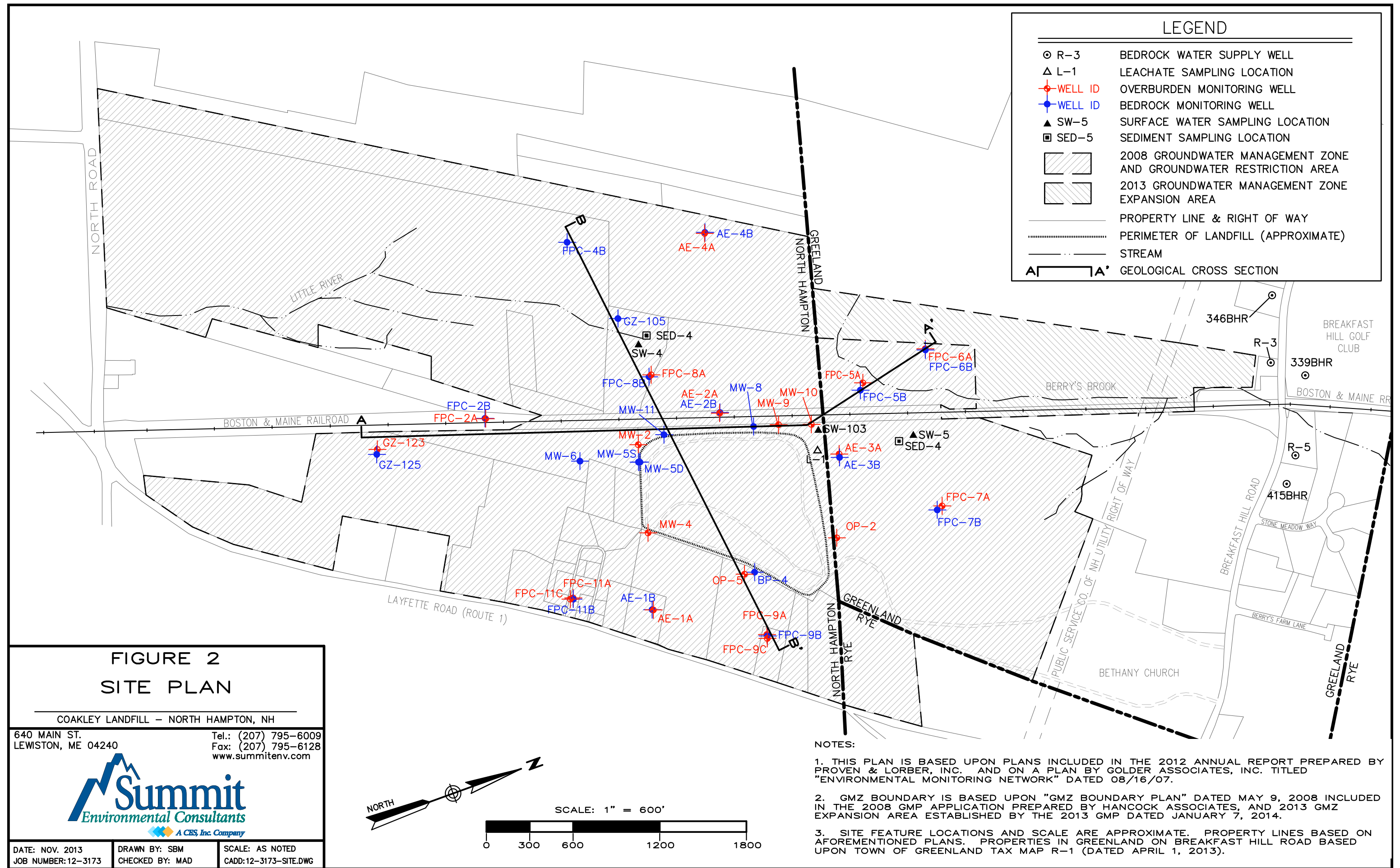
FIGURE 1
SITE LOCATION MAP
 COAKLEY LANDFILL – NORTH HAMPTON, NH
 PREPARED FOR
THE COAKLEY LANDFILL GROUP



DATE: JAN. 2014	DRAWN BY: SBM	CHECKED BY: MAD
JOB: 12-3173	1" = 1,500 FEET	FILE: 12-3173FIG1

640 MAIN ST.
 LEWISTON, MAINE 04240

Tel.: (207) 795-6009
 Fax: (207) 795-6128



TABLES

TABLE 1
Summary of Analytical Results for Off-Site Water Supply Wells
February 2014 Data Transmittal Report
Coakley Landfill - North Hampton, New Hampshire

SAMPLE IDENTIFICATION	R-3	R-3	R-3	R-3	R-3	R-3	R-3	R-3-DUP	R-3	R-3-DUP	R-3	R-3-DUP
DATE SAMPLED	24-Jan-08	13-Aug-08	19-Aug-09	17-Aug-10	18-Aug-11	30-Aug-12	26-Mar-13	26-Mar-13	16-Aug-13	16-Aug-13	27-Feb-14	27-Feb-14
VOLATILE ORGANIC COMPOUNDS												
Methyl tert-butyl ether (ug/L)	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	<0.5	<0.5	<0.5	<0.5
1,4-dioxane (ug/L)	NA	NA	NA	NA	NA	0.40	0.45	0.26	0.45	0.41	0.41	0.42
METALS												
Arsenic, total (ug/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1	< 1
Manganese, total (ug/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	130	140
FIELD PARAMETERS												
Temperature (degrees Celcius)	13.51	12.51	11.38	12.58	12.62	12.73	NM	NM	13	13	8	8
pH (standard units)	5.63	5.85	7.92	7.14	8.08	8.54	NM	NM	7	7	7.9	7.9
Conductivity (uS/cm)	316	423	452	443	238	466	NM	NM	414	414	NA	NR
Dissolved Oxygen (mg/L)	4.16	3.72	4.64	2.19	4.65	4.98	NM	NM	<0.5	<0.5	<0.5	<0.5
Turbidity (NTU)	2.0	15.4	2.2	0.5	1.04	0.70	NM	NM	6	6	<5	<5
Oxidation/Reduction Potential (mV)	157	95	-122	-35	-164.5	22.5	NM	NM	-224	-224	-143	-143

SAMPLE IDENTIFICATION	339BHR	339BHR	339BHR
DATE SAMPLED	29-Apr-13	16-Aug-13	27-Feb-14
VOLATILE ORGANIC COMPOUNDS			
Methyl tert-butyl ether (ug/L)	NA	<0.5	<0.5
1,4-dioxane (ug/L)	0.38	0.42	0.63
METALS			
Arsenic, total (ug/L)	NA	NA	< 1
Manganese, total (ug/L)	NA	NA	250
FIELD PARAMETERS			
Temperature (degrees Celcius)	NM	NM	11
pH (standard units)	NM	NM	7.1
Conductivity (uS/cm)	NM	NM	NR
Dissolved Oxygen (mg/L)	NM	NM	0.7
Turbidity (NTU)	NM	NM	35
Oxidation/Reduction Potential (mV)	NM	NM	-22

TABLE NOTES:

1. Field parameter measurements prior to Aug. 2013 were not collected with a flow cell directly connected to the sampling tap; therefore, dissolved oxygen and oxidation reduction potential measurements may be biased high due to exposure to the atmosphere.
2. Only analytes detected in one or more groundwater samples at water supply wells are listed in this table
3. The NHDES Ambient Groundwater Quality Standard for 1,4-dioxane is 3 ug/L. The EPA has not established an Interim Cleanup Level for 1,4-dioxane
4. The NHDES Ambient Groundwater Quality Standards for arsenic and manganese are 10 ug/L and 840 ug/L, respectively

TABLE ABBREVIATIONS:

NA = Not Analyzed

NM = Not Measured

NR = Not Reported due to failure of post-calibration check

uS/cm = microsiemens per centimeter

ug/L = micrograms per liter (parts per billion)

mg/L = milligrams per liter (parts per million)

NTU - Nephelometric Turbidity Units

mV = millivolts

< = parameter concentration below detection limit indicated

R-3-DUP = duplicate sample collected at R-3

Table 2
Duplicate Sample Comparison
February 2014 Data Transmittal Report
Coakley Landfill - North Hampton, New Hampshire

R-3 Samples Collected February 27, 2014 Water Supply Well Method Duplicate Sample	Sample Identification in Lab Report				
	DW-R-3-0214		DW-R-3-DUP-0214		
	Lab Sample ID: 129224.04		Lab Sample ID: 129224.05		
Analyte	Result (ug/L)	Reporting Limit (ug/L)	Result (ug/L)	Reporting Limit (ug/L)	Relative % Difference
Metals					
Arsenic, total	BDL	1	BDL	1	Not Applicable
Manganese, total	130	5	140	5	7%
Volatile Organic Compounds (Detections only)					
1,4-Dioxane	0.41	0.25	0.42	0.25	2%

Notes:

1. All values in micrograms per liter (ug/L)
2. Relative % difference (RPD) is calculated by dividing the absolute value of the difference between the two values by the average of the two values factor listed.
3. BDL = below detection/reporting limit