May 24, 2016

Mr. Joseph T. Martella II, Senior Engineer
Rhode Island Department of Environmental Management
Office of Waste Management
Site Remediation Program
235 Promenade Street
Providence, Rhode Island 02908

RE: Parcel C-1 Phase II Area – Mashapaug Pond and Cove, Phase III Area – Northeast Upland and Parcel C Remedial Action Work Plan - Parcel C Groundwater Sampling
Former Gorham Manufacturing Facility
333 Adelaide Avenue, Providence, Rhode Island
AMEC Project No. 3652150040

Dear Mr. Martella:

This letter summarizes the April 28, 2016 collection of groundwater samples from locations on Parcel C/C-1 of the Former Gorham Manufacturing Site in Providence, Rhode Island (Figure 1). This activity was performed to supplement groundwater testing done in July and December 2015, and February 2016. This groundwater sampling was conducted in accordance with the Remedial Action Work Plan (RAWP) dated March 11, 2015 and the corresponding Rhode Island Department of Environmental Management (RIDEM) July 9, 2015 Order of Approval (Order of Approval).

Background

Extensive groundwater investigations were previously conducted throughout the upland portions of the Former Gorham Manufacturing Site property, including Parcel C, and Mashapaug Inner and Outer Coves (MACTEC, 2006a) which identified low levels of VOCs in groundwater immediately upgradient of and along the southern shore of the Inner Cove (Parcels C and C-1). Based on 2006-2010 groundwater data an historic low-level tetrachloroethylene and trichloroethylene (PCE/TCE) plume (a/k/a western plume) was identified that originates from the fill material in the northwestern corner of Parcel C. Groundwater and Inner Cove sediment data collected during the same period (2006-2010) demonstrated that a clear trend of decreasing contaminant concentrations within the groundwater had occurred over time (AMEC 2014, 2015).

RIDEM's Order of Approval requires Textron to monitor Parcel C/C-1 groundwater following completion of the remedial action, by sampling six wells (MW-235S, MW-236S, MW-237S, MW-D, MW-241, and MW-FS) until data from three consecutive sampling rounds demonstrate that Parcel C groundwater is compliant with RIDEM's GB Groundwater Objectives with no increasing

concentrations of VOCs, and that Parcel C-1 groundwater is compliant with the Massachusetts Department of Environmental Protection (MassDEP) GW-3 Standards with no increasing concentrations of VOCs. The April 2016 sampling event is the fourth sampling round (following the RIDEM Order of Approval), which follows testing done in July and December 2015, and February 2016.

Work Activities Conducted

Amec Foster Wheeler Environment and Infrastructure, Inc., (Amec Foster Wheeler) gauged the depth to water in 13 monitoring wells located along the southern shoreline of the Inner Cove. These well locations and the groundwater contours for April 28, 2016 are shown on Figure 2 and include MW-235S, MW-236S, MW-237S, MW-238S/D, MW-231S/D, MW-244, MW-D, MW-241, MW-FS, GZA-3 and MW-109D.

Amec Foster Wheeler then sampled the six groundwater monitoring wells specified in the Order of Approval - MW-235S, MW-236S, MW-237S, MW-D, MW-241, and MW-FS (Figure 2) using the U.S. Environmental Protection Agency (USEPA) low-flow methodology. Samples from this April 28, 2016 round were submitted under chain-of-custody control to an off-site laboratory for VOC analysis by USEPA Method 8260B. Field data records for the groundwater sampling event are included in Appendix A.

Groundwater Sampling Results

Table 1 summarizes the historic VOC concentrations detected in the six groundwater monitoring wells including the April 2016 groundwater sampling event. VOC concentrations detected in deep wells in Parcel C (MW-D, MW-241) are measured against the RIDEM GB standards, and VOC concentrations detected in shallow wells in Parcel C-1 (MW-235S, MW-236S, MW-237S and MW-FS) are measured against MassDEP GW-3 Standards in accordance with the Order of Approval. The analytical laboratory report for the April 2016 groundwater sampling event is included in Appendix B.

As shown in Table 1, none of the detected VOC concentrations in groundwater samples collected from the two monitoring wells located in Parcel C exceeded the GB criteria and none of the wells in Parcel C-1 exceeded the MassDEP GW-3 criteria.

VOC concentrations in MW-D have decreased three consecutive rounds starting in December 2015. The April 2016 TCE concentration has also dropped below the GB criteria (0.499/0.514 mg/L vs GB Criteria 0.54 mg/L).

VOC concentrations in MW-241 have been consistently flat or non-detect since December 2015 (3 consecutive rounds), except for TCE. TCE concentrations have increased from 0.0527 to 0.21D mg/L since December 2015 (GB criteria 0.54 mg/L).

MW-235S, MW-236S and MW-237S VOC concentrations have consistently been below the GW-3 criteria since 2009 and VOC concentrations have been flat and/or not increased in the last three rounds of groundwater sampling.

MW-FS VOC concentrations have decreased three consecutive rounds starting in December 2015 and are well below the applicable GW-3 criteria.

Groundwater Monitoring Approach

Based on the extensive groundwater data collected historically and confirmation from the recent April 2016 groundwater sampling round, VOC concentrations within the western plume have been reduced and are decreasing. The December 2015 peak concentration for most of the VOCs in the Parcels C and C-1 monitoring wells is likely related to the remedial construction conducted between July and October 2015. Since the construction was completed three rounds of groundwater data have been collected (December 2015, February 2016 and April 2016). The VOC concentrations have continued to decrease as the site conditions have stabilized. The increased TCE concentration in MW-241 on Parcel C is the only outlier for the closure of the Parcel C/C-1 groundwater.

As shown in Table 1, continued biodegradation of VOCs via natural attenuation is also occurring in the groundwater. Planned reuse of the Parcel C/C-1 area by the City of Providence School Department is a soccer field. No buildings are planned in the area of the monitoring wells (located within the woods, detention basin and at the Inner Cove shoreline). The Draft Environmental Land Use Restrictions (ELUR) within the February 2016 Remedial Action Completion Report include the provision restricting the use of the groundwater for potable and non-potable use and that no subsurface structures can be constructed over the groundwater without prior approval from RIDEM. This ELUR will be signed and filed by the City of Providence within the Providence Land Use Records.

Textron will conduct the next groundwater monitoring round in June 2016 to monitor the continued degradation of VOCs and decreasing concentrations in the groundwater. We propose to eliminate monitoring wells MW-FS and the downgradient well MW-237S (Figure 2) from the future groundwater monitoring program as they both meet the closure requirements under the July 2015 Order of Approval (below MassDEP GW-3 criteria and three rounds of decreasing concentrations). The four wells to be monitored in June 2016 include MW-235S, MW-236S, MW-D and MW-241.

We will conduct a subsequent round in August 2016, if necessary, pending compliance of the Parcel C groundwater with RIDEM's GB Groundwater Objectives with no increasing trends of VOCs, and that Parcel C-1 groundwater continues to be compliant with the MassDEP GW-3 Standards with no increasing trends of VOCs. A report will be prepared and submitted to the RIDEM summarizing the Parcel C/C-1 groundwater results.

Please contact the Greg Simpson (401-457-2635) or David Heislein (978-392-5327) if we can provide additional information or answer any questions concerning these groundwater monitoring data and planned sampling events.

Sincerely,

Amec Foster Wheeler Environment &Infrastructure, Inc.

Annette McLean
Project Scientist

David E. Heislein
Senior Project Manager

Enclosures: Table 1 - Summary of Parcel C/C-1 Groundwater Results 1989-2016
Figure 1 – Site Location Map
Figure 2 – Parcel C/C-1 Groundwater Contours April 2016
Appendix A – Field Data Records
Appendix B – Laboratory Reports – April 2016 Groundwater Sampling Event

cc: Don Gralnek, Executive Director - Providence Redevelopment Agency
G. Simpson, Textron, Inc. (Electronic)
Knight Memorial Library Repository
Shane Brackett, Paolino Properties (including tenants)
Amec Foster Wheeler Project File

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TABLE 1

Table 1
Groundwater Results 1989 - 2015
Former Goreham Manufacturing Site
Providence, RI

				Location:	MW-235S	MW-235S	MW-235S	MW-235S	MW-235S	MW-236S	MW-236S	MW-236S	MW-236S	MW-236S	MW-236S	MW-236S	MW-237S	MW-237S	MW-237S	MW-237S	MW-237S	MW-237S	MW-241	MW-241	MW-241
				Sample ID:	GWMW235S	MW-235S	MW-235S	MW-235S	MW-235S	GWMW236S	GWMW236S	GWMW236S DUP	MW-236S	MW-236S	MW236S	MW-236S	GWMW237S Dup	GWMW237S	MW-237S	MW-237S	MW-237S	MW-237S	GWMW241	MW-241	MW-241
				Sample Date:	11/30/2009	7/15/2015	12/16/2015	2/10/2016	4/28/2016	11/30/2009	8/9/2010	8/9/2010	7/15/2015	12/16/2015	2/10/2016	4/28/2016	11/30/2009	11/30/2009	7/15/2015	12/17/2015	2/10/2016	4/28/2016	8/10/2010	7/15/2015	12/16/2015
Parameter Name	Units	GB	GW-3																							
1,1,1,2-Tetrachloroethane	MG/L	NS	50		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,1-Trichloroethane	MG/L	3.1	20		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0002 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	MG/L	NS	50		0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,1,2-Trichloroethane	MG/L	NS	50		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0026	0.0029	0.0031	0.0055	0.0029	0.0042	0.0054	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0006 J	0.001 U	0.001 U
1,1-Dichloroethane	MG/L	NS	20		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	MG/L	0.007	30		0.0011	0.001 U	0.001 U	0.001 U	0.001 U	0.0059	0.0061	0.0061	0.0035	0.0017	0.0022	0.0028	0.001 U	0.001 U	0.002	0.0025	0.0015	0.0031	0.0023	0.0026	0.001 U
1,1-Dichloropropene	MG/L	NS	NS		0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichlorobenzene	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,3-Trichloropropane	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	MG/L	NS	50		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trimethylbenzene	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	MG/L	0.002	NS		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,2-Dibromoethane (EDB)	MG/L	NS	50		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	MG/L	NS	2		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	MG/L	0.11	20		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0017	0.002	0.0018	0.0031	0.0024	0.0032	0.0032	0.001 U	0.0002 J	0.002	0.0013	0.0015	0.0022	0.0003 J	0.001 U	0.001 U
1,2-Dichloroethene (total)	MG/L	NS	NS																						
1,2-Dichloropropane	MG/L	3	50		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3,5-Trimethylbenzene	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	MG/L	NS	50		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichloropropane	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	MG/L	NS	8		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dioxane	MG/L	NS	50		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1-Chlorohexane	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2,2-Dichloropropane	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone	MG/L	NS	50		0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U
2-Chlorotoluene	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Hexanone	MG/L	NS	NS		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Chlorotoluene	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
4-Isopropyltoluene	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
4-Methyl-2-pentanone	MG/L	NS	50		0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Acetone	MG/L	NS	50		0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U
Benzene	MG/L	0.14	10		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0006 J	0.0006 J	0.0007 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0002 J	0.001 U	0.001 U
Bromobenzene	MG/L	NS	NS		0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromochloromethane	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	MG/L	NS	50		0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Bromoform	MG/L	NS	50		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane	MG/L	NS	0.8		0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 UJ	0.002 UJ	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Carbon disulfide	MG/L	NS	50		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0064	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0038	0.001 U	0.0019	0.001 U	0.001 U	0.001 U	0.001 U
Carbon tetrachloride	MG/L	0.07	5		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	MG/L	3.2	1		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0007 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	MG/L	NS	NS		0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroform	MG/L	NS	20		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0008 J	0.001 U	0.001 U
Chloromethane	MG/L	NS	NS		0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,2-Dichloroethene	MG/L	2.4	50		0.0332	0.012	0.0093	0.0086	0.009	0.0886	0.098	0.0948 D	0.0977	0.0755	0.0759	0.0817	0.0012	0.0012	0.0912	0.0577	0.0489	0.0834	0.0278	0.0301	0.0025
cis-1,3-Dichloropropene	MG/L	NS	NS		0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Dibromochloromethane	MG/L	NS	50		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromomethane	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	MG/L	NS	NS		0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Diethyl ether	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Diisopropyl ether	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethyl tertiary-butyl ether	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	MG/L	1.6	5		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Hexachlorobutadiene	MG/L	NS	3		0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Hexachloroethane	MG/L	NS	50		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropylbenzene	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
m,p-Xylene	MG/L	NS	5		0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methylene chloride	MG/L	NS	50		0.004 U	0.002 U	0.002 U	0.002 U	0.002 U	0.004 U	0.004 U	0.004 U	0.002 U	0.002 U	0.002 U	0.002 U	0.004 U	0.004 U	0.002 U	0.002 U	0.002 U	0.002 U	0.004 U	0.002 U	0.002 U
Methyl-t-butyl ether	MG/L	5	50		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Naphthalene	MG/L	NS	20		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
n-Butylbenzene	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
n-Propyl Benzene	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
o-Xylene	MG/L	NS	5		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
sec-Butylbenzene	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0002 J	0.0002 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Styrene	MG/L	2.2	6		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
tert-Butylbenzene	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tertiary-amyl methyl ether	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	MG/L	0.15	30		0.0069	0.0036	0.0029	0.0029	0.002	0.0153	0.0095	0.0096	0.001 U	0.001 U	0.001 U	0.001 U	0.0049	0.005	0.0212	0.0413	0.0312	0.0438	0.001 U	0.001 U	0.001 U
Tetrahydrofuran	MG/L	NS	NS		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Toluene	MG/L	1.7	40		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	MG/L	2.8	50		0.0003 J	0.001 U	0.001 U	0.001 U	0.001 U	0.0007 J	0.0006 J	0.0007 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0028	0.002	0.0014	0.0027	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	MG/L	NS	NS		0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Trichloroethene	MG/L	0.54	5		0.0672	0.0169	0.0126	0.0132	0.0117	1.07 D	0.793 D	0.821 D	0.191 D	0.144 D	0.11 D	0.167 D	0.0499	0.0511	0.118 D	0.269 D	0.404	0.375 D	0.245 D	0.39 D	0.0527
Trichlorofluoromethane	MG/L	NS	NS		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0063	0.0075	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trihalomethanes, Total	MG/L	NS	NS		0.0036 U	0.001 U				0.0036 U	0.0036 U	0.0036 U	0.001 U				0.0036 U	0.0036 U	0.001 U				0.0036 U	0.001 U	
Vinyl acetate	MG/L	NS	NS		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U

Table 1
Groundwater Results 1989 - 2015
Former Goreham Manufacturing Site
Providence, RI

			Location:	MW-235S	MW-235S	MW-235S	MW-235S	MW-235S	MW-236S	MW-236S	MW-236S	MW-236S	MW-236S	MW-236S	MW-236S	MW-237S	MW-237S	MW-237S	MW-237S	MW-237S	MW-237S	MW-241	MW-241	MW-241
			Sample ID:	GWMW235S	MW-235S	MW-235S	MW-235S	MW-235S	GWMW236S	GWMW236S	GWMW236S DUP	MW-236S	MW-236S	MW236S	MW-236S	GWMW237S Dup	GWMW237S	MW-237S	MW-237S	MW-237S	MW-237S	GWMW241	MW-241	MW-241
			Sample Date:	11/30/2009	7/15/2015	12/16/2015	2/10/2016	4/28/2016	11/30/2009	8/9/2010	8/9/2010	7/15/2015	12/16/2015	2/10/2016	4/28/2016	11/30/2009	11/30/2009	7/15/2015	12/17/2015	2/10/2016	4/28/2016	8/10/2010	7/15/2015	12/16/2015
Parameter Name	Units	GB	GW-3																					
Vinyl chloride	MG/L	NS	50	0.0021	0.001 U	0.001 U	0.001 U	0.001 U	0.0017	0.0014	0.0014	0.0018	0.001 U	0.001 U	0.0015	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0015	0.0005 J	0.001 U	0.001 U
Xylenes, Total	MG/L	NS	5	0.003 U	0.002 U				0.003 U	0.003 U	0.003 U	0.002 U				0.003 U	0.003 U	0.002 U					0.003 U	0.002 U	
Aluminum	MG/L	NS	NS																					
Antimony	MG/L	NS	8																					
Arsenic	MG/L	NS	0.9																					
Barium	MG/L	NS	50																					
Beryllium	MG/L	NS	0.2																					
Cadmium	MG/L	NS	0.004																					
Calcium	MG/L	NS	NS																					
Chromium	MG/L	NS	0.3																					
Cobalt	MG/L	NS	NS																					
Copper	MG/L	NS	NS																					
Iron	MG/L	NS	NS																					
Lead	MG/L	NS	0.01																					
Magnesium	MG/L	NS	NS																					
Manganese	MG/L	NS	NS																					
Mercury	MG/L	NS	0.02																					
Nickel	MG/L	NS	0.2																					
Potassium	MG/L	NS	NS																					
Selenium	MG/L	NS	0.1																					
Silver	MG/L	NS	0.007																					
Sodium	MG/L	NS	NS																					
Thallium	MG/L	NS	3																					
Vanadium	MG/L	NS	4																					
Zinc	MG/L	NS	0.9																					
Total Cyanide	MG/L	NS	0.03																					

Notes:
mg/L - milligrams per liter
NS - No Standard Established
U - Not detected
J - Estimated Value
D - Dilution
Concentrations did not exceed Massachusetts Contingency Plan GW-3 criteria
per the approved April 2001 Remedial Action Work Plan.
Ambient Water Quality Criteria (AWQC) does not apply to the above
volatile organic compounds.
Yellow highlighted cells exceed the GB Criteria or MCP GW-3 Criteria

Table 1
Groundwater Results 1989 - 2015
Former Goreham Manufacturing Site
Providence, RI

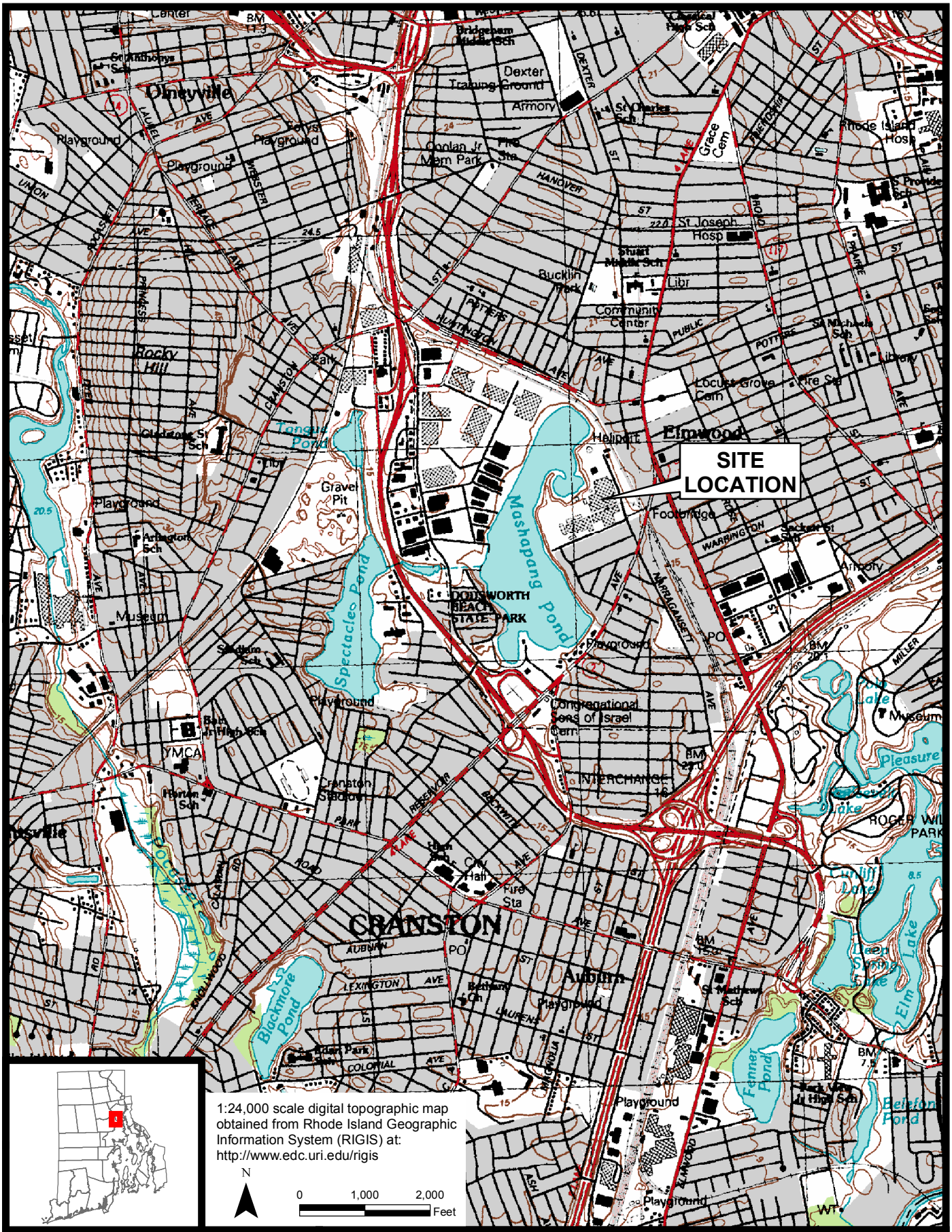
				Location:	MW-241	MW-241	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-FS/B-6S	MW-FS/B-6S	MW-FS/B-6S	MW-FS/B-6S	MW-FS/B-6S	MW-FS/B-6S	MW-FS/B-6S
				Sample ID:	MW-241	MW-241	MW-D	GMMWXXDXXX01XX	MW-D	GWMWD	MW-D	DUP-01	MW-D	MW-D	DUP-1	MW-D	Dup-01	MW-FS	MW-FS	MW-FS	MW-FS	MW-FS	DUP-01	MW-FS	MW-FS
				Sample Date:	2/10/2016	4/28/2016	4/13/1989	9/21/1994	10/15/1997	12/9/1998	2/19/2010	7/15/2015	7/15/2015	12/17/2015	2/10/2016	2/10/2016	4/28/2016	4/28/2016	4/13/1989	12/9/1998	7/15/2015	12/16/2015	12/16/2015	2/10/2016	4/28/2016
Parameter Name	Units	GB	GW-3																						
1,1,1,2-Tetrachloroethane	MG/L	NS	50		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,1-Trichloroethane	MG/L	3.1	20		0.001 U	0.001 U	0.01 U	0.01 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	MG/L	NS	50		0.0005 U	0.0005 U				0.001 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U		0.001 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
1,1,2-Trichloroethane	MG/L	NS	50		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	MG/L	NS	20		0.001 U	0.001 U	0.01 U	0.01 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	MG/L	0.007	30		0.001 U	0.0019	0.01 U	0.01 U	0.005 U	0.001 U	0.0011	0.0026	0.0025	0.0114	0.0065	0.0069	0.002	0.0019	0.005 U	0.001 U	0.0012	0.0013	0.0013	0.001 U	0.001 U
1,1-Dichloropropene	MG/L	NS	NS		0.002 U	0.002 U				0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
1,2,3-Trichlorobenzene	MG/L	NS	NS		0.001 U	0.001 U			0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,3-Trichloropropane	MG/L	NS	NS		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	MG/L	NS	50		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trimethylbenzene	MG/L	NS	NS		0.001 U	0.001 U			0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	MG/L	0.002	NS		0.005 U	0.005 U				0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,2-Dibromoethane (EDB)	MG/L	NS	50		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	MG/L	NS	2		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	MG/L	0.11	20		0.001 U	0.001 U	0.01 U	0.01 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethene (total)	MG/L	NS	NS				0.057												0.018						
1,2-Dichloropropane	MG/L	3	50		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3,5-Trimethylbenzene	MG/L	NS	NS		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	MG/L	NS	50		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichloropropane	MG/L	NS	NS		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	MG/L	NS	8		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dioxane	MG/L	NS	50		0.5 U	0.5 U					0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1-Chlorohexane	MG/L	NS	NS		0.001 U	0.001 U					0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U			0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2,2-Dichloropropane	MG/L	NS	NS		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone	MG/L	NS	50		0.01 U	0.01 U		0.1 U		0.02 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U		0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Chlorotoluene	MG/L	NS	NS		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Hexanone	MG/L	NS	NS		0.01 U	0.01 U				0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Chlorotoluene	MG/L	NS	NS		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
4-Isopropyltoluene	MG/L	NS	NS		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
4-Methyl-2-pentanone	MG/L	NS	50		0.025 U	0.025 U				0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Acetone	MG/L	NS	50		0.01 U	0.01 U	0.05 U	0.1 U	0.1 U	0.02 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzene	MG/L	0.14	10		0.001 U	0.001 U	0.01 U	0.01 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromobenzene	MG/L	NS	NS		0.002 U	0.002 U				0.001 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U		0.001 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Bromochloromethane	MG/L	NS	NS		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	MG/L	NS	50		0.0006 U	0.0006 U				0.001 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U		0.001 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Bromoform	MG/L	NS	50		0.001 U	0.001 U				0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane	MG/L	NS	0.8		0.002 U	0.002 U				0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Carbon disulfide	MG/L	NS	NS		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon tetrachloride	MG/L	0.07	5		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	MG/L	3.2	1		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.0014	0.001 U
Chloroethane	MG/L	NS	NS		0.002 U	0.002 U				0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Chloroform	MG/L	NS	20		0.001 U	0.001 U	0.01 U	0.01 U	0.005 U	0.002	0.0002 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane	MG/L	NS	NS		0.002 U	0.002 U				0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
cis-1,2-Dichloroethene	MG/L	2.4	50		0.0029	0.0209		0.088	0.101	0.07	0.0392	0.0506	0.0466	0.136 D	0.0742	0.0791	0.0294	0.0258		0.029	0.0269	0.0346	0.0363	0.0208	0.0165
cis-1,3-Dichloropropene	MG/L	NS	NS		0.0004 U	0.0004 U				0.0005 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U		0.0005 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Dibromochloromethane	MG/L	NS	50		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromomethane	MG/L	NS	NS		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	MG/L	NS	NS		0.002 U	0.002 U				0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U		0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Diethyl ether	MG/L	NS	NS		0.001 U	0.001 U					0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U			0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Diisopropyl ether	MG/L	NS	NS		0.001 U	0.001 U					0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U			0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethyl tertiary-butyl ether	MG/L	NS	NS		0.001 U	0.001 U					0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U			0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	MG/L	1.6	5		0.001 U	0.001 U	0.01 U	0.01 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Hexachlorobutadiene	MG/L	NS	3		0.0006 U	0.0006 U			0.005 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U		0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U	0.0006 U
Hexachloroethane	MG/L	NS	50		0.001 U	0.001 U					0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U			0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropylbenzene	MG/L	NS	NS		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
m,p-Xylene	MG/L	NS	5		0.002 U	0.002 U					0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U			0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methylene chloride	MG/L	NS	50		0.002 U	0.002 U	0.01 U	0.01 U	0.005 U	0.001 U	0.004 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.005 U	0.001 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Methyl-t-butyl ether	MG/L	5	50		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Naphthalene	MG/L	NS	20		0.001 U	0.001 U			0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
n-Butylbenzene	MG/L	NS	NS		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
n-Propyl Benzene	MG/L	NS	NS		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
o-Xylene	MG/L	NS	5		0.001 U	0.001 U					0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U			0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
sec-Butylbenzene	MG/L	NS	NS		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Styrene	MG/L	2.2	6		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
tert-Butylbenzene	MG/L	NS	NS		0.001 U	0.001 U				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tertiary-amyl methyl ether	MG/L	NS	NS		0.001 U	0.001 U					0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U			0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	MG/L	0.15	30		0.001 U	0.001 U	0.013	0.016	0.012	0.008	0.0044	0.0017	0.0016	0.0037	0.0023	0.0024	0.001 U	0.001 U	0.006	0.041	0.0148	0.0228	0.0237	0.0175	0.0151
Tetrahydrofuran	MG/L	NS	NS		0.005 U	0.005 U				0.001 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		0.001 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Toluene	MG/L	1.7	40		0.001 U	0.001 U	0.01 U	0.01 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	MG/L	2.8	50		0.001 U	0.001 U		0.01 U	0.005 U	0.001 U	0.0004 J	0.0015	0.0013	0.004	0.0027	0.0031	0.0011	0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	MG/L	NS	NS		0.0004 U	0.0004 U				0.0005 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U		0.0005 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Trichloroethene	MG/L	0.54	5		0.072	0.21 D	0.28	0.298	0.37	0.272	0.761 D	0.826 D	0.851 D	3.06 D	1.73 D	1.71 D	0.499 D	0.514 D	0.02	0.1	0.129 D	0.27 D	0.289 D	0.168 D	0.0746
Trichlorofluoromethane	MG/L	NS	NS		0.001 U	0.001 U				0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trihalomethanes, Total	MG/L	NS	NS								0.0036 U	0.001 U	0.001 U								0.001 U				
Vinyl acetate	MG/L	NS	NS		0.005 U	0.005 U					0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			0.005 U	0.005 U	0.005 U	0.005 U	0.005 U

Table 1
Groundwater Results 1989 - 2015
Former Goreham Manufacturing Site
Providence, RI

			Location:	MW-241	MW-241	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-D/B-4	MW-FS/B-6S	MW-FS/B-6S	MW-FS/B-6S	MW-FS/B-6S	MW-FS/B-6S	MW-FS/B-6S	MW-FS/B-6S
			Sample ID:	MW-241	MW-241	MW-D	GMMWXXDXXX01XX	MW-D	MW-D	GWMWD	MW-D	DUP-01	MW-D	MW-D	DUP-1	MW-D	Dup-01	MW-FS	MW-FS	MW-FS	MW-FS	MW-FS	DUP-01	MW-FS	MW-FS
			Sample Date:	2/10/2016	4/28/2016	4/13/1989	9/21/1994	10/15/1997	12/9/1998	2/19/2010	7/15/2015	7/15/2015	12/17/2015	2/10/2016	2/10/2016	4/28/2016	4/28/2016	4/13/1989	12/9/1998	7/15/2015	12/16/2015	12/16/2015	2/10/2016	4/28/2016
Parameter Name	Units	GB	GW-3																						
Vinyl chloride	MG/L	NS	50	0.001 U	0.001 U	0.02 U	0.02 U	0.01 U	0.003	0.003	0.0033	0.003	0.0034	0.0024	0.001 U	0.001	0.001	0.01 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Xylenes, Total	MG/L	NS	5			0.01 U	0.02 U	0.005 U	0.001 U	0.003 U	0.002 U	0.002 U						0.005 U	0.001 U	0.002 U					
Aluminum	MG/L	NS	NS				0.3																		
Antimony	MG/L	NS	8				0.1 U																		
Arsenic	MG/L	NS	0.9				0.01 U																		
Barium	MG/L	NS	50				0.2 U																		
Beryllium	MG/L	NS	0.2				0.01 U																		
Cadmium	MG/L	NS	0.004				0.005 U																		
Calcium	MG/L	NS	NS				49.3																		
Chromium	MG/L	NS	0.3				0.05 U																		
Cobalt	MG/L	NS	NS				0.05 U																		
Copper	MG/L	NS	NS				0.02 U																		
Iron	MG/L	NS	NS				0.1 U																		
Lead	MG/L	NS	0.01				0.016		0.005 U										0.005 U						
Magnesium	MG/L	NS	NS				15.7																		
Manganese	MG/L	NS	NS				0.47																		
Mercury	MG/L	NS	0.02				0.0005 U																		
Nickel	MG/L	NS	0.2				0.04 U																		
Potassium	MG/L	NS	NS				1.8																		
Selenium	MG/L	NS	0.1				0.01 U																		
Silver	MG/L	NS	0.007				0.01 U																		
Sodium	MG/L	NS	NS				25.1																		
Thallium	MG/L	NS	3				0.01 U																		
Vanadium	MG/L	NS	4				0.05 U																		
Zinc	MG/L	NS	0.9				0.05																		
Total Cyanide	MG/L	NS	0.03				0.01 U											0.01 U							

Notes:
mg/L - milligrams per liter
NS - No Standard Established
U - Not detected
J - Estimated Value
D - Dilution
Concentrations did not exceed Massachusetts Contingency Plan C
per the approved April 2001 Remedial Action Work Plan.
Ambient Water Quality Criteria (AWQC) does not apply to the abov
volatile organic compounds.
Yellow highlighted cells exceed the GB Criteria or MCP GW-3 Crite

FIGURES



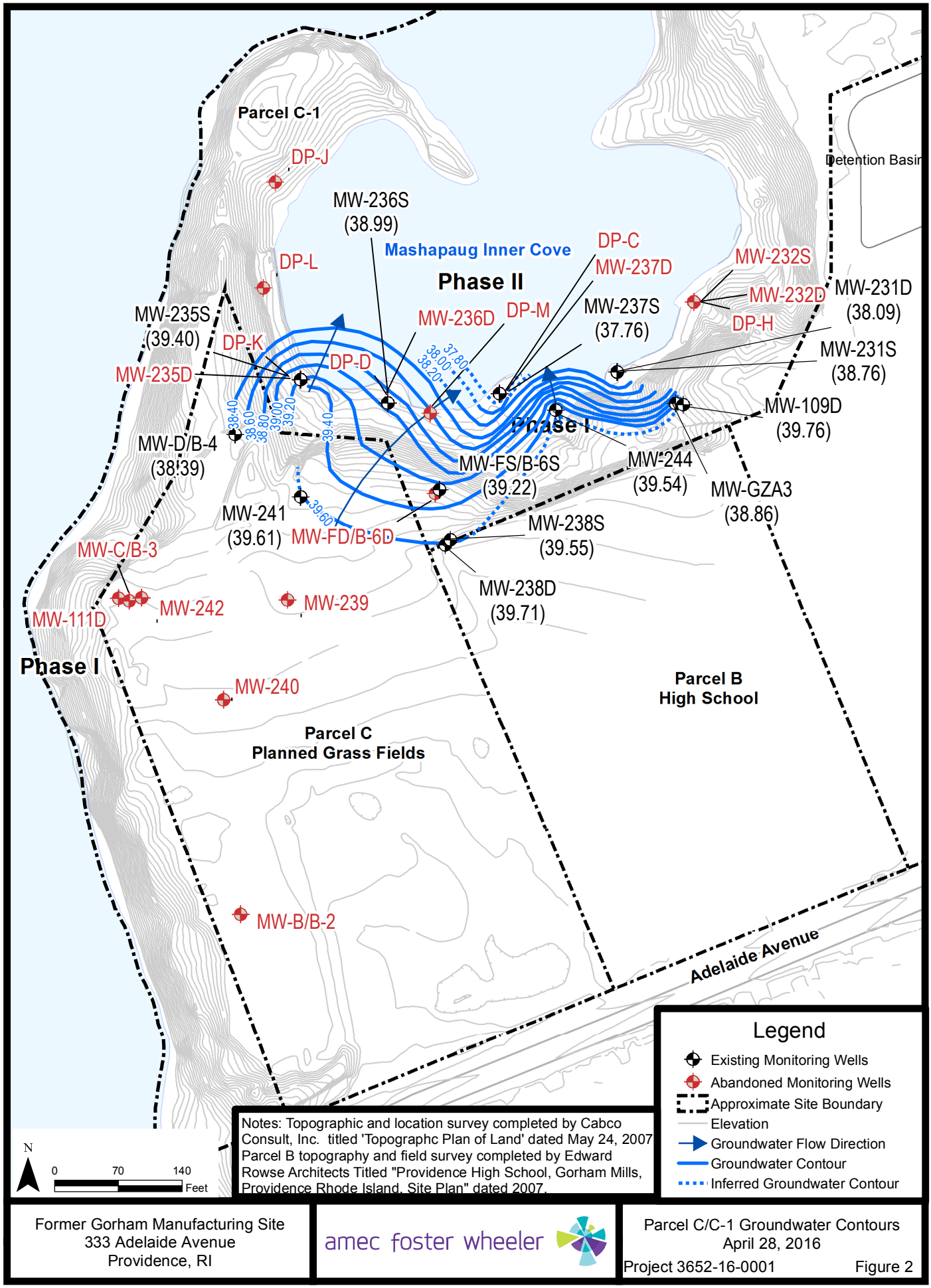
Former Gorham Manufacturing Site
333 Adelaide Avenue
Providence, RI

amec foster wheeler

Site Location Map

Project 3652-15-0040 Figure 1

H:\Textron-Gorham\Providence_RI\Task3\MXD\Fig1_SiteLocationMap.mxd January 20, 2016 DWN: emily.gardiner CHKD: AKN



Former Gorham Manufacturing Site
333 Adelaide Avenue
Providence, RI

amec foster wheeler

Parcel C/C-1 Groundwater Contours
April 28, 2016
Project 3652-16-0001 Figure 2

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APPENDIX A

Field Data Records

April 28, 2016 Groundwater Sampling Event

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT: Texter Gahan | WELL ID: Mw-23S | DATE: 4/20/16
SAMPLE ID: Mw-23S | SITE TYPE: RI DEM | BOTTLE TIME: 1431
TIME START: 1114 END: | JOB NUMBER:

WATER LEVEL / PUMP SETTINGS

QC SAMPLE COLLECTED: —

MEASUREMENT POINT: [/] TOP OF WELL RISER; [ ] TOP OF PROTECTIVE CASING; [ ] OTHER

PROTECTIVE CASING STICKUP (FROM GROUND): — FT.

PROTECTIVE CASING / WELL DIFFERENCE: — FT.

INITIAL DEPTH TO WATER: 5.05 FT.

WELL DEPTH (TOR): 16.00 FT.

PID AMBIENT AIR: — PPMV

WELL DIAMETER: 1 IN.

FINAL DEPTH TO WATER: dry FT.

SCREEN LENGTH: FT.

PID WELL MOUTH: 1^1 — PPMV

WELL INTEGRITY: YES / NO / N/A

	YES	NO	N/A
CAP	/		
CASING	/		
LOCKED	/		
COLLAR	/		

DRAWDOWN VOLUME: dry GAL.
(initial - final x 0.16 (2-inch) or x 0.65 (4-inch))

RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED: —

PRESSURE TO PUMP: — PSI

TOTAL VOL. PURGED: — GAL.
(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/ml)

REFILL TIMER SETTING: — SEC.

DISCHARGE TIMER SETTING: SEC.

PURGE DATA

TIME (5 min.)	DEPTH TO WATER (ft.) (0.3 ft.)	PURGE RATE (ml/min) (100-400)	TEMP. (deg. C) (3%)	SPEC. COND. (uS/cm) (3%)	pH (units) (+/- 0.1)	DISS. O2 (mg/L) (10%) (>0.5)	TURBIDITY (NTU) (10%) (>5)	ORP (mV) (+/- 10 mV)	SAMPLE DEPTH	COMMENTS
1114	5.05 -	Purge dry								
1125	- ~~dry~~	dry								
1120	5.65									
1130										
1431	- Collected	200	12.00	379	6.70	1.31	20.1	-101		

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [ ] QED BLADDER; [ ] SIMCO BLADDER; [ ] ~~GEOPUMP~~

TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED; [ ] HIGH DENSITY POLYETHYLENE; [/] LDPE

TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE; [ ] STAINLESS STEEL; [/] ~~SILICON~~ (Dedicated)

TYPE OF BLADDER MATERIAL: [ ] TEFLON; [ ] OTHER

ANALYTICAL PARAMETERS

To Be Collected	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[/] ~~VOCs~~	8260B	HCL / 4 DEG. C	3 X 40 mL VOA Vial	[/] ~~VOCs~~

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES / NO

NUMBER OF GALLONS GENERATED: —

SIGNATURE:

NOTES:

amec foster wheeler

Prepared by:

Checked by:

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC. PAGE 1 OF 1

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT: Texter Gorham | WELL ID: MW-236S | DATE: 4/20/16
SAMPLE ID: MW-236S | SITE TYPE: RIDEM | BOTTLE TIME: 1441
TIME START: 945 END: | JOB NUMBER:

WATER LEVEL / PUMP SETTINGS

QC SAMPLE COLLECTED: —
MEASUREMENT POINT: [x] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER
PROTECTIVE CASING STICKUP (FROM GROUND): — FT.
PROTECTIVE CASING / WELL DIFFERENCE: — FT.
INITIAL DEPTH TO WATER: 5.55 FT.
WELL DEPTH (TOR): 16.72 FT.
PID AMBIENT AIR: — PPMV
WELL DIAMETER: 1 IN.
FINAL DEPTH TO WATER: dry FT.
SCREEN LENGTH: — FT.
PID WELL MOUTH: — PPMV
WELL INTEGRITY: CAP YES — NO — N/A —; CASING YES — NO — N/A —; LOCKED YES — NO — N/A —; COLLAR YES — NO — N/A —
DRAWDOWN VOLUME: dry GAL.
(initial - final x 0.16 (2-inch) or x 0.65 (4-inch))
RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED: —
PRESSURE TO PUMP: — PSI
TOTAL VOL. PURGED: dry GAL.
(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/ml)
REFILL TIMER SETTING: — SEC.
DISCHARGE TIMER SETTING: SEC.

PURGE DATA

TIME (5 min.)	DEPTH TO WATER (ft.) (0.3 ft.)	PURGE RATE (ml/min) (100-400)	TEMP. (deg. C) (3%)	SPEC. COND. (uS/cm) (3%)	pH (units) (+/- 0.1)	DISS. O2 (mg/L) (10%) (>0.5)	TURBIDITY (NTU) (10%) (>5)	ORP (mV) (+/- 10 mV)	SAMPLE DEPTH	COMMENTS
945	5.55	Purge	dry							
1015	dry									
1437	5.82									
1440	—	200	12.21	553	6.75	2.31	23.2	-141		
1441	collect sample	recovery								

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [ ] QED BLADDER [ ] SIMCO BLADDER [ ] ~~GEOPUMP~~
TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED [ ] HIGH DENSITY POLYETHYLENE [ ] ~~LDPE~~
TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE [ ] STAINLESS STEEL [ ] ~~SILICON~~ (Dedicated)
TYPE OF BLADDER MATERIAL: [ ] TEFLON [ ] OTHER

ANALYTICAL PARAMETERS

To Be Collected	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[x] VOCs	8260B	HCL / 4 DEG. C	3 X 40 mL VOA Vial	[ ] VOCs

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES (NO) NUMBER OF GALLONS GENERATED: —

SIGNATURE:

NOTES:

amec foster wheeler

Prepared by:
Checked by:

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT: Textron Cochan | WELL ID: MW-237S | DATE: 4/28/16

SAMPLE ID: MW-237S | SITE TYPE: RIDEM | BOTTLE TIME: 1437

TIME START: 916 END: | JOB NUMBER:

WATER LEVEL / PUMP SETTINGS

QC SAMPLE COLLECTED: —

MEASUREMENT POINT: [x] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER

PROTECTIVE CASING STICKUP (FROM GROUND): — FT.

PROTECTIVE CASING / WELL DIFFERENCE: — FT.

INITIAL DEPTH TO WATER: 3.60 FT.

WELL DEPTH (TOR): 26.25 FT.

PID AMBIENT AIR: — PPMV

WELL DIAMETER: 1 IN.

FINAL DEPTH TO WATER: dry FT.

SCREEN LENGTH: — FT.

PID WELL MOUTH: — PPMV

WELL INTEGRITY: CAP YES — NO — N/A —; CASING YES — NO — N/A —; LOCKED YES — NO — N/A —; COLLAR YES — NO — N/A —

DRAWDOWN VOLUME: dry GAL.
(initial - final x 0.16 (2-inch) or x 0.65 (4-inch))

RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED: —

PRESSURE TO PUMP: — PSI

TOTAL VOL. PURGED: dry GAL.
(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/ml)

REFILL TIMER SETTING: — SEC.

DISCHARGE TIMER SETTING: SEC.

PURGE DATA

TIME (5 min.)	DEPTH TO WATER (ft.) (0.3 ft.)	PURGE RATE (ml/min) (100-400)	TEMP. (deg. C) (3%)	SPEC. COND. (uS/cm) (3%)	pH (units) (+/- 0.1)	DISS. O2 (mg/L) (10%) (>0.5)	TURBIDITY (NTU) (10%) (>5)	ORP (mV) (+/- 10 mV)	SAMPLE DEPTH	COMMENTS
916	3.60 -	Purge dry								
936 -	dry									
1047	3.61									
1055	—	250	12.73	605	6.70	5.13	NA	-16.1		
1416										

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [ ] QED BLADDER [ ] SIMCO BLADDER [x] GEOPUMP

TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED [ ] HIGH DENSITY POLYETHYLENE [x] LDPE

TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE [ ] STAINLESS STEEL [x] SILICON (Dedicated)

TYPE OF BLADDER MATERIAL: [ ] TEFLON [ ] OTHER

ANALYTICAL PARAMETERS

To Be Collected	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[x] VOCs	8260B	HCL / 4 DEG. C	3 X 40 mL VOA Vial	[x] VOCs

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES (NO) NUMBER OF GALLONS GENERATED: —

SIGNATURE:

NOTES:

amec foster wheeler

Prepared by:

Checked by:

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT: Tarton Canhan | WELL ID: MW-D | DATE: 4/20/16
SAMPLE ID: MW-D | SITE TYPE: RIDEM | BOTTLE TIME: 1225
TIME START: 1128 END: | JOB NUMBER: 365-21104

WATER LEVEL / PUMP SETTINGS

QC SAMPLE COLLECTED: Dup, MS, MSD

MEASUREMENT POINT: [x] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER

PROTECTIVE CASING STICKUP (FROM GROUND): — FT.

PROTECTIVE CASING / WELL DIFFERENCE: — FT.

INITIAL DEPTH TO WATER: 21.87 FT.

WELL DEPTH (TOR): 32 FT.

PID AMBIENT AIR: — PPMV

WELL DIAMETER: 2 IN.

FINAL DEPTH TO WATER: 21.87 FT.

SCREEN LENGTH: — FT.

PID WELL MOUTH: — PPMV

WELL INTEGRITY: YES / NO / N/A
CAP: YES
CASING: NO
LOCKED: NO
COLLAR: YES

DRAWDOWN VOLUME: 0 GAL.
(initial - final x 0.16 (2-inch) or x 0.65 (4-inch))

RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED: 0

PRESSURE TO PUMP: — PSI

TOTAL VOL. PURGED: GAL.
(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/ml)

REFILL TIMER SETTING: — SEC.

DISCHARGE TIMER SETTING: SEC.

PURGE DATA

TIME (5 min.)	DEPTH TO WATER (ft.) (0.3 ft.)	PURGE RATE (ml/min) (100-400)	TEMP. (deg. C) (3%)	SPEC. COND. (uS/cm) (3%)	pH (units) (+/- 0.1)	DISS. O2 (mg/L) (10%) (>0.5)	TURBIDITY (NTU) (10%) (>5)	ORP (mV) (+/- 10 mV)	SAMPLE DEPTH	COMMENTS
1128	21.87	130 - start Purge							30	
1135	21.87	130	12.88	177	6.75	2.82	7.98	105		
1140	21.87	130	12.66	164	6.36	2.51	6.31	112		
1145	21.87	130	12.52	143	6.36	2.11	6.01	86		
1150	21.87	130	12.37	140	6.32	1.92	5.92	74		
1155	21.87	130	12.30	144	6.43	1.86	4.99	87		
1200	21.87	130	12.22	149	6.33	1.78	4.81	64		
1205	21.87	130	12.26	158	6.24	1.65	4.33	58		
1210	21.87	130	12.34	182	6.31	1.60	4.01	53		
1215	21.87	130	12.27	182	6.02	1.53	4.21	56		
1220	21.87	130	12.24	183	5.99	1.53	4.11	58		

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [ ] QED BLADDER [ ] SIMCO BLADDER [x] GEOPUMP

TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED [ ] HIGH DENSITY POLYETHYLENE [x] LDPE

TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE [ ] STAINLESS STEEL [x] SILICON (Dedicated)

TYPE OF BLADDER MATERIAL: [ ] TEFLON [ ] OTHER

ANALYTICAL PARAMETERS

To Be Collected	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[x] VOCs	8260B	HCL / 4 DEG. C	3 X 40 mL VOA Vial	[x] VOCs

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES (NO) NUMBER OF GALLONS GENERATED:

SIGNATURE:

NOTES:

Collect Dup-01 MS/MSD

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Prepared by:
Checked by:

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC. PAGE 1 OF 1

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT: Textron Gorham | WELL ID: MW-FS | DATE: 4/28/16
SAMPLE ID: MW-FS | SITE TYPE: RI DEM | BOTTLE TIME: 1105
TIME START: 1023 END: 1115 | JOB NUMBER: 3C72106YC

WATER LEVEL / PUMP SETTINGS

QC SAMPLE COLLECTED: ✓

MEASUREMENT POINT: ✓ TOP OF WELL RISER; ☐ TOP OF PROTECTIVE CASING; ☐ OTHER

PROTECTIVE CASING STICKUP (FROM GROUND): — FT.

PROTECTIVE CASING / WELL DIFFERENCE: — FT.

INITIAL DEPTH TO WATER: 23.81 FT.

WELL DEPTH (TOR): 32 FT.

PID AMBIENT AIR: — PPMV

WELL DIAMETER: 1.5 IN.

FINAL DEPTH TO WATER: 23.81 FT.

SCREEN LENGTH: — FT.

PID WELL MOUTH: — PPMV

WELL INTEGRITY:

	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED		✓	
COLLAR	✓		

DRAWDOWN VOLUME: 0 GAL.
(initial - final x 0.16 (2-inch) or x 0.65 (4-inch))

RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED: 0

PRESSURE TO PUMP: — PSI

TOTAL VOL. PURGED: GAL.
(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/ml)

REFILL TIMER SETTING: — SEC.

DISCHARGE TIMER SETTING: — SEC.

PURGE DATA

TIME (5 min.)	DEPTH TO WATER (ft.) (0.3 ft.)	PURGE RATE (ml/min) (100-400)	TEMP. (deg. C) (3%)	SPEC. COND. (uS/cm) (3%)	pH (units) (+/- 0.1)	DISS. O2 (mg/L) (10%) (>0.5)	TURBIDITY (NTU) (10%) (>5)	ORP (mV) (+/- 10 mV)	SAMPLE DEPTH	COMMENTS
1023	23.81	120	-start purge							
1032	23.81	120	14.05	2350	6.46	3.49	8.44	254		
1037	23.81	120	14.07	2321	7.05	2.56	7.96	215		
1042	23.81	120	14.13	2310	6.41	1.43	6.27	255		
1047	23.81	120	14.01	2322	6.91	1.58	5.11	208		
1052	23.81	120	14.04	2326	6.86	1.37	4.93	171		
1057	23.81	120	14.16	2326	6.86	1.30	4.75	179		
1102	23.81	120	14.16	2333	6.89	1.25	3.91	176		
1105 - called Samp										

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: ☐ QED BLADDER; ☐ SIMCO BLADDER; ✓ GEOPUMP

TYPE OF TUBING: ☐ TEFLON OR TEFLON LINED; ☐ HIGH DENSITY POLYETHYLENE; ✓ LDPE

TYPE OF PUMP MATERIAL: ☐ POLYVINYL CHLORIDE; ☐ STAINLESS STEEL; ✓ SILICON (Dedicated)

TYPE OF BLADDER MATERIAL: ☐ TEFLON; ☐ OTHER

ANALYTICAL PARAMETERS

To Be Collected	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
✓ VOCs	8260B	HCL / 4 DEG. C	3 X 40 mL VOA Vial	✓ VOCs

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES (NO) | NUMBER OF GALLONS GENERATED: ____

SIGNATURE: [signature]

NOTES:

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Prepared by:
Checked by:

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC. PAGE 1 OF 1

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT: Textron Gorham | WELL ID: MW-241 | DATE: 4/20/16
SAMPLE ID: MW-241 | SITE TYPE: RIDEM | BOTTLE TIME: 1410
TIME START: 1330 END: | JOB NUMBER:

WATER LEVEL / PUMP SETTINGS

QC SAMPLE COLLECTED: —
MEASUREMENT POINT: [x] TOP OF WELL RISER [ ] TOP OF PROTECTIVE CASING [ ] OTHER
PROTECTIVE CASING STICKUP (FROM GROUND): — FT.
PROTECTIVE CASING / WELL DIFFERENCE: — FT.
INITIAL DEPTH TO WATER: 23.60 FT.
WELL DEPTH (TOR): FT.
PID AMBIENT AIR: — PPMV
WELL DIAMETER: 2 IN.
FINAL DEPTH TO WATER: 23.60 FT.
SCREEN LENGTH: FT.
PID WELL MOUTH: — PPMV
WELL INTEGRITY: CAP YES; CASING YES; LOCKED NO; COLLAR YES
DRAWDOWN VOLUME: 0 GAL. (initial - final x 0.16 {2-inch} or x 0.65 {4-inch})
RATIO OF DRAWDOWN VOLUME TO TOTAL VOLUME PURGED: 6.01
PRESSURE TO PUMP: — PSI
TOTAL VOL. PURGED: GAL. (purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/ml)
REFILL TIMER SETTING: — SEC.
DISCHARGE TIMER SETTING: — SEC.

PURGE DATA

TIME (5 min.)	DEPTH TO WATER (ft.) (0.3 ft.)	PURGE RATE (ml/min) (100-400)	TEMP. (deg. C) (3%)	SPEC. COND. (uS/cm) (3%)	pH (units) (+/- 0.1)	DISS. O2 (mg/L) (10%) (>0.5)	TURBIDITY (NTU) (10%) (>5)	ORP (mV) (+/- 10 mV)	SAMPLE DEPTH	COMMENTS
1330	23.60	150-start pump								
1335	23.60	150	16.69	302	5.24	2.20	3.59	87		
1340	23.60	150	14.90	348	6.15	2.04	3.61	-10		
1345	23.60	150	14.96	350	6.20	1.37	3.52	-14		
1350	23.60	150	14.99	352	6.40	0.99	3.55	-29		
1355	23.60	150	14.82	352	6.51	0.80	3.77	-32		
1400	23.60	150	14.53	354	6.60	0.72	3.78	-42		
1405	23.60	150	14.40	352	6.64	0.79	3.85	-39		
1410	-collected									

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [ ] QED BLADDER [ ] SIMCO BLADDER [x] GEOPUMP
TYPE OF TUBING: [ ] TEFLON OR TEFLON LINED [ ] HIGH DENSITY POLYETHYLENE [x] LDPE
TYPE OF PUMP MATERIAL: [ ] POLYVINYL CHLORIDE [x] STAINLESS STEEL [ ] SILICON (Dedicated)
TYPE OF BLADDER MATERIAL: [ ] TEFLON [ ] OTHER

ANALYTICAL PARAMETERS

To Be Collected	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
[x] VOCs	8260B	HCL / 4 DEG. C	3 X 40 mL VOA Vial	[x] VOCs

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES / NO
NUMBER OF GALLONS GENERATED:

SIGNATURE:

NOTES:

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Prepared by:
Checked by:

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Textron Cranston
PROJECT NUMBER:
PROJECT LOCATION: Providence, RI
WEATHER CONDITIONS (AM): Sunny, cool, temp. in 50's
WEATHER CONDITIONS (PM): Mostly cloudy temp in 60's

TASK NO: 01 DATE: 4/25-16
FIELD CREW: MAM
SAMPLER NAME: MarkMaynard
SAMPLER SIGNATURE:
CHECKED BY: DATE:

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 556
UNIT ID NO. mo15-u

AM CALIBRATION Start Time: 725 End Time: 735

PM CALIBRATION CHECK Start Time: 1515 End Time: 1525

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	3.99	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.03	+/- 0.1 pH Units	7.0	6.76	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	240	243	+/- 10 mV	240	224	+/- 10 mV
Sp. Conductivity	µS/cm	1413	1413	+/- 3% of standard	1413	1443	+/- 5% of standard
DO (saturated)	%	100	100.4	+/- 2% of standard		101	%
DO (saturated)	mg/L [1] (see Chart 1)		11.72	+/- 0.2 mg/L		10.37	+/- 0.5 mg/L of sat. value
DO (<0.1)	mg/L	<0.1		< 0.5 mg/L	DO (<0.1)	—	< 0.5 mg/L
Temperature	°C		8.54			14.53	°C
Baro. Press.	mmHg		761.9			760.0	mmHg

TURBIDITY METER

METER TYPE Hach
MODEL NO. 2100q
UNIT ID NO. ma24-30

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Standard	NTU	10	9.31	10	14.1	+/- 5% of standard
Standard	NTU	20	15.3	20	26.1	
Standard	NTU	100	96.0	100	110	
Standard	NTU	800	807	800	815	

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	
H_2S	ppmv	25		25	
CO	ppmv	50		50	

OTHER METER

METER TYPE
MODEL NO.
UNIT ID NO.

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source: Lab
Sample Preservatives Source: Lab
Disposable Filter Type: 0.45µm
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	FGL341	12/17
pH (7)	5GL573	12/17
pH (10)	—	—
ORP	9567	11/16
Conductivity	5GH100	12-16
<10 Turb. Stan.	ma24-30 3 of 4	
20 Turb. Stan.		
100 Turb. Stan.		
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
DO		

NOTES:

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* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab #

Turn Time ___J___ Standard Other_____

Reporting Limits - See PM

Regulatory State: MA RI CT NH NJ NY ME Other_____

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other_____

Electonic Deliverables Excel Access PDF

Co. Name: Amec Foster Wheeler	Project #: 3652140032	Project Name: Textron Carlisle	
Contact Person: Denise Kins	Address: 271 Mill Rd.		
City: Chelmsford	State: MA	Zip: 01824	PO # See PM ~~Cot2~~
Tel. 978-392-5339	Fax.	email:	

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	Analysis: 8260 Full List										
	4/28/15	1431	G	GW	MW-23S	2	3	V	40ml	X										
	4/28/15	1441	G	GW	MW-23BS	2	3	V	40ml	X										
	4/28/15	1437	G	GW	MW-23TS	2	3	V	40ml	X										
	4/28/15	1225	G	GW	MW-D	2	3	V	40ml	X	run	MS/MSD								
	4/28/15	1105	G	GW	MW-FS	2	3	V	40ml	X										
	4/28/15	—	G	GW	Dup-01	2	3	V	40ml	X										
	4/28/15	—	G	TB	TripBlank-01	2	1	V	40ml	X										
	4/27/15	1410	G	GW	MW-24I	2	3	V	40ml	X										

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ___X___ Yes _____ No

Seals Intact ____ Yes _____ No NA: X

Cooler Temperature: 5.2@ 4.28.15 ICE

Internal Use Only

[ ] Pickup (DO)

[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by : Mark Maggiore 339-927-3797

Comments:

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
4/28/15 1547	4.28.15 1547		
Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt

APPENDIX B

Laboratory Reports

April 28, 2016 Groundwater Sampling Event

CERTIFICATE OF ANALYSIS

Denise King
AMEC Foster Wheeler
271 Mill Road
Chelmsford, MA 01824

RE: Textron Gorham - Groundwater (3652140032)
ESS Laboratory Work Order Number: 1604778

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 12:55 pm, May 11, 2016

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with NELAC Standards, A2LA and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater

ESS Laboratory Work Order: 1604778

SAMPLE RECEIPT

The following samples were received on April 28, 2016 for the analyses specified on the enclosed Chain of Custody Record.

Revision 1 May 11, 2016: This report has been revised to correct duplicate entries for QC.

Lab Number	Sample Name	Matrix	Analysis
1604778-01	MW-235S	Ground Water	8260B
1604778-02	MW-236S	Ground Water	8260B
1604778-03	MW-237S	Ground Water	8260B
1604778-04	MW-D	Ground Water	8260B
1604778-05	MW-FS	Ground Water	8260B
1604778-06	Dup-01	Ground Water	8260B
1604778-07	MW-241	Ground Water	8260B
1604778-08	Trip Blank -01	Aqueous	8260B

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater ESS Laboratory Work Order: 1604778

PROJECT NARRATIVE

8260B Volatile Organic Compounds

CE60240-MS1 **Due to high target values, matrix spike analyte(s) is masked (MT).**
Trichloroethene (172% @ 70-130%)

CE60240-MS1 **Matrix Spike recovery is below lower control limit (M-).**
Bromomethane (34% @ 70-130%), cis-1,2-Dichloroethene (58% @ 70-130%), Ethyl tertiary-butyl ether (67% @ 70-130%), Tertiary-amyl methyl ether (61% @ 70-130%)

CE60240-MS1 **Reported above the quantitation limit; Estimated value (E).**
Trichloroethene

CE60240-MSD1 **Due to high target values, matrix spike analyte(s) is masked (MT).**
Trichloroethene (21% @ 70-130%)

CE60240-MSD1 **Matrix Spike recovery is below lower control limit (M-).**
Bromomethane (44% @ 70-130%), cis-1,2-Dichloroethene (52% @ 70-130%), Ethyl tertiary-butyl ether (65% @ 70-130%), Tertiary-amyl methyl ether (61% @ 70-130%)

CE60240-MSD1 **Reported above the quantitation limit; Estimated value (E).**
Trichloroethene

CZE0017-CCV1 **Continuing Calibration %Diff/Drift is below control limit (CD-).**
Tertiary-amyl methyl ether (41% @ 30%)

CZE0045-CCV1 **Continuing Calibration %Diff/Drift is below control limit (CD-).**
Bromomethane (48% @ 30%), Tertiary-amyl methyl ether (42% @ 30%)

CZE0060-CCV1 **Continuing Calibration %Diff/Drift is below control limit (CD-).**
Bromomethane (45% @ 30%), Ethyl tertiary-butyl ether (32% @ 30%), Naphthalene (32% @ 30%), Tertiary-amyl methyl ether (45% @ 30%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater

ESS Laboratory Work Order: 1604778

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015D - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-235S
Date Sampled: 04/28/16 14:31
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-01
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,1,1-Trichloroethane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,1-Dichloroethane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,1-Dichloroethene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,1-Dichloropropene	ND (0.0020)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,2,4-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,2-Dibromoethane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,2-Dichloroethane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,3,5-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,3-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1,4-Dioxane - Screen	ND (0.500)		8260B		1	05/02/16 21:05	CZE0017	CE60240
1-Chlorohexane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
2,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
2-Butanone	ND (0.0100)		8260B		1	05/02/16 21:05	CZE0017	CE60240
2-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
2-Hexanone	ND (0.0100)		8260B		1	05/02/16 21:05	CZE0017	CE60240
4-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
4-Isopropyltoluene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Acetone	ND (0.0100)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Benzene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Bromobenzene	ND (0.0020)		8260B		1	05/02/16 21:05	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-235S
Date Sampled: 04/28/16 14:31
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-01
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromochloromethane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Bromodichloromethane	ND (0.0006)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Bromoform	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Bromomethane	ND (0.0020)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Carbon Disulfide	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Carbon Tetrachloride	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Chlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Chloroethane	ND (0.0020)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Chloroform	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Chloromethane	ND (0.0020)		8260B		1	05/02/16 21:05	CZE0017	CE60240
cis-1,2-Dichloroethene	**0.0090** (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Dibromochloromethane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Dibromomethane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Dichlorodifluoromethane	ND (0.0020)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Diethyl Ether	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Di-isopropyl ether	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Ethylbenzene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Hexachlorobutadiene	ND (0.0006)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Hexachloroethane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Isopropylbenzene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Methylene Chloride	ND (0.0020)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Naphthalene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
n-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
n-Propylbenzene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
sec-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Styrene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
tert-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Tetrachloroethene	**0.0020** (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-235S
Date Sampled: 04/28/16 14:31
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-01
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tetrahydrofuran	ND (0.0050)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Toluene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Trichloroethene	**0.0117** (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Trichlorofluoromethane	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Vinyl Acetate	ND (0.0050)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Vinyl Chloride	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Xylene O	ND (0.0010)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Xylene P,M	ND (0.0020)		8260B		1	05/02/16 21:05	CZE0017	CE60240
Xylenes (Total)	ND (0.0020)		8260B		1	05/02/16 21:05		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*121 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*99 %*		*70-130*
Surrogate: Dibromofluoromethane	*122 %*		*70-130*
Surrogate: Toluene-d8	*102 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-236S
Date Sampled: 04/28/16 14:41
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-02
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,1,1-Trichloroethane	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,1,2-Trichloroethane	**0.0054** (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,1-Dichloroethane	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,1-Dichloroethene	**0.0028** (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,1-Dichloropropene	ND (0.0020)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,2,4-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,2-Dibromoethane	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,2-Dichloroethane	**0.0032** (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,3,5-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,3-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1,4-Dioxane - Screen	ND (0.500)		8260B		1	05/02/16 21:30	CZE0017	CE60240
1-Chlorohexane	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
2,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
2-Butanone	ND (0.0100)		8260B		1	05/02/16 21:30	CZE0017	CE60240
2-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
2-Hexanone	ND (0.0100)		8260B		1	05/02/16 21:30	CZE0017	CE60240
4-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
4-Isopropyltoluene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Acetone	ND (0.0100)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Benzene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Bromobenzene	ND (0.0020)		8260B		1	05/02/16 21:30	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-236S
Date Sampled: 04/28/16 14:41
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-02
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromochloromethane	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Bromodichloromethane	ND (0.0006)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Bromoform	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Bromomethane	ND (0.0020)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Carbon Disulfide	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Carbon Tetrachloride	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Chlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Chloroethane	ND (0.0020)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Chloroform	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Chloromethane	ND (0.0020)		8260B		1	05/02/16 21:30	CZE0017	CE60240
cis-1,2-Dichloroethene	**0.0817** (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Dibromochloromethane	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Dibromomethane	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Dichlorodifluoromethane	ND (0.0020)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Diethyl Ether	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Di-isopropyl ether	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Ethylbenzene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Hexachlorobutadiene	ND (0.0006)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Hexachloroethane	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Isopropylbenzene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Methylene Chloride	ND (0.0020)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Naphthalene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
n-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
n-Propylbenzene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
sec-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Styrene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
tert-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Tetrachloroethene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-236S
Date Sampled: 04/28/16 14:41
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-02
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tetrahydrofuran	ND (0.0050)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Toluene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Trichloroethene	**0.167** (0.0100)		8260B		10	05/03/16 16:31	CZE0017	CE60240
Trichlorofluoromethane	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Vinyl Acetate	ND (0.0050)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Vinyl Chloride	**0.0015** (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Xylene O	ND (0.0010)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Xylene P,M	ND (0.0020)		8260B		1	05/02/16 21:30	CZE0017	CE60240
Xylenes (Total)	ND (0.0020)		8260B		1	05/02/16 21:30		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*114 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*100 %*		*70-130*
Surrogate: Dibromofluoromethane	*116 %*		*70-130*
Surrogate: Toluene-d8	*105 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-237S
Date Sampled: 04/28/16 14:37
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-03
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,1,1-Trichloroethane	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,1-Dichloroethane	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,1-Dichloroethene	**0.0031** (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,1-Dichloropropene	ND (0.0020)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,2,4-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,2-Dibromoethane	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,2-Dichloroethane	**0.0022** (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,3,5-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,3-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1,4-Dioxane - Screen	ND (0.500)		8260B		1	05/02/16 21:55	CZE0017	CE60240
1-Chlorohexane	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
2,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
2-Butanone	ND (0.0100)		8260B		1	05/02/16 21:55	CZE0017	CE60240
2-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
2-Hexanone	ND (0.0100)		8260B		1	05/02/16 21:55	CZE0017	CE60240
4-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
4-Isopropyltoluene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Acetone	ND (0.0100)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Benzene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Bromobenzene	ND (0.0020)		8260B		1	05/02/16 21:55	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-237S
Date Sampled: 04/28/16 14:37
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-03
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromochloromethane	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Bromodichloromethane	ND (0.0006)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Bromoform	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Bromomethane	ND (0.0020)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Carbon Disulfide	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Carbon Tetrachloride	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Chlorobenzene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Chloroethane	ND (0.0020)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Chloroform	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Chloromethane	ND (0.0020)		8260B		1	05/02/16 21:55	CZE0017	CE60240
cis-1,2-Dichloroethene	**0.0834** (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Dibromochloromethane	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Dibromomethane	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Dichlorodifluoromethane	ND (0.0020)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Diethyl Ether	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Di-isopropyl ether	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Ethylbenzene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Hexachlorobutadiene	ND (0.0006)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Hexachloroethane	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Isopropylbenzene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Methylene Chloride	ND (0.0020)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Naphthalene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
n-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
n-Propylbenzene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
sec-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Styrene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
tert-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Tetrachloroethene	**0.0438** (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-237S
Date Sampled: 04/28/16 14:37
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-03
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tetrahydrofuran	ND (0.0050)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Toluene	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
trans-1,2-Dichloroethene	**0.0027** (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Trichloroethene	**0.375** (0.0100)		8260B		10	05/03/16 16:56	CZE0017	CE60240
Trichlorofluoromethane	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Vinyl Acetate	ND (0.0050)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Vinyl Chloride	**0.0015** (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Xylene O	ND (0.0010)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Xylene P,M	ND (0.0020)		8260B		1	05/02/16 21:55	CZE0017	CE60240
Xylenes (Total)	ND (0.0020)		8260B		1	05/02/16 21:55		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*114 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*98 %*		*70-130*
Surrogate: Dibromofluoromethane	*115 %*		*70-130*
Surrogate: Toluene-d8	*102 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-D
Date Sampled: 04/28/16 12:25
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-04
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,1,1-Trichloroethane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,1-Dichloroethane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,1-Dichloroethene	**0.0020** (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,1-Dichloropropene	ND (0.0020)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,2,4-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,2-Dibromoethane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,2-Dichloroethane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,3,5-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,3-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1,4-Dioxane - Screen	ND (0.500)		8260B		1	05/02/16 22:20	CZE0017	CE60240
1-Chlorohexane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
2,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
2-Butanone	ND (0.0100)		8260B		1	05/02/16 22:20	CZE0017	CE60240
2-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
2-Hexanone	ND (0.0100)		8260B		1	05/02/16 22:20	CZE0017	CE60240
4-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
4-Isopropyltoluene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Acetone	ND (0.0100)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Benzene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Bromobenzene	ND (0.0020)		8260B		1	05/02/16 22:20	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-D
Date Sampled: 04/28/16 12:25
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-04
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromochloromethane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Bromodichloromethane	ND (0.0006)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Bromoform	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Bromomethane	ND (0.0020)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Carbon Disulfide	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Carbon Tetrachloride	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Chlorobenzene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Chloroethane	ND (0.0020)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Chloroform	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Chloromethane	ND (0.0020)		8260B		1	05/02/16 22:20	CZE0017	CE60240
cis-1,2-Dichloroethene	**0.0294** (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Dibromochloromethane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Dibromomethane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Dichlorodifluoromethane	ND (0.0020)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Diethyl Ether	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Di-isopropyl ether	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Ethylbenzene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Hexachlorobutadiene	ND (0.0006)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Hexachloroethane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Isopropylbenzene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Methylene Chloride	ND (0.0020)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Naphthalene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
n-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
n-Propylbenzene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
sec-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Styrene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
tert-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Tetrachloroethene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-D
Date Sampled: 04/28/16 12:25
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-04
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tetrahydrofuran	ND (0.0050)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Toluene	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
trans-1,2-Dichloroethene	**0.0011** (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Trichloroethene	**0.499** (0.0200)		8260B		20	05/03/16 19:01	CZE0017	CE60240
Trichlorofluoromethane	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Vinyl Acetate	ND (0.0050)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Vinyl Chloride	**0.0010** (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Xylene O	ND (0.0010)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Xylene P,M	ND (0.0020)		8260B		1	05/02/16 22:20	CZE0017	CE60240
Xylenes (Total)	ND (0.0020)		8260B		1	05/02/16 22:20		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*116 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*99 %*		*70-130*
Surrogate: Dibromofluoromethane	*118 %*		*70-130*
Surrogate: Toluene-d8	*103 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-FS
Date Sampled: 04/28/16 11:05
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-05
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,1,1-Trichloroethane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,1-Dichloroethane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,1-Dichloroethene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,1-Dichloropropene	ND (0.0020)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,2,4-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,2-Dibromoethane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,2-Dichloroethane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,3,5-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,3-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1,4-Dioxane - Screen	ND (0.500)		8260B		1	05/02/16 22:45	CZE0017	CE60240
1-Chlorohexane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
2,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
2-Butanone	ND (0.0100)		8260B		1	05/02/16 22:45	CZE0017	CE60240
2-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
2-Hexanone	ND (0.0100)		8260B		1	05/02/16 22:45	CZE0017	CE60240
4-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
4-Isopropyltoluene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Acetone	ND (0.0100)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Benzene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Bromobenzene	ND (0.0020)		8260B		1	05/02/16 22:45	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-FS
Date Sampled: 04/28/16 11:05
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-05
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromochloromethane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Bromodichloromethane	ND (0.0006)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Bromoform	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Bromomethane	ND (0.0020)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Carbon Disulfide	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Carbon Tetrachloride	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Chlorobenzene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Chloroethane	ND (0.0020)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Chloroform	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Chloromethane	ND (0.0020)		8260B		1	05/02/16 22:45	CZE0017	CE60240
cis-1,2-Dichloroethene	**0.0165** (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Dibromochloromethane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Dibromomethane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Dichlorodifluoromethane	ND (0.0020)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Diethyl Ether	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Di-isopropyl ether	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Ethylbenzene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Hexachlorobutadiene	ND (0.0006)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Hexachloroethane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Isopropylbenzene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Methylene Chloride	ND (0.0020)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Naphthalene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
n-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
n-Propylbenzene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
sec-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Styrene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
tert-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Tetrachloroethene	**0.0151** (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-FS
Date Sampled: 04/28/16 11:05
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-05
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tetrahydrofuran	ND (0.0050)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Toluene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Trichloroethene	**0.0746** (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Trichlorofluoromethane	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Vinyl Acetate	ND (0.0050)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Vinyl Chloride	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Xylene O	ND (0.0010)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Xylene P,M	ND (0.0020)		8260B		1	05/02/16 22:45	CZE0017	CE60240
Xylenes (Total)	ND (0.0020)		8260B		1	05/02/16 22:45		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*118 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*99 %*		*70-130*
Surrogate: Dibromofluoromethane	*119 %*		*70-130*
Surrogate: Toluene-d8	*102 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: Dup-01
Date Sampled: 04/28/16 00:00
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-06
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,1,1-Trichloroethane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,1-Dichloroethane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,1-Dichloroethene	**0.0019** (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,1-Dichloropropene	ND (0.0020)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,2,4-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,2-Dibromoethane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,2-Dichloroethane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,3,5-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,3-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1,4-Dioxane - Screen	ND (0.500)		8260B		1	05/02/16 23:10	CZE0017	CE60240
1-Chlorohexane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
2,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
2-Butanone	ND (0.0100)		8260B		1	05/02/16 23:10	CZE0017	CE60240
2-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
2-Hexanone	ND (0.0100)		8260B		1	05/02/16 23:10	CZE0017	CE60240
4-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
4-Isopropyltoluene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Acetone	ND (0.0100)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Benzene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Bromobenzene	ND (0.0020)		8260B		1	05/02/16 23:10	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: Dup-01
Date Sampled: 04/28/16 00:00
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-06
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromochloromethane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Bromodichloromethane	ND (0.0006)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Bromoform	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Bromomethane	ND (0.0020)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Carbon Disulfide	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Carbon Tetrachloride	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Chlorobenzene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Chloroethane	ND (0.0020)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Chloroform	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Chloromethane	ND (0.0020)		8260B		1	05/02/16 23:10	CZE0017	CE60240
cis-1,2-Dichloroethene	**0.0258** (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Dibromochloromethane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Dibromomethane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Dichlorodifluoromethane	ND (0.0020)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Diethyl Ether	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Di-isopropyl ether	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Ethylbenzene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Hexachlorobutadiene	ND (0.0006)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Hexachloroethane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Isopropylbenzene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Methylene Chloride	ND (0.0020)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Naphthalene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
n-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
n-Propylbenzene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
sec-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Styrene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
tert-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Tetrachloroethene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: Dup-01
Date Sampled: 04/28/16 00:00
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-06
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tetrahydrofuran	ND (0.0050)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Toluene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Trichloroethene	**0.514** (0.0200)		8260B		20	05/03/16 19:26	CZE0017	CE60240
Trichlorofluoromethane	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Vinyl Acetate	ND (0.0050)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Vinyl Chloride	**0.0010** (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Xylene O	ND (0.0010)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Xylene P,M	ND (0.0020)		8260B		1	05/02/16 23:10	CZE0017	CE60240
Xylenes (Total)	ND (0.0020)		8260B		1	05/02/16 23:10		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*116 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*99 %*		*70-130*
Surrogate: Dibromofluoromethane	*118 %*		*70-130*
Surrogate: Toluene-d8	*103 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-241
Date Sampled: 04/28/16 14:10
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-07
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,1,1-Trichloroethane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,1-Dichloroethane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,1-Dichloroethene	**0.0019** (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,1-Dichloropropene	ND (0.0020)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,2,4-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,2-Dibromoethane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,2-Dichloroethane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,3,5-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,3-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1,4-Dioxane - Screen	ND (0.500)		8260B		1	05/02/16 23:35	CZE0017	CE60240
1-Chlorohexane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
2,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
2-Butanone	ND (0.0100)		8260B		1	05/02/16 23:35	CZE0017	CE60240
2-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
2-Hexanone	ND (0.0100)		8260B		1	05/02/16 23:35	CZE0017	CE60240
4-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
4-Isopropyltoluene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Acetone	ND (0.0100)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Benzene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Bromobenzene	ND (0.0020)		8260B		1	05/02/16 23:35	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-241
Date Sampled: 04/28/16 14:10
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-07
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromochloromethane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Bromodichloromethane	ND (0.0006)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Bromoform	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Bromomethane	ND (0.0020)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Carbon Disulfide	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Carbon Tetrachloride	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Chlorobenzene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Chloroethane	ND (0.0020)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Chloroform	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Chloromethane	ND (0.0020)		8260B		1	05/02/16 23:35	CZE0017	CE60240
cis-1,2-Dichloroethene	**0.0209** (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Dibromochloromethane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Dibromomethane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Dichlorodifluoromethane	ND (0.0020)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Diethyl Ether	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Di-isopropyl ether	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Ethylbenzene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Hexachlorobutadiene	ND (0.0006)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Hexachloroethane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Isopropylbenzene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Methylene Chloride	ND (0.0020)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Naphthalene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
n-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
n-Propylbenzene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
sec-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Styrene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
tert-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Tetrachloroethene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: MW-241
Date Sampled: 04/28/16 14:10
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-07
Sample Matrix: Ground Water
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tetrahydrofuran	ND (0.0050)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Toluene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Trichloroethene	**0.210** (0.0100)		8260B		10	05/04/16 14:43	CZE0017	CE60240
Trichlorofluoromethane	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Vinyl Acetate	ND (0.0050)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Vinyl Chloride	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Xylene O	ND (0.0010)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Xylene P,M	ND (0.0020)		8260B		1	05/02/16 23:35	CZE0017	CE60240
Xylenes (Total)	ND (0.0020)		8260B		1	05/02/16 23:35		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*119 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*99 %*		*70-130*
Surrogate: Dibromofluoromethane	*120 %*		*70-130*
Surrogate: Toluene-d8	*102 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: Trip Blank -01
Date Sampled: 04/28/16 00:00
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-08
Sample Matrix: Aqueous
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
1,1,1,2-Tetrachloroethane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,1,1-Trichloroethane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,1,2,2-Tetrachloroethane	ND (0.0005)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,1,2-Trichloroethane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,1-Dichloroethane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,1-Dichloroethene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,1-Dichloropropene	ND (0.0020)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,2,3-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,2,3-Trichloropropane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,2,4-Trichlorobenzene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,2,4-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,2-Dibromo-3-Chloropropane	ND (0.0050)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,2-Dibromoethane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,2-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,2-Dichloroethane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,3,5-Trimethylbenzene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,3-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,3-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,4-Dichlorobenzene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1,4-Dioxane - Screen	ND (0.500)		8260B		1	05/02/16 18:59	CZE0017	CE60240
1-Chlorohexane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
2,2-Dichloropropane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
2-Butanone	ND (0.0100)		8260B		1	05/02/16 18:59	CZE0017	CE60240
2-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
2-Hexanone	ND (0.0100)		8260B		1	05/02/16 18:59	CZE0017	CE60240
4-Chlorotoluene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
4-Isopropyltoluene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
4-Methyl-2-Pentanone	ND (0.0250)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Acetone	ND (0.0100)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Benzene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Bromobenzene	ND (0.0020)		8260B		1	05/02/16 18:59	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: Trip Blank -01
Date Sampled: 04/28/16 00:00
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-08
Sample Matrix: Aqueous
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Bromochloromethane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Bromodichloromethane	ND (0.0006)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Bromoform	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Bromomethane	ND (0.0020)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Carbon Disulfide	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Carbon Tetrachloride	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Chlorobenzene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Chloroethane	ND (0.0020)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Chloroform	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Chloromethane	ND (0.0020)		8260B		1	05/02/16 18:59	CZE0017	CE60240
cis-1,2-Dichloroethene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
cis-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Dibromochloromethane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Dibromomethane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Dichlorodifluoromethane	ND (0.0020)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Diethyl Ether	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Di-isopropyl ether	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Ethyl tertiary-butyl ether	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Ethylbenzene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Hexachlorobutadiene	ND (0.0006)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Hexachloroethane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Isopropylbenzene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Methyl tert-Butyl Ether	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Methylene Chloride	ND (0.0020)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Naphthalene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
n-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
n-Propylbenzene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
sec-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Styrene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
tert-Butylbenzene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Tertiary-amyl methyl ether	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Tetrachloroethene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater
Client Sample ID: Trip Blank -01
Date Sampled: 04/28/16 00:00
Percent Solids: N/A
Initial Volume: 5
Final Volume: 5
Extraction Method: 5030B

ESS Laboratory Work Order: 1604778
ESS Laboratory Sample ID: 1604778-08
Sample Matrix: Aqueous
Units: mg/L
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Tetrahydrofuran	ND (0.0050)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Toluene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
trans-1,2-Dichloroethene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
trans-1,3-Dichloropropene	ND (0.0004)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Trichloroethene	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Trichlorofluoromethane	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Vinyl Acetate	ND (0.0050)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Vinyl Chloride	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Xylene O	ND (0.0010)		8260B		1	05/02/16 18:59	CZE0017	CE60240
Xylene P,M	ND (0.0020)		8260B		1	05/02/16 18:59	CZE0017	CE60240

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichloroethane-d4	*120 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*100 %*		*70-130*
Surrogate: Dibromofluoromethane	*115 %*		*70-130*
Surrogate: Toluene-d8	*103 %*		*70-130*

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater

ESS Laboratory Work Order: 1604778

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CE60240 - 5030B										
Blank										
1,1,1,2-Tetrachloroethane	ND	0.0010	mg/L							
1,1,1-Trichloroethane	ND	0.0010	mg/L							
1,1,2,2-Tetrachloroethane	ND	0.0005	mg/L							
1,1,2-Trichloroethane	ND	0.0010	mg/L							
1,1-Dichloroethane	ND	0.0010	mg/L							
1,1-Dichloroethene	ND	0.0010	mg/L							
1,1-Dichloropropene	ND	0.0020	mg/L							
1,2,3-Trichlorobenzene	ND	0.0010	mg/L							
1,2,3-Trichloropropane	ND	0.0010	mg/L							
1,2,4-Trichlorobenzene	ND	0.0010	mg/L							
1,2,4-Trimethylbenzene	ND	0.0010	mg/L							
1,2-Dibromo-3-Chloropropane	ND	0.0050	mg/L							
1,2-Dibromoethane	ND	0.0010	mg/L							
1,2-Dichlorobenzene	ND	0.0010	mg/L							
1,2-Dichloroethane	ND	0.0010	mg/L							
1,2-Dichloropropane	ND	0.0010	mg/L							
1,3,5-Trimethylbenzene	ND	0.0010	mg/L							
1,3-Dichlorobenzene	ND	0.0010	mg/L							
1,3-Dichloropropane	ND	0.0010	mg/L							
1,4-Dichlorobenzene	ND	0.0010	mg/L							
1,4-Dioxane - Screen	ND	0.500	mg/L							
1-Chlorohexane	ND	0.0010	mg/L							
2,2-Dichloropropane	ND	0.0010	mg/L							
2-Butanone	ND	0.0100	mg/L							
2-Chlorotoluene	ND	0.0010	mg/L							
2-Hexanone	ND	0.0100	mg/L							
4-Chlorotoluene	ND	0.0010	mg/L							
4-Isopropyltoluene	ND	0.0010	mg/L							
4-Methyl-2-Pentanone	ND	0.0250	mg/L							
Acetone	ND	0.0100	mg/L							
Benzene	ND	0.0010	mg/L							
Bromobenzene	ND	0.0020	mg/L							
Bromochloromethane	ND	0.0010	mg/L							
Bromodichloromethane	ND	0.0006	mg/L							
Bromoform	ND	0.0010	mg/L							
Bromomethane	ND	0.0020	mg/L							
Carbon Disulfide	ND	0.0010	mg/L							
Carbon Tetrachloride	ND	0.0010	mg/L							
Chlorobenzene	ND	0.0010	mg/L							
Chloroethane	ND	0.0020	mg/L							
Chloroform	ND	0.0010	mg/L							
Chloromethane	ND	0.0020	mg/L							
cis-1,2-Dichloroethene	ND	0.0010	mg/L							
cis-1,3-Dichloropropene	ND	0.0004	mg/L							

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater

ESS Laboratory Work Order: 1604778

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CE60240 - 5030B										
Dibromochloromethane	ND	0.0010	mg/L							
Dibromomethane	ND	0.0010	mg/L							
Dichlorodifluoromethane	ND	0.0020	mg/L							
Diethyl Ether	ND	0.0010	mg/L							
Di-isopropyl ether	ND	0.0010	mg/L							
Ethyl tertiary-butyl ether	ND	0.0010	mg/L							
Ethylbenzene	ND	0.0010	mg/L							
Hexachlorobutadiene	ND	0.0006	mg/L							
Hexachloroethane	ND	0.0010	mg/L							
Isopropylbenzene	ND	0.0010	mg/L							
Methyl tert-Butyl Ether	ND	0.0010	mg/L							
Methylene Chloride	ND	0.0020	mg/L							
Naphthalene	ND	0.0010	mg/L							
n-Butylbenzene	ND	0.0010	mg/L							
n-Propylbenzene	ND	0.0010	mg/L							
sec-Butylbenzene	ND	0.0010	mg/L							
Styrene	ND	0.0010	mg/L							
tert-Butylbenzene	ND	0.0010	mg/L							
Tertiary-amyl methyl ether	ND	0.0010	mg/L							
Tetrachloroethene	ND	0.0010	mg/L							
Tetrahydrofuran	ND	0.0050	mg/L							
Toluene	ND	0.0010	mg/L							
trans-1,2-Dichloroethene	ND	0.0010	mg/L							
trans-1,3-Dichloropropene	ND	0.0004	mg/L							
Trichloroethene	ND	0.0010	mg/L							
Trichlorofluoromethane	ND	0.0010	mg/L							
Vinyl Acetate	ND	0.0050	mg/L							
Vinyl Chloride	ND	0.0010	mg/L							
Xylene O	ND	0.0010	mg/L							
Xylene P,M	ND	0.0020	mg/L							
Xylenes (Total)	ND	0.0020	mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0292*		mg/L	*0.02500*		*117*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0250*		mg/L	*0.02500*		*100*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0284*		mg/L	*0.02500*		*114*	*70-130*			
Surrogate: Toluene-d8	*0.0253*		mg/L	*0.02500*		*101*	*70-130*			
LCS										
1,1,1,2-Tetrachloroethane	9.18		ug/L	10.00		92	70-130			
1,1,1-Trichloroethane	10.2		ug/L	10.00		102	70-130			
1,1,2,2-Tetrachloroethane	9.91		ug/L	10.00		99	70-130			
1,1,2-Trichloroethane	9.96		ug/L	10.00		100	70-130			
1,1-Dichloroethane	10.1		ug/L	10.00		101	70-130			
1,1-Dichloroethene	11.4		ug/L	10.00		114	70-130			
1,1-Dichloropropene	10.3		ug/L	10.00		103	70-130			
1,2,3-Trichlorobenzene	9.74		ug/L	10.00		97	70-130			
1,2,3-Trichloropropane	9.70		ug/L	10.00		97	70-130			

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater

ESS Laboratory Work Order: 1604778

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CE60240 - 5030B										
1,2,4-Trichlorobenzene	9.48		ug/L	10.00		95	70-130			
1,2,4-Trimethylbenzene	9.00		ug/L	10.00		90	70-130			
1,2-Dibromo-3-Chloropropane	9.34		ug/L	10.00		93	70-130			
1,2-Dibromoethane	9.73		ug/L	10.00		97	70-130			
1,2-Dichlorobenzene	9.75		ug/L	10.00		98	70-130			
1,2-Dichloroethane	10.4		ug/L	10.00		104	70-130			
1,2-Dichloropropane	9.65		ug/L	10.00		96	70-130			
1,3,5-Trimethylbenzene	9.38		ug/L	10.00		94	70-130			
1,3-Dichlorobenzene	10.2		ug/L	10.00		102	70-130			
1,3-Dichloropropane	10.5		ug/L	10.00		105	70-130			
1,4-Dichlorobenzene	10.2		ug/L	10.00		102	70-130			
1,4-Dioxane - Screen	206		ug/L	200.0		103	0-332			
1-Chlorohexane	8.81		ug/L	10.00		88	70-130			
2,2-Dichloropropane	10.7		ug/L	10.00		107	70-130			
2-Butanone	49.6		ug/L	50.00		99	70-130			
2-Chlorotoluene	10.5		ug/L	10.00		105	70-130			
2-Hexanone	48.7		ug/L	50.00		97	70-130			
4-Chlorotoluene	10.7		ug/L	10.00		107	70-130			
4-Isopropyltoluene	9.96		ug/L	10.00		100	70-130			
4-Methyl-2-Pentanone	49.1		ug/L	50.00		98	70-130			
Acetone	49.0		ug/L	50.00		98	70-130			
Benzene	10.3		ug/L	10.00		103	70-130			
Bromobenzene	9.84		ug/L	10.00		98	70-130			
Bromochloromethane	10.0		ug/L	10.00		100	70-130			
Bromodichloromethane	10.4		ug/L	10.00		104	70-130			
Bromoform	8.92		ug/L	10.00		89	70-130			
Bromomethane	8.08		ug/L	10.00		81	70-130			
Carbon Disulfide	10.6		ug/L	10.00		106	70-130			
Carbon Tetrachloride	9.98		ug/L	10.00		100	70-130			
Chlorobenzene	9.69		ug/L	10.00		97	70-130			
Chloroethane	8.56		ug/L	10.00		86	70-130			
Chloroform	9.95		ug/L	10.00		100	70-130			
Chloromethane	10.1		ug/L	10.00		101	70-130			
cis-1,2-Dichloroethene	10.6		ug/L	10.00		106	70-130			
cis-1,3-Dichloropropene	10.6		ug/L	10.00		106	70-130			
Dibromochloromethane	9.84		ug/L	10.00		98	70-130			
Dibromomethane	10.0		ug/L	10.00		100	70-130			
Dichlorodifluoromethane	9.67		ug/L	10.00		97	70-130			
Diethyl Ether	10.5		ug/L	10.00		105	70-130			
Di-isopropyl ether	9.59		ug/L	10.00		96	70-130			
Ethyl tertiary-butyl ether	7.29		ug/L	10.00		73	70-130			
Ethylbenzene	9.26		ug/L	10.00		93	70-130			
Hexachlorobutadiene	10.2		ug/L	10.00		102	70-130			
Hexachloroethane	10.0		ug/L	10.00		100	70-130			
Isopropylbenzene	9.42		ug/L	10.00		94	70-130			

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater

ESS Laboratory Work Order: 1604778

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CE60240 - 5030B										
Methyl tert-Butyl Ether	8.95		ug/L	10.00		90	70-130			
Methylene Chloride	10.1		ug/L	10.00		101	70-130			
Naphthalene	10.0		ug/L	10.00		100	70-130			
n-Butylbenzene	9.04		ug/L	10.00		90	70-130			
n-Propylbenzene	9.43		ug/L	10.00		94	70-130			
sec-Butylbenzene	9.61		ug/L	10.00		96	70-130			
Styrene	8.49		ug/L	10.00		85	70-130			
tert-Butylbenzene	9.30		ug/L	10.00		93	70-130			
Tertiary-amyl methyl ether	7.00		ug/L	10.00		70	70-130			
Tetrachloroethene	7.20		ug/L	10.00		72	70-130			
Tetrahydrofuran	9.70		ug/L	10.00		97	70-130			
Toluene	10.5		ug/L	10.00		105	70-130			
trans-1,2-Dichloroethene	10.6		ug/L	10.00		106	70-130			
trans-1,3-Dichloropropene	9.04		ug/L	10.00		90	70-130			
Trichloroethene	9.77		ug/L	10.00		98	70-130			
Trichlorofluoromethane	9.34		ug/L	10.00		93	70-130			
Vinyl Acetate	10.0		ug/L	10.00		100	70-130			
Vinyl Chloride	10.1		ug/L	10.00		101	70-130			
Xylene O	9.40		ug/L	10.00		94	70-130			
Xylene P,M	18.2		ug/L	20.00		91	70-130			
Xylenes (Total)	27.6		mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0264*		mg/L	*0.02500*		*106*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0255*		mg/L	*0.02500*		*102*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0269*		mg/L	*0.02500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.0257*		mg/L	*0.02500*		*103*	*70-130*			
LCS Dup										
1,1,1,2-Tetrachloroethane	9.14		ug/L	10.00		91	70-130	0.4	25	
1,1,1-Trichloroethane	9.97		ug/L	10.00		100	70-130	2	25	
1,1,2,2-Tetrachloroethane	9.96		ug/L	10.00		100	70-130	0.5	25	
1,1,2-Trichloroethane	9.50		ug/L	10.00		95	70-130	5	25	
1,1-Dichloroethane	10.0		ug/L	10.00		100	70-130	1	25	
1,1-Dichloroethene	11.2		ug/L	10.00		112	70-130	2	25	
1,1-Dichloropropene	10.3		ug/L	10.00		103	70-130	0.3	25	
1,2,3-Trichlorobenzene	9.35		ug/L	10.00		94	70-130	4	25	
1,2,3-Trichloropropane	9.57		ug/L	10.00		96	70-130	1	25	
1,2,4-Trichlorobenzene	8.93		ug/L	10.00		89	70-130	6	25	
1,2,4-Trimethylbenzene	8.98		ug/L	10.00		90	70-130	0.2	25	
1,2-Dibromo-3-Chloropropane	9.66		ug/L	10.00		97	70-130	3	25	
1,2-Dibromoethane	9.63		ug/L	10.00		96	70-130	1	25	
1,2-Dichlorobenzene	9.66		ug/L	10.00		97	70-130	0.9	25	
1,2-Dichloroethane	9.93		ug/L	10.00		99	70-130	5	25	
1,2-Dichloropropane	9.52		ug/L	10.00		95	70-130	1	25	
1,3,5-Trimethylbenzene	9.32		ug/L	10.00		93	70-130	0.6	25	
1,3-Dichlorobenzene	10.2		ug/L	10.00		102	70-130	0	25	
1,3-Dichloropropane	10.4		ug/L	10.00		104	70-130	1	25	

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater

ESS Laboratory Work Order: 1604778

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CE60240 - 5030B										
1,4-Dichlorobenzene	10.2		ug/L	10.00		102	70-130	0.7	25	
1,4-Dioxane - Screen	196		ug/L	200.0		98	0-332	5	200	
1-Chlorohexane	8.84		ug/L	10.00		88	70-130	0.3	25	
2,2-Dichloropropane	10.3		ug/L	10.00		103	70-130	3	25	
2-Butanone	48.0		ug/L	50.00		96	70-130	3	25	
2-Chlorotoluene	10.4		ug/L	10.00		104	70-130	0.8	25	
2-Hexanone	48.0		ug/L	50.00		96	70-130	2	25	
4-Chlorotoluene	10.6		ug/L	10.00		106	70-130	0.6	25	
4-Isopropyltoluene	9.81		ug/L	10.00		98	70-130	2	25	
4-Methyl-2-Pentanone	46.8		ug/L	50.00		94	70-130	5	25	
Acetone	46.8		ug/L	50.00		94	70-130	5	25	
Benzene	9.97		ug/L	10.00		100	70-130	3	25	
Bromobenzene	9.90		ug/L	10.00		99	70-130	0.6	25	
Bromochloromethane	9.85		ug/L	10.00		98	70-130	2	25	
Bromodichloromethane	9.99		ug/L	10.00		100	70-130	4	25	
Bromoform	8.84		ug/L	10.00		88	70-130	0.9	25	
Bromomethane	7.97		ug/L	10.00		80	70-130	1	25	
Carbon Disulfide	10.4		ug/L	10.00		104	70-130	2	25	
Carbon Tetrachloride	9.81		ug/L	10.00		98	70-130	2	25	
Chlorobenzene	9.57		ug/L	10.00		96	70-130	1	25	
Chloroethane	8.19		ug/L	10.00		82	70-130	4	25	
Chloroform	9.76		ug/L	10.00		98	70-130	2	25	
Chloromethane	10.1		ug/L	10.00		101	70-130	0.5	25	
cis-1,2-Dichloroethene	10.5		ug/L	10.00		105	70-130	1	25	
cis-1,3-Dichloropropene	10.2		ug/L	10.00		102	70-130	4	25	
Dibromochloromethane	9.60		ug/L	10.00		96	70-130	2	25	
Dibromomethane	9.80		ug/L	10.00		98	70-130	2	25	
Dichlorodifluoromethane	9.47		ug/L	10.00		95	70-130	2	25	
Diethyl Ether	9.97		ug/L	10.00		100	70-130	5	25	
Di-isopropyl ether	9.28		ug/L	10.00		93	70-130	3	25	
Ethyl tertiary-butyl ether	7.22		ug/L	10.00		72	70-130	1	25	
Ethylbenzene	9.33		ug/L	10.00		93	70-130	0.8	25	
Hexachlorobutadiene	9.65		ug/L	10.00		96	70-130	6	25	
Hexachloroethane	9.87		ug/L	10.00		99	70-130	1	25	
Isopropylbenzene	9.47		ug/L	10.00		95	70-130	0.5	25	
Methyl tert-Butyl Ether	8.80		ug/L	10.00		88	70-130	2	25	
Methylene Chloride	9.76		ug/L	10.00		98	70-130	3	25	
Naphthalene	9.24		ug/L	10.00		92	70-130	8	25	
n-Butylbenzene	8.80		ug/L	10.00		88	70-130	3	25	
n-Propylbenzene	9.40		ug/L	10.00		94	70-130	0.3	25	
sec-Butylbenzene	9.70		ug/L	10.00		97	70-130	0.9	25	
Styrene	8.36		ug/L	10.00		84	70-130	2	25	
tert-Butylbenzene	9.22		ug/L	10.00		92	70-130	0.9	25	
Tertiary-amyl methyl ether	6.98		ug/L	10.00		70	70-130	0.3	25	
Tetrachloroethene	7.46		ug/L	10.00		75	70-130	4	25	

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater

ESS Laboratory Work Order: 1604778

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CE60240 - 5030B										
Tetrahydrofuran	9.78		ug/L	10.00		98	70-130	0.8	25	
Toluene	10.2		ug/L	10.00		102	70-130	3	25	
trans-1,2-Dichloroethene	10.6		ug/L	10.00		106	70-130	0.8	25	
trans-1,3-Dichloropropene	8.81		ug/L	10.00		88	70-130	3	25	
Trichloroethene	9.61		ug/L	10.00		96	70-130	2	25	
Trichlorofluoromethane	9.21		ug/L	10.00		92	70-130	1	25	
Vinyl Acetate	9.70		ug/L	10.00		97	70-130	3	25	
Vinyl Chloride	9.61		ug/L	10.00		96	70-130	5	25	
Xylene O	9.26		ug/L	10.00		93	70-130	2	25	
Xylene P,M	18.4		ug/L	20.00		92	70-130	0.7	25	
Xylenes (Total)	27.6		mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0256*		mg/L	*0.02500*		*103*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0257*		mg/L	*0.02500*		*103*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0263*		mg/L	*0.02500*		*105*	*70-130*			
Surrogate: Toluene-d8	*0.0258*		mg/L	*0.02500*		*103*	*70-130*			
Matrix Spike **Source: 1604778-04**										
1,1,1,2-Tetrachloroethane	9.55		ug/L	10.00	ND	96	70-130			
1,1,1-Trichloroethane	11.0		ug/L	10.00	ND	110	70-130			
1,1,2,2-Tetrachloroethane	9.97		ug/L	10.00	ND	100	70-130			
1,1,2-Trichloroethane	10.8		ug/L	10.00	ND	108	70-130			
1,1-Dichloroethane	10.7		ug/L	10.00	ND	107	70-130			
1,1-Dichloroethene	13.4		ug/L	10.00	2.03	114	70-130			
1,1-Dichloropropene	9.89		ug/L	10.00	ND	99	70-130			
1,2,3-Trichlorobenzene	8.33		ug/L	10.00	ND	83	70-130			
1,2,3-Trichloropropane	9.16		ug/L	10.00	ND	92	70-130			
1,2,4-Trichlorobenzene	7.87		ug/L	10.00	ND	79	70-130			
1,2,4-Trimethylbenzene	8.58		ug/L	10.00	ND	86	70-130			
1,2-Dibromo-3-Chloropropane	9.38		ug/L	10.00	ND	94	70-130			
1,2-Dibromoethane	9.82		ug/L	10.00	ND	98	70-130			
1,2-Dichlorobenzene	9.80		ug/L	10.00	ND	98	70-130			
1,2-Dichloroethane	11.2		ug/L	10.00	ND	112	70-130			
1,2-Dichloropropane	12.6		ug/L	10.00	ND	126	70-130			
1,3,5-Trimethylbenzene	9.09		ug/L	10.00	ND	91	70-130			
1,3-Dichlorobenzene	10.4		ug/L	10.00	ND	104	70-130			
1,3-Dichloropropane	11.0		ug/L	10.00	ND	110	70-130			
1,4-Dichlorobenzene	10.0		ug/L	10.00	ND	100	70-130			
1,4-Dioxane - Screen	208		ug/L	200.0	ND	104	0-332			
1-Chlorohexane	8.59		ug/L	10.00	ND	86	70-130			
2,2-Dichloropropane	8.86		ug/L	10.00	ND	89	70-130			
2-Butanone	52.5		ug/L	50.00	ND	105	70-130			
2-Chlorotoluene	10.5		ug/L	10.00	ND	105	70-130			
2-Hexanone	45.9		ug/L	50.00	ND	92	70-130			
4-Chlorotoluene	10.6		ug/L	10.00	ND	106	70-130			
4-Isopropyltoluene	9.54		ug/L	10.00	ND	95	70-130			
4-Methyl-2-Pentanone	49.2		ug/L	50.00	ND	98	70-130			

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater

ESS Laboratory Work Order: 1604778

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CE60240 - 5030B										
Acetone	48.8		ug/L	50.00	ND	98	70-130			
Benzene	10.6		ug/L	10.00	ND	106	70-130			
Bromobenzene	9.93		ug/L	10.00	ND	99	70-130			
Bromochloromethane	10.9		ug/L	10.00	ND	109	70-130			
Bromodichloromethane	11.6		ug/L	10.00	ND	116	70-130			
Bromoform	9.31		ug/L	10.00	ND	93	70-130			
Bromomethane	3.44		ug/L	10.00	ND	34	70-130			M-
Carbon Disulfide	11.1		ug/L	10.00	ND	111	70-130			
Carbon Tetrachloride	10.9		ug/L	10.00	ND	109	70-130			
Chlorobenzene	9.95		ug/L	10.00	ND	100	70-130			
Chloroethane	8.77		ug/L	10.00	ND	88	70-130			
Chloroform	11.2		ug/L	10.00	0.510	106	70-130			
Chloromethane	9.71		ug/L	10.00	ND	97	70-130			
cis-1,2-Dichloroethene	35.2		ug/L	10.00	29.4	58	70-130			M-
cis-1,3-Dichloropropene	10.7		ug/L	10.00	ND	107	70-130			
Dibromochloromethane	10.2		ug/L	10.00	ND	102	70-130			
Dibromomethane	10.6		ug/L	10.00	ND	106	70-130			
Dichlorodifluoromethane	10.3		ug/L	10.00	ND	103	70-130			
Diethyl Ether	10.1		ug/L	10.00	ND	101	70-130			
Di-isopropyl ether	9.53		ug/L	10.00	ND	95	70-130			
Ethyl tertiary-butyl ether	6.71		ug/L	10.00	ND	67	70-130			M-
Ethylbenzene	9.45		ug/L	10.00	ND	94	70-130			
Hexachlorobutadiene	9.19		ug/L	10.00	ND	92	70-130			
Hexachloroethane	9.59		ug/L	10.00	ND	96	70-130			
Isopropylbenzene	9.14		ug/L	10.00	ND	91	70-130			
Methyl tert-Butyl Ether	8.70		ug/L	10.00	ND	87	70-130			
Methylene Chloride	10.6		ug/L	10.00	ND	106	70-130			
Naphthalene	7.73		ug/L	10.00	ND	77	70-130			
n-Butylbenzene	7.95		ug/L	10.00	ND	80	70-130			
n-Propylbenzene	9.11		ug/L	10.00	ND	91	70-130			
sec-Butylbenzene	9.48		ug/L	10.00	ND	95	70-130			
Styrene	8.42		ug/L	10.00	ND	84	70-130			
tert-Butylbenzene	9.03		ug/L	10.00	ND	90	70-130			
Tertiary-amyl methyl ether	6.09		ug/L	10.00	ND	61	70-130			M-
Tetrachloroethene	8.30		ug/L	10.00	0.710	76	70-130			
Tetrahydrofuran	8.61		ug/L	10.00	ND	86	70-130			
Toluene	11.2		ug/L	10.00	ND	112	70-130			
trans-1,2-Dichloroethene	11.7		ug/L	10.00	1.06	106	70-130			
trans-1,3-Dichloropropene	8.83		ug/L	10.00	ND	88	70-130			
Trichloroethene	516		ug/L	10.00	499	172	70-130			E, MT
Trichlorofluoromethane	10.2		ug/L	10.00	ND	102	70-130			
Vinyl Acetate	7.03		ug/L	10.00	ND	70	70-130			
Vinyl Chloride	10.7		ug/L	10.00	1.03	97	70-130			
Xylene O	9.58		ug/L	10.00	ND	96	70-130			
Xylene P,M	18.9		ug/L	20.00	ND	95	70-130			

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater

ESS Laboratory Work Order: 1604778

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CE60240 - [CALC]										
Xylenes (Total)	28.5		mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0283*		mg/L	*0.02500*		*113*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0262*		mg/L	*0.02500*		*105*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0287*		mg/L	*0.02500*		*115*	*70-130*			
Surrogate: Toluene-d8	*0.0257*		mg/L	*0.02500*		*103*	*70-130*			
Matrix Spike Dup **Source: 1604778-04**										
1,1,1,2-Tetrachloroethane	9.21		ug/L	10.00	ND	92	70-130	4	30	
1,1,1-Trichloroethane	10.5		ug/L	10.00	ND	105	70-130	4	30	
1,1,2,2-Tetrachloroethane	9.53		ug/L	10.00	ND	95	70-130	5	30	
1,1,2-Trichloroethane	9.99		ug/L	10.00	ND	100	70-130	8	30	
1,1-Dichloroethane	10.3		ug/L	10.00	ND	103	70-130	4	30	
1,1-Dichloroethene	13.2		ug/L	10.00	2.03	111	70-130	2	30	
1,1-Dichloropropene	9.94		ug/L	10.00	ND	99	70-130	0.5	30	
1,2,3-Trichlorobenzene	8.76		ug/L	10.00	ND	88	70-130	5	30	
1,2,3-Trichloropropane	8.74		ug/L	10.00	ND	87	70-130	5	30	
1,2,4-Trichlorobenzene	8.28		ug/L	10.00	ND	83	70-130	5	30	
1,2,4-Trimethylbenzene	8.68		ug/L	10.00	ND	87	70-130	1	30	
1,2-Dibromo-3-Chloropropane	8.81		ug/L	10.00	ND	88	70-130	6	30	
1,2-Dibromoethane	9.55		ug/L	10.00	ND	96	70-130	3	30	
1,2-Dichlorobenzene	9.54		ug/L	10.00	ND	95	70-130	3	30	
1,2-Dichloroethane	10.4		ug/L	10.00	ND	104	70-130	7	30	
1,2-Dichloropropane	11.9		ug/L	10.00	ND	119	70-130	6	30	
1,3,5-Trimethylbenzene	9.15		ug/L	10.00	ND	92	70-130	0.7	30	
1,3-Dichlorobenzene	10.3		ug/L	10.00	ND	103	70-130	0.8	30	
1,3-Dichloropropane	10.5		ug/L	10.00	ND	105	70-130	5	30	
1,4-Dichlorobenzene	9.71		ug/L	10.00	ND	97	70-130	3	30	
1,4-Dioxane - Screen	203		ug/L	200.0	ND	102	0-332	2	200	
1-Chlorohexane	8.66		ug/L	10.00	ND	87	70-130	0.8	30	
2,2-Dichloropropane	8.41		ug/L	10.00	ND	84	70-130	5	30	
2-Butanone	49.8		ug/L	50.00	ND	100	70-130	5	30	
2-Chlorotoluene	10.5		ug/L	10.00	ND	105	70-130	0.7	30	
2-Hexanone	46.0		ug/L	50.00	ND	92	70-130	0.2	30	
4-Chlorotoluene	10.5		ug/L	10.00	ND	105	70-130	1	30	
4-Isopropyltoluene	9.45		ug/L	10.00	ND	94	70-130	0.9	30	
4-Methyl-2-Pentanone	47.2		ug/L	50.00	ND	94	70-130	4	30	
Acetone	47.6		ug/L	50.00	ND	95	70-130	2	30	
Benzene	10.1		ug/L	10.00	ND	101	70-130	5	30	
Bromobenzene	9.66		ug/L	10.00	ND	97	70-130	3	30	
Bromochloromethane	9.99		ug/L	10.00	ND	100	70-130	9	30	
Bromodichloromethane	11.0		ug/L	10.00	ND	110	70-130	5	30	
Bromoform	8.79		ug/L	10.00	ND	88	70-130	6	30	
Bromomethane	4.39		ug/L	10.00	ND	44	70-130	24	30	M-
Carbon Disulfide	10.8		ug/L	10.00	ND	108	70-130	3	30	
Carbon Tetrachloride	10.1		ug/L	10.00	ND	101	70-130	7	30	
Chlorobenzene	9.73		ug/L	10.00	ND	97	70-130	2	30	

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater

ESS Laboratory Work Order: 1604778

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch CE60240 - 5030B										
Chloroethane	8.66		ug/L	10.00	ND	87	70-130	1	30	
Chloroform	10.7		ug/L	10.00	0.510	102	70-130	5	30	
Chloromethane	9.93		ug/L	10.00	ND	99	70-130	2	30	
cis-1,2-Dichloroethene	34.6		ug/L	10.00	29.4	52	70-130	11	30	M-
cis-1,3-Dichloropropene	10.2		ug/L	10.00	ND	102	70-130	5	30	
Dibromochloromethane	9.82		ug/L	10.00	ND	98	70-130	4	30	
Dibromomethane	9.92		ug/L	10.00	ND	99	70-130	7	30	
Dichlorodifluoromethane	10.0		ug/L	10.00	ND	100	70-130	3	30	
Diethyl Ether	10.2		ug/L	10.00	ND	102	70-130	0.4	30	
Di-isopropyl ether	9.31		ug/L	10.00	ND	93	70-130	2	30	
Ethyl tertiary-butyl ether	6.50		ug/L	10.00	ND	65	70-130	3	30	M-
Ethylbenzene	9.41		ug/L	10.00	ND	94	70-130	0.4	30	
Hexachlorobutadiene	9.01		ug/L	10.00	ND	90	70-130	2	30	
Hexachloroethane	9.27		ug/L	10.00	ND	93	70-130	3	30	
Isopropylbenzene	9.16		ug/L	10.00	ND	92	70-130	0.2	30	
Methyl tert-Butyl Ether	8.44		ug/L	10.00	ND	84	70-130	3	30	
Methylene Chloride	10.0		ug/L	10.00	ND	100	70-130	6	30	
Naphthalene	8.56		ug/L	10.00	ND	86	70-130	10	30	
n-Butylbenzene	8.12		ug/L	10.00	ND	81	70-130	2	30	
n-Propylbenzene	9.07		ug/L	10.00	ND	91	70-130	0.4	30	
sec-Butylbenzene	9.28		ug/L	10.00	ND	93	70-130	2	30	
Styrene	8.35		ug/L	10.00	ND	84	70-130	0.8	30	
tert-Butylbenzene	9.08		ug/L	10.00	ND	91	70-130	0.6	30	
Tertiary-amyl methyl ether	6.09		ug/L	10.00	ND	61	70-130	0	30	M-
Tetrachloroethene	8.06		ug/L	10.00	0.710	74	70-130	3	30	
Tetrahydrofuran	8.84		ug/L	10.00	ND	88	70-130	3	30	
Toluene	10.9		ug/L	10.00	ND	109	70-130	3	30	
trans-1,2-Dichloroethene	11.7		ug/L	10.00	1.06	106	70-130	0	30	
trans-1,3-Dichloropropene	8.70		ug/L	10.00	ND	87	70-130	1	30	
Trichloroethene	501		ug/L	10.00	499	21	70-130	157	30	E, MT
Trichlorofluoromethane	9.63		ug/L	10.00	ND	96	70-130	5	30	
Vinyl Acetate	7.26		ug/L	10.00	ND	73	70-130	3	30	
Vinyl Chloride	10.7		ug/L	10.00	1.03	96	70-130	0.7	30	
Xylene O	9.39		ug/L	10.00	ND	94	70-130	2	30	
Xylene P,M	18.7		ug/L	20.00	ND	94	70-130	1	30	
Xylenes (Total)	28.1		mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0275*		mg/L	*0.02500*		*110*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0259*		mg/L	*0.02500*		*104*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0281*		mg/L	*0.02500*		*112*	*70-130*			
Surrogate: Toluene-d8	*0.0263*		mg/L	*0.02500*		*105*	*70-130*			

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater ESS Laboratory Work Order: 1604778

Notes and Definitions

U	Analyte included in the analysis, but not detected
MT	Due to high target values, matrix spike analyte(s) is masked (MT).
M-	Matrix Spike recovery is below lower control limit (M-).
E	Reported above the quantitation limit; Estimated value (E).
D	Diluted.
CD-	Continuing Calibration %Diff/Drift is below control limit (CD-).
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report

CERTIFICATE OF ANALYSIS

Client Name: AMEC Foster Wheeler
Client Project ID: Textron Gorham - Groundwater

ESS Laboratory Work Order: 1604778

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/documents/AllLabs.xls

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.depweb.state.pa.us/portal/server.pt/community/labs/13780/laboratory_accreditation_program/590095

ESS Laboratory Sample and Cooler Receipt Checklist

Client: AMEC Foster Wheeler - KPB/HDM

Shipped/Delivered Via: Client

ESS Project ID: 1604778
Date Received: 4/28/2016
Project Due Date: 5/5/2016
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 5.3 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? (Yes) / No
    a. Air bubbles in aqueous VOAs? Yes / (No)
    b. Does methanol cover soil completely? Yes / No / (NA)

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: _____ Time: _____ By: _____
    b. Low Level VOAs brought to freezer: Date: _____ Time: _____ By: _____

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / No
    Who was contacted? _____ Date: _____ Time: _____ By: _____

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
01	30453	Yes	No	Yes	VOA Vial - HCl	HCL	
01	30454	Yes	No	Yes	VOA Vial - HCl	HCL	
01	30455	Yes	No	Yes	VOA Vial - HCl	HCL	
02	30450	Yes	No	Yes	VOA Vial - HCl	HCL	
02	30451	Yes	No	Yes	VOA Vial - HCl	HCL	
02	30452	Yes	No	Yes	VOA Vial - HCl	HCL	
03	30447	Yes	No	Yes	VOA Vial - HCl	HCL	
03	30448	Yes	No	Yes	VOA Vial - HCl	HCL	
03	30449	Yes	No	Yes	VOA Vial - HCl	HCL	
04	30444	Yes	No	Yes	VOA Vial - HCl	HCL	
04	30445	Yes	No	Yes	VOA Vial - HCl	HCL	
04	30446	Yes	No	Yes	VOA Vial - HCl	HCL	
04	30457	Yes	No	Yes	VOA Vial - HCl	HCL	
04	30458	Yes	No	Yes	VOA Vial - HCl	HCL	
04	30459	Yes	No	Yes	VOA Vial - HCl	HCL	
04	30460	Yes	No	Yes	VOA Vial - HCl	HCL	
04	30461	Yes	No	Yes	VOA Vial - HCl	HCL	
04	30462	Yes	No	Yes	VOA Vial - HCl	HCL	
05	30441	Yes	No	Yes	VOA Vial - HCl	HCL	
05	30442	Yes	No	Yes	VOA Vial - HCl	HCL	
05	30443	Yes	No	Yes	VOA Vial - HCl	HCL	
06	30438	Yes	No	Yes	VOA Vial - HCl	HCL	
06	30439	Yes	No	Yes	VOA Vial - HCl	HCL	

ESS Laboratory Sample and Cooler Receipt Checklist

Client: AMEC Foster Wheeler - KPB/HDM

ESS Project ID: 1604778

Date Received: 4/28/2016

06	30440	Yes	No	Yes	VOA Vial - HCl	HCL
07	30435	Yes	No	Yes	VOA Vial - HCl	HCL
07	30436	Yes	No	Yes	VOA Vial - HCl	HCL
07	30437	Yes	No	Yes	VOA Vial - HCl	HCL
08	30456	Yes	No	Yes	VOA Vial - HCl	HCL

2nd Review

Are barcode labels on correct containers? (Yes) / No

Completed By: _____ Date & Time: 4/28/16 1602

Reviewed By: _____ Date & Time: 4/28/16 1615

Delivered By: _____ 4/28/16 1615

ESS Laboratory

Division of Thielsch Engineering, Inc.

185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 1604778

Turn Time ___J___ Standard Other_____

Regulatory State: MA RI CT NH NJ NY ME Other_____

Is this project for any of the following:(please circle)
MA-MCP Navy USACE CT DEP Other_____

Reporting Limits - Sec PM

Electonic Deliverables Excel Access PDF

Co. Name	Project #	Project Name
Amec Foster Wheeler	3652140052	Textron Cumberland

Contact Person	Address
Denise King	271 Mill Rd.

City	State	Zip	PO #
Chelmsford	MA	01824	Sec PM ~~Foster~~

Tel.	Fax.	email:
978-392-5339		

ESS Lab ID	Date	Collection Time	Grab -G Composite-C	Matrix	Sample ID	Pres Code	# of Containers	Type of Container	Vol of Container	Analysis: 8260 Full List									
1	4/28/15	1431	G	GW	MW-23S	2	3	V	40ml	X									
2	4/28/15	1411	G	GW	MW-23S	2	3	V	40ml	X									
3	4/28/15	1437	G	GW	MW-23S	2	3	V	40ml	X									
4	4/28/15	1225	G	GW	MW-D	2	3	V	40ml	X	run	MS/MSD							
5	4/28/15	1105	G	GW	MW-FS	2	3	V	40ml	X									
6	4/28/15	—	G	GW	Dup-01	2	3	V	40ml	X									
8	4/28/15	—	G	TB	TripBlk-01	2	1	V	40ml	X									
7	4/28/15	1410	G	GW	MW-24I	2	3	V	40ml	X									

Container Type: P-Poly G-Glass AG-Amber Glass S-Sterile V-VOA

Matrix: S-Soil SD-Solid D-Sludge WW-Wastewater GW-Groundwater SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filter

Cooler Present ___X___ Yes _____ No

Seals Intact _____ Yes _____ No NA: X

Cooler Temperature: 5.2° 4.2°C ICE

Internal Use Only

[ ] Pickup DD

[ ] Technician___

Preservation Code: 1-NP, 2-HCl, 3-H2SO4, 4-HNO3, 5-NaOH, 6-MeOH, 7-Asorbic Acid, 8-ZnAct, 9-_____

Sampled by : Mark Maguire 339-927-3747

Comments:

Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)
4/28/15 1547	4/28/15 1547		
Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)	Relinquished by: (Signature, Date & Time)	Received by: (Signature, Date & Time)

* By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VIIA

Please fax to the laboratory all changes to Chain of Custody

1 (White) Lab Copy
2 (Yellow) Client Receipt