

**DES Waste Management Division
29 Hazen Drive; PO Box 95
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**DRAFT 2016 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:
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Date of Report: August 19, 2016

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*): 2016 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) – concentrations are below Ambient Groundwater Quality Standards and consistent with historical results at both wells.

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.*)

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



**DRAFT 2016 ANNUAL SUMMARY REPORT
GROUNDWATER MANAGEMENT PERMIT**

Coakley Landfill
North Hampton, New Hampshire
NHDES Site #198712001

FOR

Coakley Landfill Group
1 Junkins Avenue
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**August 23, 2016
JN: 10424.008**

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Engineers ♦ Environmental Scientists ♦ Surveyors

August 23, 2016

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

**Re: DRAFT 2016 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 2016 Annual Summary Report describing long-term environmental monitoring activities completed at the closed Coakley Landfill (the Site) in 2016. [Note that at the request of the US EPA, the Annual sampling event for 2016 was moved from the normal August/September timeframe to May/June in order to incorporate analytical results into EPA's Five-Year Review being conducted in 2016.] This report has been prepared to meet the requirements of the September 2015 Sampling and Analysis Plan prepared by CES, which incorporated requirements contained in the New Hampshire Department of Environmental Services (NHDES) Groundwater Management Permit (GMP, GWP-198712001-N-002) and revised Cleanup Levels established in the Fifth Explanation of Significant Differences dated August 4, 2015.

Environmental monitoring results for the 2016 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. The compounds and locations that exceeded the regulatory thresholds during the 2016 long-term monitoring events are similar to historical monitoring events. Compounds reported at concentrations equaling or exceeding regulatory thresholds in one or more wells were limited to arsenic, manganese, tert-butyl alcohol, tetrahydrofuran, 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. Consistent with previous sampling events and historical data, 1,4-dioxane was not detected in water supply wells 415BHR and 346BHR. Manganese exceeded the EPA CL of 0.3 ug/L at 339BHR during the March (0.41 ug/L) and May/June 2016 (0.31 J ug/L) sampling events, but was well below the AGQS (0.84 ug/L).

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

CES, Inc.

Suzanne Yerina, P.G.
Project Geologist

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

SLY/MAD/jna
Attachments

cc: Peter Britz, Coakley Landfill Group
Gerardo Millan-Ramos, EPA
Andrew Hoffman via NHDES - One Stop

Groundwater Management Permits Coordinator | 01.15.16 | 10424.005-01

**2016 ANNUAL SUMMARY REPORT
GROUNDWATER MANAGEMENT PERMIT
COAKLEY LANDFILL – NORTH HAMPTON, NEW HAMPSHIRE
NHDES SITE #198712001**

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**2016 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 2016 Annual environmental monitoring event at the closed Coakley Landfill located in North Hampton, New Hampshire. [Note that at the request of the US EPA, the Annual sampling event for 2016 was moved from the normal August/September timeframe to May/June in order to incorporate analytical results into EPA's Five-Year Review being conducted in 2016.] CES conducted the monitoring event in accordance with the September 2015 Sampling and Analysis Plan (SAP) prepared by CES.

CES performed the field sampling work and reporting, Eastern Analytical, Inc. (EAI) of Concord, New Hampshire performed the laboratory analyses, and TerraNova Environmental of Rye, New Hampshire 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 to 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 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 September 2015 SAP (CES, 2015a)

The New Hampshire Department of Environmental Services (NHDES) issued 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. The renewed GMP (“the 2014 GMP”) requires that groundwater in the GMZ be monitored at specific locations, and that the results be compared to NHDES Ambient Groundwater Quality Standards (AGQSS), some of which are different than EPA’s site-specific standards (Cleanup Levels [CLs] and Primary Drinking Water Standard Maximum Contaminant Levels [MCLs]). This report considers both EPA-established CLs/MCLs and NHDES AGQSSs.

Interim Cleanup Levels (ICLs) for contaminants of concern were established in the Record of Decision (ROD) for groundwater and subsequently modified in several Explanation of Significant Differences (ESDs). The Fifth ESD issued in August 2015 formally changed the ICLs to Cleanup Levels (CLs) and established a CL for 1,4-dioxane.

Two off-site water supply wells (R-3 and 339BHR) were sampled in March and May/June 2016 in accordance with the 2014 GMP (a semiannual requirement which was incorporated into the September 2015 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). Results for the March 2016 sampling event were previously transmitted to the agencies, and a copy of the report is included as Appendix A. Results of the May/June 2016 event are described in this report.

This report provides an overview of the sample collection and analyses conducted for the May/June 2016 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 CL/AGQS exceedances, discussion of historical trends, and conclusions and recommendations.

The constituents of concern (COCs) and associated NHDES-established AGQS and EPA-established CLs are summarized in the table below; status updates for the COCs are provided in Section 5.5.

Constituents of Concern and Associated Cleanup Criteria			
PARAMETER	Chemical Abstract Service Registry Number (CAS No.)	NHDES Ambient Groundwater Quality Standard (AGQSS) ¹	EPA Cleanup Levels (CLs) ¹
Benzene	71-43-2	5	5
Chlorobenzene (Monochlorobenzene)	108-90-7	100	100
Tetrachloroethene (PCE, Tetrachloroethylene)	127-18-4	5	3.5
Tetrahydrofuran (THF)	109-99-9	600	154
1,2-Dichloropropane	78-87-5	5	5
2-Butanone (MEK, Methyl Ethyl Ketone)	78-93-3	4,000	200
Diethyl phthalate	84-66-2	--	2,800
Trans-1,2-dichloroethene (trans DCE)	156-60-5	100	100
Phenol	108-95-2	4,000	280
1,4-dioxane	123-91-1	3	3
Tertiary butyl alcohol (TBA, tert-butyl alcohol)	75-65-0	40	--
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:

1. Units in micrograms per liter (ug/L, parts per billion)

SECTION 2 | SAMPLE COLLECTION

The September 2015 SAP requires annual sampling and analysis 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 eight 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 3-9). Sampling locations are identified on Figure 2.

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 September 2015 SAP requires measurement of well depths during the sampling event *prior* to EPA 5-Year Reviews. Well depths were measured and reported in the 2015 Annual Report and will be measured again in 2020.

2.3 Well Integrity Inspection

CES completed a well integrity inspection during the May/June 2016 sampling event and copies of the well integrity field sheets are included in Appendix B. CES did not identify any new issues during the well integrity inspection that require corrective actions. FPC-5A was previously identified as having well integrity issues and is scheduled to be replaced pending resolution of offsite access issues (discussed below).

2.4 Field Parameter Monitoring

Field parameter water quality meters were calibrated in accordance with SOP-8 (*Calibration of YSI and Hach Field Instruments*) included in the September 2015 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 3 (Off-Site Water Supply Wells), Table 4 (Surface Water), and Table 6 (Leachate).

2.5 Groundwater Sample Collection

The September 2015 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.

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 May/June 2016 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.
- ◆ Well FPC-5A was not sampled due to well integrity issues. CLG was unable to obtain an access agreement to replace FPC-5A prior to the May/June 2016 sampling event.

Groundwater samples were collected in accordance with the site-specific Standard Operating Procedures (SOPs) listed in the September 2015 SAP. The sampling methodology used at each sampling location is listed in Appendix B (SAP Tables 3-5

through 3-7). Methodologies used for collection of groundwater samples are summarized below:

- ◆ Twenty-eight (28) monitoring wells were sampled with a peristaltic pump using a low-flow sampling methodology (*SOP-4 Low Flow Sampling Using a Peristaltic Pump*);
- ◆ 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-6 Drinking Water Supply Well Sampling Procedures*.

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 parameters identified in Appendix B (SAP Tables 3-5 through 3-7). Copies of groundwater sample collection logs are included in Appendix C.

In the 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. As discussed in the SAP, this practice was modified beginning in 2014 to analyze for and report dissolved (i.e., filtered) metal results for overburden groundwater to remove potential high bias in the results due to high turbidity resulting from entrained sediment in the samples and total (non-filtered) metals results for bedrock groundwater that represent conditions similar to bedrock water supply wells (open borehole non-filtered supplies). 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) and Table 3 (Off-Site Water Supply Wells).

2.6 Surface Water and Sediment Sample Collection

On June 1 and 2, 2016, sediment samples were collected at SED-4 and SED-5, and surface water samples were collected at SW-5 and SW-103. In addition, duplicate samples were collected at SW-5 and SED-5 for quality control purposes. Similar to previous Annual monitoring events, a sample was not collected at surface water sampling location SW-4 due to insufficient water. Samples were collected in accordance with *SOP-5 Surface Water, Leachate and Sediment Sampling Procedures*.

A Sampling Worksheet summarizing 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, Tables 3-8 and 3-9).

A limited surface water and sediment monitoring program is undertaken in part to assess the effectiveness of the cover system in eliminating erosion and transport of impacted sediments, as well as to evaluate potential toxicity to ecological receptors. 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-4/SED-4. The leaf litter was removed and the underlying organic soils were sampled. A surface water sample was not collected due to insufficient water.

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 and grasses. The ground in the area of SW-5/SED-5 is covered by a thick layer of partially decomposed phragmites. Channelization or ponded water was not observed in the area of 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 – this is the same location where SW-5/SED-5 were collected in the 2014 and 2015 Annual sampling events. 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 predominantly of organic materials; however, some of the underlying clay was incorporated into the samples. Samples SW-5 and SED-5 were collected from this location.

SW-103

SW-103 is located in a dense phragmites stand where no evidence of channelization or the deposition of mineral sediment was observed. An area of ponded water was observed in the vicinity of SW-103 and sampled on June 1, 2016.

Analytical laboratory results are presented in Table 4 (Surface Water – SW-5 and SW-103) and Table 5 (Sediment SED-4 and SED-5).

2.7 Leachate Seep Sample Collection

On June 1, 2016, CES collected a sample at leachate sampling point L-1. Samples were collected in accordance with *SOP-5 Surface Water, Leachate and Sediment Sampling Procedures*.

A Sampling Worksheet summarizing field parameter measurements, along with photographic documentation of the conditions at L-1 is provided in Appendix C.

The leachate sample was 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).

Analytical laboratory results are presented in Table 6 (Leachate – L-1).

It is important to note that the landfill does not have a leachate collection system, and “leachate” samples collected at L-1 are more representative of shallow overburden groundwater discharging to an impounded wetland area on the northwestern margin of the landfill. Nonetheless, the cover system installed as part of the Site remedy is aimed at reducing the generation of leachate and subsequent infiltration of water and leachate to underlying groundwater. As a result, leachate sample data can be used in conjunction with other Site data to evaluate the progress of the natural Attenuation remedy.

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 May/June 2016 sampling event are summarized below.

- ◆ Field Duplicate samples were collected at three monitoring wells (MW-4, AE-3A, and GZ-105), water supply well R-3, surface water sampling location SW-5, sediment sampling location SED-5, and leachate sampling location L-1.
- ◆ Additional aliquots for Matrix Spike and Matrix Spike Duplicate analyses were collected at two groundwater monitoring wells (MW-8 and AE-3A), at surface water sampling location SW-5, and leachate sampling location L-1.
- ◆ 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 May/June 2016 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 in-line 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 of 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; and
- ◆ 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 fifteen Trip Blanks were analyzed for VOCs, including five using EPA

Method 8260B, two using EPA Method 524, and eight were analyzed for 1,4-dioxane. EAI did not detect concentrations of VOCs or 1,4-dioxane above the laboratory reporting limits in any Trip Blanks submitted during the May/June 2016 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 sheets were found to be compliant with the SOPs.

3.1.4 Other Field QA/QC Issues

No other Field QA/QA issues were identified during completion of the May/June 2016 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.

Analytical laboratory reports associated with the May/June 2016 sampling event are provided in Appendix D.

3.2.1 Chain-of-Custody Forms

CES and TerraNova reviewed the chain-of-custody forms for completeness and 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 chain of custody for L-L-1 and L-L-1 Dup requested that samples be analyzed for GW metals instead of the intended TAL metals, which includes a longer list of metals. Ms. Suzanne Yerina of CES called EAI when the issue was identified and requested that the samples be analyzed for the TAL metals. Samples were analyzed within the required holding time.

Corrective Action

CES will review Chains of custody prior to sample shipment to verify that the correct parameter list is requested/recorded for each sample.

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 one exception. As noted above, samples L-L-1 and L-L-1 Dup were initially analyzed for the list of GW metals instead of TAL metals.

3.2.3 Tier I Data Validation

TerraNova Environmental (TerraNova) of Rye, New Hampshire, 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).

TerraNova 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 TerraNova'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:

- ◆ Concentrations for 1,3-dichlorobenzene and 1,4-dichlorobenzene for field duplicate pairs GW-AE-3A/GW-AE-3A-DUP, GW-GZ-105/GW-GZ-105-DUP, and L-L-1/L-L-1-DUP were qualified with a "J" for detections or "UJ" for non-detects based on relative percent differences (RPDs) reported greater than NFG-O criteria for field duplicate samples.
- ◆ Concentrations of 2,2-dichloropropane for select samples were qualified with a "J" for detections or "UJ" for non-detects due to the potential for low level bias indicated by LCS/LCSD recoveries below NFG-O criteria (75-125%), therefore the potential for false non-detections exists for these select samples.
- ◆ Concentrations of tetrahydrofuran in select samples were qualified as "J+" for detections due to the potential for high level bias indicated by MS/MSD recoveries outside the NFG-O criteria of 75-125%.
- ◆ Concentrations for tetrahydrofuran in select samples were qualified with a "J-" for detections and "UJ" for non-detects due to the potential for low level bias and possible false non-detections indicated by low MS/MSD recoveries outside the NFG-O criteria of 75-125%.
- ◆ Non-detect results for 2,2-dichloropropane, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene for select samples were qualified with "UJ" due to continuing calibration results.
- ◆ Selenium concentrations for SW-SW-5 and SW-SW-5-DUP are qualified with a "J" due to relative percent differences low and outside of applicable criteria.
- ◆ The sodium concentration in each parent sample used for MS/MSDs was more than four times greater than the spike concentration. Additionally, the parent concentration for calcium for one MS/MSD spike was also greater than four times the spike concentration. In most cases the MS/MSD recoveries indicated low bias and were qualified as "J" for detections and "UJ" for non-detections.

- ◆ Nickel and copper detected in aqueous samples are qualified with “J” for approximate based on blank contamination detections.
- ◆ Silver results reported for L-L-1 and L-L-1-DUP are qualified with “UJ” indicating results could be biased low based upon pre-digestion spike results outside the NRG-I guidelines.
- ◆ Report completeness is 95%.
- ◆ Based on the information presented in this report, with the exception of the sediment data, data reported in this package are acceptable for use as qualified.

Systemic concerns identified during this Tier 1 Plus data review relate to sediment sample results for S-SED-5 and S-SED-5-DUP. Due to holding time exceedances for total solids, sediment sample metals data were qualified as “R” rejected. The total % solids by Method 2540G for S-SED-4 was reported as 17.5%. Therefore, metals results for this sample were qualified with “J” for detections and “UJ” for non-detects. Although the holding time for the % solids analysis were exceeded, analytical data for inorganic constituents (metals) is not likely to be significantly affected by the holding time exceedance. Based on a review of 2016 metal concentrations in the sediment sample compared to historical results, no unusual fluctuations in sediment data were observed.

No additional systemic problems were detected during the Tier 1 Plus data review of this data set completed by Terranova.

Corrective Actions:

Systemic problems with the results for solid samples S-SED-5 and S-SED-5-DUP were due to the samples being analyzed for % solids outside of the holding time. Discussion with the laboratory have confirmed that lab procedures identified the proper holding time and the error was administrative. Future sediment samples will be analyzed within the holding time identified in the laboratory procedures.

Sediment sample S-SED-4 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, off-site water supply well R-3, surface water sampling location SW-5, sediment sampling location SED-5, and leachate sampling location L-1 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 8 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 non-aqueous 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 1,4-dichlorobenzene (67%).
- ◆ R-3: All RPDs met the $\pm 30\%$ measurement performance criteria goal;
- ◆ SW-5: All RPDs met the $\pm 30\%$ measurement performance criteria goal, with the exception of dissolved selenium (67%); and
- ◆ L-1: 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 1,4-dichlorobenzene at GZ-105 and dissolved selenium at SW-5 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 1,4-dichlorobenzene at GZ-105 (1 and 2 ug/L) are well below the AGQS (75 ug/L). Reported concentrations of dissolved selenium at SW-5 (0.002 and 0.001 mg/L) are slightly above the chronic NHDES surface water standard (0.0005 mg/L). 1,4-dichlorobenzene for GZ-105 and dissolved selenium for SW-5 were qualified as “J” due to RPDs outside of applicable criteria.

Non-Aqueous Duplicate

- ◆ SED-5: RPDs met the $\pm 50\%$ measurement performance criteria goal, with the exception of total antimony (67%) and total mercury (67%).

The majority of non-aqueous parameter values for SED-5 (21 of the 23 analytes - 91%) met the $\pm 50\%$ measurement performance criteria goal. RPD measurement performance criteria exceedances for total antimony and total mercury 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. It should be noted that metals data for S-SED-5 and S-SED-5-DUP were qualified as rejected due to a severe holding time exceedance.

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, at surface water sampling location SW-5, and at leachate sampling location L-1. MS/MSD results were reviewed as part of the Tier 1 Plus data validation (Section 3.2.3).

Concentrations of tetrahydrofuran in select samples were qualified due to the potential for low or high level bias indicated by MS/MSD recoveries outside the NFG-O criteria of 75-125%. Groundwater samples collected from monitoring wells GZ-105, MW-5D, and MW-

8 were affected by this; however, MW-8 was the only sample that reported an exceedance of the CL (154 ug/L).

The sodium concentration for fifteen groundwater, one surface water, and one leachate sample as well as the calcium concentration for ten groundwater, one surface water, and one leachate sample were qualified as “J” for detections and “UJ” for non-detects due to low or high bias with the MS/MSD recovery. Neither sodium or calcium have state or federal standards for groundwater, surface water, or leachate.

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 May 23, 2016. Consistent with data generated during previous monitoring events, the following observations are 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 at the headwaters of Little River (to the south) and Berry’s Brook to the north are located.
- ◆ Bedrock and overburden groundwater elevations in the north/south 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, as they make their way down the flow path of 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.

4.2 Groundwater Analytical Results

Analytical results for groundwater monitoring wells sampled during the May/June 2016 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 3 (Off-site Water Supply Wells).

A historical summary of analytical results for contaminants of concern at groundwater monitoring points (monitoring wells and water supply wells) is provided in Table 9.

In general, parameter concentrations reported for samples collected during the May/June 2016 sampling event are similar to previous results. No new parameters were detected in Site groundwater. Refer to Section 5.3 for a discussion of groundwater regulatory threshold exceedances.

4.3 Surface Water Analytical Results

Surface water samples were collected at SW-5 and SW-103. Similar to previous Annual monitoring events, a sample at surface water sampling location SW-4 could not be collected due to insufficient water. Analytical results for SW-5 and SW-103 are summarized in Table 4. Results for samples collected on June 1, 2016, indicate that water quality meets NHDES Surface Water Standards for acute and chronic exposure scenarios, with the following exceptions:

- ◆ Iron at SW-5 exceeded the chronic standard of 1 mg/L. SW-5 is located in a wetland area that would result in reducing conditions due to decomposition of organic materials. As a result of these reducing conditions, soluble iron would be expected at relatively high concentrations. The elevated iron concentrations is thought to be a naturally occurring due to the nature of the sample location and is not attributable to iron migrating from the landfill
- ◆ Note that zinc, silver, and lead were reported as “less than” the reporting detection limit (RDL). The RDLs 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 4). Zinc, silver, and lead have not been reported at elevated concentrations in groundwater samples or identified as constituents of concern at the landfill. Therefore, surface water quality impacts from these constituents are not likely to be present or associated with the landfill.

4.4 Leachate Seep Analytical Results

A leachate seep sample was collected at location L-1. Analytical results for L-1 are summarized in Table 6. Results for the sample indicate that water quality meets NHDES Surface Water Standards for acute and chronic exposure scenarios, with the exception of iron, which exceeded the chronic standard of 1 mg/L, and ammonia, which exceeded the chronic standard of 5.91 mg/L and the acute standard of 36.2 mg/L. Both parameters have historically exceeded the chronic/acute standards.

4.5 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 5.

As previously discussed in Section 3.2.3 and 3.2.4, all detections for SED-04 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 5 indicates that percent solids less than 30% have been commonly reported in the past at SED-4 and SED-5.

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 lead and mercury. TEC exceedances were reported at SED-5 and at the SED-5 (duplicate) for arsenic, copper, and nickel. TEC exceedance for lead and mercury were reported at the SED-5 (duplicate) only. A review of historical data for SED-4 and SED-5 indicates that the TEC exceedances reported for 2016 were similar to previous years.

Sediment Evaluation for Toxicity

For the 2016 EPA 5-year review of sediment toxicity, CES performed consensus-based evaluation of sediment toxicity following the USEPA Technical Memorandum from Richard Sugatt to Gerado Millan-Ramos titled Approach for Evaluating Sediment at Coakley Landfill During 5-Year Review Periods dated June 29, 2011. The memorandum and the technical paper it was based on (Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems) are included in Appendix F.

In 2007 a sediment sample from location SED-05 was tested in the laboratory for toxicity on a freshwater amphipod for 10-days. Results of the test indicated “there were no ecologically significant effects on the test organisms”. The values for the metals concentration in the sediment from that test were above published Threshold Effect Concentrations from USEPA Region 3 Guidance. Therefore, it was recommended by Mr. Sugatt to use the SED-05 concentrations from 2007 as a “Benchmark” for evaluating sediment toxicity during 5-year reviews.

As shown on Table 5A, the 2016 sediment concentrations for both SED-04 and SED-05 samples are divided by the benchmark concentration to calculate a Benchmark Quotient (BQ). In the event a 2016 metal concentration is reported as not detected, CES has used half the detection limit as the value. The BQ for each metal concentration is then averaged and compared to the following guidelines.

- ≤ 1 Conclude sample is likely non-toxic
- >1 and <4 Conclude sample is uncertain whether sample is likely to be toxic
- ≥4 Conclude sample is likely to be toxic.

If the toxicity evaluation is less than 4, the monitoring program needs to at a minimum collect one sample every 5-year period at SED-05 and perform sediment lab analysis. If the average BQ is equal to or greater than 4, then a 10-day amphipod toxicity test should be done on the SED-05 sediment.

Sediment Toxicity Evaluation

For the 5-year review performed in 2016, the average BQ was calculated for sediment samples collected from SED-04 and SED-05. The results were 0.3 and 0.5 respectively as shown on Table 5A. Therefore, as per USEPA guidance this sediment is likely non-toxic and the BQ evaluation only needs to be repeated at the next 5-year period.

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 CLs or AGQs.
- ◆ Trend analysis for constituents of concern at wells where concentrations are currently or have recently exceeded CLs or AGQs.
- ◆ Preparation of figures showing the vertical and lateral distributions of constituents of concern present at the Site that exceed CLs or AGQs.

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 May 23, 2016, are consistent with those measured in previous annual sampling events.

5.2 Groundwater Quality Regulatory Threshold Exceedances

5.2.1 Monitoring Wells

Analytical results from overburden and bedrock monitoring wells were tabulated and compared to EPA-established Cleanup Levels (CLs) and NHDES-established Ambient Groundwater Quality Standards (AGQs). CL and AGQS exceedances reported in groundwater samples collected during the May/June 2016 sampling event are similar to previous results. The number of CL/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 CLs or AGQs during the May/June 2016 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 CL and AGQS for arsenic is 0.01 milligrams per liter (mg/L). CL/AGQS exceedances occurred at the following fourteen (14) wells:

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

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

Total/Dissolved Manganese

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

The CL for manganese is 0.3 mg/L. CL 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-5B, FPC-6A, FPC-6B, FPC-11A, and FPC-11B

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 13 monitoring wells in OU-2. The NHDES AGQS and EPA CL 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 CL for TBA. The NHDES AGQS for TBA is 40 ug/L.

The AGQS for TBA was exceeded at two bedrock wells in OU-1 (MW-5D and MW-8), which is consistent with historical data. TBA was reported as Not Detected (ND) above laboratory detection limits at the remaining monitoring wells sampled in OU-1 and OU-2.

Tetrahydrofuran

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 NHDES AGQS for tetrahydrofuran is 600 ug/L and the EPA CL is 154 ug/L.

The EPA CL was exceeded at one bedrock well in OU-1 (MW-8). MW-8 has historically exceeded the EPA CL for tetrahydrofuran.

The AGQS was not exceeded in OU-1 and OU-2 wells.

The locations of these exceedances are consistent with past events. Reported concentrations are generally consistent with past events.

5.2.2 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 CLs and NHDES-established AGQSs. Results are summarized in Table 4.

Similar to results from previous monitoring events, no CL 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 (0.31 mg/L) slightly exceeded the CL (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 0.34 and 0.55 ug/L, respectively.

All other VOCs analyzed by EPA Method 524 (NHDES Full List) were reported as Not Detected above laboratory reporting limits.

5.3 Parameter Isoconcentration Maps and Cross Sections

Isoconcentration maps were prepared to show the lateral and vertical distributions of arsenic, manganese, and 1,4-dioxane concentrations in overburden and bedrock groundwater. Isoconcentration maps for benzene were not prepared because no CL/AGQSs exceedances were reported in 2016. 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. An isoconcentration map for tetrahydrofuran was not prepared because tetrahydrofuran was reported above the CL in only one well.

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 likely defines the extent of the impacted groundwater area.
- ◆ Results for arsenic, manganese, and 1,4-dioxane for 2016 are consistent with historical data, although a moderate decline in 1,4-dioxane and arsenic concentrations is noted at wells FPC-6A and B, the most northerly monitoring location within the GMZ.

5.4 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 13 years.

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 2016 when five or more data points and two or more detections above the laboratory practical quantitative limit (PQL) were available. For non-detect results, 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 13 year period (2004-2016); 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 ChemStat™ Starpoint Software, Advanced Statistical Analysis of Ground Water, Surface Water, Soil, or Air Quality Monitoring Data.

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 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), with the exception of MW-5S, where a decreasing trend was reported.
- ◆ A visually apparent decreasing trend in 1,4-dioxane concentrations is present at shallow bedrock wells MW-5S, MW-11 and GZ-105 and in overburden monitoring wells AE-2A and FPC-6A screened in the till unit.
- ◆ 1,4-dioxane concentrations are stable at the two off-site water supply wells (R-3 and 339BHR) where it has been detected in previous sampling events.

Benzene

- ◆ Benzene concentrations at the nine monitoring wells where it was detected in 2016 are stable or decreasing (i.e., MW-5D, MW-5S, MW-8, MW-11, AE-3A, AE-3B, FPC-6A, FPC-6B, and GZ-105). A statistically significant increasing trend was not reported in any well.

Tertiary-butyl alcohol

- ◆ TBA concentrations at the two wells where it has been detected (MW-5D and MW-8) are stable. 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, but review of time series plots indicates that concentrations are stable.

Arsenic & Manganese (Redox Metals)

- ◆ A stable (no trend) or a decreasing trend in arsenic is apparent at fourteen groundwater monitoring locations, including: bedrock wells MW-5D, MW-5S, MW-8, BP-4, FPC-6B, AE-1B, AE-2B, AE-3B, and GZ-105; overburden (outwash) wells MW-4 and OP-2; and overburden (till) wells AE-1A, AE-2A, and AE-3A. A stable (no trend) or decreasing trend in manganese is apparent at sixteen groundwater monitoring locations, including: bedrock wells MW-5D, MW-5S, MW-8, BP-4, FPC-6B, AE-1B, AE-2B, and AE-4B; overburden (outwash) well AE-4A, MW-4, MW-9, and MW-10; and overburden (till) wells AE-2A, AE-3A, FPC-9A, and FPC-11A. This is indicative of stable or improving water quality,
- ◆ At the GMZ boundary well couplet FPC-6, a review of time series plots for arsenic and manganese indicates that concentrations show no trend in shallow bedrock well FPC-6B. A review of time series plots indicate that arsenic and manganese concentrations have continued to fluctuate in the shallow overburden (till) well FPC-6A and do not show a clear trend.

- ◆ The Mann Kendall trend analysis reported that manganese concentrations are increasing at overburden (outwash) well OP-2 and no trend is present for arsenic at OP-2 and OP-5 and for manganese at OP-5. A review of time series plots indicate that arsenic shows an apparent increase in OP-5 and manganese shows an apparent increase in both wells. Manganese concentrations at both wells remain within the historic ranges reported at each individual well while arsenic showed a slight increase in concentration at OP-5 for the May/June 2016 sampling (44 ug/L to 56 ug/L).
- ◆ Arsenic and manganese concentrations at bedrock well MW-11 appear to be slowly increasing based on a review of the time series plot. However, concentrations remain within historical ranges reported at the well.
- ◆ Arsenic concentrations at overburden (till) well FPC-9A appear to be slowly increasing since August 2008. However, the magnitude of increase is very low and concentrations remain within historical ranges reported at the well.
- ◆ 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 affect the accuracy of the manganese trend determination. Arsenic concentrations continue to be well below the AGQS/CL and have remained stable during the transition between different sampling methods.

5.5 Status of Constituents of Concern

A table summarizing the COCs and associated EPA-established CLs and/or NHDES-established AGQSs is provided in Section 1.1. Analytical data for each COC from November 2000 to May/June 2016 at groundwater monitoring location identified in the September 2015 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 is provided below:

- ◆ Benzene: Trace concentrations below the CL/AGQS continue to be reported in 8 monitoring wells located in close proximity to or downgradient of the landfill. In the last five years, concentrations have exceeded CLs or AGQSs at 2 wells (MW-8 and GZ-105). No exceedances were reported in 2015 and 2016.
- ◆ Chlorobenzene: Trace concentrations continue to be reported in four monitoring wells located in close proximity to or downgradient of the landfill. The last exceedance of an CL or AGQS 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. MW-8 slightly exceeded the CL for tetrahydrofuran during May/June 2016. Prior to that, the last reported exceedance of an CL or AGQS 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 CL/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 the reporting limits at two wells (MW-5D and MW-8). Both wells reported a concentration slightly above the NHDES AGQS in 2016.
- ◆ 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 (CL/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.
- ◆ 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 2005.

SECTION 6 | CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

Based on a review of analytical results for the May/June 2016 sampling event and historical data, CES concludes the following:

Groundwater

- ◆ Results of Terranova's Tier I Plus Data Validation and CES' review of the analytical data indicate the laboratory analytical data package is considered 95% complete, of good quality, meets data quality objectives and only minor data qualification was warranted, with the exception of the sediment data. 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 May/June 2016 met EPA-established CLs and/or NHDES-established AGQSs for benzene, chlorobenzene, tetrachloroethene, 1,2-dichloropropane, methyl ethyl ketone (2-butanone), trans-1,2-dichloroethene, antimony, beryllium, chromium, lead, nickel, and vanadium. Consistent with historical results, 1,2-dichloropropane, methyl ethyl ketone, and trans-1,2-dichloroethene were reported as Not Detected above laboratory reporting limits in all groundwater and surface water samples collected.
- ◆ Consistent with historical results, CL and/or AGQS exceedances were reported for 1,4-dioxane, tert-butyl alcohol, tetrahydrofuran, arsenic, and manganese in one or more wells. 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 2016.
- ◆ 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.
- ◆ Similar to results from previous monitoring events, no CL 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 (0.31 mg/L) for the May/June 2016 sampling event slightly exceeded the CL (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 reporting limit of 0.25 ug/L at water supply wells 415BHR and 346BHR.
- ◆ In March and May/June 2016, 1,4-dioxane was reported at very low concentrations (0.3 to 0.55 ug/L) close to the detection limit of 0.25 ug/L at two water supply wells (R-3 and 339BHR). Visual review of time series concentration plots and statistical trend analyses indicate that 1,4-dioxane concentrations are stable at R-3 and 339BHR.
- ◆ A review of 1,4-dioxane data for two monitoring well couplets (FPC-5 and FPC-6) located hydraulically upgradient of R-3 and 339BHR reported either no trend (FPC-

5B) or a decreasing trend (FPC-6A). Well FPC-6B did not have enough data points to report a trend; however, a review of data shows that concentrations for 1,4-dioxane appear to be decreasing.

- ◆ Arsenic concentrations exceeding the EPA CL and NHDES AGQS of 0.01 mg/L were reported in 7 of the 11 monitoring wells sampled in OU-1, and 6 of the 20 monitoring wells sampled in OU-2, which is a slight decrease in the number of wells reported exceeding the EPA CL and NHDES AGQS in 2015.
- ◆ Manganese concentrations exceeding the EPA CL (0.3 mg/L) were reported in 11 of the 11 monitoring wells sampled in OU-1, and 10 of the 20 monitoring wells sampled in OU-2. Manganese concentrations exceeding the AGQS (0.84 mg/L) were reported in 8 of the 11 monitoring wells in OU-1, and 4 of the 20 monitoring wells in OU-2.
- ◆ Water quality at wells FPC-4B, FPC-7A, FPC-7B, AE-4A, and AE-4B in May/June 2016 continues to be consistent with what is considered to be background conditions, as discussed in Summit (2013).

Leachate Seep

- ◆ The leachate seep sample met the applicable regulatory water quality standards, with the exception of iron and ammonia-N, which is consistent with historical data.

Surface Water

- ◆ Surface water samples were not collected at one of the three surface water sampling location (SW-4) in May/June 2016 due to insufficient water. Water quality met applicable regulatory standards except for iron at SW-5, which is consistent with historical data.

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 2016, the existing monitoring well network and groundwater management zone continue to be adequate for monitoring the natural attenuation remedy.

6.2 Recommendations

Based on observations and monitoring results from the 2016 Annual sampling event, CES recommends the following:

- ◆ 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 or sediment transport has been observed in on-

site inspection. Sediment toxicity evaluation completed as part of EPA's 5-Year Site Review shows that the sediment at the Site is considered non-toxic to ecological receptors.

- ◆ Well FPC-5A should be properly abandoned due to well integrity issues and a replacement well 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 that may have slightly altered elevations.
- ◆ Install the 2 new well couplets in the GMZ to be used as sentinel wells for future assessment of groundwater quality in the GMZ.

SECTION 7 | REFERENCES

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Prepared by Roy F. Weston, Inc. and Goldberg-Zoino and Associates, Inc. for the State
of New Hampshire Department of Environmental Services Waste Management Division.

FIGURES

FIGURE 1
SITE LOCATION MAP

FIGURE 2

SITE PLAN

FIGURE 3

**GROUNDWATER CONTOURS
MAY 2016– OVERBURDEN WELLS**

FIGURE 4

**GROUNDWATER CONTOURS
MAY 2016– 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

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GROUNDWATER ELEVATION DATA

TABLE 2

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

TABLE 3

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SUMMARY OF SEDIMENT ANALYTICAL RESULTS

TABLE 5A

**SUMMARY OF SEDIMENT ANALYTICAL RESULTS
WITH BENCHMARK QUOTIENT ANALYSIS**

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**CONTAMINANTS OF CONCERN ANALYTICAL DATA
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ARSENIC SUMMARY PLOTS

MANGANESE SUMMARY PLOTS

BENZENE SUMMARY PLOTS

1,4-DIOXANE SUMMARY PLOTS

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APPENDIX A
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ENVIRONMENTAL MONITORING PLAN SAMPLING REQUIREMENTS TABLES

APPENDIX C

FIELD SAMPLING/MONITORING AND EQUIPMENT CALIBRATION FORMS

DEPTH TO GROUNDWATER AND ELEVATION

ELEVATION SUMMARY TABLE FOR MAY/JUNE 2016

APPENDIX D

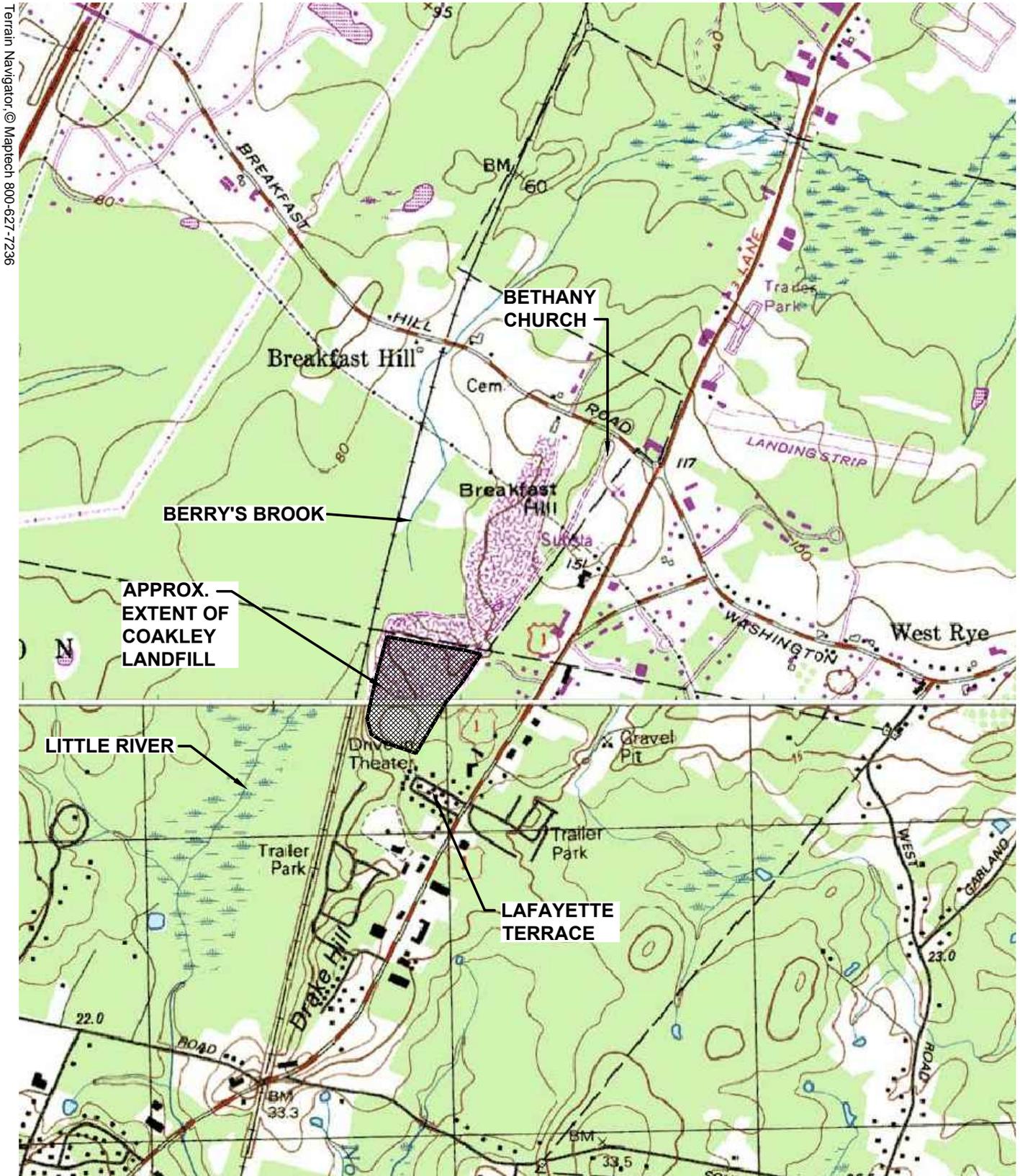
LABORATORY ANALYTICAL REPORTS (MAY/JUNE 2016)

APPENDIX E

DATA VALIDATION REPORT (MAY/JUNE 2016)

APPENDIX F

SEDIMENT EVALUATION FOR TOXICITY MEMORANDUM



Terrain Navigator, © Maptech 800-627-7236

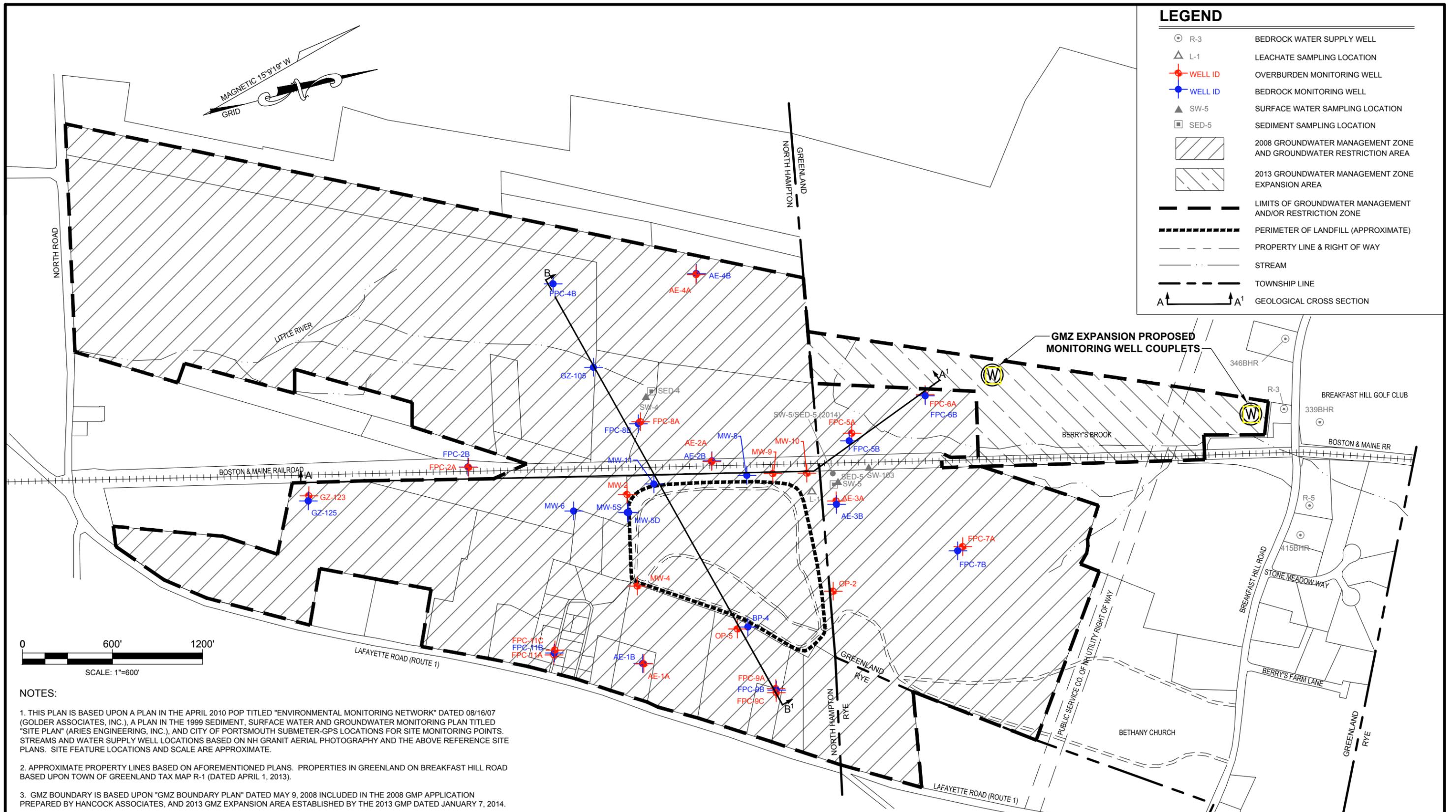
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 PORTSMOUTH
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**COAKLEY LANDFILL
 NORTH HAMPTON & GREENLAND, NH
 LOCATION MAP**

2015-02-11
 10424.003

FIGURE 1



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

SHEET TITLE: **GROUNDWATER MANAGEMENT ZONE &
ENVIRONMENTAL MONITORING NETWORK**

DWG: **FIGURE 1-2**

JN: 10424.003

SCALE: 1"=600'

BY: TND

DATE: 2016-02-16

APPROVED BY: SBM

CHECKED BY: SBM

REV: []

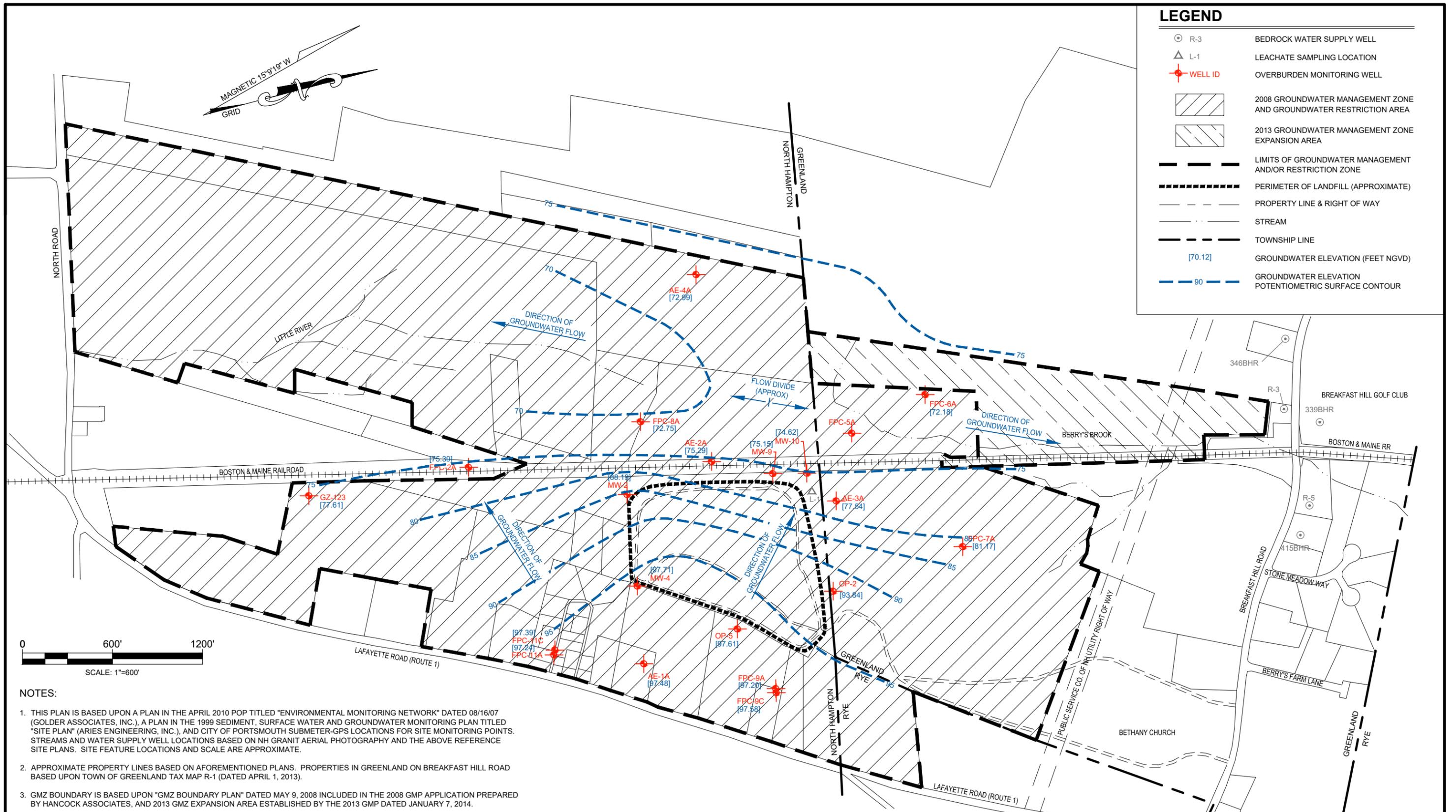
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ISSUE: []

ISSUE DATE: []

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

SHEET TITLE: **MAY/JUNE 2016 OVERBURDEN
GROUNDWATER POTENTIOMETRIC SURFACE**

DWG: **FIGURE 3**

BY: TND
DATE: 2016-07-22

JN: 10424.008
SCALE: 1"=600'

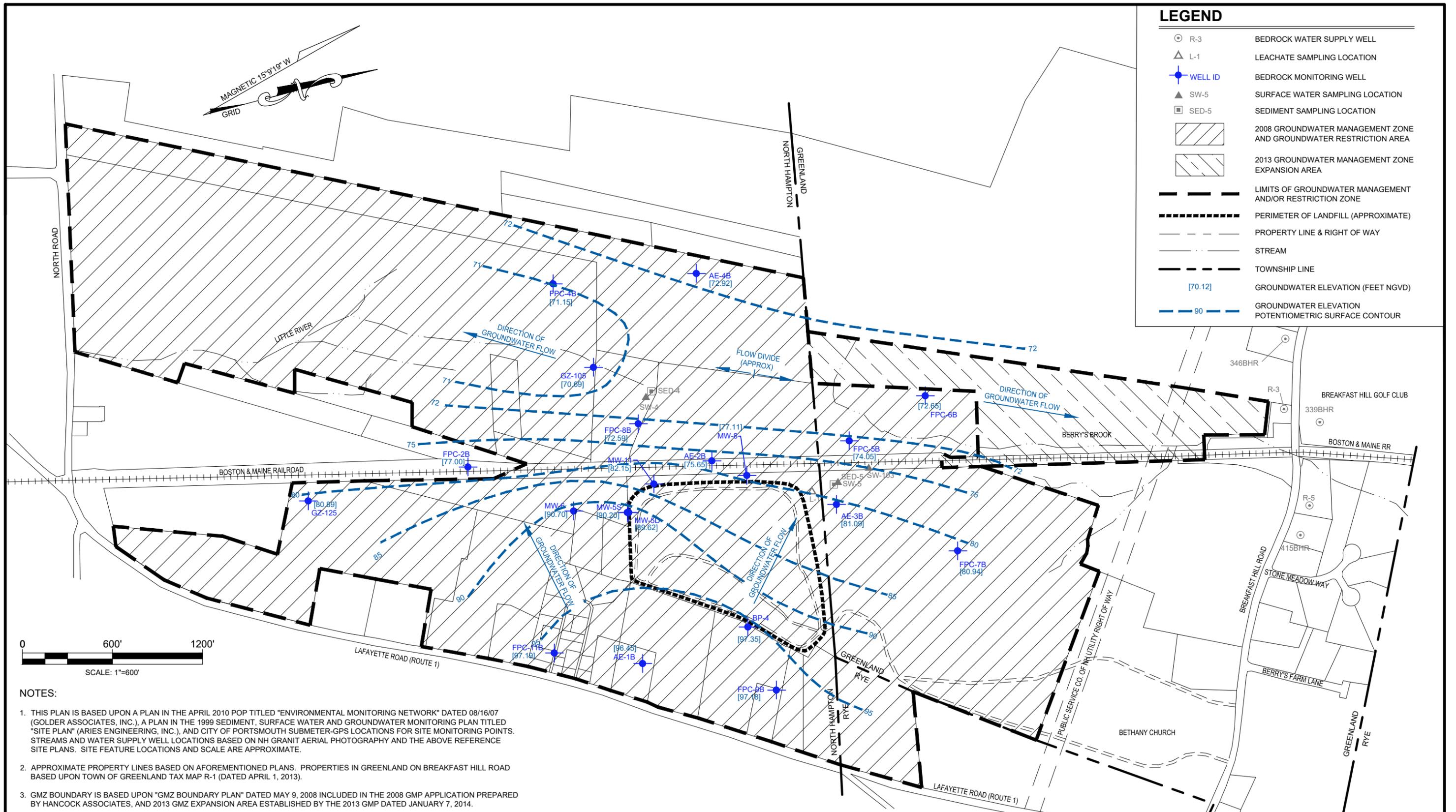
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ISSUE DATE: []

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

SHEET TITLE: **MAY/JUNE 2016 BEDROCK
GROUNDWATER POTENTIOMETRIC SURFACE**

DWG: **FIGURE 4**

BY: TND
DATE: 2016-07-22

JN: 10424.008
SCALE: 1"=600'

APPROVED BY: SLY
CHECKED BY: SLY

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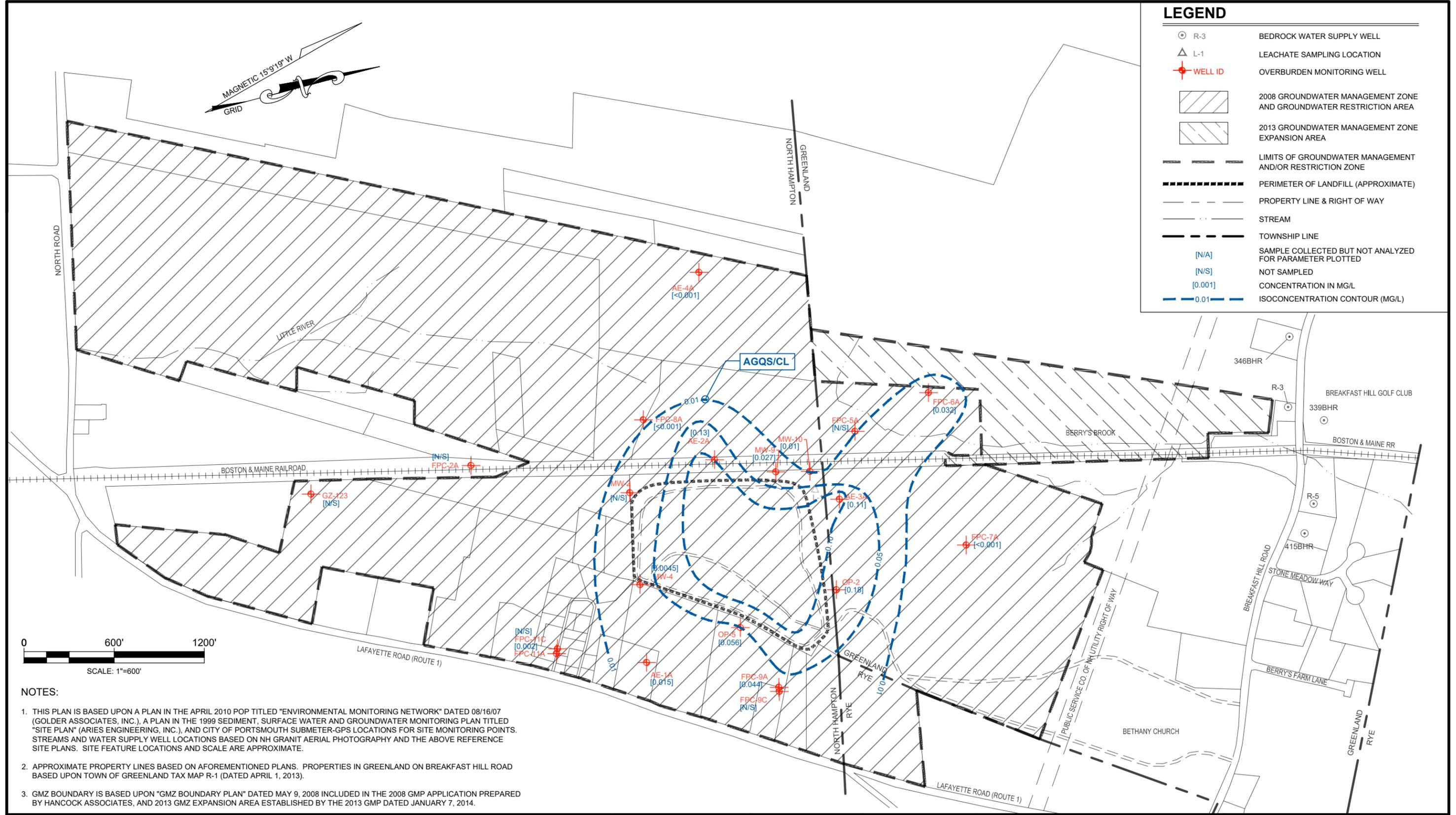
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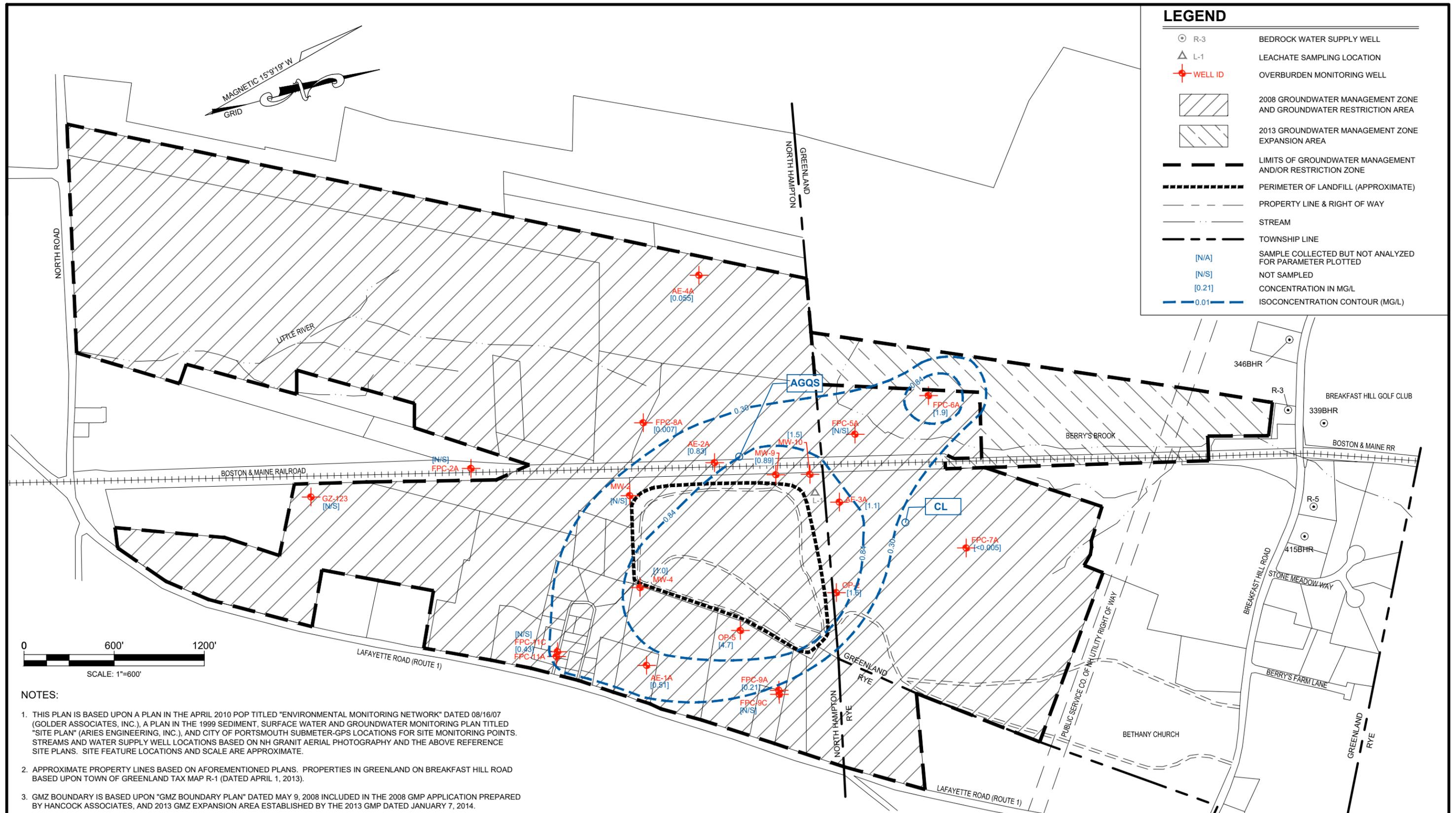
- R-3 BEDROCK WATER SUPPLY WELL
- L-1 LEACHATE SAMPLING LOCATION
- WELL ID OVERBURDEN MONITORING WELL
- 2008 GROUNDWATER MANAGEMENT ZONE AND GROUNDWATER RESTRICTION AREA
- 2013 GROUNDWATER MANAGEMENT ZONE EXPANSION AREA
- LIMITS OF GROUNDWATER MANAGEMENT AND/OR RESTRICTION ZONE
- PERIMETER OF LANDFILL (APPROXIMATE)
- PROPERTY LINE & RIGHT OF WAY
- STREAM
- TOWNSHIP LINE
- [N/A] SAMPLE COLLECTED BUT NOT ANALYZED FOR PARAMETER PLOTTED
- [N/S] NOT SAMPLED
- [0.001] CONCENTRATION IN MG/L
- 0.01 ISOCONCENTRATION CONTOUR (MG/L)



- NOTES:**
1. THIS PLAN IS BASED UPON A PLAN IN THE APRIL 2010 POP TITLED "ENVIRONMENTAL MONITORING NETWORK" DATED 08/16/07 (GOLDER ASSOCIATES, INC.), A PLAN IN THE 1999 SEDIMENT, SURFACE WATER AND GROUNDWATER MONITORING PLAN TITLED "SITE PLAN" (ARIES ENGINEERING, INC.), AND CITY OF PORTSMOUTH SUBMETER-GPS LOCATIONS FOR SITE MONITORING POINTS. STREAMS AND WATER SUPPLY WELL LOCATIONS BASED ON NH GRANIT AERIAL PHOTOGRAPHY AND THE ABOVE REFERENCE SITE PLANS. SITE FEATURE LOCATIONS AND SCALE ARE APPROXIMATE.
 2. APPROXIMATE PROPERTY LINES BASED ON AFOREMENTIONED PLANS. PROPERTIES IN GREENLAND ON BREAKFAST HILL ROAD BASED UPON TOWN OF GREENLAND TAX MAP R-1 (DATED APRIL 1, 2013).
 3. GMZ BOUNDARY IS BASED UPON "GMZ BOUNDARY PLAN" DATED MAY 9, 2008 INCLUDED IN THE 2008 GMP APPLICATION PREPARED BY HANCOCK ASSOCIATES, AND 2013 GMZ EXPANSION AREA ESTABLISHED BY THE 2013 GMP DATED JANUARY 7, 2014.

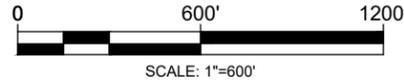
<p>PROJECT TITLE: COAKLEY LANDFILL SUPERFUND SITE NORTH HAMPTON & GREENLAND, NEW HAMPSHIRE</p> <p>SHEET TITLE: MAY/JUNE 2016 LATERAL DISTRIBUTION OF DISSOLVED ARSENIC IN OVERBURDEN GROUNDWATER</p>	<p>DWG: FIGURE 5</p> <p>JN: 10424.008</p> <p>SCALE: AS SHOWN</p>	<p>BY: TND</p> <p>DATE: 2016-07-05</p> <p>APPROVED BY: SLY</p> <p>CHECKED BY: SLY</p>	<p>REV: []</p> <p>REV DATE: []</p> <p>ISSUE: []</p> <p>ISSUE DATE: []</p>	<p>DESCRIPTION: []</p> <p>DESCRIPTION: []</p>
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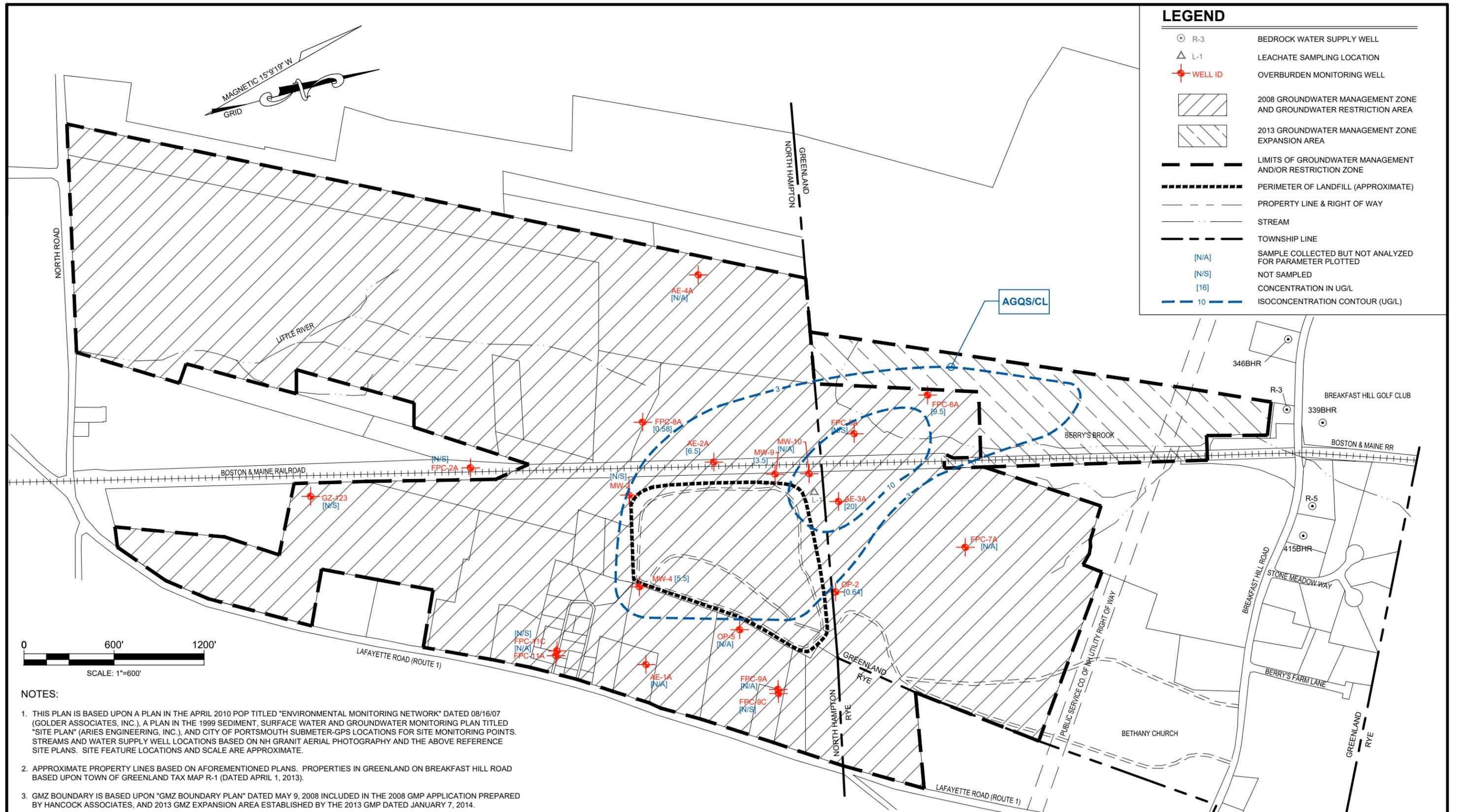
- R-3 BEDROCK WATER SUPPLY WELL
- △ L-1 LEACHATE SAMPLING LOCATION
- ⊕ WELL ID OVERBURDEN MONITORING WELL
- [Diagonal Hatching] 2008 GROUNDWATER MANAGEMENT ZONE AND GROUNDWATER RESTRICTION AREA
- [Diagonal Hatching] 2013 GROUNDWATER MANAGEMENT ZONE EXPANSION AREA
- LIMITS OF GROUNDWATER MANAGEMENT AND/OR RESTRICTION ZONE
- PERIMETER OF LANDFILL (APPROXIMATE)
- PROPERTY LINE & RIGHT OF WAY
- STREAM
- TOWNSHIP LINE
- [N/A] SAMPLE COLLECTED BUT NOT ANALYZED FOR PARAMETER PLOTTED
- [N/S] NOT SAMPLED
- [0.21] CONCENTRATION IN MG/L
- 0.01 ISOCONCENTRATION CONTOUR (MG/L)



- NOTES:**
1. THIS PLAN IS BASED UPON A PLAN IN THE APRIL 2010 POP TITLED "ENVIRONMENTAL MONITORING NETWORK" DATED 08/16/07 (GOLDER ASSOCIATES, INC.), A PLAN IN THE 1999 SEDIMENT, SURFACE WATER AND GROUNDWATER MONITORING PLAN TITLED "SITE PLAN" (ARIES ENGINEERING, INC.), AND CITY OF PORTSMOUTH SUBMETER-GPS LOCATIONS FOR SITE MONITORING POINTS. STREAMS AND WATER SUPPLY WELL LOCATIONS BASED ON NH GRANIT AERIAL PHOTOGRAPHY AND THE ABOVE REFERENCE SITE PLANS. SITE FEATURE LOCATIONS AND SCALE ARE APPROXIMATE.
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PROJECT TITLE: COAKLEY LANDFILL SUPERFUND SITE NORTH HAMPTON & GREENLAND, NEW HAMPSHIRE	DWG: FIGURE 6	BY: TND	REV:	DESCRIPTION:
	JN: 10424.008	DATE: 2016-07-05	REV DATE:	
SHEET TITLE: MAY/JUNE 2016 LATERAL DISTRIBUTION OF DISSOLVED MANGANESE IN OVERBURDEN GROUNDWATER	SCALE: AS SHOWN	APPROVED BY: SLY	ISSUE:	DESCRIPTION:
		CHECKED BY: SLY	ISSUE DATE:	





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

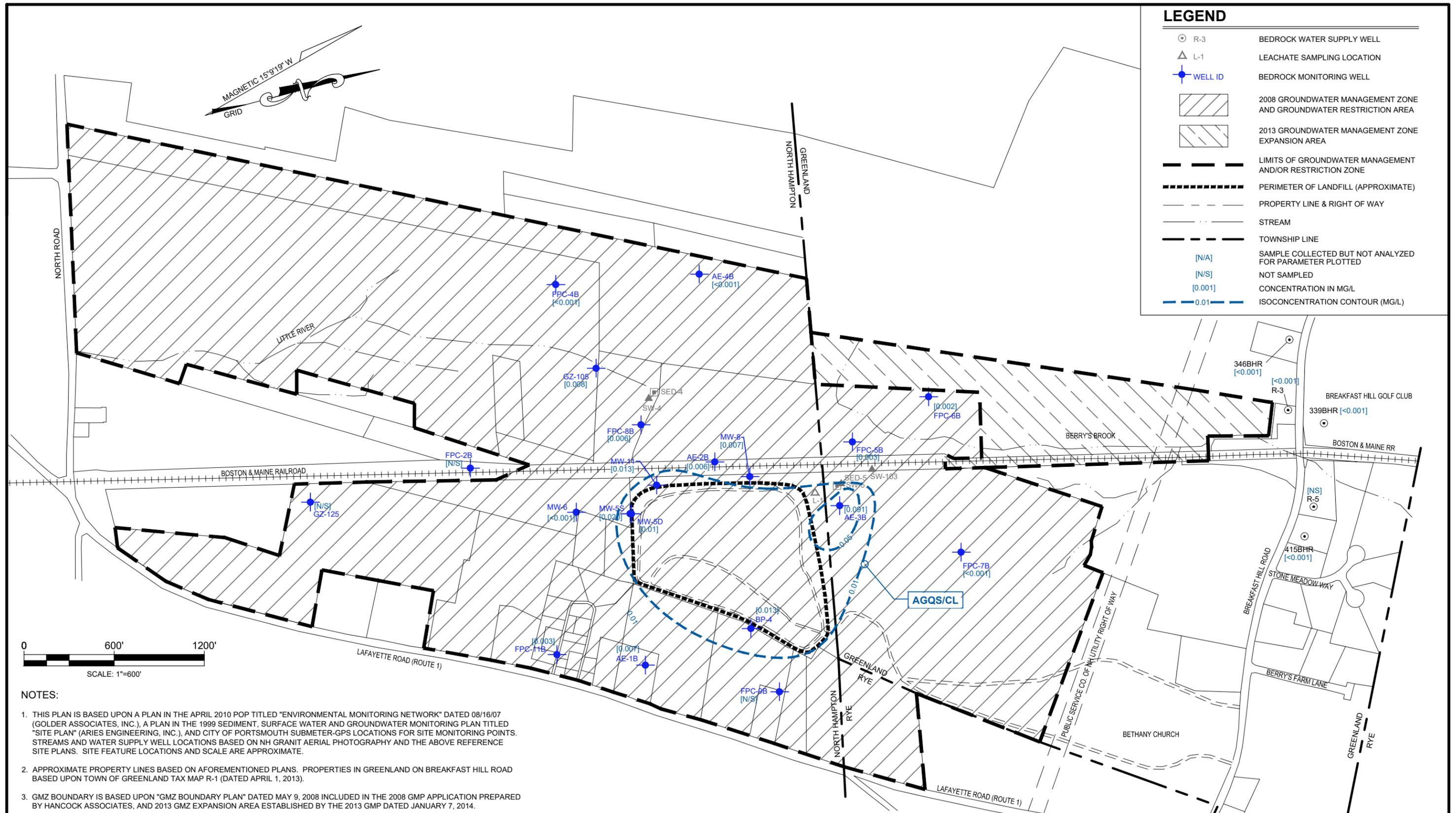
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1,4 - DIOXANE IN OVERBURDEN GROUNDWATER**

DWG: FIGURE 7	BY: TND	REV:
JN: 10424.008	DATE: 2016-07-06	REV DATE:
SCALE: AS SHOWN	APPROVED BY: SLY	ISSUE:
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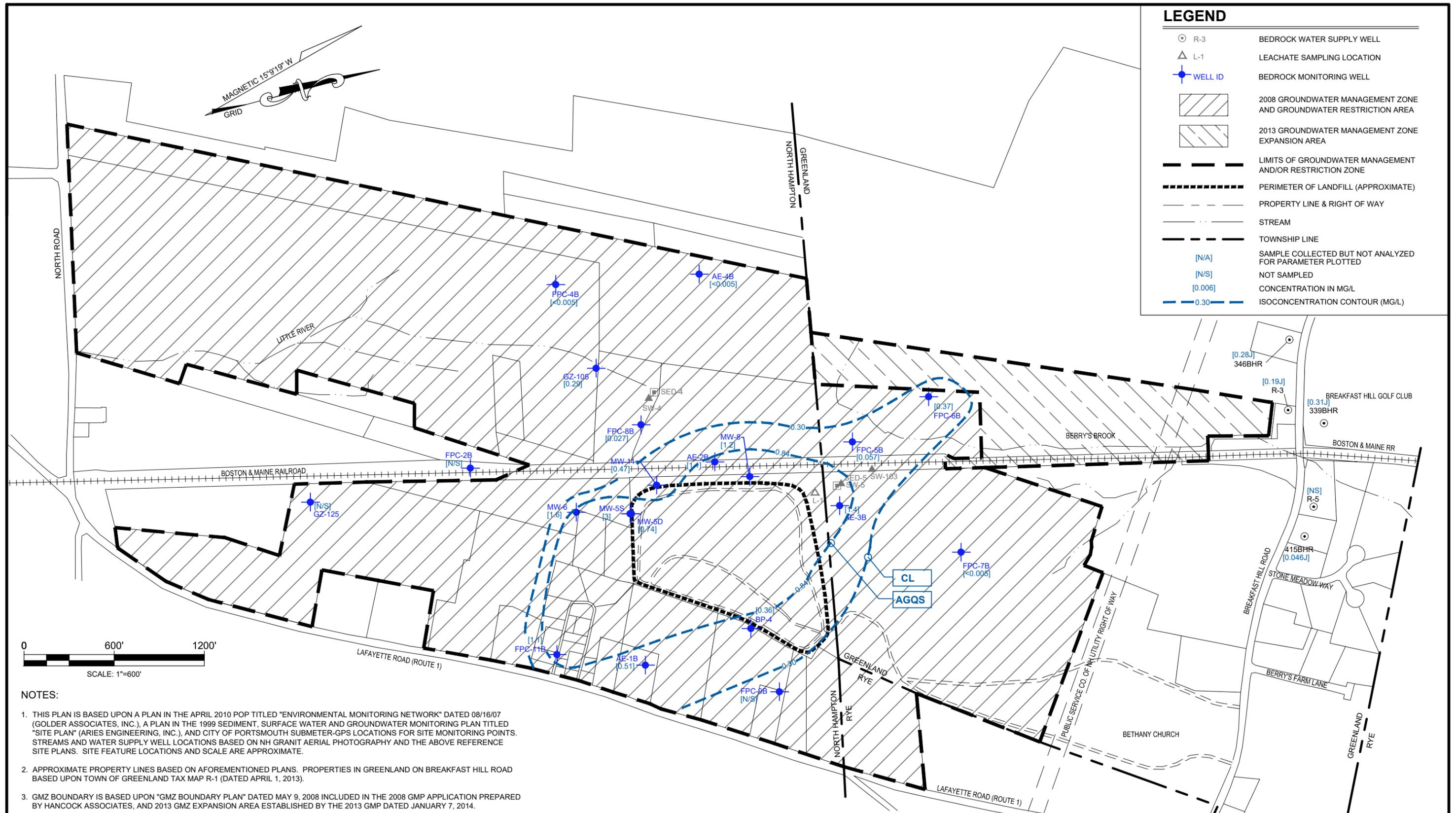


PROJECT TITLE: **COAKLEY LANDFILL SUPERFUND SITE
NORTH HAMPTON & GREENLAND, NEW HAMPSHIRE**

SHEET TITLE: **MAY/JUNE 2016 LATERAL EXTENT OF TOTAL ARSENIC
IN BEDROCK GROUNDWATER**

DWG: FIGURE 8	BY: TND	REV:	DESCRIPTION:
JN: 10424.008	DATE: 2016-07-06	REV DATE:	
SCALE: AS SHOWN	APPROVED BY: SLY	ISSUE:	DESCRIPTION:
	CHECKED BY: SLY	ISSUE DATE:	

CES INC
Engineers • Environmental Scientists • Surveyors



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

SHEET TITLE: **MAY/JUNE 2016 LATERAL EXTENT OF TOTAL
MANGANESE IN BEDROCK GROUNDWATER**

DWG: **FIGURE 9**

BY: TND
DATE: 2016-07-06

APPROVED BY: SLY
CHECKED BY: SLY

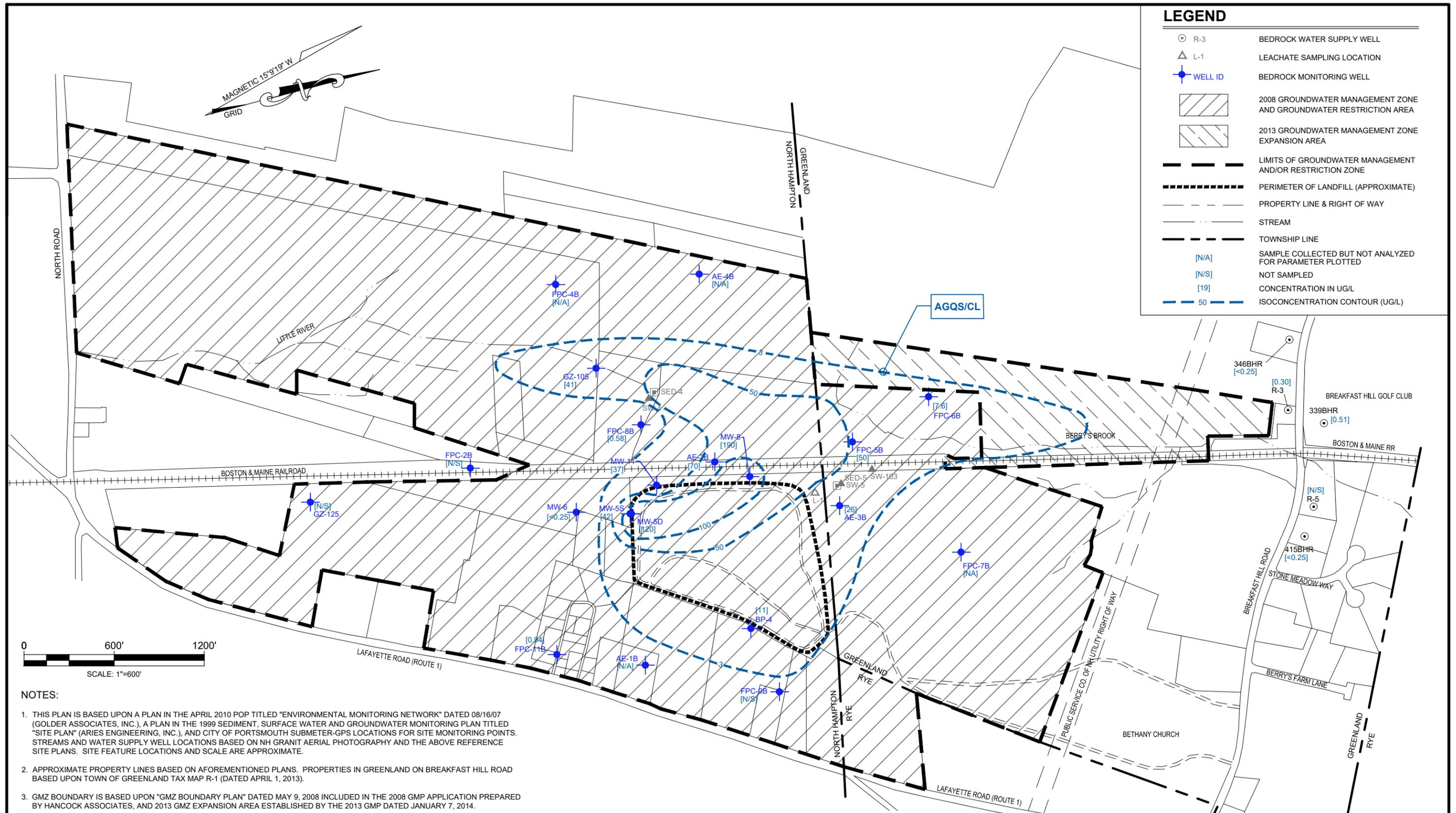
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SCALE: AS SHOWN

REV: []
REV DATE: []

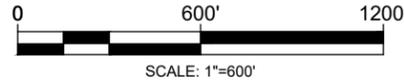
ISSUE: []
ISSUE DATE: []

DESCRIPTION: []





LEGEND	
	R-3 BEDROCK WATER SUPPLY WELL
	L-1 LEACHATE SAMPLING LOCATION
	WELL ID
	2008 GROUNDWATER MANAGEMENT ZONE AND GROUNDWATER RESTRICTION AREA
	2013 GROUNDWATER MANAGEMENT ZONE EXPANSION AREA
	LIMITS OF GROUNDWATER MANAGEMENT AND/OR RESTRICTION ZONE
	PERIMETER OF LANDFILL (APPROXIMATE)
	PROPERTY LINE & RIGHT OF WAY
	STREAM
	TOWNSHIP LINE
[N/A]	SAMPLE COLLECTED BUT NOT ANALYZED FOR PARAMETER PLOTTED
[N/S]	NOT SAMPLED
[19]	CONCENTRATION IN UG/L
	50 ISOCONCENTRATION CONTOUR (UG/L)



- NOTES:
1. THIS PLAN IS BASED UPON A PLAN IN THE APRIL 2010 POP TITLED "ENVIRONMENTAL MONITORING NETWORK" DATED 08/16/07 (GOLDER ASSOCIATES, INC.), A PLAN IN THE 1999 SEDIMENT, SURFACE WATER AND GROUNDWATER MONITORING PLAN TITLED "SITE PLAN" (ARIES ENGINEERING, INC.), AND CITY OF PORTSMOUTH SUBMETER-GPS LOCATIONS FOR SITE MONITORING POINTS. STREAMS AND WATER SUPPLY WELL LOCATIONS BASED ON NH GRANIT AERIAL PHOTOGRAPHY AND THE ABOVE REFERENCE SITE PLANS. SITE FEATURE LOCATIONS AND SCALE ARE APPROXIMATE.
 2. APPROXIMATE PROPERTY LINES BASED ON AFOREMENTIONED PLANS. PROPERTIES IN GREENLAND ON BREAKFAST HILL ROAD BASED UPON TOWN OF GREENLAND TAX MAP R-1 (DATED APRIL 1, 2013).
 3. GMZ BOUNDARY IS BASED UPON "GMZ BOUNDARY PLAN" DATED MAY 9, 2008 INCLUDED IN THE 2008 GMP APPLICATION PREPARED BY HANCOCK ASSOCIATES, AND 2013 GMZ EXPANSION AREA ESTABLISHED BY THE 2013 GMP DATED JANUARY 7, 2014.

PROJECT TITLE: COAKLEY LANDFILL SUPERFUND SITE NORTH HAMPTON & GREENLAND, NEW HAMPSHIRE	DWG: FIGURE 10	BY: TND	REV: REV DATE:	DESCRIPTION:
SHEET TITLE: MAY/JUNE 2016 LATERAL DISTRIBUTION OF 1,4 - DIOXANE IN BEDROCK GROUNDWATER	JN: 10424.008	DATE: 2016-07-05	ISSUE: ISSUE DATE:	DESCRIPTION:
	SCALE: AS SHOWN	APPROVED BY: SLY	CHECKED BY: SLY	



-  FILL MATERIAL
-  LANDFILL REFUSE
-  Outwash: Dense brown, fine to coarse sand and gravel, trace silt, portions of sand and gravel vary widely with location
-  MARINE DEPOSITS: Medium dense, gray clay and silt to soft gray silt and clay, locally stratified with fine sand.
-  GLACIAL TILL: Very dense, brown, fine to coarse sand, some fine to coarse gravel, little silt.
-  CENTRAL SILICIC COMPLEX: Generally consists of moderately hard to hard muscovite-biotite granite, quartz-feldspar granite, mylonite gneiss, and vein quartz. complex likely correlates with the breakfast hill granite and the breakfast hill member of the rye gneiss.
-  METAMORPHIC ROCKS: Generally consist of soft to hard phyllite, meta-graywacke, quartzite, amphibolite, and schist. These rocks likely correlate with the Rye Gneiss.

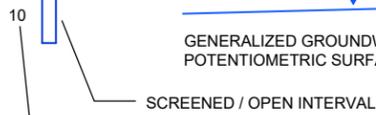
CROSS SECTIONS BASED ON SECTION INCLUDED IN 2012 ANNUAL REPORT (PREPARED BY PROVAN & LORBER, INC.)

GENERAL SOIL AND BEDROCK DESCRIPTIONS FROM PLANS PREPARED BY GZA/WESTON, REMEDIAL INVESTIGATION - OCT. 1988

BOTTOM OF REFUSE BASED ON A PLAN PREPARED BY ARIES ENGINEERING, INC. NOV. 1999 MONITORING PLAN REPORT, FIGURE 5, FEBRUARY 2000

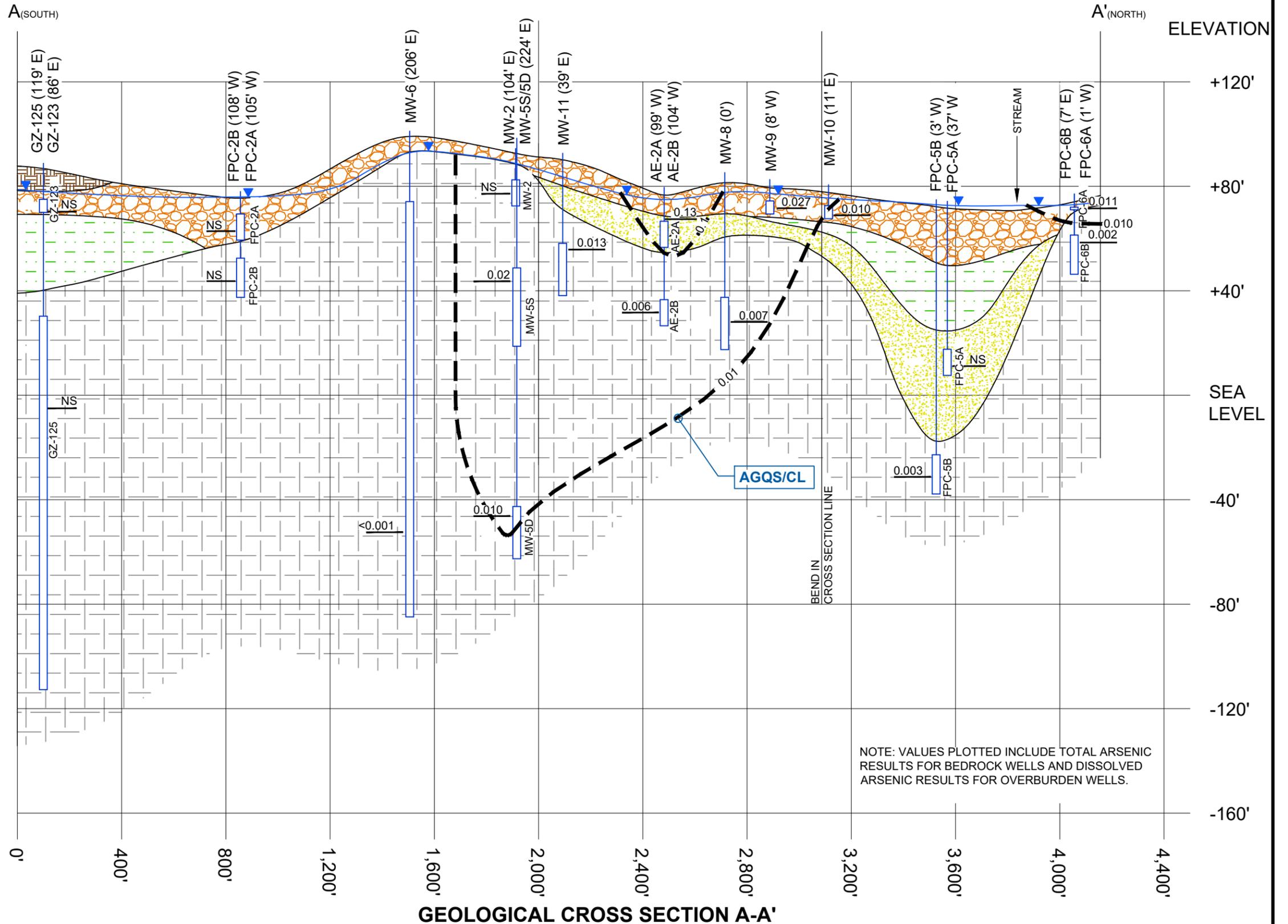
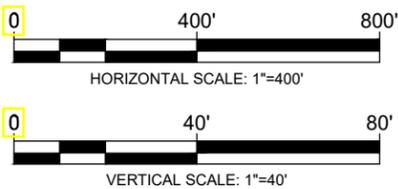
BORING LOGS AND WELL CONSTRUCTION DETAILS FROM MULTIPLE SOURCES WERE USED

WELL DESIGNATION (OFFSET DISTANCE AND DIRECTION)



LEGEND

-  10 ISOCONCENTRATION CONTOUR MG/L
-  N/A SAMPLE COLLECTED BUT NOT ANALYZED FOR PARAMETER PLOTTED
-  N/S NOT SAMPLED



NOTE: VALUES PLOTTED INCLUDE TOTAL ARSENIC RESULTS FOR BEDROCK WELLS AND DISSOLVED ARSENIC RESULTS FOR OVERBURDEN WELLS.

PROJECT TITLE: COAKLEY LANDFILL SUPERFUND SITE NORTH HAMPTON & GREENLAND, NEW HAMPSHIRE	DWG: FIGURE 11	BY: TND	REV:	DESCRIPTION:
SHEET TITLE: MAY/JUNE 2016 VERTICAL DISTRIBUTION OF ARSENIC IN GROUNDWATER A-A'	JUN: 10424.008	DATE: 2016-07-06	REV DATE:	DESCRIPTION:
	SCALE: AS SHOWN	APPROVED BY: SLY	ISSUE:	DESCRIPTION:
		CHECKED BY: SLY	ISSUE DATE:	



-  FILL MATERIAL
-  LANDFILL REFUSE
-  Outwash: Dense brown, fine to coarse sand and gravel, trace silt, portions of sand and gravel vary widely with location
-  MARINE DEPOSITS: Medium dense, gray clay and silt to soft gray silt and clay, locally stratified with fine sand.
-  GLACIAL TILL: Very dense, brown, fine to coarse sand, some fine to coarse gravel, little silt.
-  CENTRAL SILICIC COMPLEX: Generally consists of moderately hard to hard muscovite-biotite granite, quartz-feldspar granite, mylonite gneiss, and vein quartz. complex likely correlates with the breakfast hill granite and the breakfast hill member of the rye gneiss.
-  METAMORPHIC ROCKS: Generally consist of soft to hard phyllite, meta-graywacke, quartzite, amphibolite, and schist. These rocks likely correlate with the Rye Gneiss.

CROSS SECTIONS BASED ON SECTION INCLUDED IN 2012 ANNUAL REPORT (PREPARED BY PROVAN & LORBER, INC.)

GENERAL SOIL AND BEDROCK DESCRIPTIONS FROM PLANS PREPARED BY GZA/WESTON, REMEDIAL INVESTIGATION - OCT. 1988

BOTTOM OF REFUSE BASED ON A PLAN PREPARED BY ARIES ENGINEERING, INC. NOV. 1999 MONITORING PLAN REPORT, FIGURE 5, FEBRUARY 2000

BORING LOGS AND WELL CONSTRUCTION DETAILS FROM MULTIPLE SOURCES WERE USED

WELL DESIGNATION (OFFSET DISTANCE AND DIRECTION)

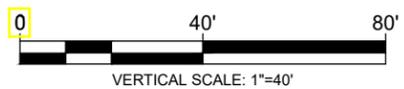
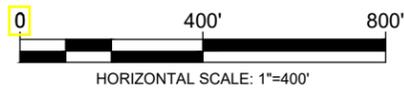
10

SCREENED / OPEN INTERVAL

CONCENTRATION IN MG/L

LEGEND

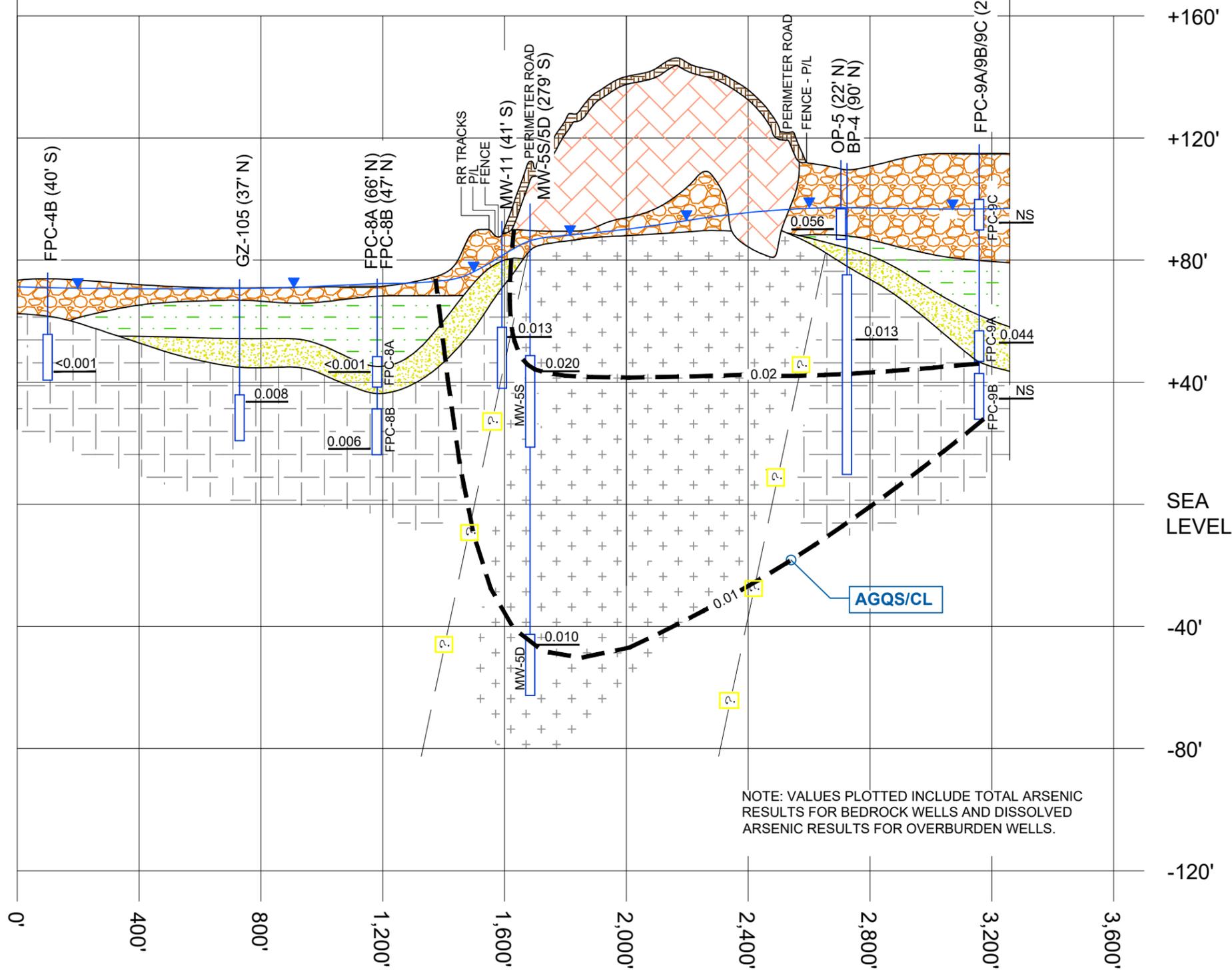
-  0.01 ISOCONCENTRATION CONTOUR (MG/L)
-  N/A SAMPLE COLLECTED BUT NOT ANALYZED FOR PARAMETER PLOTTED
-  N/S NOT SAMPLED



B_(WEST)

B'_(EAST)

ELEVATION



GEOLOGICAL CROSS SECTION B-B'

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

SHEET TITLE: **MAY/JUNE 2016 VERTICAL DISTRIBUTION OF
ARSENIC IN GROUNDWATER B-B'**

DWG:	FIGURE 12	BY:	TND	REV:		DESCRIPTION:	
JUN:	10424.008	DATE:	2016-07-06	REV DATE:		DESCRIPTION:	
SCALE:	AS SHOWN	APPROVED BY:	SLY	ISSUE:		DESCRIPTION:	
		CHECKED BY:	SLY	ISSUE DATE:			



-  FILL MATERIAL
-  LANDFILL REFUSE
-  Outwash: Dense brown, fine to coarse sand and gravel, trace silt, portions of sand and gravel vary widely with location
-  MARINE DEPOSITS: Medium dense, gray clay and silt to soft gray silt and clay, locally stratified with fine sand.
-  GLACIAL TILL: Very dense, brown, fine to coarse sand, some fine to coarse gravel, little silt.
-  CENTRAL SILICIC COMPLEX: Generally consists of moderately hard to hard muscovite-biotite granite, quartz-feldspar granite, mylonite gneiss, and vein quartz. complex likely correlates with the breakfast hill granite and the breakfast hill member of the rye gneiss.
-  METAMORPHIC ROCKS: Generally consist of soft to hard phyllite, meta-graywacke, quartzite, amphibolite, and schist. These rocks likely correlate with the Rye Gneiss.

CROSS SECTIONS BASED ON SECTION INCLUDED IN 2012 ANNUAL REPORT (PREPARED BY PROVAN & LORBER, INC.)

GENERAL SOIL AND BEDROCK DESCRIPTIONS FROM PLANS PREPARED BY GZA/WESTON, REMEDIAL INVESTIGATION - OCT. 1988

BOTTOM OF REFUSE BASED ON A PLAN PREPARED BY ARIES ENGINEERING, INC. NOV. 1999 MONITORING PLAN REPORT, FIGURE 5, FEBRUARY 2000

BORING LOGS AND WELL CONSTRUCTION DETAILS FROM MULTIPLE SOURCES WERE USED

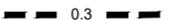
WELL DESIGNATION (OFFSET DISTANCE AND DIRECTION)

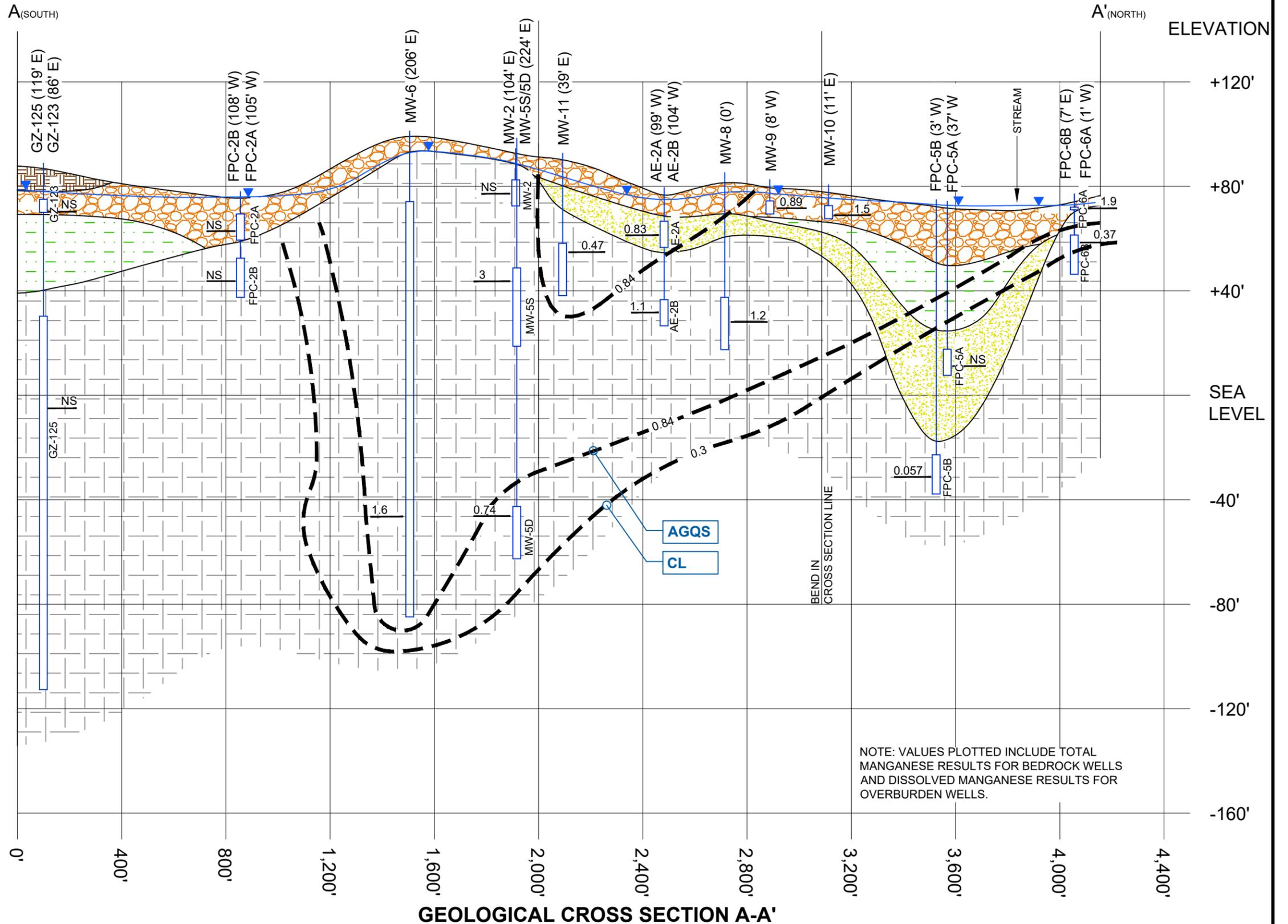
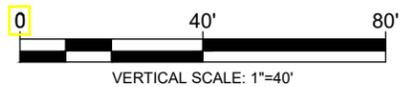
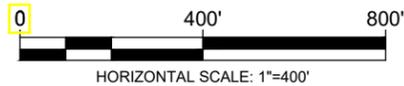
10

SCREENED / OPEN INTERVAL

CONCENTRATION IN MG/L

LEGEND

-  0.3 ISOCONCENTRATION CONTOUR (MG/L)
-  N/A SAMPLE COLLECTED BUT NOT ANALYZED FOR PARAMETER PLOTTED
-  N/S NOT SAMPLED



NOTE: VALUES PLOTTED INCLUDE TOTAL MANGANESE RESULTS FOR BEDROCK WELLS AND DISSOLVED MANGANESE RESULTS FOR OVERBURDEN WELLS.

PROJECT TITLE: COAKLEY LANDFILL SUPERFUND SITE NORTH HAMPTON & GREENLAND, NEW HAMPSHIRE	DWG: FIGURE 13	BY: TND	REV:	DESCRIPTION:
SHEET TITLE: MAY/JUNE 2016 VERTICAL DISTRIBUTION OF MANGANESE IN GROUNDWATER A-A'	JN: 10424.008	DATE: 2016-07-06	REV DATE:	DESCRIPTION:
	SCALE: AS SHOWN	APPROVED BY: SLY	ISSUE:	
		CHECKED BY: SLY	ISSUE DATE:	



-  FILL MATERIAL
-  LANDFILL REFUSE
-  Outwash: Dense brown, fine to coarse sand and gravel, trace silt, portions of sand and gravel vary widely with location
-  MARINE DEPOSITS: Medium dense, gray clay and silt to soft gray silt and clay, locally stratified with fine sand.
-  GLACIAL TILL: Very dense, brown, fine to coarse sand, some fine to coarse gravel, little silt.
-  CENTRAL SILICIC COMPLEX: Generally consists of moderately hard to hard muscovite-biotite granite, quartz-feldspar granite, mylonite gneiss, and vein quartz. complex likely correlates with the breakfast hill granite and the breakfast hill member of the rye gneiss.
-  METAMORPHIC ROCKS: Generally consist of soft to hard phyllite, meta-graywacke, quartzite, amphibolite, and schist. These rocks likely correlate with the Rye Gneiss.

CROSS SECTIONS BASED ON SECTION INCLUDED IN 2012 ANNUAL REPORT (PREPARED BY PROVAN & LORBER, INC.)

GENERAL SOIL AND BEDROCK DESCRIPTIONS FROM PLANS PREPARED BY GZA/WESTON, REMEDIAL INVESTIGATION - OCT. 1988

BOTTOM OF REFUSE BASED ON A PLAN PREPARED BY ARIES ENGINEERING, INC. NOV. 1999 MONITORING PLAN REPORT, FIGURE 5, FEBRUARY 2000

BORING LOGS AND WELL CONSTRUCTION DETAILS FROM MULTIPLE SOURCES WERE USED

WELL DESIGNATION (OFFSET DISTANCE AND DIRECTION)

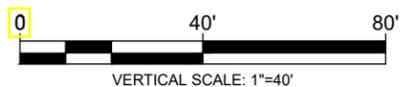
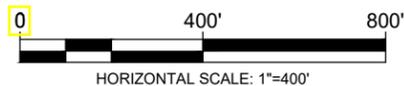
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SCREENED / OPEN INTERVAL

CONCENTRATION IN MG/L

LEGEND

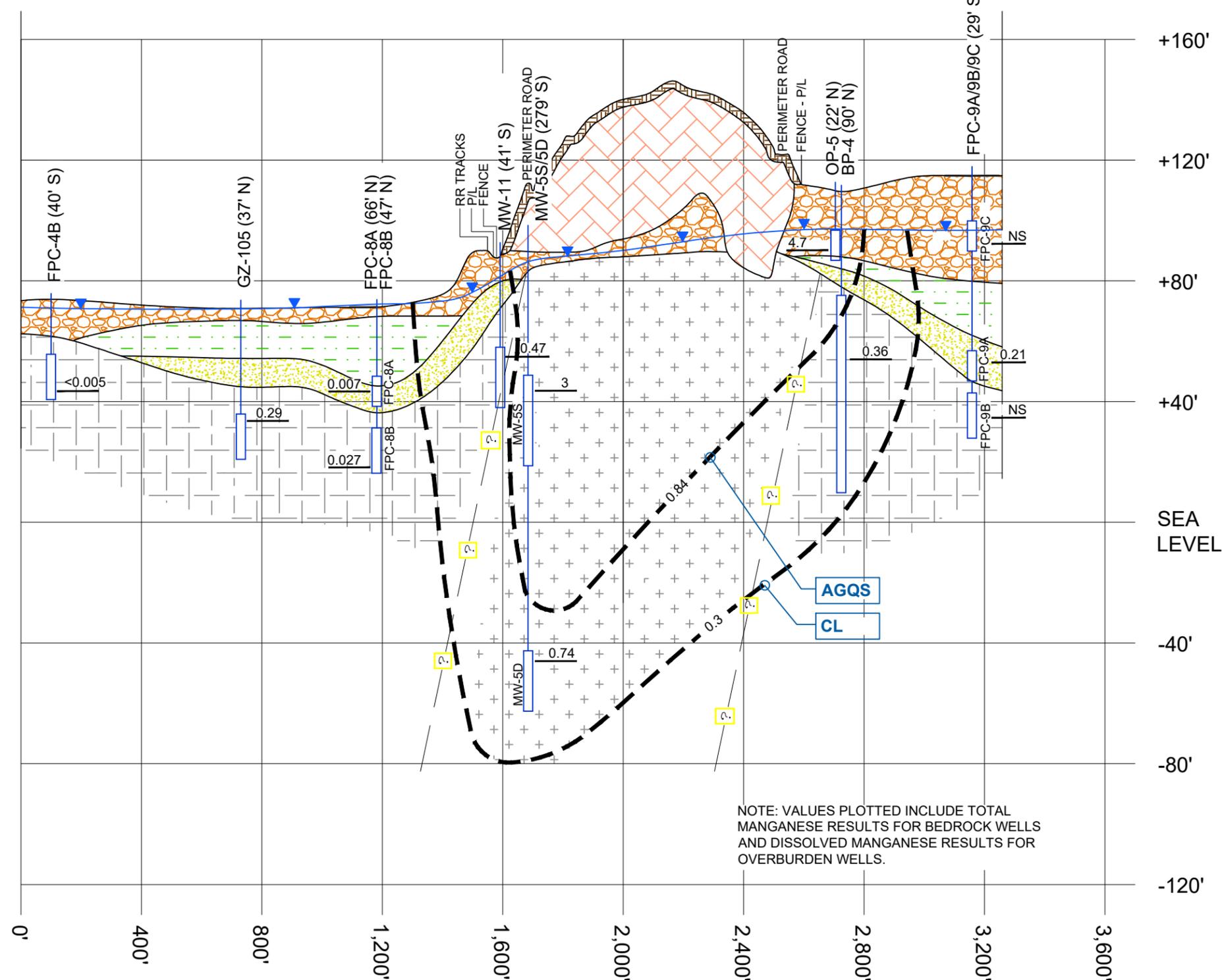
-  0.01 ISOCONCENTRATION CONTOUR (MG/L)
-  N/A SAMPLE COLLECTED BUT NOT ANALYZED FOR PARAMETER PLOTTED
-  N/S NOT SAMPLED



B_(WEST)

B'_(EAST)

ELEVATION



GEOLOGICAL CROSS SECTION B-B'

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

SHEET TITLE: **MAY/JUNE 2016 VERTICAL DISTRIBUTION OF
MANGANESE IN GROUNDWATER B-B'**

DWG:	FIGURE 14	BY:	TND	REV:	
DATE:	10424.008	DATE:	2016-01-14	REV DATE:	
SCALE:	AS SHOWN	APPROVED BY:	2016-07-06	ISSUE:	
		CHECKED BY:	SLY	ISSUE DATE:	



-  FILL MATERIAL
-  LANDFILL REFUSE
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-  MARINE DEPOSITS: Medium dense, gray clay and silt to soft gray silt and clay, locally stratified with fine sand.
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-  METAMORPHIC ROCKS: Generally consist of soft to hard phyllite, meta-graywacke, quartzite, amphibolite, and schist. These rocks likely correlate with the Rye Gneiss.

CROSS SECTIONS BASED ON SECTION INCLUDED IN 2012 ANNUAL REPORT (PREPARED BY PROVAN & LORBER, INC.)

GENERAL SOIL AND BEDROCK DESCRIPTIONS FROM PLANS PREPARED BY GZA/WESTON, REMEDIAL INVESTIGATION - OCT. 1988

BOTTOM OF REFUSE BASED ON A PLAN PREPARED BY ARIES ENGINEERING, INC. NOV. 1999 MONITORING PLAN REPORT, FIGURE 5, FEBRUARY 2000

BORING LOGS AND WELL CONSTRUCTION DETAILS FROM MULTIPLE SOURCES WERE USED

WELL DESIGNATION (OFFSET DISTANCE AND DIRECTION)

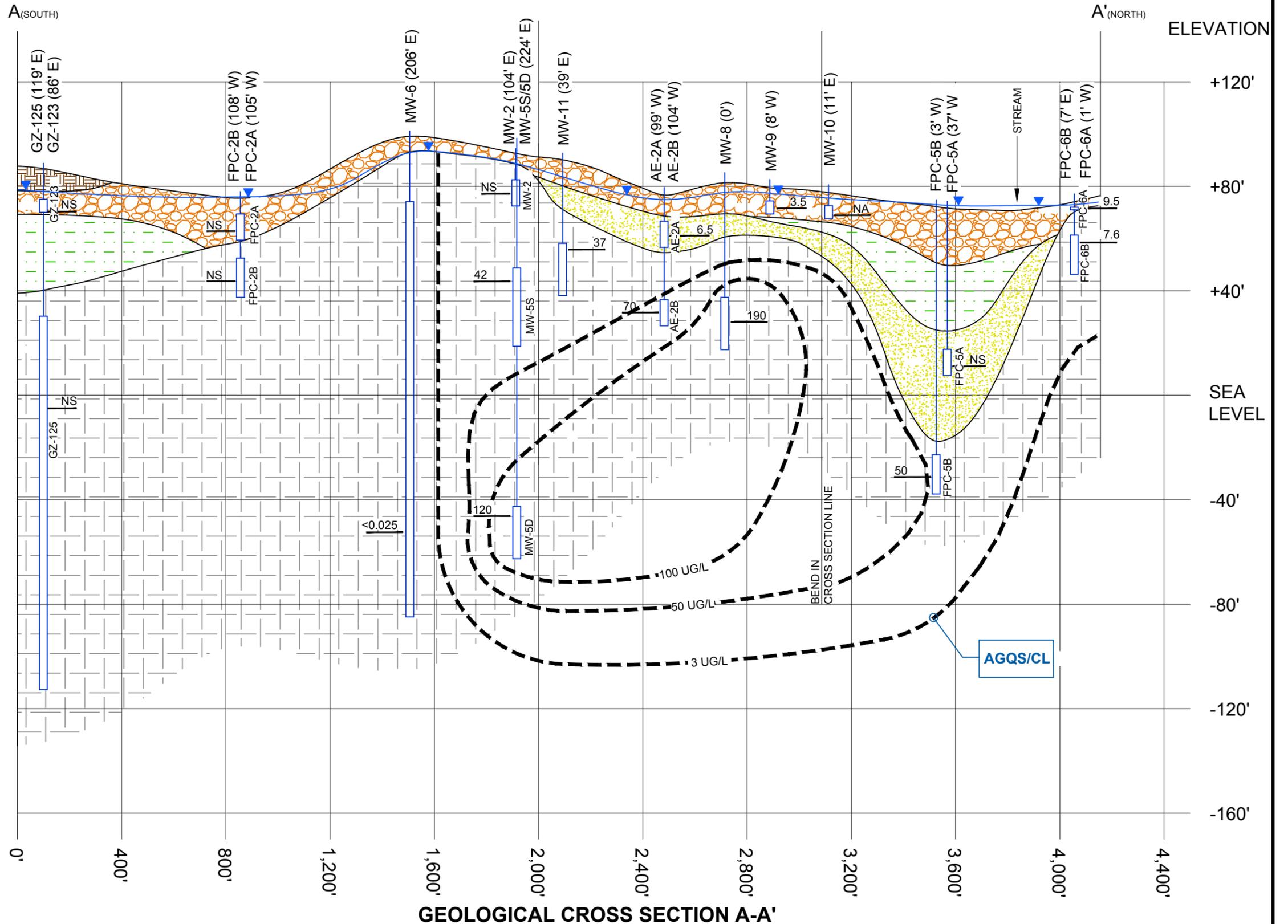
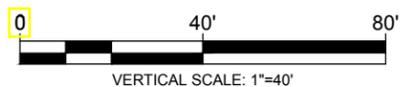
10

SCREENED / OPEN INTERVAL

CONCENTRATION IN UG/L

LEGEND

-  10 ISOCONCENTRATION CONTOUR (UG/L)
- N/A SAMPLE COLLECTED BUT NOT ANALYZED FOR PARAMETER PLOTTED
- N/S NOT SAMPLED

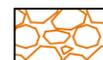
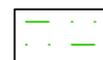


PROJECT TITLE: **COAKLEY LANDFILL SUPERFUND SITE
NORTH HAMPTON & GREENLAND, NEW HAMPSHIRE**

SHEET TITLE: **MAY/JUNE 2016 VERTICAL DISTRIBUTION OF
1,4 - DIOXANE IN GROUNDWATER A-A'**

DWG: FIGURE 15	BY: TND	REV: []	DESCRIPTION: []
JN: 10424.008	DATE: 2016-07-05	REV DATE: []	DESCRIPTION: []
SCALE: AS SHOWN	APPROVED BY: SLY	ISSUE: []	DESCRIPTION: []
	CHECKED BY: SLY	ISSUE DATE: []	



-  FILL MATERIAL
-  LANDFILL REFUSE
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CROSS SECTIONS BASED ON SECTION INCLUDED IN 2012 ANNUAL REPORT (PREPARED BY PROVAN & LORBER, INC.)

GENERAL SOIL AND BEDROCK DESCRIPTIONS FROM PLANS PREPARED BY GZA/WESTON, REMEDIAL INVESTIGATION - OCT. 1988

BOTTOM OF REFUSE BASED ON A PLAN PREPARED BY ARIES ENGINEERING, INC. NOV. 1999 MONITORING PLAN REPORT, FIGURE 5, FEBRUARY 2000

BORING LOGS AND WELL CONSTRUCTION DETAILS FROM MULTIPLE SOURCES WERE USED

WELL DESIGNATION (OFFSET DISTANCE AND DIRECTION)

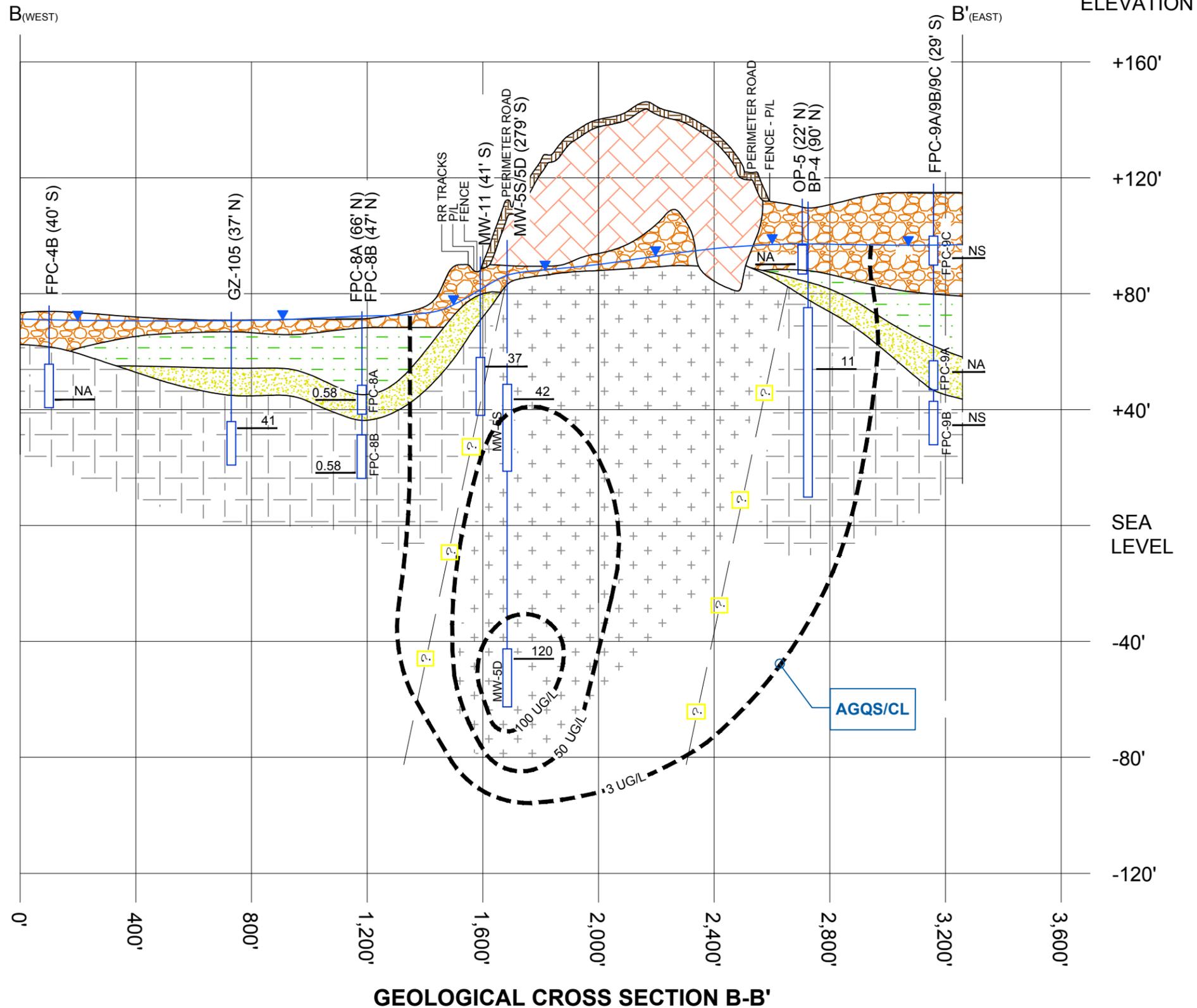
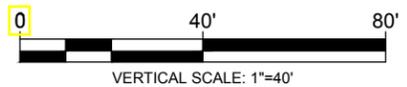
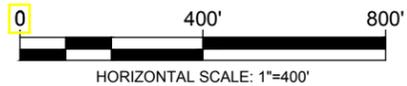
10

SCREENED / OPEN INTERVAL

CONCENTRATION IN UG/L

LEGEND

-  100 ISOCENTRATION CONTOUR (UG/L)
- N/A SAMPLE COLLECTED BUT NOT ANALYZED FOR PARAMETER PLOTTED
- N/S NOT SAMPLED



GEOLOGICAL CROSS SECTION B-B'

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

SHEET TITLE: **MAY/JUNE 2016 VERTICAL DISTRIBUTION OF
1,4 - DIOXANE IN GROUNDWATER B-B'**

DWG: FIGURE 16	BY: TND	REV:	DESCRIPTION:
JUN: 10424.008	DATE: 2016-07-05	REV DATE:	DESCRIPTION:
SCALE: AS SHOWN	APPROVED BY: SLY	ISSUE:	DESCRIPTION:
	CHECKED BY: SLY	ISSUE DATE:	



TABLE 1
 Summary of Groundwater Elevation Data
 2016 Annual Summary Report
 Coakley Landfill Superfund Site
 North Hampton, New Hampshire

MONITORING WELL IDENTIFICATION	Ref. Pt Elev. (FT. NGVD)	May-87 GW. EL. FT.	Screened Interval FT.	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.	Sep-15 GW. EL. FT.	May-16 GW. EL. FT.	
Operating Unit 1																																			
BP-4	111.70		33.6-99.0		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	96.35	97.35	
MW-2	94.54	90.57	10-20																																
MW-4	129.12		28-38	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	96.72	97.71	
MW-5S (Note 4)	101.96		48-78	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	88.76	90.20	
MW-5D (Note 4)	99.72		139-159								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	87.93	89.62	
MW-6	101.15	91.89	25-184	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	89.71	90.70	
MW-8 (Note 4)	85.02		44-65		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	75.21	77.11	
MW-9	82.62		5-10		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	74.15	75.15	
MW-10	80.60		5-10		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	74.80	74.62	
MW-11	92.70		32-52		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	74.46	79.89	82.15	
OP-2 (Note 4)	100.00		7-12	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	92.53	93.84
OP-5	112.68		13-23	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	96.67	97.61	
Operating Unit 2																																			
AE-1A	127.00		54-64								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	96.55	97.48	
AE-1B	126.80		75-85								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	96.53	96.45	
AE-2A	79.60		10-20								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	73.32	75.29		
AE-2B	79.50		40-50								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	73.56	75.65		
AE-3A	86.10		??-17.5								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	77.03	77.54	
AE-3B	87.30		28-40								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	78.47	78.50	78.32	77.76	78.84	77.50	77.84	77.22	77.45	81.09		
AE-4A	77.20		5-15																			73.47	70.75	73.75	72.91	73.10	73.20	71.49	73.10	70.80	72.29	70.42	71.20	72.99	
AE-4B	77.50		34-44																			73.42	70.51	73.30	72.28	73.61	73.01	71.10	72.18	70.58	72.12	70.26	70.55	72.92	
FPC-2A	78.40		6-16											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	75.36	75.39	
FPC-2B	77.98		22.5-37.5											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	75.18	77.00	
FPC-4B	75.83		18-33	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	69.76	71.15	
FPC-5A	74.30		54-64	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		NR		
FPC-5B	74.90		95-110	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	73.39	74.05	
FPC-6A (Note 5)	79.20		3.5-4.5	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	70.52	72.18
FPC-6B	77.10		13-28	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	71.60	70.49	71.24	72.65	
FPC-7A	82.08		16.7-21.7	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	80.46	81.17
FPC-7B	82.33		29.8-44.8	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	80.20	80.94
FPC-8A	73.80		23-33	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	71.32	72.75	
FPC-8B	73.60		40-55	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	71.19	72.59	
FPC-9A	117.57		58-68	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	96.18	97.20	
FPC-9B	117.87		72-87	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	96.18	97.18	
FPC-9C	117.75		15-25	100.45							97.87	95.77	96.33			97.25	96.50	99.62				96.75			96.08	97.62	98.10	96.75	96.65	96.78	97.69	96.53	96.84	97.58	
FPC-11A	117.95		47-52	100.4																															

TABLE 2
 Summary of May/June 2016 Groundwater Analytical Data
 Coakley Landfill Superfund Site - North Hampton and Greenland, New Hampshire

OPERABLE UNIT 1 (OU-1)																
Sampling Point ID	EPA	NHDES	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	CL	AGQS	Till	Till	DBR	SBR	OBH-BR	SBR	Outwash	Outwash	SBR	Outwash	Outwash	OBH-BR	EPA	NHDES
Date of Sample Collection	CL	AGQS	6/1/16	6/1/16	6/1/16	5/31/16	6/1/16	5/31/16	5/31/16	5/31/16	5/31/16	5/31/16	6/1/16	6/1/16	CL	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 U	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	2	N/A	N/A	1	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	31	5 U	5 U	12	N/A	N/A	6	N/A	N/A	N/A	---	---
Diethyl Ether	---	1400	N/A	N/A	87	21	5 U	57	N/A	N/A	10	N/A	N/A	N/A	---	0
IsoPropylbenzene	---	800	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
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	1	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	50	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	600	N/A	N/A	80	20	10 U	160	N/A	N/A	10	N/A	N/A	N/A	1	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	3	5.2	5.5	120	42	0.25 U	190	3.5	N/A	37	0.64	N/A	11	8	8
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	0.045	0.048	N/A	N/A	N/A	N/A	0.027	0.01	N/A	0.18	0.056	N/A	5	5
Dissolved Barium	---	2	0.063	0.062	N/A	N/A	N/A	N/A	0.037	0.033	N/A	0.011	0.024	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	---	---	57	58	N/A	N/A	N/A	N/A	42	36	N/A	32	20	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	---	---	23	23	N/A	N/A	N/A	N/A	14	20	N/A	48	31	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	---	---	19	19	N/A	N/A	N/A	N/A	11	10	N/A	6.7	5.1	N/A	---	---
Dissolved Manganese	0.3	0.84	1	0.99	N/A	N/A	N/A	N/A	0.89	1.5	N/A	1.6	4.7	N/A	6	6
Dissolved Nickel	0.1	0.1	0.007	0.008	N/A	N/A	N/A	N/A	0.007	0.003	N/A	0.01	0.015	N/A	0	0
Dissolved Potassium	---	---	30	30	N/A	N/A	N/A	N/A	4.3	8.4	N/A	9	2.8	N/A	---	---
Dissolved Sodium	---	---	27	27	N/A	N/A	N/A	N/A	15	25	N/A	12	8	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	0.01	0.02	0.001 U	0.007	N/A	N/A	0.013	N/A	N/A	0.013	3	3
Total Barium	---	2	N/A	N/A	0.091	0.12	0.004	0.17	N/A	N/A	0.064	N/A	N/A	0.027	---	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	18	28	N/A	N/A	17	N/A	N/A	35	---	---
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	14	15	1	3.3	N/A	N/A	13	N/A	N/A	12	---	---
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	28	16	7.2	33	N/A	N/A	14	N/A	N/A	18	---	---
Total Manganese	0.3	0.84	N/A	N/A	0.74	3	1.6	1.2	N/A	N/A	0.47	N/A	N/A	0.36	6	3
Total Nickel	0.1	0.1	N/A	N/A	0.008	0.01	0.003	0.019	N/A	N/A	0.005	N/A	N/A	0.006	0	0
Total Potassium	---	---	N/A	N/A	18	16	2	12	N/A	N/A	8.5	N/A	N/A	16	---	---
Total Sodium	---	---	N/A	N/A	130	65	15	170	N/A	N/A	64	N/A	N/A	64	---	---
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	1.3	2.1	1.7	1.2	1.8	2.2	1.3	1.2	2.2	1.4	---	---
Oxidation Reduction Potential (mV)	---	---	N/A	N/A	-146	-127	97	-154	-24	-82	-135	-68	-42	-187	---	---
pH (standard units)	---	---	N/A	N/A	7.1	7	6.1	7.4	6.5	6.7	7	6.4	6.2	7.5	---	---
Specific Conductance (us/cm)	---	---	N/A	N/A	1484	431	322	1138	440	489	534	487	361	831	---	---
Temperature (degrees Celcius)	---	---	N/A	N/A	13	16	13	13	15	16	13	12	12	13	---	---
Turbidity (NTU)	---	---	N/A	N/A	< 5	8	5	6	< 5	< 5	< 5	< 5	< 5	< 5	---	---

TABLE 2
Summary of May/June 2016 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	FPC-11B	GZ-105	GZ-105-DUP	# of Exceedances		
Monitored Unit	CL	AGQS	Till	SBR	Till	SBR	Till	Till	SBR	Till	SBR	SBR	SBR	Till	SBR	Till	SBR	Till	SBR	Till	Till	Till	SBR	SBR	EPA	NHDES	
Date of Sample Collection			6/1/16	6/1/16	5/31/16	5/31/16	5/31/16	5/31/16	5/31/16	6/2/16	6/2/16	6/2/16	5/31/16	6/2/16	6/2/16	6/3/16	6/3/16	6/1/16	6/1/16	6/1/16	6/2/16	6/2/16	6/2/16	6/2/16	CL	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	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	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	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 U	1 U	N/A	N/A	1 U	1 U	N/A	N/A	N/A	1	2	---	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	N/A	10 U	10 U	0	0	
Benzene	5	5	N/A	N/A	1 U	1 U	1	1	1	1 U	1 U	1 U	N/A	1 U	1 U	N/A	N/A	1 U	1 U	N/A	N/A	N/A	2	2	0	0	
Chlorobenzene	100	100	N/A	N/A	2 U	2 U	5	5	4	2 U	2 U	2 U	N/A	2 U	2 U	N/A	N/A	2 U	2 U	N/A	N/A	N/A	3	4	0	0	
Chloroethane	---	---	N/A	N/A	5 U	5 U	7	7	6	5 U	5 U	5 U	N/A	5 U	5 U	N/A	N/A	5 U	5 U	N/A	N/A	N/A	5 U	5 U	---	---	
Diethyl Ether	---	1400	N/A	N/A	5 U	14	11	12	11	5 U	5 U	5 U	N/A	7	6	N/A	N/A	5 U	5 U	N/A	N/A	N/A	19	23	---	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	N/A	1 U	1 U	---	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	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	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	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	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	N/A	2 U	2 U	0	0	
Tetrahydrofuran(THF)	154	600	N/A	N/A	10 U	20	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	N/A	20	20	0	0	
Toluene			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	N/A	1 U	1 U		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	N/A	2 U	2 U	0	0	
1,4-DIOXANE BY 8260B SIM - (ug/L)																											
1,4-Dioxane	3	3	N/A	N/A	6.5	70	20	19	26	N/A	N/A	N/A	50	9.5	7.6	N/A	N/A	0.58	0.58	N/A	N/A	0.94	39	41	10	10	
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	N/A	0	0	
Dissolved Arsenic	0.01	0.01	0.015	N/A	0.13	N/A	0.11	0.11	N/A	0.001 U	N/A	N/A	N/A	0.011	N/A	0.001 U	N/A	0.001 U	N/A	0.044	0.002	N/A	N/A	N/A	6	6	
Dissolved Barium	---	2	0.018	N/A	0.021	N/A	0.061	0.062	N/A	0.006	N/A	N/A	N/A	0.027	N/A	0.003	N/A	0.007	N/A	0.094	0.027	N/A	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	N/A	0	0	
Dissolved Calcium	---	---	32	N/A	23	N/A	40	40	N/A	6.2	N/A	N/A	N/A	23	N/A	10	N/A	20	N/A	48	55	N/A	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	N/A	0	0	
Dissolved Iron	---	---	0.47	N/A	18	N/A	22	24	N/A	0.05 U	N/A	N/A	N/A	1.1	N/A	0.05 U	N/A	0.05 U	N/A	7.3	0.47	N/A	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	N/A	0	0	
Dissolved Magnesium	---	---	12	N/A	6.8	N/A	19	19	N/A	5.5	N/A	N/A	N/A	10	N/A	3.4	N/A	4.6	N/A	26	17	N/A	N/A	N/A	---	---	
Dissolved Manganese	0.3	0.84	0.51	N/A	0.83	N/A	1.1	1.1	N/A	0.055	N/A	N/A	N/A	1.9	N/A	0.005 U	N/A	0.007	N/A	0.21	0.43	N/A	N/A	N/A	6	3	
Dissolved Nickel	0.1	0.1	0.001 U	N/A	0.007	N/A	0.007	0.007	N/A	0.001	N/A	N/A	N/A	0.005	N/A	0.003	N/A	0.002	N/A	0.005	0.001	N/A	N/A	N/A	0	0	
Dissolved Potassium	---	---	3.8	N/A	13	N/A	17	17	N/A	2	N/A	N/A	N/A	6.1	N/A	1.8	N/A	2.2	N/A	9.5	5.8	N/A	N/A	N/A	---	---	
Dissolved Sodium	---	---	20	N/A	27	N/A	62	61	N/A	7	N/A	N/A	N/A	62	N/A	8	N/A	15	N/A	78	150	N/A	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	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	0.001 U	0	0	
Total Arsenic	0.01	0.01	N/A	0.007	N/A	0.006	N/A	N/A	0.091	N/A	0.001 U	0.001 U	0.003	N/A	0.002	N/A	0.001 U	N/A	0.006	N/A	N/A	0.003	0.008	0.008	1	1	
Total Barium	---	2	N/A	0.04	N/A	0.088	N/A	N/A	0.15	N/A	0.009	0.004	0.037	N/A	0.037	N/A	0.002	N/A	0.006	N/A	N/A	0.12	0.034	0.033	---	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	0.001 U	0	0	
Total Calcium	---	---	N/A	27	N/A	39	N/A	N/A	42	N/A	6.2	3.3	5.2	N/A	8.3	N/A	13	N/A	18	N/A	N/A	42	31	31	---	---	
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	0.001 U	0	0	
Total Iron	---	---	N/A	2.6	N/A	4	N/A	N/A	17	N/A	0.05 U	0.05 U	0.19	N/A	5.5	N/A	0.05 U	N/A	0.12	N/A	N/A	6.6	2.1	2	---	---	
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	0.001 U	0	0	
Total Magnesium	---	---	N/A	13	N/A	28	N/A	N/A	20	N/A	4.7	2.4	3.3	N/A	5	N/A	3.6	N/A	3.9	N/A	N/A	16	13	13	---	---	
Total Manganese	0.3	0.84	N/A	0.51	N/A	1.1	N/A	N/A	1.4	N/A	0.005 U	0.005 U	0.057	N/A	0.37	N/A	0.005 U	N/A	0.027	N/A	N/A	1.1	0.29	0.28	5	3	
Total Nickel	0.1	0.1	N/A	0.001 U	N/A	0.008	N/A	N/A	0.007	N/A	0.001 U	0.001 U	0.006	N/A	0.002	N/A	0.001 U	N/A	0.001 U	N/A	N/A	0.006	0.005	0.004	0	0	
Total Potassium	---	---	N/A	5.3	N/A	11	N/A	N/A	18	N/A	3.1	1.5	6.3	N/A	4.5	N/A	1.7	N/A	2.5	N/A	N/A	12	5.3	5.4	---	---	
Total Sodium	---	---	N/A	23	N/A	160	N/A	N/A	70	N/A	15	5 U	250	N/A	54	N/A	8	N/A	16	N/A	N/A	520	130	130	---	---	
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	0.005 U	N/A	0.005 U	N/A	0.005 U	N/A	N/A	0.005 U	0.005 U	0.005 U	0	---	
FIELD PARAMETERS																											
Dissolved Oxygen (mg/l)	---	---	N/A	N/A	1.5	2.1	1	N/A	1.1	1.4	4.8	3.7	2	1.4	1.5	4.8	4.3	2.6	1.7	2	2.9	1.6	1.1	N/A	---	---	
Oxidation Reduction Potential (mV)	---	---	N/A	N/A	-86	-129	-102	N/A	-35	116	115	121	-166	-68	-87	140	163	118	-130	-130	-135	-150	-154	N/A	---	---	
pH (standard units)	---	---	N/A	N/A	6.8	7.3	6.6	N/A	7.1	6.7	7	6.8	8.1	7	7	6.6	6.6	6.6	8.2								

TABLE 2

Summary of 2016 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.

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 CL	US Environmental Protection Agency Cleanup Level established in 2015 Fifth Explanation of Significant Difference. Cleanup Levels were historically called Interium Cleanup Levels.
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 Off-Site Water Supply Wells
 2016 Annual Report
 Coakley Landfill - North Hampton, New Hampshire

SAMPLE IDENTIFICATION	EPA CL	NHDES AGQS	EPA MCL	R-3	R-3-DUP	R-3	R-3-DUP	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	25-Feb-15	25-Feb-15	15-Sep-15	15-Sep-15
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	<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	<0.5	<0.5	<0.5	<0.5
1,4-dioxane (ug/L)	3	3	-	NA	NA	NA	NA	NA	0.40	0.45	0.26	0.45	0.41	0.41	0.42	0.37	0.36	0.46	0.43	0.37	0.35
METALS																					
Arsenic, total (mg/L)	0.01	0.01	0.01	NA	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001									
Manganese, total (mg/L)	0.3	0.84	-	NA	0.13	0.14	0.10	0.098	0.14	0.14	0.16	0.16									
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	10.1	NA	13	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	8.3	NA	8.1	NA
Conductivity (uS/cm)	-	-	-	316	423	452	443	238	466	NM	NM	414	NA	NR	NA	417	NA	422	NA	448	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	<0.5	NA	0.8	NA
Turbidity (NTU)	-	-	-	2.0	15.4	2.2	0.5	1.04	0.70	NM	NM	6.00	NA	<5	NA	< 5	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	-186	NA	-194	NA

SAMPLE IDENTIFICATION	EPA CL	NHDES AGQS	EPA MCL	R-3	R-3 Dup	R-3	R-3 Dup
DATE SAMPLED				3-Mar-16	3-Mar-16	1-Jun-16	1-Jun-16
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	3	-	0.34	0.34	0.3	0.34
METALS							
Arsenic, total (mg/L)	0.01	0.01	0.01	<0.001	<0.001	<0.001	<0.001
Manganese, total (mg/L)	0.3	0.84	-	0.22	0.22	0.19J	0.19J
FIELD PARAMETERS							
Temperature (degrees Celcius)	-	-	-	10	NA	11	NA
pH (standard units)	-	-	-	7.9	NA	7.9	NA
Conductivity (uS/cm)	-	-	-	484	NA	402	NA
Dissolved Oxygen (mg/L)	-	-	-	0.6	NA	< 0.5	NA
Turbidity (NTU)	-	-	-	<5	NA	< 5	NA
Oxidation/Reduction Potential (mV)	-	-	-	-158	NA	-180	NA

SAMPLE IDENTIFICATION	EPA CL	NHDES AGQS	EPA MCL	339BHR	339BHR	339BHR	339BHR	339BHR	339BHR	339BHR	339BHR
DATE SAMPLED				29-Apr-13	16-Aug-13	27-Feb-14	3-Oct-14	25-Feb-15	18-Sep-15	3-Mar-16	26-May-16
VOLATILE ORGANIC COMPOUNDS											
Methyl tert-butyl ether (ug/L)	-	13	-	NA	<0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
Toluene (ug/L)	-	1000	1000	NA	<0.5	<0.5	1.8	<0.5	<0.5	<0.5	<0.5
1,4-dioxane (ug/L)	3	3	-	0.38	0.42	0.63	0.42	0.85	0.74	0.55	0.51
METALS											
Arsenic, total (mg/L)	0.01	0.01	0.01	NA	NA	< 0.001	< 0.001	<0.001	0.002	<0.001	<0.001
Manganese, total (mg/L)	0.3	0.84	-	NA	NA	0.25	0.32	0.36	0.31	0.41	0.31J
FIELD PARAMETERS											
Temperature (degrees Celcius)	-	-	-	NM	NM	11	12	10	14	11	12
pH (standard units)	-	-	-	NM	NM	7.1	7.1	7.1	6.1	7.0	7.2
Conductivity (uS/cm)	-	-	-	NM	NM	NR	394	399	383	470	424
Dissolved Oxygen (mg/L)	-	-	-	NM	NM	0.7	0.7	0.7	<0.5	1.1	2.2
Turbidity (NTU)	-	-	-	NM	NM	35	5	22	<5	12	7
Oxidation/Reduction Potential (mV)	-	-	-	NM	NM	-22	-63	20	-55	-28	-94

Notes on last page of table

TABLE 3
Summary of Analytical Results for Off-Site Water Supply Wells
2016 Annual Report
Coakley Landfill - North Hampton, New Hampshire

SAMPLE IDENTIFICATION	EPA CL	NHDES AGQS	EPA MCL	346BHR 30-Aug-12	346BHR 16-Aug-13	346BHR 3-Oct-14	346BHR 18-Sep-15	346BHR 26-May-16
DATE SAMPLED								
VOLATILE ORGANIC COMPOUNDS								
Methyl tert-butyl ether (ug/L)	-	13	-	<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
1,4-dioxane (ug/L)	3	3	-	<0.25	<0.25	<0.25	<0.25	<0.25
METALS								
Arsenic, total (mg/L)	0.01	0.01	0.01	NA	NA	< 0.001	< 0.001	< 0.001
Manganese, total (mg/L)	0.3	0.84	-	NA	NA	0.29	0.37	0.28J
FIELD PARAMETERS								
Temperature (degrees Celcius)	-	-	-	13	NM	12	12	11
pH (standard units)	-	-	-	7.3	NM	6.9	6.8	6.9
Conductivity (uS/cm)	-	-	-	606	NM	608	600	893
Dissolved Oxygen (mg/L)	-	-	-	6.4	NM	0.9	<0.5	1.4
Turbidity (NTU)	-	-	-	18	NM	21	<5	8
Oxidation/Reduction Potential (mV)	-	-	-	76	NM	-6	-21	-2

SAMPLE IDENTIFICATION	EPA CL	NHDES AGQS	EPA MCL	415BHR 16-Apr-13	415BHR 16-Aug-13	415BHR 3-Oct-14	415BHR 15-Sep-15	415BHR 25-May-16
DATE SAMPLED								
VOLATILE ORGANIC COMPOUNDS								
Methyl tert-butyl ether (ug/L)	0.01	0.01	0.01	NA	<0.5	<0.5	<0.5	<0.5
Toluene (ug/L)	-	1000	1000	NA	<0.5	<0.5	<0.5	<0.5
1,4-dioxane (ug/L)	3	3	-	<0.25	<0.25	<0.25	<0.25	<0.25
METALS								
Arsenic, total (mg/L)	0.01	0.01	0.01	NA	NA	< 0.001	< 0.001	<0.01
Manganese, total (mg/L)	0.3	0.84	-	NA	NA	0.028	0.03	0.046J
FIELD PARAMETERS								
Temperature (degrees Celcius)	-	-	-	NM	13.00	13	14	11
pH (standard units)	-	-	-	NM	8.10	8.6	8.5	8.6
Conductivity (uS/cm)	-	-	-	NM	351.00	386	389	401
Dissolved Oxygen (mg/L)	-	-	-	NM	0.57	0.6	<0.5	0.6
Turbidity (NTU)	-	-	-	NM	< 5	< 5	< 5	< 5
Oxidation/Reduction Potential (mV)	-	-	-	NM	-188	-178	-223	-237

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
4. Chloroform is synonymous with trihalomethane; therefore, the NHDES AGQS for trihalomethane will be used for chloroform.

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 CL = EPA Groundwater Quality Standard
Bold values denote concentration exceeding the EPA Interim Cleanup Level (ICL).
 Shaded values denote concentration exceeding the NHDES Ambient Groundwater Quality Standard

J = The analyte is an estimated concentration.

TABLE 4
 Summary of Surface Water Analytical Data for SW-5 & SW-103
 Coakley Landfill Superfund Site - North Hampton Greenland, New Hampshire

SAMPLE IDENTIFICATION DATE SAMPLED	NHDES Surface Water Standard		SW-5	SW-5	SW-5	SW-5	SW-5	SW-5	SW-5	SW-5	SW-5	SW-5 (DUP)	SW-5	SW-5 (DUP)	SW-5	SW-5 (DUP)
	Acute	Chronic	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	16-Sep-15	16-Sep-15	1-Jun-16	1-Jun-16	
VOLATILE ORGANIC COMPOUNDS BY 8260B (ug/L)																
Toluene	---	---	< 2	< 2	< 2	< 1	< 1	7.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METALS BY 200.8 (mg/L)																
TOTAL OR DISSOLVED (METALS ONLY)			Total	Total	Total	Dissolved	Total	Dissolved	Total	Total	Total	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Aluminum	0.75	0.087	240	9.1 J	3	0.08	0.15	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Antimony	9	1.6	< 0.004	< 0.05	< 0.004	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Arsenic*	0.34	0.15	0.72	1.2	0.017	0.019	0.006	0.008	0.002	0.045	0.007	< 0.001	< 0.001	0.002	0.002	0.003
Barium	---	---	6.1	0.36	0.07	0.056	0.029	0.033	0.053	0.063	0.023	0.013	0.014	0.016	0.015	0.024
Beryllium	0.13	0.0053	0.011	< 0.01	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium*	0.00095	0.0008	0.01	< 0.01	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Calcium	---	---	310	54 J	67	66	28	33	43	66	29	29	30	19 J-	19 J-	43
Chromium (Cr+3 + Cr+6)*	0.183 (Cr+3) 0.016 (Cr+6)	0.024 (Cr+3) 0.011 (Cr+6)	0.38	0.03	0.005	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Cobalt	---	---	0.2	0.01	0.003	< 0.004	0.003	0.003	0.002	0.002	0.003	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Copper*	0.0036	0.0027	0.14	< 0.01 J	< 0.005	< 0.004	0.003	0.002	< 0.001	0.001	0.003	0.001	0.001	0.004	0.003	< 0.001
Iron	---	1	1,200	250	25	14	5	6	2	30	4.6	0.6	0.6	0.41	0.42	7.5
Lead*	0.014	0.00054	0.44	0.01	< 0.002	< 0.002	0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Magnesium	---	---	90	18	19	17	8	10	10	15	7.3	8.3	8.2	5.4	5.1	11
Manganese	---	---	200	6	3	2.6	1	2	1	2	2.1	0.35	0.36	0.26	0.24	0.68
Mercury*	0.0014	0.00077	0.002	< 0.001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel*	0.1449	0.016	0.27	0.02	0.008	0.005	0.005	0.006	0.005	0.005	0.004	0.002	0.002	0.003	0.003	0.004
Potassium	---	---	50	20	20	23	21	24	7	20	14	5.4	5.5	5.0	4.7	11
Selenium	---	0.0005	0.009	< 0.01 J	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001	< 0.001	0.001	0.002
Silver*	0.00032	---	< 0.004	< 0.01	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Sodium	---	---	22	21	43	52	35	42	36	46	20	28	27	25 J-	23 J-	25
Thallium	1.4	0.04	< 0.004	< 0.01	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Vanadium	---	---	0.36	0.019	< 0.004	< 0.002	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc*	0.0362	0.0365	0.53	0.05	0.019	0.019	0.01	0.9	< 0.005	0.089	0.016	< 0.005	< 0.005	0.013	0.011	< 0.005
GENERAL CHEMISTRY																
Ammonia** (mg/L)	pH Dependent		9.85	11.3	5.8	2.9	< 0.05	8.7	1.9	0.08	0.08	0.08	0.08	0.06	0.41	0.33
FIELD PARAMETERS																
Temperature (degrees C)	---	---	NA	NA	NA	7.46	18.1	19.69	18.48	11.5	NA	18	NA	19	NA	NA
pH (Standard Units)	---	---	NA	NA	NA	6.99	6.45	6.31	6.51	6.8	NA	6.2	NA	7.2	NA	NA
Specific Conductance (us/cm)	---	---	NA	NA	NA	675	451	965	178	397	NA	347	NA	258	NA	NA
Dissolved Oxygen (mg/L)	---	---	NA	NA	NA	0.5	3.29	0.84	2.25	3.2	NA	1.8	NA	3.6	NA	NA
Turbidity (NTU)	---	---	NA	NA	NA	12.6	8.4	33	5.48	7	NA	<5	NA	13	NA	NA
Oxidation Reduction Potential (mV)	---	---	NA	NA	NA	-70	73	-111	-50	41	NA	63	NA	-96	NA	NA

NOTES:

- VOCs list is limited to analytes detected in samples
 - no standard has been established for the indicated parameter.
 - NHDES Surface Water Standards are listed in Env Wq 1700, Table 1703.1
 - There are no ROD ICLs established for surface water.
 - Highlighting: Bold values denote NHDES Acute Surface Water Criteria Exceedances; Gray shaded values denote NHDES Chronic Criteria Exceedances
 - 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.

TABLE 4
Summary of Surface Water Analytical Data for SW-5 & SW-103
Coakley Landfill Superfund Site - North Hampton Greenland, New Hampshire

SAMPLE IDENTIFICATION	NHDES Surface Water Standard		SW-103	SW-103	SW-103	SW-103	SW-103	SW-103	SW-103	
	Acute	Chronic	28-Aug-06	13-Sep-07	14-Aug-08	19-Aug-09	19-Aug-11	16-Sep-15	1-Jun-16	
VOLATILE ORGANIC COMPOUNDS BY 8260B (ug/L)										
Toluene	---	---	< 2	< 1	< 1	7.2	< 1	< 1	< 1	
METALS BY 200.8 (mg/L)										
TOTAL OR DISSOLVED (METALS ONLY)			Total	Total	Dissolved	Total	Total	Total	Dissolved	Dissolved
Aluminum	0.75	0.087	0.2	<0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.05	<0.05
Antimony	9	1.6	< 0.05	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.001
Arsenic*	0.34	0.15	0.004	0.005	0.006	0.002	0.011	0.002	0.002	0.002
Barium	---	---	0.038	0.04	0.045	0.029	0.078	0.019	0.017	0.016
Beryllium	0.13	0.0053	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.001
Cadmium*	0.00095	0.0008	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.001
Calcium	---	---	48	33	37	46	55	26	22	38
Chromium (Cr+3 + Cr+6)*	0.183 (Cr+3) 0.016 (Cr+6)	0.024 (Cr+3) 0.011 (Cr+6)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.001
Cobalt	---	---	< 0.01	0.007	0.009	< 0.001	0.002	< 0.001	< 0.001	<0.001
Copper*	0.0036	0.0027	< 0.01	0.003	0.002	0.002	0.003	0.002	<0.001	0.001
Iron	---	1	14	11	13	2.8	25	0.96	4.40	0.54
Lead*	0.014	0.00054	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.001
Magnesium	---	---	12	8.9	9.9	10	14	7.5	5.4	10.0
Manganese	---	---	1.6	1.4	1.6	0.59	3.3	0.4	0.60	0.70
Mercury*	0.0014	0.00077	< 0.01	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001
Nickel*	0.1449	0.016	<0.01	0.007	0.007	0.006	0.005	0.003	0.003	0.003
Potassium	---	---	7.1	18.0	18.0	9.4	8.2	11.0	6.0	8.1
Selenium	---	0.0005	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.001	0.001
Silver*	0.00032	---	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.001
Sodium	---	---	23	38	41	16	39	24	20	25
Thallium	1.4	0.04	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.001
Vanadium	---	---	<0.01	< 0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.005	<0.005
Zinc*	0.0362	0.0365	0.006	0.01	0.74	< 0.005	0.69	0.013	0.011	<0.005
GENERAL CHEMISTRY										
Ammonia** (mg/L)	pH Dependent		0.2	0.44	0.81	0.48	0.24	0.08	<0.05	
FIELD PARAMETERS										
Temperature (degrees C)	---	---	NA	7.71	17.84	21.04	18.62	16	20	
pH (Standard Units)	---	---	NA	6.69	6.35	6.77	7.87	6.3	7.1	
Specific Conductance (us/cm)	---	---	NA	603	388	610	189	272	414	
Dissolved Oxygen (mg/L)	---	---	NA	1.3	2.85	1.09	0.76	3.1	1.8	
Turbidity (NTU)	---	---	NA	2.44	7.4	43.5	2.68	12.7	12	
Oxidation Reduction Potential (mV)	---	---	NA	-9	114	-137	20.4	-55	61	

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 values denote NHDES Acute Surface Water Criteria Exceedances; Gray shaded values denote NHDES 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 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)
- ** The freshwater and saltwater aquatic life criteria for ammonia are pH dependent. Refer to Env-Wq 1703.25 through Env-Wq 1703.31.

TABLE 5
 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		SED-4	SED-4	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	9/16/2015	6/2/2016
TOTAL METALS BY 6020 - (mg/kg)												
Total Aluminum	---	8100	4400	7900	6700	3800	12000	3100	Sediment Sampling Not Required for 2010-2013	3900 J	4600 J	5500J
Total Antimony	---	5.3	< 12	< 4	< 24	1	< 0.5	0.7		< 1 UJ	0.8 J	1J
Total Arsenic	9.79	40	< 6	< 4	< 6	4.2	2.1	3.1		4 J	3.6 J	4J
Total Barium	---	220	28	60	49	68	71	52		95 J	57 J	61J
Total Beryllium	---	1.8	< 12	< 4	< 6	< 0.5	0.6	< 0.5		< 1 UJ	<0.5 UJ	<1UJ
Total Cadmium	0.99	0.8	< 6	< 4	< 6	0.8	< 0.5	0.5		1 J	0.8 J	<1UJ
Total Calcium	---	31000	9200	13000	12000	15000	2000	17000		20000 J	16000 J	17000J
Total Chromium	43.4	69	6	12	< 6	4	14	3.4		5 J	4.8 J	6J
Total Cobalt	---	14	< 3	< 4	< 6	17	1.2	2		5 J	1.6 J	2J
Total Copper	31.6	67	< 6	17	20	2.3	2.5	16		15 J	14 J	16J
Total Iron	---	2500	1200	3900	2400	3100	2100	2800		9100 J	3300 J	3400J
Total Lead	35.8	250	15	130	110	68	10	32		91 J	89 J	79J
Total Magnesium	---	4400	1500	3500	2400	2000	900	2000		2100 J	2000 J	2300J
Total Manganese	---	500	400	190	160	910	63	980		2100 J	470 J	530J
Total Mercury	0.18	0.3	< 0.6	0.4	< 0.6	0.5	< 0.1	0.3		0.5 J	0.4 J	0.4J
Total Nickel	22.7	53	< 6	14	< 9	7.4	6.3	6.9		9 J	7.1 J	8J
Total Potassium	---	800	370	500	340	300	1700	200		800 J	800 J	900J
Total Selenium	---	2.9	< 6	< 4	< 6	< 0.5	< 0.5	2.2		3 J	1.8 J	2J
Total Silver	---	< 1	< 6	< 4	< 6	< 0.5	< 0.5	< 0.5		< 1 UJ	<0.5 UJ	<1UJ
Total Sodium	---	100	230	190	1100	300	200	400		300 J	200 J	300J
Total Thallium	---	< 1	< 15	< 4	< 6	< 0.5	< 0.5	< 0.5	< 1 UJ	<0.5 UJ	<1UJ	
Total Vanadium	---	71	7	38	29	14	14	10	27 J	28 J	30J	
Total Zinc	121	220	57	91	74	110	8.3	93	170 J	74 J	100J	
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	17.3 J	17.5

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 5
 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		SED-5	SED-5-DUP	SED-5	SED-5-DUP	SED-5	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	9/16/2015	9/16/2015	6/1/2016	6/1/2016
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	14000 J	16000 J	17000J	19000J
Total Antimony	---	< 2	< 12	< 4	< 8	1	< 0.5	< 0.5		0.8 J	0.7 J	1.8 J	1.9 J	1J	2J
Total Arsenic	9.79	19	36	310	17	15	16	15		10 J	12 J	14 J	16 J	10J	10J
Total Barium	---	88	130	270	150	110	49	110		140 J	210 J	120 J	140 J	140J	150J
Total Beryllium	---	< 4	< 12	< 4	< 2	< 0.5	< 0.5	1		0.9 J	1.3 J	0.7 J	0.8 J	1J	1J
Total Cadmium	0.99	< 1	< 6	< 4	< 2	2.7	< 0.5	< 0.5		< 0.5 UJ	0.5 J	0.6 J	0.6 J	<1UJ	<1UJ
Total Calcium	---	4700	11000	8900	3600	8700	1700	1700		5600 J	11000 J	9800 J	11000 J	12000J	12000J
Total Chromium	43.4	46	56	13	69	39	23	49		28 J	45 J	26 J	29 J	30J	36J
Total Cobalt	---	12	13	6	14	55	5.1	11		5.9 J	8 J	7 J	7 J	7J	7J
Total Copper	31.6	37	20	6	45	9.7	16	28		21 J	34 J	36 J	38 J	35J	41J
Total Iron	---	31000	37000	210000	40000	54000	13000	29000		18000 J	30000 J	20000 J	23000 J	22000J	22000J
Total Lead	35.8	25	40	20	23	4000	10	18		15 J	22 J	55 J	58 J	28J	36J
Total Magnesium	---	6500	6000	3200	10000	4500	3800	7700		3900 J	6800 J	3700 J	4400 J	5100J	6100J
Total Manganese	---	840	1400	2500	500	600	240	300		350 J	570 J	470 J	520 J	460J	520J
Total Mercury	0.18	< 0.2	< 0.6	0.5	< 0.2	0.9	0.2	< 0.1		< 0.1 UJ	0.1 J	0.4 J	0.4 J	0.1J	0.2J
Total Nickel	22.7	38	38	9	53	32	14	38		21 J	33 J	24 J	26 J	27J	29J
Total Potassium	---	4400	2000	1300	8200	1600	1300	5400		5200 J	8200 J	3800 J	4200 J	5000J	5500J
Total Selenium	---	< 2	< 6	< 4	< 2	< 0.5	< 0.5	< 0.5		0.7 J	0.7 J	1.9 J	1.3 J	<1UJ	1J
Total Silver	---	< 2	< 6	< 4	< 2	1.4	< 0.5	< 0.5		< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	<1UJ	<1UJ
Total Sodium	---	480	270	240	800	400	200	300		400 J	700 J	300 J	400 J	400J	500J
Total Thallium	---	< 1	< 6	< 4	< 2	< 0.5	< 0.5	< 0.5	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	<1UJ	<1UJ	
Total Vanadium	---	35	38	17	55	24	25	41	34 J	53 J	46 J	49 J	44J	55J	
Total Zinc	121	170	120	38	130	700	28	80	94 J	130 J	110 J	120 J	110J	120J	
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	22.8 J	22.2 J	23.3	23.6

- 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
- Beginning in 2014, sediment data was qualified in accordance with EPA's Tier I Plus data validation guidelines.
 - The EPA has not established a cleanup standard for sediment.
 - 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).
 - Shaded values denote concentrations exceeding the NOAA SQiRT TEC standard.

TABLE 6
Summary of Leachate Analytical Results
2016 Annual Report
Coakley Landfill - North Hampton, New Hampshire

SAMPLE IDENTIFICATION	NHDES SURFACE WATER STANDARDS		L-1	L-1	L-1	L-1	L-1	L-1	L-1	L-1	L-1	L-1	L-1	L-1	L-1	L-1-DUP	L-1	L-1-DUP	L-1	L-1-DUP
	ACUTE	CHRONIC	16-Aug-01	7-Aug-02	27-Aug-03	25-Aug-04	25-Aug-05	30-Nov-06	13-Nov-07	12-Aug-08	19-Aug-09	17-Aug-10	19-Aug-11	30-Aug-12	14-Aug-13	14-Aug-13	17-Sep-15	17-Sep-15	1-Jun-16	1-Jun-16
DATE SAMPLED								ID 104240												
COMMENTS																				
PARAMETER ANALYZED																				
VOLATILE ORGANIC COMPOUNDS (ug/L)																				
Benzene	5300	NSE	3	2	2	<2	2	2	3	<1	1.9	2	2.0	2	2	2	2	2	1	1
Chlorobenzene	250	50	27	15	18	12	20	18	22	<2	20	24	18	15	13	14	16	14	11	12
Chloroethane	NSE	NSE	8	6	6	3	6	<2	6	<5	4.4	<5	4.1	<5	<5	<5	<5	<5	<5	<5
1,4 Dichlorobenzene (See Note 4)			<2	3	2	<2	3	2	3	<1	2.5	3	2.3	2	2	2	2	2	2	2
1,3-Dichlorobenzene (See Note 4)	1120	763	<2	<2	<2	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2 Dichlorobenzene (See Note 4)			<2	<2	<2	<2	<2	<2	1	<1	1.1	2	1.2	1	<1	<1	<1	<1	<1	<1
Isopropylbenzene	NSE	NSE	<2	<2	<2	<2	<2	2	2	<1	1.5	2	1.6	1	1	1	1	BDL	<1	<1
Diethyl Ether	NSE	NSE	31	<10	<10	<10	<10	<10	23	<5	13	15	12	10	10	10	11	10	7	7
Naphthalene	2300	620	<10	<10	<10	<10	<10	<10	<5	<5	0.6	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrahydrofuran	NSE	NSE	32	<30	<30	<30	<30	<30	20	<10	12	10	<10	<10	<10	<10	10	10	<10	<10
Toluene	NSE	NSE	<2	<2	<2	<2	<2	<2	<1	<1	<1	1	<1	<1	<1	<1	<1	2J	<1	<1
LOW LEVEL 1,4-DIOXANE (ug/L)																				
1,4-Dioxane	NSE	NSE	NA	NA	NA	NA	NA	NA	NA	NA	26	20	25	28	22	24	NA	NA	NA	NA
METALS (ug/L)																				
			Total	Total	Total	Total	Total	Total	Total	Dissolved	Total	Total								
Aluminum	750	87	3200	4100	9,500	29,000	18,000	NA	<50	<50	170	<50	<50	<50	<50	80	<50	<50	<50	<50
Antimony	9,000	1,600	6	<2	<2	<4	<6	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Arsenic	340	150	83	23	67	150	300	NA	7	6	4	4	7	6	4	5	7	6	6	3
Barium	NSE	NSE	1300	260	610	2200	4600	NA	97	99	11	100	100	97	87	92	110	100	96	74
Beryllium	130	5.3	3	<4	<4	3	<2	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium	0.95	0.80	<2	<2	<2	<4	<6	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Calcium	NSE	NSE	120,000	97,000	100,000	140,000	150,000	NA	50,000	62,000	20,000	64,000	71,000	63,000	79,000	56,000	57,000	67,000	67,000	52,000
Chromium	183	24	20	13	27	55	70	NA	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt	NSE	NSE	<2	3	6	11	10	NA	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Copper	3.6	2.7	<2	5	13	36	40	NA	<1	1	8	<1	<1	1	<1	<1	<1	<1	<1	<1
Iron	NSE	1,000	350,000	130,000	330,000	1,000,000	1,100,000	NA	30,000	27,000	1,200	35,000	34,000	31,000	31,000	35,000	45,000	35,000	33,000	36,000
Lead	14	0.54	<2	2	8	34	<6	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Magnesium	NSE	NSE	49,000	43,000	36,000	34,000	43,000	NA	20,000	25,000	2,500	25,000	21,000	21,000	20,000	16,000	16,000	17,000	17,000	18,000
Manganese	NSE	NSE	7,600	5,700	5,900	10,000	9,800	NA	2,700	3,200	98	3,200	2,900	2,700	3,300	2,500	2,500	2400 J+	2,200 J+	2,700
Mercury	1.4	0.77	<0.2	<0.2	<0.2	<0.2	<0.2	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	144.9	16.1	22	18	28	32	40	NA	7	8	3	7	6	4	6	5	5	5	5	5
Potassium	NSE	NSE	66	55	46,000	38,000	50,000	NA	34,000	40	7,800	37,000	33,000	30,000	31,000	25,000	27,000	26,000	27,000	25,000
Selenium	NSE	5	7	8	4	3	<2	NA	<1	<1	<1	<1	2	2	5	5	5	5	5	3
Silver	0.32	NSE	<2	<2	2	<4	<6	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sodium	NSE	NSE	220,000	200,000	160,000	140,000	150,000	NA	130,000	150,000	<10	100,000	110,000	91,000	100,000	78,000	76,000	90,000	90,000	61,000
Thallium	1,400	40	<2	<2	<2	<4	<6	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	NSE	NSE	46	13	36	89	220	NA	1	1	2	2	1	<1	<1	<1	<1	<1	<1	<5
Zinc	36.2	36.5	45	51	140	390	690	NA	<5	650	56	12	6	<5	<5	<5	10	<5	<5	<5
GENERAL CHEMISTRY																				
Chemical Oxygen Demand (mg/l)	NSE	NSE	190	178	560	282	377	NA	70	50	50	54	40	44	52	68	32	43	19	18
Ammonia-N (mg/l)	36.1	5.91	44	41	44.8	56.8	79	NA	33	0.62	21	22	25	24	21	19	23	23	110	100
FIELD PARAMETERS																				
Temperature (degrees Celcius)									12	18	14	16	15	16	15	NA	15	NA	11	NA
pH (standard units)									6.2	6.6	6.4	6.6	5.1	6.6	6.3	NA	6.4	NA	6.6	NA
Conductivity (us/cm)									1,600	176	1,459	1,500	821	1,399	1,220	NA	1,283	NA	1,223	NA
Dissolved Oxygen (mg/l)									2.2	4.9	1.3	0.6	3.4	2.3	2.3	NA	2.6	NA	0.8	NA
Turbidity (NTU)									18	90	10	9	2	17	144	NA	6	NA	10	NA
Oxidation/Reduction Potential (mV)									138	42	-38	-99	-73.1	-76.0	-102.0	NA	-111.0	NA	-60.0	NA

NOTES:

1. BDL = Below Detection Limit; NA = Not Analyzed
2. NSE indicates no standard has been established for the indicated parameter.
3. NHDES Surface Water Standard are listed in Env Wq 1700
4. Acute and chronic standards based on total dichlorobenzenes
5. Ammonia-N standard is based on pH of 7.0 at 14 C, salinoids not present
6. A **bold** entry indicates the parameter exceeded the acute surface water standard.
7. Shaded values indicate the parameter exceeded the chronic surface water standard.
8. **bold** and shaded values indicate exceedances of both NHDES acute and chronic criteria.
9. Volatile organic compounds and metals results are in micrograms per liter (ug/l).
10. Only volatile organic compounds detected in one or more leachate sample during the period shown are listed.
11. Only volatile organic compounds detected in one or more leachate sample during the period shown are listed.
12. Refer to Table 2 and 3 for Field Parameter unit abbreviations
13. The laboratory detection limits (for 2013) were above the either the Acute or Chronic standard for the following parameters (detection limit in parantheses): Cadmium (1 ug/L), Lead (1 ug/L) and Silver (1 ug/L).

LABORATORY ANALYTICAL METHODS (Not Confirmed for Analyses Performed Prior to 2010)

1. Volatile Organic Compounds (VOC) analyzed by EPA Method 8260B.
2. 1,4-dioxane (low level) analyzed by EPA Method 8260B SIM
3. Metals analyzed by EPA Method 200.8
4. Chemical Oxygen Demand analyzed by 4500-NH3
5. Ammonia-N analyzed by H8000

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 September 2015 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.
4. A Tier I Plus data validation was completed on the data set and laboratory results were qualified in accordance with the September 2015 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			5/31/2016			5/31/2016			
Laboratory Sample ID			156671.16			156671.17			
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	0.11			0.11			0%
Dissolved Barium	200.8-Dissolved	mg/L	0.061			0.062			2%
Dissolved Beryllium	200.8-Dissolved	mg/L	0.001	U	0	0.001	U	0	0%
Dissolved Calcium	200.8-Dissolved	mg/L	40			40			0%
Dissolved Chromium	200.8-Dissolved	mg/L	0.001	U	0	0.001	U	0	0%
Dissolved Iron	200.8-Dissolved	mg/L	22			24			9%
Dissolved Lead	200.8-Dissolved	mg/L	0.001	U	0	0.001	U	0	0%
Dissolved Magnesium	200.8-Dissolved	mg/L	19			19			0%
Dissolved Manganese	200.8-Dissolved	mg/L	1.1			1.1			0%
Dissolved Nickel	200.8-Dissolved	mg/L	0.007			0.007			0%
Dissolved Potassium	200.8-Dissolved	mg/L	17			17			0%
Dissolved Sodium	200.8-Dissolved	mg/L	62			61			2%
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	U	50	50	U	50	0%
2,2-Dichloropropane	8260B	ug/l	2	U	2	2	U	2	0%

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Sample ID			GW-AE-3A			GW-AE-3A-DUP			Relative Percent Difference (RPD)
Sample Collection Date			5/31/2016			5/31/2016			
Laboratory Sample ID			156671.16			156671.17			
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	1			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	5			5			0%
Chloroethane	8260B	ug/l	7			7			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	11			12			9%
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%

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Sample ID			GW-AE-3A			GW-AE-3A-DUP			Relative Percent Difference (RPD)
Sample Collection Date			5/31/2016			5/31/2016			
Laboratory Sample ID			156671.16			156671.17			
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	20			19			5%

Notes on first page of table

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Duplicate Comparisons
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Sample ID			GW-GZ-105			GW-GZ-105-DUP			Relative Percent Difference (RPD)
Sample Collection Date			6/2/2016			6/2/2016			
Laboratory Sample ID			156671.51			156671.52			
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	0.008			0.008			0%
Total Barium	200.8-Total	mg/L	0.033			0.033			0%
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	31			31			0%
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	2.1			2			5%
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	13			13			0%
Total Manganese	200.8-Total	mg/L	0.29			0.28			4%
Total Nickel	200.8-Total	mg/L	0.005			0.004			22%
Total Potassium	200.8-Total	mg/L	5.3			5.4			2%
Total Sodium	200.8-Total	mg/L	130			130			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	1			2			67%
1,4-Dioxane	8260B	ug/l	50	U	50	50	U	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%

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			6/2/2016			6/2/2016			
Laboratory Sample ID			156671.51			156671.52			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
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			2			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	3			4			29%
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	19			23			19%
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%
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			20			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%

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			6/2/2016			6/2/2016			
Laboratory Sample ID			156671.51			156671.52			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
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	39			41			5%

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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			6/1/2016			6/1/2016			
Laboratory Sample ID			156671.26			156671.27			
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	0.045			0.048			6%
Dissolved Barium	200.8-Dissolved	mg/L	0.063			0.062			2%
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	57			58			2%
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	23			23			0%
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	19			19			0%
Dissolved Manganese	200.8-Dissolved	mg/L	1			0.99			1%
Dissolved Nickel	200.8-Dissolved	mg/L	0.007			0.008			13%
Dissolved Potassium	200.8-Dissolved	mg/L	30			30			0%
Dissolved Sodium	200.8-Dissolved	mg/L	27			27			0%
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	5.2			5.5			6%

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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			6/1/2016			6/1/2016			
Laboratory Sample ID			156561.28			156561.29			
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	0.19		0	0.19		0	0%
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	UJ	10	10	UJ	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			6/1/2016			6/1/2016			
Laboratory Sample ID			156561.28			156561.29			
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	U	0.5	0.5	U	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			6/1/2016			6/1/2016			
Laboratory Sample ID			156561.28			156561.29			
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	0.3		0.25	0.34		0.25	13%

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

Sample ID			L-L-1			L-L-1-DUP			Relative Percent Difference (RPD)
Sample Collection Date			6/1/2016			6/1/2016			
Laboratory Sample ID			156671.34			156671.35			
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	0.003			0.003			0%
Dissolved Barium	200.8	mg/L	0.074			0.073			1%
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	52			52			0%
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	U	0.001	0.001	U	0.001	0%
Dissolved Iron	200.8	mg/L	36			35			3%
Dissolved Lead	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Magnesium	200.8	mg/L	18			18			0%
Dissolved Manganese	200.8	mg/L	2.7			2.7			0%
Dissolved Mercury	200.8	mg/L	0.0001	U	0.0001	0.0001	U	0.0001	0%
Dissolved Nickel	200.8	mg/L	0.005			0.005			0%
Dissolved Potassium	200.8	mg/L	25			25			0%
Dissolved Selenium	200.8	mg/L	0.003			0.003			0%
Dissolved Silver	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Sodium	200.8	mg/L	61			62			2%
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			L-L-1			L-L-1-DUP			Relative Percent Difference (RPD)
Sample Collection Date			6/1/2016			6/1/2016			
Laboratory Sample ID			156671.34			156671.35			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
1,4-Dichlorobenzene	8260B	ug/l	2		1	2		1	0%
1,4-Dioxane	8260B	ug/l	50	U	50	50	U	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		1	1		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	11		2	12		2	9%
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	7		5	7		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		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			L-L-1			L-L-1-DUP			Relative Percent Difference (RPD)
Sample Collection Date			6/1/2016			6/1/2016			
Laboratory Sample ID			156671.34			156671.35			
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		10	10		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	19			18			5%
COD	H8000	mg/L	110			100			10%

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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			6/1/2016			6/1/2016			
Laboratory Sample ID			156671.07			156671.08			
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	0.003			0.003			0%
Dissolved Barium	200.8	mg/L	0.024			0.025			4%
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	43			43			0%
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%
Dissolved Iron	200.8	mg/L	7.5			8.5			13%
Dissolved Lead	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Magnesium	200.8	mg/L	11			12			9%
Dissolved Manganese	200.8	mg/L	0.68			0.71			4%
Dissolved Mercury	200.8	mg/L	0.0001	U	0.0001	0.0001	U	0.0001	0%
Dissolved Nickel	200.8	mg/L	0.004			0.004			0%
Dissolved Potassium	200.8	mg/L	11			11			0%
Dissolved Selenium	200.8	mg/L	0.002		0.001	0.001		0.001	67%
Dissolved Silver	200.8	mg/L	0.001	U	0.001	0.001	U	0.001	0%
Dissolved Sodium	200.8	mg/L	25			26			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			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	1	U	1	1	U	1	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			6/1/2016			6/1/2016			
Laboratory Sample ID			156671.07			156671.08			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
1,4-Dioxane	8260B	ug/l	50	U	50	50	U	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%
tert-Butylbenzene	8260B	ug/l	1	U	1	1	U	1	0%
Tetrachloroethene	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			6/1/2016			6/1/2016			
Laboratory Sample ID			156671.07			156671.08			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
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	0.41		0.05	0.33		0.05	22%

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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			6/1/2016			6/1/2016			
Laboratory Sample ID			156671.14			156671.15			
Parameter	Method	Units	Result	Flag	RL	Result	Flag	RL	
Solids Total	2540G-91	Percent	23.3	J	0.1	22.2	J	0.1	5%
Total Aluminum	6020	mg/kg	17000	J		19000	J		11%
Total Antimony	6020	mg/kg	1	J		2	J		67%
Total Arsenic	6020	mg/kg	10	J		10	J		0%
Total Barium	6020	mg/kg	140	J		150	J		7%
Total Beryllium	6020	mg/kg	1	J		1	J		0%
Total Cadmium	6020	mg/kg	12000	J		12000	J		0%
Total Calcium	6020	mg/kg	1	UJ		1	UJ		0%
Total Chromium	6020	mg/kg	30	J		36	J		18%
Total Cobalt	6020	mg/kg	7	J		7	J		0%
Total Copper	6020	mg/kg	35	J		41	J		16%
Total Iron	6020	mg/kg	22000	J		22000	J		0%
Total Lead	6020	mg/kg	28	J		36	J		25%
Total Magnesium	6020	mg/kg	5100	J		6100	J		18%
Total Manganese	6020	mg/kg	460	J		520	J		12%
Total Mercury	6020	mg/kg	0.1	J		0.2	J		67%
Total Nickel	6020	mg/kg	27	J		29	J		7%
Total Potassium	6020	mg/kg	5000	J		5500	J		10%
Total Selenium	6020	mg/kg	1	UJ		1	J		0%
Total Silver	6020	mg/kg	0.5	UJ	0.5	0.5	UJ	0.5	0%
Total Sodium	6020	mg/kg	400	J		500	J		22%
Total Thallium	6020	mg/kg	0.5	UJ	0.5	0.5	UJ	0.5	0%
Total Vanadium	6020	mg/kg	44	J		55	J		22%
Total Zinc	6020	mg/kg	110	J		100	J		10%

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TABLE 8
 Statistical and Visual Trend Analysis Results
 2016 Annual Report - Coakley Landfill, North Hampton, New Hampshire

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	Decreasing	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	Decreasing	Decreasing
MW-5S	Decreasing	Decreasing	No Trend	Stable	ND	ND	No Trend	Stable	Decreasing	Decreasing
MW-6	ND	ND	ND	ND	ND	ND	NP	NP	Increasing	Not Stable
MW-8	No Trend	Stable	No Trend	Decreasing	Decreasing	Stable	No Trend	Decreasing	Decreasing	Decreasing
MW-9	No Trend	Not Stable	NA	NA	NA	NA	No Trend	Not Stable	No Trend	Decreasing
MW-10	NA	NA	NA	NA	NA	NA	No Trend	Not Stable	Decreasing	Decreasing
MW-11	No Trend	Decreasing	Decreasing	Stable	ND	ND	No Trend	Increasing	No Trend	Increasing
OP-2	NP	NP	NA	NA	NA	NA	No Trend	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	Decreasing	Decreasing	Increasing	Increasing
AE-1B	NA	NA	NA	NA	NA	NA	Increasing	Stable	No Trend	Decreasing
AE-2A	No Trend	Decreasing	ND	ND	ND	ND	Decreasing	Decreasing	Increasing	Stable
AE-2B	No Trend	Stable	ND	ND	ND	ND	Decreasing	Decreasing	Decreasing	Decreasing
AE-3A	No Trend	Stable	Decreasing	Stable	ND	ND	No Trend	Stable	Increasing	Stable
AE-3B	No Trend	Stable	Decreasing	Stable	ND	ND	No Trend	Stable	No Trend	Not Stable
AE-4A	ND	ND	ND	ND	ND	ND	NP	NP	No Trend	Decreasing
AE-4B	ND	ND	ND	ND	ND	ND	NP	NP	Decreasing	Stable
FPC-4B	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
FPC-5B	No Trend	No Trend	NA	NA	NA	NA	NP	NP	NP	NP
FPC-6A	No Trend	Decreasing	Decreasing	Stable	ND	ND	Increasing	Not Stable	Increasing	Not Stable
FPC-6B	NP*	NP*	Decreasing	Stable	ND	ND	Decreasing	Stable	Decreasing	Stable
FPC-7A	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND
FPC-7B	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND
FPC-8A	No Trend	Stable	ND	ND	ND	ND	ND	ND	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
FPC-11B	NP*	NP*	NA	NA	NA	NA	NP	NP	No Trend	Increasing
GZ-105	No Trend	Decreasing	Decreasing	Decreasing	ND	ND	No Trend	Decreasing	NP	NP
Water Supply Wells										
R-3	No Trend	Stable	ND	ND	ND	ND	ND	ND	No Trend	Increasing
339BHR	No Trend	Stable	ND	ND	ND	ND	ND	ND	No Trend	Increasing
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 Parameter Not Analyzed
- ND Parameter Not Detected
- NP Not Performed, trend analysis not performed because parameter has not recently exceeded USEPA ICL or NHDES AGQS.
- NP* Not Performed, data from at least 5 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 2016; therefore no trend analysis was completed.

TABLE 9
 Contaminants of Concern Analytical Data (November 2000 – June 2016)
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	Sep-15	May-16
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	< 0.001	< 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	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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	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	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	< 0.001	< 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	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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	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	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	< 0.001	< 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	< 0.001	< 0.001
FPC-11C	NS	NS	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	< 0.001	< 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	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	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	NA	NA
R-5	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA	NA	NA
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA	NA	NA
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NA	NA	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 Cleanup Level (CL) for Antimony is

TABLE 9
Contaminants of Concern Analytical Data (November 2000 – June 2016)

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	Sep-15	May-16
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	0.017	<0.001
MW-2	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	0.05	0.045
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	0.01	0.01
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	0.017	0.02
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	< 0.001	< 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	0.011	0.007
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	0.14	0.027
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	0.014	0.01
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	0.014	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	0.22	0.18
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	0.044	0.056
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	0.016	0.015
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	0.008	0.007
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	0.19	0.13
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	0.012	0.006
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	0.13	0.11
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	0.061	0.091
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	< 0.001	< 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	< 0.001	< 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	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	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	< 0.001	< 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	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	0.002	0.003
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	0.032	0.011
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	0.003	0.002
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	< 0.001	< 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	< 0.001	< 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	0.001	< 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	0.007	0.006
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	0.048	0.044
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	NS	NS
FPC-9C	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	0.003	0.002
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	0.004	0.003
FPC-11C	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	0.008	0.008
GZ-123	NS	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	< 0.001	< 0.001	NS	NS	NS	NS	NS	NS	NS							
GZ-125	NS	< 0.001	NS	< 0.001	< 0.001	NS	< 0.001	< 0.001	< 0.001	NS	NS	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	< 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	NA	NA
346BHR	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	< 0.001	< 0.001	< 0.001								
339BHR	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	< 0.001	< 0.001	0.002								
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	< 0.001	< 0.001								

Table Notes:

- All data in milligrams per liter (mg/L), parts per million - Analyzed by Method 200.8
- NHDES Ambient Groundwater Quality Standard (AGQS) for Arsenic is 0.01 mg/L. Exceedances are identified with GRAY shading.
- EPA Cleanup Level (CL) for Arsenic is 0.01 mg/L. Exceedances are identified with

TABLE 9
 Contaminants of Concern Analytical Data (November 2000 – June 2016)
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	Sep-15	May-16
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	< 0.001	< 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	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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	NS	NS	< 0.001	NS	< 0.001	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	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	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	< 0.001	< 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	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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	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	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	< 0.001	< 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	INT	NS	< 0.001	< 0.001	< 0.001
FPC-11C	NS	NS	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	< 0.001	< 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	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	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	NA	NA
R-5	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA	NA	NA
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA	NA	NA
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NA

Table Notes:

- All data in milligrams per liter (mg/L), parts per million - Analyzed by Method 200.8
- NHDES Ambient Groundwater Quality Standard (AGQS) for Beryllium is 0.004

TABLE 9
 Contaminants of Concern Analytical Data (November 2000 – June 2016)

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	Sep-15	May-16
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	< 0.001	< 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	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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	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	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	< 0.001	< 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	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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	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	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	< 0.001	< 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	< 0.001	< 0.001
FPC-11C	NS	NS	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	< 0.001	< 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	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	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	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	NA	NA
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA	NA	NA
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	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	NA	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 Cleanup Level (CL) 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

TABLE 9
 Contaminants of Concern Analytical Data (November 2000 – June 2016)
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	Sep-15	May-16
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	< 0.001	< 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	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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	0.002	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	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	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	< 0.001	< 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	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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	< 0.001	< 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	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	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	< 0.001	< 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	< 0.001	< 0.001
FPC-11C	NS	NS	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	< 0.001	< 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	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	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	NA	NA
R-5	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA	NA	NA
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA	NA	NA
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	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 Cleanup Level (CL) 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,

TABLE 9
 Contaminants of Concern Analytical Data (November 2000 – June 2016)
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	Sep-15	May-16
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	0.49	0.36
MW-2	NS																						
MW-4	1.5	1.6	1.4	1.3	1.7	1.4	1.3	4.5	5.9	NS	5.8	1.2	1.1	NS	1.3	1.2	NS	NS	0.97	NS	1.2	0.9	1
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	0.7	0.74
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	2.4	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	2.2	1.6
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	1.1	1.2
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	1.2	0.89
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	1.9	1.5
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	0.45	0.47
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	1	1.6
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	3	4.7
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	0.44	0.51
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	0.45	0.51
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	0.77	0.83
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	0.86	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	0.94	1.1
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	0.74	1.4
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	0.13	0.055
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	<0.005	<0.005
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						
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						
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	<0.005	<0.005
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	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	0.047	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	3.1	1.9
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	0.44	0.37
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	<0.005	<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	<0.005	<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	0.15	0.007
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	0.024	0.027
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	0.23	0.21
FPC-9B	0.08	NS	NS	0.053	NS																		
FPC-9C	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	0.41	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	1.9	1.1
FPC-11C	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	0.23	0.29
GZ-123	NS	3.3	NS	2.3	3	2.2	NS	2.4	1.7	NS													
GZ-125	NS	0.16	NS	0.062	0.081	NS	0.29	0.23	0.31	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	0.16	0.19
R-5	NS	NA	NS	NS	NA	NA	NA	NS	NA	NA	NA	NA	NA	NS									
346BHR	NS	NA	NA	NS	NA	NS	0.29	0.37	0.28														
339BHR	NS	NA	NA	NA	NA	0.25	0.32	0.31	0.31														
415BHR	NS	NA	NA	NS	0.028	0.03	0.046																

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 Cleanup Level (CL) 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 – June 2016)
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	Sep-15	May-16
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	0.005	0.006
MW-2	NS	NS	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	0.009J	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	0.006	0.008
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	0.008	0.01
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	0.003	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	0.016	0.019
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	0.007	0.007
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	0.004	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	0.006	0.005
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	0.01	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	0.014	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	< 0.001	< 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	0.001	< 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	0.007	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	0.006	0.008
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	0.006	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	0.006	0.007
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	< 0.001	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	< 0.001	< 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	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	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	< 0.001	< 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	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	0.005	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	0.006	0.005
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	0.003	0.002
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	0.003	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	< 0.001	< 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	< 0.001	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	< 0.001	< 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	0.003	0.005
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	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	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	< 0.001	0.001
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	0.005	0.006
FPC-11C	NS	NS	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	0.004	0.005
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	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	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	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	NA	NA
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA	NA	NA
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA	NA	NA
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NA	NA	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 Cleanup Level (CL) 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 – June 2016)
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	Sep-15	May-16
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	< 0.005	< 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	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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	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	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	< 0.005	< 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	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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	< 0.005	< 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	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	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	< 0.005	< 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	0.007 J+	NS
FPC-11C	NS	NS	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	< 0.005	< 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	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	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	NA	NA
R-5	NS	NA	NS	NS	NA	NA	NA	NS	NS	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NS	NA	NA	NA
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA
415BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	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 Cleanup Level (CL) 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 – June 2016)
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	Sep-15	May-16
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	NA	NA
MW-2	NS	NS	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	NA	NA
MW-5D	6	< 2	3	2	< 2	2	< 2	2	3	NS	2	2	2	NS	2	2	NS	NS	INT	NS	1	2	1
MW-5S	8	7	6	6	2	< 2	< 2	< 2	5	NS	4	3	4	NS	4	3	NS	NS	INT	NS	2	2	2
MW-6	< 2	< 2	1	< 2	< 2	< 2	< 2	< 2	< 1	NS	< 1	< 1	NA	< 1	< 1	< 1	NS	NS	< 1	NS	< 1	< 1	< 1
MW-8	8	5	5	3	4	< 2	3	5	3	NS	4	4	6	NS	6	6	NS	NS	INT	NS	3	3	2
MW-9	5	3	7	10	5	< 2	5	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-10	< 2	< 2	2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-11	19	22	26	22	14	7	8	5	8	NS	5	4	3	NS	2	2	NS	NS	INT	NS	2	2	1
OP-2	5	3	1	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
OP-5	< 2	< 2	1	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	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	NA	NA
AE-1B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
AE-2A	3	3	2	3	< 2	< 2	< 2	< 2	2	NS	< 1	< 1	1	NS	1	< 1	NS	NS	< 1	NS	< 1	< 1	< 1
AE-2B	10	4	6	8	5	3	4	3	5	NS	5	2	2	NS	1	2	NS	NS	2	NS	2	1	< 1
AE-3A	4	2	3	3	2	< 2	< 2	< 2	2	NS	2	2	2	NS	1	1	NS	NS	1	NS	2	2	1
AE-3B	4	4	3	3	2	< 2	< 2	< 2	< 1	NS	< 1	1	1	NS	2	1	NS	NS	INT	NS	< 1	< 1	1
AE-4A	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 1	NS	< 1	< 1	< 1	NS	< 1	< 1	NS	NS	< 1	NS	< 1	< 1	< 1
AE-4B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 1	NS	< 1	< 1	< 1	NS	< 1	< 1	NS	NS	< 1	NS	< 1	< 1	< 1
FPC-2A	NA	NA	NA	NA	< 2	< 2	< 2	< 2	< 1	NS	< 1	< 1	< 1	NS	< 1	< 1	NS						
FPC-2B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 1	NS	< 1	< 1	< 1	NS	< 1	< 1	NS						
FPC-4B	NS	NS	NS	NS	< 2	< 2	NA	< 2	< 1	NS	< 1	< 1	< 1	NS	< 1	< 1	NS	NS	INT	NS	< 1	NA	< 1
FPC-5A	< 2	< 2	5	5	< 2	3	2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS	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	NA	NA
FPC-6A	< 2	< 2	NS	NS	3	< 2	< 2	< 2	2	NS	< 1	< 1	2	NS	1	1	NS	NS	< 1	NS	1	1	< 1
FPC-6B	4	2	4	4	3	3	3	< 2	2	NS	1	< 1	2	NS	1	2	NS	NS	INT	NS	< 1	< 1	< 1
FPC-7A	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-7B	NS	NS	NS	NS	< 2	< 2	< 2	NA	< 1	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA	NA	NA
FPC-8A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 1	NS	< 1	< 1	< 1	NS	< 1	< 1	NS	NS	< 1	NS	< 1	< 1	< 1
FPC-8B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	< 1	< 1	< 1	NS	< 1	< 1	NS	NS	INT	NS	< 1	< 1	< 1
FPC-9A	4	4	3	3	3	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-9B	< 2	NS	NS	< 2	NS	NS	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	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	NA	NA
FPC-11B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	INT	NA	NA
FPC-11C	NS	NS	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	3	2
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	< 1	NS	< 1	< 1	< 1	NS	< 1	< 1	NS						
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 1	NS	< 1	< 1	NS	< 1	< 1	< 1	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	< 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	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	< 0.5	< 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	< 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	< 0.5	< 0.5

Table Notes:

- All data in micrograms per liter (ug/L), parts per billion - Analyzed by Method 8260B (monitoring well) or Method 524 (water supply wells)
- NHDES Ambient Groundwater Quality Standard (AGQS) for Benzene is 5 ug/L. Exceedances are identified with GRAY shading.
- EPA Cleanup Level (CL) 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 – June 2016)
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	Sep-15	May-16
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	NA	NA
MW-2	NS	NS	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	NA	NA
MW-5D	8	3	4	4	4	4	3	4	5	NS	4	3	4	NS	3	3	NS	NS	INT	NS	< 2	< 2	< 2
MW-5S	7	7	6	5	3	< 2	< 2	< 2	3	NS	2	2	3	NS	2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
MW-6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	NA	< 2	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
MW-8	3	3	3	< 2	2	2	2	4	3	NS	4	3	7	NS	23	9	NS	NS	INT	NS	2	3	2
MW-9	62	66	122	160	80	25	79	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-10	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-11	6	5	4	4	4	3	3	2	3	NS	2	2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
OP-2	9	6	4	4	3	2	2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
OP-5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	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	NA	NA
AE-1B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
AE-2A	6	8	5	8	4	3	3	< 2	5	NS	2	2	3	NS	3	< 2	NS	NS	< 2	NS	2	< 2	< 2
AE-2B	8	4	6	8	5	3	3	3	5	NS	5	3	3	NS	2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
AE-3A	12	7	11	9	8	6	5	6	9	NS	8	7	6	NS	6	6	NS	NS	5	NS	6	7	5
AE-3B	10	11	9	8	6	4	2	< 2	< 2	NS	< 2	5	5	NS	7	5	NS	NS	INT	NS	3	3	4
AE-4A	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
AE-4B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
FPC-2A	NA	NA	NA	NA	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS						
FPC-2B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS						
FPC-4B	NS	NS	NS	NS	< 2	< 2	NA	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	NA	< 2
FPC-5A	< 2	< 2	16	13	< 2	9	6	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS	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	NA	NA
FPC-6A	< 2	< 2	< 2	NS	9	4	3	3	5	NS	< 2	3	5	NS	3	4	NS	NS	3	NS	3	4	< 2
FPC-6B	7	4	9	8	6	7	7	3	7	NS	4	3	5	NS	4	4	NS	NS	INT	NS	2	2	< 2
FPC-7A	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-7B	NS	NS	NS	NS	< 2	< 2	< 2	NA	< 2	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA	NA	NA
FPC-8A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
FPC-8B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
FPC-9A	11	10	8	9	8	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-9B	< 2	NS	NS	< 2	NS																		
FPC-9C	NS	NS	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	NA	NA
FPC-11B	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	INT	NA	NA
FPC-11C	NS	NS	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	5	3
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS						
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 2	NS	< 2	< 2	NS	< 2	< 2	< 2	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	< 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									
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	< 0.5	< 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	< 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	< 0.5	< 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 Chlorobenzene is 100 ug/L. Exceedances are identified with GRAY shading.
 3. EPA Cleanup Level (CL) 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 – June 2016)
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	Sep-15	May-16
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	NA	NA
MW-2	NS																						
MW-4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-5D	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
MW-5S	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
MW-6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	NA	< 2	< 2	NS	NS	NS	< 2	NS	< 2	< 2	< 2
MW-8	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
MW-9	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-10	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-11	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
OP-2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
OP-5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	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	NA	NA
AE-1B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
AE-2A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
AE-2B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
AE-3A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
AE-3B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
AE-4A	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
AE-4B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
FPC-2A	NA	NA	NA	NA	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS						
FPC-2B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS						
FPC-4B	NS	NS	NS	NS	< 2	< 2	NA	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	NA	< 2
FPC-5A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS	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	NA	NA
FPC-6A	< 2	< 2	< 2	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
FPC-6B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
FPC-7A	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-7B	NS	NS	NS	NS	< 2	< 2	< 2	NA	< 2	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA	NA	NA
FPC-8A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
FPC-8B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
FPC-9A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-9B	< 2	NS	NS	< 2	NS																		
FPC-9C	NS																						
FPC-11A	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	NA	NA	NA
FPC-11B	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	INT	NA	NA
FPC-11C	NS																						
GZ-105	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
GZ-123	NS	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS													
GZ-125	NS	< 2	NS	< 2	< 2	NS	< 2	< 2	< 2	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	< 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									
346BHR	NS	< 0.5	< 0.5	NS	< 0.5	NS	< 0.5	< 0.5	< 0.5														
339BHR	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5															
415BHR	NS	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5																

Table Notes:

- All data in micrograms per liter (ug/L), parts per billion - Analyzed by Method 8260B (monitoring well) or Method 524 (water supply wells)
- NHDES Ambient Groundwater Quality Standard (AGQS) for Trans-1,2-dichloroethene (Trans-DCE) is 100 ug/L. Exceedances are identified with GRAY shading.
- EPA Cleanup Level (CL) 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 – June 2016)
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	Sep-15	May-16
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	NA	NA
MW-2	NS																						
MW-4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-5D	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
MW-5S	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
MW-6	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	NA	< 2	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
MW-8	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
MW-9	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-10	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-11	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
OP-2	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
OP-5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	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	NA	NA
AE-1B	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
AE-2A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
AE-2B	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
AE-3A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
AE-3B	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
AE-4A	NS	NS	NS	NS	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
AE-4B	NS	NS	NS	NS	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
FPC-2A	NA	NA	NA	NA	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS						
FPC-2B	NS	NS	NS	NS	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS						
FPC-4B	NS	NS	NS	NS	< 4	< 4	NA	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	NA	NA
FPC-5A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS	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	NA	NA
FPC-6A	< 4	< 4	< 4	NS	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
FPC-6B	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
FPC-7A	NS	NS	NS	NS	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-7B	NS	NS	NS	NS	< 4	< 4	< 4	NA	< 2	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA	NA	NA
FPC-8A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
FPC-8B	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
FPC-9A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-9B	< 4	NS	NS	< 4	NS																		
FPC-9C	NS																						
FPC-11A	NS	NS	NS	NS	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	NA	NA	NA
FPC-11B	NS	NS	NS	NS	< 4	< 4	< 4	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	INT	NS	NA	NA
FPC-11C	NS																						
GZ-105	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
GZ-123	NS	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS													
GZ-125	NS	< 2	NS	< 2	< 2	NS	< 2	< 2	< 2	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	< 0.5	< 0.5
R-5	NS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NS	< 0.5	< 0.5	< 0.5	< 0.5	NS									
346BHR	NS	< 0.5	< 0.5	NS	< 0.5	NS	< 0.5	< 0.5	< 0.5														
339BHR	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5															
415BHR	NS	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 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 Cleanup Level (CL) 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 – June 2016)
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	Sep-15	May-16
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	NA	NA
MW-2	NS																						
MW-4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-5D	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
MW-5S	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
MW-6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	NA	< 2	< 2	NS	NS	NS	< 2	NS	< 2	< 2	< 2
MW-8	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
MW-9	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-10	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-11	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
OP-2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
OP-5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	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	NA	NA
AE-1B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
AE-2A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
AE-2B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
AE-3A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
AE-3B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
AE-4A	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
AE-4B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
FPC-2A	NA	NA	NA	NA	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS						
FPC-2B	NS	NS	NS	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS						
FPC-4B	NS	NS	NS	NS	< 2	< 2	NA	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	NA	NA
FPC-5A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS	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	NA	NA
FPC-6A	< 2	< 2	< 2	NS	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
FPC-6B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
FPC-7A	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-7B	NS	NS	NS	NS	< 2	< 2	< 2	NA	< 2	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA	NA	NA
FPC-8A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	< 2	NS	< 2	< 2	< 2
FPC-8B	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
FPC-9A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-9B	< 2	NS	NS	< 2	NS																		
FPC-9C	NS																						
FPC-11A	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	NA	NA	NA
FPC-11B	NS	NS	NS	NS	< 2	< 2	< 2	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	INT	NA	NA
FPC-11C	NS																						
GZ-105	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS	NS	INT	NS	< 2	< 2	< 2
GZ-123	NS	< 2	NS	< 2	< 2	< 2	NS	< 2	< 2	NS													
GZ-125	NS	< 2	NS	< 2	< 2	NS	< 2	< 2	< 2	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	< 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									
346BHR	NS	< 0.5	< 0.5	NS	< 0.5	NS	< 0.5	< 0.5	< 0.5														
339BHR	NS	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5															
415BHR	NS	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 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 Cleanup Level (CL) 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 – June 2016)
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	Sep-15	May-16
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	NA	NA
MW-2	NS																						
MW-4	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-5D	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10	< 10	< 10
MW-5S	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10	< 10	< 10
MW-6	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	NA	< 10	< 10	< 10	NS	NS	< 10	NS	< 10	< 10	< 10
MW-8	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10	< 10	< 10
MW-9	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-10	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-11	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10	< 10	< 10
OP-2	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
OP-5	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	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	NA	NA
AE-1B	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
AE-2A	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10	< 10	< 10
AE-2B	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10	< 10	< 10
AE-3A	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10	< 10	< 10
AE-3B	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10	< 10	< 10
AE-4A	NS	NS	NS	NS	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10	< 10	< 10
AE-4B	NS	NS	NS	NS	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10	< 10	< 10
FPC-2A	NA	NA	NA	NA	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS						
FPC-2B	NS	NS	NS	NS	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS						
FPC-4B	NS	NS	NS	NS	< 50	< 50	NA	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10	NA	NA
FPC-5A	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS	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	NA	NA
FPC-6A	< 50	< 50	< 50	NS	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10	< 10	< 10
FPC-6B	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10	< 10	< 10
FPC-7A	NS	NS	NS	NS	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-7B	NS	NS	NS	NS	< 50	< 50	< 50	NA	< 10	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA	NA	NA
FPC-8A	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10	< 10	< 10
FPC-8B	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10	< 10	< 10
FPC-9A	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-9B	< 50	NS	NS	< 50	NS																		
FPC-9C	NS																						
FPC-11A	NS	NS	NS	NS	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	NA	NA	NA
FPC-11B	NS	NS	NS	NS	< 50	< 50	< 50	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	INT	NA	NA
FPC-11C	NS																						
GZ-105	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10	< 10	< 10
GZ-123	NS	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS													
GZ-125	NS	< 10	NS	< 10	< 10	NS	< 10	< 10	< 10	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	< 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									
346BHR	NS	< 5	< 5	NS	< 5	NS	< 5	< 5	< 5														
339BHR	NS	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5														
415BHR	NS	< 5	< 5	NS	< 5	< 5	< 5																

Table Notes:

- All data in micrograms per liter (ug/L), parts per billion - Analyzed by Method 8260B (monitoring well) or Method 524 (water supply wells)
- NHDES Ambient Groundwater Quality Standard (AGQS) for methyl ethyl ketone (MEK, 2-butanone) is 4000 ug/L. Exceedances are identified with GRAY shading.
- EPA Cleanup Level (CL) 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 – June 2016)
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	Sep-15	May-16
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	NA	NA
MW-2	NS	NS	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	NA	NA
MW-5D	162	60	< 30	101	85	142	88	110	110	NS	110	90	90	NS	110	90	NS	NS	INT	NS	50	50	80
MW-5S	44	35	< 30	46	< 30	34	< 30	< 30	60	NS	40	40	40	NS	40	30	NS	NS	INT	NS	20	20	20
MW-6	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	NA	< 10	< 10	< 10	NS	NS	< 10	NS	< 10	< 10	< 10
MW-8	248	157	< 30	175	184	282	273	239	180	NS	180	180	160	NS	140	100	NS	NS	INT	NS	150	140	160
MW-9	< 30	< 30	< 30	137	< 30	< 30	84	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-10	< 30	< 30	< 30	< 30	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-11	246	228	< 30	225	130	114	< 30	50	60	NS	30	30	20	NS	20	10	NS	NS	INT	NS	10	10	10
OP-2	< 30	< 30	< 30	< 30	< 30	< 30	87	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
OP-5	< 30	< 30	< 30	< 30	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	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	NA	NA
AE-1B	< 30	< 30	< 30	< 30	< 30	< 30	< 30	NA	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
AE-2A	30	33	< 30	45	< 30	< 30	< 30	< 30	20	NS	< 10	10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10	< 10	< 10
AE-2B	157	86	< 30	127	104	92	81	69	60	NS	70	50	30	NS	30	30	NS	NS	30	NS	30	30	20
AE-3A	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10	< 10	< 10
AE-3B	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10	< 10	< 10
AE-4A	NS	NS	NS	NS	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10	< 10	< 10
AE-4B	NS	NS	NS	NS	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10	< 10	< 10
FPC-2A	NA	NA	NA	NA	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS						
FPC-2B	NS	NS	NS	NS	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS						
FPC-4B	NS	NS	NS	NS	< 30	< 30	NA	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10	NA	NA
FPC-5A	< 30	< 30	< 30	< 30	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS	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	NA	NA
FPC-6A	< 30	< 30	< 30	NS	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10	< 10	< 10
FPC-6B	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10	< 10	< 10
FPC-7A	NS	NS	NS	NS	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-7B	NS	NS	NS	NS	< 30	< 30	< 30	NA	< 10	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA	NA	NA
FPC-8A	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	< 10	NS	< 10	< 10	< 10
FPC-8B	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	NA	NS	< 10	< 10	< 10	NS	< 10	< 10	NS	NS	INT	NS	< 10	< 10	< 10
FPC-9A	32	< 30	< 30	30	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-9B	< 30	NS	NS	< 30	NS	NS	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	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	NA	NA
FPC-11B	NS	NS	NS	NS	< 30	< 30	< 30	NA	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	INT	NA	NA
FPC-11C	NS	NS	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	20	20
GZ-123	NS	NS	NS	NS	NS	NS	NS	NS	< 10	NS	< 10	< 10	< 10	NS	< 10	< 10	NS						
GZ-125	NS	NS	NS	NS	NS	NS	NS	NS	< 10	NS	< 10	< 10	NS	< 10	< 10	< 10	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	< 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									
346BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 5	< 5	NS	< 5	NS	< 5	< 5	< 5
339BHR	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	< 5	< 5	< 5	< 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	< 5	< 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 Cleanup Level (CL) 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 – June 2016)
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	Sep-15	May-16
Operating Unit 1 Wells															
BP-4	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-2	NS														
MW-4	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-5D	60	NS	50	40	40	NS	50	40	NS	NS	INT	NS	60	40	50
MW-5S	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	INT	NS	< 30	< 30	< 30
MW-6	< 30	NS	< 30	< 30	NA	< 30	< 30	< 30	NS	NS	< 30	NS	< 30	< 30	< 30
MW-8	70	NS	70	60	50	NS	50	40	NS	NS	INT	NS	50	40	50
MW-9	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-10	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-11	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	INT	NS	< 30	< 30	< 30
OP-2	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
OP-5	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
Operating Unit 2 Wells															
AE-1A	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
AE-1B	NS	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
AE-2A	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	< 30	NS	< 30	< 30	< 30
AE-2B	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	< 30	NS	< 30	< 30	< 30
AE-3A	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	< 30	NS	< 30	< 30	< 30
AE-3B	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	INT	NS	< 30	< 30	< 30
AE-4A	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	< 30	NS	< 30	< 30	< 30
AE-4B	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	< 30	NS	< 30	< 30	< 30
FPC-2A	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS						
FPC-2B	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS						
FPC-4B	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	INT	NS	< 30	NA	NA
FPC-5A	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NS	NS	NS
FPC-5B	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA	NA	NA
FPC-6A	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	< 30	NS	< 30	< 30	< 30
FPC-6B	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	INT	NS	< 30	< 30	< 30
FPC-7A	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-7B	< 30	NS	NA	NA	NA	NS	NA	NA	NS	NS	INT	NS	NA	NA	NA
FPC-8A	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	< 30	NS	< 30	< 30	< 30
FPC-8B	NA	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	INT	NS	< 30	< 30	< 30
FPC-9A	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
FPC-9B	NS														
FPC-9C	NS														
FPC-11A	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	NA	NA	NA
FPC-11B	NA	NS	NA	NA	NA	NS	NA	NA	NS	NS	NS	NS	INT	NA	NA
FPC-11C	NS														
GZ-105	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS	NS	INT	NS	< 30	< 30	< 30
GZ-123	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS						
GZ-125	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	NS						
Water Supply Wells															
R-3	NS	< 30	< 30	< 30	< 30	NS	< 30	< 30	< 30	NS	< 30	< 30	< 30	< 30	< 30
R-5	NS	< 30	< 30	< 30	< 30	NS									
346BHR	NS	< 30	< 30	NS	< 30	NS	< 30	< 30	< 30						
339BHR	NS	< 30	< 30	< 30	< 30	< 30	< 30	< 30							
415BHR	NS	< 30	< 30	NS	< 30	< 30	< 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 Cleanup Level (CL) 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 – June 2016)
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	Sep-15	May-16
Operating Unit 1 Wells												
BP-4	NA	NA	9	10	13	NS	NS	9.6	NS	12	11	11
MW-2	NS											
MW-4	NA	6	NS	6	2.5	NS	NS	4.8	NS	6.9	8.5	5.2
MW-5D	140	150	NS	140	140	NS	NS	INT	NS	130	150	120
MW-5S	70	90	NS	70	61	NS	NS	INT	NS	49	57	42
MW-6	< 1	NA	NS	< 1	< 0.25	NS	NS	< 0.25	NS	< 0.25	< 0.25	< 0.25
MW-8	310	230	NS	200	210	NS	NS	INT	NS	200	240	190
MW-9	NA	16	NS	14	30	NS	NS	6.1	NS	28	26	3.5
MW-10	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NA
MW-11	100	45	NS	40	56	NS	NS	INT	NS	41	38	37
OP-2	NA	1	NS	1	1	NS	NS	1.2	NS	1.5	1.6	0.64
OP-5	NA	< 1	NS	< 1	NA	NS	NS	NA	NS	NA	NA	NA
Operating Unit 2 Wells												
AE-1A	NA	NA	NS	< 1	NA	NS	NS	NA	NS	NA	NA	NA
AE-1B	NA	NA	NS	< 1	NA	NS	NS	NA	NS	NA	NA	NA
AE-2A	NA	12	NS	14	16	NS	NS	15	NS	16	13	6.5
AE-2B	NA	110	NS	80	82	NS	NS	88	NS	87	96	70
AE-3A	NA	23	NS	19	24	NS	NS	21	NS	25	24	20
AE-3B	NA	24	NS	19	27	NS	NS	INT	NS	26	25	26
AE-4A	NA	NA	NA	NA	< 0.25	NS	NS	NA	NS	NA	< 0.25	< 0.25
AE-4B	NA	NA	NA	NA	< 0.25	NS	NS	NA	NS	NA	< 0.25	< 0.25
FPC-2A	NA	NA	NA	NA	NA	NS						
FPC-2B	NA	NA	NA	NA	NA	NS						
FPC-4B	NA	NA	NA	NA	< 0.25	NA	NA	INT	NS	NA	NA	NA
FPC-5A	NA	NA	NS	27	25	NS	NS	29	NS	NS	NS	NS
FPC-5B	NA	NA	NS	50	53	NS	NS	INT	NS	64	67	50
FPC-6A	NA	NA	NS	NA	31	NS	NS	21	NS	26	30	9.5
FPC-6B	NA	NA	NS	NA	23	NS	NS	INT	NS	19	19	7.6
FPC-7A	NA	NA	NA	< 1	< 0.25	NA	NA	NA	NS	NA	NA	NA
FPC-7B	NA	NA	NA	< 1	< 0.25	NA	NA	INT	NS	NA	NA	NA
FPC-8A	NA	< 1	NS	< 1	0.51	NS	NS	0.6	NS	0.60	0.70	0.58
FPC-8B	NA	1	NS	< 1	0.93	NS	NS	INT	NS	0.62	0.81	0.58
FPC-9A	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NS
FPC-9B	NS											
FPC-9C	NS											
FPC-11A	NA	NA	NS	NA	NA	NS	NS	NA	NS	NA	NA	NS
FPC-11B	NA	NA	NS	NA	NA	NS	NS	NA	NS	INT	1.4	0.94
FPC-11C	NS											
GZ-105	NA	NA	NS	80	98	NS	NS	INT	NS	69	62	39
GZ-123	NA	NA	NS	NA	NA	NS						
GZ-125	NA	NA	NS	NA	NA	NS						
Water Supply Wells												
R-3	NA	NA	NS	NA	0.4	0.45	NS	0.45	0.42	0.37	0.37	0.45
R-5	NA	NA	NS									
346BHR	NS	NS	NS	NS	< 0.25	NS	NS	< 0.25	NS	< 0.25	< 0.25	< 0.25
339BHR	NS	NS	NS	NS	NS	NS	0.38	0.42	0.63	0.42	0.74	0.51
415BHR	NS	NS	NS	NS	NS	NS	< 0.25	< 0.25	NS	< 0.25	< 0.25	< 0.25

Table Notes:

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