Environmental Resources Management

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15 November 2016
Reference: 0321744

Massachusetts Department of Environmental Protection
Northeast Regional Office
Bureau of Waste Site Cleanup
205B Lowell Street
Wilmington, MA 01887

Re: Remedy Operation Status Submittal
May 2016 through November 2016
Former Raytheon Facility
Wayland, Massachusetts
Release Tracking Nos. 3-13302 and 3-22408
Tier IB Permit Nos. 133939 and W045278

Dear Sir or Madam:

On behalf of Raytheon Company (Raytheon), Environmental Resources Management (ERM) has prepared this Remedy Operation Status (ROS) Submittal for the Former Raytheon Facility located at 430 Boston Post Road in Wayland, Massachusetts (herein referred to as the "Site") (Figure 1). This report discusses groundwater remediation and monitoring activities conducted at the Site during the reporting period from 1 May 2016 to 31 October 2016, and is intended to satisfy the requirements of the Massachusetts Contingency Plan (MCP) at 310 CMR 40.0893.

The Massachusetts Department of Environmental Protection (MassDEP) Remedy Operation Status (ROS) transmittal form (BWSC 108) and Remedial Monitoring Reports (RMRs) were filed electronically via eDEP. Copies of the BWSC forms are included in Appendix C.

BACKGROUND

This submittal incorporates the ongoing bioremediation activities in the Northern Area of the Site (Figure 2) with the ongoing Southern Area in-situ chemical oxidation (ISCO) program. Northern Area response actions were formerly tracked under Release Tracking Number (RTN) 3-22408. These RTNs were linked under 3-13302 in a letter submitted to the MassDEP on 9 June 2009.

RTN 3-13302

A Phase IV Completion Report was submitted for RTN 3-13302 on 24 November 2004 to MassDEP for portions of the approximately 83-acre property (Figure 2). The Phase IV Completion Report documented wetland remediation activities conducted from October 2003 through October 2004, and groundwater remediation activities conducted from May through July 2004. Since completion of Phase IV activities and the Site entering into ROS, ROS reports are submitted to MassDEP on a semi-annual basis.

RTN 3-22408

A Phase IV Completion Report was submitted for RTN 3-22408 on 23 December 2008 for the chlorinated volatile organic compound (CVOC) impacts to Northern Area soil and groundwater. Beginning with the 9 June 2009 report, activities formerly conducted under this RTN have been summarized jointly with those under RTN 3-13302 in the ROS submittals described above.

Current Property Conditions

The property is currently under redevelopment by the property owners of each individual parcel. All pre-existing buildings have been razed, the Site has been graded, and new buildings are completed and occupied or nearly completed. Most of the Southern Area monitoring wells were decommissioned prior to the redevelopment – an effort that was described in previous ROS submittals. Details regarding the new monitoring well network were reported in the May 2013 ROS report, with additional monitoring well installations described in subsequent ROS submittals. The current monitoring well network is shown on Figure 3.

NORTHERN AREA BIOREMEDIATION ACTIVITIES

Northern Area bioremediation response actions were conducted by Innovative Engineering Solutions, Inc. (IESI) of Walpole, Massachusetts during this reporting period. Response actions during this reporting period included operation of the Enhanced Anaerobic Dechlorination (EAD) system. Appendix A includes a memorandum prepared by IESI to document those activities.

NORTHERN AREA GROUNDWATER MONITORING

Quarterly groundwater sampling in the Northern Area was conducted by IESI in July and October 2016. Groundwater sampling results for the Northern Area are summarized in Appendix A.

SOUTHERN AREA GROUNDWATER MONITORING

Semi-annual groundwater monitoring in the Southern Area was conducted by ERM in August 2016. Comprehensive groundwater gauging activities were conducted in August 2016. Groundwater monitoring activities in the Southern Area included:

- Comprehensive groundwater gauging; and
- Collection of groundwater samples via passive diffusion bags (PDBs) and hydrasleeves for laboratory analyses.

Groundwater gauging data collected in August 2016 is included in Table 1. Results from the August 2016 groundwater gauging activities indicate that groundwater generally flows from the southeast to the northwest, and then west toward the Sudbury River, consistent with historical observations. An interpretation of the generalized upper and lower potentiometric surfaces are presented in Figures 4A and 4B.

In August 2016, PDBs and hydrasleeves were used to collect groundwater samples at the Site for analysis of CVOCs and 1,4-dioxane. PDBs are constructed of a semi-permeable membrane that allows groundwater to pass through the membrane and into the PDB, thereby allowing collection of a sample from the aquifer at equilibrium conditions. PDBs were installed across the saturated mid-point of each screen and were allowed to equilibrate with the surrounding groundwater for at least 14 days before being sampled. Samples to be analyzed for 1,4-dioxane were collected using hydrasleeves. Hydrasleeves are a no-purge sampling method that allows sampling at discrete intervals without mixing the water column in the well during sampling. The hydrasleeves were deployed immediately following PDB sampling and were retrieved after 2 days in order to collect a representative grab sample.

Test America of South Burlington, VT, or Buffalo, NY, analyzed groundwater samples for CVOCs using the U.S. Environmental Protection Agency (USEPA) Method 8260C and for 1,4-dioxane using USEPA Method 522. A summary of the laboratory analytical data for the Southern Area monitoring wells is provided as Table 2. Groundwater laboratory analytical reports are provided in Appendix B.

Groundwater monitoring results indicate that trichloroethene (TCE) was detected above the MCP GW-1 criteria in a portion of the monitoring wells during the August 2016 Southern Area sampling event. Results indicate that 1,4-dioxane was detected above the MCP GW-1 criteria in MW-1026D and MW-1033. Additionally, 1,1,1-trichloroethane (1,1,1-TCA) was detected above the MCP GW-1 criteria in MW-1038. However, concentrations of CVOCs in MW-1038 and several other wells along the southern property boundary were determined to be originating from an off-site source. A Downgradient Property Status submittal will be filed for the southern property boundary area. Concentrations of TCE in the Southern Area are expected to continue decreasing over time. There were no other exceedances of the MCP GW-1 criteria in groundwater during this sampling event. Figure 5 summarizes TCE detections in the Southern Area monitoring wells during the August 2016 sampling event.

SENTINEL WELL MONITORING

In 2009, Raytheon installed five sentinel monitoring wells on the Town of Wayland Cow Common Conservation Area as part of a voluntary Supplemental Environmental Project (SEP). In addition to the installation of the five wells, the SEP included an agreement to conduct semi-annual monitoring of CVOC concentrations in the wells through December 2011; however, Raytheon continues to voluntarily sample these wells on an annual basis. The locations of the sentinel monitoring wells are shown on Figure 6. A summary of groundwater analytical data for the sentinel wells is summarized in Table 3. The next sentinel well sampling event is scheduled for spring 2017.

If you have any questions or comments in regard to this submittal, please contact the undersigned at (617) 646-7800.

Sincerely,

John C. Drobinski, P.G., LSP
Principal–in-Charge

Lyndsey Colburn, P.G.
Principal Consultant

encl:

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cc: Jonathan Hone, Raytheon
Brian Monahan, Town of Wayland Conservation Commission
Richard Gass, Wayland Meadows
Tim Skehan, Russell's Garden Center
David Costello, National Development
Sami Fam, IESI
Public Repositories

Tables

Table 1
Summary of Groundwater Gauging Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

Location ID	Measurement Date	Historical Reference Elevation (ft ASL)	Depth to Water (ft)	Groundwater Elevation (ft ASL)
EW-1	21-May-15	124.93	7.09	117.84
	26-Aug-15	124.93	9.09	115.84
	12-Jan-16	124.93	8.51	116.42
	24-Aug-16	124.93	10.46	114.47
EW-2	21-May-15	124.73	6.68	118.05
	26-Aug-15	124.73	8.68	116.05
	12-Jan-16	124.73	7.79	116.94
	24-Aug-16	124.73	10.25	114.48
EW-3	21-May-15	127.35	8.75	118.60
	26-Aug-15	127.35	9.98	117.37
MW-1001B	01-Oct-13	135.11	16.37	118.74
	20-Aug-14	135.11	16.11	119.00
	26-Aug-15	135.11	14.87	120.24
	24-Aug-16	135.11	1.24	133.87
MW-1001M	01-Oct-13	135.06	15.45	119.61
	27-Mar-14	135.06	14.90	120.16
	20-Aug-14	135.06	15.32	119.74
	26-Aug-15	135.06	16.05	119.01
	12-Jan-16	135.06	15.62	119.44
	24-Aug-16	135.06	17.42	117.64
MW-1002B	01-Oct-13	135.44	16.78	118.66
	27-Mar-14	135.44	15.90	119.54
	26-Aug-15	135.44	17.38	118.06
	12-Jan-16	135.44	16.17	119.27
	24-Aug-16	135.44	18.80	116.64
MW-1003	01-Oct-13	132.53	13.11	119.42
	27-Mar-14	132.53	12.30	120.23
	20-Aug-14	132.53	12.81	119.72
	26-Aug-15	132.53	13.54	118.99
	12-Jan-16	132.53	13.95	118.58
	24-Aug-16	132.53	14.83	117.70
MW-1004	01-Oct-13	134.61	16.10	118.51
	27-Mar-14	134.61	14.96	119.65
	20-Aug-14	134.61	15.71	118.90
	26-Aug-15	134.61	16.45	118.16
	12-Jan-16	134.61	15.26	119.35
	24-Aug-16	134.61	17.69	116.92
MW-1005	01-Oct-13	134.28	15.56	118.72
	27-Mar-14	134.28	14.70	119.58
	20-Aug-14	134.28	15.25	119.03
	26-Aug-15	134.28	16.14	118.14
	12-Jan-16	134.28	15.18	119.10
	24-Aug-16	134.28	17.46	116.82
MW-1006	01-Oct-13	135.21	15.11	120.10
	27-Mar-14	135.21	15.48	119.73
	20-Aug-14	135.21	15.44	119.77
	26-Aug-15	135.21	15.90	119.31
	12-Jan-16	135.21	16.30	118.91
	24-Aug-16	135.21	17.32	117.89
MW-1008	01-Oct-13	134.84	16.38	118.46
	27-Mar-14	134.84	14.51	120.33
	20-Aug-14	134.84	16.30	118.54
	26-Aug-15	134.84	16.86	117.98
	12-Jan-16	134.84	16.44	118.40
	24-Aug-16	134.84	18.32	116.52

Notes:
Units are in ft = feet
ASL = above mean sea level
EW - Easement Wells. Monitoring wells within the MBTA Right-of-Way not installed by ERM.

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Former Raytheon Facility
Wayland, Massachusetts

Location ID	Measurement Date	Historical Reference Elevation (ft ASL)	Depth to Water (ft)	Groundwater Elevation (ft ASL)
MW-1009	01-Oct-13	134.66	17.90	116.76
	27-Mar-14	134.66	16.60	118.06
	20-Aug-14	134.66	17.54	117.12
	26-Aug-15	134.66	18.21	116.45
	12-Jan-16	134.66	17.20	117.46
	24-Aug-16	134.66	19.57	115.09
MW-1010D	01-Oct-13	133.40	17.42	115.98
	27-Mar-14	133.40	15.90	117.50
	20-Aug-14	133.40	16.98	116.42
	26-Aug-15	133.40	17.08	116.32
	12-Jan-16	133.40	16.53	116.87
	24-Aug-16	133.40	18.90	114.50
MW-1010M	01-Oct-13	133.43	15.62	117.81
	27-Mar-14	133.43	16.00	117.43
	20-Aug-14	133.43	16.00	117.43
	26-Aug-15	133.43	16.52	116.91
	12-Jan-16	133.43	16.45	116.98
	24-Aug-16	133.43	17.75	115.68
MW-1011	02-Oct-13	133.18	16.56	116.62
	27-Mar-14	133.18	15.35	117.83
	20-Aug-14	133.18	16.28	116.90
	21-May-15	133.18	15.11	118.07
	26-Aug-15	133.18	16.90	116.28
	12-Jan-16	133.18	16.56	116.62
	24-Aug-16	133.18	18.18	115.00
MW-1013	01-Oct-13	133.26	14.63	118.63
	27-Mar-14	133.26	14.83	118.43
	20-Aug-14	133.26	14.45	118.81
	26-Aug-15	133.26	15.02	118.24
	12-Jan-16	133.26	15.93	117.33
	24-Aug-16	133.26	16.31	116.95
MW-1014	01-Oct-13	133.37	16.81	116.56
	26-Aug-15	133.37	17.60	115.77
	12-Jan-16	133.37	17.07	116.30
	24-Aug-16	133.37	19.60	113.77
MW-1015D	01-Oct-13	133.61	18.24	115.37
	27-Mar-14	133.61	16.53	117.08
	20-Aug-14	133.61	17.72	115.89
	26-Aug-15	133.61	18.35	115.26
	12-Jan-16	133.61	17.26	116.35
	24-Aug-16	133.61	19.68	113.93
MW-1016D	01-Oct-13	133.40	18.01	115.39
	27-Mar-14	133.40	16.35	117.05
	20-Aug-14	133.40	17.50	115.90
	26-Aug-15	133.40	18.15	115.25
	12-Jan-16	133.40	17.04	116.36
	24-Aug-16	133.40	19.40	114.00
MW-1017D	01-Oct-13	133.15	17.71	115.44
	27-Mar-14	133.15	16.10	117.05
	20-Aug-14	133.15	17.11	116.04
	21-May-15	133.15	16.65	116.50
	26-Aug-15	133.15	17.84	115.31
	12-Jan-16	133.15	16.78	116.37
	24-Aug-16	133.15	19.15	114.00

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Location ID	Measurement Date	Historical Reference Elevation (ft ASL)	Depth to Water (ft)	Groundwater Elevation (ft ASL)
MW-1018	01-Oct-13	133.55	18.36	115.19
	27-Mar-14	133.55	16.88	116.67
	20-Aug-14	133.55	17.81	115.74
	21-May-15	133.55	16.67	116.88
	26-Aug-15	133.55	18.41	115.14
	12-Jan-16	133.55	18.11	15.44
	24-Aug-16	133.55	19.79	113.76
MW-1019B	01-Oct-13	131.51	16.13	115.38
	27-Mar-14	131.51	14.60	116.91
	20-Aug-14	131.51	15.70	115.81
	26-Aug-15	131.51	16.24	115.27
	12-Jan-16	131.51	15.59	115.92
	24-Aug-16	131.51	17.64	113.87
MW-1020	01-Oct-13	132.92	18.41	114.51
	27-Mar-14	132.92	16.70	116.22
	20-Aug-14	132.92	17.98	114.94
	26-Aug-15	132.92	18.55	114.37
	12-Jan-16	132.92	17.80	115.12
	24-Aug-16	132.92	19.87	113.05
MW-1022	01-Oct-13	132.22	18.36	113.86
	27-Mar-14	132.22	16.32	115.90
	20-Aug-14	132.22	17.88	114.34
	26-Aug-15	132.22	18.44	113.78
	12-Jan-16	132.22	17.21	115.01
	24-Aug-16	132.22	19.81	112.41
MW-1023	01-Oct-13	131.76	17.92	113.84
	27-Mar-14	131.76	15.89	115.87
	20-Aug-14	131.76	17.41	114.35
	21-May-15	131.76	16.65	115.11
	26-Aug-15	131.76	17.99	113.77
	12-Jan-16	131.76	16.79	114.97
	24-Aug-16	131.76	19.27	112.49
MW-1024D	01-Oct-13	130.66	15.98	114.68
	27-Mar-14	130.66	14.14	116.52
	20-Aug-14	130.66	15.36	115.30
	26-Aug-15	130.66	15.93	114.73
	12-Jan-16	130.66	15.13	115.53
	24-Aug-16	130.66	17.22	113.44
MW-1025D	01-Oct-13	130.92	16.10	114.82
	27-Mar-14	130.92	14.32	116.60
	20-Aug-14	130.92	15.61	115.31
	26-Aug-15	130.92	15.96	114.96
	12-Jan-16	130.92	15.13	115.79
	24-Aug-16	130.92	17.46	113.46
MW-1025M	01-Oct-13	130.75	16.88	113.87
	27-Mar-14	130.75	14.86	115.89
	20-Aug-14	130.75	15.35	115.40
	21-May-15	130.75	15.56	115.19
	26-Aug-15	130.75	15.95	114.80
	12-Jan-16	130.75	15.78	114.97
	24-Aug-16	130.75	18.27	112.48
MW-1026D	01-Oct-13	131.55	16.54	115.01
	26-Aug-15	131.55	16.51	115.04
	12-Jan-16	131.55	15.56	16.00
	24-Aug-16	131.55	18.04	113.51

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Former Raytheon Facility
Wayland, Massachusetts

Location ID	Measurement Date	Historical Reference Elevation (ft ASL)	Depth to Water (ft)	Groundwater Elevation (ft ASL)
MW-1027	01-Oct-13	126.87	13.22	113.65
	27-Mar-14	126.87	11.01	115.86
	20-Aug-14	126.87	12.71	114.16
	26-Aug-15	126.87	13.28	113.59
	12-Jan-16	126.87	11.90	114.97
	24-Aug-16	126.87	14.55	112.32
MW-1028	01-Oct-13	127.99	14.44	113.55
	27-Mar-14	127.99	12.25	115.74
	20-Aug-14	127.99	13.94	114.05
	26-Aug-15	127.99	14.43	113.56
	12-Jan-16	127.99	13.09	114.90
	24-Aug-16	127.99	15.80	112.19
MW-1030	01-Oct-13	131.51	17.78	113.73
	27-Mar-14	131.51	15.63	115.88
	20-Aug-14	131.51	17.30	114.21
	26-Aug-15	131.51	17.83	113.68
	12-Jan-16	131.51	16.53	114.98
	24-Aug-16	131.51	19.19	112.32
MW-1031	01-Oct-13	130.56	16.87	113.69
	27-Mar-14	130.56	14.72	115.84
	20-Aug-14	130.56	16.35	114.21
	26-Aug-15	130.56	16.91	113.65
	12-Jan-16	130.56	15.58	114.98
	24-Aug-16	130.56	18.24	112.32
MW-1032	01-Oct-13	130.08	16.55	113.53
	27-Mar-14	130.08	14.41	115.67
	20-Aug-14	130.08	16.02	114.06
	26-Aug-15	130.08	16.59	113.49
	12-Jan-16	130.08	15.30	114.78
	24-Aug-16	130.08	17.94	112.14
MW-1033	01-Oct-13	119.99	6.62	113.37
	27-Mar-14	119.99	4.71	115.28
	20-Aug-14	119.99	6.11	113.88
	26-Aug-15	119.99	6.67	113.32
	12-Jan-16	119.99	5.20	114.79
	24-Aug-16	119.99	7.93	112.06
MW-1034	01-Oct-13	123.20	9.85	113.35
	27-Mar-14	123.20	8.45	114.75
	20-Aug-14	123.20	9.35	113.85
	21-May-15	123.20	5.40	117.80
	26-Aug-15	123.20	9.89	113.31
	12-Jan-16	123.20	8.32	114.88
	24-Aug-16	123.20	11.12	112.08
MW-1035	05-May-15	132.35	15.41	116.94
	21-May-15	132.35	16.23	116.12
	26-Aug-15	132.35	18.00	114.35
	12-Jan-16	132.35	17.69	114.66
	24-Aug-16	132.35	19.34	113.01
MW-1036	05-May-15	132.70	15.55	117.15
	21-May-15	132.70	16.28	116.42
	26-Aug-15	132.70	17.73	114.97
	12-Jan-16	132.70	17.10	115.60
	24-Aug-16	132.70	19.04	113.66

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Table 1
Summary of Groundwater Gauging Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

Location ID	Measurement Date	Historical Reference Elevation (ft ASL)	Depth to Water (ft)	Groundwater Elevation (ft ASL)
MW-1037	05-May-15	132.70	15.21	117.49
	21-May-15	132.70	15.95	116.75
	26-Aug-15	132.70	17.77	114.93
	12-Jan-16	132.70	17.70	115.00
	24-Aug-16	132.70	19.11	113.59
MW-1038	05-May-15	132.03	14.40	117.63
	21-May-15	132.03	15.10	116.93
	26-Aug-15	132.03	16.92	115.11
	12-Jan-16	132.03	16.89	115.14
	24-Aug-16	132.03	18.26	113.77
MW-1039	05-May-15	131.14	13.95	117.19
	21-May-15	131.14	14.45	116.69
	26-Aug-15	131.14	15.83	115.31
	12-Jan-16	131.14	15.01	116.13
	24-Aug-16	131.14	17.03	114.11
MW-1040	12-Jan-16	130.97	16.76	114.21
MW-1041	12-Jan-16	124.22	8.81	115.41
	24-Aug-16	124.22	10.43	113.79
MW-1042	12-Jan-16	123.79	7.89	115.90
	24-Aug-16	123.79	9.56	114.23
MW-1043	12-Jan-16	123.81	7.27	116.54
	24-Aug-16	123.81	9.11	114.70
MW-1044	12-Jan-16	123.64	7.85	115.79
	24-Aug-16	123.64	9.42	114.22
MW-1045	12-Jan-16	123.00	7.50	116.40
	24-Aug-16	123.00	9.89	113.11
MW-217D	01-Oct-13	123.90	14.96	114.91
	27-Mar-14	129.87	13.19	116.68
	20-Aug-14	129.87	14.38	115.49
	26-Aug-15	129.87	14.90	114.97
	12-Jan-16	129.87	13.87	116.00
	24-Aug-16	129.87	16.25	113.62
MW-217M	01-Oct-13	130.21	15.61	114.60
	27-Mar-14	130.21	13.78	116.43
	20-Aug-14	130.21	15.12	115.09
	26-Aug-15	130.21	15.66	114.55
	12-Jan-16	130.21	14.80	115.41
	24-Aug-16	130.21	17.06	113.15
MW-217S	01-Oct-13	129.83	14.98	114.85
	27-Mar-14	129.83	13.27	116.56
	20-Aug-14	130.44	14.49	115.95
	26-Aug-15	130.44	15.07	115.37
	12-Jan-16	130.44	14.55	115.89
	24-Aug-16	130.44	16.55	113.89

Notes:
Units are in ft = feet
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Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1001B
	Sample Date	9-Sep-15
	Sample Type	N
Analyte	**MA-GW-1**	
Method 8260, µg/L		
1,1,1-Trichloroethane	200	*< 1.0*
1,1-Dichloroethane	70	*< 1.0*
1,1-Dichloroethene	7	*< 1.0*
1,2,3-Trichlorobenzene	NS	*< 1.0*
1,2,4-Trichlorobenzene	70	*< 1.0*
1,2,4-Trimethylbenzene	NS	*< 1.0*
1,2-Dichlorobenzene	600	*< 1.0*
1,2-Dichloroethane	5	*< 1.0*
1,2-Dichloroethene	NS	
1,3,5-Trimethylbenzene	NS	*< 1.0*
1,3-Dichlorobenzene	100	*< 1.0*
1,4-Dichlorobenzene	5	*< 1.0*
2-Butanone	4,000	*< 10*
4-Isopropyltoluene	NS	*< 1.0*
Acetone	6,300	*< 50*
Benzene	5	*< 1.0*
Bromodichloromethane	3	*< 0.50*
Bromoform	4	*< 1.0*
Carbon disulfide	NS	*< 10*
Chlorobenzene	100	*< 1.0*
Chloroethane	NS	*< 2.0*
Chloroform	70	*< 1.0*
cis-1,2-Dichloroethene	70	*< 1.0*
Dibromochloromethane	2	*< 0.50*
Ethyl ether	NS	*< 1.0*
Ethylbenzene	700	*< 1.0*
Ethyl-tert-butyl ether	NS	*< 5.0*
Freon 11	NS	*< 1.0*
Isopropylbenzene (Cumene)	NS	*< 1.0*
m,p-Xylenes	10,000	*< 2.0*
Methyl tert-butyl ether	70	*< 1.0*
Methylene chloride	5	*< 1.0*
Naphthalene	140	*< 5.0*
o-Xylene	10,000	*< 1.0*
sec-Butylbenzene	NS	*< 1.0*
Styrene	100	*< 1.0*
tert-Amyl Methyl Ether	NS	*< 5.0*
Tetrachloroethene	5	*< 1.0*
Tetrahydrofuran	NS	*< 10*
Toluene	1,000	*< 1.0*
trans-1,2-Dichloroethene	100	*< 1.0*
Trichloroethene	5	*< 1.0*
Vinyl chloride	2	*< 1.0*
Xylenes, Total	10,000	
Method EPA522, µg/L		
1,4-Dioxane	0.3	*< 50*

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1001M	MW-1001M	MW-1001M
	Sample Date	31-Mar-15	9-Sep-15	24-Aug-16
	Sample Type	N	N	N
Analyte	**MA-GW-1**			
Method 8260, µg/L				
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS			
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	300	< 50 *
Benzene	5	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	4.0	16	16
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10 *
Toluene	1,000	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0
Trichloroethene	5	1.5	**6.1**	**7.0**
Vinyl chloride	2	< 1.0	< 1.0	< 1.0
Xylenes, Total	10,000			
Method EPA522, µg/L				
1,4-Dioxane	0.3	< 50	< 50	< 50

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID Sample Date Sample Type	MW-1002B 9-Sep-15 N	MW-1002B 24-Aug-16 N
Analyte	**MA-GW-1**		
Method 8260, µg/L			
1,1,1-Trichloroethane	200	*< 1.0*	*< 1.0*
1,1-Dichloroethane	70	*< 1.0*	*< 1.0*
1,1-Dichloroethene	7	*< 1.0*	*< 1.0*
1,2,3-Trichlorobenzene	NS	*< 1.0*	*< 1.0*
1,2,4-Trichlorobenzene	70	*< 1.0*	*< 1.0*
1,2,4-Trimethylbenzene	NS	*< 1.0*	*< 1.0*
1,2-Dichlorobenzene	600	*< 1.0*	*< 1.0*
1,2-Dichloroethane	5	*< 1.0*	*< 1.0*
1,2-Dichloroethene	NS		
1,3,5-Trimethylbenzene	NS	*< 1.0*	*< 1.0*
1,3-Dichlorobenzene	100	*< 1.0*	*< 1.0*
1,4-Dichlorobenzene	5	*< 1.0*	*< 1.0*
2-Butanone	4,000	*< 10*	*< 10*
4-Isopropyltoluene	NS	*< 1.0*	*< 1.0*
Acetone	6,300	*< 50*	*< 50 **
Benzene	5	*< 1.0*	*< 1.0*
Bromodichloromethane	3	*< 0.50*	*< 0.50*
Bromoform	4	*< 1.0*	*< 1.0*
Carbon disulfide	NS	*< 10*	*< 10*
Chlorobenzene	100	*< 1.0*	*< 1.0*
Chloroethane	NS	*< 2.0*	*< 2.0*
Chloroform	70	*< 1.0*	*< 1.0*
cis-1,2-Dichloroethene	70	*< 1.0*	*< 1.0*
Dibromochloromethane	2	*< 0.50*	*< 0.50*
Ethyl ether	NS	*< 1.0*	*< 1.0*
Ethylbenzene	700	*< 1.0*	*< 1.0*
Ethyl-tert-butyl ether	NS	*< 5.0*	*< 5.0*
Freon 11	NS	*< 1.0*	*< 1.0*
Isopropylbenzene (Cumene)	NS	*< 1.0*	*< 1.0*
m,p-Xylenes	10,000	*< 2.0*	*< 2.0*
Methyl tert-butyl ether	70	*< 1.0*	*< 1.0*
Methylene chloride	5	*< 1.0*	*< 1.0*
Naphthalene	140	*< 5.0*	*< 5.0*
o-Xylene	10,000	*< 1.0*	*< 1.0*
sec-Butylbenzene	NS	*< 1.0*	*< 1.0*
Styrene	100	*< 1.0*	*< 1.0*
tert-Amyl Methyl Ether	NS	*< 5.0*	*< 5.0*
Tetrachloroethene	5	*< 1.0*	*< 1.0*
Tetrahydrofuran	NS	*< 10*	*< 10 **
Toluene	1,000	*< 1.0*	*< 1.0*
trans-1,2-Dichloroethene	100	*< 1.0*	*< 1.0*
Trichloroethene	5	*< 1.0*	*< 1.0*
Vinyl chloride	2	*< 1.0*	*< 1.0*
Xylenes, Total	10,000		
Method EPA522, µg/L			
1,4-Dioxane	0.3	*< 50*	*< 50*

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1003	MW-1003	MW-1003	MW-1003
	Sample Date	31-Mar-15	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N	N
Analyte	**MA-GW-1**				
Method 8260, µg/L					
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS				
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	< 10	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	< 50	55	< 50 *
Benzene	5	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	3.3	4.0	1.8	3.9
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10	< 10 *
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	**6.2**	**7.3**	**4.4**	**8.0**
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0
Xylenes, Total	10,000				
Method EPA522, µg/L					
1,4-Dioxane	0.3	< 50	< 50	< 50	< 50

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1004	MW-1004	MW-1004	MW-1004
	Sample Date	31-Mar-15	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N	N
Analyte	**MA-GW-1**				
Method 8260, µg/L					
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS				
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	< 10 *	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	51	< 50	< 50 *
Benzene	5	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10	< 10 *
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0
Xylenes, Total	10,000				
Method EPA522, µg/L					
1,4-Dioxane	0.3	< 50	< 50	< 50	< 50 *

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1005	MW-1005	MW-1005	MW-1005	MW-1005	MW-1005	MW-1005	MW-1005
	Sample Date	31-Mar-15	31-Mar-15	9-Sep-15	9-Sep-15	1-Mar-16	1-Mar-16	24-Aug-16	24-Aug-16
	Sample Type	N	FD	N	FD	N	FD	N	FD
Analyte	**MA-GW-1**								
Method 8260, µg/L									
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS								
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	< 10 *	< 10 *	< 10	< 10	< 10	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	< 50	50	< 50	< 50	< 50	< 50	< 50 *
Benzene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10	< 10	< 10	< 10	< 10 *	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	1.7	1.5	6.1	5.7	3.2	3.2	5.5	7.0
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10 *
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	**5.0**	4.8	**8.7**	**8.4**	**9.6**	**9.2**	**6.5**	**8.6**
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 *	< 1.0
Xylenes, Total	10,000								
Method EPA522, µg/L									
1,4-Dioxane	0.3	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50 *

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1006	MW-1006	MW-1006	MW-1006
	Sample Date	31-Mar-15	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N	N
Analyte	**MA-GW-1**				
Method 8260, µg/L					
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS				
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	24	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	850	< 50	< 50
Benzene	5	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10	< 10 *
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10	< 10
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	2.3	2.9	3.0	3.5
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0 *
Xylenes, Total	10,000				
Method EPA522, µg/L					
1,4-Dioxane	0.3	< 50	< 50	< 50	< 50

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1008	MW-1008	MW-1008	MW-1008
	Sample Date	31-Mar-15	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N	N
Analyte	**MA-GW-1**				
Method 8260, µg/L					
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS				
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	< 10	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	60	< 50	< 50
Benzene	5	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10	< 10 *
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10	< 10
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	3.9	3.4	4.7	3.3
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0 *
Xylenes, Total	10,000				
Method EPA522, µg/L					
1,4-Dioxane	0.3	< 50	< 50	< 50	< 50

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1009	MW-1009	MW-1009	MW-1009
	Sample Date	31-Mar-15	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N	N
Analyte	**MA-GW-1**				
Method 8260, µg/L					
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS				
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	< 10	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	54	< 50	< 50
Benzene	5	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10	< 10 *
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	4.6	10	10	22
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10	< 10
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0 *
Xylenes, Total	10,000				
Method EPA522, µg/L					
1,4-Dioxane	0.3	< 50	< 50	< 50	< 50

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1010D	MW-1010D	MW-1010D
	Sample Date	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N
Analyte	**MA-GW-1**			
Method 8260, µg/L				
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	1.3	< 1.0	1.4
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS			
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0
Acetone	6,300	50	< 50	< 50
Benzene	5	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10 *
Chlorobenzene	100	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	30	6.1	38
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10
Toluene	1,000	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0
Trichloroethene	5	3.8	4.0	**12**
Vinyl chloride	2	< 1.0	< 1.0	< 1.0 *
Xylenes, Total	10,000			
Method EPA522, µg/L				
1,4-Dioxane	0.3	< 50	< 50	< 50

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1010M	MW-1010M	MW-1010M	MW-1010M
	Sample Date	31-Mar-15	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N	N
Analyte	**MA-GW-1**				
Method 8260, µg/L					
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS				
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	11	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	110	< 50	< 50
Benzene	5	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10	< 10 *
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10	< 10
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	1.7	4.4	7.3	7.7
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0 *
Xylenes, Total	10,000				
Method EPA522, µg/L					
1,4-Dioxane	0.3	< 50	< 50	< 50	< 50

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1011	MW-1011	MW-1011	MW-1011	MW-1011	MW-1011
	Sample Date	9-Sep-15	11-Sep-15	1-Mar-16	15-Mar-16	24-Aug-16	26-Aug-16
	Sample Type	N	N	N	N	N	N
Analyte	**MA-GW-1**						
Method 8260, µg/L							
1,1,1-Trichloroethane	200	< 1.0		< 1.0		< 1.0	
1,1-Dichloroethane	70	< 1.0		< 1.0		< 1.0	
1,1-Dichloroethene	7	< 1.0		< 1.0		< 1.0	
1,2,3-Trichlorobenzene	NS	< 1.0		< 1.0		< 1.0	
1,2,4-Trichlorobenzene	70	< 1.0		< 1.0		< 1.0	
1,2,4-Trimethylbenzene	NS	< 1.0		< 1.0		< 1.0	
1,2-Dichlorobenzene	600	< 1.0		< 1.0		< 1.0	
1,2-Dichloroethane	5	< 1.0		< 1.0		< 1.0	
1,2-Dichloroethene	NS						
1,3,5-Trimethylbenzene	NS	< 1.0		< 1.0		< 1.0	
1,3-Dichlorobenzene	100	< 1.0		< 1.0		< 1.0	
1,4-Dichlorobenzene	5	< 1.0		< 1.0		< 1.0	
2-Butanone	4,000	< 10		< 10		< 10	
4-Isopropyltoluene	NS	< 1.0		< 1.0		< 1.0	
Acetone	6,300	< 50		< 50		59 *	
Benzene	5	< 1.0		< 1.0		< 1.0	
Bromodichloromethane	3	< 0.50		< 0.50		< 0.50	
Bromoform	4	< 1.0		< 1.0		< 1.0	
Carbon disulfide	NS	< 10		< 10		< 10	
Chlorobenzene	100	< 1.0		< 1.0		< 1.0	
Chloroethane	NS	< 2.0		< 2.0		< 2.0	
Chloroform	70	< 1.0		< 1.0		< 1.0	
cis-1,2-Dichloroethene	70	4.5		23		6.6	
Dibromochloromethane	2	< 0.50		< 0.50		< 0.50	
Ethyl ether	NS	< 1.0		< 1.0		< 1.0	
Ethylbenzene	700	< 1.0		< 1.0		< 1.0	
Ethyl-tert-butyl ether	NS	< 5.0		< 5.0		< 5.0	
Freon 11	NS	< 1.0		< 1.0		< 1.0	
Isopropylbenzene (Cumene)	NS	< 1.0		< 1.0		< 1.0	
m,p-Xylenes	10,000	< 2.0		< 2.0		< 2.0	
Methyl tert-butyl ether	70	< 1.0		< 1.0		< 1.0	
Methylene chloride	5	< 1.0		< 1.0		< 1.0	
Naphthalene	140	< 5.0		< 5.0		< 5.0	
o-Xylene	10,000	< 1.0		< 1.0		< 1.0	
sec-Butylbenzene	NS	< 1.0		< 1.0		< 1.0	
Styrene	100	< 1.0		< 1.0		< 1.0	
tert-Amyl Methyl Ether	NS	< 5.0		< 5.0		< 5.0	
Tetrachloroethene	5	< 1.0		< 1.0		< 1.0	
Tetrahydrofuran	NS	< 10		< 10		< 10 *	
Toluene	1,000	< 1.0		< 1.0		< 1.0	
trans-1,2-Dichloroethene	100	< 1.0		< 1.0		< 1.0	
Trichloroethene	5	**13**		**35**		**16**	
Vinyl chloride	2	< 1.0		< 1.0		< 1.0	
Xylenes, Total	10,000						
Method EPA522, µg/L							
1,4-Dioxane	0.3	< 50	0.21	< 50	0.20	< 50	< 0.20

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1013	MW-1013	MW-1013	MW-1013
	Sample Date	31-Mar-15	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N	N
Analyte	**MA-GW-1**				
Method 8260, µg/L					
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS				
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	< 10	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	66	< 50	< 50
Benzene	5	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10	< 10 *
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10	< 10
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0 *
Xylenes, Total	10,000				
Method EPA522, µg/L					
1,4-Dioxane	0.3	< 50	< 50	< 50	< 50

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1014	MW-1014
	Sample Date	1-Mar-16	24-Aug-16
	Sample Type	N	N
Analyte	**MA-GW-1**		
Method 8260, µg/L			
1,1,1-Trichloroethane	200	*< 1.0*	*< 1.0*
1,1-Dichloroethane	70	*< 1.0*	*< 1.0*
1,1-Dichloroethene	7	*< 1.0*	*< 1.0*
1,2,3-Trichlorobenzene	NS	*< 1.0*	*< 1.0*
1,2,4-Trichlorobenzene	70	*< 1.0*	*< 1.0*
1,2,4-Trimethylbenzene	NS	*< 1.0*	*< 1.0*
1,2-Dichlorobenzene	600	*< 1.0*	*< 1.0*
1,2-Dichloroethane	5	*< 1.0*	*< 1.0*
1,2-Dichloroethene	NS		
1,3,5-Trimethylbenzene	NS	*< 1.0*	*< 1.0*
1,3-Dichlorobenzene	100	*< 1.0*	*< 1.0*
1,4-Dichlorobenzene	5	*< 1.0*	*< 1.0*
2-Butanone	4,000	*< 10*	*< 10*
4-Isopropyltoluene	NS	*< 1.0*	*< 1.0*
Acetone	6,300	*< 50*	*< 50*
Benzene	5	*< 1.0*	*< 1.0*
Bromodichloromethane	3	*< 0.50*	*< 0.50*
Bromoform	4	*< 1.0*	*< 1.0*
Carbon disulfide	NS	*< 10*	*< 10 **
Chlorobenzene	100	*< 1.0*	*< 1.0*
Chloroethane	NS	*< 2.0*	*< 2.0*
Chloroform	70	*< 1.0*	*< 1.0*
cis-1,2-Dichloroethene	70	*< 1.0*	5.7
Dibromochloromethane	2	*< 0.50*	*< 0.50*
Ethyl ether	NS	*< 1.0*	*< 1.0*
Ethylbenzene	700	*< 1.0*	*< 1.0*
Ethyl-tert-butyl ether	NS	*< 5.0*	*< 5.0*
Freon 11	NS	*< 1.0*	*< 1.0*
Isopropylbenzene (Cumene)	NS	*< 1.0*	*< 1.0*
m,p-Xylenes	10,000	*< 2.0*	*< 2.0*
Methyl tert-butyl ether	70	*< 1.0*	*< 1.0*
Methylene chloride	5	*< 1.0*	*< 1.0*
Naphthalene	140	*< 5.0*	*< 5.0*
o-Xylene	10,000	*< 1.0*	*< 1.0*
sec-Butylbenzene	NS	*< 1.0*	*< 1.0*
Styrene	100	*< 1.0*	*< 1.0*
tert-Amyl Methyl Ether	NS	*< 5.0*	*< 5.0*
Tetrachloroethene	5	*< 1.0*	*< 1.0*
Tetrahydrofuran	NS	*< 10*	*< 10*
Toluene	1,000	*< 1.0*	*< 1.0*
trans-1,2-Dichloroethene	100	*< 1.0*	*< 1.0*
Trichloroethene	5	**7.1**	**61**
Vinyl chloride	2	*< 1.0*	*< 1.0 **
Xylenes, Total	10,000		
Method EPA522, µg/L			
1,4-Dioxane	0.3	*< 50*	*< 50*

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1015D	MW-1015D	MW-1015D	MW-1015D
	Sample Date	31-Mar-15	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N	N
Analyte	**MA-GW-1**				
Method 8260, µg/L					
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS				
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	12	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	190	< 50	< 50
Benzene	5	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10	< 10 *
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	1.3	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	1.2	1.7	2.1	1.6
Tetrahydrofuran	NS	< 10	< 10	< 10	< 10
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	**18**	**20**	**14**	**10**
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0 *
Xylenes, Total	10,000				
Method EPA522, µg/L					
1,4-Dioxane	0.3	< 50	< 50	< 50	< 50

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1016D	MW-1016D	MW-1016D	MW-1016D	MW-1016D	MW-1016D	MW-1016D
	Sample Date	31-Mar-15	31-Mar-15	9-Sep-15	9-Sep-15	15-Mar-16	24-Aug-16	24-Aug-16
	Sample Type	N	FD	N	FD	N	N	FD
Analyte	**MA-GW-1**							
Method 8260, µg/L								
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	1.4	1.5	< 1.0	< 1.0	1.2
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS							
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	< 10 *	< 10 *	< 10 *	< 10	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	< 50	220	230	< 50	< 50	< 50 *
Benzene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10	< 10	< 10	< 10 *	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	15	15	24	26	4.7	35	43
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 *	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10	< 10	< 10	< 10	< 10 *
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	**5.1**	**5.3**	**5.6**	**7.3**	2.8	< 1.0	< 1.0
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 *	< 1.0
Xylenes, Total	10,000							
Method EPA522, µg/L								
1,4-Dioxane	0.3	< 50	< 50	< 50	< 50	< 50	< 50	< 50 *

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1017D	MW-1017D	MW-1017D	MW-1017D
	Sample Date	9-Sep-15	1-Mar-16	1-Mar-16	24-Aug-16
	Sample Type	N	N	FD	N
Analyte	**MA-GW-1**				
Method 8260, µg/L					
1,1,1-Trichloroethane	200	< 2.0	< 2.0	< 1.0	< 2.0
1,1-Dichloroethane	70	< 2.0	< 2.0	< 1.0	< 2.0
1,1-Dichloroethene	7	< 2.0	< 2.0	< 1.0	< 2.0
1,2,3-Trichlorobenzene	NS	< 2.0	< 2.0	< 1.0	< 2.0
1,2,4-Trichlorobenzene	70	< 2.0	< 2.0	< 1.0	< 2.0
1,2,4-Trimethylbenzene	NS	< 2.0	< 2.0	< 1.0	< 2.0
1,2-Dichlorobenzene	600	< 2.0	< 2.0	< 1.0	< 2.0
1,2-Dichloroethane	5	< 2.0	< 2.0	< 1.0	< 2.0
1,2-Dichloroethene	NS				
1,3,5-Trimethylbenzene	NS	< 2.0	< 2.0	< 1.0	< 2.0
1,3-Dichlorobenzene	100	< 2.0	< 2.0	< 1.0	< 2.0
1,4-Dichlorobenzene	5	< 2.0	< 2.0	< 1.0	< 2.0
2-Butanone	4,000	< 20	< 20	< 10	< 20
4-Isopropyltoluene	NS	< 2.0	< 2.0	< 1.0	< 2.0
Acetone	6,300	< 100	< 100	< 50	< 100
Benzene	5	< 2.0	< 2.0	< 1.0	< 2.0
Bromodichloromethane	3	< 1.0	< 1.0	< 0.50	< 1.0
Bromoform	4	< 2.0	< 2.0	< 1.0	< 2.0
Carbon disulfide	NS	< 20	< 20	< 10	< 20 *
Chlorobenzene	100	< 2.0	< 2.0	< 1.0	< 2.0
Chloroethane	NS	< 4.0	< 4.0	< 2.0	< 4.0
Chloroform	70	< 2.0	< 2.0	< 1.0	< 2.0
cis-1,2-Dichloroethene	70	**81**	**120**	**110**	68
Dibromochloromethane	2	< 1.0	< 1.0	< 0.50	< 1.0
Ethyl ether	NS	< 2.0	< 2.0	< 1.0	< 2.0
Ethylbenzene	700	< 2.0	< 2.0	< 1.0	< 2.0
Ethyl-tert-butyl ether	NS	< 10	< 10	< 5.0	< 10
Freon 11	NS	< 2.0	< 2.0	< 1.0	< 2.0
Isopropylbenzene (Cumene)	NS	< 2.0	< 2.0	< 1.0	< 2.0
m,p-Xylenes	10,000	< 4.0	< 4.0	< 2.0	< 4.0
Methyl tert-butyl ether	70	< 2.0	< 2.0	< 1.0	< 2.0
Methylene chloride	5	< 2.0	**9.9**	< 1.0	< 2.0
Naphthalene	140	< 10	< 10	< 5.0	< 10
o-Xylene	10,000	< 2.0	< 2.0	< 1.0	< 2.0
sec-Butylbenzene	NS	< 2.0	< 2.0	< 1.0	< 2.0
Styrene	100	< 2.0	< 2.0	< 1.0	< 2.0
tert-Amyl Methyl Ether	NS	< 10	< 10	< 5.0	< 10
Tetrachloroethene	5	< 2.0	< 2.0	< 1.0	< 2.0
Tetrahydrofuran	NS	< 20	< 20	< 10	< 20
Toluene	1,000	< 2.0	< 2.0	< 1.0	< 2.0
trans-1,2-Dichloroethene	100	< 2.0	< 2.0	< 1.0	< 2.0
Trichloroethene	5	**18**	2.7	3.0	**38**
Vinyl chloride	2	< 2.0	< 2.0	< 1.0	< 2.0 *
Xylenes, Total	10,000				
Method EPA522, µg/L					
1,4-Dioxane	0.3	< 100	< 100	< 50	< 100

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1018	MW-1018	MW-1018
	Sample Date	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N
Analyte	**MA-GW-1**			
Method 8260, µg/L				
1,1,1-Trichloroethane	200	< 1.0	50	1.4
1,1-Dichloroethane	70	< 1.0	1.2	< 1.0
1,1-Dichloroethene	7	< 1.0	3.9	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS			
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0
Acetone	6,300	410	84	130 *
Benzene	5	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	12	1.3
Methylene chloride	5	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	9.7	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10 *
Toluene	1,000	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0
Trichloroethene	5	1.7	**180**	**5.9**
Vinyl chloride	2	< 1.0	< 1.0	< 1.0
Xylenes, Total	10,000			
Method EPA522, µg/L				
1,4-Dioxane	0.3	< 50	< 50	< 50 *

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1019B	MW-1019B	MW-1019B	MW-1019B
	Sample Date	31-Mar-15	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N	N
Analyte	**MA-GW-1**				
Method 8260, µg/L					
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS				
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	< 10	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	< 50	97	200
Benzene	5	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10	< 10 *
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10	< 10
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	2.3	1.3	2.0	1.4
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0 *
Xylenes, Total	10,000				
Method EPA522, µg/L					
1,4-Dioxane	0.3	< 50	< 50	< 50	< 50

Notes:
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Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
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J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1020	MW-1020	MW-1020	MW-1020	MW-1020	MW-1020
	Sample Date	9-Sep-15	11-Sep-15	1-Mar-16	15-Mar-16	24-Aug-16	26-Aug-16
	Sample Type	N	N	N	N	N	N
Analyte	**MA-GW-1**						
Method 8260, µg/L							
1,1,1-Trichloroethane	200	3.4		< 1.0		1.1	
1,1-Dichloroethane	70	< 1.0		1.0		1.0	
1,1-Dichloroethene	7	< 1.0		< 1.0		< 1.0	
1,2,3-Trichlorobenzene	NS	< 1.0		< 1.0		< 1.0	
1,2,4-Trichlorobenzene	70	< 1.0		< 1.0		< 1.0	
1,2,4-Trimethylbenzene	NS	< 1.0		< 1.0		< 1.0	
1,2-Dichlorobenzene	600	< 1.0		< 1.0		< 1.0	
1,2-Dichloroethane	5	< 1.0		< 1.0		< 1.0	
1,2-Dichloroethene	NS						
1,3,5-Trimethylbenzene	NS	< 1.0		< 1.0		< 1.0	
1,3-Dichlorobenzene	100	< 1.0		< 1.0		< 1.0	
1,4-Dichlorobenzene	5	< 1.0		< 1.0		< 1.0	
2-Butanone	4,000	< 10		< 10		< 10	
4-Isopropyltoluene	NS	< 1.0		< 1.0		< 1.0	
Acetone	6,300	< 50		< 50		51 *	
Benzene	5	< 1.0		< 1.0		< 1.0	
Bromodichloromethane	3	< 0.50		< 0.50		< 0.50	
Bromoform	4	< 1.0		< 1.0		< 1.0	
Carbon disulfide	NS	< 10		< 10		< 10	
Chlorobenzene	100	< 1.0		< 1.0		< 1.0	
Chloroethane	NS	< 2.0		< 2.0		< 2.0	
Chloroform	70	< 1.0		< 1.0		< 1.0	
cis-1,2-Dichloroethene	70	< 1.0		< 1.0		< 1.0	
Dibromochloromethane	2	< 0.50		< 0.50		< 0.50	
Ethyl ether	NS	< 1.0		< 1.0		< 1.0	
Ethylbenzene	700	< 1.0		< 1.0		< 1.0	
Ethyl-tert-butyl ether	NS	< 5.0		< 5.0		< 5.0	
Freon 11	NS	< 1.0		< 1.0		< 1.0	
Isopropylbenzene (Cumene)	NS	< 1.0		< 1.0		< 1.0	
m,p-Xylenes	10,000	< 2.0		< 2.0		< 2.0	
Methyl tert-butyl ether	70	1.7		18		24	
Methylene chloride	5	< 1.0		< 1.0		< 1.0	
Naphthalene	140	< 5.0		< 5.0		< 5.0	
o-Xylene	10,000	< 1.0		< 1.0		< 1.0	
sec-Butylbenzene	NS	< 1.0		< 1.0		< 1.0	
Styrene	100	< 1.0		< 1.0		< 1.0	
tert-Amyl Methyl Ether	NS	< 5.0		13		14	
Tetrachloroethene	5	< 1.0		< 1.0		< 1.0	
Tetrahydrofuran	NS	< 10		< 10		< 10 *	
Toluene	1,000	< 1.0		< 1.0		< 1.0	
trans-1,2-Dichloroethene	100	< 1.0		< 1.0		< 1.0	
Trichloroethene	5	**19**		**13**		**16**	
Vinyl chloride	2	< 1.0		< 1.0		< 1.0	
Xylenes, Total	10,000						
Method EPA522, µg/L							
1,4-Dioxane	0.3	< 50	0.26	< 50	**0.39**	< 50	< 0.20

Notes:
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NS = No Standard
N = Normal Sample
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J = The analyte was positively identified;
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Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1022	MW-1022	MW-1022	MW-1022	MW-1022	MW-1022
	Sample Date	9-Sep-15	11-Sep-15	1-Mar-16	15-Mar-16	24-Aug-16	26-Aug-16
	Sample Type	N	N	N	N	N	N
Analyte	**MA-GW-1**						
Method 8260, µg/L							
1,1,1-Trichloroethane	200	< 1.0		< 1.0		< 1.0	
1,1-Dichloroethane	70	< 1.0		< 1.0		< 1.0	
1,1-Dichloroethene	7	< 1.0		< 1.0		< 1.0	
1,2,3-Trichlorobenzene	NS	< 1.0		< 1.0		< 1.0	
1,2,4-Trichlorobenzene	70	< 1.0		< 1.0		< 1.0	
1,2,4-Trimethylbenzene	NS	< 1.0		< 1.0		< 1.0	
1,2-Dichlorobenzene	600	< 1.0		< 1.0		< 1.0	
1,2-Dichloroethane	5	< 1.0		< 1.0		< 1.0	
1,2-Dichloroethene	NS						
1,3,5-Trimethylbenzene	NS	< 1.0		< 1.0		< 1.0	
1,3-Dichlorobenzene	100	< 1.0		< 1.0		< 1.0	
1,4-Dichlorobenzene	5	< 1.0		< 1.0		< 1.0	
2-Butanone	4,000	< 10 *		< 10		< 10	
4-Isopropyltoluene	NS	< 1.0		< 1.0		< 1.0	
Acetone	6,300	51		88		< 50	
Benzene	5	< 1.0		< 1.0		< 1.0	
Bromodichloromethane	3	< 0.50		< 0.50		< 0.50	
Bromoform	4	< 1.0		< 1.0		< 1.0	
Carbon disulfide	NS	< 10		< 10		< 10 *	
Chlorobenzene	100	< 1.0		< 1.0		< 1.0	
Chloroethane	NS	< 2.0		< 2.0		< 2.0	
Chloroform	70	< 1.0		< 1.0		< 1.0	
cis-1,2-Dichloroethene	70	< 1.0		< 1.0		< 1.0	
Dibromochloromethane	2	< 0.50		< 0.50		< 0.50	
Ethyl ether	NS	< 1.0		< 1.0		< 1.0	
Ethylbenzene	700	< 1.0		< 1.0		< 1.0	
Ethyl-tert-butyl ether	NS	< 5.0		< 5.0		< 5.0	
Freon 11	NS	< 1.0		< 1.0		< 1.0	
Isopropylbenzene (Cumene)	NS	< 1.0		< 1.0		< 1.0	
m,p-Xylenes	10,000	< 2.0		< 2.0		< 2.0	
Methyl tert-butyl ether	70	< 1.0		< 1.0		< 1.0	
Methylene chloride	5	< 1.0		< 1.0		< 1.0	
Naphthalene	140	< 5.0		< 5.0		< 5.0	
o-Xylene	10,000	< 1.0		< 1.0		< 1.0	
sec-Butylbenzene	NS	< 1.0		< 1.0		< 1.0	
Styrene	100	< 1.0		< 1.0		< 1.0	
tert-Amyl Methyl Ether	NS	< 5.0		< 5.0		< 5.0	
Tetrachloroethene	5	< 1.0		< 1.0		< 1.0	
Tetrahydrofuran	NS	< 10		< 10		< 10	
Toluene	1,000	< 1.0		< 1.0		< 1.0	
trans-1,2-Dichloroethene	100	< 1.0		< 1.0		< 1.0	
Trichloroethene	5	2.9		3.4		3.1	
Vinyl chloride	2	< 1.0		< 1.0		< 1.0 *	
Xylenes, Total	10,000						
Method EPA522, µg/L							
1,4-Dioxane	0.3	< 50	< 0.20	< 50	< 0.20	< 50	< 0.20

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1023	MW-1023	MW-1023	MW-1023	MW-1023	MW-1023	MW-1023	MW-1023
	Sample Date	31-Mar-15	2-Apr-15	9-Sep-15	11-Sep-15	1-Mar-16	15-Mar-16	24-Aug-16	26-Aug-16
	Sample Type	N	N	N	N	N	N	N	N
Analyte	**MA-GW-1**								
Method 8260, µg/L									
1,1,1-Trichloroethane	200	< 1.0		< 1.0		< 1.0		< 1.0	
1,1-Dichloroethane	70	< 1.0		< 1.0		< 1.0		< 1.0	
1,1-Dichloroethene	7	< 1.0		< 1.0		< 1.0		< 1.0	
1,2,3-Trichlorobenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
1,2,4-Trichlorobenzene	70	< 1.0		< 1.0		< 1.0		< 1.0	
1,2,4-Trimethylbenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
1,2-Dichlorobenzene	600	< 1.0		< 1.0		< 1.0		< 1.0	
1,2-Dichloroethane	5	< 1.0		< 1.0		< 1.0		< 1.0	
1,2-Dichloroethene	NS								
1,3,5-Trimethylbenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
1,3-Dichlorobenzene	100	< 1.0		< 1.0		< 1.0		< 1.0	
1,4-Dichlorobenzene	5	< 1.0		< 1.0		< 1.0		< 1.0	
2-Butanone	4,000	< 10 *		< 10 *		< 10		< 10	
4-Isopropyltoluene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Acetone	6,300	< 50		52		< 50		< 50	
Benzene	5	< 1.0		< 1.0		< 1.0		< 1.0	
Bromodichloromethane	3	< 0.50		< 0.50		< 0.50		< 0.50	
Bromoform	4	< 1.0		< 1.0		< 1.0		< 1.0	
Carbon disulfide	NS	< 10		< 10		< 10		< 10 *	
Chlorobenzene	100	< 1.0		< 1.0		< 1.0		< 1.0	
Chloroethane	NS	< 2.0		< 2.0		< 2.0		< 2.0	
Chloroform	70	< 1.0		< 1.0		< 1.0		< 1.0	
cis-1,2-Dichloroethene	70	1.0		14		< 1.0		42	
Dibromochloromethane	2	< 0.50		< 0.50		< 0.50		< 0.50	
Ethyl ether	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Ethylbenzene	700	< 1.0		< 1.0		< 1.0		< 1.0	
Ethyl-tert-butyl ether	NS	< 5.0		< 5.0		< 5.0		< 5.0	
Freon 11	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Isopropylbenzene (Cumene)	NS	< 1.0		< 1.0		< 1.0		< 1.0	
m,p-Xylenes	10,000	< 2.0		< 2.0		< 2.0		< 2.0	
Methyl tert-butyl ether	70	< 1.0		< 1.0		< 1.0		< 1.0	
Methylene chloride	5	< 1.0		< 1.0		< 1.0		< 1.0	
Naphthalene	140	< 5.0		< 5.0		< 5.0		< 5.0	
o-Xylene	10,000	< 1.0		< 1.0		< 1.0		< 1.0	
sec-Butylbenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Styrene	100	< 1.0		< 1.0		< 1.0		< 1.0	
tert-Amyl Methyl Ether	NS	< 5.0		< 5.0		< 5.0		< 5.0	
Tetrachloroethene	5	< 1.0		< 1.0		< 1.0		< 1.0	
Tetrahydrofuran	NS	< 10		< 10		< 10		< 10	
Toluene	1,000	< 1.0		< 1.0		< 1.0		< 1.0	
trans-1,2-Dichloroethene	100	< 1.0		< 1.0		< 1.0		< 1.0	
Trichloroethene	5	**14**		**42**		**5.0**		2.8	
Vinyl chloride	2	< 1.0		< 1.0		< 1.0		< 1.0 *	
Xylenes, Total	10,000								
Method EPA522, µg/L									
1,4-Dioxane	0.3	< 50	**0.81**	< 50	< 0.20	< 50	< 0.20	< 50	< 0.20

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1024D	MW-1024D	MW-1024D	MW-1024D	MW-1024D	MW-1024D	MW-1024D	MW-1024D
	Sample Date	31-Mar-15	2-Apr-15	9-Sep-15	11-Sep-15	1-Mar-16	15-Mar-16	24-Aug-16	26-Aug-16
	Sample Type	N	N	N	N	N	N	N	N
Analyte	**MA-GW-1**								
Method 8260, µg/L									
1,1,1-Trichloroethane	200	< 1.0		< 1.0		< 1.0		< 1.0	
1,1-Dichloroethane	70	< 1.0		< 1.0		< 1.0		< 1.0	
1,1-Dichloroethene	7	< 1.0		< 1.0		< 1.0		< 1.0	
1,2,3-Trichlorobenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
1,2,4-Trichlorobenzene	70	< 1.0		< 1.0		< 1.0		< 1.0	
1,2,4-Trimethylbenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
1,2-Dichlorobenzene	600	< 1.0		< 1.0		< 1.0		< 1.0	
1,2-Dichloroethane	5	< 1.0		< 1.0		< 1.0		< 1.0	
1,2-Dichloroethene	NS								
1,3,5-Trimethylbenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
1,3-Dichlorobenzene	100	< 1.0		< 1.0		< 1.0		< 1.0	
1,4-Dichlorobenzene	5	< 1.0		< 1.0		< 1.0		< 1.0	
2-Butanone	4,000	< 10 *		11		< 10		< 10	
4-Isopropyltoluene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Acetone	6,300	< 50		120		< 50		< 50	
Benzene	5	< 1.0		< 1.0		< 1.0		< 1.0	
Bromodichloromethane	3	< 0.50		< 0.50		< 0.50		< 0.50	
Bromoform	4	< 1.0		< 1.0		< 1.0		< 1.0	
Carbon disulfide	NS	< 10		< 10		< 10		< 10 *	
Chlorobenzene	100	< 1.0		< 1.0		< 1.0		< 1.0	
Chloroethane	NS	< 2.0		< 2.0		< 2.0		< 2.0	
Chloroform	70	< 1.0		< 1.0		< 1.0		< 1.0	
cis-1,2-Dichloroethene	70	12		27		14		12	
Dibromochloromethane	2	< 0.50		< 0.50		< 0.50		< 0.50	
Ethyl ether	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Ethylbenzene	700	< 1.0		< 1.0		< 1.0		< 1.0	
Ethyl-tert-butyl ether	NS	< 5.0		< 5.0		< 5.0		< 5.0	
Freon 11	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Isopropylbenzene (Cumene)	NS	< 1.0		< 1.0		< 1.0		< 1.0	
m,p-Xylenes	10,000	< 2.0		< 2.0		< 2.0		< 2.0	
Methyl tert-butyl ether	70	< 1.0		< 1.0		< 1.0		< 1.0	
Methylene chloride	5	< 1.0		< 1.0		< 1.0		< 1.0	
Naphthalene	140	< 5.0		< 5.0		< 5.0		< 5.0	
o-Xylene	10,000	< 1.0		< 1.0		< 1.0		< 1.0	
sec-Butylbenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Styrene	100	< 1.0		< 1.0		< 1.0		< 1.0	
tert-Amyl Methyl Ether	NS	< 5.0		< 5.0		< 5.0		< 5.0	
Tetrachloroethene	5	< 1.0		< 1.0		< 1.0		< 1.0	
Tetrahydrofuran	NS	< 10		< 10		< 10		< 10	
Toluene	1,000	< 1.0		< 1.0		< 1.0		< 1.0	
trans-1,2-Dichloroethene	100	< 1.0		< 1.0		< 1.0		< 1.0	
Trichloroethene	5	**33**		**70**		**22**		1.1	
Vinyl chloride	2	< 1.0		< 1.0		< 1.0		< 1.0 *	
Xylenes, Total	10,000								
Method EPA522, µg/L									
1,4-Dioxane	0.3	< 50	**0.36**	< 50	< 0.20	< 50	< 0.20	< 50	< 0.20

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1025D	MW-1025D	MW-1025D	MW-1025D	MW-1025D	MW-1025D	MW-1025D	MW-1025D
	Sample Date	31-Mar-15	2-Apr-15	9-Sep-15	11-Sep-15	1-Mar-16	15-Mar-16	24-Aug-16	26-Aug-16
	Sample Type	N	N	N	N	N	N	N	N
Analyte	**MA-GW-1**								
Method 8260, µg/L									
1,1,1-Trichloroethane	200	< 1.0		< 1.0		< 1.0		< 1.0	
1,1-Dichloroethane	70	< 1.0		< 1.0		< 1.0		< 1.0	
1,1-Dichloroethene	7	< 1.0		< 1.0		< 1.0		< 1.0	
1,2,3-Trichlorobenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
1,2,4-Trichlorobenzene	70	< 1.0		< 1.0		< 1.0		< 1.0	
1,2,4-Trimethylbenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
1,2-Dichlorobenzene	600	< 1.0		< 1.0		< 1.0		< 1.0	
1,2-Dichloroethane	5	< 1.0		< 1.0		< 1.0		< 1.0	
1,2-Dichloroethene	NS								
1,3,5-Trimethylbenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
1,3-Dichlorobenzene	100	< 1.0		< 1.0		< 1.0		< 1.0	
1,4-Dichlorobenzene	5	< 1.0		< 1.0		< 1.0		< 1.0	
2-Butanone	4,000	< 10 *		12		< 10		< 10	
4-Isopropyltoluene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Acetone	6,300	< 50		170		< 50		< 50	
Benzene	5	< 1.0		< 1.0		< 1.0		< 1.0	
Bromodichloromethane	3	< 0.50		< 0.50		< 0.50		< 0.50	
Bromoform	4	< 1.0		< 1.0		< 1.0		< 1.0	
Carbon disulfide	NS	< 10		< 10		< 10		< 10 *	
Chlorobenzene	100	< 1.0		< 1.0		< 1.0		< 1.0	
Chloroethane	NS	< 2.0		< 2.0		< 2.0		< 2.0	
Chloroform	70	< 1.0		< 1.0		< 1.0		< 1.0	
cis-1,2-Dichloroethene	70	1.0		45		4.4		< 1.0	
Dibromochloromethane	2	< 0.50		< 0.50		< 0.50		< 0.50	
Ethyl ether	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Ethylbenzene	700	< 1.0		< 1.0		< 1.0		< 1.0	
Ethyl-tert-butyl ether	NS	< 5.0		< 5.0		< 5.0		< 5.0	
Freon 11	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Isopropylbenzene (Cumene)	NS	< 1.0		< 1.0		< 1.0		< 1.0	
m,p-Xylenes	10,000	< 2.0		< 2.0		< 2.0		< 2.0	
Methyl tert-butyl ether	70	< 1.0		< 1.0		< 1.0		< 1.0	
Methylene chloride	5	< 1.0		< 1.0		< 1.0		< 1.0	
Naphthalene	140	< 5.0		< 5.0		< 5.0		< 5.0	
o-Xylene	10,000	< 1.0		< 1.0		< 1.0		< 1.0	
sec-Butylbenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Styrene	100	< 1.0		< 1.0		< 1.0		< 1.0	
tert-Amyl Methyl Ether	NS	< 5.0		< 5.0		< 5.0		< 5.0	
Tetrachloroethene	5	< 1.0		< 1.0		< 1.0		< 1.0	
Tetrahydrofuran	NS	< 10		< 10		< 10		< 10	
Toluene	1,000	< 1.0		< 1.0		< 1.0		< 1.0	
trans-1,2-Dichloroethene	100	< 1.0		< 1.0		< 1.0		< 1.0	
Trichloroethene	5	< 1.0		**59**		1.4		< 1.0	
Vinyl chloride	2	< 1.0		< 1.0		< 1.0		< 1.0 *	
Xylenes, Total	10,000								
Method EPA522, µg/L									
1,4-Dioxane	0.3	< 50	< 0.20	< 50	< 0.20	< 50	< 0.20	< 50	< 0.20

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1025M	MW-1025M	MW-1025M	MW-1025M	MW-1025M	MW-1025M	MW-1025M	MW-1025M	MW-1025M	MW-1025M	MW-1025M	MW-1025M
	Sample Date	31-Mar-15	31-Mar-15	2-Apr-15	9-Sep-15	9-Sep-15	11-Sep-15	1-Mar-16	1-Mar-16	15-Mar-16	24-Aug-16	24-Aug-16	26-Aug-16
	Sample Type	N	FD	N	N	FD	N	N	FD	N	N	FD	N
Analyte	**MA-GW-1**												
Method 8260, µg/L													
1,1,1-Trichloroethane	200	3.7	3.9		2.3	2.3		1.4	1.4		< 1.0	< 1.0	
1,1-Dichloroethane	70	3.2	3.1		< 1.0	< 1.0		< 1.0	< 1.0		1.6	1.8	
1,1-Dichloroethene	7	3.8	4.3		3.8	3.9		< 1.0	< 1.0		4.5	5.7	
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,2-Dichlorobenzene	600	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,2-Dichloroethane	5	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,2-Dichloroethene	NS												
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,3-Dichlorobenzene	100	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,4-Dichlorobenzene	5	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
2-Butanone	4,000	< 10 *	< 10 *		< 10	< 10		< 10	< 10		< 10	< 10	
4-Isopropyltoluene	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Acetone	6,300	< 50	< 50		240	240		< 50	< 50		< 50	< 50 *	
Benzene	5	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Bromodichloromethane	3	< 0.50	< 0.50		< 0.50	< 0.50		< 0.50	< 0.50		< 0.50	< 0.50	
Bromoform	4	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Carbon disulfide	NS	< 10	< 10		< 10	< 10		< 10	< 10		< 10 *	< 10	
Chlorobenzene	100	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Chloroethane	NS	< 2.0	< 2.0		< 2.0	< 2.0		< 2.0	< 2.0		< 2.0	< 2.0	
Chloroform	70	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
cis-1,2-Dichloroethene	70	3.2	3.4		< 1.0	< 1.0		< 1.0	< 1.0		48	53	
Dibromochloromethane	2	< 0.50	< 0.50		< 0.50	< 0.50		< 0.50	< 0.50		< 0.50	< 0.50	
Ethyl ether	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Ethylbenzene	700	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0		< 5.0	< 5.0		< 5.0	< 5.0		< 5.0	< 5.0	
Freon 11	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
m,p-Xylenes	10,000	< 2.0	< 2.0		< 2.0	< 2.0		< 2.0	< 2.0		< 2.0	< 2.0	
Methyl tert-butyl ether	70	< 1.0	1.1		< 1.0	< 1.0		4.7	4.7		5.2	6.1	
Methylene chloride	5	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Naphthalene	140	< 5.0	< 5.0		< 5.0	< 5.0		< 5.0	< 5.0		< 5.0	< 5.0	
o-Xylene	10,000	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
sec-Butylbenzene	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Styrene	100	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0		< 5.0	< 5.0		< 5.0	< 5.0		< 5.0	< 5.0	
Tetrachloroethene	5	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Tetrahydrofuran	NS	< 10	< 10		< 10	< 10		< 10	< 10		< 10	< 10 *	
Toluene	1,000	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
trans-1,2-Dichloroethene	100	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Trichloroethene	5	**98**	**97**		**60**	**58**		**30**	**29**		**21**	**23**	
Vinyl chloride	2	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0 *	< 1.0	
Xylenes, Total	10,000												
Method EPA522, µg/L													
1,4-Dioxane	0.3	< 50	< 50	**2.2**	< 50	< 50	0.24	< 50	< 50	< 0.20	< 50	< 50 *	< 0.20

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1026D	MW-1026D	MW-1026D	MW-1026D
	Sample Date	1-Mar-16	15-Mar-16	24-Aug-16	26-Aug-16
	Sample Type	N	N	N	N
Analyte	**MA-GW-1**				
Method 8260, µg/L					
1,1,1-Trichloroethane	200	*< 1.0*		*< 1.0*	
1,1-Dichloroethane	70	*< 1.0*		*< 1.0*	
1,1-Dichloroethene	7	*< 1.0*		*< 1.0*	
1,2,3-Trichlorobenzene	NS	*< 1.0*		*< 1.0*	
1,2,4-Trichlorobenzene	70	*< 1.0*		*< 1.0*	
1,2,4-Trimethylbenzene	NS	*< 1.0*		*< 1.0*	
1,2-Dichlorobenzene	600	*< 1.0*		*< 1.0*	
1,2-Dichloroethane	5	*< 1.0*		*< 1.0*	
1,2-Dichloroethene	NS				
1,3,5-Trimethylbenzene	NS	*< 1.0*		*< 1.0*	
1,3-Dichlorobenzene	100	*< 1.0*		*< 1.0*	
1,4-Dichlorobenzene	5	*< 1.0*		*< 1.0*	
2-Butanone	4,000	*< 10*		*< 10*	
4-Isopropyltoluene	NS	*< 1.0*		*< 1.0*	
Acetone	6,300	*< 50*		*< 50 **	
Benzene	5	*< 1.0*		*< 1.0*	
Bromodichloromethane	3	*< 0.50*		*< 0.50*	
Bromoform	4	*< 1.0*		*< 1.0*	
Carbon disulfide	NS	*< 10*		*< 10*	
Chlorobenzene	100	*< 1.0*		*< 1.0*	
Chloroethane	NS	*< 2.0*		*< 2.0*	
Chloroform	70	*< 1.0*		*< 1.0*	
cis-1,2-Dichloroethene	70	26		40	
Dibromochloromethane	2	*< 0.50*		*< 0.50*	
Ethyl ether	NS	*< 1.0*		*< 1.0*	
Ethylbenzene	700	*< 1.0*		*< 1.0*	
Ethyl-tert-butyl ether	NS	*< 5.0*		*< 5.0*	
Freon 11	NS	*< 1.0*		*< 1.0*	
Isopropylbenzene (Cumene)	NS	*< 1.0*		*< 1.0*	
m,p-Xylenes	10,000	*< 2.0*		*< 2.0*	
Methyl tert-butyl ether	70	*< 1.0*		*< 1.0*	
Methylene chloride	5	*< 1.0*		*< 1.0*	
Naphthalene	140	*< 5.0*		*< 5.0*	
o-Xylene	10,000	*< 1.0*		*< 1.0*	
sec-Butylbenzene	NS	*< 1.0*		*< 1.0*	
Styrene	100	*< 1.0*		*< 1.0*	
tert-Amyl Methyl Ether	NS	*< 5.0*		*< 5.0*	
Tetrachloroethene	5	*< 1.0*		*< 1.0*	
Tetrahydrofuran	NS	*< 10*		*< 10 **	
Toluene	1,000	*< 1.0*		*< 1.0*	
trans-1,2-Dichloroethene	100	*< 1.0*		*< 1.0*	
Trichloroethene	5	**69**		**43**	
Vinyl chloride	2	*< 1.0*		*< 1.0*	
Xylenes, Total	10,000				
Method EPA522, µg/L					
1,4-Dioxane	0.3	*< 50*	**0.51**	*< 50*	**0.37**

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1027	MW-1027	MW-1027	MW-1027
	Sample Date	31-Mar-15	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N	N
Analyte	**MA-GW-1**				
Method 8260, µg/L					
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS				
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	< 10	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	51	< 50	< 50
Benzene	5	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10	< 10 *
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10	< 10
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0 *
Xylenes, Total	10,000				
Method EPA522, µg/L					
1,4-Dioxane	0.3	< 50	< 50	< 50	< 50

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1028	MW-1028	MW-1028
	Sample Date	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N
Analyte	**MA-GW-1**			
Method 8260, µg/L				
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS			
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0
Acetone	6,300	50	< 50	< 50
Benzene	5	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10 *
Chlorobenzene	100	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10
Toluene	1,000	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0
Trichloroethene	5	**6.0**	**5.6**	**5.6**
Vinyl chloride	2	< 1.0	< 1.0	< 1.0 *
Xylenes, Total	10,000			
Method EPA522, µg/L				
1,4-Dioxane	0.3	< 50	< 50	< 50

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1030	MW-1030	MW-1030	MW-1030
	Sample Date	31-Mar-15	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N	N
Analyte	**MA-GW-1**				
Method 8260, µg/L					
1,1,1-Trichloroethane	200	4.9	1.1	1.6	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	1.9	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS				
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	< 10 *	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	< 50	< 50	< 50 *
Benzene	5	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	1.2	< 1.0	2.5	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10	< 10 *
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	**31**	**6.6**	**9.5**	4.0
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0
Xylenes, Total	10,000				
Method EPA522, µg/L					
1,4-Dioxane	0.3	< 50	< 50	< 50	< 50 *

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1031	MW-1031	MW-1031
	Sample Date	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N
Analyte	**MA-GW-1**			
Method 8260, µg/L				
1,1,1-Trichloroethane	200	5.1	< 1.0	< 1.0
1,1-Dichloroethane	70	2.9	< 1.0	< 1.0
1,1-Dichloroethene	7	5.9	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS			
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0
Acetone	6,300	54	< 50	< 50 *
Benzene	5	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	1.7	< 1.0	< 1.0
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	2.4	3.5	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10 *
Toluene	1,000	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0
Trichloroethene	5	**120**	**6.0**	< 1.0
Vinyl chloride	2	< 1.0	< 1.0	< 1.0
Xylenes, Total	10,000			
Method EPA522, µg/L				
1,4-Dioxane	0.3	< 50	< 50	< 50 *

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1032	MW-1032	MW-1032
	Sample Date	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N
Analyte	**MA-GW-1**			
Method 8260, µg/L				
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	1.3	1.5
1,1-Dichloroethene	7	1.5	2.1	2.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS			
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10 *	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0
Acetone	6,300	65	< 50	< 50 *
Benzene	5	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	4.7	43	47
Methylene chloride	5	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	15	14
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10 *
Toluene	1,000	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0
Trichloroethene	5	**6.7**	**10**	**6.9**
Vinyl chloride	2	< 1.0	< 1.0	< 1.0
Xylenes, Total	10,000			
Method EPA522, µg/L				
1,4-Dioxane	0.3	< 50	< 50	< 50

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1033	MW-1033	MW-1033	MW-1033	MW-1033	MW-1033	MW-1033	MW-1033
	Sample Date	31-Mar-15	2-Apr-15	9-Sep-15	11-Sep-15	1-Mar-16	15-Mar-16	24-Aug-16	26-Aug-16
	Sample Type	N	N	N	N	N	N	N	N
Analyte	**MA-GW-1**								
Method 8260, µg/L									
1,1,1-Trichloroethane	200	< 1.0		< 1.0		< 1.0		< 1.0	
1,1-Dichloroethane	70	< 1.0		< 1.0		< 1.0		< 1.0	
1,1-Dichloroethene	7	< 1.0		< 1.0		< 1.0		< 1.0	
1,2,3-Trichlorobenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
1,2,4-Trichlorobenzene	70	< 1.0		< 1.0		< 1.0		< 1.0	
1,2,4-Trimethylbenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
1,2-Dichlorobenzene	600	< 1.0		< 1.0		< 1.0		< 1.0	
1,2-Dichloroethane	5	< 1.0		< 1.0		< 1.0		< 1.0	
1,2-Dichloroethene	NS								
1,3,5-Trimethylbenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
1,3-Dichlorobenzene	100	< 1.0		< 1.0		< 1.0		< 1.0	
1,4-Dichlorobenzene	5	< 1.0		< 1.0		< 1.0		< 1.0	
2-Butanone	4,000	< 10 *		< 10		< 10		< 10	
4-Isopropyltoluene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Acetone	6,300	< 50		50		< 50		< 50 *	
Benzene	5	< 1.0		< 1.0		< 1.0		< 1.0	
Bromodichloromethane	3	< 0.50		< 0.50		< 0.50		< 0.50	
Bromoform	4	< 1.0		< 1.0		< 1.0		< 1.0	
Carbon disulfide	NS	< 10		< 10		< 10		< 10	
Chlorobenzene	100	< 1.0		< 1.0		< 1.0		< 1.0	
Chloroethane	NS	< 2.0		< 2.0		< 2.0		< 2.0	
Chloroform	70	< 1.0		< 1.0		< 1.0		< 1.0	
cis-1,2-Dichloroethene	70	< 1.0		< 1.0		< 1.0		< 1.0	
Dibromochloromethane	2	< 0.50		< 0.50		< 0.50		< 0.50	
Ethyl ether	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Ethylbenzene	700	< 1.0		< 1.0		< 1.0		< 1.0	
Ethyl-tert-butyl ether	NS	< 5.0		< 5.0		< 5.0		< 5.0	
Freon 11	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Isopropylbenzene (Cumene)	NS	< 1.0		< 1.0		< 1.0		< 1.0	
m,p-Xylenes	10,000	< 2.0		< 2.0		< 2.0		< 2.0	
Methyl tert-butyl ether	70	< 1.0		< 1.0		< 1.0		< 1.0	
Methylene chloride	5	< 1.0		< 1.0		< 1.0		< 1.0	
Naphthalene	140	< 5.0		< 5.0		< 5.0		< 5.0	
o-Xylene	10,000	< 1.0		< 1.0		< 1.0		< 1.0	
sec-Butylbenzene	NS	< 1.0		< 1.0		< 1.0		< 1.0	
Styrene	100	< 1.0		< 1.0		< 1.0		< 1.0	
tert-Amyl Methyl Ether	NS	< 5.0		< 5.0		< 5.0		< 5.0	
Tetrachloroethene	5	< 1.0		< 1.0		< 1.0		< 1.0	
Tetrahydrofuran	NS	< 10		< 10		< 10		< 10 *	
Toluene	1,000	< 1.0		< 1.0		< 1.0		< 1.0	
trans-1,2-Dichloroethene	100	< 1.0		< 1.0		< 1.0		< 1.0	
Trichloroethene	5	< 1.0		< 1.0		< 1.0		< 1.0	
Vinyl chloride	2	< 1.0		< 1.0		< 1.0		< 1.0	
Xylenes, Total	10,000								
Method EPA522, µg/L									
1,4-Dioxane	0.3	< 50	**0.53**	< 50	**0.75**	< 50	**0.57**	< 50 *	**0.49**

Notes:
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Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1034	MW-1034	MW-1034	MW-1034	MW-1034	MW-1034	MW-1034	MW-1034	MW-1034	MW-1034	MW-1034	MW-1034
	Sample Date	31-Mar-15	31-Mar-15	2-Apr-15	9-Sep-15	9-Sep-15	11-Sep-15	1-Mar-16	1-Mar-16	15-Mar-16	24-Aug-16	24-Aug-16	26-Aug-16
	Sample Type	N	FD	N	N	FD	N	N	FD	N	N	FD	N
Analyte	**MA-GW-1**												
Method 8260, µg/L													
1,1,1-Trichloroethane	200	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,1-Dichloroethane	70	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,1-Dichloroethene	7	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,2-Dichlorobenzene	600	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,2-Dichloroethane	5	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,2-Dichloroethene	NS												
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,3-Dichlorobenzene	100	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
1,4-Dichlorobenzene	5	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
2-Butanone	4,000	< 10 *	< 10 *		< 10 *	< 10 *		< 10	< 10		< 10	< 10	
4-Isopropyltoluene	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Acetone	6,300	< 50	< 50		< 50	52		< 50	< 50		61 *	64 *	
Benzene	5	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Bromodichloromethane	3	< 0.50	< 0.50		< 0.50	< 0.50		< 0.50	< 0.50		< 0.50	< 0.50	
Bromoform	4	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Carbon disulfide	NS	< 10	< 10		< 10	< 10		< 10	< 10		< 10	< 10	
Chlorobenzene	100	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Chloroethane	NS	< 2.0	< 2.0		< 2.0	< 2.0		< 2.0	< 2.0		< 2.0	< 2.0	
Chloroform	70	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
cis-1,2-Dichloroethene	70	11	11		13	13		6.4	6.4		14	14	
Dibromochloromethane	2	< 0.50	< 0.50		< 0.50	< 0.50		< 0.50	< 0.50		< 0.50	< 0.50	
Ethyl ether	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Ethylbenzene	700	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0		< 5.0	< 5.0		< 5.0	< 5.0		< 5.0	< 5.0	
Freon 11	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
m,p-Xylenes	10,000	< 2.0	< 2.0		< 2.0	< 2.0		< 2.0	< 2.0		< 2.0	< 2.0	
Methyl tert-butyl ether	70	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Methylene chloride	5	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Naphthalene	140	< 5.0	< 5.0		< 5.0	< 5.0		< 5.0	< 5.0		< 5.0	< 5.0	
o-Xylene	10,000	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
sec-Butylbenzene	NS	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Styrene	100	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0		< 5.0	< 5.0		< 5.0	< 5.0		< 5.0	< 5.0	
Tetrachloroethene	5	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Tetrahydrofuran	NS	< 10	< 10		< 10	< 10		< 10	< 10		< 10 *	< 10 *	
Toluene	1,000	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
trans-1,2-Dichloroethene	100	1.1	1.1		1.3	1.3		< 1.0	< 1.0		1.2	1.3	
Trichloroethene	5	**35**	**34**		**43**	**43**		**24**	**24**		**46**	**46**	
Vinyl chloride	2	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	
Xylenes, Total	10,000												
Method EPA522, µg/L													
1,4-Dioxane	0.3	< 50	< 50	< 0.20	< 50	< 50	**0.51**	< 50	< 50	< 0.20	< 50 *	< 50 *	< 0.20

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1035	MW-1035	MW-1035
	Sample Date	9-Sep-15	15-Mar-16	24-Aug-16
	Sample Type	N	N	N
Analyte	**MA-GW-1**			
Method 8260, µg/L				
1,1,1-Trichloroethane	200	42	74	34
1,1-Dichloroethane	70	< 4.0	< 4.0	< 4.0
1,1-Dichloroethene	7	< 4.0	5.4	< 4.0
1,2,3-Trichlorobenzene	NS	< 4.0	< 4.0	< 4.0
1,2,4-Trichlorobenzene	70	< 4.0	< 4.0	< 4.0
1,2,4-Trimethylbenzene	NS	< 4.0	< 4.0	< 4.0
1,2-Dichlorobenzene	600	< 4.0	< 4.0	< 4.0
1,2-Dichloroethane	5	< 4.0	< 4.0	< 4.0
1,2-Dichloroethene	NS			
1,3,5-Trimethylbenzene	NS	< 4.0	< 4.0	< 4.0
1,3-Dichlorobenzene	100	< 4.0	< 4.0	< 4.0
1,4-Dichlorobenzene	5	< 4.0	< 4.0	< 4.0
2-Butanone	4,000	< 40	< 40	< 40
4-Isopropyltoluene	NS	< 4.0	< 4.0	< 4.0
Acetone	6,300	< 200	< 200	< 200 *
Benzene	5	< 4.0	< 4.0	< 4.0
Bromodichloromethane	3	< 2.0	< 2.0	< 2.0
Bromoform	4	< 4.0	< 4.0	< 4.0
Carbon disulfide	NS	< 40	< 40	< 40
Chlorobenzene	100	< 4.0	< 4.0	< 4.0
Chloroethane	NS	< 8.0	< 8.0	< 8.0
Chloroform	70	< 4.0	< 4.0	< 4.0
cis-1,2-Dichloroethene	70	< 4.0	< 4.0	< 4.0
Dibromochloromethane	2	< 2.0	< 2.0	< 2.0
Ethyl ether	NS	< 4.0	< 4.0	< 4.0
Ethylbenzene	700	< 4.0	< 4.0	< 4.0
Ethyl-tert-butyl ether	NS	< 20	< 20	< 20
Freon 11	NS	< 4.0	< 4.0	< 4.0
Isopropylbenzene (Cumene)	NS	< 4.0	< 4.0	< 4.0
m,p-Xylenes	10,000	< 8.0	< 8.0	< 8.0
Methyl tert-butyl ether	70	< 4.0	17	< 4.0
Methylene chloride	5	< 4.0	< 4.0	< 4.0
Naphthalene	140	< 20	< 20	< 20
o-Xylene	10,000	< 4.0	< 4.0	< 4.0
sec-Butylbenzene	NS	< 4.0	< 4.0	< 4.0
Styrene	100	< 4.0	< 4.0	< 4.0
tert-Amyl Methyl Ether	NS	< 20	< 20	< 20
Tetrachloroethene	5	< 4.0	< 4.0 *	< 4.0
Tetrahydrofuran	NS	< 40	< 40	< 40 *
Toluene	1,000	< 4.0	< 4.0	< 4.0
trans-1,2-Dichloroethene	100	< 4.0	< 4.0	< 4.0
Trichloroethene	5	**170**	**290**	**140**
Vinyl chloride	2	< 4.0	< 4.0	< 4.0
Xylenes, Total	10,000			
Method EPA522, µg/L				
1,4-Dioxane	0.3	< 200	< 200	< 200

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
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Sample Duplicate exceeds the control limits.
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Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1036	MW-1036	MW-1036	MW-1036	MW-1036	MW-1036
	Sample Date	9-Sep-15	9-Sep-15	1-Mar-16	1-Mar-16	24-Aug-16	24-Aug-16
	Sample Type	N	FD	N	FD	N	FD
Analyte	**MA-GW-1**						
Method 8260, µg/L							
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS						
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10	< 10	< 10	< 10	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	< 50	92	93	110 *	110 *
Benzene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10	< 10	< 10	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	18	18	1.2	1.2	4.6	4.5
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10	< 10	< 10 *	< 10 *
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	**29**	**28**	**6.4**	**6.8**	**11**	**10**
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Xylenes, Total	10,000						
Method EPA522, µg/L							
1,4-Dioxane	0.3	< 50	< 50	< 50	< 50	< 50	< 50

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1037	MW-1037	MW-1037
	Sample Date	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N
Analyte	**MA-GW-1**			
Method 8260, µg/L				
1,1,1-Trichloroethane	200	4.1	83	31
1,1-Dichloroethane	70	< 1.0	< 1.0	< 5.0
1,1-Dichloroethene	7	< 1.0	4.5	< 5.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 5.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 5.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 5.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 5.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 5.0
1,2-Dichloroethene	NS			
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 5.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 5.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 5.0
2-Butanone	4,000	< 10	< 10	< 50
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 5.0
Acetone	6,300	55	82	< 250 *
Benzene	5	< 1.0	< 1.0	< 5.0
Bromodichloromethane	3	< 0.50	< 0.50	< 2.5
Bromoform	4	< 1.0	< 1.0	< 5.0
Carbon disulfide	NS	< 10	< 10	< 50
Chlorobenzene	100	< 1.0	< 1.0	< 5.0
Chloroethane	NS	< 2.0	< 2.0	< 10
Chloroform	70	< 1.0	< 1.0	< 5.0
cis-1,2-Dichloroethene	70	< 1.0	1.4	< 5.0
Dibromochloromethane	2	< 0.50	< 0.50	< 2.5
Ethyl ether	NS	< 1.0	< 1.0	< 5.0
Ethylbenzene	700	< 1.0	< 1.0	< 5.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 25
Freon 11	NS	< 1.0	< 1.0	< 5.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 5.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 10
Methyl tert-butyl ether	70	< 1.0	2.9	< 5.0
Methylene chloride	5	< 1.0	< 1.0	< 5.0
Naphthalene	140	< 5.0	< 5.0	< 25
o-Xylene	10,000	< 1.0	< 1.0	< 5.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 5.0
Styrene	100	< 1.0	< 1.0	< 5.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 25
Tetrachloroethene	5	< 1.0	< 1.0	< 5.0
Tetrahydrofuran	NS	< 10	< 10	< 50 *
Toluene	1,000	< 1.0	< 1.0	< 5.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 5.0
Trichloroethene	5	**14**	**260**	**100**
Vinyl chloride	2	< 1.0	< 1.0	< 5.0
Xylenes, Total	10,000			
Method EPA522, µg/L				
1,4-Dioxane	0.3	< 50	< 50	< 250

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1038	MW-1038	MW-1038
	Sample Date	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N
Analyte	**MA-GW-1**			
Method 8260, µg/L				
1,1,1-Trichloroethane	200	110	**380**	**310**
1,1-Dichloroethane	70	< 10	< 10	< 20
1,1-Dichloroethene	7	< 10	**19**	< 20
1,2,3-Trichlorobenzene	NS	< 10	< 10	< 20
1,2,4-Trichlorobenzene	70	< 10	< 10	< 20
1,2,4-Trimethylbenzene	NS	< 10	< 10	< 20
1,2-Dichlorobenzene	600	< 10	< 10	< 20
1,2-Dichloroethane	5	< 10	< 10	< 20
1,2-Dichloroethene	NS			
1,3,5-Trimethylbenzene	NS	< 10	< 10	< 20
1,3-Dichlorobenzene	100	< 10	< 10	< 20
1,4-Dichlorobenzene	5	< 10	< 10	< 20
2-Butanone	4,000	< 100 *	< 100	< 200
4-Isopropyltoluene	NS	< 10	< 10	< 20
Acetone	6,300	< 500	< 500	< 1,000 *
Benzene	5	< 10	< 10	< 20
Bromodichloromethane	3	< 5.0	< 5.0	< 10
Bromoform	4	< 10	< 10	< 20
Carbon disulfide	NS	< 100	< 100	< 200
Chlorobenzene	100	< 10	< 10	< 20
Chloroethane	NS	< 20	< 20	< 40
Chloroform	70	< 10	< 10	< 20
cis-1,2-Dichloroethene	70	< 10	< 10	< 20
Dibromochloromethane	2	< 5.0	< 5.0	< 10
Ethyl ether	NS	< 10	< 10	< 20
Ethylbenzene	700	< 10	< 10	< 20
Ethyl-tert-butyl ether	NS	< 50	< 50	< 100
Freon 11	NS	< 10	< 10	< 20
Isopropylbenzene (Cumene)	NS	< 10	< 10	< 20
m,p-Xylenes	10,000	< 20	< 20	< 40
Methyl tert-butyl ether	70	< 10	< 10	< 20
Methylene chloride	5	< 10	< 10	< 20
Naphthalene	140	< 50	< 50	< 100
o-Xylene	10,000	< 10	< 10	< 20
sec-Butylbenzene	NS	< 10	< 10	< 20
Styrene	100	< 10	< 10	< 20
tert-Amyl Methyl Ether	NS	< 50	< 50	< 100
Tetrachloroethene	5	< 10	< 10	< 20
Tetrahydrofuran	NS	< 100	< 100	< 200 *
Toluene	1,000	< 10	< 10	< 20
trans-1,2-Dichloroethene	100	< 10	< 10	< 20
Trichloroethene	5	**440**	**1,700**	**1,100 F1**
Vinyl chloride	2	< 10	< 10	< 20
Xylenes, Total	10,000			
Method EPA522, µg/L				
1,4-Dioxane	0.3	< 500	< 500	< 1,000

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 2
Summary of Groundwater Analytical Data - Southern Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	MW-1039	MW-1039	MW-1039
	Sample Date	9-Sep-15	1-Mar-16	24-Aug-16
	Sample Type	N	N	N
Analyte	**MA-GW-1**			
Method 8260, µg/L				
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0
1,2-Dichloroethene	NS			
1,3,5-Trimethylbenzene	NS	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0
2-Butanone	4,000	< 10	< 10	< 10
4-Isopropyltoluene	NS	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 50	90	< 50 *
Benzene	5	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 0.50	< 0.50	< 0.50
Bromoform	4	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 10	< 10	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	29	30	29
Dibromochloromethane	2	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0
Tetrahydrofuran	NS	< 10	< 10	< 10 *
Toluene	1,000	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	1.8	1.9	1.9
Trichloroethene	5	**49**	**61**	**48**
Vinyl chloride	2	< 1.0	< 1.0	< 1.0
Xylenes, Total	10,000			
Method EPA522, µg/L				
1,4-Dioxane	0.3	< 50	< 50	< 50

Notes:
< = Compound not detected. Reportable detection limit is shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
Shaded = Analyte concentration exceeded applicable MCP criteria
J = The analyte was positively identified;
associated numerical value is the approximate
concentration of the analyte in the sample.
* = Laboratory Control Sample or Laboratory Control
Sample Duplicate exceeds the control limits.
F1 = MS and/or MSD Recovery is outside acceptance limits (TABUF)
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 3
Summary of Groundwater Analytical Data - Cow Common Conservation Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	SEN-1D	SEN-1D	SEN-1D	SEN-1D	SEN-1D	SEN-1D	SEN-1D	SEN-1D
	Sample Date	20-Apr-10	07-Oct-10	06-Apr-11	19-Oct-11	23-Jul-12	02-Oct-13	31-Mar-15	15-Mar-16
	Sample Type	N	N	N	N	N	N	N	N
Analyte	**MA-GW-1**								
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.4	1.2
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dioxane	0.3	< 250	< 250	< 250	< 250	< 50	< 50	< 50	< 50
2-Butanone	4,000	< 5.0	< 5.0	< 5.0	< 5.0	< 10 *	< 10	< 10 *	< 10
4-Isopropyltoluene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 5.0	< 5.0	< 5.0	< 5.0	< 50	< 50	< 50	120
Benzene	5	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	2.4	< 2.0	< 2.0	< 2.0	< 10	< 10	< 10	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	1.0	1.3	1.2	< 1.0	1.0	2.3	2.8
Dibromochloromethane	2	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 2.0	< 2.0	< 2.0	< 2.0	1.1	1.2	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 *
Tetrahydrofuran	NS	< 10	< 10	< 5.0	< 5.0	< 10	< 10	< 10	< 10
Toluene	1,000	1.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0

Notes:
< = Compound not detected. Reportable detection limit shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
* = Laboratory Control Standard or Laboratory Control Standard Duplicate exceeds the control limits.
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 3
Summary of Groundwater Analytical Data - Cow Common Conservation Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	SEN-1M	SEN-1M	SEN-1M	SEN-1M	SEN-1M	SEN-1M	SEN-1M
	Sample Date	20-Apr-10	7-Oct-10	6-Apr-11	19-Oct-11	23-Jul-12	2-Oct-13	15-Mar-16
	Sample Type	N	N	N	N	N	N	N
Analyte	**MA-GW-1**							
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dioxane	0.3	< 250	< 250	< 250	< 250	< 50	< 50	< 50
2-Butanone	4,000	< 5.0	< 5.0	< 5.0	< 5.0	< 10 *	< 10	< 10
4-Isopropyltoluene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 5.0	< 5.0	< 5.0	< 5.0	< 50	< 50	< 50
Benzene	5	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50
Bromoform	4	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	2.7	< 2.0	< 2.0	< 2.0	< 10	< 10	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	19	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 *
Tetrahydrofuran	NS	< 10	< 10	< 5.0	< 5.0	< 10	< 10	< 10
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0

Notes:
< = Compound not detected. Reportable detection limit shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
* = Laboratory Control Standard or Laboratory Control Standard Duplicate exceeds the control limits.
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 3
Summary of Groundwater Analytical Data - Cow Common Conservation Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	SEN-2D	SEN-2D	SEN-2D	SEN-2D	SEN-2D	SEN-2D	SEN-2D	SEN-2D	SEN-2D
	Sample Date	20-Apr-10	7-Oct-10	6-Apr-11	19-Oct-11	23-Jul-12	2-Oct-13	4-Sep-14	9-Sep-15	15-Mar-16
	Sample Type	N	N	N	N	N	N	N	N	N
Analyte	**MA-GW-1**									
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dioxane	0.3	< 250	< 250	< 250	< 250	< 50	< 50 *	< 50	< 50	< 50
2-Butanone	4,000	< 5.0	< 5.0	< 5.0	< 5.0	< 10 *	< 10 *	< 10 *	< 10	< 10
4-Isopropyltoluene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 5.0	< 5.0	< 5.0	< 5.0	< 50	< 50	< 50	< 50	< 50
Benzene	5	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	3.1	< 2.0	< 2.0	< 2.0	< 10	< 10	< 10	< 10	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	20	4.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	3.8	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 5.0	< 2.0	< 2.0	2.6	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 *
Tetrahydrofuran	NS	< 10	< 10	< 5.0	< 5.0	< 10	< 10	< 10	< 10	< 10
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0

Notes:
< = Compound not detected. Reportable detection limit shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
* = Laboratory Control Standard or Laboratory Control Standard Duplicate exceeds the control limits.
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 3
Summary of Groundwater Analytical Data - Cow Common Conservation Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	SEN-2M	SEN-2M	SEN-2M	SEN-2M	SEN-2M	SEN-2M	SEN-2M	SEN-2M	SEN-2M	SEN-2M	SEN-2M	SEN-2M
	Sample Date	19-Apr-10	19-Apr-10	7-Oct-10	7-Oct-10	6-Apr-11	6-Apr-11	19-Oct-11	23-Jul-12	2-Oct-13	4-Sep-14	9-Sep-15	15-Mar-16
	Sample Type	N	FD	N	FD	N	FD	N	N	N	N	N	N
Analyte	**MA-GW-1**												
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dioxane	0.3	< 250	< 250	< 250	< 250	< 250	< 250	< 250	< 50	< 50 *	< 50	< 50	< 50
2-Butanone	4,000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10 *	< 10 *	< 10 *	< 10 *	< 10
4-Isopropyltoluene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 50	< 50	< 50	< 50	< 50
Benzene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 10	< 10	< 10	< 10	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 *
Tetrahydrofuran	NS	< 10	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 10	< 10	< 10	< 10	< 10
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0

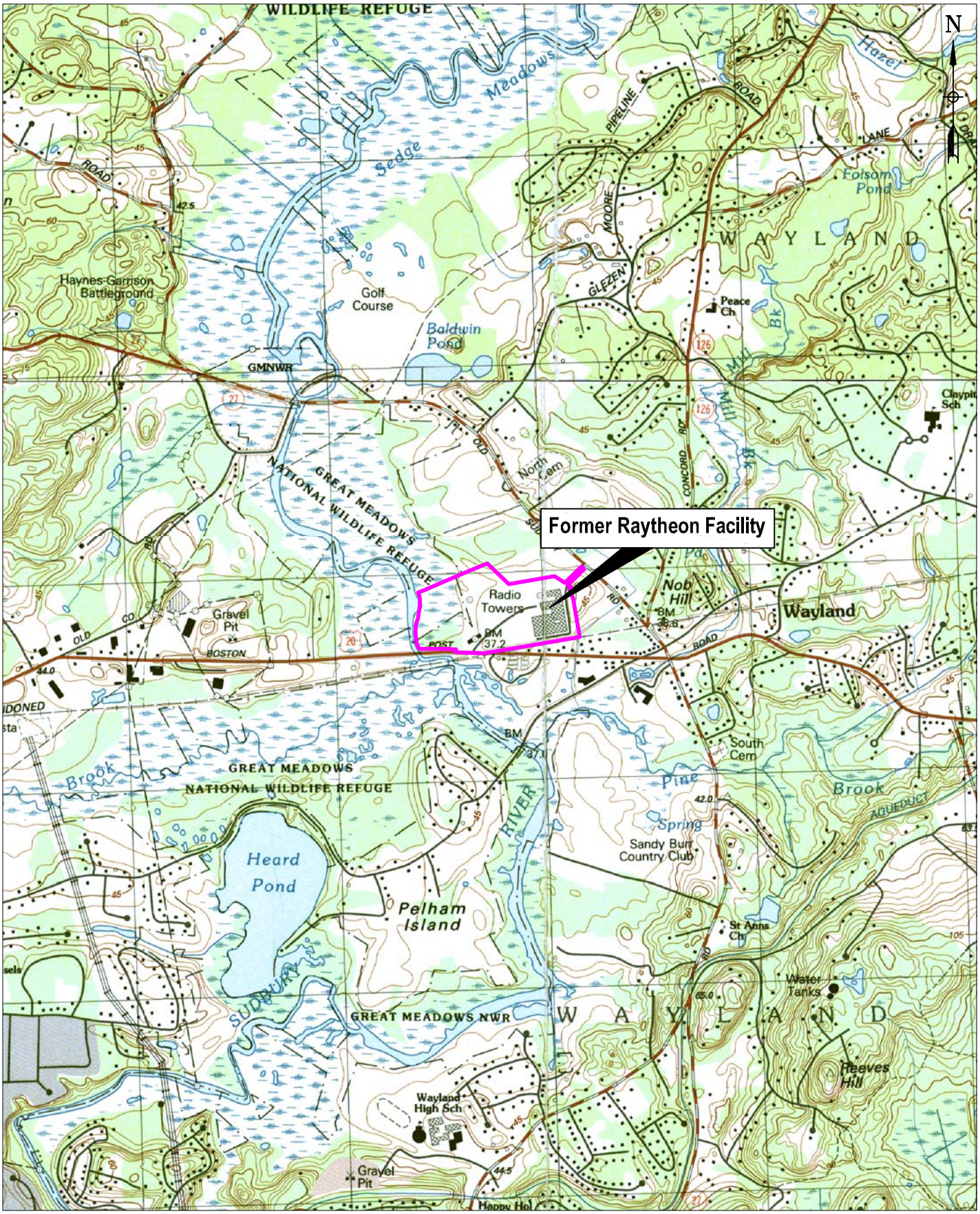
Notes:
< = Compound not detected. Reportable detection limit shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
* = Laboratory Control Standard or Laboratory Control Standard Duplicate exceeds the control limits.
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Table 3
Summary of Groundwater Analytical Data - Cow Common Conservation Area
Former Raytheon Facility
Wayland, Massachusetts

	Location ID	SEN-3	SEN-3	SEN-3	SEN-3	SEN-3	SEN-3	SEN-3	SEN-3	SEN-3	SEN-3
	Sample Date	19-Apr-10	7-Oct-10	6-Apr-11	19-Oct-11	24-Jul-12	24-Jul-12	3-Oct-13	4-Sep-14	9-Sep-15	15-Mar-16
	Sample Type	N	N	N	N	N	FD	N	N	N	N
Analyte	**MA-GW-1**										
1,1,1-Trichloroethane	200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	70	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	600	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dioxane	0.3	< 250	< 250	< 250	< 250	< 50	< 50	< 50	< 50	< 50	< 50
2-Butanone	4,000	< 5.0	< 5.0	< 5.0	< 5.0	< 10 *	< 10 *	< 10	< 10 *	< 10	16
4-Isopropyltoluene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Acetone	6,300	< 5.0	< 5.0	< 5.0	< 5.0	< 50	< 50	< 50	< 50	60	75
Benzene	5	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	3	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	4	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 10	< 10	< 10	< 10	< 10	< 10
Chlorobenzene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Chloroform	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	70	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	2	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Ethyl ether	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	700	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl-tert-butyl ether	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Freon 11	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m,p-Xylenes	10,000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl tert-butyl ether	70	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	5	< 5.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	140	< 5.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	10,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Amyl Methyl Ether	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 *
Tetrahydrofuran	NS	< 10	< 10	< 5.0	< 5.0	< 10	< 10	< 10	< 10	< 10	< 10
Toluene	1,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	100	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	2	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0

Notes:
< = Compound not detected. Reportable detection limit shown.
Empty cells = Not analyzed
NS = No Standard
N = Normal Sample
FD = Field Duplicate Sample
Units are in µg/L = micrograms per liter
* = Laboratory Control Standard or Laboratory Control Standard Duplicate exceeds the control limits.
Analyis performed by TestAmerica - Buffalo, NY, TestAmerica - Burlington, VT,
STONE, Alpha Woods Hole Laboratories.
MA-GW-1 = MCP, 310 CMR 40, Groundwater Stds Category GW-1.

Figures



Legend

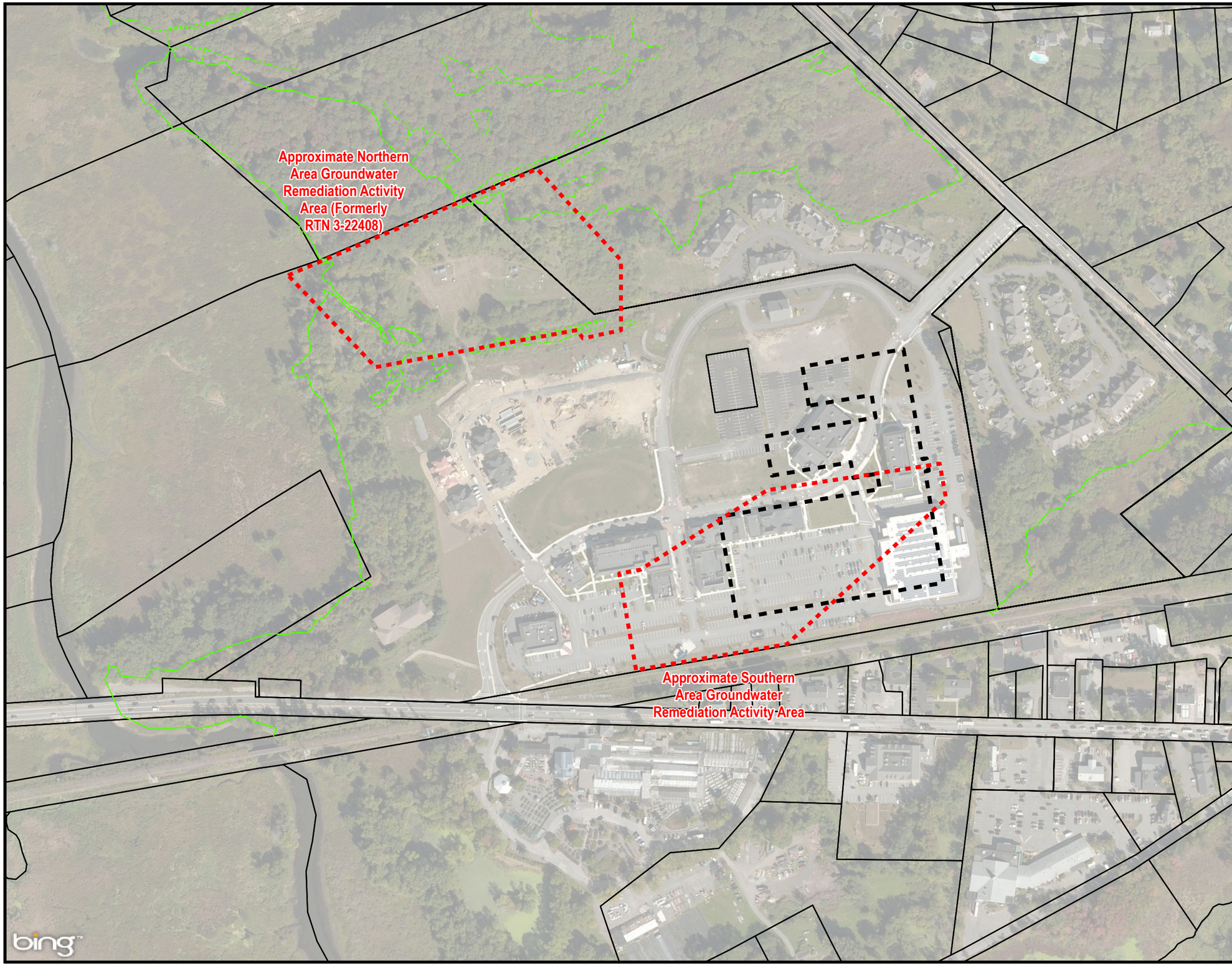
Former Raytheon Facility Property Boundary

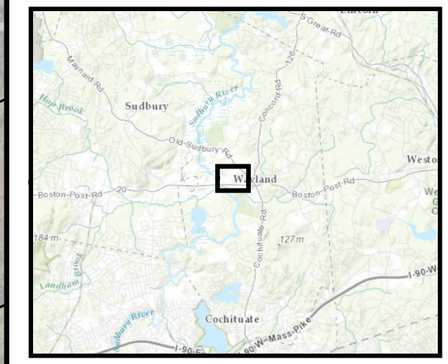
Figure 1 - Site Locus Map
Former Raytheon Facility

Scale = 1:25,000

ERM

R:\Raytheon\Wayland - 1922\Raytheon ROS\ROS Locus.dwg (05/24/2005 - 11:50am Boston)





Legend

- Approximate Remediation Activity Area
- Approximate Former Building Footprint
- Delineated Wetland Boundary
- Parcel Outlines

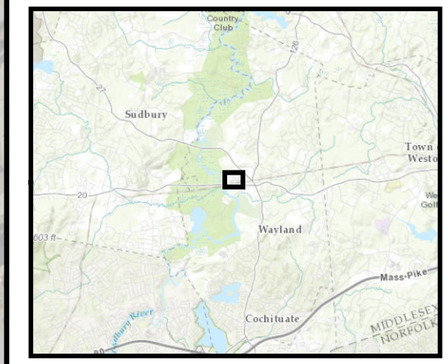
N

0 50 100 200 300 400 500 Feet

Figure 2: Remediation Site Plan
Former Raytheon Facility
Wayland, MA

ERM

G:\Graphics\Clients_Q_U\Raytheon\WAYLAND\MXD\2015_10_ROS\Report\Figure2_RemediationSitePlan_20160523.mxd - brett.shaver - 5/23/2016



Legend

- Monitoring Well Locations
- Approximate Former Building Footprint
- Parcel Outlines

NOTES:

- Aerial Imagery from Microsoft's Bing maps and reproduced under license with ArcGIS 10.3.1

N

0 25 50 100 150 200 250 Feet

Figure 3: Monitoring Well Locations - Southern Area

Former Raytheon Facility
Wayland, MA

ERM

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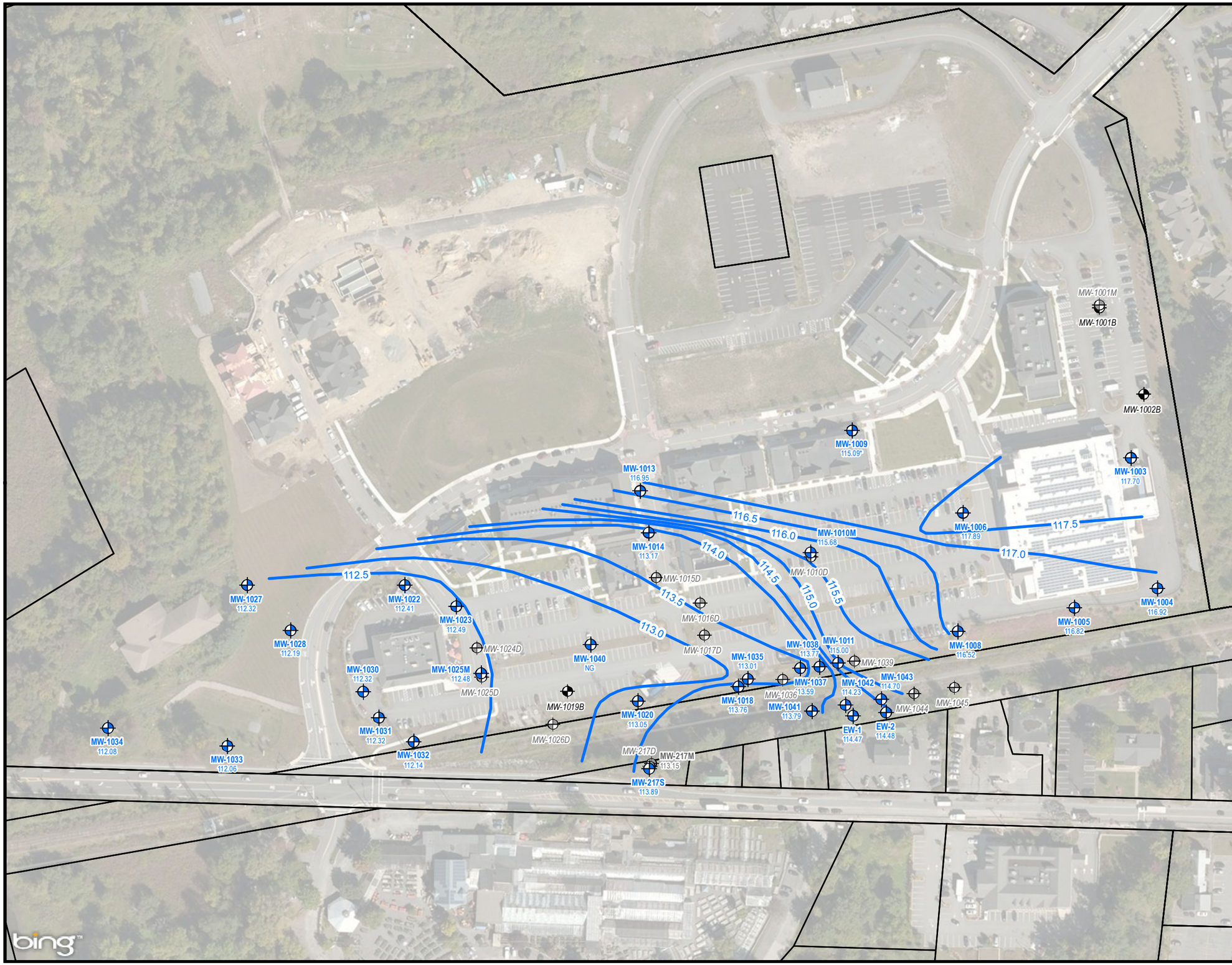
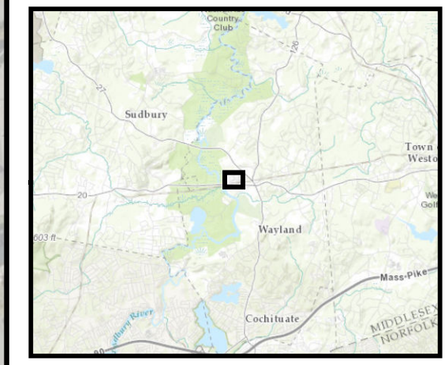




Legend

- Monitoring Well Screened in Lower Hydrogeologic Unit

August 2016 Groundwater Elevation (ft ASL)

- Monitoring Well Screened in Upper Hydrogeologic Unit
- Monitoring Well Screened in Lower Hydrogeologic Unit
- Monitoring Well in Bedrock
- Upper Potentiometric Surface Contour
- Parcel Boundary

NOTES:

- Groundwater Elevation measure on 24 August 2016. Labeled as feet abovesea level (ASL)
-* Anomalous reading not used in placement of groundwater contour lines.
-NG = Not Gauged

N

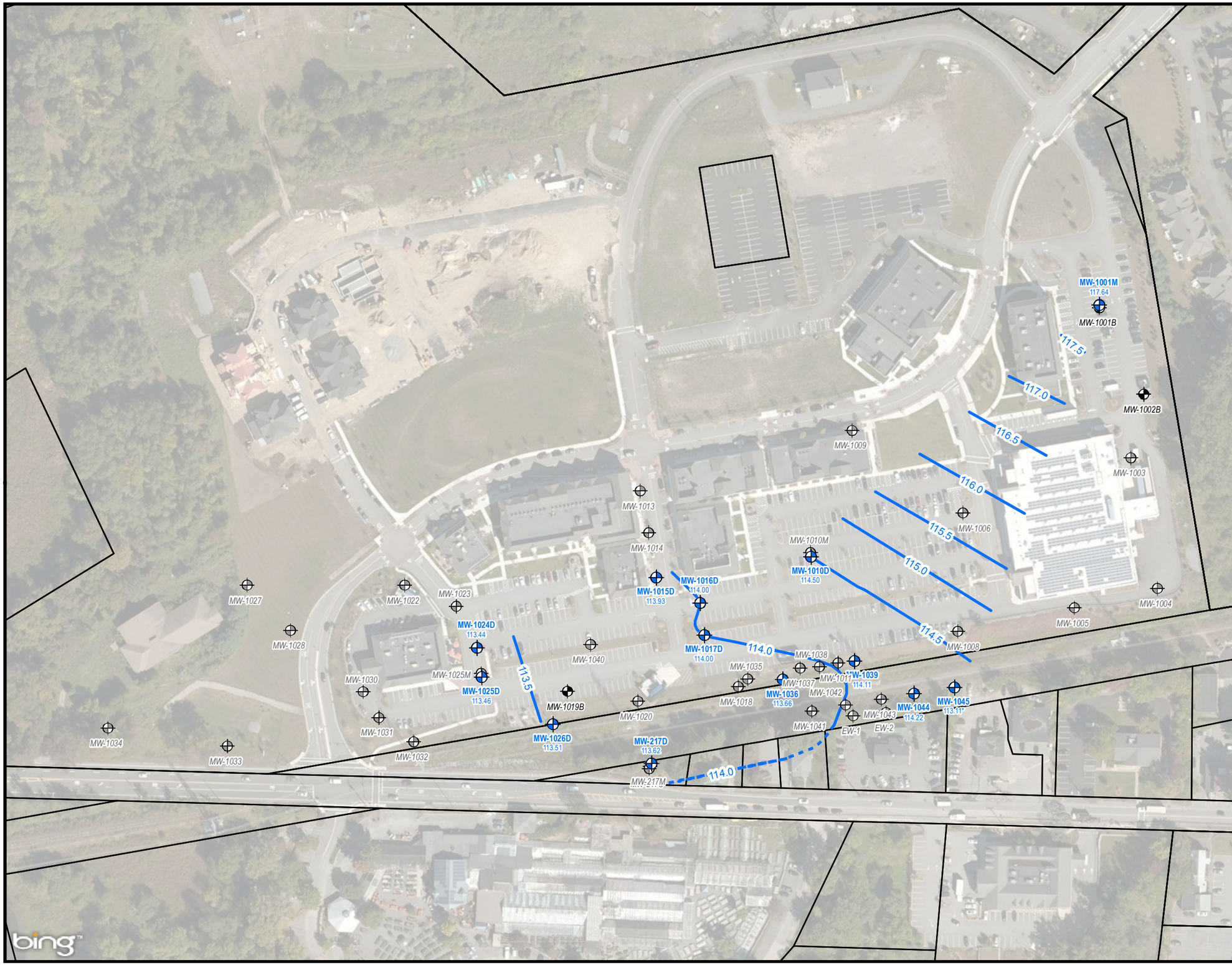
0 25 50 100 150 200 250 Feet

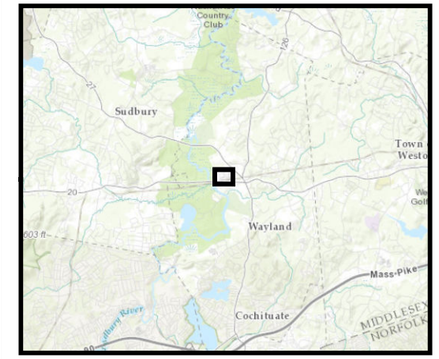
Figure 4A: August 2016 Generalized Upper Potentiometric Surface Southern Area

Former Raytheon Facility
Wayland, MA

ERM

G:\Graphics\Clients_Q_U\Raytheon\WAYLAND\MXD\2015_10_ROSReport\Figure4A_UpperEquipotentialSurfaceMap_August2016_20161006.mxd - steven.vickery - 10/14/2016





Legend

August 2016 Groundwater Elevation (ft ASL)

- Monitoring Well Screened in Lower Hydrogeologic Unit
- Monitoring Well Screened in Lower Hydrogeologic Unit
- Monitoring Well in Bedrock
- Lower Potentiometric Surface Contour
- Inferred Lower Potentiometric Surface Contour
- Parcel Boundary

NOTES:

- Groundwater Elevation measure on 24 August 2016. Labeled as feet abovesea level (ASL)
-* Anomalous reading not used in placement of groundwater contour lines.

N

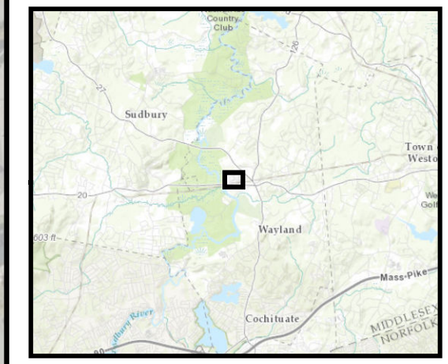
0 25 50 100 150 200 250 Feet

Figure 4B: August 2016 Generalized Lower Potentiometric Surface Southern Area

Former Raytheon Facility
Wayland, MA

ERM

G:\Graphics\Clients_Q_U\Raytheon\WAYLAND\MXD\2015_10_ROSReport\Figure4B_LowerEquipotentialSurfaceMap_August2016_20161006.mxd - steven.vickery - 10/11/2016



Legend

- Monitoring Well Location
- Exceeds GW 1 Criteria (≥5 µg/L)
- Below GW 1 Criteria (<5 µg/L)
- Non-detect
- Not Sampled (NS)
- Approximate Former Building Footprint
- Parcel Outlines

MW-1008 - Well ID
4.7 - TCE Concentration (µg/L)

NOTES:
- Locations sampled on 24 August 2016 with the exception of MW-1035 and MW-1016D which were sampled on 15 March 2016

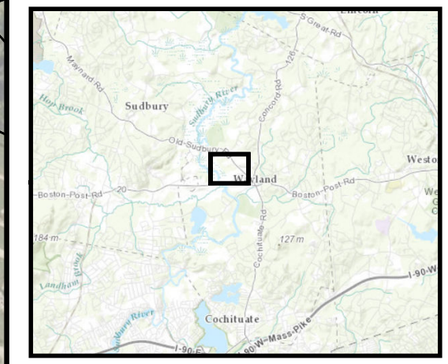
N

0 25 50 100 150 200 250 Feet

Figure 5: August 2016 TCE Concentrations in Groundwater - Southern Area
Former Raytheon Facility
Wayland, MA

ERM

G:\Graphics\Clients_Q_U\Raytheon\WAYLAND\MXD\2015_10_RGSReport\Figure5_August2016_TCEConcentrationInGW_20161006.mxd - steven.vickery - 10/10/2016



Legend

- Sentinel Well Location
- Approximate Former Building Footprint
- Parcel Boundary

0 50100 200 300 400 500 Feet

Figure 6: Sentinel Well Locations
Former Raytheon Facility
Wayland, MA

G:\Graphics\Clients_Q_U\Raytheon\WAYLAND\MXD\2015_10_RGSReport\Figure6_Sentinel\WellLocations_20160523.mxd - brett.shaver - 5/23/2016

Appendix A
IESI Memorandum

Innovative Engineering Solutions, Inc.
25 Spring Street • Walpole, Massachusetts 02081-4301 (508) 668-0033 • fax (508) 668-5175

MEMORANDUM

To: Chip Burkhardt, Jonathan Hone; Raytheon Company
From: Sami A. Fam, Ph.D., P.E., L.S.P., IESI
David Falatko, P.E., IESI
Subject: Work Summary for ROS Report
Raytheon Facility
Wayland, Massachusetts
Date: November 8, 2016

At the request of Raytheon Company (Raytheon), Innovative Engineering Solutions Inc. (IESI) has prepared this memorandum outlining the bioremediation activities (at the Northern Area) between May 1, 2016 and October 31, 2016 at the Former Raytheon Facility located in Wayland, Massachusetts. The memorandum provides sufficient detail to be incorporated into a Remedy Operation Status (ROS) report. The following activities have been performed during this time period:

1. Enhanced Anaerobic Dechlorination (EAD) system operation;
2. Collection of groundwater elevation data; and,
3. Sampling and analysis to evaluate remediation progress;

These activities are described in greater detail below.

1. EAD Recirculation System Operation

The EAD program involves recirculation of groundwater within the treatment zone to distribute the added electron donor. During the reporting period, the remediation system extracted from wells REW-1, REW-2, REW-3, REW-4, REW-5, REW-7, REW-8, REW-9, and REW-12 (extraction rate of approximately 4 gallons per minute overall; see site map-Figure 1). Groundwater was injected into different wells at different times, but generally the following wells received recirculated groundwater during the reporting period: IW-1 to IW-17, RIW-2, RIW-3, RIW-8 to RIW-10, RIW-12 to RIW-14, RIW-16, REW-6 and REW-11. No groundwater was injected into wells RIW-4 to RIW-7. Approximately 23,000 lbs. (64 drums) of electron donor (methanol) was injected during the reporting period. Approximately 6 drums of potassium hydroxide (for pH buffering) were also added to the subsurface during the reporting period (Table 1).

In total, the system recirculated approximately 920,000 gallons of groundwater during the past six months (Table 1). To date in 2016 (January 2016 through October 2016), approximately 1.6 million gallons of groundwater have been recirculated at the site. Since system start up in 2011, approximately 12.7 million gallons have been extracted and re-injected. The system will continue to operate for the remainder of 2016 as needed. Additional electron donor and pH buffer injections are planned during November/December 2016.

2. Collection of Groundwater Elevation Data

Groundwater elevation data was collected from selected wells in the Northern Area on September 30, 2016. The data is compiled and presented in Table 2. Figure 2 presents interpreted groundwater elevation contour maps for the

September 2016 measurement event. Consistent with past groundwater elevation measurements, groundwater flow is to the west.

3. Sampling and Analysis to Evaluate the Progress of the Recirculation System

Groundwater samples were collected to evaluate the progress of the remedial program. Groundwater sampling was conducted in July, 2016 and in October, 2016. The July 2016 analytical data is summarized in Table 3 and the October 2016 data is summarized in Table 4. All laboratory analytical data reports can be found in Attachment C. All sampling was conducted using low flow sampling methods using a peristaltic pump. Groundwater sampling logs can be found in Attachment D.

Dissolved gases (methane, ethane and ethene) during the July and October sampling events were analyzed by Alpha Analytical of Westborough, MA. All other analysis was conducted by Test America of Amherst, NY.

Analytical data are presented in Attachment C and selected data are graphed in Attachment B. Each page in Attachment C is for a single well and is made up of four separate graphs to allow a simultaneous evaluation of biogeochemical and VOC data.

In general, the data indicate excellent VOC reduction, electron donor distribution, sulfate reduction, methane generation and dechlorination of parent compounds to breakdown products (leading to ethene/ethane). The data often indicate initial electron donor induced desorption (of VOCs), followed by dechlorination of the chlorinated VOCs (CVOCs). These are all indicators of EAD system success. Near complete dechlorination is evident in all treatment zone wells upgradient of wells REW-7 and REW-8 (MW-551, MW-552, MW-553, MW-261S, REW-4, REW-5, MW-560, ME-561, MW-562, MW-563, and MW-265M). The more downgradient wells such as REW-6 to REW-12, MW-267M and MW-268M generally show approximately 95+% improvement (on average) in groundwater quality (VOC reduction), abundant total organic carbon (TOC) and reducing conditions. Complete dechlorination has essentially been achieved across the entire northern area plume. The active groundwater recirculation system will be temporarily deactivated in January 2017 for at least six months. We expect continued groundwater improvement over the next several years since residual TOC will act as an electron donor as will TOC that may be generated from endogenous microbial decay. Following the initial six month period without active recirculation, Raytheon will evaluate the need to restart active remediation.

Analytical results for sample trip blank and sample duplicates conform to acceptable and applicable guidelines/standards and are tabulated in Tables 3 and 4 alongside the respective sampled wells. Correlation between the sample duplicates is considered acceptable except for the results of duplicate 2 (October 2016). The original sample (well MW-268D) does not contain any VOCs, however the duplicate sample contains relatively low concentrations of 4 different VOCs. The laboratory blanks were free of detectable VOCs.

Acetone, a fermentation product of many electron donors, is being produced at several locations within the treatment area in concentrations up to 460 μg/L (MW-265 in October 2016). It is noteworthy that acetone is generally only present near injection locations, and is degraded and does not reach more downgradient locations in significant concentrations. The generation of acetone and methyl ethyl ketone (MEK) at these locations is a transient phenomenon and the compound is not expected to mobilize beyond the treatment area. Acetone, itself is an electron donor and is expected to degrade rapidly once electron donor addition ceases (Fowler et. al., 2011).

4. Summary of Overall Project History and Concentration Declines

The EAD system was initially operated in 2011 as a small pilot program to ensure the viability of the remedy in this low hydraulic permeability environment. The pilot program was highly successful and subsequently the treatment areas were slowly expanded between 2012 and 2016. The progression of system operation is shown graphically in Attachment A. Also include in Attachment A are two site photos and an isocontour map showing the dramatic decline in TCE concentrations across the site (at the mid depth interval) from pre-remediation concentration to the October 2016 sampling results.

5. References

Fowler, T., Thompson, B., Mueller, J., 2011; Acetone and 2-Butanone Creation Associated with Biological and Chemical Remediation of Environmental Contamination; Remediation Journal Winter 2011, p-9-27.

Tables

Table 1: Summary of Additives and Recirculation Volumes
Table 2: Groundwater Gauging Summary, September 30, 2016
Table 3: Summary of Analytical Data, July, 2016
Table 4: Summary of Analytical Data, October 2016

Figures

Figure 1: Groundwater Treatment System Expansion As-Built
Figure 2: Mid-Depth Groundwater Contour Map, September 30, 2016

Attachments

Attachment A: System Operation Progress
Attachment B: Selected Well Analytical Data Tracking Graphs
Attachment C: Analytical Data
Attachment D: Well Sampling Logs

Table 1 Summary of Additives & Recirculation Volumes
Former Raytheon, Wayland Facility
May 1, 2016 to October 31, 2016

Date (week of)	Injection Location	Additive	Estimated Weight (lbs.)
5/11/2016	IW-1 to IW-17, RIW-1 to RIW-3, RIW-8 to RIW-10, RIW-12 to RIW-14, RIW-16, REW-11 and REW-6.	Potasium Hydroxide (2 drum)	1,200
5/11/2016	IW-1 to IW-17, RIW-1 to RIW-3, RIW-8 to RIW-10, RIW-12 to RIW-14, RIW-16, REW-11 and REW-6.	Methanol (24 drums)	8,592
8/5/2016	IW-1 to IW-17, RIW-1 to RIW-3, RIW-8 to RIW-10, RIW-12 to RIW-14, RIW-16, REW-11 and REW-6.	Potasium Hydroxide (2 drum)	1200
8/5/2016	IW-1 to IW-17, RIW-1 to RIW-3, RIW-8 to RIW-10, RIW-12 to RIW-14, RIW-16, REW-11 and REW-6.	Methanol (20 drums)	7,160
8/22/2016	IW-1 to IW-17, RIW-1 to RIW-3, RIW-8 to RIW-10, RIW-12 to RIW-14, RIW-16, REW-11 and REW-6.	Potasium Hydroxide (2 drum)	1,200
8/22/2016	IW-1 to IW-17, RIW-1 to RIW-3, RIW-8 to RIW-10, RIW-12 to RIW-14, RIW-16, REW-11 and REW-6.	Methanol (20 drums)	7,160

Recirculation Volumes

Well	REW-1 (gallons)	REW-4 (gallons)	REW-5 (gallons)	REW-6, REW-7, REW-8, REW-9, REW-12
May 1, 2016 to October 31, 2016	Off	Est. 60,000	Est. 60,000	Est. 800,000
Total				
920,000				

Former Raytheon Facility
Wayland, Massachusetts
Table 2 - Groundwater Gauging Summary

Well Designation	Screen Length (feet)	Total Well Depth (feet)	Measuring Point Elevation	DTW 30-Sep-16	GW Elevation September 30, 2016
MW-32	10	12	124.41	NM	NM
MW-1S	10	15	133.79	NM	NM
MW-1M	5	40	133.78	NM	NM
MW-1D	5	55	133.74	NM	NM
MW-261S	5	22	131.28	16.45	114.83
MW-263S	5	25	127.96	13.51	114.45
MW-263M	5	50	127.77	13.83	113.94
MW-264S	10	20	126.32	13.15	113.17
MW-264M	10	44	126.28	12.68	113.60
MW-264D	5	77	126.63	13.78	112.85
MW-265S	10	18	130.06	14.63	115.43
MW-265M	5	45	129.89	16.23	113.66
MW-265D	5	89	130.07	17.17	112.90
MW-266S	10	17	126.79	13.54	113.25
MW-266Ma	5	52	127.72	15.9	111.82
MW-266Mb	10	68	126.88	13.93	112.95
MW-266D	5	105	127.70	14.8	112.90
MW-266B	5	138	128.14	15.13	113.01
MW-267S	5	77	125.30	11.9	113.40
MW-267M	10	95	125.40	13.06	112.34
MW-267D	5	121	125.88	13.27	112.61
MW-267B	5	153	124.02	11.66	112.36
MW-268S	5	74	123.66	11.91	111.75
MW-268M	10	94	123.41	11.58	111.83
MW-268D	5	127	124.86	12.27	112.59
MW-268B	5	153	122.34	10.92	111.42
MW-269S	10	20	125.54	14.41	111.13
MW-269Ma	5	32	124.96	14.03	110.93
MW-269Mb	10	84	125.42	13.43	111.99
MW-269D	5	144	125.34	13.93	111.41
MW-551	5	26	129.30	14.28	115.02
MW-552	5	24	130.09	15.18	114.91
MW-553	5	20	130.33	15.36	114.97
MW-554S	5	196	120.93	NM	NM
MW-554Ma	10	196	120.82	NM	NM
MW-554Mb	10	196	120.96	NM	NM
MW-554D	10	196	120.96	NM	NM
MW-555S	5	194.5	121.10	NM	NM
MW-555Ma	10	194.5	121.25	NM	NM
MW-555Mb	10	194.5	121.26	NM	NM
MW-555D	10	194.5	121.19	NM	NM
MW-556S	5	165	120.93	NM	NM
MW-556M	10	165	121.00	NM	NM
MW-556D	10	165	120.92	NM	NM
MW-307	5	11	124.86	NM	NM
DEP-19S	5	15	120.79	8.1	112.69
DEP-19M	5	40	120.62	4.12	116.50
DEP-19D	5	50	120.78	7.38	113.40
DEP-20	5	50	119.98	NM	NM
DEP-21	5	50	119.18	6.44	112.74
MW-560	10	67	127.23	14.12	113.11
MW-561	10*	53.65	127.90	14.55	113.35
MW-562	10	45	128.13	13.4	114.73
MW-563	30	70	125.70	11.53	114.17
RIW-1	30	45	127.84	NM	NM
RIW-2	30	45	127.09	NM	NM
RIW-3	30	45	127.82	NM	NM
RIW-4	15	30	127.23	NM	NM
RIW-5	15	30	126.88	NM	NM
RIW-6	15	30	127.69	NM	NM
RIW-7	15	30	128.54	NM	NM
REW-1	30	45	126.23	NM	NM
REW-2	30	45	127.40	NM	NM
REW-3	30	45	127.15	NM	NM
REW-4	30	45	125.85	NM	NM
REW-5	30	45	125.80	NM	NM
IW-4	10	65	128.30	NM	NM
IW-5	10	65	128.26	NM	NM
IW-6	10	65	128.01	NM	NM
IW-7	10	65	127.93	NM	NM
IW-8	10	65	128.48	NM	NM
IW-9	10	65	128.13	NM	NM
IW-13	10	50	129.47	NM	NM
IW-14	10	50	128.91	NM	NM
IW-15	10	50	129.08	NM	NM
IW-16	10	50	129.66	NM	NM
IW-18	10	35	131.04	NM	NM

DTW- depth to water
NM-not measured

Table 3- Summary of Analytical Data, July 2016
Former Raytheon Facility, Wayland MA

Sample ID	units	MW-265M	MW-267S	MW-267M	MW-268S	MW-268M	MW-268M (dup1)	MW 562	MW 561	MW 563	REW-7	REW-7 (dup 2)	REW-8	REW-11	REW-12	Trip Blank
Methane	ug/L	15300	21200	30900	1200	34000	na	19100	20500	19600	19600	na	21900	21900	27800	ND
Ethene	ug/L	1	3	ND	2	10	na	ND	ND	ND	8	na	3	7	12	ND
Ethane	ug/L	1	ND	18	ND	49	na	1.8	24	4	10	na	8	7	11	ND
Vinyl Chloride	ug/L	5.7	14	ND	5.2	43	38	4.3	ND	ND	23	20	13	13	21	ND
Chloroethane	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DCE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DCA	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-cDCE	ug/L	ND	270	ND	70	58	46	8.4	ND	ND	30	29	4.1	32	58	ND
t-1,2 DCE	ug/L	ND	ND	ND	ND	2	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-TCA	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCE	ug/L	ND	ND	ND	150	ND	ND	ND	ND	ND	ND	ND	ND	4.8	5.9	ND
PCE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ug/L	600	ND	ND	ND	ND	ND	ND	ND	ND	50	ND	ND	ND	ND	ND
THF	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p xylene	ug/L	11	ND	ND	ND	ND	ND	ND	3.1	ND	2.2	2	ND	ND	ND	ND
2-Butan. (MEK)	ug/L	100	350	ND	ND	110	120	200	18	ND	70	70	37	32	38	ND
Ethyl benzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/L	ND	ND	ND	ND	1.4	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ug/L	7.9	96	3.4	ND	8.1	8.4	4.3	14	ND	83	77	31	24	33	ND
1,2,4 TMB	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Cl.		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-xylene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4 Dioxane	ug/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Chloride	mg/L	64	56	23	14	41	na	37	44	28	24	na	32	51	36	na
Nitrate	mg/L	ND	ND	ND	ND	ND	na	ND	ND	ND	ND	na	ND	ND	na	na
Sulfate	mg/L	ND	ND	2.7	35	ND	na	ND	ND	ND	ND	na	ND	18	21	na
Lactate	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Acetate	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Propionate	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Butyrate	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Alkalinity	mg/L	720	510	280	40	280	na	580	530	340	220	na	240	150	200	na
Manganese	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
NH3-N	mg/L	0.200	0.4	0.8	0.3	1.9	na	2.6	2.2	1.9	0.4	na	0.2	0.8	0.270	na
PO4	mg/L	0.2	0.43	0.12	0.010	0.1	na	0.0	0.2	0.1	0.2	na	0.2	0.2	ND	na
Sulfide	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Total Iron	mg/L	390	340	ND	0.40	82	na	260	190	80	62	na	66	68	81	na
COD	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
TOC	mg/L	1100	2000	8	0.00	82	na	580	13	2	74	na	79	200	97	na
pH	pH units	5.3	5.2	6.7	7.1	6.8	na	6.5	6.8	6.8	6.8	na	6.8	6.7	6.5	na
H2 headspace	µM	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CO2	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

1,1 DCE- 1,1 dichloroethene; 1,1 DCA-1,1 Dichloroethane; 1,2cDCE- 1,2 cis dichloroethene;
1,1,1 TCA- 1,1,1 trichoroethane, TCE- trichoroethene; PCE- tetrachloroethene
na- not analyzed
All analysis by Test America except dissolved gases by Alpha Analytical
1,4 dioxane by Method 522
all other VOCs by Method 8260B
THF-tetrahydrofuran 1,2,4 TMB- 1,2,4 trimethylbenzene
ND- not detected- see lab report for detection limits
ketone breakdown products
VOC detectic VOC detections

Table 4- Summary of Analytical Data, October 2016
Former Raytheon Facility, Wayland MA

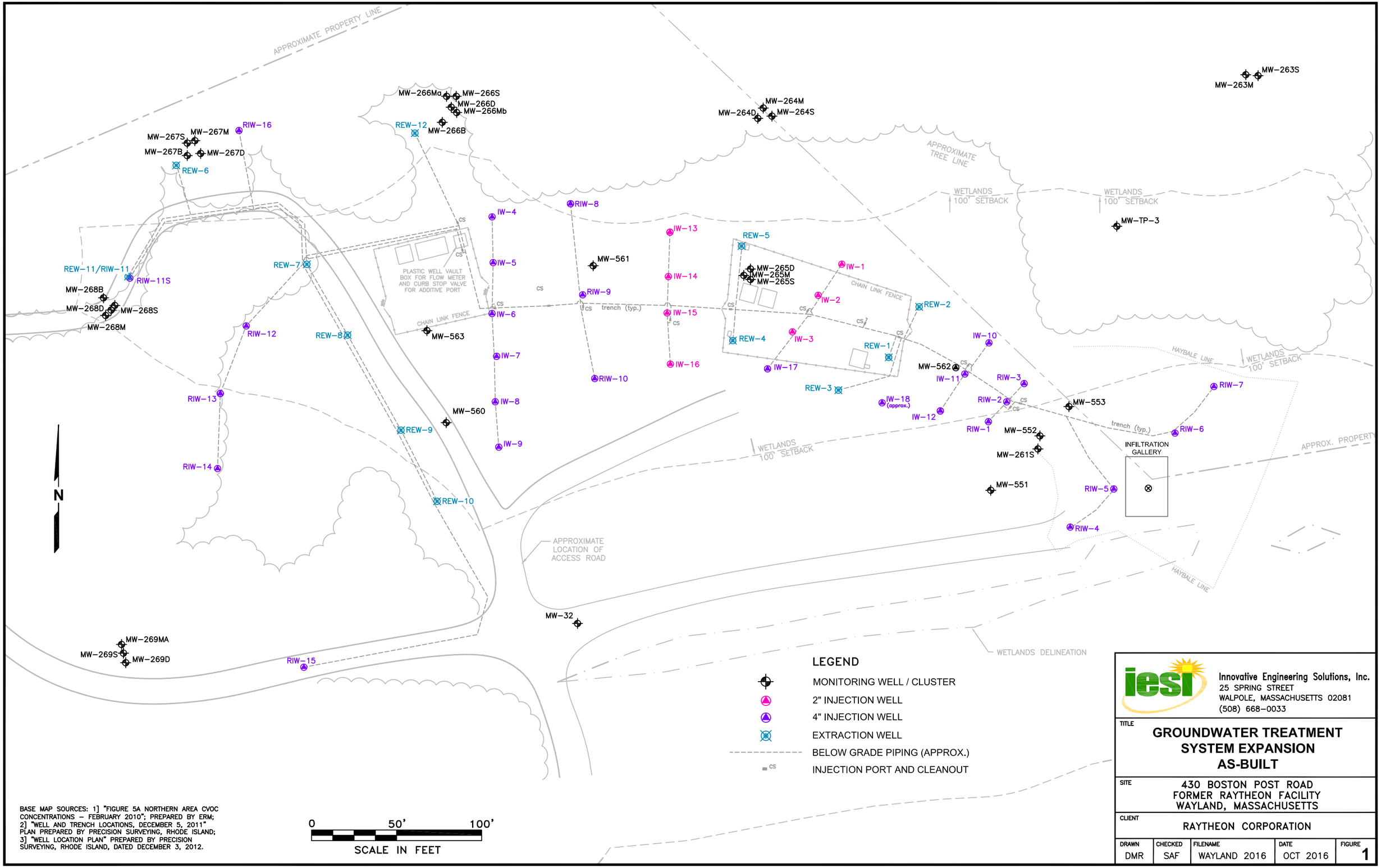
Sample ID	units	DEP 21	MW-261S	MW-264M	MW-265S	MW-265M	MW-265D	MW-266Ma	MW-266MB	MW-267S	MW-267M	MW-268S	MW-268M	MW-268D	MW-268D Dup 2	MW-269Ma	MW-551	MW-552	MW-552 Dup 1	MW-553	MW-560	MW-561	MW-562	MW-563	Trip Blank
Methane	ug/L	na	19400	na	na	11500	na	na	na	16700	na	12000	24,500	na	na	na	na	20300	na	15700	13300	29600	19100	28500	na
Ethene	ug/L	na	5	na	na	1	na	na	na	2	na	1.1	7	na	na	na	na	6	na	6	ND	ND	ND	ND	na
Ethane	ug/L	na	23	na	na	1	na	na	na	1	na	3	9	na	na	na	na	35	na	3	1	28	2	8	na
Vinyl Chloride	ug/L	ND	ND	8.2	ND	ND	ND	4.5	23	21	ND	ND	47	ND	ND	ND	ND	ND	ND	2.6	1.2	ND	ND	ND	ND
Chloroethane	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DCE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DCA	ug/L	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-c DCE	ug/L	ND	ND	11	ND	ND	ND	4.2	5.3	310	ND	ND	440	ND	3.9	2.5	ND	2.4	2.1	ND	ND	ND	ND	ND	ND
1,2 t-DCE	ug/L	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-TCA	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCE	ug/L	ND	ND	11	ND	ND	ND	ND	2.9	ND	ND	ND	ND	ND	1.4	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCE	ug/L	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ug/L	ND	ND	ND	ND	460	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
THF	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p xylene	ug/L	ND	14	ND	2.6	14	2.5	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23	2.7	2.5	ND	ND	ND
Toluene	ug/L	ND	1.9	ND	1.1	9.3	1.1	55	3.9	100	ND	ND	ND	ND	1.8	ND	ND	ND	ND	5.6	11	ND	6	ND	ND
Ethyl Benzene	ug/L	ND	4.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND
2-Butananone (MEK)	ug/L	ND	ND	ND	ND	140	ND	ND	ND	380	ND	ND	200	ND	37	ND	ND	ND	ND	ND	22	ND	140	ND	ND
o-xylene	ug/L	ND	3.5	ND	1.3	5.4	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	ND	ND	ND	ND	ND
Carbon Disulfide	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4 Dioxane	ug/L	na	2.7	na	na	2.6	na	1.5	na	6.7	3.8	0.54	6.7	na	na	1.4	na	1.7	1.7	na	na	na	na	na	ND
Chloride	mg/L	na	23	na	na	41	na	na	na	33	na	26	38	na	na	na	na	13	na	13	34	43	31	42	na
Nitrate	mg/L	na	ND	na	na	ND	na	na	na	ND	na	ND	ND	na	na	na	na		na	ND	ND	ND	ND	ND	na
Sulfate	mg/L	na	ND	na	na	ND	na	na	na	ND	na	ND	ND	na	na	na	na	0.0	na	ND	ND	ND	ND	ND	na
Lactate	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Acetate	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Propionate	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Butyrate	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Alkalinity	mg/L	na	400	na	na	730	na	na	na	500	na	10000	11000	na	na	na	na	480	na	650	520	370	510	230	na
Manganese	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
NH3-N	mg/L	na	0.5	na	na	0.5	na	na	na	0.22	na	0.72	0.4	na	na	na	na	0.47	na	0.42	0.0	3.9	1.1	1.3	na
PO4	mg/L	na	0.0	na	na	0.2	na	na	na	0.19	na	0.05	0.00	na	na	na	na	0.03	na	0.04	0.00	0.0	1.4	0.00	na
Sulfide	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Total Iron	mg/L	na	50	na	na	460	na	na	na	360	na	1.6	2	na	na	na	na	33	na	33	110	110	240	58	na
COD	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
TOC	mg/L	na	2	na	na	1400	na	na	na	2100	na	58000	15000	na	na	na	na	2	na	2	6	9	560	2	na
pH	pH unit	na	6.8	na	na	5.1	na	na	na	5.2	na	7.1	6.8	na	na	na	na	6.9	na	7.0	6.9	6.7	6.1	6.6	na
H2 headspace	µM	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CO2	mg/L	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

1,1 DCE- 1,1 dichloroethene; 1,1 DCA-1,1 Dichloroethane; 1,2cDCE- 1,2 cis dichloroethene; 1,2,4 TMB- 1,2,4 trimethylbenzene
1,1,1 TCA- 1,1,1 trichoroethane, TCE- trichoroethene; PCE- tetrachloroethene THF-tetrahydrofuran 1,4 dioxane by Method 522; all other VOCs by 8260B
na/NA- not analyzed
All analysis by Test America except dissolved gases by Alpha Anal. ketone breakdown products VOC detections

Table 4- Summary of Analytical Data, October 2016 (Cont)
Former Raytheon Facility, Wayland MA

Sample ID	units	REW-1	REW-4	REW-5	REW-7	REW-8	REW-9	REW-10	REW-10 Dup 3	REW-11	REW-12	Trip Blank
Methane	ug/L	23,400	19500	19100	18500	21200	33000	15500	na	22800	33000	na
Ethene	ug/L	ND	ND	ND	5	ND	2	ND	na	7	17	na
Ethane	ug/L	3.0	9.0	2.0	10	2	3.0	2.0	na	10	17	na
Vinyl Chloride	ug/L	ND	1.4	ND	8.6	ND	13	ND	ND	9.7	53	ND
Carbon Disulfide	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DCE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DCA	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND
1,2-cDCE	ug/L	ND	5.1	2.3	9.7	ND	24	ND	ND	20	130	ND
t-1,2 DCE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-TCA	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	3.4	29	ND
PCE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
THF	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p xylene	ug/L	2.4	2.9	ND	ND	ND	3.9	ND	ND	ND	ND	ND
2-Butan. (MEK)	ug/L	ND	ND	ND	38	ND	140	ND	ND	30	66	ND
MIBK	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl benzene	ug/L	1.1	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND
Benzene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ug/L	ND	ND	ND	58	9.4	48	ND	ND	34	39	ND
1,2,4 TMB	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Napthalene	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Meth. Chloride	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-xylene	ug/L	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4 Dioxane	ug/L	na	na	na	na	na	na	na	na	na	na	na
Chloride	mg/L	13	13	4	23	35	28	68	na	50	36	na
Nitrate	mg/L	ND	ND	ND	ND	ND	ND	ND	na	ND	ND	na
Sulfate	mg/L	13	13	ND	ND	ND	9	26	na	19	21	na
Lactate	mg/L	na	na	na	na	na	na	na	na	na	na	na
Acetate	mg/L	na	na	na	na	na	na	na	na	na	na	na
Propionate	mg/L	na	na	na	na	na	na	na	na	na	na	na
Butyrate	mg/L	na	na	na	na	na	na	na	na	na	na	na
Alkalinity	mg/L	280	280	100	260	260	380	81	na	160	200	na
Manganese	mg/L	na	na	na	na	na	na	na	na	na	na	na
NH3-N	mg/L	0.5	1	2.5	ND	6.7	0.2	0.2	na	0.8	0.3	na
PO4	mg/L	0.19	0.2	0.12	ND	0.21	0.1	0.03	na	0.0	0.03	na
Sulfide	mg/L	na	na	na	na	na	na	na	na	na	na	na
Total Iron	mg/L	37	37	0	61	49	100	2.3	na	43	81	na
COD	mg/L	na	na	na	na	na	na	na	na	na	na	na
TOC	mg/L	1.1	2	ND	27	14	250	1.1	na	80	97	na
pH	pH unit	6.7	6.4	6.9	6.7	6.8	6.4	7.1	na	6.6	6.5	na
H2 headspace	µM	na	na	na	na	na	na	na	na	na	na	na
CO2	mg/L	na	na	na	na	na	na	na	na	na	na	na

1,1 DCE- 1,1 dichloroethene; 1,1 DCA-1,1 Dichloroethane; 1,2cDCE- 1,2 cis dichloroethene;
1,1,1 TCA- 1,1,1 trichoroethane, TCE- trichoroethene; PCE- tetrachloroethene
na/NA- not analyzed
All analysis by Test America except dissolved gases by Alpha Analytical
1,4 dioxane analysis by Method 522
all other VOCs by 8260B
THF-tetrahydrofuran; MIBK- 4 methyl-2-pentanone
1,2,4 TMB- 1,2,4 trimethylbenzene
ND- not detected- see lab report for detection limits
ketone breakdown products VOC detections



BASE MAP SOURCES: 1] "FIGURE 5A NORTHERN AREA CVOC CONCENTRATIONS – FEBRUARY 2010"; PREPARED BY ERM; 2] "WELL AND TRENCH LOCATIONS, DECEMBER 5, 2011" PLAN PREPARED BY PRECISION SURVEYING, RHODE ISLAND; 3] "WELL LOCATION PLAN" PREPARED BY PRECISION SURVEYING, RHODE ISLAND, DATED DECEMBER 3, 2012.

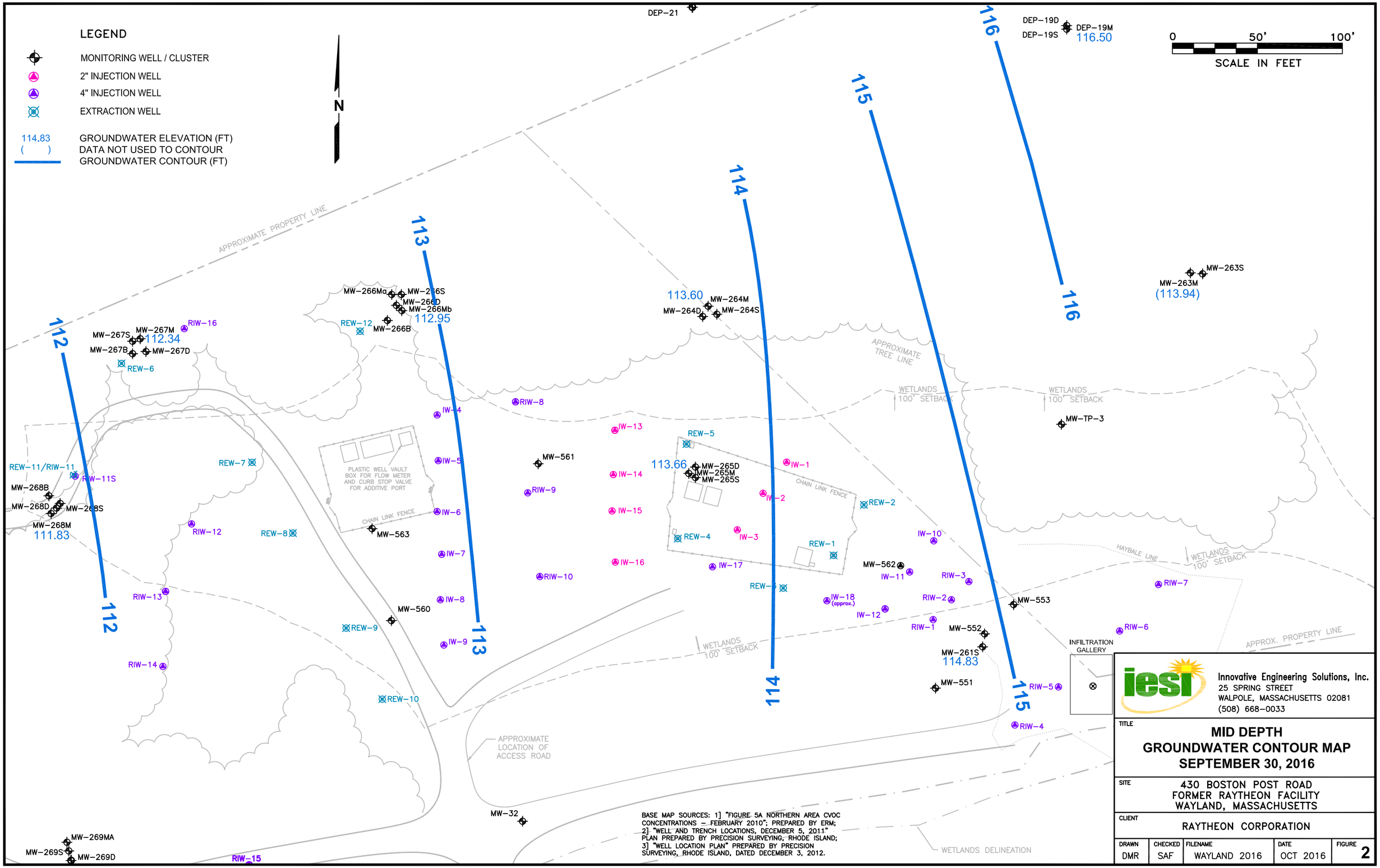
Innovative Engineering Solutions, Inc.
25 SPRING STREET
WALPOLE, MASSACHUSETTS 02081
(508) 668-0033

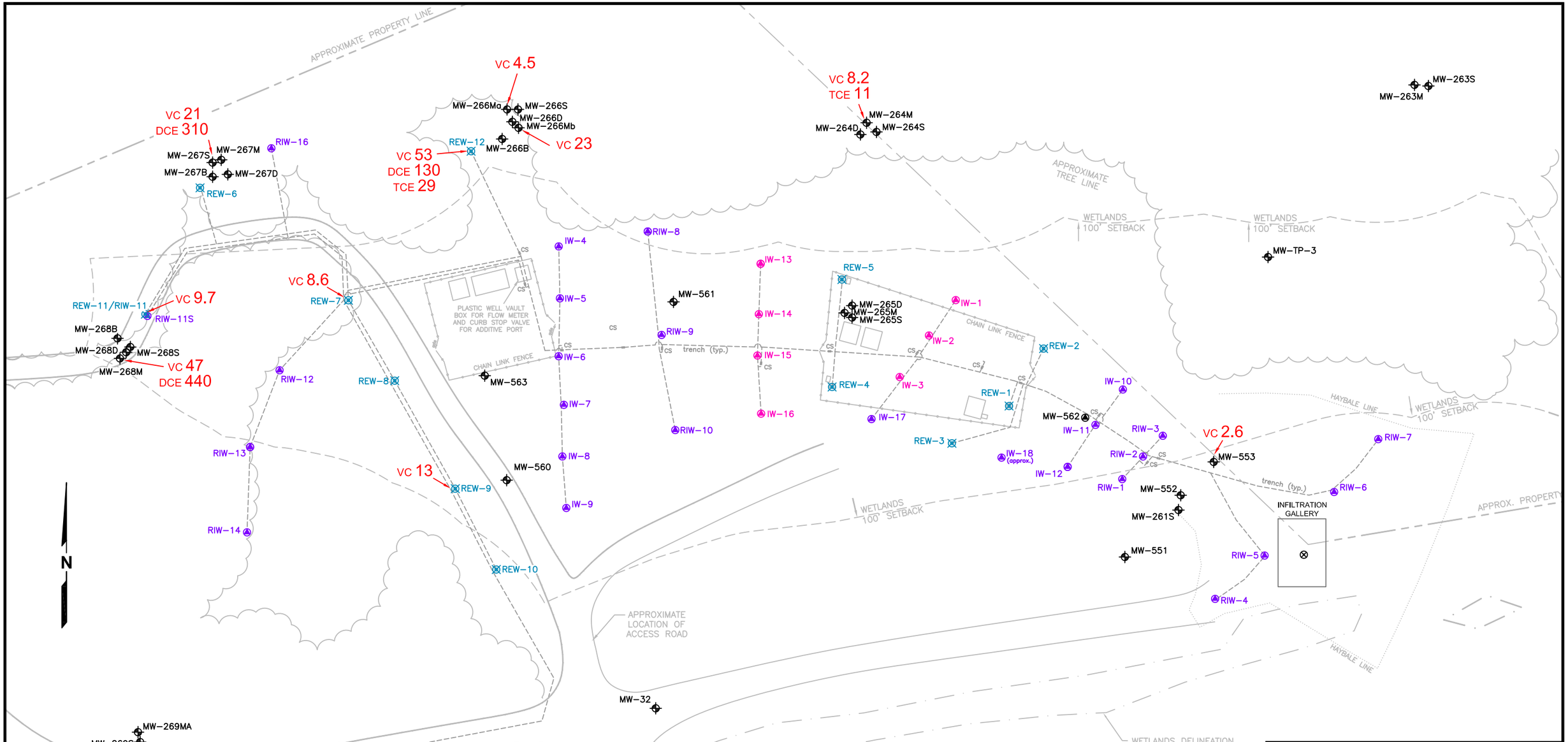
TITLE
GROUNDWATER TREATMENT SYSTEM EXPANSION AS-BUILT

SITE
430 BOSTON POST ROAD
FORMER RAYTHEON FACILITY
WAYLAND, MASSACHUSETTS

CLIENT
RAYTHEON CORPORATION

DRAWN	CHECKED	FILENAME	DATE	FIGURE
DMR	SAF	WAYLAND 2016	OCT 2016	1


LEGEND
MONITORING WELL / CLUSTER
2" INJECTION WELL
4" INJECTION WELL
EXTRACTION WELL
114.83
( )
GROUNDWATER ELEVATION (FT)
DATA NOT USED TO CONTOUR
GROUNDWATER CONTOUR (FT)
N
0
50'
100'
SCALE IN FEET
DEP-21
DEP-19D
DEP-19S
DEP-19M
116.50
116
115
114
113
112
APPROXIMATE PROPERTY LINE
MW-263S
MW-263M
(113.94)
MW-266Ma
MW-266S
MW-266D
MW-266Mb
112.95
REW-12
MW-266B
113.60
MW-264M
MW-264D
MW-264S
MW-267S
MW-267M
112.34
MW-267B
MW-267D
REW-6
RIW-16
APPROXIMATE TREE LINE
WETLANDS 100' SETBACK
MW-TP-3
RIW-8
IW-4
IW-13
REW-5
REW-11/RIW-11
RIW-11S
REW-7
PLASTIC WELL VAULT BOX FOR FLOW METER AND CURB STOP VALVE FOR ADDITIVE PORT
MW-561
113.66
MW-265D
MW-265M
MW-265S
IW-1
IW-5
IW-14
RIW-9
IW-2
CHAIN LINK FENCE
REW-2
MW-268B
MW-268D
MW-268S
MW-268M
111.83
IW-15
IW-6
MW-563
REW-4
IW-3
REW-1
IW-10
RIW-12
REW-8
IW-7
IW-16
IW-17
MW-562
IW-11
RIW-3
HAYBALE LINE
RIW-7
RIW-10
REW-3
IW-18 (approx.)
RIW-2
MW-553
RIW-13
IW-8
MW-560
IW-12
RIW-1
MW-552
RIW-6
REW-9
IW-9
MW-261S
114.83
INFILTRATION GALLERY
APPROX. PROPERTY LINE
RIW-14
MW-551
RIW-5
REW-10
RIW-4
APPROXIMATE LOCATION OF ACCESS ROAD
MW-32
MW-269MA
MW-269S
MW-269D
RIW-15
WETLANDS DELINEATION
BASE MAP SOURCES: 1] "FIGURE 5A NORTHERN AREA CVOC CONCENTRATIONS – FEBRUARY 2010"; PREPARED BY ERM; 2] "WELL AND TRENCH LOCATIONS, DECEMBER 5, 2011" PLAN PREPARED BY PRECISION SURVEYING, RHODE ISLAND; 3] "WELL LOCATION PLAN" PREPARED BY PRECISION SURVEYING, RHODE ISLAND, DATED DECEMBER 3, 2012.
iesi
Innovative Engineering Solutions, Inc.
25 SPRING STREET
WALPOLE, MASSACHUSETTS 02081
(508) 668-0033
TITLE
MID DEPTH
GROUNDWATER CONTOUR MAP
SEPTEMBER 30, 2016
SITE
430 BOSTON POST ROAD
FORMER RAYTHEON FACILITY
WAYLAND, MASSACHUSETTS
CLIENT
RAYTHEON CORPORATION
DRAWN
DMR
CHECKED
SAF
FILENAME
WAYLAND 2016
DATE
OCT 2016
FIGURE
2



LEGEND

- MONITORING WELL / CLUSTER
- 2" INJECTION WELL
- 4" INJECTION WELL
- EXTRACTION WELL
- BELOW GRADE PIPING (APPROX.)
- CS — INJECTION PORT AND CLEANOUT

GW-1 CONCENTRATION EXCEEDENCE (PPB)

- VC 53 — Vinyl Chloride (GW-1 = 2)
- DCE 130 — cis-1,2-Dichloroethene (GW-1 = 70)
- TCE 29 — Trichloroethene (GW-1 = 5)

0 50' 100'
SCALE IN FEET

BASE MAP SOURCES: 1] "FIGURE 5A NORTHERN AREA CVOC CONCENTRATIONS – FEBRUARY 2010"; PREPARED BY ERM; 2] "WELL AND TRENCH LOCATIONS, DECEMBER 5, 2011" PLAN PREPARED BY PRECISION SURVEYING, RHODE ISLAND; 3] "WELL LOCATION PLAN" PREPARED BY PRECISION SURVEYING, RHODE ISLAND, DATED DECEMBER 3, 2012.

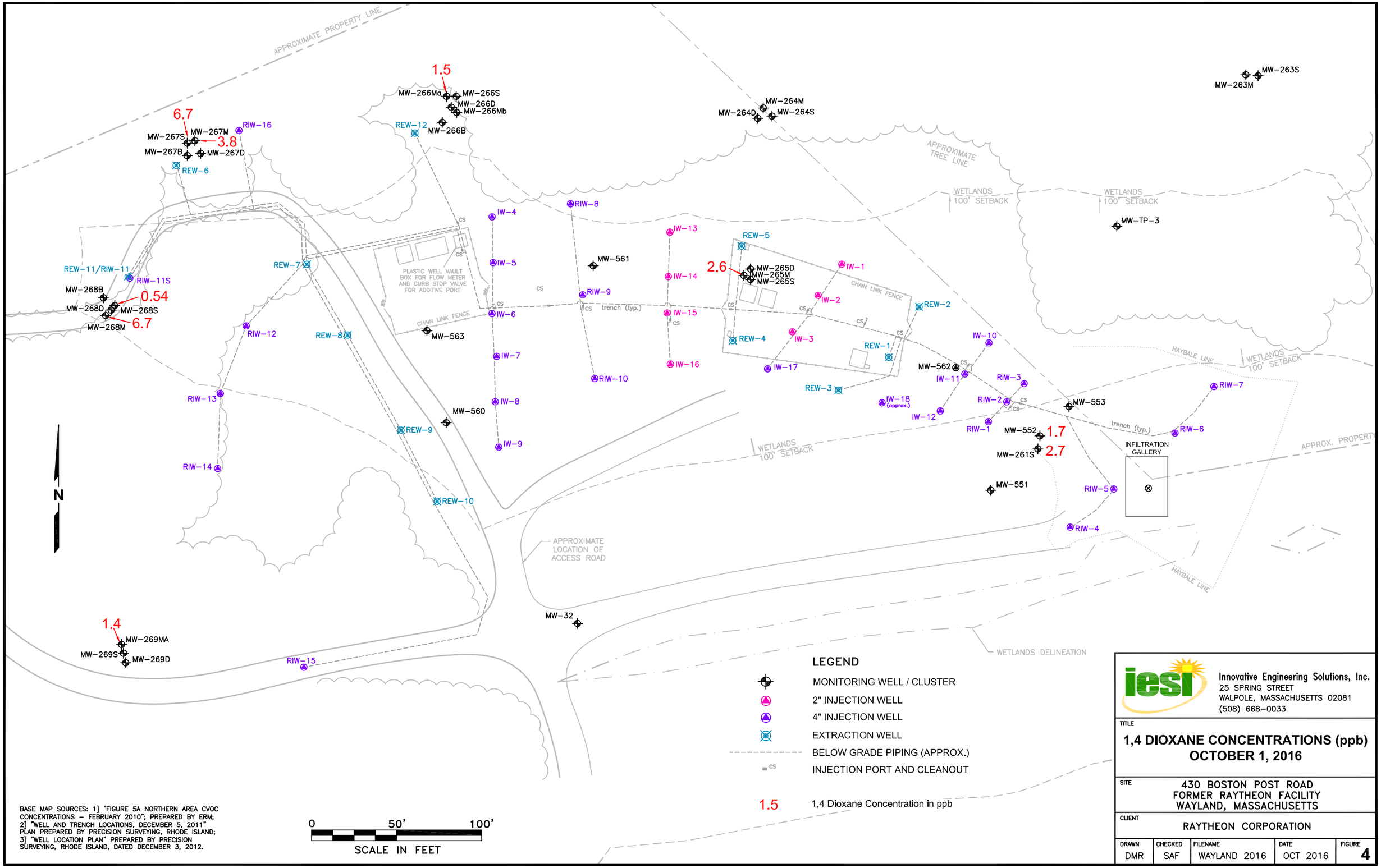
iesi
Innovative Engineering Solutions, Inc.
25 SPRING STREET
WALPOLE, MASSACHUSETTS 02081
(508) 668-0033

TITLE
GW-1
CONCENTRATION EXCEEDENCES (ppb)
OCTOBER 1, 2016

SITE
430 BOSTON POST ROAD
FORMER RAYTHEON FACILITY
WAYLAND, MASSACHUSETTS

CLIENT
RAYTHEON CORPORATION

DRAWN	CHECKED	FILENAME	DATE	FIGURE
DMR	SAF	WAYLAND 2016	OCT 2016	3



BASE MAP SOURCES: 1] "FIGURE 5A NORTHERN AREA CVOC CONCENTRATIONS – FEBRUARY 2010"; PREPARED BY ERM; 2] "WELL AND TRENCH LOCATIONS, DECEMBER 5, 2011" PLAN PREPARED BY PRECISION SURVEYING, RHODE ISLAND; 3] "WELL LOCATION PLAN" PREPARED BY PRECISION SURVEYING, RHODE ISLAND, DATED DECEMBER 3, 2012.

Innovative Engineering Solutions, Inc.
25 SPRING STREET
WALPOLE, MASSACHUSETTS 02081
(508) 668-0033

TITLE
1,4 DIOXANE CONCENTRATIONS (ppb)
OCTOBER 1, 2016

SITE
430 BOSTON POST ROAD
FORMER RAYTHEON FACILITY
WAYLAND, MASSACHUSETTS

CLIENT
RAYTHEON CORPORATION

DRAWN	CHECKED	FILENAME	DATE	FIGURE
DMR	SAF	WAYLAND 2016	OCT 2016	4

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-107199-1
Client Project/Site: IDS Wayland

For:
Innovative Engineering Solutions, Inc
25 Spring Street
Walpole, Massachusetts 02081

Attn: Vicki Pariyar

Denise L Giglia

Authorized for release by:
10/10/2016 10:45:48 AM
Denise Giglia, Project Management Assistant II
denise.giglia@testamericainc.com

Designee for

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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QC Association Summary 17
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Definitions/Glossary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107199-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-107199-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-107199-1

Receipt
The samples were received on 10/7/2016 2:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2º C.

GC/MS VOA
Method 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-dibromo-3-chloropropane, Carbon Disulfide, Isopropyl Ether, Naphthalene, tert-Amyl Methyl Ether and Tetrahydrofuran.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-324456 recovered outside MCP control limits but <40% for Tetrahydrofuran, Naphthalene . MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples are impacted: DEP-21-20161006 (480-107199-1) and TRIP BLANKS (480-107199-2).

Method 8260C: The laboratory control sample (LCS) for batch 480-324456 recovered outside control limits but were greater than 10% for the following analytes: 1,4-Dioxane . MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples are impacted: DEP-21-20161006 (480-107199-1) and TRIP BLANKS (480-107199-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MassDEP Analytical Protocol Certification Form

Laboratory Name:	**TestAmerica Buffalo**	Project #:	**480-107199**
Project Location:	**IDS Wayland**	RTN:	

This form provides certifications for the following data set: list Laboratory Sample ID Number(s):

480-107199 [1-2]

Matrices: ■ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ■	7470/7471 Hg CAM III B ☐	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	■ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	■ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	■ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	■ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	■ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ■ No[1]

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350***

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ■ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	■ Yes ☐ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature:	Denise L Giglia	Position:	Project Manager Assistant II
Printed Name:	Denise L. Giglia	Date:	10/10/16 10:41

Detection Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107199-1

Client Sample ID: DEP-21-20161006 — Lab Sample ID: 480-107199-1

No Detections.

Client Sample ID: TRIP BLANKS — Lab Sample ID: 480-107199-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107199-1

Client Sample ID: DEP-21-20161006

Lab Sample ID: 480-107199-1

Date Collected: 10/06/16 10:35

Matrix: Water

Date Received: 10/07/16 02:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/08/16 03:13	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/08/16 03:13	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/08/16 03:13	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/08/16 03:13	1
1,1-Dichloroethane	ND		1.0		ug/L			10/08/16 03:13	1
1,1-Dichloroethene	ND		1.0		ug/L			10/08/16 03:13	1
1,1-Dichloropropene	ND		1.0		ug/L			10/08/16 03:13	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/08/16 03:13	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/08/16 03:13	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/08/16 03:13	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/08/16 03:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/08/16 03:13	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/08/16 03:13	1
1,2-Dichloroethane	ND		1.0		ug/L			10/08/16 03:13	1
1,2-Dichloropropane	ND		1.0		ug/L			10/08/16 03:13	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/08/16 03:13	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/08/16 03:13	1
1,3-Dichloropropane	ND		1.0		ug/L			10/08/16 03:13	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/08/16 03:13	1
1,4-Dioxane	ND	*	50		ug/L			10/08/16 03:13	1
2,2-Dichloropropane	ND		1.0		ug/L			10/08/16 03:13	1
2-Butanone (MEK)	ND		10		ug/L			10/08/16 03:13	1
2-Chlorotoluene	ND		1.0		ug/L			10/08/16 03:13	1
2-Hexanone	ND		10		ug/L			10/08/16 03:13	1
4-Chlorotoluene	ND		1.0		ug/L			10/08/16 03:13	1
4-Isopropyltoluene	ND		1.0		ug/L			10/08/16 03:13	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/08/16 03:13	1
Acetone	ND		50		ug/L			10/08/16 03:13	1
Benzene	ND		1.0		ug/L			10/08/16 03:13	1
Bromobenzene	ND		1.0		ug/L			10/08/16 03:13	1
Bromoform	ND		1.0		ug/L			10/08/16 03:13	1
Bromomethane	ND		2.0		ug/L			10/08/16 03:13	1
Carbon disulfide	ND		10		ug/L			10/08/16 03:13	1
Carbon tetrachloride	ND		1.0		ug/L			10/08/16 03:13	1
Chlorobenzene	ND		1.0		ug/L			10/08/16 03:13	1
Chlorobromomethane	ND		1.0		ug/L			10/08/16 03:13	1
Chlorodibromomethane	ND		0.50		ug/L			10/08/16 03:13	1
Chloroethane	ND		2.0		ug/L			10/08/16 03:13	1
Chloroform	ND		1.0		ug/L			10/08/16 03:13	1
Chloromethane	ND		2.0		ug/L			10/08/16 03:13	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/08/16 03:13	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/08/16 03:13	1
Dichlorobromomethane	ND		0.50		ug/L			10/08/16 03:13	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/08/16 03:13	1
Ethyl ether	ND		1.0		ug/L			10/08/16 03:13	1
Ethylbenzene	ND		1.0		ug/L			10/08/16 03:13	1
Ethylene Dibromide	ND		1.0		ug/L			10/08/16 03:13	1
Hexachlorobutadiene	ND		0.40		ug/L			10/08/16 03:13	1
Isopropyl ether	ND		10		ug/L			10/08/16 03:13	1

Client Sample ID: DEP-21-20161006

Lab Sample ID: 480-107199-1
Date Collected: 10/06/16 10:35
Matrix: Water
Date Received: 10/07/16 02:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			10/08/16 03:13	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/08/16 03:13	1
Methylene Chloride	ND		1.0		ug/L			10/08/16 03:13	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/08/16 03:13	1
Naphthalene	ND		5.0		ug/L			10/08/16 03:13	1
n-Butylbenzene	ND		1.0		ug/L			10/08/16 03:13	1
N-Propylbenzene	ND		1.0		ug/L			10/08/16 03:13	1
o-Xylene	ND		1.0		ug/L			10/08/16 03:13	1
sec-Butylbenzene	ND		1.0		ug/L			10/08/16 03:13	1
Styrene	ND		1.0		ug/L			10/08/16 03:13	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/08/16 03:13	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/08/16 03:13	1
tert-Butylbenzene	ND		1.0		ug/L			10/08/16 03:13	1
Tetrachloroethene	ND		1.0		ug/L			10/08/16 03:13	1
Tetrahydrofuran	ND		10		ug/L			10/08/16 03:13	1
Toluene	ND		1.0		ug/L			10/08/16 03:13	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/08/16 03:13	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/08/16 03:13	1
Trichloroethene	ND		1.0		ug/L			10/08/16 03:13	1
Trichlorofluoromethane	ND		1.0		ug/L			10/08/16 03:13	1
Vinyl chloride	ND		1.0		ug/L			10/08/16 03:13	1
Dibromomethane	ND		1.0		ug/L			10/08/16 03:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*70 - 130*		*10/08/16 03:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*10/08/16 03:13*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/08/16 03:13*	*1*

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-107199-2
Date Collected: 10/06/16 00:00
Matrix: Water
Date Received: 10/07/16 02:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/08/16 03:37	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/08/16 03:37	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/08/16 03:37	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/08/16 03:37	1
1,1-Dichloroethane	ND		1.0		ug/L			10/08/16 03:37	1
1,1-Dichloroethene	ND		1.0		ug/L			10/08/16 03:37	1
1,1-Dichloropropene	ND		1.0		ug/L			10/08/16 03:37	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/08/16 03:37	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/08/16 03:37	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/08/16 03:37	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/08/16 03:37	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/08/16 03:37	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/08/16 03:37	1
1,2-Dichloroethane	ND		1.0		ug/L			10/08/16 03:37	1
1,2-Dichloropropane	ND		1.0		ug/L			10/08/16 03:37	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/08/16 03:37	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107199-1

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-107199-2

Date Collected: 10/06/16 00:00

Matrix: Water

Date Received: 10/07/16 02:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			10/08/16 03:37	1
1,3-Dichloropropane	ND		1.0		ug/L			10/08/16 03:37	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/08/16 03:37	1
1,4-Dioxane	ND	*	50		ug/L			10/08/16 03:37	1
2,2-Dichloropropane	ND		1.0		ug/L			10/08/16 03:37	1
2-Butanone (MEK)	ND		10		ug/L			10/08/16 03:37	1
2-Chlorotoluene	ND		1.0		ug/L			10/08/16 03:37	1
2-Hexanone	ND		10		ug/L			10/08/16 03:37	1
4-Chlorotoluene	ND		1.0		ug/L			10/08/16 03:37	1
4-Isopropyltoluene	ND		1.0		ug/L			10/08/16 03:37	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/08/16 03:37	1
Acetone	ND		50		ug/L			10/08/16 03:37	1
Benzene	ND		1.0		ug/L			10/08/16 03:37	1
Bromobenzene	ND		1.0		ug/L			10/08/16 03:37	1
Bromoform	ND		1.0		ug/L			10/08/16 03:37	1
Bromomethane	ND		2.0		ug/L			10/08/16 03:37	1
Carbon disulfide	ND		10		ug/L			10/08/16 03:37	1
Carbon tetrachloride	ND		1.0		ug/L			10/08/16 03:37	1
Chlorobenzene	ND		1.0		ug/L			10/08/16 03:37	1
Chlorobromomethane	ND		1.0		ug/L			10/08/16 03:37	1
Chlorodibromomethane	ND		0.50		ug/L			10/08/16 03:37	1
Chloroethane	ND		2.0		ug/L			10/08/16 03:37	1
Chloroform	ND		1.0		ug/L			10/08/16 03:37	1
Chloromethane	ND		2.0		ug/L			10/08/16 03:37	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/08/16 03:37	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/08/16 03:37	1
Dichlorobromomethane	ND		0.50		ug/L			10/08/16 03:37	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/08/16 03:37	1
Ethyl ether	ND		1.0		ug/L			10/08/16 03:37	1
Ethylbenzene	ND		1.0		ug/L			10/08/16 03:37	1
Ethylene Dibromide	ND		1.0		ug/L			10/08/16 03:37	1
Hexachlorobutadiene	ND		0.40		ug/L			10/08/16 03:37	1
Isopropyl ether	ND		10		ug/L			10/08/16 03:37	1
Isopropylbenzene	ND		1.0		ug/L			10/08/16 03:37	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/08/16 03:37	1
Methylene Chloride	ND		1.0		ug/L			10/08/16 03:37	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/08/16 03:37	1
Naphthalene	ND		5.0		ug/L			10/08/16 03:37	1
n-Butylbenzene	ND		1.0		ug/L			10/08/16 03:37	1
N-Propylbenzene	ND		1.0		ug/L			10/08/16 03:37	1
o-Xylene	ND		1.0		ug/L			10/08/16 03:37	1
sec-Butylbenzene	ND		1.0		ug/L			10/08/16 03:37	1
Styrene	ND		1.0		ug/L			10/08/16 03:37	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/08/16 03:37	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/08/16 03:37	1
tert-Butylbenzene	ND		1.0		ug/L			10/08/16 03:37	1
Tetrachloroethene	ND		1.0		ug/L			10/08/16 03:37	1
Tetrahydrofuran	ND		10		ug/L			10/08/16 03:37	1
Toluene	ND		1.0		ug/L			10/08/16 03:37	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107199-1

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-107199-2

Date Collected: 10/06/16 00:00

Matrix: Water

Date Received: 10/07/16 02:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/08/16 03:37	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/08/16 03:37	1
Trichloroethene	ND		1.0		ug/L			10/08/16 03:37	1
Trichlorofluoromethane	ND		1.0		ug/L			10/08/16 03:37	1
Vinyl chloride	ND		1.0		ug/L			10/08/16 03:37	1
Dibromomethane	ND		1.0		ug/L			10/08/16 03:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*89*		*70 - 130*		*10/08/16 03:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*10/08/16 03:37*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/08/16 03:37*	*1*

Surrogate Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107199-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	12DCE	BFB
Lab Sample ID	**Client Sample ID**	**(70-130)**	**(70-130)**	**(70-130)**
480-107199-1	DEP-21-20161006	86	88	97
480-107199-2	TRIP BLANKS	89	88	97
LCS 480-324456/5	Lab Control Sample	88	82	100
LCSD 480-324456/6	Lab Control Sample Dup	87	82	97
MB 480-324456/8	Method Blank	88	86	96

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-324456/8
Matrix: Water
Analysis Batch: 324456

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/07/16 22:17	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/07/16 22:17	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 22:17	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/07/16 22:17	1
1,1-Dichloroethane	ND		1.0		ug/L			10/07/16 22:17	1
1,1-Dichloroethene	ND		1.0		ug/L			10/07/16 22:17	1
1,1-Dichloropropene	ND		1.0		ug/L			10/07/16 22:17	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/16 22:17	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/07/16 22:17	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/16 22:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/07/16 22:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/16 22:17	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/07/16 22:17	1
1,2-Dichloroethane	ND		1.0		ug/L			10/07/16 22:17	1
1,2-Dichloropropane	ND		1.0		ug/L			10/07/16 22:17	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/07/16 22:17	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/07/16 22:17	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 22:17	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/07/16 22:17	1
1,4-Dioxane	ND		50		ug/L			10/07/16 22:17	1
2,2-Dichloropropane	ND		1.0		ug/L			10/07/16 22:17	1
2-Butanone (MEK)	ND		10		ug/L			10/07/16 22:17	1
2-Chlorotoluene	ND		1.0		ug/L			10/07/16 22:17	1
2-Hexanone	ND		10		ug/L			10/07/16 22:17	1
4-Chlorotoluene	ND		1.0		ug/L			10/07/16 22:17	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 22:17	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/07/16 22:17	1
Acetone	ND		50		ug/L			10/07/16 22:17	1
Benzene	ND		1.0		ug/L			10/07/16 22:17	1
Bromobenzene	ND		1.0		ug/L			10/07/16 22:17	1
Bromoform	ND		1.0		ug/L			10/07/16 22:17	1
Bromomethane	ND		2.0		ug/L			10/07/16 22:17	1
Carbon disulfide	ND		10		ug/L			10/07/16 22:17	1
Carbon tetrachloride	ND		1.0		ug/L			10/07/16 22:17	1
Chlorobenzene	ND		1.0		ug/L			10/07/16 22:17	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 22:17	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 22:17	1
Chloroethane	ND		2.0		ug/L			10/07/16 22:17	1
Chloroform	ND		1.0		ug/L			10/07/16 22:17	1
Chloromethane	ND		2.0		ug/L			10/07/16 22:17	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 22:17	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 22:17	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 22:17	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/07/16 22:17	1
Ethyl ether	ND		1.0		ug/L			10/07/16 22:17	1
Ethylbenzene	ND		1.0		ug/L			10/07/16 22:17	1
Ethylene Dibromide	ND		1.0		ug/L			10/07/16 22:17	1
Hexachlorobutadiene	ND		0.40		ug/L			10/07/16 22:17	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-324456/8
Matrix: Water
Analysis Batch: 324456

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			10/07/16 22:17	1
Isopropylbenzene	ND		1.0		ug/L			10/07/16 22:17	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/07/16 22:17	1
Methylene Chloride	ND		1.0		ug/L			10/07/16 22:17	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/07/16 22:17	1
Naphthalene	ND		5.0		ug/L			10/07/16 22:17	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 22:17	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 22:17	1
o-Xylene	ND		1.0		ug/L			10/07/16 22:17	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 22:17	1
Styrene	ND		1.0		ug/L			10/07/16 22:17	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/07/16 22:17	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/07/16 22:17	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 22:17	1
Tetrachloroethene	ND		1.0		ug/L			10/07/16 22:17	1
Tetrahydrofuran	ND		10		ug/L			10/07/16 22:17	1
Toluene	ND		1.0		ug/L			10/07/16 22:17	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 22:17	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 22:17	1
Trichloroethene	ND		1.0		ug/L			10/07/16 22:17	1
Trichlorofluoromethane	ND		1.0		ug/L			10/07/16 22:17	1
Vinyl chloride	ND		1.0		ug/L			10/07/16 22:17	1
Dibromomethane	ND		1.0		ug/L			10/07/16 22:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*70 - 130*		*10/07/16 22:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*		*10/07/16 22:17*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*10/07/16 22:17*	*1*

Lab Sample ID: LCS 480-324456/5
Matrix: Water
Analysis Batch: 324456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	23.1		ug/L		92	70 - 130
1,1,1-Trichloroethane	25.0	24.0		ug/L		96	70 - 130
1,1,2,2-Tetrachloroethane	25.0	20.8		ug/L		83	70 - 130
1,1,2-Trichloroethane	25.0	21.6		ug/L		86	70 - 130
1,1-Dichloroethane	25.0	24.3		ug/L		97	70 - 130
1,1-Dichloroethene	25.0	24.3		ug/L		97	70 - 130
1,1-Dichloropropene	25.0	22.7		ug/L		91	70 - 130
1,2,3-Trichlorobenzene	25.0	20.4		ug/L		82	70 - 130
1,2,3-Trichloropropane	25.0	19.5		ug/L		78	70 - 130
1,2,4-Trichlorobenzene	25.0	21.5		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	25.0	23.0		ug/L		92	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	19.1		ug/L		76	70 - 130
1,2-Dichlorobenzene	25.0	22.5		ug/L		90	70 - 130
1,2-Dichloroethane	25.0	22.0		ug/L		88	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-324456/5
Matrix: Water
Analysis Batch: 324456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	23.0		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	25.0	23.4		ug/L		94	70 - 130
1,3-Dichlorobenzene	25.0	22.9		ug/L		91	70 - 130
1,3-Dichloropropane	25.0	20.6		ug/L		82	70 - 130
1,4-Dichlorobenzene	25.0	23.2		ug/L		93	70 - 130
1,4-Dioxane	500	326	*	ug/L		65	70 - 130
2,2-Dichloropropane	25.0	23.3		ug/L		93	70 - 130
2-Butanone (MEK)	125	107		ug/L		86	70 - 130
2-Chlorotoluene	25.0	22.7		ug/L		91	70 - 130
2-Hexanone	125	101		ug/L		80	70 - 130
4-Chlorotoluene	25.0	24.6		ug/L		98	70 - 130
4-Isopropyltoluene	25.0	23.5		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	125	96.2		ug/L		77	70 - 130
Acetone	125	121		ug/L		97	70 - 130
Benzene	25.0	23.2		ug/L		93	70 - 130
Bromobenzene	25.0	23.3		ug/L		93	70 - 130
Bromoform	25.0	22.1		ug/L		88	70 - 130
Bromomethane	25.0	25.5		ug/L		102	70 - 130
Carbon disulfide	25.0	23.6		ug/L		94	70 - 130
Carbon tetrachloride	25.0	24.3		ug/L		97	70 - 130
Chlorobenzene	25.0	22.5		ug/L		90	70 - 130
Chlorobromomethane	25.0	24.8		ug/L		99	70 - 130
Chlorodibromomethane	25.0	23.2		ug/L		93	70 - 130
Chloroethane	25.0	27.5		ug/L		110	70 - 130
Chloroform	25.0	23.3		ug/L		93	70 - 130
Chloromethane	25.0	26.1		ug/L		104	70 - 130
cis-1,2-Dichloroethene	25.0	24.3		ug/L		97	70 - 130
cis-1,3-Dichloropropene	25.0	24.1		ug/L		96	70 - 130
Dichlorobromomethane	25.0	23.7		ug/L		95	70 - 130
Dichlorodifluoromethane	25.0	26.4		ug/L		106	70 - 130
Ethyl ether	25.0	21.0		ug/L		84	70 - 130
Ethylbenzene	25.0	22.1		ug/L		89	70 - 130
Ethylene Dibromide	25.0	21.2		ug/L		85	70 - 130
Hexachlorobutadiene	25.0	23.2		ug/L		93	70 - 130
Isopropyl ether	25.0	23.2		ug/L		93	70 - 130
Isopropylbenzene	25.0	22.6		ug/L		90	70 - 130
Methyl tert-butyl ether	25.0	21.8		ug/L		87	70 - 130
Methylene Chloride	25.0	25.8		ug/L		103	70 - 130
m-Xylene & p-Xylene	25.0	22.2		ug/L		89	70 - 130
Naphthalene	25.0	19.4		ug/L		77	70 - 130
n-Butylbenzene	25.0	22.9		ug/L		92	70 - 130
N-Propylbenzene	25.0	22.6		ug/L		90	70 - 130
o-Xylene	25.0	22.6		ug/L		90	70 - 130
sec-Butylbenzene	25.0	22.8		ug/L		91	70 - 130
Styrene	25.0	23.7		ug/L		95	70 - 130
Tert-amyl methyl ether	25.0	22.6		ug/L		91	70 - 130
Tert-butyl ethyl ether	25.0	22.8		ug/L		91	70 - 130
tert-Butylbenzene	25.0	22.7		ug/L		91	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-324456/5
Matrix: Water
Analysis Batch: 324456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	25.0	24.8		ug/L		99	70 - 130
Tetrahydrofuran	50.0	53.3		ug/L		107	70 - 130
Toluene	25.0	21.8		ug/L		87	70 - 130
trans-1,2-Dichloroethene	25.0	23.5		ug/L		94	70 - 130
trans-1,3-Dichloropropene	25.0	21.7		ug/L		87	70 - 130
Trichloroethene	25.0	23.8		ug/L		95	70 - 130
Trichlorofluoromethane	25.0	29.8		ug/L		119	70 - 130
Vinyl chloride	25.0	25.9		ug/L		104	70 - 130
Dibromomethane	25.0	22.8		ug/L		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*88*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 480-324456/6
Matrix: Water
Analysis Batch: 324456

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	22.9		ug/L		92	70 - 130	1	20
1,1,1-Trichloroethane	25.0	24.0		ug/L		96	70 - 130	0	20
1,1,2,2-Tetrachloroethane	25.0	20.9		ug/L		84	70 - 130	1	20
1,1,2-Trichloroethane	25.0	21.0		ug/L		84	70 - 130	3	20
1,1-Dichloroethane	25.0	23.7		ug/L		95	70 - 130	2	20
1,1-Dichloroethene	25.0	23.3		ug/L		93	70 - 130	4	20
1,1-Dichloropropene	25.0	23.4		ug/L		94	70 - 130	3	20
1,2,3-Trichlorobenzene	25.0	21.1		ug/L		84	70 - 130	3	20
1,2,3-Trichloropropane	25.0	19.4		ug/L		78	70 - 130	0	20
1,2,4-Trichlorobenzene	25.0	21.7		ug/L		87	70 - 130	1	20
1,2,4-Trimethylbenzene	25.0	23.7		ug/L		95	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	25.0	20.3		ug/L		81	70 - 130	6	20
1,2-Dichlorobenzene	25.0	23.0		ug/L		92	70 - 130	2	20
1,2-Dichloroethane	25.0	21.7		ug/L		87	70 - 130	1	20
1,2-Dichloropropane	25.0	22.9		ug/L		92	70 - 130	0	20
1,3,5-Trimethylbenzene	25.0	23.9		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	25.0	23.5		ug/L		94	70 - 130	3	20
1,3-Dichloropropane	25.0	20.1		ug/L		80	70 - 130	3	20
1,4-Dichlorobenzene	25.0	23.4		ug/L		94	70 - 130	1	20
1,4-Dioxane	500	386		ug/L		77	70 - 130	17	20
2,2-Dichloropropane	25.0	23.5		ug/L		94	70 - 130	1	20
2-Butanone (MEK)	125	117		ug/L		94	70 - 130	9	20
2-Chlorotoluene	25.0	23.6		ug/L		94	70 - 130	4	20
2-Hexanone	125	102		ug/L		81	70 - 130	1	20
4-Chlorotoluene	25.0	25.0		ug/L		100	70 - 130	2	20
4-Isopropyltoluene	25.0	24.5		ug/L		98	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	125	95.9		ug/L		77	70 - 130	0	20
Acetone	125	116		ug/L		93	70 - 130	4	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-324456/6
Matrix: Water
Analysis Batch: 324456

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	25.0	23.2		ug/L		93	70 - 130	0	20
Bromobenzene	25.0	22.8		ug/L		91	70 - 130	2	20
Bromoform	25.0	21.7		ug/L		87	70 - 130	2	20
Bromomethane	25.0	26.6		ug/L		107	70 - 130	4	20
Carbon disulfide	25.0	24.2		ug/L		97	70 - 130	2	20
Carbon tetrachloride	25.0	24.9		ug/L		99	70 - 130	2	20
Chlorobenzene	25.0	23.1		ug/L		93	70 - 130	3	20
Chlorobromomethane	25.0	24.1		ug/L		97	70 - 130	3	20
Chlorodibromomethane	25.0	23.1		ug/L		92	70 - 130	0	20
Chloroethane	25.0	27.2		ug/L		109	70 - 130	1	20
Chloroform	25.0	22.7		ug/L		91	70 - 130	2	20
Chloromethane	25.0	25.7		ug/L		103	70 - 130	2	20
cis-1,2-Dichloroethene	25.0	23.4		ug/L		93	70 - 130	4	20
cis-1,3-Dichloropropene	25.0	23.5		ug/L		94	70 - 130	2	20
Dichlorobromomethane	25.0	23.6		ug/L		94	70 - 130	0	20
Dichlorodifluoromethane	25.0	26.5		ug/L		106	70 - 130	0	20
Ethyl ether	25.0	21.2		ug/L		85	70 - 130	1	20
Ethylbenzene	25.0	22.8		ug/L		91	70 - 130	3	20
Ethylene Dibromide	25.0	21.3		ug/L		85	70 - 130	1	20
Hexachlorobutadiene	25.0	24.2		ug/L		97	70 - 130	4	20
Isopropyl ether	25.0	22.4		ug/L		90	70 - 130	4	20
Isopropylbenzene	25.0	23.2		ug/L		93	70 - 130	3	20
Methyl tert-butyl ether	25.0	20.6		ug/L		82	70 - 130	6	20
Methylene Chloride	25.0	25.1		ug/L		101	70 - 130	3	20
m-Xylene & p-Xylene	25.0	23.6		ug/L		94	70 - 130	6	20
Naphthalene	25.0	19.9		ug/L		80	70 - 130	3	20
n-Butylbenzene	25.0	23.4		ug/L		94	70 - 130	2	20
N-Propylbenzene	25.0	23.4		ug/L		94	70 - 130	4	20
o-Xylene	25.0	23.5		ug/L		94	70 - 130	4	20
sec-Butylbenzene	25.0	23.9		ug/L		95	70 - 130	4	20
Styrene	25.0	23.7		ug/L		95	70 - 130	0	20
Tert-amyl methyl ether	25.0	21.9		ug/L		87	70 - 130	3	20
Tert-butyl ethyl ether	25.0	22.6		ug/L		90	70 - 130	1	20
tert-Butylbenzene	25.0	23.9		ug/L		96	70 - 130	5	20
Tetrachloroethene	25.0	25.4		ug/L		101	70 - 130	2	20
Tetrahydrofuran	50.0	52.2		ug/L		104	70 - 130	2	20
Toluene	25.0	22.4		ug/L		90	70 - 130	3	20
trans-1,2-Dichloroethene	25.0	23.5		ug/L		94	70 - 130	0	20
trans-1,3-Dichloropropene	25.0	21.2		ug/L		85	70 - 130	3	20
Trichloroethene	25.0	24.3		ug/L		97	70 - 130	2	20
Trichlorofluoromethane	25.0	30.0		ug/L		120	70 - 130	1	20
Vinyl chloride	25.0	26.7		ug/L		107	70 - 130	3	20
Dibromomethane	25.0	22.4		ug/L		89	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*87*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

QC Association Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107199-1

GC/MS VOA

Analysis Batch: 324456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107199-1	DEP-21-20161006	Total/NA	Water	8260C	
480-107199-2	TRIP BLANKS	Total/NA	Water	8260C	
MB 480-324456/8	Method Blank	Total/NA	Water	8260C	
LCS 480-324456/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-324456/6	Lab Control Sample Dup	Total/NA	Water	8260C	

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107199-1

Client Sample ID: DEP-21-20161006

Lab Sample ID: 480-107199-1
Date Collected: 10/06/16 10:35
Matrix: Water
Date Received: 10/07/16 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324456	10/08/16 03:13	JWG	TAL BUF

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-107199-2
Date Collected: 10/06/16 00:00
Matrix: Water
Date Received: 10/07/16 02:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324456	10/08/16 03:37	JWG	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107199-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-17
California	State Program	9	1169CA	09-30-17
Connecticut	State Program	1	PH-0568	09-30-18
Florida	NELAP	4	E87672	06-30-17
Georgia	State Program	4	N/A	03-31-17
Georgia	State Program	4	956	03-31-17
Illinois	NELAP	5	200003	09-30-16 *
Iowa	State Program	7	374	03-01-17
Kansas	NELAP	7	E-10187	10-31-16
Kentucky (DW)	State Program	4	90029	12-31-16
Kentucky (UST)	State Program	4	30	03-31-17
Kentucky (WW)	State Program	4	90029	12-31-16
Louisiana	NELAP	6	02031	06-30-17
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-17
Massachusetts	State Program	1	M-NY044	06-30-17
Michigan	State Program	5	9937	03-31-17
Minnesota	NELAP	5	036-999-337	12-31-16
New Hampshire	NELAP Primary AB	1	2973	09-11-17
New Hampshire	NELAP Secondary AB	1	2337	11-17-16
New Jersey	NELAP	2	NY455	06-30-17
New York	NELAP	2	10026	03-31-17
North Dakota	State Program	8	R-176	03-31-17
Oklahoma	State Program	6	9421	08-31-17
Oregon	NELAP	10	NY200003	06-09-17
Pennsylvania	NELAP	3	68-00281	07-31-17
Rhode Island	State Program	1	LAO00328	12-30-16
Tennessee	State Program	4	TN02970	03-31-17
Texas	NELAP	6	T104704412-15-6	07-31-17
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-17
Washington	State Program	10	C784	02-10-17
West Virginia DEP	State Program	3	252	09-30-16 *
Wisconsin	State Program	5	998310390	08-31-17

* Certification renewal pending - certification considered valid.

Method Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107199-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107199-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-107199-1	DEP-21-20161006	Water	10/06/16 10:35	10/07/16 02:15
480-107199-2	TRIP BLANKS	Water	10/06/16 00:00	10/07/16 02:15

Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 480-107199-1

Login Number: 107199
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	IESI
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

360325-Boston

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road -- Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:	Sample Collector's Name (Please Print Neatly): Dany Jones	Lab PM:	Lab CC	COC No: 37034
Client Contact: Vicki Perriman	Sample Collector's Phone: 508-404-3196	E-Mail:		Page: 1 of 1
Company: Innovative Engineering Solutions Inc				Job #:
Address: 23 Spring St	Due Date Requested: 10/13/16			
City: Walpole MA	Turnaround Time (TAT) Requested (business days): 5 days			
State and Zip: MA 02081				
Client's Phone: 508-668-0033	Quote # or Project #:			
Client's Contact Email: vperriman@IESIonline.com	PO #: RA-008			
Client's Project Name/Number: Raytheon Wayland RA-008	WO #:			
Sample Collection Site Name & Location: Wayland MA	PWS ID #:			

480-107199 COC

Analysis Request

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP ☐ GW1/S1 ☐
RCP ☐ CT RSR ☐
DEP Form ☐ EDD Required ☐
eDEP Filing ☐ NPDES ☐

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit Test-America to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	8260MCP	Total Number of Containers (enter total for each line)	Special Instructions & Notes:
			Preservation Codes →		A		
DEP-21-2016 1006	10/6/16	1033	G	W	X	3	
Trip Blanks	—	—	—	W	X	2	

Possible Hazard Identification (please check off each that may apply):
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month):
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

** **Matrix Types**: A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► **NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !!** ◄

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10/6/16 1225	IESI		10-6-16-1 1230	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10-6-16 1800	TA		10-7-16 0215	TAD
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 2.2 #1

WI-QA-010 rev 8

Revised 10/29/2014
TAL-8245-360R

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-106923-1
Client Project/Site: IDS Wayland

For:
Innovative Engineering Solutions, Inc
25 Spring Street
Walpole, Massachusetts 02081

Attn: Vicki Pariyar

Authorized for release by:
10/11/2016 9:05:07 AM
Denise Giglia, Project Management Assistant II
denise.giglia@testamericainc.com

Designee for

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-106923-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-106923-1

Receipt
The samples were received on 10/4/2016 12:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7º C.

GC/MS VOA
Method 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-dibromo-3-chloropropane, Carbon Disulfide, Isopropyl Ether, Naphthalene, tert-Amyl Methyl Ether and Tetrahydrofuran.

Method 8260C: The continuing calibration verification (CCV) for Tetrahydrofuran, Dichlorodifluoromethane, and 1,4-Dioxane associated with batch 480-323673 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following sample was affected : TRIP BLANKS (480-106923-10).

Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-562-20161003 (480-106923-5) and MW-265M-20161003 (480-106923-7). Elevated reporting limits (RLs) are provided.

Method 8260C: The following samples were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: MW-265M-20161003 (480-106923-7). The sample was analyzed within 7 days per EPA recommendation.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-323720 recovered outside MCP control limits but <40% for Trichlorofluoromethane, 1,2,3-Trichloropropane, Tetrahydrofuran, Naphthalene and 1,4-Dioxane . MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples are impacted: MW-551-20161003 (480-106923-2), MW-552-20161003 (480-106923-3), MW-553-20161003 (480-106923-4), MW-562-20161003 (480-106923-5), MW-265S-20161003 (480-106923-6), MW-265M-20161003 (480-106923-7), MW-265D-20161003 (480-106923-8) and DUP1-20161003 (480-106923-9).

Method 8260C: The continuing calibration verification (CCV) for Acetone and 1,4-Dioxane associated with batch 480-323855 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following sample was affected : MW-261S-20161003 (480-106923-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 522: Surrogate recovery for the following sample was outside control limits: MW-265M-20161003 (480-106923-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HPLC/IC
Method 300.0: The following samples were diluted due to the nature of the sample matrix: MW-261S-20161003 (480-106923-1), MW-552-20161003 (480-106923-3), MW-553-20161003 (480-106923-4), MW-562-20161003 (480-106923-5) and MW-265M-20161003 (480-106923-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010: At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

No additional analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Job ID: 480-106923-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

General Chemistry
Method 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: MW-261S-20161003 (480-106923-1), MW-552-20161003 (480-106923-3), MW-553-20161003 (480-106923-4), MW-562-20161003 (480-106923-5) and MW-265M-20161003 (480-106923-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

MassDEP Analytical Protocol Certification Form

Laboratory Name:	**TestAmerica Buffalo**	Project #:	**480-106923**
Project Location:	**IDS Wayland**	RTN:	

This form provides certifications for the following data set: list Laboratory Sample ID Number(s):

480-106923 [1-10]

Matrices: ■ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ■	7470/7471 Hg CAM III B ☐	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ■	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	■ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	■ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	■ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	■ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	■ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ■ No[1]

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350***

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ■ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	☐ Yes ■ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature:	Denise L Giglia	Position:	Project Manager Assistant II
Printed Name:	Denise L. Giglia	Date:	10/11/16 8:53

Detection Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Client Sample ID: MW-261S-20161003 — Lab Sample ID: 480-106923-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1.7		1.0		ug/L	1		8260C	Total/NA
Ethylbenzene	4.1		1.0		ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	14		2.0		ug/L	1		8260C	Total/NA
o-Xylene	3.5		1.0		ug/L	1		8260C	Total/NA
Toluene	1.9		1.0		ug/L	1		8260C	Total/NA
1,4-Dioxane	2.7		0.20		ug/L	1		522	Total/NA
Iron	50		0.050		mg/L	1		6010	Total/NA
Chloride	23		2.5		mg/L	5		300.0	Total/NA
Ammonia	0.48		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	2.0		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	2.2		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	2.1		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	400		5.0		mg/L	1		SM 2320B	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.8	HF	0.1		SU	1		9040C	Total/NA

Client Sample ID: MW-551-20161003 — Lab Sample ID: 480-106923-2

No Detections.

Client Sample ID: MW-552-20161003 — Lab Sample ID: 480-106923-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.4		1.0		ug/L	1		8260C	Total/NA
1,4-Dioxane	1.7		0.20		ug/L	1		522	Total/NA
Iron	33		0.050		mg/L	1		6010	Total/NA
Chloride	13		2.5		mg/L	5		300.0	Total/NA
Ammonia	0.47		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	1.4		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	1.6		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	1.5		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	480		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.026		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.9	HF	0.1		SU	1		9040C	Total/NA

Client Sample ID: MW-553-20161003 — Lab Sample ID: 480-106923-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	6.3		1.0		ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	23		2.0		ug/L	1		8260C	Total/NA
o-Xylene	5.7		1.0		ug/L	1		8260C	Total/NA
Toluene	5.6		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	2.6		1.0		ug/L	1		8260C	Total/NA
Iron	33		0.050		mg/L	1		6010	Total/NA
Chloride	13		5.0		mg/L	10		300.0	Total/NA
Ammonia	0.42		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	2.1		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	2.7		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	2.4		1.0		mg/L	1		9060A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Client Sample ID: MW-553-20161003 (Continued) — Lab Sample ID: 480-106923-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity, Total	650		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.043		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	7.0	HF	0.1		SU	1		9040C	Total/NA

Client Sample ID: MW-562-20161003 — Lab Sample ID: 480-106923-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	140		40		ug/L	4		8260C	Total/NA
Toluene	6.0		4.0		ug/L	4		8260C	Total/NA
Iron	240		0.050		mg/L	1		6010	Total/NA
Chloride	31		5.0		mg/L	10		300.0	Total/NA
Ammonia	1.1		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	560		20		mg/L	20		9060A	Total/NA
TOC Result 2	590		20		mg/L	20		9060A	Total/NA
Total Organic Carbon - Duplicates	580		20		mg/L	20		9060A	Total/NA
Alkalinity, Total	510		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	1.4		0.10		mg/L	5		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.1	HF	0.1		SU	1		9040C	Total/NA

Client Sample ID: MW-265S-20161003 — Lab Sample ID: 480-106923-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1.5		1.0		ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	2.6		2.0		ug/L	1		8260C	Total/NA
o-Xylene	1.3		1.0		ug/L	1		8260C	Total/NA
Toluene	1.1		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-265M-20161003 — Lab Sample ID: 480-106923-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	140		50		ug/L	5		8260C	Total/NA
Acetone	460		250		ug/L	5		8260C	Total/NA
m-Xylene & p-Xylene	14		10		ug/L	5		8260C	Total/NA
o-Xylene	5.4		5.0		ug/L	5		8260C	Total/NA
Toluene	9.3		5.0		ug/L	5		8260C	Total/NA
Iron	460		0.050		mg/L	1		6010	Total/NA
Chloride	41		10		mg/L	20		300.0	Total/NA
Ammonia	0.50		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	1300		20		mg/L	20		9060A	Total/NA
TOC Result 2	1400		20		mg/L	20		9060A	Total/NA
Total Organic Carbon - Duplicates	1400		20		mg/L	20		9060A	Total/NA
Alkalinity, Total	730		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.19		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	5.1	HF	0.1		SU	1		9040C	Total/NA

Client Sample ID: MW-265D-20161003 — Lab Sample ID: 480-106923-8

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Client Sample ID: MW-265D-20161003 (Continued) — Lab Sample ID: 480-106923-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1.2		1.0		ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	2.5		2.0		ug/L	1		8260C	Total/NA
o-Xylene	1.2		1.0		ug/L	1		8260C	Total/NA
Toluene	1.1		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: DUP1-20161003 — Lab Sample ID: 480-106923-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.1		1.0		ug/L	1		8260C	Total/NA
1,4-Dioxane	1.7		0.20		ug/L	1		522	Total/NA

Client Sample ID: TRIP BLANKS — Lab Sample ID: 480-106923-10

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Client Sample ID: MW-261S-20161003

Lab Sample ID: 480-106923-1

Date Collected: 10/03/16 08:15
Matrix: Water
Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/05/16 13:31	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/05/16 13:31	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/05/16 13:31	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/05/16 13:31	1
1,1-Dichloroethane	ND		1.0		ug/L			10/05/16 13:31	1
1,1-Dichloroethene	ND		1.0		ug/L			10/05/16 13:31	1
1,1-Dichloropropene	ND		1.0		ug/L			10/05/16 13:31	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/05/16 13:31	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/05/16 13:31	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/05/16 13:31	1
1,2,4-Trimethylbenzene	**1.7**		1.0		ug/L			10/05/16 13:31	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/05/16 13:31	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/05/16 13:31	1
1,2-Dichloroethane	ND		1.0		ug/L			10/05/16 13:31	1
1,2-Dichloropropane	ND		1.0		ug/L			10/05/16 13:31	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/05/16 13:31	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/05/16 13:31	1
1,3-Dichloropropane	ND		1.0		ug/L			10/05/16 13:31	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/05/16 13:31	1
1,4-Dioxane	ND		50		ug/L			10/05/16 13:31	1
2,2-Dichloropropane	ND		1.0		ug/L			10/05/16 13:31	1
2-Butanone (MEK)	ND		10		ug/L			10/05/16 13:31	1
2-Chlorotoluene	ND		1.0		ug/L			10/05/16 13:31	1
2-Hexanone	ND		10		ug/L			10/05/16 13:31	1
4-Chlorotoluene	ND		1.0		ug/L			10/05/16 13:31	1
4-Isopropyltoluene	ND		1.0		ug/L			10/05/16 13:31	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/05/16 13:31	1
Acetone	ND		50		ug/L			10/05/16 13:31	1
Benzene	ND		1.0		ug/L			10/05/16 13:31	1
Bromobenzene	ND		1.0		ug/L			10/05/16 13:31	1
Bromoform	ND		1.0		ug/L			10/05/16 13:31	1
Bromomethane	ND		2.0		ug/L			10/05/16 13:31	1
Carbon disulfide	ND		10		ug/L			10/05/16 13:31	1
Carbon tetrachloride	ND		1.0		ug/L			10/05/16 13:31	1
Chlorobenzene	ND		1.0		ug/L			10/05/16 13:31	1
Chlorobromomethane	ND		1.0		ug/L			10/05/16 13:31	1
Chlorodibromomethane	ND		0.50		ug/L			10/05/16 13:31	1
Chloroethane	ND		2.0		ug/L			10/05/16 13:31	1
Chloroform	ND		1.0		ug/L			10/05/16 13:31	1
Chloromethane	ND		2.0		ug/L			10/05/16 13:31	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/05/16 13:31	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 13:31	1
Dichlorobromomethane	ND		0.50		ug/L			10/05/16 13:31	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/05/16 13:31	1
Ethyl ether	ND		1.0		ug/L			10/05/16 13:31	1
Ethylbenzene	**4.1**		1.0		ug/L			10/05/16 13:31	1
Ethylene Dibromide	ND		1.0		ug/L			10/05/16 13:31	1
Hexachlorobutadiene	ND		0.40		ug/L			10/05/16 13:31	1
Isopropyl ether	ND		10		ug/L			10/05/16 13:31	1

Client Sample ID: MW-261S-20161003

Lab Sample ID: 480-106923-1

Date Collected: 10/03/16 08:15

Matrix: Water

Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			10/05/16 13:31	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/05/16 13:31	1
Methylene Chloride	ND		1.0		ug/L			10/05/16 13:31	1
m-Xylene & p-Xylene	**14**		2.0		ug/L			10/05/16 13:31	1
Naphthalene	ND		5.0		ug/L			10/05/16 13:31	1
n-Butylbenzene	ND		1.0		ug/L			10/05/16 13:31	1
N-Propylbenzene	ND		1.0		ug/L			10/05/16 13:31	1
o-Xylene	**3.5**		1.0		ug/L			10/05/16 13:31	1
sec-Butylbenzene	ND		1.0		ug/L			10/05/16 13:31	1
Styrene	ND		1.0		ug/L			10/05/16 13:31	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/05/16 13:31	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/05/16 13:31	1
tert-Butylbenzene	ND		1.0		ug/L			10/05/16 13:31	1
Tetrachloroethene	ND		1.0		ug/L			10/05/16 13:31	1
Tetrahydrofuran	ND		10		ug/L			10/05/16 13:31	1
Toluene	**1.9**		1.0		ug/L			10/05/16 13:31	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/05/16 13:31	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 13:31	1
Trichloroethene	ND		1.0		ug/L			10/05/16 13:31	1
Trichlorofluoromethane	ND		1.0		ug/L			10/05/16 13:31	1
Vinyl chloride	ND		1.0		ug/L			10/05/16 13:31	1
Dibromomethane	ND		1.0		ug/L			10/05/16 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*10/05/16 13:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*10/05/16 13:31*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/05/16 13:31*	*1*

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.7**		0.20		ug/L		10/05/16 11:16	10/06/16 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*97*		*70 - 130*	*10/05/16 11:16*	*10/06/16 14:36*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**50**		0.050		mg/L		10/04/16 08:55	10/05/16 16:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**23**		2.5		mg/L			10/05/16 12:02	5
Sulfate	ND		2.0		mg/L			10/07/16 06:46	1
Ammonia	**0.48**		0.20		mg/L		10/04/16 12:24	10/04/16 13:54	1
Nitrate as N	ND		0.050		mg/L			10/04/16 17:23	1
TOC Result 1	**2.0**		1.0		mg/L			10/05/16 18:14	1
TOC Result 2	**2.2**		1.0		mg/L			10/05/16 18:14	1
Total Organic Carbon - Duplicates	**2.1**		1.0		mg/L			10/05/16 18:14	1
Alkalinity, Total	**400**		5.0		mg/L			10/05/16 14:52	1
ortho-Phosphate	ND		0.020		mg/L			10/04/16 09:30	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Client Sample ID: MW-261S-20161003

Lab Sample ID: 480-106923-1
Date Collected: 10/03/16 08:15
Matrix: Water
Date Received: 10/04/16 00:50

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.8	HF	0.1		SU			10/05/16 14:17	1

Client Sample ID: MW-551-20161003

Lab Sample ID: 480-106923-2
Date Collected: 10/03/16 07:45
Matrix: Water
Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/04/16 23:40	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/04/16 23:40	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/04/16 23:40	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/04/16 23:40	1
1,1-Dichloroethane	ND		1.0		ug/L			10/04/16 23:40	1
1,1-Dichloroethene	ND		1.0		ug/L			10/04/16 23:40	1
1,1-Dichloropropene	ND		1.0		ug/L			10/04/16 23:40	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/04/16 23:40	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/04/16 23:40	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/04/16 23:40	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/04/16 23:40	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/04/16 23:40	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/04/16 23:40	1
1,2-Dichloroethane	ND		1.0		ug/L			10/04/16 23:40	1
1,2-Dichloropropane	ND		1.0		ug/L			10/04/16 23:40	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/04/16 23:40	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/04/16 23:40	1
1,3-Dichloropropane	ND		1.0		ug/L			10/04/16 23:40	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/04/16 23:40	1
1,4-Dioxane	ND		50		ug/L			10/04/16 23:40	1
2,2-Dichloropropane	ND		1.0		ug/L			10/04/16 23:40	1
2-Butanone (MEK)	ND		10		ug/L			10/04/16 23:40	1
2-Chlorotoluene	ND		1.0		ug/L			10/04/16 23:40	1
2-Hexanone	ND		10		ug/L			10/04/16 23:40	1
4-Chlorotoluene	ND		1.0		ug/L			10/04/16 23:40	1
4-Isopropyltoluene	ND		1.0		ug/L			10/04/16 23:40	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/04/16 23:40	1
Acetone	ND		50		ug/L			10/04/16 23:40	1
Benzene	ND		1.0		ug/L			10/04/16 23:40	1
Bromobenzene	ND		1.0		ug/L			10/04/16 23:40	1
Bromoform	ND		1.0		ug/L			10/04/16 23:40	1
Bromomethane	ND		2.0		ug/L			10/04/16 23:40	1
Carbon disulfide	ND		10		ug/L			10/04/16 23:40	1
Carbon tetrachloride	ND		1.0		ug/L			10/04/16 23:40	1
Chlorobenzene	ND		1.0		ug/L			10/04/16 23:40	1
Chlorobromomethane	ND		1.0		ug/L			10/04/16 23:40	1
Chlorodibromomethane	ND		0.50		ug/L			10/04/16 23:40	1
Chloroethane	ND		2.0		ug/L			10/04/16 23:40	1
Chloroform	ND		1.0		ug/L			10/04/16 23:40	1
Chloromethane	ND		2.0		ug/L			10/04/16 23:40	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/04/16 23:40	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/04/16 23:40	1
Dichlorobromomethane	ND		0.50		ug/L			10/04/16 23:40	1

Client Sample ID: MW-551-20161003

Lab Sample ID: 480-106923-2
Date Collected: 10/03/16 07:45
Matrix: Water
Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0		ug/L			10/04/16 23:40	1
Ethyl ether	ND		1.0		ug/L			10/04/16 23:40	1
Ethylbenzene	ND		1.0		ug/L			10/04/16 23:40	1
Ethylene Dibromide	ND		1.0		ug/L			10/04/16 23:40	1
Hexachlorobutadiene	ND		0.40		ug/L			10/04/16 23:40	1
Isopropyl ether	ND		10		ug/L			10/04/16 23:40	1
Isopropylbenzene	ND		1.0		ug/L			10/04/16 23:40	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/04/16 23:40	1
Methylene Chloride	ND		1.0		ug/L			10/04/16 23:40	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/04/16 23:40	1
Naphthalene	ND		5.0		ug/L			10/04/16 23:40	1
n-Butylbenzene	ND		1.0		ug/L			10/04/16 23:40	1
N-Propylbenzene	ND		1.0		ug/L			10/04/16 23:40	1
o-Xylene	ND		1.0		ug/L			10/04/16 23:40	1
sec-Butylbenzene	ND		1.0		ug/L			10/04/16 23:40	1
Styrene	ND		1.0		ug/L			10/04/16 23:40	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/04/16 23:40	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/04/16 23:40	1
tert-Butylbenzene	ND		1.0		ug/L			10/04/16 23:40	1
Tetrachloroethene	ND		1.0		ug/L			10/04/16 23:40	1
Tetrahydrofuran	ND		10		ug/L			10/04/16 23:40	1
Toluene	ND		1.0		ug/L			10/04/16 23:40	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/04/16 23:40	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/04/16 23:40	1
Trichloroethene	ND		1.0		ug/L			10/04/16 23:40	1
Trichlorofluoromethane	ND		1.0		ug/L			10/04/16 23:40	1
Vinyl chloride	ND		1.0		ug/L			10/04/16 23:40	1
Dibromomethane	ND		1.0		ug/L			10/04/16 23:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*70 - 130*		*10/04/16 23:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*10/04/16 23:40*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*10/04/16 23:40*	*1*

Client Sample ID: MW-552-20161003

Lab Sample ID: 480-106923-3
Date Collected: 10/03/16 08:55
Matrix: Water
Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/05/16 00:04	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/05/16 00:04	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/05/16 00:04	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/05/16 00:04	1
1,1-Dichloroethane	ND		1.0		ug/L			10/05/16 00:04	1
1,1-Dichloroethene	ND		1.0		ug/L			10/05/16 00:04	1
1,1-Dichloropropene	ND		1.0		ug/L			10/05/16 00:04	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/05/16 00:04	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/05/16 00:04	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/05/16 00:04	1

Client Sample ID: MW-552-20161003

Lab Sample ID: 480-106923-3

Date Collected: 10/03/16 08:55

Matrix: Water

Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/05/16 00:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/05/16 00:04	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/05/16 00:04	1
1,2-Dichloroethane	ND		1.0		ug/L			10/05/16 00:04	1
1,2-Dichloropropane	ND		1.0		ug/L			10/05/16 00:04	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/05/16 00:04	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/05/16 00:04	1
1,3-Dichloropropane	ND		1.0		ug/L			10/05/16 00:04	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/05/16 00:04	1
1,4-Dioxane	ND		50		ug/L			10/05/16 00:04	1
2,2-Dichloropropane	ND		1.0		ug/L			10/05/16 00:04	1
2-Butanone (MEK)	ND		10		ug/L			10/05/16 00:04	1
2-Chlorotoluene	ND		1.0		ug/L			10/05/16 00:04	1
2-Hexanone	ND		10		ug/L			10/05/16 00:04	1
4-Chlorotoluene	ND		1.0		ug/L			10/05/16 00:04	1
4-Isopropyltoluene	ND		1.0		ug/L			10/05/16 00:04	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/05/16 00:04	1
Acetone	ND		50		ug/L			10/05/16 00:04	1
Benzene	ND		1.0		ug/L			10/05/16 00:04	1
Bromobenzene	ND		1.0		ug/L			10/05/16 00:04	1
Bromoform	ND		1.0		ug/L			10/05/16 00:04	1
Bromomethane	ND		2.0		ug/L			10/05/16 00:04	1
Carbon disulfide	ND		10		ug/L			10/05/16 00:04	1
Carbon tetrachloride	ND		1.0		ug/L			10/05/16 00:04	1
Chlorobenzene	ND		1.0		ug/L			10/05/16 00:04	1
Chlorobromomethane	ND		1.0		ug/L			10/05/16 00:04	1
Chlorodibromomethane	ND		0.50		ug/L			10/05/16 00:04	1
Chloroethane	ND		2.0		ug/L			10/05/16 00:04	1
Chloroform	ND		1.0		ug/L			10/05/16 00:04	1
Chloromethane	ND		2.0		ug/L			10/05/16 00:04	1
cis-1,2-Dichloroethene	**2.4**		1.0		ug/L			10/05/16 00:04	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 00:04	1
Dichlorobromomethane	ND		0.50		ug/L			10/05/16 00:04	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/05/16 00:04	1
Ethyl ether	ND		1.0		ug/L			10/05/16 00:04	1
Ethylbenzene	ND		1.0		ug/L			10/05/16 00:04	1
Ethylene Dibromide	ND		1.0		ug/L			10/05/16 00:04	1
Hexachlorobutadiene	ND		0.40		ug/L			10/05/16 00:04	1
Isopropyl ether	ND		10		ug/L			10/05/16 00:04	1
Isopropylbenzene	ND		1.0		ug/L			10/05/16 00:04	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/05/16 00:04	1
Methylene Chloride	ND		1.0		ug/L			10/05/16 00:04	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/05/16 00:04	1
Naphthalene	ND		5.0		ug/L			10/05/16 00:04	1
n-Butylbenzene	ND		1.0		ug/L			10/05/16 00:04	1
N-Propylbenzene	ND		1.0		ug/L			10/05/16 00:04	1
o-Xylene	ND		1.0		ug/L			10/05/16 00:04	1
sec-Butylbenzene	ND		1.0		ug/L			10/05/16 00:04	1
Styrene	ND		1.0		ug/L			10/05/16 00:04	1

Client Sample ID: MW-552-20161003 — Lab Sample ID: 480-106923-3

Date Collected: 10/03/16 08:55 — **Matrix: Water**
Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	ND		5.0		ug/L			10/05/16 00:04	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/05/16 00:04	1
tert-Butylbenzene	ND		1.0		ug/L			10/05/16 00:04	1
Tetrachloroethene	ND		1.0		ug/L			10/05/16 00:04	1
Tetrahydrofuran	ND		10		ug/L			10/05/16 00:04	1
Toluene	ND		1.0		ug/L			10/05/16 00:04	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/05/16 00:04	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 00:04	1
Trichloroethene	ND		1.0		ug/L			10/05/16 00:04	1
Trichlorofluoromethane	ND		1.0		ug/L			10/05/16 00:04	1
Vinyl chloride	ND		1.0		ug/L			10/05/16 00:04	1
Dibromomethane	ND		1.0		ug/L			10/05/16 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*10/05/16 00:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*10/05/16 00:04*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*10/05/16 00:04*	*1*

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**		0.20		ug/L		10/05/16 11:16	10/06/16 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*91*		*70 - 130*	*10/05/16 11:16*	*10/06/16 14:55*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**33**		0.050		mg/L		10/04/16 08:55	10/05/16 16:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13**		2.5		mg/L			10/05/16 12:10	5
Sulfate	ND		2.0		mg/L			10/07/16 06:54	1
Ammonia	**0.47**		0.20		mg/L		10/04/16 12:24	10/04/16 13:54	1
Nitrate as N	ND		0.050		mg/L			10/04/16 17:26	1
TOC Result 1	**1.4**		1.0		mg/L			10/05/16 18:43	1
TOC Result 2	**1.6**		1.0		mg/L			10/05/16 18:43	1
Total Organic Carbon - Duplicates	**1.5**		1.0		mg/L			10/05/16 18:43	1
Alkalinity, Total	**480**		5.0		mg/L			10/05/16 15:00	1
ortho-Phosphate	**0.026**		0.020		mg/L			10/04/16 09:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.9**	**HF**	0.1		SU			10/05/16 14:20	1

Client Sample ID: MW-553-20161003 — Lab Sample ID: 480-106923-4

Date Collected: 10/03/16 09:50 — **Matrix: Water**
Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/05/16 00:28	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/05/16 00:28	1

Client Sample ID: MW-553-20161003

Lab Sample ID: 480-106923-4

Date Collected: 10/03/16 09:50

Matrix: Water

Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/05/16 00:28	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/05/16 00:28	1
1,1-Dichloroethane	ND		1.0		ug/L			10/05/16 00:28	1
1,1-Dichloroethene	ND		1.0		ug/L			10/05/16 00:28	1
1,1-Dichloropropene	ND		1.0		ug/L			10/05/16 00:28	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/05/16 00:28	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/05/16 00:28	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/05/16 00:28	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/05/16 00:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/05/16 00:28	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/05/16 00:28	1
1,2-Dichloroethane	ND		1.0		ug/L			10/05/16 00:28	1
1,2-Dichloropropane	ND		1.0		ug/L			10/05/16 00:28	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/05/16 00:28	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/05/16 00:28	1
1,3-Dichloropropane	ND		1.0		ug/L			10/05/16 00:28	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/05/16 00:28	1
1,4-Dioxane	ND		50		ug/L			10/05/16 00:28	1
2,2-Dichloropropane	ND		1.0		ug/L			10/05/16 00:28	1
2-Butanone (MEK)	ND		10		ug/L			10/05/16 00:28	1
2-Chlorotoluene	ND		1.0		ug/L			10/05/16 00:28	1
2-Hexanone	ND		10		ug/L			10/05/16 00:28	1
4-Chlorotoluene	ND		1.0		ug/L			10/05/16 00:28	1
4-Isopropyltoluene	ND		1.0		ug/L			10/05/16 00:28	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/05/16 00:28	1
Acetone	ND		50		ug/L			10/05/16 00:28	1
Benzene	ND		1.0		ug/L			10/05/16 00:28	1
Bromobenzene	ND		1.0		ug/L			10/05/16 00:28	1
Bromoform	ND		1.0		ug/L			10/05/16 00:28	1
Bromomethane	ND		2.0		ug/L			10/05/16 00:28	1
Carbon disulfide	ND		10		ug/L			10/05/16 00:28	1
Carbon tetrachloride	ND		1.0		ug/L			10/05/16 00:28	1
Chlorobenzene	ND		1.0		ug/L			10/05/16 00:28	1
Chlorobromomethane	ND		1.0		ug/L			10/05/16 00:28	1
Chlorodibromomethane	ND		0.50		ug/L			10/05/16 00:28	1
Chloroethane	ND		2.0		ug/L			10/05/16 00:28	1
Chloroform	ND		1.0		ug/L			10/05/16 00:28	1
Chloromethane	ND		2.0		ug/L			10/05/16 00:28	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/05/16 00:28	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 00:28	1
Dichlorobromomethane	ND		0.50		ug/L			10/05/16 00:28	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/05/16 00:28	1
Ethyl ether	ND		1.0		ug/L			10/05/16 00:28	1
Ethylbenzene	**6.3**		1.0		ug/L			10/05/16 00:28	1
Ethylene Dibromide	ND		1.0		ug/L			10/05/16 00:28	1
Hexachlorobutadiene	ND		0.40		ug/L			10/05/16 00:28	1
Isopropyl ether	ND		10		ug/L			10/05/16 00:28	1
Isopropylbenzene	ND		1.0		ug/L			10/05/16 00:28	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/05/16 00:28	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Client Sample ID: MW-553-20161003

Date Collected: 10/03/16 09:50
Date Received: 10/04/16 00:50

Lab Sample ID: 480-106923-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0		ug/L			10/05/16 00:28	1
m-Xylene & p-Xylene	**23**		2.0		ug/L			10/05/16 00:28	1
Naphthalene	ND		5.0		ug/L			10/05/16 00:28	1
n-Butylbenzene	ND		1.0		ug/L			10/05/16 00:28	1
N-Propylbenzene	ND		1.0		ug/L			10/05/16 00:28	1
o-Xylene	**5.7**		1.0		ug/L			10/05/16 00:28	1
sec-Butylbenzene	ND		1.0		ug/L			10/05/16 00:28	1
Styrene	ND		1.0		ug/L			10/05/16 00:28	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/05/16 00:28	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/05/16 00:28	1
tert-Butylbenzene	ND		1.0		ug/L			10/05/16 00:28	1
Tetrachloroethene	ND		1.0		ug/L			10/05/16 00:28	1
Tetrahydrofuran	ND		10		ug/L			10/05/16 00:28	1
Toluene	**5.6**		1.0		ug/L			10/05/16 00:28	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/05/16 00:28	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 00:28	1
Trichloroethene	ND		1.0		ug/L			10/05/16 00:28	1
Trichlorofluoromethane	ND		1.0		ug/L			10/05/16 00:28	1
Vinyl chloride	**2.6**		1.0		ug/L			10/05/16 00:28	1
Dibromomethane	ND		1.0		ug/L			10/05/16 00:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*10/05/16 00:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*10/05/16 00:28*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/05/16 00:28*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**33**		0.050		mg/L		10/04/16 08:55	10/05/16 16:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13**		5.0		mg/L			10/05/16 12:18	10
Sulfate	ND		2.0		mg/L			10/07/16 07:02	1
Ammonia	**0.42**		0.20		mg/L		10/04/16 12:24	10/04/16 13:55	1
Nitrate as N	ND		0.050		mg/L			10/04/16 17:27	1
TOC Result 1	**2.1**		1.0		mg/L			10/05/16 19:39	1
TOC Result 2	**2.7**		1.0		mg/L			10/05/16 19:39	1
Total Organic Carbon - Duplicates	**2.4**		1.0		mg/L			10/05/16 19:39	1
Alkalinity, Total	**650**		5.0		mg/L			10/05/16 15:09	1
ortho-Phosphate	**0.043**		0.020		mg/L			10/04/16 09:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.0**	**HF**	0.1		SU			10/05/16 14:22	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Client Sample ID: MW-562-20161003

Date Collected: 10/03/16 10:45
Date Received: 10/04/16 00:50

Lab Sample ID: 480-106923-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.0		ug/L			10/05/16 00:51	4
1,1,1-Trichloroethane	ND		4.0		ug/L			10/05/16 00:51	4
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L			10/05/16 00:51	4
1,1,2-Trichloroethane	ND		4.0		ug/L			10/05/16 00:51	4
1,1-Dichloroethane	ND		4.0		ug/L			10/05/16 00:51	4
1,1-Dichloroethene	ND		4.0		ug/L			10/05/16 00:51	4
1,1-Dichloropropene	ND		4.0		ug/L			10/05/16 00:51	4
1,2,3-Trichlorobenzene	ND		4.0		ug/L			10/05/16 00:51	4
1,2,3-Trichloropropane	ND		4.0		ug/L			10/05/16 00:51	4
1,2,4-Trichlorobenzene	ND		4.0		ug/L			10/05/16 00:51	4
1,2,4-Trimethylbenzene	ND		4.0		ug/L			10/05/16 00:51	4
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			10/05/16 00:51	4
1,2-Dichlorobenzene	ND		4.0		ug/L			10/05/16 00:51	4
1,2-Dichloroethane	ND		4.0		ug/L			10/05/16 00:51	4
1,2-Dichloropropane	ND		4.0		ug/L			10/05/16 00:51	4
1,3,5-Trimethylbenzene	ND		4.0		ug/L			10/05/16 00:51	4
1,3-Dichlorobenzene	ND		4.0		ug/L			10/05/16 00:51	4
1,3-Dichloropropane	ND		4.0		ug/L			10/05/16 00:51	4
1,4-Dichlorobenzene	ND		4.0		ug/L			10/05/16 00:51	4
1,4-Dioxane	ND		200		ug/L			10/05/16 00:51	4
2,2-Dichloropropane	ND		4.0		ug/L			10/05/16 00:51	4
2-Butanone (MEK)	**140**		40		ug/L			10/05/16 00:51	4
2-Chlorotoluene	ND		4.0		ug/L			10/05/16 00:51	4
2-Hexanone	ND		40		ug/L			10/05/16 00:51	4
4-Chlorotoluene	ND		4.0		ug/L			10/05/16 00:51	4
4-Isopropyltoluene	ND		4.0		ug/L			10/05/16 00:51	4
4-Methyl-2-pentanone (MIBK)	ND		40		ug/L			10/05/16 00:51	4
Acetone	ND		200		ug/L			10/05/16 00:51	4
Benzene	ND		4.0		ug/L			10/05/16 00:51	4
Bromobenzene	ND		4.0		ug/L			10/05/16 00:51	4
Bromoform	ND		4.0		ug/L			10/05/16 00:51	4
Bromomethane	ND		8.0		ug/L			10/05/16 00:51	4
Carbon disulfide	ND		40		ug/L			10/05/16 00:51	4
Carbon tetrachloride	ND		4.0		ug/L			10/05/16 00:51	4
Chlorobenzene	ND		4.0		ug/L			10/05/16 00:51	4
Chlorobromomethane	ND		4.0		ug/L			10/05/16 00:51	4
Chlorodibromomethane	ND		2.0		ug/L			10/05/16 00:51	4
Chloroethane	ND		8.0		ug/L			10/05/16 00:51	4
Chloroform	ND		4.0		ug/L			10/05/16 00:51	4
Chloromethane	ND		8.0		ug/L			10/05/16 00:51	4
cis-1,2-Dichloroethene	ND		4.0		ug/L			10/05/16 00:51	4
cis-1,3-Dichloropropene	ND		1.6		ug/L			10/05/16 00:51	4
Dichlorobromomethane	ND		2.0		ug/L			10/05/16 00:51	4
Dichlorodifluoromethane	ND		4.0		ug/L			10/05/16 00:51	4
Ethyl ether	ND		4.0		ug/L			10/05/16 00:51	4
Ethylbenzene	ND		4.0		ug/L			10/05/16 00:51	4
Ethylene Dibromide	ND		4.0		ug/L			10/05/16 00:51	4
Hexachlorobutadiene	ND		1.6		ug/L			10/05/16 00:51	4
Isopropyl ether	ND		40		ug/L			10/05/16 00:51	4

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Client Sample ID: MW-562-20161003

Date Collected: 10/03/16 10:45
Date Received: 10/04/16 00:50

Lab Sample ID: 480-106923-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		4.0		ug/L			10/05/16 00:51	4
Methyl tert-butyl ether	ND		4.0		ug/L			10/05/16 00:51	4
Methylene Chloride	ND		4.0		ug/L			10/05/16 00:51	4
m-Xylene & p-Xylene	ND		8.0		ug/L			10/05/16 00:51	4
Naphthalene	ND		20		ug/L			10/05/16 00:51	4
n-Butylbenzene	ND		4.0		ug/L			10/05/16 00:51	4
N-Propylbenzene	ND		4.0		ug/L			10/05/16 00:51	4
o-Xylene	ND		4.0		ug/L			10/05/16 00:51	4
sec-Butylbenzene	ND		4.0		ug/L			10/05/16 00:51	4
Styrene	ND		4.0		ug/L			10/05/16 00:51	4
Tert-amyl methyl ether	ND		20		ug/L			10/05/16 00:51	4
Tert-butyl ethyl ether	ND		20		ug/L			10/05/16 00:51	4
tert-Butylbenzene	ND		4.0		ug/L			10/05/16 00:51	4
Tetrachloroethene	ND		4.0		ug/L			10/05/16 00:51	4
Tetrahydrofuran	ND		40		ug/L			10/05/16 00:51	4
Toluene	**6.0**		4.0		ug/L			10/05/16 00:51	4
trans-1,2-Dichloroethene	ND		4.0		ug/L			10/05/16 00:51	4
trans-1,3-Dichloropropene	ND		1.6		ug/L			10/05/16 00:51	4
Trichloroethene	ND		4.0		ug/L			10/05/16 00:51	4
Trichlorofluoromethane	ND		4.0		ug/L			10/05/16 00:51	4
Vinyl chloride	ND		4.0		ug/L			10/05/16 00:51	4
Dibromomethane	ND		4.0		ug/L			10/05/16 00:51	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*10/05/16 00:51*	*4*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*10/05/16 00:51*	*4*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*10/05/16 00:51*	*4*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**240**		0.050		mg/L		10/04/16 08:55	10/05/16 16:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**31**		5.0		mg/L			10/05/16 12:26	10
Sulfate	ND		2.0		mg/L			10/07/16 07:10	1
Ammonia	**1.1**		0.20		mg/L		10/04/16 12:24	10/04/16 13:56	1
Nitrate as N	ND		0.050		mg/L			10/04/16 17:31	1
TOC Result 1	**560**		20		mg/L			10/07/16 18:50	20
TOC Result 2	**590**		20		mg/L			10/07/16 18:50	20
Total Organic Carbon - Duplicates	**580**		20		mg/L			10/07/16 18:50	20
Alkalinity, Total	**510**		5.0		mg/L			10/05/16 15:18	1
ortho-Phosphate	**1.4**		0.10		mg/L			10/04/16 09:30	5

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.1**	**HF**	0.1		SU			10/05/16 14:25	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Client Sample ID: MW-265S-20161003

Lab Sample ID: 480-106923-6

Date Collected: 10/03/16 11:35
Matrix: Water
Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/05/16 01:15	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/05/16 01:15	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/05/16 01:15	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/05/16 01:15	1
1,1-Dichloroethane	ND		1.0		ug/L			10/05/16 01:15	1
1,1-Dichloroethene	ND		1.0		ug/L			10/05/16 01:15	1
1,1-Dichloropropene	ND		1.0		ug/L			10/05/16 01:15	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/05/16 01:15	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/05/16 01:15	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/05/16 01:15	1
1,2,4-Trimethylbenzene	**1.5**		1.0		ug/L			10/05/16 01:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/05/16 01:15	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/05/16 01:15	1
1,2-Dichloroethane	ND		1.0		ug/L			10/05/16 01:15	1
1,2-Dichloropropane	ND		1.0		ug/L			10/05/16 01:15	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/05/16 01:15	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/05/16 01:15	1
1,3-Dichloropropane	ND		1.0		ug/L			10/05/16 01:15	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/05/16 01:15	1
1,4-Dioxane	ND		50		ug/L			10/05/16 01:15	1
2,2-Dichloropropane	ND		1.0		ug/L			10/05/16 01:15	1
2-Butanone (MEK)	ND		10		ug/L			10/05/16 01:15	1
2-Chlorotoluene	ND		1.0		ug/L			10/05/16 01:15	1
2-Hexanone	ND		10		ug/L			10/05/16 01:15	1
4-Chlorotoluene	ND		1.0		ug/L			10/05/16 01:15	1
4-Isopropyltoluene	ND		1.0		ug/L			10/05/16 01:15	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/05/16 01:15	1
Acetone	ND		50		ug/L			10/05/16 01:15	1
Benzene	ND		1.0		ug/L			10/05/16 01:15	1
Bromobenzene	ND		1.0		ug/L			10/05/16 01:15	1
Bromoform	ND		1.0		ug/L			10/05/16 01:15	1
Bromomethane	ND		2.0		ug/L			10/05/16 01:15	1
Carbon disulfide	ND		10		ug/L			10/05/16 01:15	1
Carbon tetrachloride	ND		1.0		ug/L			10/05/16 01:15	1
Chlorobenzene	ND		1.0		ug/L			10/05/16 01:15	1
Chlorobromomethane	ND		1.0		ug/L			10/05/16 01:15	1
Chlorodibromomethane	ND		0.50		ug/L			10/05/16 01:15	1
Chloroethane	ND		2.0		ug/L			10/05/16 01:15	1
Chloroform	ND		1.0		ug/L			10/05/16 01:15	1
Chloromethane	ND		2.0		ug/L			10/05/16 01:15	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/05/16 01:15	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 01:15	1
Dichlorobromomethane	ND		0.50		ug/L			10/05/16 01:15	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/05/16 01:15	1
Ethyl ether	ND		1.0		ug/L			10/05/16 01:15	1
Ethylbenzene	ND		1.0		ug/L			10/05/16 01:15	1
Ethylene Dibromide	ND		1.0		ug/L			10/05/16 01:15	1
Hexachlorobutadiene	ND		0.40		ug/L			10/05/16 01:15	1
Isopropyl ether	ND		10		ug/L			10/05/16 01:15	1

Client Sample ID: MW-265S-20161003

Lab Sample ID: 480-106923-6

Date Collected: 10/03/16 11:35

Matrix: Water

Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			10/05/16 01:15	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/05/16 01:15	1
Methylene Chloride	ND		1.0		ug/L			10/05/16 01:15	1
m-Xylene & p-Xylene	**2.6**		2.0		ug/L			10/05/16 01:15	1
Naphthalene	ND		5.0		ug/L			10/05/16 01:15	1
n-Butylbenzene	ND		1.0		ug/L			10/05/16 01:15	1
N-Propylbenzene	ND		1.0		ug/L			10/05/16 01:15	1
o-Xylene	**1.3**		1.0		ug/L			10/05/16 01:15	1
sec-Butylbenzene	ND		1.0		ug/L			10/05/16 01:15	1
Styrene	ND		1.0		ug/L			10/05/16 01:15	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/05/16 01:15	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/05/16 01:15	1
tert-Butylbenzene	ND		1.0		ug/L			10/05/16 01:15	1
Tetrachloroethene	ND		1.0		ug/L			10/05/16 01:15	1
Tetrahydrofuran	ND		10		ug/L			10/05/16 01:15	1
Toluene	**1.1**		1.0		ug/L			10/05/16 01:15	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/05/16 01:15	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 01:15	1
Trichloroethene	ND		1.0		ug/L			10/05/16 01:15	1
Trichlorofluoromethane	ND		1.0		ug/L			10/05/16 01:15	1
Vinyl chloride	ND		1.0		ug/L			10/05/16 01:15	1
Dibromomethane	ND		1.0		ug/L			10/05/16 01:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*10/05/16 01:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*10/05/16 01:15*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*10/05/16 01:15*	*1*

Client Sample ID: MW-265M-20161003

Lab Sample ID: 480-106923-7

Date Collected: 10/03/16 12:05

Matrix: Water

Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			10/05/16 01:39	5
1,1,1-Trichloroethane	ND		5.0		ug/L			10/05/16 01:39	5
1,1,2,2-Tetrachloroethane	ND		2.5		ug/L			10/05/16 01:39	5
1,1,2-Trichloroethane	ND		5.0		ug/L			10/05/16 01:39	5
1,1-Dichloroethane	ND		5.0		ug/L			10/05/16 01:39	5
1,1-Dichloroethene	ND		5.0		ug/L			10/05/16 01:39	5
1,1-Dichloropropene	ND		5.0		ug/L			10/05/16 01:39	5
1,2,3-Trichlorobenzene	ND		5.0		ug/L			10/05/16 01:39	5
1,2,3-Trichloropropane	ND		5.0		ug/L			10/05/16 01:39	5
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/05/16 01:39	5
1,2,4-Trimethylbenzene	ND		5.0		ug/L			10/05/16 01:39	5
1,2-Dibromo-3-Chloropropane	ND		25		ug/L			10/05/16 01:39	5
1,2-Dichlorobenzene	ND		5.0		ug/L			10/05/16 01:39	5
1,2-Dichloroethane	ND		5.0		ug/L			10/05/16 01:39	5
1,2-Dichloropropane	ND		5.0		ug/L			10/05/16 01:39	5
1,3,5-Trimethylbenzene	ND		5.0		ug/L			10/05/16 01:39	5

Client Sample ID: MW-265M-20161003

Lab Sample ID: 480-106923-7

Date Collected: 10/03/16 12:05

Matrix: Water

Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		5.0		ug/L			10/05/16 01:39	5
1,3-Dichloropropane	ND		5.0		ug/L			10/05/16 01:39	5
1,4-Dichlorobenzene	ND		5.0		ug/L			10/05/16 01:39	5
1,4-Dioxane	ND		250		ug/L			10/05/16 01:39	5
2,2-Dichloropropane	ND		5.0		ug/L			10/05/16 01:39	5
2-Butanone (MEK)	**140**		50		ug/L			10/05/16 01:39	5
2-Chlorotoluene	ND		5.0		ug/L			10/05/16 01:39	5
2-Hexanone	ND		50		ug/L			10/05/16 01:39	5
4-Chlorotoluene	ND		5.0		ug/L			10/05/16 01:39	5
4-Isopropyltoluene	ND		5.0		ug/L			10/05/16 01:39	5
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			10/05/16 01:39	5
Acetone	**460**		250		ug/L			10/05/16 01:39	5
Benzene	ND		5.0		ug/L			10/05/16 01:39	5
Bromobenzene	ND		5.0		ug/L			10/05/16 01:39	5
Bromoform	ND		5.0		ug/L			10/05/16 01:39	5
Bromomethane	ND		10		ug/L			10/05/16 01:39	5
Carbon disulfide	ND		50		ug/L			10/05/16 01:39	5
Carbon tetrachloride	ND		5.0		ug/L			10/05/16 01:39	5
Chlorobenzene	ND		5.0		ug/L			10/05/16 01:39	5
Chlorobromomethane	ND		5.0		ug/L			10/05/16 01:39	5
Chlorodibromomethane	ND		2.5		ug/L			10/05/16 01:39	5
Chloroethane	ND		10		ug/L			10/05/16 01:39	5
Chloroform	ND		5.0		ug/L			10/05/16 01:39	5
Chloromethane	ND		10		ug/L			10/05/16 01:39	5
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/05/16 01:39	5
cis-1,3-Dichloropropene	ND		2.0		ug/L			10/05/16 01:39	5
Dichlorobromomethane	ND		2.5		ug/L			10/05/16 01:39	5
Dichlorodifluoromethane	ND		5.0		ug/L			10/05/16 01:39	5
Ethyl ether	ND		5.0		ug/L			10/05/16 01:39	5
Ethylbenzene	ND		5.0		ug/L			10/05/16 01:39	5
Ethylene Dibromide	ND		5.0		ug/L			10/05/16 01:39	5
Hexachlorobutadiene	ND		2.0		ug/L			10/05/16 01:39	5
Isopropyl ether	ND		50		ug/L			10/05/16 01:39	5
Isopropylbenzene	ND		5.0		ug/L			10/05/16 01:39	5
Methyl tert-butyl ether	ND		5.0		ug/L			10/05/16 01:39	5
Methylene Chloride	ND		5.0		ug/L			10/05/16 01:39	5
m-Xylene & p-Xylene	**14**		10		ug/L			10/05/16 01:39	5
Naphthalene	ND		25		ug/L			10/05/16 01:39	5
n-Butylbenzene	ND		5.0		ug/L			10/05/16 01:39	5
N-Propylbenzene	ND		5.0		ug/L			10/05/16 01:39	5
o-Xylene	**5.4**		5.0		ug/L			10/05/16 01:39	5
sec-Butylbenzene	ND		5.0		ug/L			10/05/16 01:39	5
Styrene	ND		5.0		ug/L			10/05/16 01:39	5
Tert-amyl methyl ether	ND		25		ug/L			10/05/16 01:39	5
Tert-butyl ethyl ether	ND		25		ug/L			10/05/16 01:39	5
tert-Butylbenzene	ND		5.0		ug/L			10/05/16 01:39	5
Tetrachloroethene	ND		5.0		ug/L			10/05/16 01:39	5
Tetrahydrofuran	ND		50		ug/L			10/05/16 01:39	5
Toluene	**9.3**		5.0		ug/L			10/05/16 01:39	5

Client Sample ID: MW-265M-20161003 — Lab Sample ID: 480-106923-7

Date Collected: 10/03/16 12:05 — **Matrix: Water**
Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/05/16 01:39	5
trans-1,3-Dichloropropene	ND		2.0		ug/L			10/05/16 01:39	5
Trichloroethene	ND		5.0		ug/L			10/05/16 01:39	5
Trichlorofluoromethane	ND		5.0		ug/L			10/05/16 01:39	5
Vinyl chloride	ND		5.0		ug/L			10/05/16 01:39	5
Dibromomethane	ND		5.0		ug/L			10/05/16 01:39	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*70 - 130*		*10/05/16 01:39*	*5*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*10/05/16 01:39*	*5*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*10/05/16 01:39*	*5*

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		10/05/16 11:16	10/06/16 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*10*	*X*	*70 - 130*	*10/05/16 11:16*	*10/06/16 15:14*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**460**		0.050		mg/L		10/04/16 08:55	10/05/16 16:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**41**		10		mg/L			10/05/16 12:34	20
Sulfate	ND		2.0		mg/L			10/07/16 07:18	1
Ammonia	**0.50**		0.20		mg/L		10/04/16 12:24	10/04/16 13:57	1
Nitrate as N	ND		0.050		mg/L			10/04/16 17:33	1
TOC Result 1	**1300**		20		mg/L			10/07/16 19:17	20
TOC Result 2	**1400**		20		mg/L			10/07/16 19:17	20
Total Organic Carbon - Duplicates	**1400**		20		mg/L			10/07/16 19:17	20
Alkalinity, Total	**730**		5.0		mg/L			10/05/16 15:54	1
ortho-Phosphate	**0.19**		0.020		mg/L			10/04/16 09:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.1**	**HF**	0.1		SU			10/05/16 14:27	1

Client Sample ID: MW-265D-20161003 — Lab Sample ID: 480-106923-8

Date Collected: 10/03/16 12:45 — **Matrix: Water**
Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/05/16 02:03	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/05/16 02:03	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/05/16 02:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/05/16 02:03	1
1,1-Dichloroethane	ND		1.0		ug/L			10/05/16 02:03	1
1,1-Dichloroethene	ND		1.0		ug/L			10/05/16 02:03	1
1,1-Dichloropropene	ND		1.0		ug/L			10/05/16 02:03	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/05/16 02:03	1

Client Sample ID: MW-265D-20161003

Lab Sample ID: 480-106923-8

Date Collected: 10/03/16 12:45

Matrix: Water

Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0		ug/L			10/05/16 02:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/05/16 02:03	1
1,2,4-Trimethylbenzene	**1.2**		1.0		ug/L			10/05/16 02:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/05/16 02:03	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/05/16 02:03	1
1,2-Dichloroethane	ND		1.0		ug/L			10/05/16 02:03	1
1,2-Dichloropropane	ND		1.0		ug/L			10/05/16 02:03	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/05/16 02:03	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/05/16 02:03	1
1,3-Dichloropropane	ND		1.0		ug/L			10/05/16 02:03	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/05/16 02:03	1
1,4-Dioxane	ND		50		ug/L			10/05/16 02:03	1
2,2-Dichloropropane	ND		1.0		ug/L			10/05/16 02:03	1
2-Butanone (MEK)	ND		10		ug/L			10/05/16 02:03	1
2-Chlorotoluene	ND		1.0		ug/L			10/05/16 02:03	1
2-Hexanone	ND		10		ug/L			10/05/16 02:03	1
4-Chlorotoluene	ND		1.0		ug/L			10/05/16 02:03	1
4-Isopropyltoluene	ND		1.0		ug/L			10/05/16 02:03	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/05/16 02:03	1
Acetone	ND		50		ug/L			10/05/16 02:03	1
Benzene	ND		1.0		ug/L			10/05/16 02:03	1
Bromobenzene	ND		1.0		ug/L			10/05/16 02:03	1
Bromoform	ND		1.0		ug/L			10/05/16 02:03	1
Bromomethane	ND		2.0		ug/L			10/05/16 02:03	1
Carbon disulfide	ND		10		ug/L			10/05/16 02:03	1
Carbon tetrachloride	ND		1.0		ug/L			10/05/16 02:03	1
Chlorobenzene	ND		1.0		ug/L			10/05/16 02:03	1
Chlorobromomethane	ND		1.0		ug/L			10/05/16 02:03	1
Chlorodibromomethane	ND		0.50		ug/L			10/05/16 02:03	1
Chloroethane	ND		2.0		ug/L			10/05/16 02:03	1
Chloroform	ND		1.0		ug/L			10/05/16 02:03	1
Chloromethane	ND		2.0		ug/L			10/05/16 02:03	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/05/16 02:03	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 02:03	1
Dichlorobromomethane	ND		0.50		ug/L			10/05/16 02:03	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/05/16 02:03	1
Ethyl ether	ND		1.0		ug/L			10/05/16 02:03	1
Ethylbenzene	ND		1.0		ug/L			10/05/16 02:03	1
Ethylene Dibromide	ND		1.0		ug/L			10/05/16 02:03	1
Hexachlorobutadiene	ND		0.40		ug/L			10/05/16 02:03	1
Isopropyl ether	ND		10		ug/L			10/05/16 02:03	1
Isopropylbenzene	ND		1.0		ug/L			10/05/16 02:03	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/05/16 02:03	1
Methylene Chloride	ND		1.0		ug/L			10/05/16 02:03	1
m-Xylene & p-Xylene	**2.5**		2.0		ug/L			10/05/16 02:03	1
Naphthalene	ND		5.0		ug/L			10/05/16 02:03	1
n-Butylbenzene	ND		1.0		ug/L			10/05/16 02:03	1
N-Propylbenzene	ND		1.0		ug/L			10/05/16 02:03	1
o-Xylene	**1.2**		1.0		ug/L			10/05/16 02:03	1

Client Sample ID: MW-265D-20161003

Lab Sample ID: 480-106923-8
Date Collected: 10/03/16 12:45
Matrix: Water
Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			10/05/16 02:03	1
Styrene	ND		1.0		ug/L			10/05/16 02:03	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/05/16 02:03	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/05/16 02:03	1
tert-Butylbenzene	ND		1.0		ug/L			10/05/16 02:03	1
Tetrachloroethene	ND		1.0		ug/L			10/05/16 02:03	1
Tetrahydrofuran	ND		10		ug/L			10/05/16 02:03	1
Toluene	**1.1**		1.0		ug/L			10/05/16 02:03	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/05/16 02:03	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 02:03	1
Trichloroethene	ND		1.0		ug/L			10/05/16 02:03	1
Trichlorofluoromethane	ND		1.0		ug/L			10/05/16 02:03	1
Vinyl chloride	ND		1.0		ug/L			10/05/16 02:03	1
Dibromomethane	ND		1.0		ug/L			10/05/16 02:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*10/05/16 02:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*10/05/16 02:03*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/05/16 02:03*	*1*

Client Sample ID: DUP1-20161003

Lab Sample ID: 480-106923-9
Date Collected: 10/03/16 00:00
Matrix: Water
Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/05/16 02:27	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/05/16 02:27	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/05/16 02:27	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/05/16 02:27	1
1,1-Dichloroethane	ND		1.0		ug/L			10/05/16 02:27	1
1,1-Dichloroethene	ND		1.0		ug/L			10/05/16 02:27	1
1,1-Dichloropropene	ND		1.0		ug/L			10/05/16 02:27	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/05/16 02:27	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/05/16 02:27	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/05/16 02:27	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/05/16 02:27	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/05/16 02:27	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/05/16 02:27	1
1,2-Dichloroethane	ND		1.0		ug/L			10/05/16 02:27	1
1,2-Dichloropropane	ND		1.0		ug/L			10/05/16 02:27	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/05/16 02:27	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/05/16 02:27	1
1,3-Dichloropropane	ND		1.0		ug/L			10/05/16 02:27	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/05/16 02:27	1
1,4-Dioxane	ND		50		ug/L			10/05/16 02:27	1
2,2-Dichloropropane	ND		1.0		ug/L			10/05/16 02:27	1
2-Butanone (MEK)	ND		10		ug/L			10/05/16 02:27	1
2-Chlorotoluene	ND		1.0		ug/L			10/05/16 02:27	1
2-Hexanone	ND		10		ug/L			10/05/16 02:27	1

Client Sample ID: DUP1-20161003

Lab Sample ID: 480-106923-9

Date Collected: 10/03/16 00:00

Matrix: Water

Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0		ug/L			10/05/16 02:27	1
4-Isopropyltoluene	ND		1.0		ug/L			10/05/16 02:27	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/05/16 02:27	1
Acetone	ND		50		ug/L			10/05/16 02:27	1
Benzene	ND		1.0		ug/L			10/05/16 02:27	1
Bromobenzene	ND		1.0		ug/L			10/05/16 02:27	1
Bromoform	ND		1.0		ug/L			10/05/16 02:27	1
Bromomethane	ND		2.0		ug/L			10/05/16 02:27	1
Carbon disulfide	ND		10		ug/L			10/05/16 02:27	1
Carbon tetrachloride	ND		1.0		ug/L			10/05/16 02:27	1
Chlorobenzene	ND		1.0		ug/L			10/05/16 02:27	1
Chlorobromomethane	ND		1.0		ug/L			10/05/16 02:27	1
Chlorodibromomethane	ND		0.50		ug/L			10/05/16 02:27	1
Chloroethane	ND		2.0		ug/L			10/05/16 02:27	1
Chloroform	ND		1.0		ug/L			10/05/16 02:27	1
Chloromethane	ND		2.0		ug/L			10/05/16 02:27	1
cis-1,2-Dichloroethene	**2.1**		1.0		ug/L			10/05/16 02:27	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 02:27	1
Dichlorobromomethane	ND		0.50		ug/L			10/05/16 02:27	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/05/16 02:27	1
Ethyl ether	ND		1.0		ug/L			10/05/16 02:27	1
Ethylbenzene	ND		1.0		ug/L			10/05/16 02:27	1
Ethylene Dibromide	ND		1.0		ug/L			10/05/16 02:27	1
Hexachlorobutadiene	ND		0.40		ug/L			10/05/16 02:27	1
Isopropyl ether	ND		10		ug/L			10/05/16 02:27	1
Isopropylbenzene	ND		1.0		ug/L			10/05/16 02:27	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/05/16 02:27	1
Methylene Chloride	ND		1.0		ug/L			10/05/16 02:27	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/05/16 02:27	1
Naphthalene	ND		5.0		ug/L			10/05/16 02:27	1
n-Butylbenzene	ND		1.0		ug/L			10/05/16 02:27	1
N-Propylbenzene	ND		1.0		ug/L			10/05/16 02:27	1
o-Xylene	ND		1.0		ug/L			10/05/16 02:27	1
sec-Butylbenzene	ND		1.0		ug/L			10/05/16 02:27	1
Styrene	ND		1.0		ug/L			10/05/16 02:27	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/05/16 02:27	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/05/16 02:27	1
tert-Butylbenzene	ND		1.0		ug/L			10/05/16 02:27	1
Tetrachloroethene	ND		1.0		ug/L			10/05/16 02:27	1
Tetrahydrofuran	ND		10		ug/L			10/05/16 02:27	1
Toluene	ND		1.0		ug/L			10/05/16 02:27	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/05/16 02:27	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 02:27	1
Trichloroethene	ND		1.0		ug/L			10/05/16 02:27	1
Trichlorofluoromethane	ND		1.0		ug/L			10/05/16 02:27	1
Vinyl chloride	ND		1.0		ug/L			10/05/16 02:27	1
Dibromomethane	ND		1.0		ug/L			10/05/16 02:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*90*		*70 - 130*		*10/05/16 02:27*	*1*

Client Sample ID: DUP1-20161003

Lab Sample ID: 480-106923-9

Date Collected: 10/03/16 00:00
Matrix: Water
Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*10/05/16 02:27*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*10/05/16 02:27*	*1*

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.7**		0.20		ug/L		10/05/16 11:16	10/06/16 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*92*		*70 - 130*	*10/05/16 11:16*	*10/06/16 15:33*	*1*

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-106923-10

Date Collected: 10/03/16 00:00
Matrix: Water
Date Received: 10/04/16 00:50

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/04/16 19:09	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/04/16 19:09	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/04/16 19:09	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/04/16 19:09	1
1,1-Dichloroethane	ND		1.0		ug/L			10/04/16 19:09	1
1,1-Dichloroethene	ND		1.0		ug/L			10/04/16 19:09	1
1,1-Dichloropropene	ND		1.0		ug/L			10/04/16 19:09	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/04/16 19:09	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/04/16 19:09	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/04/16 19:09	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/04/16 19:09	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/04/16 19:09	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/04/16 19:09	1
1,2-Dichloroethane	ND		1.0		ug/L			10/04/16 19:09	1
1,2-Dichloropropane	ND		1.0		ug/L			10/04/16 19:09	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/04/16 19:09	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/04/16 19:09	1
1,3-Dichloropropane	ND		1.0		ug/L			10/04/16 19:09	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/04/16 19:09	1
1,4-Dioxane	ND		50		ug/L			10/04/16 19:09	1
2,2-Dichloropropane	ND		1.0		ug/L			10/04/16 19:09	1
2-Butanone (MEK)	ND		10		ug/L			10/04/16 19:09	1
2-Chlorotoluene	ND		1.0		ug/L			10/04/16 19:09	1
2-Hexanone	ND		10		ug/L			10/04/16 19:09	1
4-Chlorotoluene	ND		1.0		ug/L			10/04/16 19:09	1
4-Isopropyltoluene	ND		1.0		ug/L			10/04/16 19:09	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/04/16 19:09	1
Acetone	ND		50		ug/L			10/04/16 19:09	1
Benzene	ND		1.0		ug/L			10/04/16 19:09	1
Bromobenzene	ND		1.0		ug/L			10/04/16 19:09	1
Bromoform	ND		1.0		ug/L			10/04/16 19:09	1
Bromomethane	ND		2.0		ug/L			10/04/16 19:09	1
Carbon disulfide	ND		10		ug/L			10/04/16 19:09	1
Carbon tetrachloride	ND		1.0		ug/L			10/04/16 19:09	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Client Sample ID: TRIP BLANKS

Date Collected: 10/03/16 00:00
Date Received: 10/04/16 00:50

Lab Sample ID: 480-106923-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0		ug/L			10/04/16 19:09	1
Chlorobromomethane	ND		1.0		ug/L			10/04/16 19:09	1
Chlorodibromomethane	ND		0.50		ug/L			10/04/16 19:09	1
Chloroethane	ND		2.0		ug/L			10/04/16 19:09	1
Chloroform	ND		1.0		ug/L			10/04/16 19:09	1
Chloromethane	ND		2.0		ug/L			10/04/16 19:09	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/04/16 19:09	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/04/16 19:09	1
Dichlorobromomethane	ND		0.50		ug/L			10/04/16 19:09	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/04/16 19:09	1
Ethyl ether	ND		1.0		ug/L			10/04/16 19:09	1
Ethylbenzene	ND		1.0		ug/L			10/04/16 19:09	1
Ethylene Dibromide	ND		1.0		ug/L			10/04/16 19:09	1
Hexachlorobutadiene	ND		0.40		ug/L			10/04/16 19:09	1
Isopropyl ether	ND		10		ug/L			10/04/16 19:09	1
Isopropylbenzene	ND		1.0		ug/L			10/04/16 19:09	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/04/16 19:09	1
Methylene Chloride	ND		1.0		ug/L			10/04/16 19:09	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/04/16 19:09	1
Naphthalene	ND		5.0		ug/L			10/04/16 19:09	1
n-Butylbenzene	ND		1.0		ug/L			10/04/16 19:09	1
N-Propylbenzene	ND		1.0		ug/L			10/04/16 19:09	1
o-Xylene	ND		1.0		ug/L			10/04/16 19:09	1
sec-Butylbenzene	ND		1.0		ug/L			10/04/16 19:09	1
Styrene	ND		1.0		ug/L			10/04/16 19:09	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/04/16 19:09	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/04/16 19:09	1
tert-Butylbenzene	ND		1.0		ug/L			10/04/16 19:09	1
Tetrachloroethene	ND		1.0		ug/L			10/04/16 19:09	1
Tetrahydrofuran	ND		10		ug/L			10/04/16 19:09	1
Toluene	ND		1.0		ug/L			10/04/16 19:09	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/04/16 19:09	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/04/16 19:09	1
Trichloroethene	ND		1.0		ug/L			10/04/16 19:09	1
Trichlorofluoromethane	ND		1.0		ug/L			10/04/16 19:09	1
Vinyl chloride	ND		1.0		ug/L			10/04/16 19:09	1
Dibromomethane	ND		1.0		ug/L			10/04/16 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*70 - 130*		*10/04/16 19:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*10/04/16 19:09*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*10/04/16 19:09*	*1*

Surrogate Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	12DCE	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
480-106923-1	MW-261S-20161003	91	89	97
480-106923-2	MW-551-20161003	88	97	93
480-106923-3	MW-552-20161003	91	92	95
480-106923-4	MW-553-20161003	91	93	97
480-106923-5	MW-562-20161003	91	96	94
480-106923-6	MW-265S-20161003	91	93	94
480-106923-7	MW-265M-20161003	92	98	99
480-106923-8	MW-265D-20161003	91	90	97
480-106923-9	DUP1-20161003	90	87	94
480-106923-10	TRIP BLANKS	93	91	96
LCS 480-323673/5	Lab Control Sample	92	92	97
LCS 480-323720/5	Lab Control Sample	95	92	101
LCS 480-323855/6	Lab Control Sample	95	89	100
LCSD 480-323673/6	Lab Control Sample Dup	95	88	101
LCSD 480-323720/6	Lab Control Sample Dup	94	93	96
LCSD 480-323855/7	Lab Control Sample Dup	93	88	99
MB 480-323673/7	Method Blank	91	89	94
MB 480-323720/8	Method Blank	93	91	97
MB 480-323855/9	Method Blank	91	89	98

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		14DD8
Lab Sample ID	Client Sample ID	(70-130)
480-106923-1	MW-261S-20161003	97
480-106923-3	MW-552-20161003	91
480-106923-7	MW-265M-20161003	10 X
480-106923-9	DUP1-20161003	92
LCS 200-109819/2-A	Lab Control Sample	94
MB 200-109819/1-A	Method Blank	104

Surrogate Legend

14DD8 = 1,4-Dioxane-d8 (Surr)

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-323673/7
Matrix: Water
Analysis Batch: 323673

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/04/16 12:21	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/04/16 12:21	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/04/16 12:21	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/04/16 12:21	1
1,1-Dichloroethane	ND		1.0		ug/L			10/04/16 12:21	1
1,1-Dichloroethene	ND		1.0		ug/L			10/04/16 12:21	1
1,1-Dichloropropene	ND		1.0		ug/L			10/04/16 12:21	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/04/16 12:21	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/04/16 12:21	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/04/16 12:21	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/04/16 12:21	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/04/16 12:21	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/04/16 12:21	1
1,2-Dichloroethane	ND		1.0		ug/L			10/04/16 12:21	1
1,2-Dichloropropane	ND		1.0		ug/L			10/04/16 12:21	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/04/16 12:21	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/04/16 12:21	1
1,3-Dichloropropane	ND		1.0		ug/L			10/04/16 12:21	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/04/16 12:21	1
1,4-Dioxane	ND		50		ug/L			10/04/16 12:21	1
2,2-Dichloropropane	ND		1.0		ug/L			10/04/16 12:21	1
2-Butanone (MEK)	ND		10		ug/L			10/04/16 12:21	1
2-Chlorotoluene	ND		1.0		ug/L			10/04/16 12:21	1
2-Hexanone	ND		10		ug/L			10/04/16 12:21	1
4-Chlorotoluene	ND		1.0		ug/L			10/04/16 12:21	1
4-Isopropyltoluene	ND		1.0		ug/L			10/04/16 12:21	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/04/16 12:21	1
Acetone	ND		50		ug/L			10/04/16 12:21	1
Benzene	ND		1.0		ug/L			10/04/16 12:21	1
Bromobenzene	ND		1.0		ug/L			10/04/16 12:21	1
Bromoform	ND		1.0		ug/L			10/04/16 12:21	1
Bromomethane	ND		2.0		ug/L			10/04/16 12:21	1
Carbon disulfide	ND		10		ug/L			10/04/16 12:21	1
Carbon tetrachloride	ND		1.0		ug/L			10/04/16 12:21	1
Chlorobenzene	ND		1.0		ug/L			10/04/16 12:21	1
Chlorobromomethane	ND		1.0		ug/L			10/04/16 12:21	1
Chlorodibromomethane	ND		0.50		ug/L			10/04/16 12:21	1
Chloroethane	ND		2.0		ug/L			10/04/16 12:21	1
Chloroform	ND		1.0		ug/L			10/04/16 12:21	1
Chloromethane	ND		2.0		ug/L			10/04/16 12:21	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/04/16 12:21	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/04/16 12:21	1
Dichlorobromomethane	ND		0.50		ug/L			10/04/16 12:21	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/04/16 12:21	1
Ethyl ether	ND		1.0		ug/L			10/04/16 12:21	1
Ethylbenzene	ND		1.0		ug/L			10/04/16 12:21	1
Ethylene Dibromide	ND		1.0		ug/L			10/04/16 12:21	1
Hexachlorobutadiene	ND		0.40		ug/L			10/04/16 12:21	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-323673/7
Matrix: Water
Analysis Batch: 323673

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			10/04/16 12:21	1
Isopropylbenzene	ND		1.0		ug/L			10/04/16 12:21	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/04/16 12:21	1
Methylene Chloride	ND		1.0		ug/L			10/04/16 12:21	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/04/16 12:21	1
Naphthalene	ND		5.0		ug/L			10/04/16 12:21	1
n-Butylbenzene	ND		1.0		ug/L			10/04/16 12:21	1
N-Propylbenzene	ND		1.0		ug/L			10/04/16 12:21	1
o-Xylene	ND		1.0		ug/L			10/04/16 12:21	1
sec-Butylbenzene	ND		1.0		ug/L			10/04/16 12:21	1
Styrene	ND		1.0		ug/L			10/04/16 12:21	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/04/16 12:21	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/04/16 12:21	1
tert-Butylbenzene	ND		1.0		ug/L			10/04/16 12:21	1
Tetrachloroethene	ND		1.0		ug/L			10/04/16 12:21	1
Tetrahydrofuran	ND		10		ug/L			10/04/16 12:21	1
Toluene	ND		1.0		ug/L			10/04/16 12:21	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/04/16 12:21	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/04/16 12:21	1
Trichloroethene	ND		1.0		ug/L			10/04/16 12:21	1
Trichlorofluoromethane	ND		1.0		ug/L			10/04/16 12:21	1
Vinyl chloride	ND		1.0		ug/L			10/04/16 12:21	1
Dibromomethane	ND		1.0		ug/L			10/04/16 12:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*10/04/16 12:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*10/04/16 12:21*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*10/04/16 12:21*	*1*

Lab Sample ID: LCS 480-323673/5
Matrix: Water
Analysis Batch: 323673

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.2		ug/L		97	70 - 130
1,1,1-Trichloroethane	25.0	24.5		ug/L		98	70 - 130
1,1,2,2-Tetrachloroethane	25.0	22.0		ug/L		88	70 - 130
1,1,2-Trichloroethane	25.0	22.5		ug/L		90	70 - 130
1,1-Dichloroethane	25.0	23.9		ug/L		96	70 - 130
1,1-Dichloroethene	25.0	22.8		ug/L		91	70 - 130
1,1-Dichloropropene	25.0	22.8		ug/L		91	70 - 130
1,2,3-Trichlorobenzene	25.0	21.3		ug/L		85	70 - 130
1,2,3-Trichloropropane	25.0	19.6		ug/L		78	70 - 130
1,2,4-Trichlorobenzene	25.0	23.0		ug/L		92	70 - 130
1,2,4-Trimethylbenzene	25.0	24.1		ug/L		96	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	19.7		ug/L		79	70 - 130
1,2-Dichlorobenzene	25.0	23.2		ug/L		93	70 - 130
1,2-Dichloroethane	25.0	21.8		ug/L		87	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-323673/5
Matrix: Water
Analysis Batch: 323673

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	23.3		ug/L		93	70 - 130
1,3,5-Trimethylbenzene	25.0	24.2		ug/L		97	70 - 130
1,3-Dichlorobenzene	25.0	23.7		ug/L		95	70 - 130
1,3-Dichloropropane	25.0	21.3		ug/L		85	70 - 130
1,4-Dichlorobenzene	25.0	23.8		ug/L		95	70 - 130
1,4-Dioxane	500	401		ug/L		80	70 - 130
2,2-Dichloropropane	25.0	23.9		ug/L		96	70 - 130
2-Butanone (MEK)	125	108		ug/L		87	70 - 130
2-Chlorotoluene	25.0	24.1		ug/L		97	70 - 130
2-Hexanone	125	104		ug/L		84	70 - 130
4-Chlorotoluene	25.0	25.5		ug/L		102	70 - 130
4-Isopropyltoluene	25.0	24.6		ug/L		99	70 - 130
4-Methyl-2-pentanone (MIBK)	125	102		ug/L		82	70 - 130
Acetone	125	105		ug/L		84	70 - 130
Benzene	25.0	23.2		ug/L		93	70 - 130
Bromobenzene	25.0	24.5		ug/L		98	70 - 130
Bromoform	25.0	22.9		ug/L		92	70 - 130
Bromomethane	25.0	25.6		ug/L		102	70 - 130
Carbon disulfide	25.0	22.7		ug/L		91	70 - 130
Carbon tetrachloride	25.0	23.9		ug/L		95	70 - 130
Chlorobenzene	25.0	23.5		ug/L		94	70 - 130
Chlorobromomethane	25.0	24.0		ug/L		96	70 - 130
Chlorodibromomethane	25.0	24.2		ug/L		97	70 - 130
Chloroethane	25.0	25.6		ug/L		102	70 - 130
Chloroform	25.0	23.0		ug/L		92	70 - 130
Chloromethane	25.0	25.3		ug/L		101	70 - 130
cis-1,2-Dichloroethene	25.0	23.2		ug/L		93	70 - 130
cis-1,3-Dichloropropene	25.0	24.4		ug/L		98	70 - 130
Dichlorobromomethane	25.0	23.7		ug/L		95	70 - 130
Dichlorodifluoromethane	25.0	28.8		ug/L		115	70 - 130
Ethyl ether	25.0	21.7		ug/L		87	70 - 130
Ethylbenzene	25.0	23.2		ug/L		93	70 - 130
Ethylene Dibromide	25.0	22.6		ug/L		90	70 - 130
Hexachlorobutadiene	25.0	23.4		ug/L		94	70 - 130
Isopropyl ether	25.0	23.3		ug/L		93	70 - 130
Isopropylbenzene	25.0	23.6		ug/L		94	70 - 130
Methyl tert-butyl ether	25.0	22.4		ug/L		90	70 - 130
Methylene Chloride	25.0	24.3		ug/L		97	70 - 130
m-Xylene & p-Xylene	25.0	23.5		ug/L		94	70 - 130
Naphthalene	25.0	20.8		ug/L		83	70 - 130
n-Butylbenzene	25.0	23.6		ug/L		94	70 - 130
N-Propylbenzene	25.0	24.0		ug/L		96	70 - 130
o-Xylene	25.0	23.6		ug/L		95	70 - 130
sec-Butylbenzene	25.0	23.6		ug/L		94	70 - 130
Styrene	25.0	24.0		ug/L		96	70 - 130
Tert-amyl methyl ether	25.0	22.3		ug/L		89	70 - 130
Tert-butyl ethyl ether	25.0	22.9		ug/L		92	70 - 130
tert-Butylbenzene	25.0	24.3		ug/L		97	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-323673/5
Matrix: Water
Analysis Batch: 323673

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	25.0	25.0		ug/L		100	70 - 130
Tetrahydrofuran	50.0	54.6		ug/L		109	70 - 130
Toluene	25.0	22.8		ug/L		91	70 - 130
trans-1,2-Dichloroethene	25.0	23.7		ug/L		95	70 - 130
trans-1,3-Dichloropropene	25.0	22.7		ug/L		91	70 - 130
Trichloroethene	25.0	23.3		ug/L		93	70 - 130
Trichlorofluoromethane	25.0	27.0		ug/L		108	70 - 130
Vinyl chloride	25.0	25.9		ug/L		103	70 - 130
Dibromomethane	25.0	22.4		ug/L		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*92*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 480-323673/6
Matrix: Water
Analysis Batch: 323673

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	25.0		ug/L		100	70 - 130	3	20
1,1,1-Trichloroethane	25.0	25.6		ug/L		102	70 - 130	4	20
1,1,2,2-Tetrachloroethane	25.0	22.1		ug/L		88	70 - 130	1	20
1,1,2-Trichloroethane	25.0	22.8		ug/L		91	70 - 130	1	20
1,1-Dichloroethane	25.0	24.5		ug/L		98	70 - 130	3	20
1,1-Dichloroethene	25.0	24.3		ug/L		97	70 - 130	6	20
1,1-Dichloropropene	25.0	23.6		ug/L		94	70 - 130	3	20
1,2,3-Trichlorobenzene	25.0	21.7		ug/L		87	70 - 130	2	20
1,2,3-Trichloropropane	25.0	20.3		ug/L		81	70 - 130	4	20
1,2,4-Trichlorobenzene	25.0	23.6		ug/L		94	70 - 130	2	20
1,2,4-Trimethylbenzene	25.0	24.5		ug/L		98	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	25.0	20.5		ug/L		82	70 - 130	4	20
1,2-Dichlorobenzene	25.0	23.5		ug/L		94	70 - 130	1	20
1,2-Dichloroethane	25.0	22.4		ug/L		89	70 - 130	3	20
1,2-Dichloropropane	25.0	24.7		ug/L		99	70 - 130	6	20
1,3,5-Trimethylbenzene	25.0	24.6		ug/L		98	70 - 130	2	20
1,3-Dichlorobenzene	25.0	24.1		ug/L		96	70 - 130	2	20
1,3-Dichloropropane	25.0	21.4		ug/L		86	70 - 130	1	20
1,4-Dichlorobenzene	25.0	24.6		ug/L		99	70 - 130	3	20
1,4-Dioxane	500	388		ug/L		78	70 - 130	3	20
2,2-Dichloropropane	25.0	24.8		ug/L		99	70 - 130	4	20
2-Butanone (MEK)	125	106		ug/L		85	70 - 130	2	20
2-Chlorotoluene	25.0	24.6		ug/L		98	70 - 130	2	20
2-Hexanone	125	104		ug/L		83	70 - 130	1	20
4-Chlorotoluene	25.0	26.0		ug/L		104	70 - 130	2	20
4-Isopropyltoluene	25.0	25.1		ug/L		100	70 - 130	2	20
4-Methyl-2-pentanone (MIBK)	125	102		ug/L		81	70 - 130	0	20
Acetone	125	103		ug/L		82	70 - 130	2	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-323673/6
Matrix: Water
Analysis Batch: 323673

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	25.0	24.4		ug/L		98	70 - 130	5	20
Bromobenzene	25.0	23.8		ug/L		95	70 - 130	3	20
Bromoform	25.0	23.5		ug/L		94	70 - 130	2	20
Bromomethane	25.0	25.7		ug/L		103	70 - 130	1	20
Carbon disulfide	25.0	24.0		ug/L		96	70 - 130	5	20
Carbon tetrachloride	25.0	25.1		ug/L		101	70 - 130	5	20
Chlorobenzene	25.0	24.4		ug/L		98	70 - 130	4	20
Chlorobromomethane	25.0	25.0		ug/L		100	70 - 130	4	20
Chlorodibromomethane	25.0	25.3		ug/L		101	70 - 130	5	20
Chloroethane	25.0	26.7		ug/L		107	70 - 130	4	20
Chloroform	25.0	23.5		ug/L		94	70 - 130	2	20
Chloromethane	25.0	26.3		ug/L		105	70 - 130	4	20
cis-1,2-Dichloroethene	25.0	24.6		ug/L		98	70 - 130	6	20
cis-1,3-Dichloropropene	25.0	25.3		ug/L		101	70 - 130	4	20
Dichlorobromomethane	25.0	24.2		ug/L		97	70 - 130	2	20
Dichlorodifluoromethane	25.0	29.8		ug/L		119	70 - 130	4	20
Ethyl ether	25.0	22.4		ug/L		90	70 - 130	3	20
Ethylbenzene	25.0	24.1		ug/L		96	70 - 130	4	20
Ethylene Dibromide	25.0	22.8		ug/L		91	70 - 130	1	20
Hexachlorobutadiene	25.0	25.0		ug/L		100	70 - 130	6	20
Isopropyl ether	25.0	24.0		ug/L		96	70 - 130	3	20
Isopropylbenzene	25.0	24.7		ug/L		99	70 - 130	5	20
Methyl tert-butyl ether	25.0	22.8		ug/L		91	70 - 130	2	20
Methylene Chloride	25.0	25.1		ug/L		100	70 - 130	3	20
m-Xylene & p-Xylene	25.0	24.0		ug/L		96	70 - 130	2	20
Naphthalene	25.0	21.0		ug/L		84	70 - 130	1	20
n-Butylbenzene	25.0	24.5		ug/L		98	70 - 130	4	20
N-Propylbenzene	25.0	24.7		ug/L		99	70 - 130	3	20
o-Xylene	25.0	24.4		ug/L		98	70 - 130	3	20
sec-Butylbenzene	25.0	24.5		ug/L		98	70 - 130	3	20
Styrene	25.0	25.5		ug/L		102	70 - 130	6	20
Tert-amyl methyl ether	25.0	23.0		ug/L		92	70 - 130	3	20
Tert-butyl ethyl ether	25.0	23.3		ug/L		93	70 - 130	2	20
tert-Butylbenzene	25.0	25.0		ug/L		100	70 - 130	3	20
Tetrachloroethene	25.0	26.2		ug/L		105	70 - 130	5	20
Tetrahydrofuran	50.0	53.1		ug/L		106	70 - 130	3	20
Toluene	25.0	23.4		ug/L		94	70 - 130	3	20
trans-1,2-Dichloroethene	25.0	25.0		ug/L		100	70 - 130	5	20
trans-1,3-Dichloropropene	25.0	23.7		ug/L		95	70 - 130	4	20
Trichloroethene	25.0	24.3		ug/L		97	70 - 130	4	20
Trichlorofluoromethane	25.0	28.4		ug/L		114	70 - 130	5	20
Vinyl chloride	25.0	27.0		ug/L		108	70 - 130	4	20
Dibromomethane	25.0	23.2		ug/L		93	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*

QC Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Lab Sample ID: MB 480-323720/8
Matrix: Water
Analysis Batch: 323720

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/04/16 22:43	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/04/16 22:43	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/04/16 22:43	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/04/16 22:43	1
1,1-Dichloroethane	ND		1.0		ug/L			10/04/16 22:43	1
1,1-Dichloroethene	ND		1.0		ug/L			10/04/16 22:43	1
1,1-Dichloropropene	ND		1.0		ug/L			10/04/16 22:43	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/04/16 22:43	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/04/16 22:43	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/04/16 22:43	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/04/16 22:43	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/04/16 22:43	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/04/16 22:43	1
1,2-Dichloroethane	ND		1.0		ug/L			10/04/16 22:43	1
1,2-Dichloropropane	ND		1.0		ug/L			10/04/16 22:43	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/04/16 22:43	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/04/16 22:43	1
1,3-Dichloropropane	ND		1.0		ug/L			10/04/16 22:43	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/04/16 22:43	1
1,4-Dioxane	ND		50		ug/L			10/04/16 22:43	1
2,2-Dichloropropane	ND		1.0		ug/L			10/04/16 22:43	1
2-Butanone (MEK)	ND		10		ug/L			10/04/16 22:43	1
2-Chlorotoluene	ND		1.0		ug/L			10/04/16 22:43	1
2-Hexanone	ND		10		ug/L			10/04/16 22:43	1
4-Chlorotoluene	ND		1.0		ug/L			10/04/16 22:43	1
4-Isopropyltoluene	ND		1.0		ug/L			10/04/16 22:43	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/04/16 22:43	1
Acetone	ND		50		ug/L			10/04/16 22:43	1
Benzene	ND		1.0		ug/L			10/04/16 22:43	1
Bromobenzene	ND		1.0		ug/L			10/04/16 22:43	1
Bromoform	ND		1.0		ug/L			10/04/16 22:43	1
Bromomethane	ND		2.0		ug/L			10/04/16 22:43	1
Carbon disulfide	ND		10		ug/L			10/04/16 22:43	1
Carbon tetrachloride	ND		1.0		ug/L			10/04/16 22:43	1
Chlorobenzene	ND		1.0		ug/L			10/04/16 22:43	1
Chlorobromomethane	ND		1.0		ug/L			10/04/16 22:43	1
Chlorodibromomethane	ND		0.50		ug/L			10/04/16 22:43	1
Chloroethane	ND		2.0		ug/L			10/04/16 22:43	1
Chloroform	ND		1.0		ug/L			10/04/16 22:43	1
Chloromethane	ND		2.0		ug/L			10/04/16 22:43	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/04/16 22:43	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/04/16 22:43	1
Dichlorobromomethane	ND		0.50		ug/L			10/04/16 22:43	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/04/16 22:43	1
Ethyl ether	ND		1.0		ug/L			10/04/16 22:43	1
Ethylbenzene	ND		1.0		ug/L			10/04/16 22:43	1
Ethylene Dibromide	ND		1.0		ug/L			10/04/16 22:43	1
Hexachlorobutadiene	ND		0.40		ug/L			10/04/16 22:43	1
Isopropyl ether	ND		10		ug/L			10/04/16 22:43	1
Isopropylbenzene	ND		1.0		ug/L			10/04/16 22:43	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-323720/8
Matrix: Water
Analysis Batch: 323720

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			10/04/16 22:43	1
Methylene Chloride	ND		1.0		ug/L			10/04/16 22:43	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/04/16 22:43	1
Naphthalene	ND		5.0		ug/L			10/04/16 22:43	1
n-Butylbenzene	ND		1.0		ug/L			10/04/16 22:43	1
N-Propylbenzene	ND		1.0		ug/L			10/04/16 22:43	1
o-Xylene	ND		1.0		ug/L			10/04/16 22:43	1
sec-Butylbenzene	ND		1.0		ug/L			10/04/16 22:43	1
Styrene	ND		1.0		ug/L			10/04/16 22:43	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/04/16 22:43	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/04/16 22:43	1
tert-Butylbenzene	ND		1.0		ug/L			10/04/16 22:43	1
Tetrachloroethene	ND		1.0		ug/L			10/04/16 22:43	1
Tetrahydrofuran	ND		10		ug/L			10/04/16 22:43	1
Toluene	ND		1.0		ug/L			10/04/16 22:43	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/04/16 22:43	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/04/16 22:43	1
Trichloroethene	ND		1.0		ug/L			10/04/16 22:43	1
Trichlorofluoromethane	ND		1.0		ug/L			10/04/16 22:43	1
Vinyl chloride	ND		1.0		ug/L			10/04/16 22:43	1
Dibromomethane	ND		1.0		ug/L			10/04/16 22:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*70 - 130*		*10/04/16 22:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*10/04/16 22:43*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/04/16 22:43*	*1*

Lab Sample ID: LCS 480-323720/5
Matrix: Water
Analysis Batch: 323720

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	23.5		ug/L		94	70 - 130
1,1,1-Trichloroethane	25.0	23.6		ug/L		94	70 - 130
1,1,2,2-Tetrachloroethane	25.0	20.8		ug/L		83	70 - 130
1,1,2-Trichloroethane	25.0	21.6		ug/L		86	70 - 130
1,1-Dichloroethane	25.0	23.6		ug/L		94	70 - 130
1,1-Dichloroethene	25.0	22.2		ug/L		89	70 - 130
1,1-Dichloropropene	25.0	22.9		ug/L		92	70 - 130
1,2,3-Trichlorobenzene	25.0	20.5		ug/L		82	70 - 130
1,2,3-Trichloropropane	25.0	19.6		ug/L		79	70 - 130
1,2,4-Trichlorobenzene	25.0	21.4		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	25.0	22.8		ug/L		91	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	19.2		ug/L		77	70 - 130
1,2-Dichlorobenzene	25.0	22.1		ug/L		89	70 - 130
1,2-Dichloroethane	25.0	21.7		ug/L		87	70 - 130
1,2-Dichloropropane	25.0	23.2		ug/L		93	70 - 130
1,3,5-Trimethylbenzene	25.0	22.8		ug/L		91	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-323720/5
Matrix: Water
Analysis Batch: 323720

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	25.0	23.0		ug/L		92	70 - 130
1,3-Dichloropropane	25.0	20.9		ug/L		84	70 - 130
1,4-Dichlorobenzene	25.0	22.6		ug/L		91	70 - 130
1,4-Dioxane	500	395		ug/L		79	70 - 130
2,2-Dichloropropane	25.0	23.7		ug/L		95	70 - 130
2-Butanone (MEK)	125	118		ug/L		95	70 - 130
2-Chlorotoluene	25.0	22.6		ug/L		90	70 - 130
2-Hexanone	125	109		ug/L		87	70 - 130
4-Chlorotoluene	25.0	23.9		ug/L		96	70 - 130
4-Isopropyltoluene	25.0	23.2		ug/L		93	70 - 130
4-Methyl-2-pentanone (MIBK)	125	102		ug/L		81	70 - 130
Acetone	125	133		ug/L		107	70 - 130
Benzene	25.0	22.7		ug/L		91	70 - 130
Bromobenzene	25.0	22.7		ug/L		91	70 - 130
Bromoform	25.0	22.2		ug/L		89	70 - 130
Bromomethane	25.0	28.2		ug/L		113	70 - 130
Carbon disulfide	25.0	22.4		ug/L		90	70 - 130
Carbon tetrachloride	25.0	23.2		ug/L		93	70 - 130
Chlorobenzene	25.0	22.5		ug/L		90	70 - 130
Chlorobromomethane	25.0	23.6		ug/L		94	70 - 130
Chlorodibromomethane	25.0	23.5		ug/L		94	70 - 130
Chloroethane	25.0	28.3		ug/L		113	70 - 130
Chloroform	25.0	22.3		ug/L		89	70 - 130
Chloromethane	25.0	25.0		ug/L		100	70 - 130
cis-1,2-Dichloroethene	25.0	23.5		ug/L		94	70 - 130
cis-1,3-Dichloropropene	25.0	23.1		ug/L		93	70 - 130
Dichlorobromomethane	25.0	24.1		ug/L		97	70 - 130
Dichlorodifluoromethane	25.0	26.6		ug/L		106	70 - 130
Ethyl ether	25.0	21.6		ug/L		86	70 - 130
Ethylbenzene	25.0	22.5		ug/L		90	70 - 130
Ethylene Dibromide	25.0	22.2		ug/L		89	70 - 130
Hexachlorobutadiene	25.0	22.5		ug/L		90	70 - 130
Isopropyl ether	25.0	22.2		ug/L		89	70 - 130
Isopropylbenzene	25.0	22.6		ug/L		90	70 - 130
Methyl tert-butyl ether	25.0	21.6		ug/L		86	70 - 130
Methylene Chloride	25.0	24.7		ug/L		99	70 - 130
m-Xylene & p-Xylene	25.0	22.6		ug/L		90	70 - 130
Naphthalene	25.0	19.3		ug/L		77	70 - 130
n-Butylbenzene	25.0	21.8		ug/L		87	70 - 130
N-Propylbenzene	25.0	22.0		ug/L		88	70 - 130
o-Xylene	25.0	23.4		ug/L		94	70 - 130
sec-Butylbenzene	25.0	22.2		ug/L		89	70 - 130
Styrene	25.0	23.7		ug/L		95	70 - 130
Tert-amyl methyl ether	25.0	21.9		ug/L		87	70 - 130
Tert-butyl ethyl ether	25.0	22.1		ug/L		88	70 - 130
tert-Butylbenzene	25.0	23.3		ug/L		93	70 - 130
Tetrachloroethene	25.0	24.1		ug/L		97	70 - 130
Tetrahydrofuran	50.0	51.1		ug/L		102	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-323720/5
Matrix: Water
Analysis Batch: 323720

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	25.0	21.9		ug/L		88	70 - 130
trans-1,2-Dichloroethene	25.0	23.8		ug/L		95	70 - 130
trans-1,3-Dichloropropene	25.0	21.8		ug/L		87	70 - 130
Trichloroethene	25.0	23.5		ug/L		94	70 - 130
Trichlorofluoromethane	25.0	28.2		ug/L		113	70 - 130
Vinyl chloride	25.0	26.0		ug/L		104	70 - 130
Dibromomethane	25.0	22.2		ug/L		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 480-323720/6
Matrix: Water
Analysis Batch: 323720

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	23.8		ug/L		95	70 - 130	1	20
1,1,1-Trichloroethane	25.0	25.4		ug/L		102	70 - 130	7	20
1,1,2,2-Tetrachloroethane	25.0	21.7		ug/L		87	70 - 130	4	20
1,1,2-Trichloroethane	25.0	22.2		ug/L		89	70 - 130	3	20
1,1-Dichloroethane	25.0	24.1		ug/L		96	70 - 130	2	20
1,1-Dichloroethene	25.0	24.1		ug/L		97	70 - 130	9	20
1,1-Dichloropropene	25.0	23.6		ug/L		94	70 - 130	3	20
1,2,3-Trichlorobenzene	25.0	21.4		ug/L		86	70 - 130	4	20
1,2,3-Trichloropropane	25.0	19.8		ug/L		79	70 - 130	1	20
1,2,4-Trichlorobenzene	25.0	22.5		ug/L		90	70 - 130	5	20
1,2,4-Trimethylbenzene	25.0	24.7		ug/L		99	70 - 130	8	20
1,2-Dibromo-3-Chloropropane	25.0	21.0		ug/L		84	70 - 130	9	20
1,2-Dichlorobenzene	25.0	23.4		ug/L		94	70 - 130	6	20
1,2-Dichloroethane	25.0	22.0		ug/L		88	70 - 130	2	20
1,2-Dichloropropane	25.0	23.6		ug/L		94	70 - 130	2	20
1,3,5-Trimethylbenzene	25.0	24.3		ug/L		97	70 - 130	7	20
1,3-Dichlorobenzene	25.0	23.7		ug/L		95	70 - 130	3	20
1,3-Dichloropropane	25.0	20.7		ug/L		83	70 - 130	1	20
1,4-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130	8	20
1,4-Dioxane	500	353		ug/L		71	70 - 130	11	20
2,2-Dichloropropane	25.0	25.2		ug/L		101	70 - 130	6	20
2-Butanone (MEK)	125	112		ug/L		89	70 - 130	6	20
2-Chlorotoluene	25.0	23.6		ug/L		94	70 - 130	4	20
2-Hexanone	125	107		ug/L		85	70 - 130	2	20
4-Chlorotoluene	25.0	25.6		ug/L		102	70 - 130	7	20
4-Isopropyltoluene	25.0	25.0		ug/L		100	70 - 130	8	20
4-Methyl-2-pentanone (MIBK)	125	98.3		ug/L		79	70 - 130	3	20
Acetone	125	128		ug/L		102	70 - 130	4	20
Benzene	25.0	24.0		ug/L		96	70 - 130	6	20
Bromobenzene	25.0	23.6		ug/L		94	70 - 130	4	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-323720/6
Matrix: Water
Analysis Batch: 323720

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform			25.0	22.5		ug/L		90	70 - 130	1	20
Bromomethane			25.0	29.9		ug/L		119	70 - 130	6	20
Carbon disulfide			25.0	24.3		ug/L		97	70 - 130	8	20
Carbon tetrachloride			25.0	25.3		ug/L		101	70 - 130	9	20
Chlorobenzene			25.0	23.0		ug/L		92	70 - 130	2	20
Chlorobromomethane			25.0	24.5		ug/L		98	70 - 130	4	20
Chlorodibromomethane			25.0	23.8		ug/L		95	70 - 130	1	20
Chloroethane			25.0	29.5		ug/L		118	70 - 130	4	20
Chloroform			25.0	22.9		ug/L		92	70 - 130	3	20
Chloromethane			25.0	26.4		ug/L		106	70 - 130	6	20
cis-1,2-Dichloroethene			25.0	24.9		ug/L		100	70 - 130	6	20
cis-1,3-Dichloropropene			25.0	24.6		ug/L		98	70 - 130	6	20
Dichlorobromomethane			25.0	24.8		ug/L		99	70 - 130	3	20
Dichlorodifluoromethane			25.0	29.7		ug/L		119	70 - 130	11	20
Ethyl ether			25.0	22.1		ug/L		88	70 - 130	2	20
Ethylbenzene			25.0	23.6		ug/L		94	70 - 130	4	20
Ethylene Dibromide			25.0	21.7		ug/L		87	70 - 130	2	20
Hexachlorobutadiene			25.0	24.4		ug/L		98	70 - 130	8	20
Isopropyl ether			25.0	23.0		ug/L		92	70 - 130	4	20
Isopropylbenzene			25.0	23.9		ug/L		96	70 - 130	6	20
Methyl tert-butyl ether			25.0	22.0		ug/L		88	70 - 130	2	20
Methylene Chloride			25.0	25.1		ug/L		100	70 - 130	2	20
m-Xylene & p-Xylene			25.0	23.7		ug/L		95	70 - 130	5	20
Naphthalene			25.0	20.2		ug/L		81	70 - 130	5	20
n-Butylbenzene			25.0	23.7		ug/L		95	70 - 130	8	20
N-Propylbenzene			25.0	24.0		ug/L		96	70 - 130	9	20
o-Xylene			25.0	24.3		ug/L		97	70 - 130	4	20
sec-Butylbenzene			25.0	24.2		ug/L		97	70 - 130	9	20
Styrene			25.0	24.6		ug/L		98	70 - 130	3	20
Tert-amyl methyl ether			25.0	22.1		ug/L		88	70 - 130	1	20
Tert-butyl ethyl ether			25.0	23.1		ug/L		92	70 - 130	5	20
tert-Butylbenzene			25.0	24.8		ug/L		99	70 - 130	6	20
Tetrachloroethene			25.0	25.6		ug/L		102	70 - 130	6	20
Tetrahydrofuran			50.0	51.5		ug/L		103	70 - 130	1	20
Toluene			25.0	22.6		ug/L		90	70 - 130	3	20
trans-1,2-Dichloroethene			25.0	24.0		ug/L		96	70 - 130	1	20
trans-1,3-Dichloropropene			25.0	22.1		ug/L		88	70 - 130	1	20
Trichloroethene			25.0	25.2		ug/L		101	70 - 130	7	20
Trichlorofluoromethane			25.0	30.4		ug/L		122	70 - 130	8	20
Vinyl chloride			25.0	27.2		ug/L		109	70 - 130	4	20
Dibromomethane			25.0	22.5		ug/L		90	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-323855/9
Matrix: Water
Analysis Batch: 323855

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/05/16 12:18	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/05/16 12:18	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/05/16 12:18	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/05/16 12:18	1
1,1-Dichloroethane	ND		1.0		ug/L			10/05/16 12:18	1
1,1-Dichloroethene	ND		1.0		ug/L			10/05/16 12:18	1
1,1-Dichloropropene	ND		1.0		ug/L			10/05/16 12:18	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/05/16 12:18	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/05/16 12:18	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/05/16 12:18	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/05/16 12:18	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/05/16 12:18	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/05/16 12:18	1
1,2-Dichloroethane	ND		1.0		ug/L			10/05/16 12:18	1
1,2-Dichloropropane	ND		1.0		ug/L			10/05/16 12:18	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/05/16 12:18	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/05/16 12:18	1
1,3-Dichloropropane	ND		1.0		ug/L			10/05/16 12:18	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/05/16 12:18	1
1,4-Dioxane	ND		50		ug/L			10/05/16 12:18	1
2,2-Dichloropropane	ND		1.0		ug/L			10/05/16 12:18	1
2-Butanone (MEK)	ND		10		ug/L			10/05/16 12:18	1
2-Chlorotoluene	ND		1.0		ug/L			10/05/16 12:18	1
2-Hexanone	ND		10		ug/L			10/05/16 12:18	1
4-Chlorotoluene	ND		1.0		ug/L			10/05/16 12:18	1
4-Isopropyltoluene	ND		1.0		ug/L			10/05/16 12:18	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/05/16 12:18	1
Acetone	ND		50		ug/L			10/05/16 12:18	1
Benzene	ND		1.0		ug/L			10/05/16 12:18	1
Bromobenzene	ND		1.0		ug/L			10/05/16 12:18	1
Bromoform	ND		1.0		ug/L			10/05/16 12:18	1
Bromomethane	ND		2.0		ug/L			10/05/16 12:18	1
Carbon disulfide	ND		10		ug/L			10/05/16 12:18	1
Carbon tetrachloride	ND		1.0		ug/L			10/05/16 12:18	1
Chlorobenzene	ND		1.0		ug/L			10/05/16 12:18	1
Chlorobromomethane	ND		1.0		ug/L			10/05/16 12:18	1
Chlorodibromomethane	ND		0.50		ug/L			10/05/16 12:18	1
Chloroethane	ND		2.0		ug/L			10/05/16 12:18	1
Chloroform	ND		1.0		ug/L			10/05/16 12:18	1
Chloromethane	ND		2.0		ug/L			10/05/16 12:18	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/05/16 12:18	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 12:18	1
Dichlorobromomethane	ND		0.50		ug/L			10/05/16 12:18	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/05/16 12:18	1
Ethyl ether	ND		1.0		ug/L			10/05/16 12:18	1
Ethylbenzene	ND		1.0		ug/L			10/05/16 12:18	1
Ethylene Dibromide	ND		1.0		ug/L			10/05/16 12:18	1
Hexachlorobutadiene	ND		0.40		ug/L			10/05/16 12:18	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-323855/9
Matrix: Water
Analysis Batch: 323855

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			10/05/16 12:18	1
Isopropylbenzene	ND		1.0		ug/L			10/05/16 12:18	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/05/16 12:18	1
Methylene Chloride	ND		1.0		ug/L			10/05/16 12:18	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/05/16 12:18	1
Naphthalene	ND		5.0		ug/L			10/05/16 12:18	1
n-Butylbenzene	ND		1.0		ug/L			10/05/16 12:18	1
N-Propylbenzene	ND		1.0		ug/L			10/05/16 12:18	1
o-Xylene	ND		1.0		ug/L			10/05/16 12:18	1
sec-Butylbenzene	ND		1.0		ug/L			10/05/16 12:18	1
Styrene	ND		1.0		ug/L			10/05/16 12:18	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/05/16 12:18	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/05/16 12:18	1
tert-Butylbenzene	ND		1.0		ug/L			10/05/16 12:18	1
Tetrachloroethene	ND		1.0		ug/L			10/05/16 12:18	1
Tetrahydrofuran	ND		10		ug/L			10/05/16 12:18	1
Toluene	ND		1.0		ug/L			10/05/16 12:18	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/05/16 12:18	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 12:18	1
Trichloroethene	ND		1.0		ug/L			10/05/16 12:18	1
Trichlorofluoromethane	ND		1.0		ug/L			10/05/16 12:18	1
Vinyl chloride	ND		1.0		ug/L			10/05/16 12:18	1
Dibromomethane	ND		1.0		ug/L			10/05/16 12:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*10/05/16 12:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*10/05/16 12:18*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/05/16 12:18*	*1*

Lab Sample ID: LCS 480-323855/6
Matrix: Water
Analysis Batch: 323855

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.2		ug/L		101	70 - 130
1,1,1-Trichloroethane	25.0	24.6		ug/L		98	70 - 130
1,1,2,2-Tetrachloroethane	25.0	22.9		ug/L		92	70 - 130
1,1,2-Trichloroethane	25.0	23.9		ug/L		96	70 - 130
1,1-Dichloroethane	25.0	24.0		ug/L		96	70 - 130
1,1-Dichloroethene	25.0	22.9		ug/L		92	70 - 130
1,1-Dichloropropene	25.0	23.0		ug/L		92	70 - 130
1,2,3-Trichlorobenzene	25.0	22.1		ug/L		88	70 - 130
1,2,3-Trichloropropane	25.0	21.3		ug/L		85	70 - 130
1,2,4-Trichlorobenzene	25.0	23.0		ug/L		92	70 - 130
1,2,4-Trimethylbenzene	25.0	24.7		ug/L		99	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	20.9		ug/L		83	70 - 130
1,2-Dichlorobenzene	25.0	24.0		ug/L		96	70 - 130
1,2-Dichloroethane	25.0	21.9		ug/L		88	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-323855/6
Matrix: Water
Analysis Batch: 323855

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	23.8		ug/L		95	70 - 130
1,3,5-Trimethylbenzene	25.0	24.6		ug/L		98	70 - 130
1,3-Dichlorobenzene	25.0	23.8		ug/L		95	70 - 130
1,3-Dichloropropane	25.0	22.0		ug/L		88	70 - 130
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	70 - 130
1,4-Dioxane	500	361		ug/L		72	70 - 130
2,2-Dichloropropane	25.0	23.6		ug/L		95	70 - 130
2-Butanone (MEK)	125	114		ug/L		91	70 - 130
2-Chlorotoluene	25.0	23.9		ug/L		96	70 - 130
2-Hexanone	125	116		ug/L		93	70 - 130
4-Chlorotoluene	25.0	25.6		ug/L		102	70 - 130
4-Isopropyltoluene	25.0	24.9		ug/L		100	70 - 130
4-Methyl-2-pentanone (MIBK)	125	105		ug/L		84	70 - 130
Acetone	125	135		ug/L		108	70 - 130
Benzene	25.0	23.9		ug/L		96	70 - 130
Bromobenzene	25.0	23.9		ug/L		96	70 - 130
Bromoform	25.0	24.4		ug/L		98	70 - 130
Bromomethane	25.0	22.5		ug/L		90	70 - 130
Carbon disulfide	25.0	22.9		ug/L		92	70 - 130
Carbon tetrachloride	25.0	24.3		ug/L		97	70 - 130
Chlorobenzene	25.0	24.0		ug/L		96	70 - 130
Chlorobromomethane	25.0	24.1		ug/L		96	70 - 130
Chlorodibromomethane	25.0	25.1		ug/L		100	70 - 130
Chloroethane	25.0	26.2		ug/L		105	70 - 130
Chloroform	25.0	22.9		ug/L		92	70 - 130
Chloromethane	25.0	24.6		ug/L		98	70 - 130
cis-1,2-Dichloroethene	25.0	24.2		ug/L		97	70 - 130
cis-1,3-Dichloropropene	25.0	24.5		ug/L		98	70 - 130
Dichlorobromomethane	25.0	24.6		ug/L		98	70 - 130
Dichlorodifluoromethane	25.0	25.6		ug/L		102	70 - 130
Ethyl ether	25.0	22.4		ug/L		89	70 - 130
Ethylbenzene	25.0	23.7		ug/L		95	70 - 130
Ethylene Dibromide	25.0	22.9		ug/L		92	70 - 130
Hexachlorobutadiene	25.0	24.1		ug/L		96	70 - 130
Isopropyl ether	25.0	23.0		ug/L		92	70 - 130
Isopropylbenzene	25.0	24.7		ug/L		99	70 - 130
Methyl tert-butyl ether	25.0	21.9		ug/L		88	70 - 130
Methylene Chloride	25.0	25.4		ug/L		101	70 - 130
m-Xylene & p-Xylene	25.0	23.5		ug/L		94	70 - 130
Naphthalene	25.0	21.2		ug/L		85	70 - 130
n-Butylbenzene	25.0	24.1		ug/L		96	70 - 130
N-Propylbenzene	25.0	24.3		ug/L		97	70 - 130
o-Xylene	25.0	24.2		ug/L		97	70 - 130
sec-Butylbenzene	25.0	23.6		ug/L		94	70 - 130
Styrene	25.0	24.9		ug/L		100	70 - 130
Tert-amyl methyl ether	25.0	22.2		ug/L		89	70 - 130
Tert-butyl ethyl ether	25.0	22.8		ug/L		91	70 - 130
tert-Butylbenzene	25.0	24.7		ug/L		99	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-323855/6
Matrix: Water
Analysis Batch: 323855

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	25.0	26.3		ug/L		105	70 - 130
Tetrahydrofuran	50.0	55.4		ug/L		111	70 - 130
Toluene	25.0	23.5		ug/L		94	70 - 130
trans-1,2-Dichloroethene	25.0	23.7		ug/L		95	70 - 130
trans-1,3-Dichloropropene	25.0	23.7		ug/L		95	70 - 130
Trichloroethene	25.0	23.9		ug/L		96	70 - 130
Trichlorofluoromethane	25.0	27.5		ug/L		110	70 - 130
Vinyl chloride	25.0	24.7		ug/L		99	70 - 130
Dibromomethane	25.0	23.2		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 480-323855/7
Matrix: Water
Analysis Batch: 323855

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	25.6		ug/L		103	70 - 130	2	20
1,1,1-Trichloroethane	25.0	25.0		ug/L		100	70 - 130	2	20
1,1,2,2-Tetrachloroethane	25.0	21.8		ug/L		87	70 - 130	5	20
1,1,2-Trichloroethane	25.0	23.5		ug/L		94	70 - 130	2	20
1,1-Dichloroethane	25.0	24.8		ug/L		99	70 - 130	3	20
1,1-Dichloroethene	25.0	23.8		ug/L		95	70 - 130	4	20
1,1-Dichloropropene	25.0	23.6		ug/L		94	70 - 130	3	20
1,2,3-Trichlorobenzene	25.0	21.2		ug/L		85	70 - 130	4	20
1,2,3-Trichloropropane	25.0	21.0		ug/L		84	70 - 130	1	20
1,2,4-Trichlorobenzene	25.0	23.0		ug/L		92	70 - 130	0	20
1,2,4-Trimethylbenzene	25.0	24.4		ug/L		97	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	25.0	20.7		ug/L		83	70 - 130	1	20
1,2-Dichlorobenzene	25.0	23.6		ug/L		95	70 - 130	1	20
1,2-Dichloroethane	25.0	22.8		ug/L		91	70 - 130	4	20
1,2-Dichloropropane	25.0	24.2		ug/L		97	70 - 130	1	20
1,3,5-Trimethylbenzene	25.0	24.5		ug/L		98	70 - 130	0	20
1,3-Dichlorobenzene	25.0	24.3		ug/L		97	70 - 130	2	20
1,3-Dichloropropane	25.0	22.1		ug/L		88	70 - 130	0	20
1,4-Dichlorobenzene	25.0	24.2		ug/L		97	70 - 130	1	20
1,4-Dioxane	500	388		ug/L		78	70 - 130	7	20
2,2-Dichloropropane	25.0	25.0		ug/L		100	70 - 130	5	20
2-Butanone (MEK)	125	120		ug/L		96	70 - 130	5	20
2-Chlorotoluene	25.0	24.1		ug/L		96	70 - 130	1	20
2-Hexanone	125	111		ug/L		89	70 - 130	4	20
4-Chlorotoluene	25.0	25.7		ug/L		103	70 - 130	0	20
4-Isopropyltoluene	25.0	25.1		ug/L		100	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	125	105		ug/L		84	70 - 130	0	20
Acetone	125	129		ug/L		103	70 - 130	5	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-323855/7
Matrix: Water
Analysis Batch: 323855

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			25.0	24.5		ug/L		98	70 - 130	2	20
Bromobenzene			25.0	23.9		ug/L		96	70 - 130	0	20
Bromoform			25.0	24.0		ug/L		96	70 - 130	2	20
Bromomethane			25.0	25.2		ug/L		101	70 - 130	11	20
Carbon disulfide			25.0	23.7		ug/L		95	70 - 130	3	20
Carbon tetrachloride			25.0	25.4		ug/L		101	70 - 130	4	20
Chlorobenzene			25.0	24.1		ug/L		96	70 - 130	0	20
Chlorobromomethane			25.0	24.4		ug/L		98	70 - 130	1	20
Chlorodibromomethane			25.0	25.8		ug/L		103	70 - 130	3	20
Chloroethane			25.0	26.3		ug/L		105	70 - 130	0	20
Chloroform			25.0	23.8		ug/L		95	70 - 130	4	20
Chloromethane			25.0	25.4		ug/L		102	70 - 130	3	20
cis-1,2-Dichloroethene			25.0	24.3		ug/L		97	70 - 130	1	20
cis-1,3-Dichloropropene			25.0	25.0		ug/L		100	70 - 130	2	20
Dichlorobromomethane			25.0	25.3		ug/L		101	70 - 130	3	20
Dichlorodifluoromethane			25.0	26.2		ug/L		105	70 - 130	2	20
Ethyl ether			25.0	22.2		ug/L		89	70 - 130	1	20
Ethylbenzene			25.0	24.5		ug/L		98	70 - 130	4	20
Ethylene Dibromide			25.0	23.0		ug/L		92	70 - 130	1	20
Hexachlorobutadiene			25.0	24.6		ug/L		98	70 - 130	2	20
Isopropyl ether			25.0	23.3		ug/L		93	70 - 130	1	20
Isopropylbenzene			25.0	24.0		ug/L		96	70 - 130	3	20
Methyl tert-butyl ether			25.0	22.5		ug/L		90	70 - 130	3	20
Methylene Chloride			25.0	25.5		ug/L		102	70 - 130	0	20
m-Xylene & p-Xylene			25.0	24.8		ug/L		99	70 - 130	5	20
Naphthalene			25.0	20.5		ug/L		82	70 - 130	3	20
n-Butylbenzene			25.0	24.4		ug/L		98	70 - 130	2	20
N-Propylbenzene			25.0	24.4		ug/L		97	70 - 130	0	20
o-Xylene			25.0	24.2		ug/L		97	70 - 130	0	20
sec-Butylbenzene			25.0	24.2		ug/L		97	70 - 130	3	20
Styrene			25.0	25.7		ug/L		103	70 - 130	3	20
Tert-amyl methyl ether			25.0	23.0		ug/L		92	70 - 130	4	20
Tert-butyl ethyl ether			25.0	23.3		ug/L		93	70 - 130	2	20
tert-Butylbenzene			25.0	24.2		ug/L		97	70 - 130	2	20
Tetrachloroethene			25.0	27.0		ug/L		108	70 - 130	3	20
Tetrahydrofuran			50.0	54.2		ug/L		108	70 - 130	2	20
Toluene			25.0	23.5		ug/L		94	70 - 130	0	20
trans-1,2-Dichloroethene			25.0	24.3		ug/L		97	70 - 130	3	20
trans-1,3-Dichloropropene			25.0	24.1		ug/L		97	70 - 130	2	20
Trichloroethene			25.0	25.3		ug/L		101	70 - 130	5	20
Trichlorofluoromethane			25.0	28.4		ug/L		113	70 - 130	3	20
Vinyl chloride			25.0	25.4		ug/L		102	70 - 130	3	20
Dibromomethane			25.0	24.4		ug/L		97	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*93*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Lab Sample ID: MB 200-109819/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 109859 — **Prep Batch: 109819**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		10/05/16 11:16	10/06/16 09:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*104*		*70 - 130*	*10/05/16 11:16*	*10/06/16 09:28*	*1*

Lab Sample ID: LCS 200-109819/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 109859 — **Prep Batch: 109819**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	8.00	7.07		ug/L		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*94*		*70 - 130*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-323660/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324737 — **Prep Batch: 323660**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050		mg/L		10/04/16 08:55	10/05/16 14:38	1

Lab Sample ID: LCS 480-323660/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324737 — **Prep Batch: 323660**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.5		mg/L		105	80 - 120

Lab Sample ID: LCSD 480-323660/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324737 — **Prep Batch: 323660**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	10.0	10.5		mg/L		105	80 - 120	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-323818/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323818

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			10/05/16 11:45	1
Sulfate	ND		2.0		mg/L			10/05/16 11:45	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 480-323818/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323818

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	48.0		mg/L		96	90 - 110
Sulfate	50.0	46.7		mg/L		93	90 - 110

Lab Sample ID: 480-106923-7 MS — **Client Sample ID: MW-265M-20161003**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323818

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	41		1000	946		mg/L		91	81 - 120

Lab Sample ID: 480-106923-7 MSD — **Client Sample ID: MW-265M-20161003**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323818

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	41		1000	928		mg/L		89	81 - 120	2	20

Lab Sample ID: MB 480-324265/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324265

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			10/07/16 06:29	1
Sulfate	ND		2.0		mg/L			10/07/16 06:29	1

Lab Sample ID: LCS 480-324265/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324265

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	48.5		mg/L		97	90 - 110
Sulfate	50.0	48.6		mg/L		97	90 - 110

Lab Sample ID: 480-106923-7 MS — **Client Sample ID: MW-265M-20161003**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324265

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	ND		50.0	46.7		mg/L		93	80 - 120

Lab Sample ID: 480-106923-7 MSD — **Client Sample ID: MW-265M-20161003**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324265

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	ND		50.0	49.3		mg/L		99	80 - 120	5	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-323735/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323762 — **Prep Batch: 323735**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L		10/04/16 12:24	10/04/16 13:42	1

Lab Sample ID: LCS 480-323735/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323762 — **Prep Batch: 323735**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.08		mg/L		108	90 - 110

Lab Sample ID: 480-106923-7 MS — **Client Sample ID: MW-265M-20161003**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323762 — **Prep Batch: 323735**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.50		0.500	1.02		mg/L		105	90 - 110

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-324190/27 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			10/06/16 04:37	1
TOC Result 2	ND		1.0		mg/L			10/06/16 04:37	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/06/16 04:37	1

Lab Sample ID: MB 480-324190/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			10/05/16 17:18	1
TOC Result 2	ND		1.0		mg/L			10/05/16 17:18	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/05/16 17:18	1

Lab Sample ID: LCS 480-324190/28 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324190

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	56.5		mg/L		94	90 - 110
TOC Result 2	60.0	57.5		mg/L		96	90 - 110
Total Organic Carbon - Duplicates	60.0	57.0		mg/L		95	90 - 110

Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 480-324190/4
Matrix: Water
Analysis Batch: 324190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	57.1		mg/L		95	90 - 110
TOC Result 2	60.0	57.6		mg/L		96	90 - 110
Total Organic Carbon - Duplicates	60.0	57.3		mg/L		96	90 - 110

Lab Sample ID: 480-106923-3 DU
Matrix: Water
Analysis Batch: 324190

Client Sample ID: MW-552-20161003
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
TOC Result 1	1.4		1.44		mg/L		4	20
TOC Result 2	1.6		1.77		mg/L		7	20
Total Organic Carbon - Duplicates	1.5		1.61		mg/L		6	20

Lab Sample ID: MB 480-324587/4
Matrix: Water
Analysis Batch: 324587

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			10/07/16 17:53	1
TOC Result 2	ND		1.0		mg/L			10/07/16 17:53	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/07/16 17:53	1

Lab Sample ID: MB 480-324587/52
Matrix: Water
Analysis Batch: 324587

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			10/08/16 16:20	1
TOC Result 2	ND		1.0		mg/L			10/08/16 16:20	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/08/16 16:20	1

Lab Sample ID: LCS 480-324587/5
Matrix: Water
Analysis Batch: 324587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	57.8		mg/L		96	90 - 110
TOC Result 2	60.0	60.9		mg/L		101	90 - 110
Total Organic Carbon - Duplicates	60.0	59.3		mg/L		99	90 - 110

Lab Sample ID: LCS 480-324587/53
Matrix: Water
Analysis Batch: 324587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	55.6		mg/L		93	90 - 110
TOC Result 2	60.0	59.2		mg/L		99	90 - 110

Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 480-324587/53 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324587

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	60.0	57.4		mg/L		96	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-324113/30 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324113

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0		mg/L			10/05/16 15:35	1

Lab Sample ID: MB 480-324113/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324113

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0		mg/L			10/05/16 12:53	1

Lab Sample ID: LCS 480-324113/31 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	97.8		mg/L		98	90 - 110

Lab Sample ID: LCS 480-324113/8 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	101		mg/L		101	90 - 110

Method: SM 4500 P E - Orthophosphate

Lab Sample ID: MB 480-323751/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323751

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ortho-Phosphate	ND		0.020		mg/L			10/04/16 09:30	1

Lab Sample ID: LCS 480-323751/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323751

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
ortho-Phosphate	0.200	0.208		mg/L		104	90 - 110

Method: SM 4500 P E - Orthophosphate (Continued)

Lab Sample ID: 480-106923-7 MS — **Client Sample ID: MW-265M-20161003**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323751

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
ortho-Phosphate	0.19		1.00	1.12		mg/L		93	49 - 138		

Lab Sample ID: 480-106923-7 MSD — **Client Sample ID: MW-265M-20161003**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323751

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
ortho-Phosphate	0.19		1.00	1.12		mg/L		93	49 - 138	0	20

QC Association Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

GC/MS VOA

Analysis Batch: 323673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-10	TRIP BLANKS	Total/NA	Water	8260C	
MB 480-323673/7	Method Blank	Total/NA	Water	8260C	
LCS 480-323673/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-323673/6	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 323720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-2	MW-551-20161003	Total/NA	Water	8260C	
480-106923-3	MW-552-20161003	Total/NA	Water	8260C	
480-106923-4	MW-553-20161003	Total/NA	Water	8260C	
480-106923-5	MW-562-20161003	Total/NA	Water	8260C	
480-106923-6	MW-265S-20161003	Total/NA	Water	8260C	
480-106923-7	MW-265M-20161003	Total/NA	Water	8260C	
480-106923-8	MW-265D-20161003	Total/NA	Water	8260C	
480-106923-9	DUP1-20161003	Total/NA	Water	8260C	
MB 480-323720/8	Method Blank	Total/NA	Water	8260C	
LCS 480-323720/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-323720/6	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 323855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-1	MW-261S-20161003	Total/NA	Water	8260C	
MB 480-323855/9	Method Blank	Total/NA	Water	8260C	
LCS 480-323855/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-323855/7	Lab Control Sample Dup	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 109819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-1	MW-261S-20161003	Total/NA	Water	3535A	
480-106923-3	MW-552-20161003	Total/NA	Water	3535A	
480-106923-7	MW-265M-20161003	Total/NA	Water	3535A	
480-106923-9	DUP1-20161003	Total/NA	Water	3535A	
MB 200-109819/1-A	Method Blank	Total/NA	Water	3535A	
LCS 200-109819/2-A	Lab Control Sample	Total/NA	Water	3535A	

Analysis Batch: 109859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-1	MW-261S-20161003	Total/NA	Water	522	109819
480-106923-3	MW-552-20161003	Total/NA	Water	522	109819
480-106923-7	MW-265M-20161003	Total/NA	Water	522	109819
480-106923-9	DUP1-20161003	Total/NA	Water	522	109819
MB 200-109819/1-A	Method Blank	Total/NA	Water	522	109819
LCS 200-109819/2-A	Lab Control Sample	Total/NA	Water	522	109819

QC Association Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Metals

Prep Batch: 323660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-1	MW-261S-20161003	Total/NA	Water	3005A	
480-106923-3	MW-552-20161003	Total/NA	Water	3005A	
480-106923-4	MW-553-20161003	Total/NA	Water	3005A	
480-106923-5	MW-562-20161003	Total/NA	Water	3005A	
480-106923-7	MW-265M-20161003	Total/NA	Water	3005A	
MB 480-323660/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-323660/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-323660/3-A	Lab Control Sample Dup	Total/NA	Water	3005A	

Analysis Batch: 324737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-1	MW-261S-20161003	Total/NA	Water	6010	323660
480-106923-3	MW-552-20161003	Total/NA	Water	6010	323660
480-106923-4	MW-553-20161003	Total/NA	Water	6010	323660
480-106923-5	MW-562-20161003	Total/NA	Water	6010	323660
480-106923-7	MW-265M-20161003	Total/NA	Water	6010	323660
MB 480-323660/1-A	Method Blank	Total/NA	Water	6010	323660
LCS 480-323660/2-A	Lab Control Sample	Total/NA	Water	6010	323660
LCSD 480-323660/3-A	Lab Control Sample Dup	Total/NA	Water	6010	323660

General Chemistry

Prep Batch: 323735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-1	MW-261S-20161003	Total/NA	Water	Distill/Ammonia	
480-106923-3	MW-552-20161003	Total/NA	Water	Distill/Ammonia	
480-106923-4	MW-553-20161003	Total/NA	Water	Distill/Ammonia	
480-106923-5	MW-562-20161003	Total/NA	Water	Distill/Ammonia	
480-106923-7	MW-265M-20161003	Total/NA	Water	Distill/Ammonia	
MB 480-323735/2-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 480-323735/1-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	
480-106923-7 MS	MW-265M-20161003	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 323751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-1	MW-261S-20161003	Total/NA	Water	SM 4500 P E	
480-106923-3	MW-552-20161003	Total/NA	Water	SM 4500 P E	
480-106923-4	MW-553-20161003	Total/NA	Water	SM 4500 P E	
480-106923-5	MW-562-20161003	Total/NA	Water	SM 4500 P E	
480-106923-7	MW-265M-20161003	Total/NA	Water	SM 4500 P E	
MB 480-323751/3	Method Blank	Total/NA	Water	SM 4500 P E	
LCS 480-323751/4	Lab Control Sample	Total/NA	Water	SM 4500 P E	
480-106923-7 MS	MW-265M-20161003	Total/NA	Water	SM 4500 P E	
480-106923-7 MSD	MW-265M-20161003	Total/NA	Water	SM 4500 P E	

Analysis Batch: 323762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-1	MW-261S-20161003	Total/NA	Water	350.1	323735
480-106923-3	MW-552-20161003	Total/NA	Water	350.1	323735
480-106923-4	MW-553-20161003	Total/NA	Water	350.1	323735

General Chemistry (Continued)

Analysis Batch: 323762 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-5	MW-562-20161003	Total/NA	Water	350.1	323735
480-106923-7	MW-265M-20161003	Total/NA	Water	350.1	323735
MB 480-323735/2-A	Method Blank	Total/NA	Water	350.1	323735
LCS 480-323735/1-A	Lab Control Sample	Total/NA	Water	350.1	323735
480-106923-7 MS	MW-265M-20161003	Total/NA	Water	350.1	323735

Analysis Batch: 323809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-1	MW-261S-20161003	Total/NA	Water	353.2	
480-106923-3	MW-552-20161003	Total/NA	Water	353.2	
480-106923-4	MW-553-20161003	Total/NA	Water	353.2	
480-106923-5	MW-562-20161003	Total/NA	Water	353.2	
480-106923-7	MW-265M-20161003	Total/NA	Water	353.2	

Analysis Batch: 323818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-1	MW-261S-20161003	Total/NA	Water	300.0	
480-106923-3	MW-552-20161003	Total/NA	Water	300.0	
480-106923-4	MW-553-20161003	Total/NA	Water	300.0	
480-106923-5	MW-562-20161003	Total/NA	Water	300.0	
480-106923-7	MW-265M-20161003	Total/NA	Water	300.0	
MB 480-323818/4	Method Blank	Total/NA	Water	300.0	
LCS 480-323818/3	Lab Control Sample	Total/NA	Water	300.0	
480-106923-7 MS	MW-265M-20161003	Total/NA	Water	300.0	
480-106923-7 MSD	MW-265M-20161003	Total/NA	Water	300.0	

Analysis Batch: 324113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-1	MW-261S-20161003	Total/NA	Water	SM 2320B	
480-106923-3	MW-552-20161003	Total/NA	Water	SM 2320B	
480-106923-4	MW-553-20161003	Total/NA	Water	SM 2320B	
480-106923-5	MW-562-20161003	Total/NA	Water	SM 2320B	
480-106923-7	MW-265M-20161003	Total/NA	Water	SM 2320B	
MB 480-324113/30	Method Blank	Total/NA	Water	SM 2320B	
MB 480-324113/7	Method Blank	Total/NA	Water	SM 2320B	
LCS 480-324113/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 480-324113/8	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 324114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-1	MW-261S-20161003	Total/NA	Water	9040C	
480-106923-3	MW-552-20161003	Total/NA	Water	9040C	
480-106923-4	MW-553-20161003	Total/NA	Water	9040C	
480-106923-5	MW-562-20161003	Total/NA	Water	9040C	
480-106923-7	MW-265M-20161003	Total/NA	Water	9040C	
LCS 480-324114/1	Lab Control Sample	Total/NA	Water	9040C	

Analysis Batch: 324190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-1	MW-261S-20161003	Total/NA	Water	9060A	
480-106923-3	MW-552-20161003	Total/NA	Water	9060A	

General Chemistry (Continued)

Analysis Batch: 324190 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-4	MW-553-20161003	Total/NA	Water	9060A	
MB 480-324190/27	Method Blank	Total/NA	Water	9060A	
MB 480-324190/3	Method Blank	Total/NA	Water	9060A	
LCS 480-324190/28	Lab Control Sample	Total/NA	Water	9060A	
LCS 480-324190/4	Lab Control Sample	Total/NA	Water	9060A	
480-106923-3 DU	MW-552-20161003	Total/NA	Water	9060A	

Analysis Batch: 324265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-1	MW-261S-20161003	Total/NA	Water	300.0	
480-106923-3	MW-552-20161003	Total/NA	Water	300.0	
480-106923-4	MW-553-20161003	Total/NA	Water	300.0	
480-106923-5	MW-562-20161003	Total/NA	Water	300.0	
480-106923-7	MW-265M-20161003	Total/NA	Water	300.0	
MB 480-324265/4	Method Blank	Total/NA	Water	300.0	
LCS 480-324265/3	Lab Control Sample	Total/NA	Water	300.0	
480-106923-7 MS	MW-265M-20161003	Total/NA	Water	300.0	
480-106923-7 MSD	MW-265M-20161003	Total/NA	Water	300.0	

Analysis Batch: 324587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-106923-5	MW-562-20161003	Total/NA	Water	9060A	
480-106923-7	MW-265M-20161003	Total/NA	Water	9060A	
MB 480-324587/4	Method Blank	Total/NA	Water	9060A	
MB 480-324587/52	Method Blank	Total/NA	Water	9060A	
LCS 480-324587/5	Lab Control Sample	Total/NA	Water	9060A	
LCS 480-324587/53	Lab Control Sample	Total/NA	Water	9060A	

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Client Sample ID: MW-261S-20161003 — Lab Sample ID: 480-106923-1

Date Collected: 10/03/16 08:15
Date Received: 10/04/16 00:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	323855	10/05/16 13:31	RRS	TAL BUF
Total/NA	Prep	3535A			109819	10/05/16 11:16	ERJ	TAL BUR
Total/NA	Analysis	522		1	109859	10/06/16 14:36	P1M	TAL BUR
Total/NA	Prep	3005A			323660	10/04/16 08:55	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324737	10/05/16 16:04	TRB	TAL BUF
Total/NA	Analysis	300.0		5	323818	10/05/16 12:02	CAV	TAL BUF
Total/NA	Analysis	300.0		1	324265	10/07/16 06:46	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			323735	10/04/16 12:24	CEA	TAL BUF
Total/NA	Analysis	350.1		1	323762	10/04/16 13:54	CEA	TAL BUF
Total/NA	Analysis	353.2		1	323809	10/04/16 17:23	ELR	TAL BUF
Total/NA	Analysis	9040C		1	324114	10/05/16 14:17	LED	TAL BUF
Total/NA	Analysis	9060A		1	324190	10/05/16 18:14	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324113	10/05/16 14:52	LED	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	323751	10/04/16 09:30	KRT	TAL BUF

Client Sample ID: MW-551-20161003 — Lab Sample ID: 480-106923-2

Date Collected: 10/03/16 07:45
Date Received: 10/04/16 00:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	323720	10/04/16 23:40	JWG	TAL BUF

Client Sample ID: MW-552-20161003 — Lab Sample ID: 480-106923-3

Date Collected: 10/03/16 08:55
Date Received: 10/04/16 00:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	323720	10/05/16 00:04	JWG	TAL BUF
Total/NA	Prep	3535A			109819	10/05/16 11:16	ERJ	TAL BUR
Total/NA	Analysis	522		1	109859	10/06/16 14:55	P1M	TAL BUR
Total/NA	Prep	3005A			323660	10/04/16 08:55	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324737	10/05/16 16:18	TRB	TAL BUF
Total/NA	Analysis	300.0		5	323818	10/05/16 12:10	CAV	TAL BUF
Total/NA	Analysis	300.0		1	324265	10/07/16 06:54	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			323735	10/04/16 12:24	CEA	TAL BUF
Total/NA	Analysis	350.1		1	323762	10/04/16 13:54	CEA	TAL BUF
Total/NA	Analysis	353.2		1	323809	10/04/16 17:26	ELR	TAL BUF
Total/NA	Analysis	9040C		1	324114	10/05/16 14:20	LED	TAL BUF
Total/NA	Analysis	9060A		1	324190	10/05/16 18:43	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324113	10/05/16 15:00	LED	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	323751	10/04/16 09:30	KRT	TAL BUF

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Client Sample ID: MW-553-20161003 — Lab Sample ID: 480-106923-4

Date Collected: 10/03/16 09:50
Date Received: 10/04/16 00:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	323720	10/05/16 00:28	JWG	TAL BUF
Total/NA	Prep	3005A			323660	10/04/16 08:55	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324737	10/05/16 16:22	TRB	TAL BUF
Total/NA	Analysis	300.0		10	323818	10/05/16 12:18	CAV	TAL BUF
Total/NA	Analysis	300.0		1	324265	10/07/16 07:02	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			323735	10/04/16 12:24	CEA	TAL BUF
Total/NA	Analysis	350.1		1	323762	10/04/16 13:55	CEA	TAL BUF
Total/NA	Analysis	353.2		1	323809	10/04/16 17:27	ELR	TAL BUF
Total/NA	Analysis	9040C		1	324114	10/05/16 14:22	LED	TAL BUF
Total/NA	Analysis	9060A		1	324190	10/05/16 19:39	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324113	10/05/16 15:09	LED	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	323751	10/04/16 09:30	KRT	TAL BUF

Client Sample ID: MW-562-20161003 — Lab Sample ID: 480-106923-5

Date Collected: 10/03/16 10:45
Date Received: 10/04/16 00:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	323720	10/05/16 00:51	JWG	TAL BUF
Total/NA	Prep	3005A			323660	10/04/16 08:55	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324737	10/05/16 16:25	TRB	TAL BUF
Total/NA	Analysis	300.0		10	323818	10/05/16 12:26	CAV	TAL BUF
Total/NA	Analysis	300.0		1	324265	10/07/16 07:10	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			323735	10/04/16 12:24	CEA	TAL BUF
Total/NA	Analysis	350.1		1	323762	10/04/16 13:56	CEA	TAL BUF
Total/NA	Analysis	353.2		1	323809	10/04/16 17:31	ELR	TAL BUF
Total/NA	Analysis	9040C		1	324114	10/05/16 14:25	LED	TAL BUF
Total/NA	Analysis	9060A		20	324587	10/07/16 18:50	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324113	10/05/16 15:18	LED	TAL BUF
Total/NA	Analysis	SM 4500 P E		5	323751	10/04/16 09:30	KRT	TAL BUF

Client Sample ID: MW-265S-20161003 — Lab Sample ID: 480-106923-6

Date Collected: 10/03/16 11:35
Date Received: 10/04/16 00:50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	323720	10/05/16 01:15	JWG	TAL BUF

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Client Sample ID: MW-265M-20161003 — Lab Sample ID: 480-106923-7

Date Collected: 10/03/16 12:05 — **Matrix: Water**
Date Received: 10/04/16 00:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	323720	10/05/16 01:39	JWG	TAL BUF
Total/NA	Prep	3535A			109819	10/05/16 11:16	ERJ	TAL BUR
Total/NA	Analysis	522		1	109859	10/06/16 15:14	P1M	TAL BUR
Total/NA	Prep	3005A			323660	10/04/16 08:55	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324737	10/05/16 16:33	TRB	TAL BUF
Total/NA	Analysis	300.0		20	323818	10/05/16 12:34	CAV	TAL BUF
Total/NA	Analysis	300.0		1	324265	10/07/16 07:18	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			323735	10/04/16 12:24	CEA	TAL BUF
Total/NA	Analysis	350.1		1	323762	10/04/16 13:57	CEA	TAL BUF
Total/NA	Analysis	353.2		1	323809	10/04/16 17:33	ELR	TAL BUF
Total/NA	Analysis	9040C		1	324114	10/05/16 14:27	LED	TAL BUF
Total/NA	Analysis	9060A		20	324587	10/07/16 19:17	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324113	10/05/16 15:54	LED	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	323751	10/04/16 09:30	KRT	TAL BUF

Client Sample ID: MW-265D-20161003 — Lab Sample ID: 480-106923-8

Date Collected: 10/03/16 12:45 — **Matrix: Water**
Date Received: 10/04/16 00:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	323720	10/05/16 02:03	JWG	TAL BUF

Client Sample ID: DUP1-20161003 — Lab Sample ID: 480-106923-9

Date Collected: 10/03/16 00:00 — **Matrix: Water**
Date Received: 10/04/16 00:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	323720	10/05/16 02:27	JWG	TAL BUF
Total/NA	Prep	3535A			109819	10/05/16 11:16	ERJ	TAL BUR
Total/NA	Analysis	522		1	109859	10/06/16 15:33	P1M	TAL BUR

Client Sample ID: TRIP BLANKS — Lab Sample ID: 480-106923-10

Date Collected: 10/03/16 00:00 — **Matrix: Water**
Date Received: 10/04/16 00:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	323673	10/04/16 19:09	RRS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Certification Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-17
California	State Program	9	1169CA	09-30-17
Connecticut	State Program	1	PH-0568	09-30-18
Florida	NELAP	4	E87672	06-30-17
Georgia	State Program	4	N/A	03-31-17
Georgia	State Program	4	956	03-31-17
Illinois	NELAP	5	200003	09-30-16 *
Iowa	State Program	7	374	03-01-17
Kansas	NELAP	7	E-10187	10-31-16
Kentucky (DW)	State Program	4	90029	12-31-16
Kentucky (UST)	State Program	4	30	03-31-17
Kentucky (WW)	State Program	4	90029	12-31-16
Louisiana	NELAP	6	02031	06-30-17
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-17
Massachusetts	State Program	1	M-NY044	06-30-17
Michigan	State Program	5	9937	03-31-17
Minnesota	NELAP	5	036-999-337	12-31-16
New Hampshire	NELAP Primary AB	1	2973	09-11-17
New Hampshire	NELAP Secondary AB	1	2337	11-17-16
New Jersey	NELAP	2	NY455	06-30-17
New York	NELAP	2	10026	03-31-17
North Dakota	State Program	8	R-176	03-31-17
Oklahoma	State Program	6	9421	08-31-17
Oregon	NELAP	10	NY200003	06-09-17
Pennsylvania	NELAP	3	68-00281	07-31-17
Rhode Island	State Program	1	LAO00328	12-30-16
Tennessee	State Program	4	TN02970	03-31-17
Texas	NELAP	6	T104704412-15-6	07-31-17
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-17
Washington	State Program	10	C784	02-10-17
West Virginia DEP	State Program	3	252	09-30-16 *
Wisconsin	State Program	5	998310390	08-31-17

Laboratory: TestAmerica Burlington

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-17
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-02-17
Florida	NELAP	4	E87467	06-30-17
L-A-B	DoD ELAP		L2336	02-26-17
Maine	State Program	1	VT00008	04-17-17
Minnesota	NELAP	5	050-999-436	12-31-16
New Hampshire	NELAP	1	2006	12-18-16
New Jersey	NELAP	2	VT972	06-30-17
New York	NELAP	2	10391	04-01-17
Pennsylvania	NELAP	3	68-00489	04-30-17
Rhode Island	State Program	1	LAO00298	12-30-16

* Certification renewal pending - certification considered valid.

Certification Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Laboratory: TestAmerica Burlington (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
US Fish & Wildlife	Federal		LE-058448-0	10-31-16
USDA	Federal		P330-11-00093	10-28-16
Vermont	State Program	1	VT-4000	12-31-16
Virginia	NELAP	3	460209	12-14-16

Method Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
522	1,4 Dioxane (GC/MS SIM)	EPA	TAL BUR
6010	Metals (ICP)	SW846	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
9040C	pH	SW846	TAL BUF
9060A	Organic Carbon, Total (TOC)	SW846	TAL BUF
SM 2320B	Alkalinity	SM	TAL BUF
SM 4500 P E	Orthophosphate	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency
MA DEP = Massachusetts Department Of Environmental Protection
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-106923-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-106923-1	MW-261S-20161003	Water	10/03/16 08:15	10/04/16 00:50
480-106923-2	MW-551-20161003	Water	10/03/16 07:45	10/04/16 00:50
480-106923-3	MW-552-20161003	Water	10/03/16 08:55	10/04/16 00:50
480-106923-4	MW-553-20161003	Water	10/03/16 09:50	10/04/16 00:50
480-106923-5	MW-562-20161003	Water	10/03/16 10:45	10/04/16 00:50
480-106923-6	MW-265S-20161003	Water	10/03/16 11:35	10/04/16 00:50
480-106923-7	MW-265M-20161003	Water	10/03/16 12:05	10/04/16 00:50
480-106923-8	MW-265D-20161003	Water	10/03/16 12:45	10/04/16 00:50
480-106923-9	DUP1-20161003	Water	10/03/16 00:00	10/04/16 00:50
480-106923-10	TRIP BLANKS	Water	10/03/16 00:00	10/04/16 00:50

Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 480-106923-1

Login Number: 106923
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	IESI
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 480-106923-1

Login Number: 106923
List Number: 2
Creator: Lavigne, Scott M

List Source: TestAmerica Burlington
List Creation: 10/04/16 02:11 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.2ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

360325-Boston

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road -- Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:

Client Contact: Vicki Perlinger
Company: Innovative Engineering Solutions Inc
Address: 25 Spring St
City: Walpole
State and Zip: MA 02081
Client's Phone: 508-668-0033
Client's Contact Email: vperlinger@IESIonline.com
Client's Project Name/Number: Raytheon Wayland RA-008
Sample Collection Site Name & Location: Wayland MA

Sample Collector's Name (Please Print Neatly): Danny Jones
Sample Collector's Phone: 508-[redacted]-4704-3196
Lab PM:
E-Mail:
Due Date Requested: 10/10/16
Turnaround Time (TAT) Requested (business days): 5 days
Quote # or Project #:
PO #: RA-008
WO #:
PWS ID #:

Lab COC Barcode: 480-106923 COC

COC No: 37049
Page: 1 of 1
Job #:

Analysis Requ

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	8260 MCP	529_MOD Dioxane	6010 MCP Total Arsenic	9060A TOC	350.1 NH3	4500-F-C-2010 Chlorides	300.0 Nitrate/Nitrite								Total Number of Containers (enter total for each line)	Special Instructions & Notes:
			Preservation Codes →		A	A	D	A	S	N	N								↓	
MW-261S-20161003	10/3/16	0815	G	W	X	X	X	X	X	X	X								11	
MW-551-20161003	10/3/16	0745	G	W	X														3	
MW-552-20161003	10/3/16	0855	G	W	X	X	X	X	X	X	X								11	
MW-553-20161003	10/3/16	0930	G	W	X		X	X	X	X	X								9	
MW-562-20161003	10/3/16	1045	G	W	X		X	X	X	X	X								9	
MW-265S-20161003	10/3/16	1135	G	W	X														3	
MW-265M-20161003	10/3/16	1205	G	W	X	X	X	X	X	X	X								11	
MW-265D-20161003	10/3/16	1245	G	W	X														3	
Dupl-20161003	10/3/16	—	G	W	X	X													5	
Trip Blanks	—	—	—	W	X														3	

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP ☐ GW1/S1 ☐
RCP ☐ CT RSR ☐
DEP Form ☐ EDD Required ☐
eDEP Filing ☐ NPDES ☐

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit Test-America to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Possible Hazard Identification (please check off each that may apply):
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month):
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

**** Matrix Types:** A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◄

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	10/3/16 1330	IESI	[signature]	10-3-16 1400	TA
[signature]	10-3-16 1800	TA	[signature]	10-4-16 0050	TA

Custody Seals Intact: △ Yes △ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.7 #1

WI-QA-010 rev 8

Revised 10/29/2014
TAL-8245-360R

360325-Boston

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501 Southampton Road
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TestAmerica Boston
240 Bear Hill Road -- Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:	Sample Collector's Name (Please Print Neatly): Denny Jones	Lab PM:	Lab COC Barcode Label
Client Contact: Vicki Perrigan	Sample Collector's Phone: 508-[redacted] 404-3196	E-Mail:	
Company: Innovative Engineering Solutions Inc			
Address: 25 Spring St	Due Date Requested: 10/10/16		
City: Walpole	Turnaround Time (TAT) Requested (business days): 5 days		
State and Zip: MA 02081			
Client's Phone: 508-668-0033	Quote # or Project #:		
Client's Contact Email: v.perrigan@IESIonline.com	PO #: RA-008		
Client's Project Name/Number: Raytheon Wayland RA-008	WO #:		
Sample Collection Site Name & Location: Wayland MA	PWS ID #:		

COC No: 37049
Page: 1 of 1
Job #:

Analysis Requested

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	8260 MCP	528 MCP Dioxane	6010 MCP total iron	9060A TOC	350.1 NH3	4500-CN-E 0-Phosphate	9040C-pH	2000.8 Boron-Total								Total Number of Containers (enter total for each line)	Special Instructions & Notes:
			Preservation Codes **		A	A	D	A	S	N	N										
MW-261S-20161003	10/3/16	0815	G	W	X	X	X	X	X	X	X									11	
MW-531-20161003	10/3/16	0745	G	W	X															3	
MW-559-20161003	10/3/16	0855	G	W	X	X	X	X	X	X	X									11	
MW-553-20161003	10/3/16	0950	G	W	X		X	X	X	X	X									9	
MW-569-20161003	10/3/16	1045	G	W	X		X	X	X	X	X									9	
MW-265S-20161003	10/3/16	1135	G	W	X															3	
MW-265M-20161003	10/3/16	1205	G	W	X	X	X	X	X	X	X										
MW-265D-20161003	10/3/16	1245	G	W	X																
Dupl-20161003	10/3/16	—	G	W	X	X															
Trip Blanks	—	—	—	W	X																

522-1-4-Dioxane
To Burlington

480-106923 Chain of Custody

Possible Hazard Identification (please check off each that may apply):
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal Requirements (A ... than 1 month):
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

▶ NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◀

** Matrix Types: A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: ____

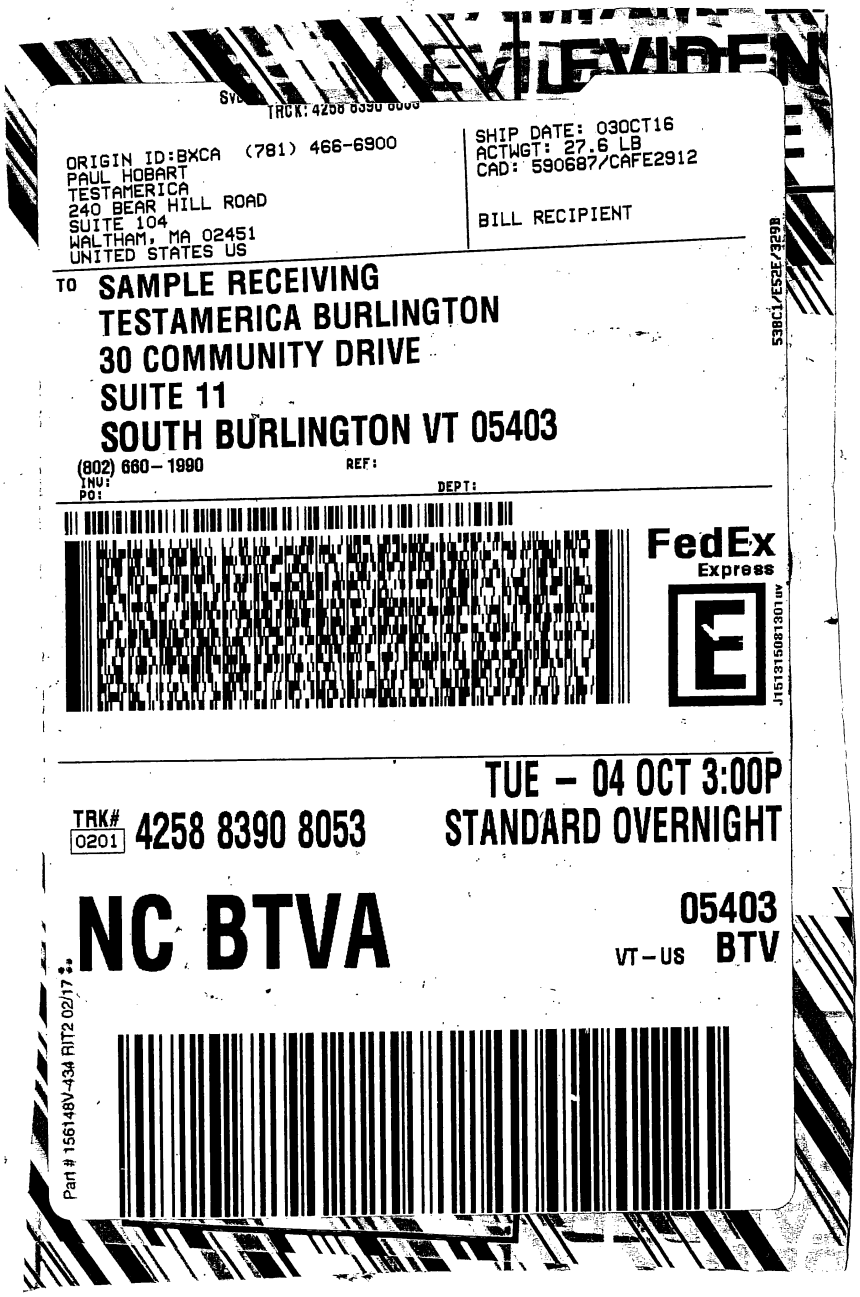
	Date/Time:	Company		Date/Time:	Company
Relinquished by:	10/3/16 1330	IESI	Received by:	10-3-16 1400	IESI
Relinquished by:	10-3-16 1400	IESI	Received by:	10/4/16 1030	IESI
Relinquished by:			Received by:		

Cooler Temperature(s) °C and Other Remarks:

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:

Revised 10/29/2014
TAL-8245-360R

WI-QA-010 rev 8



SV
TRCK: 4258 8390 8053

ORIGIN ID:BXCA (781) 466-6900
PAUL HOBART
TESTAMERICA
240 BEAR HILL ROAD
SUITE 104
WALTHAM, MA 02451
UNITED STATES US

SHIP DATE: 03OCT16
ACTWGT: 27.6 LB
CAD: 590687/CAFE2912

BILL RECIPIENT

TO SAMPLE RECEIVING
TESTAMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403

(802) 660-1990 REF:
INV:
PO: DEPT:

FedEx Express

TUE - 04 OCT 3:00P
STANDARD OVERNIGHT

TRK# 0201 4258 8390 8053

NC BTVA

05403
VT-US BTV

Part # 156148V-434 RIT2 02/17

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-107013-1
Client Project/Site: IDS Wayland

For:
Innovative Engineering Solutions, Inc
25 Spring Street
Walpole, Massachusetts 02081

Attn: Vicki Pariyar

Denise L Giglia

Authorized for release by:
10/12/2016 6:10:04 PM
Denise Giglia, Project Management Assistant II
denise.giglia@testamericainc.com

Designee for

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-107013-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-107013-1

Receipt
The samples were received on 10/5/2016 1:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.6º C and 1.8º C.

GC/MS VOA
Method 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-dibromo-3-chloropropane, Carbon Disulfide, Isopropyl Ether, Naphthalene, tert-Amyl Methyl Ether and Tetrahydrofuran.

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-267S-20161004 (480-107013-1). Elevated reporting limits (RLs) are provided.

Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-268S-20161004 (480-107013-3), MW-268M-20161004 (480-107013-4) and MW-268D-20161004 (480-107013-5). Elevated reporting limits (RLs) are provided.

Method 8260C: The following samples were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: MW-268M-20161004 (480-107013-4), MW-268D-20161004 (480-107013-5), REW-1-20161004 (480-107013-6) and DUP2-20161004 (480-107013-9). The sample was analyzed within 7 days per EPA recommendation.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-323990 recovered outside the MCP control limit but <40% for Tetrahydrofuran, Naphthalene and 1,4-Dioxane . MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples are impacted: MW-267S-20161004 (480-107013-1), MW-267M-20161004 (480-107013-2), MW-268S-20161004 (480-107013-3), MW-268M-20161004 (480-107013-4), MW-268D-20161004 (480-107013-5), REW-1-20161004 (480-107013-6), REW-5-20161004 (480-107013-8) and TRIP BLANKS (480-107013-10).

Method 8260C: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: DUP2-20161004 (480-107013-9). The sample was analyzed within 7 days per EPA recommendation.

Method 8260C: The continuing calibration verification (CCV) for 1,4-Dioxane associated with batch 480-324093 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following samples were affected : REW-4-20161004 (480-107013-7) and DUP2-20161004 (480-107013-9).

Method 8260C: The laboratory control sample (LCS) for batch 480-324093 exceeded control limits for the following analytes: 1,4-Dioxane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : REW-4-20161004 (480-107013-7) and DUP2-20161004 (480-107013-9).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 522: Surrogate recovery for the following sample was outside control limits: MW-268S-20161004 (480-107013-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 522: The matrix spike duplicate (MSD) recoveries and precision for preparation batch 200-109914 and analytical batch 200-109928 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample(LCS) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 480-107013-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

HPLC/IC
Method 300.0: The following samples were diluted due to the nature of the sample matrix: MW-267S-20161004 (480-107013-1), REW-1-20161004 (480-107013-6) and REW-4-20161004 (480-107013-7). Elevated reporting limits (RLs) are provided.

Method 300.0: The following samples were diluted due to the nature of the sample matrix: MW-268S-20161004 (480-107013-3) and MW-268M-20161004 (480-107013-4). Elevated reporting limits (RLs) are provided.

Method 300.0: The following sample was diluted due to the nature of the sample matrix: MW-268S-20161004 (480-107013-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010: At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method 350.1: The following samples was received with insufficient preservation: MW-268S-20161004 (480-107013-3) and MW-268M-20161004 (480-107013-4). Additional preservative was added by the laboratory to bring the samples within the method required pH range for analysis.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

MassDEP Analytical Protocol Certification Form

Laboratory Name:	**TestAmerica Buffalo**	Project #:	**480-107013**
Project Location:	**IDS Wayland**	RTN:	

This form provides certifications for the following data set: list Laboratory Sample ID Number(s):

480-107013 [1-10]

Matrices: ■ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ■	7470/7471 Hg CAM III B ☐	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ■	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	■ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	■ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	■ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	■ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	■ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ■ No[1]

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350***

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ■ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	☐ Yes ■ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature:	Denise L Giglia	Position:	Project Manager Assistant II
Printed Name:	Denise L. Giglia	Date:	10/12/16 16:33

Detection Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107013-1

Client Sample ID: MW-267S-20161004 — Lab Sample ID: 480-107013-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	380		40		ug/L	4		8260C	Total/NA
cis-1,2-Dichloroethene	310		4.0		ug/L	4		8260C	Total/NA
Toluene	100		4.0		ug/L	4		8260C	Total/NA
Vinyl chloride	21		4.0		ug/L	4		8260C	Total/NA
1,4-Dioxane	6.7		0.20		ug/L	1		522	Total/NA
Iron	360		0.050		mg/L	1		6010	Total/NA
Chloride	33		5.0		mg/L	10		300.0	Total/NA
Ammonia	0.22		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	2100		40		mg/L	40		9060A	Total/NA
TOC Result 2	2100		40		mg/L	40		9060A	Total/NA
Total Organic Carbon - Duplicates	2100		40		mg/L	40		9060A	Total/NA
Alkalinity, Total	500		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.19		0.020		mg/L	1		SM 4500 P E	Total/NA

Client Sample ID: MW-267M-20161004 — Lab Sample ID: 480-107013-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	3.8		0.20		ug/L	1		522	Total/NA

Client Sample ID: MW-268S-20161004 — Lab Sample ID: 480-107013-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.54		0.20		ug/L	1		522	Total/NA
Iron	1.6		0.050		mg/L	1		6010	Total/NA
Chloride	26		25		mg/L	50		300.0	Total/NA
Ammonia	0.72		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	57000		1000		mg/L	1000		9060A	Total/NA
TOC Result 2	59000		1000		mg/L	1000		9060A	Total/NA
Total Organic Carbon - Duplicates	58000		1000		mg/L	1000		9060A	Total/NA
Alkalinity, Total	10000		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.049		0.020		mg/L	1		SM 4500 P E	Total/NA

Client Sample ID: MW-268M-20161004 — Lab Sample ID: 480-107013-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	200		200		ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene	440		20		ug/L	20		8260C	Total/NA
Vinyl chloride	47		20		ug/L	20		8260C	Total/NA
1,4-Dioxane	6.7	F1	0.20		ug/L	1		522	Total/NA
Iron	2.1		0.050		mg/L	1		6010	Total/NA
Chloride	38	F1	25		mg/L	50		300.0	Total/NA
Ammonia	0.42		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	15000		500		mg/L	500		9060A	Total/NA
TOC Result 2	16000		500		mg/L	500		9060A	Total/NA
Total Organic Carbon - Duplicates	15000		500		mg/L	500		9060A	Total/NA
Alkalinity, Total	11000		5.0		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-268D-20161004 — Lab Sample ID: 480-107013-5

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107013-1

Client Sample ID: REW-1-20161004 — Lab Sample ID: 480-107013-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1.1		1.0		ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	2.4		2.0		ug/L	1		8260C	Total/NA
o-Xylene	1.4		1.0		ug/L	1		8260C	Total/NA
Iron	37		0.050		mg/L	1		6010	Total/NA
Chloride	13		2.5		mg/L	5		300.0	Total/NA
Sulfate	13		10		mg/L	5		300.0	Total/NA
Ammonia	0.50		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	1.1		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	1.2		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	1.1		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	280		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.19		0.020		mg/L	1		SM 4500 P E	Total/NA

Client Sample ID: REW-4-20161004 — Lab Sample ID: 480-107013-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5.1		1.0		ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	2.9		2.0		ug/L	1		8260C	Total/NA
Vinyl chloride	1.4		1.0		ug/L	1		8260C	Total/NA
Iron	13		0.050		mg/L	1		6010	Total/NA
Chloride	9.2		2.5		mg/L	5		300.0	Total/NA
Ammonia	6.2		1.0		mg/L	5		350.1	Total/NA
TOC Result 1	2.3		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	2.4		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	2.3		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	270		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.75		0.020		mg/L	1		SM 4500 P E	Total/NA

Client Sample ID: REW-5-20161004 — Lab Sample ID: 480-107013-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.3		1.0		ug/L	1		8260C	Total/NA
Iron	47		0.050		mg/L	1		6010	Total/NA
Chloride	3.9		0.50		mg/L	1		300.0	Total/NA
Ammonia	2.5		0.40		mg/L	2		350.1	Total/NA
Alkalinity, Total	100		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.12		0.020		mg/L	1		SM 4500 P E	Total/NA

Client Sample ID: DUP2-20161004 — Lab Sample ID: 480-107013-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	37		10		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	3.9		1.0		ug/L	1		8260C	Total/NA
Toluene	1.8		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	1.4		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: TRIP BLANKS — Lab Sample ID: 480-107013-10

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107013-1

Client Sample ID: MW-267S-20161004

Lab Sample ID: 480-107013-1

Date Collected: 10/04/16 13:30

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.0		ug/L			10/06/16 02:25	4
1,1,1-Trichloroethane	ND		4.0		ug/L			10/06/16 02:25	4
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L			10/06/16 02:25	4
1,1,2-Trichloroethane	ND		4.0		ug/L			10/06/16 02:25	4
1,1-Dichloroethane	ND		4.0		ug/L			10/06/16 02:25	4
1,1-Dichloroethene	ND		4.0		ug/L			10/06/16 02:25	4
1,1-Dichloropropene	ND		4.0		ug/L			10/06/16 02:25	4
1,2,3-Trichlorobenzene	ND		4.0		ug/L			10/06/16 02:25	4
1,2,3-Trichloropropane	ND		4.0		ug/L			10/06/16 02:25	4
1,2,4-Trichlorobenzene	ND		4.0		ug/L			10/06/16 02:25	4
1,2,4-Trimethylbenzene	ND		4.0		ug/L			10/06/16 02:25	4
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			10/06/16 02:25	4
1,2-Dichlorobenzene	ND		4.0		ug/L			10/06/16 02:25	4
1,2-Dichloroethane	ND		4.0		ug/L			10/06/16 02:25	4
1,2-Dichloropropane	ND		4.0		ug/L			10/06/16 02:25	4
1,3,5-Trimethylbenzene	ND		4.0		ug/L			10/06/16 02:25	4
1,3-Dichlorobenzene	ND		4.0		ug/L			10/06/16 02:25	4
1,3-Dichloropropane	ND		4.0		ug/L			10/06/16 02:25	4
1,4-Dichlorobenzene	ND		4.0		ug/L			10/06/16 02:25	4
1,4-Dioxane	ND		200		ug/L			10/06/16 02:25	4
2,2-Dichloropropane	ND		4.0		ug/L			10/06/16 02:25	4
2-Butanone (MEK)	**380**		40		ug/L			10/06/16 02:25	4
2-Chlorotoluene	ND		4.0		ug/L			10/06/16 02:25	4
2-Hexanone	ND		40		ug/L			10/06/16 02:25	4
4-Chlorotoluene	ND		4.0		ug/L			10/06/16 02:25	4
4-Isopropyltoluene	ND		4.0		ug/L			10/06/16 02:25	4
4-Methyl-2-pentanone (MIBK)	ND		40		ug/L			10/06/16 02:25	4
Acetone	ND		200		ug/L			10/06/16 02:25	4
Benzene	ND		4.0		ug/L			10/06/16 02:25	4
Bromobenzene	ND		4.0		ug/L			10/06/16 02:25	4
Bromoform	ND		4.0		ug/L			10/06/16 02:25	4
Bromomethane	ND		8.0		ug/L			10/06/16 02:25	4
Carbon disulfide	ND		40		ug/L			10/06/16 02:25	4
Carbon tetrachloride	ND		4.0		ug/L			10/06/16 02:25	4
Chlorobenzene	ND		4.0		ug/L			10/06/16 02:25	4
Chlorobromomethane	ND		4.0		ug/L			10/06/16 02:25	4
Chlorodibromomethane	ND		2.0		ug/L			10/06/16 02:25	4
Chloroethane	ND		8.0		ug/L			10/06/16 02:25	4
Chloroform	ND		4.0		ug/L			10/06/16 02:25	4
Chloromethane	ND		8.0		ug/L			10/06/16 02:25	4
cis-1,2-Dichloroethene	**310**		4.0		ug/L			10/06/16 02:25	4
cis-1,3-Dichloropropene	ND		1.6		ug/L			10/06/16 02:25	4
Dichlorobromomethane	ND		2.0		ug/L			10/06/16 02:25	4
Dichlorodifluoromethane	ND		4.0		ug/L			10/06/16 02:25	4
Ethyl ether	ND		4.0		ug/L			10/06/16 02:25	4
Ethylbenzene	ND		4.0		ug/L			10/06/16 02:25	4
Ethylene Dibromide	ND		4.0		ug/L			10/06/16 02:25	4
Hexachlorobutadiene	ND		1.6		ug/L			10/06/16 02:25	4
Isopropyl ether	ND		40		ug/L			10/06/16 02:25	4

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107013-1

Client Sample ID: MW-267S-20161004

Lab Sample ID: 480-107013-1

Date Collected: 10/04/16 13:30
Matrix: Water
Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		4.0		ug/L			10/06/16 02:25	4
Methyl tert-butyl ether	ND		4.0		ug/L			10/06/16 02:25	4
Methylene Chloride	ND		4.0		ug/L			10/06/16 02:25	4
m-Xylene & p-Xylene	ND		8.0		ug/L			10/06/16 02:25	4
Naphthalene	ND		20		ug/L			10/06/16 02:25	4
n-Butylbenzene	ND		4.0		ug/L			10/06/16 02:25	4
N-Propylbenzene	ND		4.0		ug/L			10/06/16 02:25	4
o-Xylene	ND		4.0		ug/L			10/06/16 02:25	4
sec-Butylbenzene	ND		4.0		ug/L			10/06/16 02:25	4
Styrene	ND		4.0		ug/L			10/06/16 02:25	4
Tert-amyl methyl ether	ND		20		ug/L			10/06/16 02:25	4
Tert-butyl ethyl ether	ND		20		ug/L			10/06/16 02:25	4
tert-Butylbenzene	ND		4.0		ug/L			10/06/16 02:25	4
Tetrachloroethene	ND		4.0		ug/L			10/06/16 02:25	4
Tetrahydrofuran	ND		40		ug/L			10/06/16 02:25	4
Toluene	**100**		4.0		ug/L			10/06/16 02:25	4
trans-1,2-Dichloroethene	ND		4.0		ug/L			10/06/16 02:25	4
trans-1,3-Dichloropropene	ND		1.6		ug/L			10/06/16 02:25	4
Trichloroethene	ND		4.0		ug/L			10/06/16 02:25	4
Trichlorofluoromethane	ND		4.0		ug/L			10/06/16 02:25	4
Vinyl chloride	**21**		4.0		ug/L			10/06/16 02:25	4
Dibromomethane	ND		4.0		ug/L			10/06/16 02:25	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*10/06/16 02:25*	*4*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*10/06/16 02:25*	*4*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*10/06/16 02:25*	*4*

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.7**		0.20		ug/L		10/07/16 08:57	10/10/16 11:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*97*		*70 - 130*	*10/07/16 08:57*	*10/10/16 11:07*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**360**		0.050		mg/L		10/06/16 09:31	10/07/16 16:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**33**		5.0		mg/L			10/06/16 12:42	10
Sulfate	ND		20		mg/L			10/06/16 12:42	10
Ammonia	**0.22**		0.20		mg/L		10/05/16 13:21	10/05/16 15:26	1
Nitrate as N	ND		0.050		mg/L			10/05/16 16:50	1
TOC Result 1	**2100**		40		mg/L			10/12/16 00:13	40
TOC Result 2	**2100**		40		mg/L			10/12/16 00:13	40
Total Organic Carbon - Duplicates	**2100**		40		mg/L			10/12/16 00:13	40
Alkalinity, Total	**500**		5.0		mg/L			10/06/16 18:25	1
ortho-Phosphate	**0.19**		0.020		mg/L			10/05/16 14:30	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107013-1

Client Sample ID: MW-267M-20161004

Lab Sample ID: 480-107013-2

Date Collected: 10/04/16 14:10

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/06/16 02:50	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/06/16 02:50	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/06/16 02:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/06/16 02:50	1
1,1-Dichloroethane	ND		1.0		ug/L			10/06/16 02:50	1
1,1-Dichloroethene	ND		1.0		ug/L			10/06/16 02:50	1
1,1-Dichloropropene	ND		1.0		ug/L			10/06/16 02:50	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/06/16 02:50	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/06/16 02:50	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/06/16 02:50	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/06/16 02:50	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/06/16 02:50	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/06/16 02:50	1
1,2-Dichloroethane	ND		1.0		ug/L			10/06/16 02:50	1
1,2-Dichloropropane	ND		1.0		ug/L			10/06/16 02:50	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/06/16 02:50	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/06/16 02:50	1
1,3-Dichloropropane	ND		1.0		ug/L			10/06/16 02:50	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/06/16 02:50	1
1,4-Dioxane	ND		50		ug/L			10/06/16 02:50	1
2,2-Dichloropropane	ND		1.0		ug/L			10/06/16 02:50	1
2-Butanone (MEK)	ND		10		ug/L			10/06/16 02:50	1
2-Chlorotoluene	ND		1.0		ug/L			10/06/16 02:50	1
2-Hexanone	ND		10		ug/L			10/06/16 02:50	1
4-Chlorotoluene	ND		1.0		ug/L			10/06/16 02:50	1
4-Isopropyltoluene	ND		1.0		ug/L			10/06/16 02:50	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/06/16 02:50	1
Acetone	ND		50		ug/L			10/06/16 02:50	1
Benzene	ND		1.0		ug/L			10/06/16 02:50	1
Bromobenzene	ND		1.0		ug/L			10/06/16 02:50	1
Bromoform	ND		1.0		ug/L			10/06/16 02:50	1
Bromomethane	ND		2.0		ug/L			10/06/16 02:50	1
Carbon disulfide	ND		10		ug/L			10/06/16 02:50	1
Carbon tetrachloride	ND		1.0		ug/L			10/06/16 02:50	1
Chlorobenzene	ND		1.0		ug/L			10/06/16 02:50	1
Chlorobromomethane	ND		1.0		ug/L			10/06/16 02:50	1
Chlorodibromomethane	ND		0.50		ug/L			10/06/16 02:50	1
Chloroethane	ND		2.0		ug/L			10/06/16 02:50	1
Chloroform	ND		1.0		ug/L			10/06/16 02:50	1
Chloromethane	ND		2.0		ug/L			10/06/16 02:50	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/06/16 02:50	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/06/16 02:50	1
Dichlorobromomethane	ND		0.50		ug/L			10/06/16 02:50	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/06/16 02:50	1
Ethyl ether	ND		1.0		ug/L			10/06/16 02:50	1
Ethylbenzene	ND		1.0		ug/L			10/06/16 02:50	1
Ethylene Dibromide	ND		1.0		ug/L			10/06/16 02:50	1
Hexachlorobutadiene	ND		0.40		ug/L			10/06/16 02:50	1
Isopropyl ether	ND		10		ug/L			10/06/16 02:50	1

Client Sample ID: MW-267M-20161004

Lab Sample ID: 480-107013-2

Date Collected: 10/04/16 14:10

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			10/06/16 02:50	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/06/16 02:50	1
Methylene Chloride	ND		1.0		ug/L			10/06/16 02:50	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/06/16 02:50	1
Naphthalene	ND		5.0		ug/L			10/06/16 02:50	1
n-Butylbenzene	ND		1.0		ug/L			10/06/16 02:50	1
N-Propylbenzene	ND		1.0		ug/L			10/06/16 02:50	1
o-Xylene	ND		1.0		ug/L			10/06/16 02:50	1
sec-Butylbenzene	ND		1.0		ug/L			10/06/16 02:50	1
Styrene	ND		1.0		ug/L			10/06/16 02:50	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/06/16 02:50	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/06/16 02:50	1
tert-Butylbenzene	ND		1.0		ug/L			10/06/16 02:50	1
Tetrachloroethene	ND		1.0		ug/L			10/06/16 02:50	1
Tetrahydrofuran	ND		10		ug/L			10/06/16 02:50	1
Toluene	ND		1.0		ug/L			10/06/16 02:50	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/06/16 02:50	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/06/16 02:50	1
Trichloroethene	ND		1.0		ug/L			10/06/16 02:50	1
Trichlorofluoromethane	ND		1.0		ug/L			10/06/16 02:50	1
Vinyl chloride	ND		1.0		ug/L			10/06/16 02:50	1
Dibromomethane	ND		1.0		ug/L			10/06/16 02:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*90*		*70 - 130*		*10/06/16 02:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*10/06/16 02:50*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*10/06/16 02:50*	*1*

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.8**		0.20		ug/L		10/07/16 08:57	10/10/16 11:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*94*		*70 - 130*	*10/07/16 08:57*	*10/10/16 11:26*	*1*

Client Sample ID: MW-268S-20161004

Lab Sample ID: 480-107013-3

Date Collected: 10/04/16 11:35

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		50		ug/L			10/06/16 03:14	50
1,1,1-Trichloroethane	ND		50		ug/L			10/06/16 03:14	50
1,1,2,2-Tetrachloroethane	ND		25		ug/L			10/06/16 03:14	50
1,1,2-Trichloroethane	ND		50		ug/L			10/06/16 03:14	50
1,1-Dichloroethane	ND		50		ug/L			10/06/16 03:14	50
1,1-Dichloroethene	ND		50		ug/L			10/06/16 03:14	50
1,1-Dichloropropene	ND		50		ug/L			10/06/16 03:14	50
1,2,3-Trichlorobenzene	ND		50		ug/L			10/06/16 03:14	50
1,2,3-Trichloropropane	ND		50		ug/L			10/06/16 03:14	50

Client Sample ID: MW-268S-20161004

Lab Sample ID: 480-107013-3

Date Collected: 10/04/16 11:35

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		50		ug/L			10/06/16 03:14	50
1,2,4-Trimethylbenzene	ND		50		ug/L			10/06/16 03:14	50
1,2-Dibromo-3-Chloropropane	ND		250		ug/L			10/06/16 03:14	50
1,2-Dichlorobenzene	ND		50		ug/L			10/06/16 03:14	50
1,2-Dichloroethane	ND		50		ug/L			10/06/16 03:14	50
1,2-Dichloropropane	ND		50		ug/L			10/06/16 03:14	50
1,3,5-Trimethylbenzene	ND		50		ug/L			10/06/16 03:14	50
1,3-Dichlorobenzene	ND		50		ug/L			10/06/16 03:14	50
1,3-Dichloropropane	ND		50		ug/L			10/06/16 03:14	50
1,4-Dichlorobenzene	ND		50		ug/L			10/06/16 03:14	50
1,4-Dioxane	ND		2500		ug/L			10/06/16 03:14	50
2,2-Dichloropropane	ND		50		ug/L			10/06/16 03:14	50
2-Butanone (MEK)	ND		500		ug/L			10/06/16 03:14	50
2-Chlorotoluene	ND		50		ug/L			10/06/16 03:14	50
2-Hexanone	ND		500		ug/L			10/06/16 03:14	50
4-Chlorotoluene	ND		50		ug/L			10/06/16 03:14	50
4-Isopropyltoluene	ND		50		ug/L			10/06/16 03:14	50
4-Methyl-2-pentanone (MIBK)	ND		500		ug/L			10/06/16 03:14	50
Acetone	ND		2500		ug/L			10/06/16 03:14	50
Benzene	ND		50		ug/L			10/06/16 03:14	50
Bromobenzene	ND		50		ug/L			10/06/16 03:14	50
Bromoform	ND		50		ug/L			10/06/16 03:14	50
Bromomethane	ND		100		ug/L			10/06/16 03:14	50
Carbon disulfide	ND		500		ug/L			10/06/16 03:14	50
Carbon tetrachloride	ND		50		ug/L			10/06/16 03:14	50
Chlorobenzene	ND		50		ug/L			10/06/16 03:14	50
Chlorobromomethane	ND		50		ug/L			10/06/16 03:14	50
Chlorodibromomethane	ND		25		ug/L			10/06/16 03:14	50
Chloroethane	ND		100		ug/L			10/06/16 03:14	50
Chloroform	ND		50		ug/L			10/06/16 03:14	50
Chloromethane	ND		100		ug/L			10/06/16 03:14	50
cis-1,2-Dichloroethene	ND		50		ug/L			10/06/16 03:14	50
cis-1,3-Dichloropropene	ND		20		ug/L			10/06/16 03:14	50
Dichlorobromomethane	ND		25		ug/L			10/06/16 03:14	50
Dichlorodifluoromethane	ND		50		ug/L			10/06/16 03:14	50
Ethyl ether	ND		50		ug/L			10/06/16 03:14	50
Ethylbenzene	ND		50		ug/L			10/06/16 03:14	50
Ethylene Dibromide	ND		50		ug/L			10/06/16 03:14	50
Hexachlorobutadiene	ND		20		ug/L			10/06/16 03:14	50
Isopropyl ether	ND		500		ug/L			10/06/16 03:14	50
Isopropylbenzene	ND		50		ug/L			10/06/16 03:14	50
Methyl tert-butyl ether	ND		50		ug/L			10/06/16 03:14	50
Methylene Chloride	ND		50		ug/L			10/06/16 03:14	50
m-Xylene & p-Xylene	ND		100		ug/L			10/06/16 03:14	50
Naphthalene	ND		250		ug/L			10/06/16 03:14	50
n-Butylbenzene	ND		50		ug/L			10/06/16 03:14	50
N-Propylbenzene	ND		50		ug/L			10/06/16 03:14	50
o-Xylene	ND		50		ug/L			10/06/16 03:14	50
sec-Butylbenzene	ND		50		ug/L			10/06/16 03:14	50

Client Sample ID: MW-268S-20161004

Lab Sample ID: 480-107013-3

Date Collected: 10/04/16 11:35
Matrix: Water
Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		50		ug/L			10/06/16 03:14	50
Tert-amyl methyl ether	ND		250		ug/L			10/06/16 03:14	50
Tert-butyl ethyl ether	ND		250		ug/L			10/06/16 03:14	50
tert-Butylbenzene	ND		50		ug/L			10/06/16 03:14	50
Tetrachloroethene	ND		50		ug/L			10/06/16 03:14	50
Tetrahydrofuran	ND		500		ug/L			10/06/16 03:14	50
Toluene	ND		50		ug/L			10/06/16 03:14	50
trans-1,2-Dichloroethene	ND		50		ug/L			10/06/16 03:14	50
trans-1,3-Dichloropropene	ND		20		ug/L			10/06/16 03:14	50
Trichloroethene	ND		50		ug/L			10/06/16 03:14	50
Trichlorofluoromethane	ND		50		ug/L			10/06/16 03:14	50
Vinyl chloride	ND		50		ug/L			10/06/16 03:14	50
Dibromomethane	ND		50		ug/L			10/06/16 03:14	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*10/06/16 03:14*	*50*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*10/06/16 03:14*	*50*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*10/06/16 03:14*	*50*

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.54**		0.20		ug/L		10/07/16 08:57	10/07/16 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*12*	*X*	*70 - 130*	*10/07/16 08:57*	*10/07/16 15:59*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.6**		0.050		mg/L		10/06/16 09:31	10/07/16 16:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26**		25		mg/L			10/10/16 12:50	50
Sulfate	ND		10		mg/L			10/11/16 10:57	5
Ammonia	**0.72**		0.20		mg/L		10/05/16 13:21	10/05/16 15:27	1
Nitrate as N	ND		0.050		mg/L			10/05/16 16:52	1
TOC Result 1	**57000**		1000		mg/L			10/07/16 23:31	1000
TOC Result 2	**59000**		1000		mg/L			10/07/16 23:31	1000
Total Organic Carbon - Duplicates	**58000**		1000		mg/L			10/07/16 23:31	1000
Alkalinity, Total	**10000**		5.0		mg/L			10/12/16 14:55	1
ortho-Phosphate	**0.049**		0.020		mg/L			10/05/16 14:30	1

Client Sample ID: MW-268M-20161004

Lab Sample ID: 480-107013-4

Date Collected: 10/04/16 12:20
Matrix: Water
Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		20		ug/L			10/06/16 03:39	20
1,1,1-Trichloroethane	ND		20		ug/L			10/06/16 03:39	20
1,1,2,2-Tetrachloroethane	ND		10		ug/L			10/06/16 03:39	20

Client Sample ID: MW-268M-20161004

Lab Sample ID: 480-107013-4

Date Collected: 10/04/16 12:20

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		20		ug/L			10/06/16 03:39	20
1,1-Dichloroethane	ND		20		ug/L			10/06/16 03:39	20
1,1-Dichloroethene	ND		20		ug/L			10/06/16 03:39	20
1,1-Dichloropropene	ND		20		ug/L			10/06/16 03:39	20
1,2,3-Trichlorobenzene	ND		20		ug/L			10/06/16 03:39	20
1,2,3-Trichloropropane	ND		20		ug/L			10/06/16 03:39	20
1,2,4-Trichlorobenzene	ND		20		ug/L			10/06/16 03:39	20
1,2,4-Trimethylbenzene	ND		20		ug/L			10/06/16 03:39	20
1,2-Dibromo-3-Chloropropane	ND		100		ug/L			10/06/16 03:39	20
1,2-Dichlorobenzene	ND		20		ug/L			10/06/16 03:39	20
1,2-Dichloroethane	ND		20		ug/L			10/06/16 03:39	20
1,2-Dichloropropane	ND		20		ug/L			10/06/16 03:39	20
1,3,5-Trimethylbenzene	ND		20		ug/L			10/06/16 03:39	20
1,3-Dichlorobenzene	ND		20		ug/L			10/06/16 03:39	20
1,3-Dichloropropane	ND		20		ug/L			10/06/16 03:39	20
1,4-Dichlorobenzene	ND		20		ug/L			10/06/16 03:39	20
1,4-Dioxane	ND		1000		ug/L			10/06/16 03:39	20
2,2-Dichloropropane	ND		20		ug/L			10/06/16 03:39	20
2-Butanone (MEK)	**200**		200		ug/L			10/06/16 03:39	20
2-Chlorotoluene	ND		20		ug/L			10/06/16 03:39	20
2-Hexanone	ND		200		ug/L			10/06/16 03:39	20
4-Chlorotoluene	ND		20		ug/L			10/06/16 03:39	20
4-Isopropyltoluene	ND		20		ug/L			10/06/16 03:39	20
4-Methyl-2-pentanone (MIBK)	ND		200		ug/L			10/06/16 03:39	20
Acetone	ND		1000		ug/L			10/06/16 03:39	20
Benzene	ND		20		ug/L			10/06/16 03:39	20
Bromobenzene	ND		20		ug/L			10/06/16 03:39	20
Bromoform	ND		20		ug/L			10/06/16 03:39	20
Bromomethane	ND		40		ug/L			10/06/16 03:39	20
Carbon disulfide	ND		200		ug/L			10/06/16 03:39	20
Carbon tetrachloride	ND		20		ug/L			10/06/16 03:39	20
Chlorobenzene	ND		20		ug/L			10/06/16 03:39	20
Chlorobromomethane	ND		20		ug/L			10/06/16 03:39	20
Chlorodibromomethane	ND		10		ug/L			10/06/16 03:39	20
Chloroethane	ND		40		ug/L			10/06/16 03:39	20
Chloroform	ND		20		ug/L			10/06/16 03:39	20
Chloromethane	ND		40		ug/L			10/06/16 03:39	20
cis-1,2-Dichloroethene	**440**		20		ug/L			10/06/16 03:39	20
cis-1,3-Dichloropropene	ND		8.0		ug/L			10/06/16 03:39	20
Dichlorobromomethane	ND		10		ug/L			10/06/16 03:39	20
Dichlorodifluoromethane	ND		20		ug/L			10/06/16 03:39	20
Ethyl ether	ND		20		ug/L			10/06/16 03:39	20
Ethylbenzene	ND		20		ug/L			10/06/16 03:39	20
Ethylene Dibromide	ND		20		ug/L			10/06/16 03:39	20
Hexachlorobutadiene	ND		8.0		ug/L			10/06/16 03:39	20
Isopropyl ether	ND		200		ug/L			10/06/16 03:39	20
Isopropylbenzene	ND		20		ug/L			10/06/16 03:39	20
Methyl tert-butyl ether	ND		20		ug/L			10/06/16 03:39	20
Methylene Chloride	ND		20		ug/L			10/06/16 03:39	20

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107013-1

Client Sample ID: MW-268M-20161004

Lab Sample ID: 480-107013-4

Date Collected: 10/04/16 12:20
Matrix: Water
Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		40		ug/L			10/06/16 03:39	20
Naphthalene	ND		100		ug/L			10/06/16 03:39	20
n-Butylbenzene	ND		20		ug/L			10/06/16 03:39	20
N-Propylbenzene	ND		20		ug/L			10/06/16 03:39	20
o-Xylene	ND		20		ug/L			10/06/16 03:39	20
sec-Butylbenzene	ND		20		ug/L			10/06/16 03:39	20
Styrene	ND		20		ug/L			10/06/16 03:39	20
Tert-amyl methyl ether	ND		100		ug/L			10/06/16 03:39	20
Tert-butyl ethyl ether	ND		100		ug/L			10/06/16 03:39	20
tert-Butylbenzene	ND		20		ug/L			10/06/16 03:39	20
Tetrachloroethene	ND		20		ug/L			10/06/16 03:39	20
Tetrahydrofuran	ND		200		ug/L			10/06/16 03:39	20
Toluene	ND		20		ug/L			10/06/16 03:39	20
trans-1,2-Dichloroethene	ND		20		ug/L			10/06/16 03:39	20
trans-1,3-Dichloropropene	ND		8.0		ug/L			10/06/16 03:39	20
Trichloroethene	ND		20		ug/L			10/06/16 03:39	20
Trichlorofluoromethane	ND		20		ug/L			10/06/16 03:39	20
Vinyl chloride	**47**		20		ug/L			10/06/16 03:39	20
Dibromomethane	ND		20		ug/L			10/06/16 03:39	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*90*		*70 - 130*		*10/06/16 03:39*	*20*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*10/06/16 03:39*	*20*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*10/06/16 03:39*	*20*

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.7**	**F1**	0.20		ug/L		10/07/16 08:57	10/10/16 11:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*90*		*70 - 130*	*10/07/16 08:57*	*10/10/16 11:44*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.1**		0.050		mg/L		10/06/16 09:31	10/07/16 16:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**38**	**F1**	25		mg/L			10/10/16 12:59	50
Sulfate	ND	F1	100		mg/L			10/10/16 12:59	50
Ammonia	**0.42**		0.20		mg/L		10/05/16 13:21	10/05/16 15:28	1
Nitrate as N	ND		0.050		mg/L			10/05/16 16:53	1
TOC Result 1	**15000**		500		mg/L			10/07/16 23:59	500
TOC Result 2	**16000**		500		mg/L			10/07/16 23:59	500
Total Organic Carbon - Duplicates	**15000**		500		mg/L			10/07/16 23:59	500
Alkalinity, Total	**11000**		5.0		mg/L			10/12/16 14:55	1
ortho-Phosphate	ND		0.020		mg/L			10/05/16 14:30	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107013-1

Client Sample ID: MW-268D-20161004

Lab Sample ID: 480-107013-5

Date Collected: 10/04/16 13:00

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			10/06/16 04:03	5
1,1,1-Trichloroethane	ND		5.0		ug/L			10/06/16 04:03	5
1,1,2,2-Tetrachloroethane	ND		2.5		ug/L			10/06/16 04:03	5
1,1,2-Trichloroethane	ND		5.0		ug/L			10/06/16 04:03	5
1,1-Dichloroethane	ND		5.0		ug/L			10/06/16 04:03	5
1,1-Dichloroethene	ND		5.0		ug/L			10/06/16 04:03	5
1,1-Dichloropropene	ND		5.0		ug/L			10/06/16 04:03	5
1,2,3-Trichlorobenzene	ND		5.0		ug/L			10/06/16 04:03	5
1,2,3-Trichloropropane	ND		5.0		ug/L			10/06/16 04:03	5
1,2,4-Trichlorobenzene	ND		5.0		ug/L			10/06/16 04:03	5
1,2,4-Trimethylbenzene	ND		5.0		ug/L			10/06/16 04:03	5
1,2-Dibromo-3-Chloropropane	ND		25		ug/L			10/06/16 04:03	5
1,2-Dichlorobenzene	ND		5.0		ug/L			10/06/16 04:03	5
1,2-Dichloroethane	ND		5.0		ug/L			10/06/16 04:03	5
1,2-Dichloropropane	ND		5.0		ug/L			10/06/16 04:03	5
1,3,5-Trimethylbenzene	ND		5.0		ug/L			10/06/16 04:03	5
1,3-Dichlorobenzene	ND		5.0		ug/L			10/06/16 04:03	5
1,3-Dichloropropane	ND		5.0		ug/L			10/06/16 04:03	5
1,4-Dichlorobenzene	ND		5.0		ug/L			10/06/16 04:03	5
1,4-Dioxane	ND		250		ug/L			10/06/16 04:03	5
2,2-Dichloropropane	ND		5.0		ug/L			10/06/16 04:03	5
2-Butanone (MEK)	ND		50		ug/L			10/06/16 04:03	5
2-Chlorotoluene	ND		5.0		ug/L			10/06/16 04:03	5
2-Hexanone	ND		50		ug/L			10/06/16 04:03	5
4-Chlorotoluene	ND		5.0		ug/L			10/06/16 04:03	5
4-Isopropyltoluene	ND		5.0		ug/L			10/06/16 04:03	5
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			10/06/16 04:03	5
Acetone	ND		250		ug/L			10/06/16 04:03	5
Benzene	ND		5.0		ug/L			10/06/16 04:03	5
Bromobenzene	ND		5.0		ug/L			10/06/16 04:03	5
Bromoform	ND		5.0		ug/L			10/06/16 04:03	5
Bromomethane	ND		10		ug/L			10/06/16 04:03	5
Carbon disulfide	ND		50		ug/L			10/06/16 04:03	5
Carbon tetrachloride	ND		5.0		ug/L			10/06/16 04:03	5
Chlorobenzene	ND		5.0		ug/L			10/06/16 04:03	5
Chlorobromomethane	ND		5.0		ug/L			10/06/16 04:03	5
Chlorodibromomethane	ND		2.5		ug/L			10/06/16 04:03	5
Chloroethane	ND		10		ug/L			10/06/16 04:03	5
Chloroform	ND		5.0		ug/L			10/06/16 04:03	5
Chloromethane	ND		10		ug/L			10/06/16 04:03	5
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/06/16 04:03	5
cis-1,3-Dichloropropene	ND		2.0		ug/L			10/06/16 04:03	5
Dichlorobromomethane	ND		2.5		ug/L			10/06/16 04:03	5
Dichlorodifluoromethane	ND		5.0		ug/L			10/06/16 04:03	5
Ethyl ether	ND		5.0		ug/L			10/06/16 04:03	5
Ethylbenzene	ND		5.0		ug/L			10/06/16 04:03	5
Ethylene Dibromide	ND		5.0		ug/L			10/06/16 04:03	5
Hexachlorobutadiene	ND		2.0		ug/L			10/06/16 04:03	5
Isopropyl ether	ND		50		ug/L			10/06/16 04:03	5

Client Sample ID: MW-268D-20161004

Lab Sample ID: 480-107013-5

Date Collected: 10/04/16 13:00

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0		ug/L			10/06/16 04:03	5
Methyl tert-butyl ether	ND		5.0		ug/L			10/06/16 04:03	5
Methylene Chloride	ND		5.0		ug/L			10/06/16 04:03	5
m-Xylene & p-Xylene	ND		10		ug/L			10/06/16 04:03	5
Naphthalene	ND		25		ug/L			10/06/16 04:03	5
n-Butylbenzene	ND		5.0		ug/L			10/06/16 04:03	5
N-Propylbenzene	ND		5.0		ug/L			10/06/16 04:03	5
o-Xylene	ND		5.0		ug/L			10/06/16 04:03	5
sec-Butylbenzene	ND		5.0		ug/L			10/06/16 04:03	5
Styrene	ND		5.0		ug/L			10/06/16 04:03	5
Tert-amyl methyl ether	ND		25		ug/L			10/06/16 04:03	5
Tert-butyl ethyl ether	ND		25		ug/L			10/06/16 04:03	5
tert-Butylbenzene	ND		5.0		ug/L			10/06/16 04:03	5
Tetrachloroethene	ND		5.0		ug/L			10/06/16 04:03	5
Tetrahydrofuran	ND		50		ug/L			10/06/16 04:03	5
Toluene	ND		5.0		ug/L			10/06/16 04:03	5
trans-1,2-Dichloroethene	ND		5.0		ug/L			10/06/16 04:03	5
trans-1,3-Dichloropropene	ND		2.0		ug/L			10/06/16 04:03	5
Trichloroethene	ND		5.0		ug/L			10/06/16 04:03	5
Trichlorofluoromethane	ND		5.0		ug/L			10/06/16 04:03	5
Vinyl chloride	ND		5.0		ug/L			10/06/16 04:03	5
Dibromomethane	ND		5.0		ug/L			10/06/16 04:03	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*70 - 130*		*10/06/16 04:03*	*5*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*10/06/16 04:03*	*5*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*10/06/16 04:03*	*5*

Client Sample ID: REW-1-20161004

Lab Sample ID: 480-107013-6

Date Collected: 10/04/16 08:35

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/06/16 04:27	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/06/16 04:27	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/06/16 04:27	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/06/16 04:27	1
1,1-Dichloroethane	ND		1.0		ug/L			10/06/16 04:27	1
1,1-Dichloroethene	ND		1.0		ug/L			10/06/16 04:27	1
1,1-Dichloropropene	ND		1.0		ug/L			10/06/16 04:27	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/06/16 04:27	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/06/16 04:27	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/06/16 04:27	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/06/16 04:27	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/06/16 04:27	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/06/16 04:27	1
1,2-Dichloroethane	ND		1.0		ug/L			10/06/16 04:27	1
1,2-Dichloropropane	ND		1.0		ug/L			10/06/16 04:27	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/06/16 04:27	1

Client Sample ID: REW-1-20161004

Lab Sample ID: 480-107013-6

Date Collected: 10/04/16 08:35

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			10/06/16 04:27	1
1,3-Dichloropropane	ND		1.0		ug/L			10/06/16 04:27	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/06/16 04:27	1
1,4-Dioxane	ND		50		ug/L			10/06/16 04:27	1
2,2-Dichloropropane	ND		1.0		ug/L			10/06/16 04:27	1
2-Butanone (MEK)	ND		10		ug/L			10/06/16 04:27	1
2-Chlorotoluene	ND		1.0		ug/L			10/06/16 04:27	1
2-Hexanone	ND		10		ug/L			10/06/16 04:27	1
4-Chlorotoluene	ND		1.0		ug/L			10/06/16 04:27	1
4-Isopropyltoluene	ND		1.0		ug/L			10/06/16 04:27	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/06/16 04:27	1
Acetone	ND		50		ug/L			10/06/16 04:27	1
Benzene	ND		1.0		ug/L			10/06/16 04:27	1
Bromobenzene	ND		1.0		ug/L			10/06/16 04:27	1
Bromoform	ND		1.0		ug/L			10/06/16 04:27	1
Bromomethane	ND		2.0		ug/L			10/06/16 04:27	1
Carbon disulfide	ND		10		ug/L			10/06/16 04:27	1
Carbon tetrachloride	ND		1.0		ug/L			10/06/16 04:27	1
Chlorobenzene	ND		1.0		ug/L			10/06/16 04:27	1
Chlorobromomethane	ND		1.0		ug/L			10/06/16 04:27	1
Chlorodibromomethane	ND		0.50		ug/L			10/06/16 04:27	1
Chloroethane	ND		2.0		ug/L			10/06/16 04:27	1
Chloroform	ND		1.0		ug/L			10/06/16 04:27	1
Chloromethane	ND		2.0		ug/L			10/06/16 04:27	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/06/16 04:27	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/06/16 04:27	1
Dichlorobromomethane	ND		0.50		ug/L			10/06/16 04:27	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/06/16 04:27	1
Ethyl ether	ND		1.0		ug/L			10/06/16 04:27	1
Ethylbenzene	**1.1**		1.0		ug/L			10/06/16 04:27	1
Ethylene Dibromide	ND		1.0		ug/L			10/06/16 04:27	1
Hexachlorobutadiene	ND		0.40		ug/L			10/06/16 04:27	1
Isopropyl ether	ND		10		ug/L			10/06/16 04:27	1
Isopropylbenzene	ND		1.0		ug/L			10/06/16 04:27	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/06/16 04:27	1
Methylene Chloride	ND		1.0		ug/L			10/06/16 04:27	1
m-Xylene & p-Xylene	**2.4**		2.0		ug/L			10/06/16 04:27	1
Naphthalene	ND		5.0		ug/L			10/06/16 04:27	1
n-Butylbenzene	ND		1.0		ug/L			10/06/16 04:27	1
N-Propylbenzene	ND		1.0		ug/L			10/06/16 04:27	1
o-Xylene	**1.4**		1.0		ug/L			10/06/16 04:27	1
sec-Butylbenzene	ND		1.0		ug/L			10/06/16 04:27	1
Styrene	ND		1.0		ug/L			10/06/16 04:27	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/06/16 04:27	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/06/16 04:27	1
tert-Butylbenzene	ND		1.0		ug/L			10/06/16 04:27	1
Tetrachloroethene	ND		1.0		ug/L			10/06/16 04:27	1
Tetrahydrofuran	ND		10		ug/L			10/06/16 04:27	1
Toluene	ND		1.0		ug/L			10/06/16 04:27	1

Client Sample ID: REW-1-20161004

Lab Sample ID: 480-107013-6

Date Collected: 10/04/16 08:35
Matrix: Water
Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/06/16 04:27	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/06/16 04:27	1
Trichloroethene	ND		1.0		ug/L			10/06/16 04:27	1
Trichlorofluoromethane	ND		1.0		ug/L			10/06/16 04:27	1
Vinyl chloride	ND		1.0		ug/L			10/06/16 04:27	1
Dibromomethane	ND		1.0		ug/L			10/06/16 04:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*89*		*70 - 130*		*10/06/16 04:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*10/06/16 04:27*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/06/16 04:27*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**37**		0.050		mg/L		10/06/16 09:31	10/07/16 16:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13**		2.5		mg/L			10/06/16 13:06	5
Sulfate	**13**		10		mg/L			10/06/16 13:06	5
Ammonia	**0.50**		0.20		mg/L		10/05/16 13:21	10/05/16 15:29	1
Nitrate as N	ND		0.050		mg/L			10/05/16 16:54	1
TOC Result 1	**1.1**		1.0		mg/L			10/06/16 10:17	1
TOC Result 2	**1.2**		1.0		mg/L			10/06/16 10:17	1
Total Organic Carbon - Duplicates	**1.1**		1.0		mg/L			10/06/16 10:17	1
Alkalinity, Total	**280**		5.0		mg/L			10/06/16 18:32	1
ortho-Phosphate	**0.19**		0.020		mg/L			10/05/16 14:30	1

Client Sample ID: REW-4-20161004

Lab Sample ID: 480-107013-7

Date Collected: 10/04/16 09:20
Matrix: Water
Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/06/16 14:45	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/06/16 14:45	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/06/16 14:45	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/06/16 14:45	1
1,1-Dichloroethane	ND		1.0		ug/L			10/06/16 14:45	1
1,1-Dichloroethene	ND		1.0		ug/L			10/06/16 14:45	1
1,1-Dichloropropene	ND		1.0		ug/L			10/06/16 14:45	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/06/16 14:45	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/06/16 14:45	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/06/16 14:45	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/06/16 14:45	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/06/16 14:45	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/06/16 14:45	1
1,2-Dichloroethane	ND		1.0		ug/L			10/06/16 14:45	1
1,2-Dichloropropane	ND		1.0		ug/L			10/06/16 14:45	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/06/16 14:45	1

Client Sample ID: REW-4-20161004

Lab Sample ID: 480-107013-7

Date Collected: 10/04/16 09:20

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			10/06/16 14:45	1
1,3-Dichloropropane	ND		1.0		ug/L			10/06/16 14:45	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/06/16 14:45	1
1,4-Dioxane	ND	*	50		ug/L			10/06/16 14:45	1
2,2-Dichloropropane	ND		1.0		ug/L			10/06/16 14:45	1
2-Butanone (MEK)	ND		10		ug/L			10/06/16 14:45	1
2-Chlorotoluene	ND		1.0		ug/L			10/06/16 14:45	1
2-Hexanone	ND		10		ug/L			10/06/16 14:45	1
4-Chlorotoluene	ND		1.0		ug/L			10/06/16 14:45	1
4-Isopropyltoluene	ND		1.0		ug/L			10/06/16 14:45	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/06/16 14:45	1
Acetone	ND		50		ug/L			10/06/16 14:45	1
Benzene	ND		1.0		ug/L			10/06/16 14:45	1
Bromobenzene	ND		1.0		ug/L			10/06/16 14:45	1
Bromoform	ND		1.0		ug/L			10/06/16 14:45	1
Bromomethane	ND		2.0		ug/L			10/06/16 14:45	1
Carbon disulfide	ND		10		ug/L			10/06/16 14:45	1
Carbon tetrachloride	ND		1.0		ug/L			10/06/16 14:45	1
Chlorobenzene	ND		1.0		ug/L			10/06/16 14:45	1
Chlorobromomethane	ND		1.0		ug/L			10/06/16 14:45	1
Chlorodibromomethane	ND		0.50		ug/L			10/06/16 14:45	1
Chloroethane	ND		2.0		ug/L			10/06/16 14:45	1
Chloroform	ND		1.0		ug/L			10/06/16 14:45	1
Chloromethane	ND		2.0		ug/L			10/06/16 14:45	1
cis-1,2-Dichloroethene	**5.1**		1.0		ug/L			10/06/16 14:45	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/06/16 14:45	1
Dichlorobromomethane	ND		0.50		ug/L			10/06/16 14:45	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/06/16 14:45	1
Ethyl ether	ND		1.0		ug/L			10/06/16 14:45	1
Ethylbenzene	ND		1.0		ug/L			10/06/16 14:45	1
Ethylene Dibromide	ND		1.0		ug/L			10/06/16 14:45	1
Hexachlorobutadiene	ND		0.40		ug/L			10/06/16 14:45	1
Isopropyl ether	ND		10		ug/L			10/06/16 14:45	1
Isopropylbenzene	ND		1.0		ug/L			10/06/16 14:45	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/06/16 14:45	1
Methylene Chloride	ND		1.0		ug/L			10/06/16 14:45	1
m-Xylene & p-Xylene	**2.9**		2.0		ug/L			10/06/16 14:45	1
Naphthalene	ND		5.0		ug/L			10/06/16 14:45	1
n-Butylbenzene	ND		1.0		ug/L			10/06/16 14:45	1
N-Propylbenzene	ND		1.0		ug/L			10/06/16 14:45	1
o-Xylene	ND		1.0		ug/L			10/06/16 14:45	1
sec-Butylbenzene	ND		1.0		ug/L			10/06/16 14:45	1
Styrene	ND		1.0		ug/L			10/06/16 14:45	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/06/16 14:45	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/06/16 14:45	1
tert-Butylbenzene	ND		1.0		ug/L			10/06/16 14:45	1
Tetrachloroethene	ND		1.0		ug/L			10/06/16 14:45	1
Tetrahydrofuran	ND		10		ug/L			10/06/16 14:45	1
Toluene	ND		1.0		ug/L			10/06/16 14:45	1

Client Sample ID: REW-4-20161004

Lab Sample ID: 480-107013-7

Date Collected: 10/04/16 09:20

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/06/16 14:45	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/06/16 14:45	1
Trichloroethene	ND		1.0		ug/L			10/06/16 14:45	1
Trichlorofluoromethane	ND		1.0		ug/L			10/06/16 14:45	1
Vinyl chloride	**1.4**		1.0		ug/L			10/06/16 14:45	1
Dibromomethane	ND		1.0		ug/L			10/06/16 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*90*		*70 - 130*		*10/06/16 14:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*10/06/16 14:45*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/06/16 14:45*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**13**		0.050		mg/L		10/06/16 09:31	10/07/16 16:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.2**		2.5		mg/L			10/06/16 13:15	5
Sulfate	ND		10		mg/L			10/06/16 13:15	5
Ammonia	**6.2**		1.0		mg/L		10/05/16 13:21	10/05/16 15:38	5
Nitrate as N	ND		0.050		mg/L			10/05/16 16:55	1
TOC Result 1	**2.3**		1.0		mg/L			10/06/16 11:13	1
TOC Result 2	**2.4**		1.0		mg/L			10/06/16 11:13	1
Total Organic Carbon - Duplicates	**2.3**		1.0		mg/L			10/06/16 11:13	1
Alkalinity, Total	**270**		5.0		mg/L			10/06/16 18:39	1
ortho-Phosphate	**0.75**		0.020		mg/L			10/05/16 14:30	1

Client Sample ID: REW-5-20161004

Lab Sample ID: 480-107013-8

Date Collected: 10/04/16 10:05

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/06/16 05:15	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/06/16 05:15	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/06/16 05:15	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/06/16 05:15	1
1,1-Dichloroethane	ND		1.0		ug/L			10/06/16 05:15	1
1,1-Dichloroethene	ND		1.0		ug/L			10/06/16 05:15	1
1,1-Dichloropropene	ND		1.0		ug/L			10/06/16 05:15	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/06/16 05:15	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/06/16 05:15	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/06/16 05:15	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/06/16 05:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/06/16 05:15	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/06/16 05:15	1
1,2-Dichloroethane	ND		1.0		ug/L			10/06/16 05:15	1
1,2-Dichloropropane	ND		1.0		ug/L			10/06/16 05:15	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/06/16 05:15	1

Client Sample ID: REW-5-20161004

Lab Sample ID: 480-107013-8

Date Collected: 10/04/16 10:05

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			10/06/16 05:15	1
1,3-Dichloropropane	ND		1.0		ug/L			10/06/16 05:15	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/06/16 05:15	1
1,4-Dioxane	ND		50		ug/L			10/06/16 05:15	1
2,2-Dichloropropane	ND		1.0		ug/L			10/06/16 05:15	1
2-Butanone (MEK)	ND		10		ug/L			10/06/16 05:15	1
2-Chlorotoluene	ND		1.0		ug/L			10/06/16 05:15	1
2-Hexanone	ND		10		ug/L			10/06/16 05:15	1
4-Chlorotoluene	ND		1.0		ug/L			10/06/16 05:15	1
4-Isopropyltoluene	ND		1.0		ug/L			10/06/16 05:15	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/06/16 05:15	1
Acetone	ND		50		ug/L			10/06/16 05:15	1
Benzene	ND		1.0		ug/L			10/06/16 05:15	1
Bromobenzene	ND		1.0		ug/L			10/06/16 05:15	1
Bromoform	ND		1.0		ug/L			10/06/16 05:15	1
Bromomethane	ND		2.0		ug/L			10/06/16 05:15	1
Carbon disulfide	ND		10		ug/L			10/06/16 05:15	1
Carbon tetrachloride	ND		1.0		ug/L			10/06/16 05:15	1
Chlorobenzene	ND		1.0		ug/L			10/06/16 05:15	1
Chlorobromomethane	ND		1.0		ug/L			10/06/16 05:15	1
Chlorodibromomethane	ND		0.50		ug/L			10/06/16 05:15	1
Chloroethane	ND		2.0		ug/L			10/06/16 05:15	1
Chloroform	ND		1.0		ug/L			10/06/16 05:15	1
Chloromethane	ND		2.0		ug/L			10/06/16 05:15	1
cis-1,2-Dichloroethene	**2.3**		1.0		ug/L			10/06/16 05:15	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/06/16 05:15	1
Dichlorobromomethane	ND		0.50		ug/L			10/06/16 05:15	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/06/16 05:15	1
Ethyl ether	ND		1.0		ug/L			10/06/16 05:15	1
Ethylbenzene	ND		1.0		ug/L			10/06/16 05:15	1
Ethylene Dibromide	ND		1.0		ug/L			10/06/16 05:15	1
Hexachlorobutadiene	ND		0.40		ug/L			10/06/16 05:15	1
Isopropyl ether	ND		10		ug/L			10/06/16 05:15	1
Isopropylbenzene	ND		1.0		ug/L			10/06/16 05:15	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/06/16 05:15	1
Methylene Chloride	ND		1.0		ug/L			10/06/16 05:15	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/06/16 05:15	1
Naphthalene	ND		5.0		ug/L			10/06/16 05:15	1
n-Butylbenzene	ND		1.0		ug/L			10/06/16 05:15	1
N-Propylbenzene	ND		1.0		ug/L			10/06/16 05:15	1
o-Xylene	ND		1.0		ug/L			10/06/16 05:15	1
sec-Butylbenzene	ND		1.0		ug/L			10/06/16 05:15	1
Styrene	ND		1.0		ug/L			10/06/16 05:15	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/06/16 05:15	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/06/16 05:15	1
tert-Butylbenzene	ND		1.0		ug/L			10/06/16 05:15	1
Tetrachloroethene	ND		1.0		ug/L			10/06/16 05:15	1
Tetrahydrofuran	ND		10		ug/L			10/06/16 05:15	1
Toluene	ND		1.0		ug/L			10/06/16 05:15	1

Client Sample ID: REW-5-20161004

Lab Sample ID: 480-107013-8

Date Collected: 10/04/16 10:05

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/06/16 05:15	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/06/16 05:15	1
Trichloroethene	ND		1.0		ug/L			10/06/16 05:15	1
Trichlorofluoromethane	ND		1.0		ug/L			10/06/16 05:15	1
Vinyl chloride	ND		1.0		ug/L			10/06/16 05:15	1
Dibromomethane	ND		1.0		ug/L			10/06/16 05:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*89*		*70 - 130*		*10/06/16 05:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*10/06/16 05:15*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*10/06/16 05:15*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**47**		0.050		mg/L		10/06/16 09:31	10/07/16 16:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.9**		0.50		mg/L			10/06/16 13:23	1
Sulfate	ND		2.0		mg/L			10/06/16 13:23	1
Ammonia	**2.5**		0.40		mg/L		10/05/16 13:21	10/05/16 15:39	2
Nitrate as N	ND		0.050		mg/L			10/05/16 16:57	1
TOC Result 1	ND		1.0		mg/L			10/06/16 12:11	1
TOC Result 2	ND		1.0		mg/L			10/06/16 12:11	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/06/16 12:11	1
Alkalinity, Total	**100**		5.0		mg/L			10/06/16 13:18	1
ortho-Phosphate	**0.12**		0.020		mg/L			10/05/16 14:30	1

Client Sample ID: DUP2-20161004

Lab Sample ID: 480-107013-9

Date Collected: 10/04/16 00:00

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/06/16 15:09	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/06/16 15:09	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/06/16 15:09	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/06/16 15:09	1
1,1-Dichloroethane	ND		1.0		ug/L			10/06/16 15:09	1
1,1-Dichloroethene	ND		1.0		ug/L			10/06/16 15:09	1
1,1-Dichloropropene	ND		1.0		ug/L			10/06/16 15:09	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/06/16 15:09	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/06/16 15:09	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/06/16 15:09	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/06/16 15:09	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/06/16 15:09	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/06/16 15:09	1
1,2-Dichloroethane	ND		1.0		ug/L			10/06/16 15:09	1
1,2-Dichloropropane	ND		1.0		ug/L			10/06/16 15:09	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/06/16 15:09	1

Client Sample ID: DUP2-20161004

Lab Sample ID: 480-107013-9

Date Collected: 10/04/16 00:00

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			10/06/16 15:09	1
1,3-Dichloropropane	ND		1.0		ug/L			10/06/16 15:09	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/06/16 15:09	1
1,4-Dioxane	ND	*	50		ug/L			10/06/16 15:09	1
2,2-Dichloropropane	ND		1.0		ug/L			10/06/16 15:09	1
2-Butanone (MEK)	**37**		10		ug/L			10/06/16 15:09	1
2-Chlorotoluene	ND		1.0		ug/L			10/06/16 15:09	1
2-Hexanone	ND		10		ug/L			10/06/16 15:09	1
4-Chlorotoluene	ND		1.0		ug/L			10/06/16 15:09	1
4-Isopropyltoluene	ND		1.0		ug/L			10/06/16 15:09	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/06/16 15:09	1
Acetone	ND		50		ug/L			10/06/16 15:09	1
Benzene	ND		1.0		ug/L			10/06/16 15:09	1
Bromobenzene	ND		1.0		ug/L			10/06/16 15:09	1
Bromoform	ND		1.0		ug/L			10/06/16 15:09	1
Bromomethane	ND		2.0		ug/L			10/06/16 15:09	1
Carbon disulfide	ND		10		ug/L			10/06/16 15:09	1
Carbon tetrachloride	ND		1.0		ug/L			10/06/16 15:09	1
Chlorobenzene	ND		1.0		ug/L			10/06/16 15:09	1
Chlorobromomethane	ND		1.0		ug/L			10/06/16 15:09	1
Chlorodibromomethane	ND		0.50		ug/L			10/06/16 15:09	1
Chloroethane	ND		2.0		ug/L			10/06/16 15:09	1
Chloroform	ND		1.0		ug/L			10/06/16 15:09	1
Chloromethane	ND		2.0		ug/L			10/06/16 15:09	1
cis-1,2-Dichloroethene	**3.9**		1.0		ug/L			10/06/16 15:09	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/06/16 15:09	1
Dichlorobromomethane	ND		0.50		ug/L			10/06/16 15:09	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/06/16 15:09	1
Ethyl ether	ND		1.0		ug/L			10/06/16 15:09	1
Ethylbenzene	ND		1.0		ug/L			10/06/16 15:09	1
Ethylene Dibromide	ND		1.0		ug/L			10/06/16 15:09	1
Hexachlorobutadiene	ND		0.40		ug/L			10/06/16 15:09	1
Isopropyl ether	ND		10		ug/L			10/06/16 15:09	1
Isopropylbenzene	ND		1.0		ug/L			10/06/16 15:09	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/06/16 15:09	1
Methylene Chloride	ND		1.0		ug/L			10/06/16 15:09	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/06/16 15:09	1
Naphthalene	ND		5.0		ug/L			10/06/16 15:09	1
n-Butylbenzene	ND		1.0		ug/L			10/06/16 15:09	1
N-Propylbenzene	ND		1.0		ug/L			10/06/16 15:09	1
o-Xylene	ND		1.0		ug/L			10/06/16 15:09	1
sec-Butylbenzene	ND		1.0		ug/L			10/06/16 15:09	1
Styrene	ND		1.0		ug/L			10/06/16 15:09	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/06/16 15:09	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/06/16 15:09	1
tert-Butylbenzene	ND		1.0		ug/L			10/06/16 15:09	1
Tetrachloroethene	ND		1.0		ug/L			10/06/16 15:09	1
Tetrahydrofuran	ND		10		ug/L			10/06/16 15:09	1
Toluene	**1.8**		1.0		ug/L			10/06/16 15:09	1

Client Sample ID: DUP2-20161004

Lab Sample ID: 480-107013-9

Date Collected: 10/04/16 00:00

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/06/16 15:09	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/06/16 15:09	1
Trichloroethene	**1.4**		1.0		ug/L			10/06/16 15:09	1
Trichlorofluoromethane	ND		1.0		ug/L			10/06/16 15:09	1
Vinyl chloride	ND		1.0		ug/L			10/06/16 15:09	1
Dibromomethane	ND		1.0		ug/L			10/06/16 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*70 - 130*		*10/06/16 15:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*		*10/06/16 15:09*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*10/06/16 15:09*	*1*

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-107013-10

Date Collected: 10/04/16 00:00

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/06/16 06:03	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/06/16 06:03	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/06/16 06:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/06/16 06:03	1
1,1-Dichloroethane	ND		1.0		ug/L			10/06/16 06:03	1
1,1-Dichloroethene	ND		1.0		ug/L			10/06/16 06:03	1
1,1-Dichloropropene	ND		1.0		ug/L			10/06/16 06:03	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/06/16 06:03	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/06/16 06:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/06/16 06:03	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/06/16 06:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/06/16 06:03	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/06/16 06:03	1
1,2-Dichloroethane	ND		1.0		ug/L			10/06/16 06:03	1
1,2-Dichloropropane	ND		1.0		ug/L			10/06/16 06:03	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/06/16 06:03	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/06/16 06:03	1
1,3-Dichloropropane	ND		1.0		ug/L			10/06/16 06:03	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/06/16 06:03	1
1,4-Dioxane	ND		50		ug/L			10/06/16 06:03	1
2,2-Dichloropropane	ND		1.0		ug/L			10/06/16 06:03	1
2-Butanone (MEK)	ND		10		ug/L			10/06/16 06:03	1
2-Chlorotoluene	ND		1.0		ug/L			10/06/16 06:03	1
2-Hexanone	ND		10		ug/L			10/06/16 06:03	1
4-Chlorotoluene	ND		1.0		ug/L			10/06/16 06:03	1
4-Isopropyltoluene	ND		1.0		ug/L			10/06/16 06:03	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/06/16 06:03	1
Acetone	ND		50		ug/L			10/06/16 06:03	1
Benzene	ND		1.0		ug/L			10/06/16 06:03	1
Bromobenzene	ND		1.0		ug/L			10/06/16 06:03	1
Bromoform	ND		1.0		ug/L			10/06/16 06:03	1
Bromomethane	ND		2.0		ug/L			10/06/16 06:03	1

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-107013-10

Date Collected: 10/04/16 00:00

Matrix: Water

Date Received: 10/05/16 01:15

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		10		ug/L			10/06/16 06:03	1
Carbon tetrachloride	ND		1.0		ug/L			10/06/16 06:03	1
Chlorobenzene	ND		1.0		ug/L			10/06/16 06:03	1
Chlorobromomethane	ND		1.0		ug/L			10/06/16 06:03	1
Chlorodibromomethane	ND		0.50		ug/L			10/06/16 06:03	1
Chloroethane	ND		2.0		ug/L			10/06/16 06:03	1
Chloroform	ND		1.0		ug/L			10/06/16 06:03	1
Chloromethane	ND		2.0		ug/L			10/06/16 06:03	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/06/16 06:03	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/06/16 06:03	1
Dichlorobromomethane	ND		0.50		ug/L			10/06/16 06:03	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/06/16 06:03	1
Ethyl ether	ND		1.0		ug/L			10/06/16 06:03	1
Ethylbenzene	ND		1.0		ug/L			10/06/16 06:03	1
Ethylene Dibromide	ND		1.0		ug/L			10/06/16 06:03	1
Hexachlorobutadiene	ND		0.40		ug/L			10/06/16 06:03	1
Isopropyl ether	ND		10		ug/L			10/06/16 06:03	1
Isopropylbenzene	ND		1.0		ug/L			10/06/16 06:03	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/06/16 06:03	1
Methylene Chloride	ND		1.0		ug/L			10/06/16 06:03	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/06/16 06:03	1
Naphthalene	ND		5.0		ug/L			10/06/16 06:03	1
n-Butylbenzene	ND		1.0		ug/L			10/06/16 06:03	1
N-Propylbenzene	ND		1.0		ug/L			10/06/16 06:03	1
o-Xylene	ND		1.0		ug/L			10/06/16 06:03	1
sec-Butylbenzene	ND		1.0		ug/L			10/06/16 06:03	1
Styrene	ND		1.0		ug/L			10/06/16 06:03	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/06/16 06:03	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/06/16 06:03	1
tert-Butylbenzene	ND		1.0		ug/L			10/06/16 06:03	1
Tetrachloroethene	ND		1.0		ug/L			10/06/16 06:03	1
Tetrahydrofuran	ND		10		ug/L			10/06/16 06:03	1
Toluene	ND		1.0		ug/L			10/06/16 06:03	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/06/16 06:03	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/06/16 06:03	1
Trichloroethene	ND		1.0		ug/L			10/06/16 06:03	1
Trichlorofluoromethane	ND		1.0		ug/L			10/06/16 06:03	1
Vinyl chloride	ND		1.0		ug/L			10/06/16 06:03	1
Dibromomethane	ND		1.0		ug/L			10/06/16 06:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*10/06/16 06:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*10/06/16 06:03*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/06/16 06:03*	*1*

Surrogate Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107013-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	12DCE	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
480-107013-1	MW-267S-20161004	91	90	96
480-107013-2	MW-267M-20161004	90	93	96
480-107013-3	MW-268S-20161004	91	87	96
480-107013-4	MW-268M-20161004	90	87	96
480-107013-5	MW-268D-20161004	88	97	95
480-107013-6	REW-1-20161004	89	90	97
480-107013-7	REW-4-20161004	90	91	98
480-107013-8	REW-5-20161004	89	89	95
480-107013-9	DUP2-20161004	92	86	99
480-107013-10	TRIP BLANKS	91	89	97
LCS 480-323990/5	Lab Control Sample	90	88	99
LCS 480-324093/5	Lab Control Sample	91	87	99
LCSD 480-323990/6	Lab Control Sample Dup	89	90	99
LCSD 480-324093/6	Lab Control Sample Dup	92	86	100
MB 480-323990/8	Method Blank	92	90	97
MB 480-324093/8	Method Blank	92	86	98

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		14DD8
Lab Sample ID	Client Sample ID	(70-130)
480-107013-1	MW-267S-20161004	97
480-107013-2	MW-267M-20161004	94
480-107013-3	MW-268S-20161004	12 X
480-107013-4	MW-268M-20161004	90
480-107013-4 MS	MW-268M-20161004	94
480-107013-4 MSD	MW-268M-20161004	72
LCS 200-109914/2-A	Lab Control Sample	91
MB 200-109914/1-A	Method Blank	103

Surrogate Legend

14DD8 = 1,4-Dioxane-d8 (Surr)

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-323990/8
Matrix: Water
Analysis Batch: 323990

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/05/16 23:03	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/05/16 23:03	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/05/16 23:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/05/16 23:03	1
1,1-Dichloroethane	ND		1.0		ug/L			10/05/16 23:03	1
1,1-Dichloroethene	ND		1.0		ug/L			10/05/16 23:03	1
1,1-Dichloropropene	ND		1.0		ug/L			10/05/16 23:03	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/05/16 23:03	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/05/16 23:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/05/16 23:03	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/05/16 23:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/05/16 23:03	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/05/16 23:03	1
1,2-Dichloroethane	ND		1.0		ug/L			10/05/16 23:03	1
1,2-Dichloropropane	ND		1.0		ug/L			10/05/16 23:03	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/05/16 23:03	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/05/16 23:03	1
1,3-Dichloropropane	ND		1.0		ug/L			10/05/16 23:03	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/05/16 23:03	1
1,4-Dioxane	ND		50		ug/L			10/05/16 23:03	1
2,2-Dichloropropane	ND		1.0		ug/L			10/05/16 23:03	1
2-Butanone (MEK)	ND		10		ug/L			10/05/16 23:03	1
2-Chlorotoluene	ND		1.0		ug/L			10/05/16 23:03	1
2-Hexanone	ND		10		ug/L			10/05/16 23:03	1
4-Chlorotoluene	ND		1.0		ug/L			10/05/16 23:03	1
4-Isopropyltoluene	ND		1.0		ug/L			10/05/16 23:03	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/05/16 23:03	1
Acetone	ND		50		ug/L			10/05/16 23:03	1
Benzene	ND		1.0		ug/L			10/05/16 23:03	1
Bromobenzene	ND		1.0		ug/L			10/05/16 23:03	1
Bromoform	ND		1.0		ug/L			10/05/16 23:03	1
Bromomethane	ND		2.0		ug/L			10/05/16 23:03	1
Carbon disulfide	ND		10		ug/L			10/05/16 23:03	1
Carbon tetrachloride	ND		1.0		ug/L			10/05/16 23:03	1
Chlorobenzene	ND		1.0		ug/L			10/05/16 23:03	1
Chlorobromomethane	ND		1.0		ug/L			10/05/16 23:03	1
Chlorodibromomethane	ND		0.50		ug/L			10/05/16 23:03	1
Chloroethane	ND		2.0		ug/L			10/05/16 23:03	1
Chloroform	ND		1.0		ug/L			10/05/16 23:03	1
Chloromethane	ND		2.0		ug/L			10/05/16 23:03	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/05/16 23:03	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 23:03	1
Dichlorobromomethane	ND		0.50		ug/L			10/05/16 23:03	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/05/16 23:03	1
Ethyl ether	ND		1.0		ug/L			10/05/16 23:03	1
Ethylbenzene	ND		1.0		ug/L			10/05/16 23:03	1
Ethylene Dibromide	ND		1.0		ug/L			10/05/16 23:03	1
Hexachlorobutadiene	ND		0.40		ug/L			10/05/16 23:03	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-323990/8
Matrix: Water
Analysis Batch: 323990

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			10/05/16 23:03	1
Isopropylbenzene	ND		1.0		ug/L			10/05/16 23:03	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/05/16 23:03	1
Methylene Chloride	ND		1.0		ug/L			10/05/16 23:03	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/05/16 23:03	1
Naphthalene	ND		5.0		ug/L			10/05/16 23:03	1
n-Butylbenzene	ND		1.0		ug/L			10/05/16 23:03	1
N-Propylbenzene	ND		1.0		ug/L			10/05/16 23:03	1
o-Xylene	ND		1.0		ug/L			10/05/16 23:03	1
sec-Butylbenzene	ND		1.0		ug/L			10/05/16 23:03	1
Styrene	ND		1.0		ug/L			10/05/16 23:03	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/05/16 23:03	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/05/16 23:03	1
tert-Butylbenzene	ND		1.0		ug/L			10/05/16 23:03	1
Tetrachloroethene	ND		1.0		ug/L			10/05/16 23:03	1
Tetrahydrofuran	ND		10		ug/L			10/05/16 23:03	1
Toluene	ND		1.0		ug/L			10/05/16 23:03	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/05/16 23:03	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/05/16 23:03	1
Trichloroethene	ND		1.0		ug/L			10/05/16 23:03	1
Trichlorofluoromethane	ND		1.0		ug/L			10/05/16 23:03	1
Vinyl chloride	ND		1.0		ug/L			10/05/16 23:03	1
Dibromomethane	ND		1.0		ug/L			10/05/16 23:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*70 - 130*		*10/05/16 23:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*10/05/16 23:03*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/05/16 23:03*	*1*

Lab Sample ID: LCS 480-323990/5
Matrix: Water
Analysis Batch: 323990

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	23.0		ug/L		92	70 - 130
1,1,1-Trichloroethane	25.0	23.1		ug/L		92	70 - 130
1,1,2,2-Tetrachloroethane	25.0	21.9		ug/L		88	70 - 130
1,1,2-Trichloroethane	25.0	22.2		ug/L		89	70 - 130
1,1-Dichloroethane	25.0	23.4		ug/L		94	70 - 130
1,1-Dichloroethene	25.0	21.3		ug/L		85	70 - 130
1,1-Dichloropropene	25.0	22.6		ug/L		90	70 - 130
1,2,3-Trichlorobenzene	25.0	20.7		ug/L		83	70 - 130
1,2,3-Trichloropropane	25.0	20.0		ug/L		80	70 - 130
1,2,4-Trichlorobenzene	25.0	21.7		ug/L		87	70 - 130
1,2,4-Trimethylbenzene	25.0	23.6		ug/L		94	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	19.0		ug/L		76	70 - 130
1,2-Dichlorobenzene	25.0	22.4		ug/L		90	70 - 130
1,2-Dichloroethane	25.0	22.2		ug/L		89	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-323990/5
Matrix: Water
Analysis Batch: 323990

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	23.3		ug/L		93	70 - 130
1,3,5-Trimethylbenzene	25.0	23.4		ug/L		93	70 - 130
1,3-Dichlorobenzene	25.0	23.2		ug/L		93	70 - 130
1,3-Dichloropropane	25.0	21.0		ug/L		84	70 - 130
1,4-Dichlorobenzene	25.0	23.5		ug/L		94	70 - 130
1,4-Dioxane	500	358		ug/L		72	70 - 130
2,2-Dichloropropane	25.0	23.5		ug/L		94	70 - 130
2-Butanone (MEK)	125	118		ug/L		95	70 - 130
2-Chlorotoluene	25.0	22.4		ug/L		90	70 - 130
2-Hexanone	125	112		ug/L		89	70 - 130
4-Chlorotoluene	25.0	24.5		ug/L		98	70 - 130
4-Isopropyltoluene	25.0	23.5		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	125	101		ug/L		81	70 - 130
Acetone	125	136		ug/L		109	70 - 130
Benzene	25.0	22.9		ug/L		92	70 - 130
Bromobenzene	25.0	22.9		ug/L		92	70 - 130
Bromoform	25.0	22.5		ug/L		90	70 - 130
Bromomethane	25.0	23.9		ug/L		96	70 - 130
Carbon disulfide	25.0	21.3		ug/L		85	70 - 130
Carbon tetrachloride	25.0	23.4		ug/L		93	70 - 130
Chlorobenzene	25.0	22.6		ug/L		91	70 - 130
Chlorobromomethane	25.0	23.0		ug/L		92	70 - 130
Chlorodibromomethane	25.0	23.9		ug/L		96	70 - 130
Chloroethane	25.0	24.7		ug/L		99	70 - 130
Chloroform	25.0	22.4		ug/L		89	70 - 130
Chloromethane	25.0	22.9		ug/L		92	70 - 130
cis-1,2-Dichloroethene	25.0	22.8		ug/L		91	70 - 130
cis-1,3-Dichloropropene	25.0	24.4		ug/L		98	70 - 130
Dichlorobromomethane	25.0	24.2		ug/L		97	70 - 130
Dichlorodifluoromethane	25.0	22.7		ug/L		91	70 - 130
Ethyl ether	25.0	21.0		ug/L		84	70 - 130
Ethylbenzene	25.0	22.3		ug/L		89	70 - 130
Ethylene Dibromide	25.0	22.3		ug/L		89	70 - 130
Hexachlorobutadiene	25.0	23.5		ug/L		94	70 - 130
Isopropyl ether	25.0	22.8		ug/L		91	70 - 130
Isopropylbenzene	25.0	22.7		ug/L		91	70 - 130
Methyl tert-butyl ether	25.0	21.8		ug/L		87	70 - 130
Methylene Chloride	25.0	27.3		ug/L		109	70 - 130
m-Xylene & p-Xylene	25.0	22.3		ug/L		89	70 - 130
Naphthalene	25.0	20.1		ug/L		80	70 - 130
n-Butylbenzene	25.0	22.5		ug/L		90	70 - 130
N-Propylbenzene	25.0	22.8		ug/L		91	70 - 130
o-Xylene	25.0	23.1		ug/L		92	70 - 130
sec-Butylbenzene	25.0	23.1		ug/L		92	70 - 130
Styrene	25.0	23.2		ug/L		93	70 - 130
Tert-amyl methyl ether	25.0	22.5		ug/L		90	70 - 130
Tert-butyl ethyl ether	25.0	22.8		ug/L		91	70 - 130
tert-Butylbenzene	25.0	23.2		ug/L		93	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-323990/5
Matrix: Water
Analysis Batch: 323990

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	25.0	24.8		ug/L		99	70 - 130
Tetrahydrofuran	50.0	55.8		ug/L		112	70 - 130
Toluene	25.0	21.4		ug/L		86	70 - 130
trans-1,2-Dichloroethene	25.0	23.3		ug/L		93	70 - 130
trans-1,3-Dichloropropene	25.0	22.4		ug/L		89	70 - 130
Trichloroethene	25.0	23.8		ug/L		95	70 - 130
Trichlorofluoromethane	25.0	25.8		ug/L		103	70 - 130
Vinyl chloride	25.0	23.5		ug/L		94	70 - 130
Dibromomethane	25.0	22.6		ug/L		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*90*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 480-323990/6
Matrix: Water
Analysis Batch: 323990

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	23.5		ug/L		94	70 - 130	2	20
1,1,1-Trichloroethane	25.0	24.3		ug/L		97	70 - 130	5	20
1,1,2,2-Tetrachloroethane	25.0	21.6		ug/L		86	70 - 130	1	20
1,1,2-Trichloroethane	25.0	21.9		ug/L		88	70 - 130	1	20
1,1-Dichloroethane	25.0	24.3		ug/L		97	70 - 130	4	20
1,1-Dichloroethene	25.0	22.9		ug/L		92	70 - 130	7	20
1,1-Dichloropropene	25.0	23.0		ug/L		92	70 - 130	1	20
1,2,3-Trichlorobenzene	25.0	20.8		ug/L		83	70 - 130	1	20
1,2,3-Trichloropropane	25.0	20.1		ug/L		80	70 - 130	0	20
1,2,4-Trichlorobenzene	25.0	22.2		ug/L		89	70 - 130	3	20
1,2,4-Trimethylbenzene	25.0	24.0		ug/L		96	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	25.0	20.8		ug/L		83	70 - 130	9	20
1,2-Dichlorobenzene	25.0	23.4		ug/L		94	70 - 130	4	20
1,2-Dichloroethane	25.0	21.9		ug/L		87	70 - 130	2	20
1,2-Dichloropropane	25.0	23.4		ug/L		94	70 - 130	1	20
1,3,5-Trimethylbenzene	25.0	24.1		ug/L		96	70 - 130	3	20
1,3-Dichlorobenzene	25.0	23.7		ug/L		95	70 - 130	2	20
1,3-Dichloropropane	25.0	20.8		ug/L		83	70 - 130	1	20
1,4-Dichlorobenzene	25.0	24.1		ug/L		96	70 - 130	3	20
1,4-Dioxane	500	398		ug/L		80	70 - 130	10	20
2,2-Dichloropropane	25.0	24.0		ug/L		96	70 - 130	2	20
2-Butanone (MEK)	125	111		ug/L		89	70 - 130	6	20
2-Chlorotoluene	25.0	23.6		ug/L		94	70 - 130	5	20
2-Hexanone	125	109		ug/L		87	70 - 130	3	20
4-Chlorotoluene	25.0	25.3		ug/L		101	70 - 130	3	20
4-Isopropyltoluene	25.0	24.3		ug/L		97	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	125	101		ug/L		80	70 - 130	0	20
Acetone	125	136		ug/L		109	70 - 130	0	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-323990/6
Matrix: Water
Analysis Batch: 323990

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	25.0	23.9		ug/L		96	70 - 130	4	20
Bromobenzene	25.0	23.1		ug/L		92	70 - 130	1	20
Bromoform	25.0	23.0		ug/L		92	70 - 130	2	20
Bromomethane	25.0	24.7		ug/L		99	70 - 130	3	20
Carbon disulfide	25.0	23.0		ug/L		92	70 - 130	8	20
Carbon tetrachloride	25.0	25.0		ug/L		100	70 - 130	7	20
Chlorobenzene	25.0	23.3		ug/L		93	70 - 130	3	20
Chlorobromomethane	25.0	23.2		ug/L		93	70 - 130	1	20
Chlorodibromomethane	25.0	24.2		ug/L		97	70 - 130	1	20
Chloroethane	25.0	25.1		ug/L		100	70 - 130	1	20
Chloroform	25.0	23.6		ug/L		94	70 - 130	5	20
Chloromethane	25.0	24.1		ug/L		96	70 - 130	5	20
cis-1,2-Dichloroethene	25.0	24.3		ug/L		97	70 - 130	6	20
cis-1,3-Dichloropropene	25.0	24.8		ug/L		99	70 - 130	2	20
Dichlorobromomethane	25.0	24.3		ug/L		97	70 - 130	1	20
Dichlorodifluoromethane	25.0	24.8		ug/L		99	70 - 130	9	20
Ethyl ether	25.0	21.5		ug/L		86	70 - 130	2	20
Ethylbenzene	25.0	23.2		ug/L		93	70 - 130	4	20
Ethylene Dibromide	25.0	21.9		ug/L		88	70 - 130	2	20
Hexachlorobutadiene	25.0	23.3		ug/L		93	70 - 130	1	20
Isopropyl ether	25.0	23.0		ug/L		92	70 - 130	1	20
Isopropylbenzene	25.0	23.5		ug/L		94	70 - 130	3	20
Methyl tert-butyl ether	25.0	22.0		ug/L		88	70 - 130	1	20
Methylene Chloride	25.0	26.8		ug/L		107	70 - 130	2	20
m-Xylene & p-Xylene	25.0	23.3		ug/L		93	70 - 130	5	20
Naphthalene	25.0	20.2		ug/L		81	70 - 130	1	20
n-Butylbenzene	25.0	23.5		ug/L		94	70 - 130	4	20
N-Propylbenzene	25.0	23.6		ug/L		94	70 - 130	3	20
o-Xylene	25.0	23.1		ug/L		92	70 - 130	0	20
sec-Butylbenzene	25.0	24.1		ug/L		96	70 - 130	4	20
Styrene	25.0	24.3		ug/L		97	70 - 130	5	20
Tert-amyl methyl ether	25.0	23.1		ug/L		93	70 - 130	3	20
Tert-butyl ethyl ether	25.0	23.0		ug/L		92	70 - 130	1	20
tert-Butylbenzene	25.0	24.5		ug/L		98	70 - 130	6	20
Tetrachloroethene	25.0	25.5		ug/L		102	70 - 130	3	20
Tetrahydrofuran	50.0	53.2		ug/L		106	70 - 130	5	20
Toluene	25.0	22.8		ug/L		91	70 - 130	6	20
trans-1,2-Dichloroethene	25.0	23.9		ug/L		96	70 - 130	3	20
trans-1,3-Dichloropropene	25.0	22.2		ug/L		89	70 - 130	1	20
Trichloroethene	25.0	24.6		ug/L		98	70 - 130	3	20
Trichlorofluoromethane	25.0	27.9		ug/L		112	70 - 130	8	20
Vinyl chloride	25.0	24.2		ug/L		97	70 - 130	3	20
Dibromomethane	25.0	23.2		ug/L		93	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*89*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 480-324093/8
Matrix: Water
Analysis Batch: 324093

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/06/16 11:56	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/06/16 11:56	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/06/16 11:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/06/16 11:56	1
1,1-Dichloroethane	ND		1.0		ug/L			10/06/16 11:56	1
1,1-Dichloroethene	ND		1.0		ug/L			10/06/16 11:56	1
1,1-Dichloropropene	ND		1.0		ug/L			10/06/16 11:56	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/06/16 11:56	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/06/16 11:56	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/06/16 11:56	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/06/16 11:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/06/16 11:56	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/06/16 11:56	1
1,2-Dichloroethane	ND		1.0		ug/L			10/06/16 11:56	1
1,2-Dichloropropane	ND		1.0		ug/L			10/06/16 11:56	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/06/16 11:56	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/06/16 11:56	1
1,3-Dichloropropane	ND		1.0		ug/L			10/06/16 11:56	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/06/16 11:56	1
1,4-Dioxane	ND		50		ug/L			10/06/16 11:56	1
2,2-Dichloropropane	ND		1.0		ug/L			10/06/16 11:56	1
2-Butanone (MEK)	ND		10		ug/L			10/06/16 11:56	1
2-Chlorotoluene	ND		1.0		ug/L			10/06/16 11:56	1
2-Hexanone	ND		10		ug/L			10/06/16 11:56	1
4-Chlorotoluene	ND		1.0		ug/L			10/06/16 11:56	1
4-Isopropyltoluene	ND		1.0		ug/L			10/06/16 11:56	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/06/16 11:56	1
Acetone	ND		50		ug/L			10/06/16 11:56	1
Benzene	ND		1.0		ug/L			10/06/16 11:56	1
Bromobenzene	ND		1.0		ug/L			10/06/16 11:56	1
Bromoform	ND		1.0		ug/L			10/06/16 11:56	1
Bromomethane	ND		2.0		ug/L			10/06/16 11:56	1
Carbon disulfide	ND		10		ug/L			10/06/16 11:56	1
Carbon tetrachloride	ND		1.0		ug/L			10/06/16 11:56	1
Chlorobenzene	ND		1.0		ug/L			10/06/16 11:56	1
Chlorobromomethane	ND		1.0		ug/L			10/06/16 11:56	1
Chlorodibromomethane	ND		0.50		ug/L			10/06/16 11:56	1
Chloroethane	ND		2.0		ug/L			10/06/16 11:56	1
Chloroform	ND		1.0		ug/L			10/06/16 11:56	1
Chloromethane	ND		2.0		ug/L			10/06/16 11:56	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/06/16 11:56	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/06/16 11:56	1
Dichlorobromomethane	ND		0.50		ug/L			10/06/16 11:56	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/06/16 11:56	1
Ethyl ether	ND		1.0		ug/L			10/06/16 11:56	1
Ethylbenzene	ND		1.0		ug/L			10/06/16 11:56	1
Ethylene Dibromide	ND		1.0		ug/L			10/06/16 11:56	1
Hexachlorobutadiene	ND		0.40		ug/L			10/06/16 11:56	1
Isopropyl ether	ND		10		ug/L			10/06/16 11:56	1
Isopropylbenzene	ND		1.0		ug/L			10/06/16 11:56	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-324093/8
Matrix: Water
Analysis Batch: 324093

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			10/06/16 11:56	1
Methylene Chloride	ND		1.0		ug/L			10/06/16 11:56	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/06/16 11:56	1
Naphthalene	ND		5.0		ug/L			10/06/16 11:56	1
n-Butylbenzene	ND		1.0		ug/L			10/06/16 11:56	1
N-Propylbenzene	ND		1.0		ug/L			10/06/16 11:56	1
o-Xylene	ND		1.0		ug/L			10/06/16 11:56	1
sec-Butylbenzene	ND		1.0		ug/L			10/06/16 11:56	1
Styrene	ND		1.0		ug/L			10/06/16 11:56	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/06/16 11:56	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/06/16 11:56	1
tert-Butylbenzene	ND		1.0		ug/L			10/06/16 11:56	1
Tetrachloroethene	ND		1.0		ug/L			10/06/16 11:56	1
Tetrahydrofuran	ND		10		ug/L			10/06/16 11:56	1
Toluene	ND		1.0		ug/L			10/06/16 11:56	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/06/16 11:56	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/06/16 11:56	1
Trichloroethene	ND		1.0		ug/L			10/06/16 11:56	1
Trichlorofluoromethane	ND		1.0		ug/L			10/06/16 11:56	1
Vinyl chloride	ND		1.0		ug/L			10/06/16 11:56	1
Dibromomethane	ND		1.0		ug/L			10/06/16 11:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*70 - 130*		*10/06/16 11:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*		*10/06/16 11:56*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/06/16 11:56*	*1*

Lab Sample ID: LCS 480-324093/5
Matrix: Water
Analysis Batch: 324093

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.8		ug/L		99	70 - 130
1,1,1-Trichloroethane	25.0	26.4		ug/L		105	70 - 130
1,1,2,2-Tetrachloroethane	25.0	21.7		ug/L		87	70 - 130
1,1,2-Trichloroethane	25.0	22.2		ug/L		89	70 - 130
1,1-Dichloroethane	25.0	26.2		ug/L		105	70 - 130
1,1-Dichloroethene	25.0	24.6		ug/L		98	70 - 130
1,1-Dichloropropene	25.0	25.3		ug/L		101	70 - 130
1,2,3-Trichlorobenzene	25.0	21.5		ug/L		86	70 - 130
1,2,3-Trichloropropane	25.0	21.3		ug/L		85	70 - 130
1,2,4-Trichlorobenzene	25.0	23.7		ug/L		95	70 - 130
1,2,4-Trimethylbenzene	25.0	24.9		ug/L		100	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	20.0		ug/L		80	70 - 130
1,2-Dichlorobenzene	25.0	23.7		ug/L		95	70 - 130
1,2-Dichloroethane	25.0	23.1		ug/L		93	70 - 130
1,2-Dichloropropane	25.0	25.9		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	25.0	25.4		ug/L		102	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-324093/5
Matrix: Water
Analysis Batch: 324093

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130
1,3-Dichloropropane	25.0	21.7		ug/L		87	70 - 130
1,4-Dichlorobenzene	25.0	24.7		ug/L		99	70 - 130
1,4-Dioxane	500	338	*	ug/L		68	70 - 130
2,2-Dichloropropane	25.0	25.6		ug/L		102	70 - 130
2-Butanone (MEK)	125	114		ug/L		91	70 - 130
2-Chlorotoluene	25.0	24.1		ug/L		96	70 - 130
2-Hexanone	125	110		ug/L		88	70 - 130
4-Chlorotoluene	25.0	26.4		ug/L		106	70 - 130
4-Isopropyltoluene	25.0	25.5		ug/L		102	70 - 130
4-Methyl-2-pentanone (MIBK)	125	103		ug/L		82	70 - 130
Acetone	125	117		ug/L		93	70 - 130
Benzene	25.0	25.3		ug/L		101	70 - 130
Bromobenzene	25.0	24.8		ug/L		99	70 - 130
Bromoform	25.0	23.1		ug/L		92	70 - 130
Bromomethane	25.0	26.1		ug/L		104	70 - 130
Carbon disulfide	25.0	25.9		ug/L		104	70 - 130
Carbon tetrachloride	25.0	26.4		ug/L		106	70 - 130
Chlorobenzene	25.0	24.2		ug/L		97	70 - 130
Chlorobromomethane	25.0	25.0		ug/L		100	70 - 130
Chlorodibromomethane	25.0	24.7		ug/L		99	70 - 130
Chloroethane	25.0	27.8		ug/L		111	70 - 130
Chloroform	25.0	24.6		ug/L		98	70 - 130
Chloromethane	25.0	26.9		ug/L		108	70 - 130
cis-1,2-Dichloroethene	25.0	25.9		ug/L		103	70 - 130
cis-1,3-Dichloropropene	25.0	26.5		ug/L		106	70 - 130
Dichlorobromomethane	25.0	25.6		ug/L		102	70 - 130
Dichlorodifluoromethane	25.0	27.6		ug/L		110	70 - 130
Ethyl ether	25.0	23.9		ug/L		96	70 - 130
Ethylbenzene	25.0	24.0		ug/L		96	70 - 130
Ethylene Dibromide	25.0	23.7		ug/L		95	70 - 130
Hexachlorobutadiene	25.0	24.9		ug/L		100	70 - 130
Isopropyl ether	25.0	24.4		ug/L		98	70 - 130
Isopropylbenzene	25.0	24.8		ug/L		99	70 - 130
Methyl tert-butyl ether	25.0	23.3		ug/L		93	70 - 130
Methylene Chloride	25.0	27.4		ug/L		109	70 - 130
m-Xylene & p-Xylene	25.0	24.2		ug/L		97	70 - 130
Naphthalene	25.0	20.5		ug/L		82	70 - 130
n-Butylbenzene	25.0	24.5		ug/L		98	70 - 130
N-Propylbenzene	25.0	25.0		ug/L		100	70 - 130
o-Xylene	25.0	24.6		ug/L		98	70 - 130
sec-Butylbenzene	25.0	24.5		ug/L		98	70 - 130
Styrene	25.0	25.1		ug/L		100	70 - 130
Tert-amyl methyl ether	25.0	23.7		ug/L		95	70 - 130
Tert-butyl ethyl ether	25.0	24.0		ug/L		96	70 - 130
tert-Butylbenzene	25.0	24.7		ug/L		99	70 - 130
Tetrachloroethene	25.0	26.3		ug/L		105	70 - 130
Tetrahydrofuran	50.0	55.5		ug/L		111	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-324093/5
Matrix: Water
Analysis Batch: 324093

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	25.0	23.7		ug/L		95	70 - 130
trans-1,2-Dichloroethene	25.0	26.2		ug/L		105	70 - 130
trans-1,3-Dichloropropene	25.0	23.6		ug/L		94	70 - 130
Trichloroethene	25.0	25.9		ug/L		104	70 - 130
Trichlorofluoromethane	25.0	29.1		ug/L		116	70 - 130
Vinyl chloride	25.0	26.9		ug/L		108	70 - 130
Dibromomethane	25.0	23.5		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*91*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 480-324093/6
Matrix: Water
Analysis Batch: 324093

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.8		ug/L		99	70 - 130	0	20
1,1,1-Trichloroethane	25.0	25.5		ug/L		102	70 - 130	3	20
1,1,2,2-Tetrachloroethane	25.0	20.9		ug/L		84	70 - 130	4	20
1,1,2-Trichloroethane	25.0	22.8		ug/L		91	70 - 130	3	20
1,1-Dichloroethane	25.0	24.4		ug/L		98	70 - 130	7	20
1,1-Dichloroethene	25.0	24.2		ug/L		97	70 - 130	2	20
1,1-Dichloropropene	25.0	24.2		ug/L		97	70 - 130	4	20
1,2,3-Trichlorobenzene	25.0	21.8		ug/L		87	70 - 130	1	20
1,2,3-Trichloropropane	25.0	19.6		ug/L		78	70 - 130	8	20
1,2,4-Trichlorobenzene	25.0	22.9		ug/L		92	70 - 130	3	20
1,2,4-Trimethylbenzene	25.0	23.8		ug/L		95	70 - 130	5	20
1,2-Dibromo-3-Chloropropane	25.0	20.4		ug/L		82	70 - 130	2	20
1,2-Dichlorobenzene	25.0	22.8		ug/L		91	70 - 130	4	20
1,2-Dichloroethane	25.0	22.8		ug/L		91	70 - 130	2	20
1,2-Dichloropropane	25.0	24.2		ug/L		97	70 - 130	7	20
1,3,5-Trimethylbenzene	25.0	24.5		ug/L		98	70 - 130	4	20
1,3-Dichlorobenzene	25.0	23.5		ug/L		94	70 - 130	4	20
1,3-Dichloropropane	25.0	21.0		ug/L		84	70 - 130	3	20
1,4-Dichlorobenzene	25.0	23.7		ug/L		95	70 - 130	4	20
1,4-Dioxane	500	367		ug/L		73	70 - 130	8	20
2,2-Dichloropropane	25.0	24.7		ug/L		99	70 - 130	4	20
2-Butanone (MEK)	125	112		ug/L		90	70 - 130	1	20
2-Chlorotoluene	25.0	23.8		ug/L		95	70 - 130	1	20
2-Hexanone	125	108		ug/L		86	70 - 130	2	20
4-Chlorotoluene	25.0	25.3		ug/L		101	70 - 130	4	20
4-Isopropyltoluene	25.0	24.4		ug/L		97	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	125	103		ug/L		83	70 - 130	1	20
Acetone	125	114		ug/L		91	70 - 130	3	20
Benzene	25.0	24.3		ug/L		97	70 - 130	4	20
Bromobenzene	25.0	24.0		ug/L		96	70 - 130	3	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-324093/6
Matrix: Water
Analysis Batch: 324093

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform			25.0	22.9		ug/L		92	70 - 130	1	20
Bromomethane			25.0	25.1		ug/L		100	70 - 130	4	20
Carbon disulfide			25.0	25.0		ug/L		100	70 - 130	3	20
Carbon tetrachloride			25.0	25.3		ug/L		101	70 - 130	4	20
Chlorobenzene			25.0	23.6		ug/L		94	70 - 130	3	20
Chlorobromomethane			25.0	24.7		ug/L		99	70 - 130	1	20
Chlorodibromomethane			25.0	25.0		ug/L		100	70 - 130	1	20
Chloroethane			25.0	26.4		ug/L		106	70 - 130	5	20
Chloroform			25.0	23.9		ug/L		95	70 - 130	3	20
Chloromethane			25.0	25.0		ug/L		100	70 - 130	7	20
cis-1,2-Dichloroethene			25.0	25.0		ug/L		100	70 - 130	3	20
cis-1,3-Dichloropropene			25.0	25.8		ug/L		103	70 - 130	3	20
Dichlorobromomethane			25.0	25.4		ug/L		102	70 - 130	1	20
Dichlorodifluoromethane			25.0	26.0		ug/L		104	70 - 130	6	20
Ethyl ether			25.0	22.6		ug/L		90	70 - 130	6	20
Ethylbenzene			25.0	23.6		ug/L		94	70 - 130	2	20
Ethylene Dibromide			25.0	22.3		ug/L		89	70 - 130	6	20
Hexachlorobutadiene			25.0	24.6		ug/L		98	70 - 130	1	20
Isopropyl ether			25.0	23.8		ug/L		95	70 - 130	3	20
Isopropylbenzene			25.0	23.2		ug/L		93	70 - 130	7	20
Methyl tert-butyl ether			25.0	22.6		ug/L		91	70 - 130	3	20
Methylene Chloride			25.0	26.3		ug/L		105	70 - 130	4	20
m-Xylene & p-Xylene			25.0	24.0		ug/L		96	70 - 130	1	20
Naphthalene			25.0	20.5		ug/L		82	70 - 130	0	20
n-Butylbenzene			25.0	23.7		ug/L		95	70 - 130	3	20
N-Propylbenzene			25.0	23.9		ug/L		96	70 - 130	4	20
o-Xylene			25.0	23.8		ug/L		95	70 - 130	3	20
sec-Butylbenzene			25.0	23.6		ug/L		94	70 - 130	4	20
Styrene			25.0	24.8		ug/L		99	70 - 130	1	20
Tert-amyl methyl ether			25.0	23.4		ug/L		93	70 - 130	1	20
Tert-butyl ethyl ether			25.0	23.8		ug/L		95	70 - 130	1	20
tert-Butylbenzene			25.0	23.7		ug/L		95	70 - 130	4	20
Tetrachloroethene			25.0	25.9		ug/L		104	70 - 130	1	20
Tetrahydrofuran			50.0	56.5		ug/L		113	70 - 130	2	20
Toluene			25.0	23.1		ug/L		92	70 - 130	3	20
trans-1,2-Dichloroethene			25.0	24.9		ug/L		100	70 - 130	5	20
trans-1,3-Dichloropropene			25.0	22.9		ug/L		92	70 - 130	3	20
Trichloroethene			25.0	25.3		ug/L		101	70 - 130	3	20
Trichlorofluoromethane			25.0	27.6		ug/L		110	70 - 130	5	20
Vinyl chloride			25.0	25.4		ug/L		102	70 - 130	6	20
Dibromomethane			25.0	23.4		ug/L		93	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*92*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Lab Sample ID: MB 200-109914/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 109928 — **Prep Batch: 109914**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		10/07/16 08:57	10/07/16 12:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*103*		*70 - 130*	*10/07/16 08:57*	*10/07/16 12:12*	*1*

Lab Sample ID: LCS 200-109914/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 109928 — **Prep Batch: 109914**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	2.00	1.79		ug/L		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*91*		*70 - 130*

Lab Sample ID: 480-107013-4 MS — **Client Sample ID: MW-268M-20161004**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 109981 — **Prep Batch: 109914**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	6.7	F1	2.00	9.03		ug/L		118	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: 480-107013-4 MSD — **Client Sample ID: MW-268M-20161004**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 109928 — **Prep Batch: 109914**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	5.7	F1	2.00	6.80	F1	ug/L		55	70 - 130	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*72*		*70 - 130*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-324002/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324537 — **Prep Batch: 324002**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050		mg/L		10/06/16 09:31	10/07/16 16:16	1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-324002/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324537 — **Prep Batch: 324002**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.4		mg/L		104	80 - 120

Lab Sample ID: LCSD 480-324002/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324537 — **Prep Batch: 324002**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	10.0	10.3		mg/L		103	80 - 120	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-324036/30 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324036

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			10/06/16 10:56	1
Sulfate	ND		2.0		mg/L			10/06/16 10:56	1

Lab Sample ID: MB 480-324036/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324036

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			10/06/16 07:25	1
Sulfate	ND		2.0		mg/L			10/06/16 07:25	1

Lab Sample ID: MB 480-324036/56 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324036

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			10/06/16 14:28	1
Sulfate	ND		2.0		mg/L			10/06/16 14:28	1

Lab Sample ID: LCS 480-324036/29 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324036

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.0		mg/L		98	90 - 110
Sulfate	50.0	48.1		mg/L		96	90 - 110

Lab Sample ID: LCS 480-324036/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324036

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	48.3		mg/L		97	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 480-324036/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324036

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	50.0	47.6		mg/L		95	90 - 110

Lab Sample ID: LCS 480-324036/55 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324036

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.4		mg/L		99	90 - 110
Sulfate	50.0	48.5		mg/L		97	90 - 110

Lab Sample ID: MB 480-324714/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324714

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			10/10/16 12:10	1
Sulfate	ND		2.0		mg/L			10/10/16 12:10	1

Lab Sample ID: LCS 480-324714/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324714

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.1		mg/L		100	90 - 110
Sulfate	50.0	50.3		mg/L		101	90 - 110

Lab Sample ID: 480-107013-4 MS — **Client Sample ID: MW-268M-20161004**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324714

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	38	F1	2500	3880	F1	mg/L		154	81 - 120
Sulfate	ND	F1	2500	3770	F1	mg/L		151	80 - 120

Lab Sample ID: 480-107013-4 MSD — **Client Sample ID: MW-268M-20161004**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324714

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	38	F1	2500	3690	F1	mg/L		146	81 - 120	5	20
Sulfate	ND	F1	2500	3690	F1	mg/L		147	80 - 120	2	20

Lab Sample ID: MB 480-324850/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			10/11/16 10:32	1
Sulfate	ND		2.0		mg/L			10/11/16 10:32	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 480-324850/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.4		mg/L		101	90 - 110
Sulfate	50.0	50.1		mg/L		100	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-323953/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323984 — **Prep Batch: 323953**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L		10/05/16 13:21	10/05/16 15:17	1

Lab Sample ID: LCS 480-323953/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323984 — **Prep Batch: 323953**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	0.977		mg/L		98	90 - 110

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-324190/27 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			10/06/16 04:37	1
TOC Result 2	ND		1.0		mg/L			10/06/16 04:37	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/06/16 04:37	1

Lab Sample ID: LCS 480-324190/28 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324190

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	56.5		mg/L		94	90 - 110
TOC Result 2	60.0	57.5		mg/L		96	90 - 110
Total Organic Carbon - Duplicates	60.0	57.0		mg/L		95	90 - 110

Lab Sample ID: 480-107013-7 MS — **Client Sample ID: REW-4-20161004**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324190

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	2.3		20.0	20.2		mg/L		90	54 - 131
TOC Result 2	2.4		20.0	20.7		mg/L		92	54 - 131
Total Organic Carbon - Duplicates	2.3		20.0	20.5		mg/L		91	54 - 131

Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 480-107013-6 DU — **Client Sample ID: REW-1-20161004**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324190

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
TOC Result 1	1.1		1.08		mg/L		0.9	20
TOC Result 2	1.2		1.24		mg/L		3	20
Total Organic Carbon - Duplicates	1.1		1.16		mg/L		1	20

Lab Sample ID: MB 480-324587/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324587

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			10/07/16 17:53	1
TOC Result 2	ND		1.0		mg/L			10/07/16 17:53	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/07/16 17:53	1

Lab Sample ID: MB 480-324587/52 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324587

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			10/08/16 16:20	1
TOC Result 2	ND		1.0		mg/L			10/08/16 16:20	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/08/16 16:20	1

Lab Sample ID: LCS 480-324587/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324587

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	57.8		mg/L		96	90 - 110
TOC Result 2	60.0	60.9		mg/L		101	90 - 110
Total Organic Carbon - Duplicates	60.0	59.3		mg/L		99	90 - 110

Lab Sample ID: LCS 480-324587/53 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324587

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	55.6		mg/L		93	90 - 110
TOC Result 2	60.0	59.2		mg/L		99	90 - 110
Total Organic Carbon - Duplicates	60.0	57.4		mg/L		96	90 - 110

Lab Sample ID: MB 480-325086/28 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 325086

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			10/11/16 18:37	1
TOC Result 2	ND		1.0		mg/L			10/11/16 18:37	1

Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: MB 480-325086/28 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 325086

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/11/16 18:37	1

Lab Sample ID: LCS 480-325086/29 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 325086

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	61.0		mg/L		102	90 - 110
TOC Result 2	60.0	60.7		mg/L		101	90 - 110
Total Organic Carbon - Duplicates	60.0	60.8		mg/L		101	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-324328/30 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324328

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0		mg/L			10/06/16 15:01	1

Lab Sample ID: MB 480-324328/54 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324328

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0		mg/L			10/06/16 17:27	1

Lab Sample ID: MB 480-324328/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324328

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0		mg/L			10/06/16 12:36	1

Lab Sample ID: LCS 480-324328/31 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324328

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	98.6		mg/L		99	90 - 110

Lab Sample ID: LCS 480-324328/55 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324328

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	99.6		mg/L		100	90 - 110

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 480-324328/8 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324328

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	99.7		mg/L		100	90 - 110

Lab Sample ID: MB 480-325246/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 325246

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0		mg/L			10/12/16 14:55	1

Lab Sample ID: LCS 480-325246/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 325246

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	100		mg/L		100	90 - 110

Lab Sample ID: 480-107013-4 MS — **Client Sample ID: MW-268M-20161004**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 325246

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	11000		1000	21300	4	mg/L		1000	60 - 140

Lab Sample ID: 480-107013-4 DU — **Client Sample ID: MW-268M-20161004**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 325246

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity, Total	11000		11500		mg/L		2	20

Method: SM 4500 P E - Orthophosphate

Lab Sample ID: MB 480-323987/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323987

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ortho-Phosphate	ND		0.020		mg/L			10/05/16 14:30	1

Lab Sample ID: LCS 480-323987/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323987

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
ortho-Phosphate	0.200	0.200		mg/L		100	90 - 110

Method: SM 4500 P E - Orthophosphate (Continued)

Lab Sample ID: 480-107013-6 MS — **Client Sample ID: REW-1-20161004**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323987

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
ortho-Phosphate	0.19		1.00	1.08		mg/L		89	49 - 138		

Lab Sample ID: 480-107013-6 MSD — **Client Sample ID: REW-1-20161004**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323987

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
ortho-Phosphate	0.19		1.00	1.11		mg/L		92	49 - 138	3	20

Lab Sample ID: 480-107013-8 MS — **Client Sample ID: REW-5-20161004**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323987

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
ortho-Phosphate	0.12		1.00	1.05		mg/L		93	49 - 138		

Lab Sample ID: 480-107013-8 MSD — **Client Sample ID: REW-5-20161004**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 323987

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
ortho-Phosphate	0.12		1.00	1.01		mg/L		89	49 - 138	4	20

QC Association Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107013-1

GC/MS VOA

Analysis Batch: 323990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-1	MW-267S-20161004	Total/NA	Water	8260C	
480-107013-2	MW-267M-20161004	Total/NA	Water	8260C	
480-107013-3	MW-268S-20161004	Total/NA	Water	8260C	
480-107013-4	MW-268M-20161004	Total/NA	Water	8260C	
480-107013-5	MW-268D-20161004	Total/NA	Water	8260C	
480-107013-6	REW-1-20161004	Total/NA	Water	8260C	
480-107013-8	REW-5-20161004	Total/NA	Water	8260C	
480-107013-10	TRIP BLANKS	Total/NA	Water	8260C	
MB 480-323990/8	Method Blank	Total/NA	Water	8260C	
LCS 480-323990/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-323990/6	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 324093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-7	REW-4-20161004	Total/NA	Water	8260C	
480-107013-9	DUP2-20161004	Total/NA	Water	8260C	
MB 480-324093/8	Method Blank	Total/NA	Water	8260C	
LCS 480-324093/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-324093/6	Lab Control Sample Dup	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 109914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-1	MW-267S-20161004	Total/NA	Water	3535A	
480-107013-2	MW-267M-20161004	Total/NA	Water	3535A	
480-107013-3	MW-268S-20161004	Total/NA	Water	3535A	
480-107013-4	MW-268M-20161004	Total/NA	Water	3535A	
MB 200-109914/1-A	Method Blank	Total/NA	Water	3535A	
LCS 200-109914/2-A	Lab Control Sample	Total/NA	Water	3535A	
480-107013-4 MS	MW-268M-20161004	Total/NA	Water	3535A	
480-107013-4 MSD	MW-268M-20161004	Total/NA	Water	3535A	

Analysis Batch: 109928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-3	MW-268S-20161004	Total/NA	Water	522	109914
MB 200-109914/1-A	Method Blank	Total/NA	Water	522	109914
LCS 200-109914/2-A	Lab Control Sample	Total/NA	Water	522	109914
480-107013-4 MSD	MW-268M-20161004	Total/NA	Water	522	109914

Analysis Batch: 109981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-1	MW-267S-20161004	Total/NA	Water	522	109914
480-107013-2	MW-267M-20161004	Total/NA	Water	522	109914
480-107013-4	MW-268M-20161004	Total/NA	Water	522	109914
480-107013-4 MS	MW-268M-20161004	Total/NA	Water	522	109914

QC Association Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107013-1

Metals

Prep Batch: 324002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-1	MW-267S-20161004	Total/NA	Water	3005A	
480-107013-3	MW-268S-20161004	Total/NA	Water	3005A	
480-107013-4	MW-268M-20161004	Total/NA	Water	3005A	
480-107013-6	REW-1-20161004	Total/NA	Water	3005A	
480-107013-7	REW-4-20161004	Total/NA	Water	3005A	
480-107013-8	REW-5-20161004	Total/NA	Water	3005A	
MB 480-324002/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-324002/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-324002/3-A	Lab Control Sample Dup	Total/NA	Water	3005A	

Analysis Batch: 324537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-1	MW-267S-20161004	Total/NA	Water	6010	324002
480-107013-3	MW-268S-20161004	Total/NA	Water	6010	324002
480-107013-4	MW-268M-20161004	Total/NA	Water	6010	324002
480-107013-6	REW-1-20161004	Total/NA	Water	6010	324002
480-107013-7	REW-4-20161004	Total/NA	Water	6010	324002
480-107013-8	REW-5-20161004	Total/NA	Water	6010	324002
MB 480-324002/1-A	Method Blank	Total/NA	Water	6010	324002
LCS 480-324002/2-A	Lab Control Sample	Total/NA	Water	6010	324002
LCSD 480-324002/3-A	Lab Control Sample Dup	Total/NA	Water	6010	324002

General Chemistry

Prep Batch: 323953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-1	MW-267S-20161004	Total/NA	Water	Distill/Ammonia	
480-107013-3	MW-268S-20161004	Total/NA	Water	Distill/Ammonia	
480-107013-4	MW-268M-20161004	Total/NA	Water	Distill/Ammonia	
480-107013-6	REW-1-20161004	Total/NA	Water	Distill/Ammonia	
480-107013-7	REW-4-20161004	Total/NA	Water	Distill/Ammonia	
480-107013-8	REW-5-20161004	Total/NA	Water	Distill/Ammonia	
MB 480-323953/2-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 480-323953/1-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 323984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-1	MW-267S-20161004	Total/NA	Water	350.1	323953
480-107013-3	MW-268S-20161004	Total/NA	Water	350.1	323953
480-107013-4	MW-268M-20161004	Total/NA	Water	350.1	323953
480-107013-6	REW-1-20161004	Total/NA	Water	350.1	323953
480-107013-7	REW-4-20161004	Total/NA	Water	350.1	323953
480-107013-8	REW-5-20161004	Total/NA	Water	350.1	323953
MB 480-323953/2-A	Method Blank	Total/NA	Water	350.1	323953
LCS 480-323953/1-A	Lab Control Sample	Total/NA	Water	350.1	323953

Analysis Batch: 323987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-1	MW-267S-20161004	Total/NA	Water	SM 4500 P E	
480-107013-3	MW-268S-20161004	Total/NA	Water	SM 4500 P E	

General Chemistry (Continued)

Analysis Batch: 323987 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-4	MW-268M-20161004	Total/NA	Water	SM 4500 P E	
480-107013-6	REW-1-20161004	Total/NA	Water	SM 4500 P E	
480-107013-7	REW-4-20161004	Total/NA	Water	SM 4500 P E	
480-107013-8	REW-5-20161004	Total/NA	Water	SM 4500 P E	
MB 480-323987/3	Method Blank	Total/NA	Water	SM 4500 P E	
LCS 480-323987/4	Lab Control Sample	Total/NA	Water	SM 4500 P E	
480-107013-6 MS	REW-1-20161004	Total/NA	Water	SM 4500 P E	
480-107013-6 MSD	REW-1-20161004	Total/NA	Water	SM 4500 P E	
480-107013-8 MS	REW-5-20161004	Total/NA	Water	SM 4500 P E	
480-107013-8 MSD	REW-5-20161004	Total/NA	Water	SM 4500 P E	

Analysis Batch: 324035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-1	MW-267S-20161004	Total/NA	Water	353.2	
480-107013-3	MW-268S-20161004	Total/NA	Water	353.2	
480-107013-4	MW-268M-20161004	Total/NA	Water	353.2	
480-107013-6	REW-1-20161004	Total/NA	Water	353.2	
480-107013-7	REW-4-20161004	Total/NA	Water	353.2	
480-107013-8	REW-5-20161004	Total/NA	Water	353.2	

Analysis Batch: 324036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-1	MW-267S-20161004	Total/NA	Water	300.0	
480-107013-6	REW-1-20161004	Total/NA	Water	300.0	
480-107013-7	REW-4-20161004	Total/NA	Water	300.0	
480-107013-8	REW-5-20161004	Total/NA	Water	300.0	
MB 480-324036/30	Method Blank	Total/NA	Water	300.0	
MB 480-324036/4	Method Blank	Total/NA	Water	300.0	
MB 480-324036/56	Method Blank	Total/NA	Water	300.0	
LCS 480-324036/29	Lab Control Sample	Total/NA	Water	300.0	
LCS 480-324036/3	Lab Control Sample	Total/NA	Water	300.0	
LCS 480-324036/55	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 324190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-6	REW-1-20161004	Total/NA	Water	9060A	
480-107013-7	REW-4-20161004	Total/NA	Water	9060A	
480-107013-8	REW-5-20161004	Total/NA	Water	9060A	
MB 480-324190/27	Method Blank	Total/NA	Water	9060A	
LCS 480-324190/28	Lab Control Sample	Total/NA	Water	9060A	
480-107013-7 MS	REW-4-20161004	Total/NA	Water	9060A	
480-107013-6 DU	REW-1-20161004	Total/NA	Water	9060A	

Analysis Batch: 324328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-1	MW-267S-20161004	Total/NA	Water	SM 2320B	
480-107013-6	REW-1-20161004	Total/NA	Water	SM 2320B	
480-107013-7	REW-4-20161004	Total/NA	Water	SM 2320B	
480-107013-8	REW-5-20161004	Total/NA	Water	SM 2320B	
MB 480-324328/30	Method Blank	Total/NA	Water	SM 2320B	
MB 480-324328/54	Method Blank	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 324328 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-324328/7	Method Blank	Total/NA	Water	SM 2320B	
LCS 480-324328/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 480-324328/55	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 480-324328/8	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 324587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-3	MW-268S-20161004	Total/NA	Water	9060A	
480-107013-4	MW-268M-20161004	Total/NA	Water	9060A	
MB 480-324587/4	Method Blank	Total/NA	Water	9060A	
MB 480-324587/52	Method Blank	Total/NA	Water	9060A	
LCS 480-324587/5	Lab Control Sample	Total/NA	Water	9060A	
LCS 480-324587/53	Lab Control Sample	Total/NA	Water	9060A	

Analysis Batch: 324714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-3	MW-268S-20161004	Total/NA	Water	300.0	
480-107013-4	MW-268M-20161004	Total/NA	Water	300.0	
MB 480-324714/4	Method Blank	Total/NA	Water	300.0	
LCS 480-324714/3	Lab Control Sample	Total/NA	Water	300.0	
480-107013-4 MS	MW-268M-20161004	Total/NA	Water	300.0	
480-107013-4 MSD	MW-268M-20161004	Total/NA	Water	300.0	

Analysis Batch: 324850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-3	MW-268S-20161004	Total/NA	Water	300.0	
MB 480-324850/4	Method Blank	Total/NA	Water	300.0	
LCS 480-324850/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 325086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-1	MW-267S-20161004	Total/NA	Water	9060A	
MB 480-325086/28	Method Blank	Total/NA	Water	9060A	
LCS 480-325086/29	Lab Control Sample	Total/NA	Water	9060A	

Analysis Batch: 325246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107013-3	MW-268S-20161004	Total/NA	Water	SM 2320B	
480-107013-4	MW-268M-20161004	Total/NA	Water	SM 2320B	
MB 480-325246/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 480-325246/4	Lab Control Sample	Total/NA	Water	SM 2320B	
480-107013-4 MS	MW-268M-20161004	Total/NA	Water	SM 2320B	
480-107013-4 DU	MW-268M-20161004	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107013-1

Client Sample ID: MW-267S-20161004 — Lab Sample ID: 480-107013-1

Date Collected: 10/04/16 13:30
Date Received: 10/05/16 01:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	323990	10/06/16 02:25	JWG	TAL BUF
Total/NA	Prep	3535A			109914	10/07/16 08:57	ERJ	TAL BUR
Total/NA	Analysis	522		1	109981	10/10/16 11:07	NJS	TAL BUR
Total/NA	Prep	3005A			324002	10/06/16 09:31	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324537	10/07/16 16:26	TRB	TAL BUF
Total/NA	Analysis	300.0		10	324036	10/06/16 12:42	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			323953	10/05/16 13:21	KRT	TAL BUF
Total/NA	Analysis	350.1		1	323984	10/05/16 15:26	KRT	TAL BUF
Total/NA	Analysis	353.2		1	324035	10/05/16 16:50	ELR	TAL BUF
Total/NA	Analysis	9060A		40	325086	10/12/16 00:13	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324328	10/06/16 18:25	KMF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	323987	10/05/16 14:30	MDL	TAL BUF

Client Sample ID: MW-267M-20161004 — Lab Sample ID: 480-107013-2

Date Collected: 10/04/16 14:10
Date Received: 10/05/16 01:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	323990	10/06/16 02:50	JWG	TAL BUF
Total/NA	Prep	3535A			109914	10/07/16 08:57	ERJ	TAL BUR
Total/NA	Analysis	522		1	109981	10/10/16 11:26	NJS	TAL BUR

Client Sample ID: MW-268S-20161004 — Lab Sample ID: 480-107013-3

Date Collected: 10/04/16 11:35
Date Received: 10/05/16 01:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	323990	10/06/16 03:14	JWG	TAL BUF
Total/NA	Prep	3535A			109914	10/07/16 08:57	ERJ	TAL BUR
Total/NA	Analysis	522		1	109928	10/07/16 15:59	P1M	TAL BUR
Total/NA	Prep	3005A			324002	10/06/16 09:31	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324537	10/07/16 16:30	TRB	TAL BUF
Total/NA	Analysis	300.0		50	324714	10/10/16 12:50	CAV	TAL BUF
Total/NA	Analysis	300.0		5	324850	10/11/16 10:57	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			323953	10/05/16 13:21	KRT	TAL BUF
Total/NA	Analysis	350.1		1	323984	10/05/16 15:27	KRT	TAL BUF
Total/NA	Analysis	353.2		1	324035	10/05/16 16:52	ELR	TAL BUF
Total/NA	Analysis	9060A		1000	324587	10/07/16 23:31	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	325246	10/12/16 14:55	KMF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	323987	10/05/16 14:30	MDL	TAL BUF

Client Sample ID: MW-268M-20161004 — Lab Sample ID: 480-107013-4

Date Collected: 10/04/16 12:20 — **Matrix: Water**
Date Received: 10/05/16 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	323990	10/06/16 03:39	JWG	TAL BUF
Total/NA	Prep	3535A			109914	10/07/16 08:57	ERJ	TAL BUR
Total/NA	Analysis	522		1	109981	10/10/16 11:44	NJS	TAL BUR
Total/NA	Prep	3005A			324002	10/06/16 09:31	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324537	10/07/16 16:33	TRB	TAL BUF
Total/NA	Analysis	300.0		50	324714	10/10/16 12:59	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			323953	10/05/16 13:21	KRT	TAL BUF
Total/NA	Analysis	350.1		1	323984	10/05/16 15:28	KRT	TAL BUF
Total/NA	Analysis	353.2		1	324035	10/05/16 16:53	ELR	TAL BUF
Total/NA	Analysis	9060A		500	324587	10/07/16 23:59	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	325246	10/12/16 14:55	KMF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	323987	10/05/16 14:30	MDL	TAL BUF

Client Sample ID: MW-268D-20161004 — Lab Sample ID: 480-107013-5

Date Collected: 10/04/16 13:00 — **Matrix: Water**
Date Received: 10/05/16 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	323990	10/06/16 04:03	JWG	TAL BUF

Client Sample ID: REW-1-20161004 — Lab Sample ID: 480-107013-6

Date Collected: 10/04/16 08:35 — **Matrix: Water**
Date Received: 10/05/16 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	323990	10/06/16 04:27	JWG	TAL BUF
Total/NA	Prep	3005A			324002	10/06/16 09:31	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324537	10/07/16 16:37	TRB	TAL BUF
Total/NA	Analysis	300.0		5	324036	10/06/16 13:06	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			323953	10/05/16 13:21	KRT	TAL BUF
Total/NA	Analysis	350.1		1	323984	10/05/16 15:29	KRT	TAL BUF
Total/NA	Analysis	353.2		1	324035	10/05/16 16:54	ELR	TAL BUF
Total/NA	Analysis	9060A		1	324190	10/06/16 10:17	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324328	10/06/16 18:32	KMF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	323987	10/05/16 14:30	MDL	TAL BUF

Client Sample ID: REW-4-20161004 — Lab Sample ID: 480-107013-7

Date Collected: 10/04/16 09:20 — **Matrix: Water**
Date Received: 10/05/16 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324093	10/06/16 14:45	RRS	TAL BUF

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107013-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			324002	10/06/16 09:31	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324537	10/07/16 16:51	TRB	TAL BUF
Total/NA	Analysis	300.0		5	324036	10/06/16 13:15	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			323953	10/05/16 13:21	KRT	TAL BUF
Total/NA	Analysis	350.1		5	323984	10/05/16 15:38	KRT	TAL BUF
Total/NA	Analysis	353.2		1	324035	10/05/16 16:55	ELR	TAL BUF
Total/NA	Analysis	9060A		1	324190	10/06/16 11:13	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324328	10/06/16 18:39	KMF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	323987	10/05/16 14:30	MDL	TAL BUF

Client Sample ID: REW-5-20161004 — Lab Sample ID: 480-107013-8

Date Collected: 10/04/16 10:05 — **Matrix: Water**
Date Received: 10/05/16 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	323990	10/06/16 05:15	JWG	TAL BUF
Total/NA	Prep	3005A			324002	10/06/16 09:31	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324537	10/07/16 16:55	TRB	TAL BUF
Total/NA	Analysis	300.0		1	324036	10/06/16 13:23	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			323953	10/05/16 13:21	KRT	TAL BUF
Total/NA	Analysis	350.1		2	323984	10/05/16 15:39	KRT	TAL BUF
Total/NA	Analysis	353.2		1	324035	10/05/16 16:57	ELR	TAL BUF
Total/NA	Analysis	9060A		1	324190	10/06/16 12:11	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324328	10/06/16 13:18	KMF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	323987	10/05/16 14:30	MDL	TAL BUF

Client Sample ID: DUP2-20161004 — Lab Sample ID: 480-107013-9

Date Collected: 10/04/16 00:00 — **Matrix: Water**
Date Received: 10/05/16 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324093	10/06/16 15:09	RRS	TAL BUF

Client Sample ID: TRIP BLANKS — Lab Sample ID: 480-107013-10

Date Collected: 10/04/16 00:00 — **Matrix: Water**
Date Received: 10/05/16 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	323990	10/06/16 06:03	JWG	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Certification Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107013-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-17
California	State Program	9	1169CA	09-30-17
Connecticut	State Program	1	PH-0568	09-30-18
Florida	NELAP	4	E87672	06-30-17
Georgia	State Program	4	N/A	03-31-17
Georgia	State Program	4	956	03-31-17
Illinois	NELAP	5	200003	09-30-16 *
Iowa	State Program	7	374	03-01-17
Kansas	NELAP	7	E-10187	10-31-16
Kentucky (DW)	State Program	4	90029	12-31-16
Kentucky (UST)	State Program	4	30	03-31-17
Kentucky (WW)	State Program	4	90029	12-31-16
Louisiana	NELAP	6	02031	06-30-17
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-17
Massachusetts	State Program	1	M-NY044	06-30-17
Michigan	State Program	5	9937	03-31-17
Minnesota	NELAP	5	036-999-337	12-31-16
New Hampshire	NELAP Primary AB	1	2973	09-11-17
New Hampshire	NELAP Secondary AB	1	2337	11-17-16
New Jersey	NELAP	2	NY455	06-30-17
New York	NELAP	2	10026	03-31-17
North Dakota	State Program	8	R-176	03-31-17
Oklahoma	State Program	6	9421	08-31-17
Oregon	NELAP	10	NY200003	06-09-17
Pennsylvania	NELAP	3	68-00281	07-31-17
Rhode Island	State Program	1	LAO00328	12-30-16
Tennessee	State Program	4	TN02970	03-31-17
Texas	NELAP	6	T104704412-15-6	07-31-17
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-17
Washington	State Program	10	C784	02-10-17
West Virginia DEP	State Program	3	252	09-30-16 *
Wisconsin	State Program	5	998310390	08-31-17

Laboratory: TestAmerica Burlington

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-17
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-02-17
Florida	NELAP	4	E87467	06-30-17
L-A-B	DoD ELAP		L2336	02-26-17
Maine	State Program	1	VT00008	04-17-17
Minnesota	NELAP	5	050-999-436	12-31-16
New Hampshire	NELAP	1	2006	12-18-16
New Jersey	NELAP	2	VT972	06-30-17
New York	NELAP	2	10391	04-01-17
Pennsylvania	NELAP	3	68-00489	04-30-17
Rhode Island	State Program	1	LAO00298	12-30-16

* Certification renewal pending - certification considered valid.

Laboratory: TestAmerica Burlington (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
US Fish & Wildlife	Federal		LE-058448-0	10-31-16
USDA	Federal		P330-11-00093	10-28-16
Vermont	State Program	1	VT-4000	12-31-16
Virginia	NELAP	3	460209	12-14-16

Method Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107013-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
522	1,4 Dioxane (GC/MS SIM)	EPA	TAL BUR
6010	Metals (ICP)	SW846	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
9060A	Organic Carbon, Total (TOC)	SW846	TAL BUF
SM 2320B	Alkalinity	SM	TAL BUF
SM 4500 P E	Orthophosphate	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency
MA DEP = Massachusetts Department Of Environmental Protection
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107013-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-107013-1	MW-267S-20161004	Water	10/04/16 13:30	10/05/16 01:15
480-107013-2	MW-267M-20161004	Water	10/04/16 14:10	10/05/16 01:15
480-107013-3	MW-268S-20161004	Water	10/04/16 11:35	10/05/16 01:15
480-107013-4	MW-268M-20161004	Water	10/04/16 12:20	10/05/16 01:15
480-107013-5	MW-268D-20161004	Water	10/04/16 13:00	10/05/16 01:15
480-107013-6	REW-1-20161004	Water	10/04/16 08:35	10/05/16 01:15
480-107013-7	REW-4-20161004	Water	10/04/16 09:20	10/05/16 01:15
480-107013-8	REW-5-20161004	Water	10/04/16 10:05	10/05/16 01:15
480-107013-9	DUP2-20161004	Water	10/04/16 00:00	10/05/16 01:15
480-107013-10	TRIP BLANKS	Water	10/04/16 00:00	10/05/16 01:15

Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 480-107013-1

Login Number: 107013
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	IESI
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 480-107013-1

Login Number: 107013
List Number: 2
Creator: Lavigne, Scott M

List Source: TestAmerica Burlington
List Creation: 10/05/16 12:35 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.4ºC,6.0ºC,4.8ºC,3.8ºC,2.8ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

360325-Boston

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road -- Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:	Sample Collector's Name (Please Print Neatly): Danny Jones	Lab PM:	Lab COC Barcode Label: 480-107013 COC	COC No: 37052
Client Contact: Innovative Nicki Pariyar	Sample Collector's Phone: 508-404-3196	E-Mail:		Page: 1 of 1
Company: Innovative Engineering Solutions Inc				Job #:
Address: 25 Spring St	Due Date Requested: 10/11/16			
City: Walpole	Turnaround Time (TAT) Requested (business days): 5 days			
State and Zip: MA 02081				
Client's Phone: 508-668-0033	Quote # or Project #:			
Client's Contact Email: nicki@iessolutions.com	PO #: RA-008			
Client's Project Name/Number: Raytheon - Wayland RA-008	WO #:			
Sample Collection Site Name & Location: Wayland MA	PWS ID #:			

Analysis Requested

Preservation Codes:
A - Hydrochloric Acid; B - Sodium Hydroxide; C - Zinc Acetate; D - Nitric Acid; E - Sodium Bisulfite; F - Methanol; H - Ascorbic Acid; J - Deionized Water; M - Hexane; N - No Preservative; P - Sodium Sulfate; Q - Sodium Sulfite; R - Sodium Thiosulfate; S - Sulfuric Acid; Z - other (specify)

Regulatory Programs:
MCP ☐ GW1/S1 ☐
RCP ☐ CT RSR ☐
DEP Form ☐ EDD Required ☐
eDEP Filing ☐ NPDES ☐

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit Test-America to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	8260 mod	8290 mod Dioxins	537-mod PFC	8010 mod Total 1,4 Dioxane	8260A TOC	1,4 Dioxane	8260B Hill	8260B Hill	Total Number of Containers (enter total for each line)	Special Instructions & Notes:
			Preservation Codes →		A	A	D	A	A	N	N		↓	
MW-267S-20161004	10/4/16	1330	G	W	X	X	X	X	X	X	X		7	
MW-267M-20161004	10/4/16	1410	G	W	X	X							5	
MW-268S-20161004	10/4/16	1135	G	W	X	X	X	X	X	X	X		11	
MW-268M-20161004	10/4/16	1220	G	W	X	X	X	X	X	X	X		11	
MW-268D-20161004	10/4/16	1300	G	W	X								3	
REW-1-20161004	10/4/16	0835	G	W	X		X	X	X	X	X		9	
REW-4-20161004	10/4/16	0920	G	W	X		X	X	X	X	X		9	
REW-5-20161004	10/4/16	1005	G	W	X		X	X	X	X	X		9	
DUP2-20161004	10/4/16	—	G	W	X								3	
Trip Blank	—	—	G	W	X								2	

Possible Hazard Identification (please check off each that may apply):
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month):
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

** Matrix Types: A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

▶ NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◀

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10/4/16 1450	IESS		10-4-16 1500	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10-4-16 1700			10-5-16 0115	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.6, 1.8

WI-QA-010 rev 8

Revised 10/29/2014
TAL-8245-360R

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road -- Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

360325-Boston

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:	Sample Collector's Name (Please Print Neatly): Danny Sorro	Lab PM:	Lab COC Barcode Label	COC No: 37052
Client Contact: Nicki Pringle	Sample Collector's Phone: 508-404-3196	E-Mail:		Page: 1 of 1
Company: Innovative Engineering Solutions Inc				Job #:
Address: 25 Spring St	Due Date Requested: 10/11/16			
City: Walpole	Turnaround Time (TAT) Requested (business days): 5 days			
State and Zip: MA 02081				
Client's Phone: 508-668-0033	Quote # or Project #:			
Client's Contact Email: vipreiner@iesinc.com	PO #: RA-008			
Client's Project Name/Number: Raytheon-Wayland RA-008	WO #:			
Sample Collection Site Name & Location: Wayland MA	PWS ID #:			

Analysis Requested

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfate
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP ☐ GW1/S1 ☐
RCP ☐ CT RSR ☐
DEP Form ☐ EDD Required ☐
eDEP Filing ☐ NPDES ☐

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit Test-America to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	8260 MCP	522-MCP Dioxans	6010 MCP Total	9060A TOC	350.1 NH3	4500-P-E Ortho Active PO4	8270D 1,4 Dioxane	300.0-SO4 Cl NO3									Total Number of Containers (enter total for each line)
			Preservation Code:		A	A	D	A	A	N	N										↓
MW-267S-20161004	10/4/16	1330	G	W	X	X	X	X	X	X	X										7
MW-267M-20161004	10/4/16	1410	G	W	X	X															5
MW-268S-20161004	10/4/16	1135	G	W	X	X	X	X	X	X	X										11
MW-268M-20161004	10/4/16	1220	G	W	X	X	X	X	X	X	X										11
MW-268D-20161004	10/4/16	1300	G	W	X																3
REW-1-20161004	10/4/16	0835	G	W	X		X	X	X	X	X										9
REW-4-20161004	10/4/16	0920	G	W	X		X	X	X	X	X										
REW-5-20161004	10/4/16	1005	G	W	X		X	X	X	X	X										
DUP2-20161004	10/4/16	—	G	W	X																
Trip Blank	—	—	—	W	X																

Special Instructions & Notes:
522 - Danny to Burlington

480-107013 Chain of Custody

Possible Hazard Identification (please check off each that may apply):
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal Requirements (A fee may be assessed if samples are retained longer ...):
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

** Matrix Types: A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

▶ NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◀

Relinquished by:	Date/Time: 10/4/16 1450	Company: IES	Received by:	Date/Time: 10-7-16 1800	Company:
Relinquished by:	Date/Time: 10-7-16 1800	Company:	Received by:	Date/Time: 10/5/16 1030	Company: TAB
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

WI-QA-010 rev 8

Revised 10/29/2014
TAL-8245-360R

ORIGIN ID:BXCA (781) 466-6900
PAUL HOBART
TESTAMERICA
240 BEAR HILL ROAD
SUITE 104
WALTHAM, MA 02451
UNITED STATES US

SHIP DATE: 04OCT16
ACTWGT: 45.1 LB
CAD: 590687/CAFE2912

BILL RECIPIENT

TO SAMPLE RECEIVING
TESTAMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403

(802) 660-1990 REF:
INV:
PO: DEPT:

FedEx Express

1 of 7

TRK# 0201 4258 8390 8086

WED - 05 OCT 3:00P
STANDARD OVERNIGHT

MASTER

NC BTVA

05403
VT-US BTV

Part # 156148V-434 RIT2 02/17

ORIGIN ID:BXCA (781) 466-6900
PAUL HOBART
TESTAMERICA
240 BEAR HILL ROAD
SUITE 104
WALTHAM, MA 02451
UNITED STATES US

SHIP DATE: 04OCT16
ACTWGT: 57.1 LB
CAD: 590687/CAFE2912

BILL RECIPIENT

TO SAMPLE RECEIVING
TESTAMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403

(802) 660-1990 REF:
INV:
PO: DEPT:

FedEx Express

2 of 7

MPS# 0263 4258 8390 8097

Mstr# 4258 8390 8086 0201

WED - 05 OCT 3:00P
STANDARD OVERNIGHT

NC BTVA

05403
VT-US BTV

Part # 156148V-434 RIT2 02/17

ORIGIN ID:BXCA (781) 466-6900
PAUL HOBART
TESTAMERICA
240 BEAR HILL ROAD
SUITE 104
WALTHAM, MA 02451
UNITED STATES US

SHIP DATE: 04OCT16
ACTWGT: 61.0 LB
CAD: 590687/CAFE2912

BILL RECIPIENT

TO SAMPLE RECEIVING
TESTAMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403

(802) 660-1990 REF:
INV:
PO: DEPT:

FedEx Express

4 of 7

MPS# 0263 4258 8390 8112

Mstr# 4258 8390 8086 0201

WED - 05 OCT 3:00P
STANDARD OVERNIGHT

NC BTVA

05403
VT-US BTV

ORIGIN ID:BXCA (781) 466-6900
PAUL HOBART
TESTAMERICA
240 BEAR HILL ROAD
SUITE 104
WALTHAM, MA 02451
UNITED STATES US

SHIP DATE: 04OCT16
ACTWGT: 54.5 LB
CAD: 590687/CAFE2912

BILL RECIPIENT

TO SAMPLE RECEIVING
TESTAMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990 REF:
INV:
PO: DEPT:

538C1/ES2E/329B

FedEx Express

J151315081301uv

6 of 7

MPS# 0263 4258 8390 8134

Mstr# 4258 8390 8086 0201

WED - 05 OCT 3:00P
STANDARD OVERNIGHT

NC BTVA

05403
VT-US BTV

Part # 156148V-434 RIT2 02/17

ORIGIN ID:BXCA (781) 466-6900
PAUL HOBART
TESTAMERICA
240 BEAR HILL ROAD
SUITE 104
WALTHAM, MA 02451
UNITED STATES US

SHIP DATE: 04OCT16
ACTWGT: 55.8 LB
CAD: 590687/CAFE2912

BILL RECIPIENT

TO SAMPLE RECEIVING
TESTAMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990 REF:
INV:
PO: DEPT:

538C1/ES2E/329B

FedEx Express

J151315081301uv

7 of 7

MPS# 0263 4258 8390 8145

Mstr# 4258 8390 8086 0201

WED - 05 OCT 3:00P
STANDARD OVERNIGHT

NC BTVA

05403
VT-US BTV

Part # 156148V-434 RIT2 02/17

ANALYTICAL REPORT

Lab Number:	L1631730
Client:	Innovative Engineering Solutions, Inc. 25 Spring Street Walpole, MA 02081
ATTN:	Vicki Pariyar
Phone:	(508) 668-0033
Project Name:	RAYTHEON-WAYLAND
Project Number:	RA-008
Report Date:	10/13/16

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), ME (MA00030), PA (68-02089), VA (460194), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), USFWS (Permit #LE2069641), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON-WAYLAND
Project Number: RA-008

Lab Number: L1631730
Report Date: 10/13/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1631730-01	MW-261S-20161003	WATER	WAYLAND, MA	10/03/16 08:15	10/05/16
L1631730-02	MW-265M-20161003	WATER	WAYLAND, MA	10/03/16 12:05	10/05/16
L1631730-03	MW-267S-20161004	WATER	WAYLAND, MA	10/04/16 13:30	10/05/16
L1631730-04	MW-268S-20161004	WATER	WAYLAND, MA	10/04/16 11:35	10/05/16
L1631730-05	MW-268M-20161004	WATER	WAYLAND, MA	10/04/16 12:20	10/05/16
L1631730-06	MW-552-20161003	WATER	WAYLAND, MA	10/03/16 08:55	10/05/16
L1631730-07	MW-553-20161003	WATER	WAYLAND, MA	10/03/16 09:50	10/05/16
L1631730-08	MW-560-20161005	WATER	WAYLAND, MA	10/05/16 13:00	10/05/16
L1631730-09	MW-561-20161005	WATER	WAYLAND, MA	10/05/16 12:00	10/05/16
L1631730-10	MW-562-20161003	WATER	WAYLAND, MA	10/03/16 10:45	10/05/16
L1631730-11	MW-563-20161005	WATER	WAYLAND, MA	10/05/16 08:35	10/05/16
L1631730-12	REW-1-20161004	WATER	WAYLAND, MA	10/04/16 08:35	10/05/16
L1631730-13	REW-4-20161004	WATER	WAYLAND, MA	10/04/16 09:20	10/05/16
L1631730-14	REW-5-20161004	WATER	WAYLAND, MA	10/04/16 10:05	10/05/16
L1631730-15	REW-7-20161005	WATER	WAYLAND, MA	10/05/16 11:20	10/05/16
L1631730-16	REW-8-20161005	WATER	WAYLAND, MA	10/05/16 10:25	10/05/16
L1631730-17	REW-9-20161005	WATER	WAYLAND, MA	10/05/16 09:30	10/05/16
L1631730-18	REW-10-20161005	WATER	WAYLAND, MA	10/05/16 08:55	10/05/16
L1631730-19	REW-11-20161005	WATER	WAYLAND, MA	10/05/16 12:20	10/05/16
L1631730-20	REW-12-20161005	WATER	WAYLAND, MA	10/05/16 13:10	10/05/16

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730
Project Number: RA-008 **Report Date:** 10/13/16

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	RAYTHEON-WAYLAND	**Lab Number:**	L1631730
Project Number:	RA-008	**Report Date:**	10/13/16

Case Narrative (continued)

Dissolved Gases

L1631730-1 through -20: The samples were re-analyzed on dilution in order to quantify the results within the calibration range. The resuls should be considered estimated, and are qualified with an E flag, for any compounds that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound that exceeded the calibration range.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Porta

Title: Technical Director/Representative Date: 10/13/16

ORGANICS

VOLATILES

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-01	Date Collected:	10/03/16 08:15
Client ID:	MW-261S-20161003	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/10/16 12:19		
Analyst:	LB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	19400	E	ug/l	0.500	--	1	A
Ethene	5.37		ug/l	0.500	--	1	A
Ethane	23.4		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-01 D	Date Collected:	10/03/16 08:15
Client ID:	MW-261S-20161003	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/10/16 18:42		
Analyst:	LB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	16900		ug/l	2.50	--	5	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-02	Date Collected:	10/03/16 12:05
Client ID:	MW-265M-20161003	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/10/16 12:33		
Analyst:	LB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	11500	E	ug/l	0.500	--	1	A
Ethene	0.670		ug/l	0.500	--	1	A
Ethane	0.874		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-02 D	Date Collected:	10/03/16 12:05
Client ID:	MW-265M-20161003	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/10/16 17:41		
Analyst:	LB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	9770		ug/l	1.00	--	2	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-03	Date Collected:	10/04/16 13:30
Client ID:	MW-267S-20161004	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/10/16 12:48		
Analyst:	LB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	16700	E	ug/l	0.500	--	1	A
Ethene	1.52		ug/l	0.500	--	1	A
Ethane	0.659		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-03	D	Date Collected:	10/04/16 13:30
Client ID:	MW-267S-20161004		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/10/16 18:56			
Analyst:	LB			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	15000		ug/l	2.50	--	5	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-04	Date Collected:	10/04/16 11:35
Client ID:	MW-268S-20161004	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/10/16 13:32		
Analyst:	LB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	12000	E	ug/l	0.500	--	1	A
Ethene	1.13		ug/l	0.500	--	1	A
Ethane	2.51		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-04	D	Date Collected:	10/04/16 11:35
Client ID:	MW-268S-20161004		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/10/16 17:56			
Analyst:	LB			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	12400		ug/l	1.00	--	2	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-05	Date Collected:	10/04/16 12:20
Client ID:	MW-268M-20161004	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/10/16 13:46		
Analyst:	LB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	24500	E	ug/l	0.500	--	1	A
Ethene	6.71		ug/l	0.500	--	1	A
Ethane	8.54		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-05 D	Date Collected:	10/04/16 12:20
Client ID:	MW-268M-20161004	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/10/16 19:11		
Analyst:	LB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	19100		ug/l	2.50	--	5	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-06	Date Collected:	10/03/16 08:55
Client ID:	MW-552-20161003	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/10/16 14:01		
Analyst:	LB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	20300	E	ug/l	0.500	--	1	A
Ethene	5.71		ug/l	0.500	--	1	A
Ethane	34.6		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-06	D	Date Collected:	10/03/16 08:55
Client ID:	MW-552-20161003		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/10/16 19:25			
Analyst:	LB			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	17400		ug/l	2.50	--	5	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-07	Date Collected:	10/03/16 09:50
Client ID:	MW-553-20161003	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/10/16 14:16		
Analyst:	LB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	15700	E	ug/l	0.500	--	1	A
Ethene	6.04		ug/l	0.500	--	1	A
Ethane	2.82		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-07	D	Date Collected:	10/03/16 09:50
Client ID:	MW-553-20161003		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/10/16 18:10			
Analyst:	LB			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	13800		ug/l	1.00	--	2	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-08	Date Collected:	10/05/16 13:00
Client ID:	MW-560-20161005	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/10/16 14:30		
Analyst:	LB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	13300	E	ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	1.24		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-08	D	Date Collected:	10/05/16 13:00
Client ID:	MW-560-20161005		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/10/16 18:25			
Analyst:	LB			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	11800		ug/l	1.00	--	2	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-09	Date Collected:	10/05/16 12:00
Client ID:	MW-561-20161005	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/10/16 14:45		
Analyst:	LB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	29600	E	ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	27.8		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-09	D	Date Collected:	10/05/16 12:00
Client ID:	MW-561-20161005		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/10/16 19:40			
Analyst:	LB			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	24400		ug/l	2.50	--	5	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-10	Date Collected:	10/03/16 10:45
Client ID:	MW-562-20161003	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/10/16 14:59		
Analyst:	LB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	19100	E	ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	2.37		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-10	D	Date Collected:	10/03/16 10:45
Client ID:	MW-562-20161003		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/10/16 19:54			
Analyst:	LB			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	15900		ug/l	2.50	--	5	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-11	Date Collected:	10/05/16 08:35
Client ID:	MW-563-20161005	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/11/16 14:06		
Analyst:	MR		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	28500	E	ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	7.64		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-11	D	Date Collected:	10/05/16 08:35
Client ID:	MW-563-20161005		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/11/16 18:14			
Analyst:	MR			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	24900		ug/l	2.50	--	5	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-12	Date Collected:	10/04/16 08:35
Client ID:	REW-1-20161004	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/11/16 14:20		
Analyst:	MR		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	23400	E	ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	3.37		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-12	D	Date Collected:	10/04/16 08:35
Client ID:	REW-1-20161004		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/11/16 18:28			
Analyst:	MR			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	18100		ug/l	2.50	--	5	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-13	Date Collected:	10/04/16 09:20
Client ID:	REW-4-20161004	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/11/16 14:35		
Analyst:	MR		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	19500	E	ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	9.00		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-13	D	Date Collected:	10/04/16 09:20
Client ID:	REW-4-20161004		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/11/16 18:43			
Analyst:	MR			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	19400		ug/l	2.50	--	5	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-14	Date Collected:	10/04/16 10:05
Client ID:	REW-5-20161004	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/11/16 14:52		
Analyst:	MR		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	19100	E	ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	2.25		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-14	D	Date Collected:	10/04/16 10:05
Client ID:	REW-5-20161004		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/11/16 18:57			
Analyst:	MR			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	18100		ug/l	2.50	--	5	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-15	Date Collected:	10/05/16 11:20
Client ID:	REW-7-20161005	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/11/16 15:10		
Analyst:	MR		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	18500	E	ug/l	0.500	--	1	A
Ethene	5.39		ug/l	0.500	--	1	A
Ethane	9.98		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-15	D	Date Collected:	10/05/16 11:20
Client ID:	REW-7-20161005		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/11/16 19:11			
Analyst:	MR			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	18300		ug/l	2.50	--	5	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-16	Date Collected:	10/05/16 10:25
Client ID:	REW-8-20161005	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/11/16 15:24		
Analyst:	MR		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	21200	E	ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	2.21		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-16	D	Date Collected:	10/05/16 10:25
Client ID:	REW-8-20161005		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/11/16 19:26			
Analyst:	MR			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	16900		ug/l	2.50	--	5	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-17	Date Collected:	10/05/16 09:30
Client ID:	REW-9-20161005	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/11/16 15:39		
Analyst:	MR		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	33000	E	ug/l	0.500	--	1	A
Ethene	2.34		ug/l	0.500	--	1	A
Ethane	2.63		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-17	D	Date Collected:	10/05/16 09:30
Client ID:	REW-9-20161005		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/11/16 20:12			
Analyst:	MR			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	29600		ug/l	5.00	--	10	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-18	Date Collected:	10/05/16 08:55
Client ID:	REW-10-20161005	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/11/16 15:53		
Analyst:	MR		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	15500	E	ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	1.74		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-18	D	Date Collected:	10/05/16 08:55
Client ID:	REW-10-20161005		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/11/16 19:40			
Analyst:	MR			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	13100		ug/l	2.50	--	5	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-19	Date Collected:	10/05/16 12:20
Client ID:	REW-11-20161005	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/11/16 16:08		
Analyst:	MR		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	22800	E	ug/l	0.500	--	1	A
Ethene	6.68		ug/l	0.500	--	1	A
Ethane	10.1		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-19	D	Date Collected:	10/05/16 12:20
Client ID:	REW-11-20161005		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/11/16 19:55			
Analyst:	MR			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	19900		ug/l	2.50	--	5	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-20	Date Collected:	10/05/16 13:10
Client ID:	REW-12-20161005	Date Received:	10/05/16
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	117,-		
Analytical Date:	10/11/16 16:22		
Analyst:	MR		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	33000	E	ug/l	0.500	--	1	A
Ethene	16.8		ug/l	0.500	--	1	A
Ethane	17.4		ug/l	0.500	--	1	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

SAMPLE RESULTS

Lab ID:	L1631730-20	D	Date Collected:	10/05/16 13:10
Client ID:	REW-12-20161005		Date Received:	10/05/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	10/11/16 20:26			
Analyst:	MR			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	26200		ug/l	5.00	--	10	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 117,-
Analytical Date: 10/10/16 11:50
Analyst: LB

Parameter	Result	Qualifier	Units	RL	MDL	
Dissolved Gases by GC - Mansfield Lab for sample(s): 01-10 Batch: WG940544-3						
Methane	ND		ug/l	0.500	--	A
Ethene	ND		ug/l	0.500	--	A
Ethane	ND		ug/l	0.500	--	A

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 117,-
Analytical Date: 10/11/16 12:50
Analyst: MR

Parameter	Result	Qualifier	Units	RL	MDL	
Dissolved Gases by GC - Mansfield Lab for sample(s): 11-20 Batch: WG941006-3						
Methane	ND		ug/l	0.500	--	A
Ethene	ND		ug/l	0.500	--	A
Ethane	ND		ug/l	0.500	--	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON-WAYLAND

Project Number: RA-008

Lab Number: L1631730

Report Date: 10/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 01-10 Batch: WG940544-2									
Methane	111		-		80-120	-		25	A
Ethene	111		-		80-120	-		25	A
Ethane	113		-		80-120	-		25	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON-WAYLAND

Project Number: RA-008

Lab Number: L1631730

Report Date: 10/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 11-20 Batch: WG941006-2									
Methane	109		-		80-120	-		25	A
Ethene	106		-		80-120	-		25	A
Ethane	107		-		80-120	-		25	A

Project Name: RAYTHEON-WAYLAND
Project Number: RA-008

Lab Number: L1631730
Report Date: 10/13/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information	Custody Seal
Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1631730-01A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-01B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-02A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-02B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-03A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-03B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-04A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-04B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-05A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-05B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-06A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-06B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-07A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-07B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-08A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-08B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-09A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-09B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-10A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-10B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-11A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-11B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-12A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-12B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-13A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-13B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-14A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-14B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-15A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)

*Values in parentheses indicate holding time in days

Project Name: RAYTHEON-WAYLAND
Project Number: RA-008

Lab Number: L1631730
Report Date: 10/13/16

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1631730-15B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-16A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-16B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-17A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-17B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-18A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-18B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-19A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-19B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-20A	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)
L1631730-20B	20ml Vial HCl preserved	A	N/A	3.2	Y	Absent	DISSGAS(14)

*Values in parentheses indicate holding time in days

Project Name:	RAYTHEON-WAYLAND	**Lab Number:**	L1631730
Project Number:	RA-008	**Report Date:**	10/13/16

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Project Name: RAYTHEON-WAYLAND **Lab Number:** L1631730

Project Number: RA-008 **Report Date:** 10/13/16

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

REFERENCES

117 Technical Guidance for the Natural Attenuation Indicators: Methane, Ethane, and Ethene, EPA-NE, Revision 1, February 21, 2002 and Sample Preparation & Calculations for Dissolved Gas Analysis in Water Samples using a GC Headspace Equilibration Technique, EPA RSKSOP-175, Revision 2, May 2004.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: ***EPA 3050B***

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 2

ALPHA ANALYTICAL
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Date Rec'd in Lab: 10/5/16

ALPHA Job #: L1631730

Project Information

Project Name: Raytheon - Wayland
Project Location: Wayland MA
Project #: RA-008
Project Manager: Vicki Paniyan
ALPHA Quote #:

Report Information - Data Deliverables

☐ ADEx ☒ EMAIL

Billing Information

☒ Same as Client info PO #: RA-008

Client Information

Client: Innovative Engineering Solutions Inc
Address: 25 Spring St
Wilmington MA 01887
Phone: 508-668-0033
Email: v.paniyan@IESIonline.com

Regulatory Requirements & Project Information Requirements

☐ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☒ No CT RCP Analytical Methods
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☐ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due:

Additional Project Information:

ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2; SVOC: ☐ ABN ☐ PAH; METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15; METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13; EPH: ☐ Ranges & Targets ☐ Ranges Only; VPH: ☐ Ranges & Targets ☐ Ranges Only; ☐ PCB ☐ PEST; TPH: ☐ Quant Only ☐ Fingerprint; Dissolved Gases

SAMPLE INFO: Filtration ☐ Field ☐ Lab to do; Preservation ☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	Dissolved Gases	Sample Comments	TOTAL # BOTTLES
31730.01	MW-261S-20161003	10/3/16	0815	GW		X		2
.02	MW-265M-20161003	10/3/16	1205	GW		X		2
.03	MW-267S-20161004	10/4/16	1330	GW		X		2
.04	MW-268S-20161004	10/4/16	1135	GW		X		2
.05	MW-268M-20161004	10/4/16	1220	GW		X		2
.06	MW-552-20161003	10/3/16	0855	GW		X		2
.07	MW-553-20161003	10/3/16	0950	GW		X		2
.08	MW-560-20161005	10/5/16	1300	GW		X		2
.09	MW-561-20161005	10/5/16	1200	GW		X		2
.10	MW-562-20161003	10/3/16	1045	GW		X		2
					Container Type	V		
					Preservative	B		

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
	10/5/16 1615	[signature] AAL	10/5/16 1615

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

CHAIN OF CUSTODY

PAGE 2 OF 2

ALPHA ANALYTICAL
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Date Rec'd in Lab: 10/5/16

ALPHA Job #: L1631730

Project Information

Project Name: Raytheon - Wayland
Project Location: Wayland MA
Project #: RA-008
Project Manager: Vicki Pariyar
ALPHA Quote #:

Report Information - Data Deliverables

☐ ADEx ☒ EMAIL

Billing Information

☒ Same as Client info PO #: RA-008

Client Information

Client: Innovative Engineering Solutions Inc
Address: 25 Spring St
Walpole MA 02081
Phone: 508-668-0033
Email: vpariyar@IESIonline.com

Regulatory Requirements & Project Information Requirements

☐ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☐ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due:

Additional Project Information:

ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2; SVOC: ☐ ABN ☐ PAH; METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15; METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13; EPH: ☐ Ranges & Targets ☐ Ranges Only; VPH: ☐ Ranges & Targets ☐ Ranges Only; ☐ PCB ☐ PEST; TPH: ☐ Quant Only ☐ Fingerprint; Disposal Costs (Contaminated Effluent Water)

SAMPLE INFO: Filtration ☐ Field ☐ Lab to do; Preservation ☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	TPH: Quant Only	Sample Comments	TOTAL # BOTTLES
31730.11	MW-563-20161005	10/5/16	1355	GW	JA	X		2
.12	REW-1-20161004	10/4/16	0835	GW	JA	X		2
.13	REW-4-20161004	10/4/16	0920	GW	JA	X		2
.14	REW-5-20161004	10/4/16	1005	GW	JA	X		2
.15	REW-7-20161005	10/05/16	1120	GW	JA	X		2
.16	REW-8-20161005	10/5/16	1025	GW	JA	X		2
.17	REW-9-20161005	10/5/16	0930	GW	JA	X		2
.18	REW-10-20161005	10/5/16	0855	GW	JA	X		2
.19	REW-11-20161005	10/5/16	1220	GW	JA	X	—	2
.20	REW-12-20161005	10/5/16	1310	GW	JA	X		2
					Container Type	V	Temp Blank	
					Preservative	B		

Container Type: P= Plastic, A= Amber glass, V= Vial, G= Glass, B= Bacteria cup, C= Cube, O= Other, E= Encore, D= BOD Bottle

Preservative: A= None, B= HCl, C= HNO_3, D= H_2SO_4, E= NaOH, F= MeOH, G= $NaHSO_4$, H = $Na_2S_2O_3$, I= Ascorbic Acid, J = NH_4Cl, K= Zn Acetate, O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	10/5/16 1615	[signature] NAAL	10/5/16 1615

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-107127-1
Client Project/Site: IDS Wayland

For:
Innovative Engineering Solutions, Inc
25 Spring Street
Walpole, Massachusetts 02081

Attn: Vicki Pariyar

Denise L Giglia

Authorized for release by:
10/14/2016 10:43:27 AM
Denise Giglia, Project Management Assistant II
denise.giglia@testamericainc.com

Designee for

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-107127-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-107127-1

Receipt
The samples were received on 10/6/2016 1:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.1º C and 1.6º C.

GC/MS VOA
Method 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-dibromo-3-chloropropane, Carbon Disulfide, Isopropyl Ether, Naphthalene, tert-Amyl Methyl Ether and Tetrahydrofuran.

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: REW-12-20161005 (480-107127-7). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-324456 recovered outside MCP control limits but <40% for Tetrahydrofuran, Naphthalene . MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples are impacted: MW-560-20161005 (480-107127-13) and MW-563-20161005 (480-107127-15).

Method 8260C: The laboratory control sample (LCS) for batch 480-324456 recovered outside control limits but were greater than 10% for the following analytes: 1,4-Dioxane . MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples are impacted: MW-560-20161005 (480-107127-13) and MW-563-20161005 (480-107127-15).

Method 8260C: The laboratory control sample (LCS) for batch 480-324621 recovered outside control limits but were greater than 10% for the following analytes: 1,4-Dioxane . MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following sample is impacted: MW-561-20161005 (480-107127-14).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-324621 recovered outside MCP control limits but <40% for 1,4-Dioxane. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following sample is impacted: MW-561-20161005 (480-107127-14).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

HPLC/IC
Method 300.0: The following samples were diluted due to the nature of the sample matrix: REW-7-20161005 (480-107127-2), REW-8-20161005 (480-107127-3), REW-9-20161005 (480-107127-4), REW-10-20161005 (480-107127-5), REW-11-20161005 (480-107127-6), REW-12-20161005 (480-107127-7), MW-560-20161005 (480-107127-13), MW-561-20161005 (480-107127-14) and MW-563-20161005 (480-107127-15). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010: At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: REW-7-20161005 (480-107127-2), REW-8-20161005 (480-107127-3), REW-9-20161005 (480-107127-4), REW-10-20161005

Job ID: 480-107127-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

(480-107127-5), REW-11-20161005 (480-107127-6), REW-12-20161005 (480-107127-7), MW-560-20161005 (480-107127-13), MW-561-20161005 (480-107127-14) and MW-563-20161005 (480-107127-15).

Method Distill/Ammonia: Due to the matrix, the initial volume(s) used for the following samples deviated from the standard procedure: REW-8-20161005 (480-107127-3) and (480-107127-A-3 DU). The reporting limits (RLs) have been adjusted proportionately.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

MassDEP Analytical Protocol Certification Form

Laboratory Name:	**TestAmerica Buffalo**	Project #:	**480-107127**
Project Location:	**IDS Wayland**	RTN:	

This form provides certifications for the following data set: list Laboratory Sample ID Number(s):

480-107127 [1-15]

Matrices: ■ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ■	7470/7471 Hg CAM III B ☐	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ■	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	■ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	■ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	■ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	■ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	■ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ■ No[1]

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350***

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ■ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	☐ Yes ■ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature:	Denise L Giglia	Position:	Project Manager Assistant II
Printed Name:	Denise L. Giglia	Date:	10/14/16 10:31

Detection Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Client Sample ID: MW-269Ma-20161005 — Lab Sample ID: 480-107127-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.5		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	1.3		1.0		ug/L	1		8260C	Total/NA
1,4-Dioxane	1.1		0.20		ug/L	1		522	Total/NA

Client Sample ID: REW-7-20161005 — Lab Sample ID: 480-107127-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	38		10		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	9.7		1.0		ug/L	1		8260C	Total/NA
Toluene	58		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	8.6		1.0		ug/L	1		8260C	Total/NA
Iron	61		0.050		mg/L	1		6010	Total/NA
Chloride	23		2.5		mg/L	5		300.0	Total/NA
TOC Result 1	26		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	28		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	27		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	260		5.0		mg/L	1		SM 2320B	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.7	HF	0.1		SU	1		9040C	Total/NA

Client Sample ID: REW-8-20161005 — Lab Sample ID: 480-107127-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	9.4		1.0		ug/L	1		8260C	Total/NA
Iron	49		0.050		mg/L	1		6010	Total/NA
Chloride	35		2.5		mg/L	5		300.0	Total/NA
Ammonia	6.7		1.0		mg/L	1		350.1	Total/NA
TOC Result 1	13		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	14		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	13		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	260		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.21		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.8	HF	0.1		SU	1		9040C	Total/NA

Client Sample ID: REW-9-20161005 — Lab Sample ID: 480-107127-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	140		10		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	24		1.0		ug/L	1		8260C	Total/NA
Ethylbenzene	1.1		1.0		ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	3.9		2.0		ug/L	1		8260C	Total/NA
Toluene	48		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	13		1.0		ug/L	1		8260C	Total/NA
Iron	100		0.050		mg/L	1		6010	Total/NA
Chloride	28		2.5		mg/L	5		300.0	Total/NA
Sulfate	8.6		2.0		mg/L	1		300.0	Total/NA
Ammonia	0.20		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	250		5.0		mg/L	5		9060A	Total/NA
TOC Result 2	250		5.0		mg/L	5		9060A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: REW-9-20161005 (Continued) — Lab Sample ID: 480-107127-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Duplicates	250		5.0		mg/L	5		9060A	Total/NA
Alkalinity, Total	380		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.077		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.4	HF	0.1		SU	1		9040C	Total/NA

Client Sample ID: REW-10-20161005 — Lab Sample ID: 480-107127-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	2.3		0.050		mg/L	1		6010	Total/NA
Chloride	68		1.0		mg/L	2		300.0	Total/NA
Sulfate	26		4.0		mg/L	2		300.0	Total/NA
Ammonia	0.22		0.20		mg/L	1		350.1	Total/NA
TOC Result 2	1.1		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	81		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.029		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	7.1	HF	0.1		SU	1		9040C	Total/NA

Client Sample ID: REW-11-20161005 — Lab Sample ID: 480-107127-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	30		10		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	20		1.0		ug/L	1		8260C	Total/NA
Toluene	34		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	3.4		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	9.7		1.0		ug/L	1		8260C	Total/NA
Iron	43		0.050		mg/L	1		6010	Total/NA
Chloride	50		2.5		mg/L	5		300.0	Total/NA
Sulfate	19		10		mg/L	5		300.0	Total/NA
Ammonia	0.79		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	78		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	83		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	80		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	160		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.027		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.6	HF	0.1		SU	1		9040C	Total/NA

Client Sample ID: REW-12-20161005 — Lab Sample ID: 480-107127-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.2		2.0		ug/L	2		8260C	Total/NA
2-Butanone (MEK)	66		20		ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	130		2.0		ug/L	2		8260C	Total/NA
Toluene	72		2.0		ug/L	2		8260C	Total/NA
Trichloroethene	29		2.0		ug/L	2		8260C	Total/NA
Vinyl chloride	53		2.0		ug/L	2		8260C	Total/NA
Iron	81		0.050		mg/L	1		6010	Total/NA
Chloride	36		2.5		mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Client Sample ID: REW-12-20161005 (Continued) — Lab Sample ID: 480-107127-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	21		10		mg/L	5		300.0	Total/NA
Ammonia	0.27		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	94		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	99		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	97		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	200		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.026		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.5	HF	0.1		SU	1		9040C	Total/NA

Client Sample ID: DUP3-20161005 — Lab Sample ID: 480-107127-8

No Detections.

Client Sample ID: TRIP BLANKS — Lab Sample ID: 480-107127-9

No Detections.

Client Sample ID: MW-264M-20161005 — Lab Sample ID: 480-107127-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	11		1.0		ug/L	1		8260C	Total/NA
Tetrachloroethene	1.6		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	11		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	8.2		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-266Ma-20161005 — Lab Sample ID: 480-107127-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.1		1.0		ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	2.1		2.0		ug/L	1		8260C	Total/NA
Toluene	55		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	4.5		1.0		ug/L	1		8260C	Total/NA
1,4-Dioxane	1.5		0.20		ug/L	1		522	Total/NA

Client Sample ID: MW-266Mb-20161005 — Lab Sample ID: 480-107127-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	1.0		1.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	5.3		1.0		ug/L	1		8260C	Total/NA
Toluene	3.9		1.0		ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	1.6		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	2.9		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	23		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-560-20161005 — Lab Sample ID: 480-107127-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	22		10		ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	2.7		2.0		ug/L	1		8260C	Total/NA
Toluene	11		1.0		ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Client Sample ID: MW-560-20161005 (Continued) — Lab Sample ID: 480-107127-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	1.2		1.0		ug/L	1		8260C	Total/NA
Iron	110		0.050		mg/L	1		6010	Total/NA
Chloride	34		2.5		mg/L	5		300.0	Total/NA
TOC Result 1	5.3		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	6.3		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	5.8		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	520		5.0		mg/L	1		SM 2320B	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.9	HF	0.1		SU	1		9040C	Total/NA

Client Sample ID: MW-561-20161005 — Lab Sample ID: 480-107127-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
m-Xylene & p-Xylene	2.5		2.0		ug/L	1		8260C	Total/NA
Iron	110		0.050		mg/L	1		6010	Total/NA
Chloride	43		2.5		mg/L	5		300.0	Total/NA
Ammonia	3.9		1.0		mg/L	5		350.1	Total/NA
TOC Result 1	8.1		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	9.1		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	8.6		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	370		5.0		mg/L	1		SM 2320B	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.7	HF	0.1		SU	1		9040C	Total/NA

Client Sample ID: MW-563-20161005 — Lab Sample ID: 480-107127-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	58		0.050		mg/L	1		6010	Total/NA
Chloride	42		2.5		mg/L	5		300.0	Total/NA
Ammonia	1.3		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	1.6		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	1.7		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	1.6		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	230		5.0		mg/L	1		SM 2320B	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.6	HF	0.1		SU	1		9040C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Client Sample ID: MW-269Ma-20161005

Lab Sample ID: 480-107127-1

Date Collected: 10/05/16 08:15

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/07/16 14:36	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/07/16 14:36	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 14:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/07/16 14:36	1
1,1-Dichloroethane	ND		1.0		ug/L			10/07/16 14:36	1
1,1-Dichloroethene	ND		1.0		ug/L			10/07/16 14:36	1
1,1-Dichloropropene	ND		1.0		ug/L			10/07/16 14:36	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/16 14:36	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/07/16 14:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/16 14:36	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/07/16 14:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/16 14:36	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/07/16 14:36	1
1,2-Dichloroethane	ND		1.0		ug/L			10/07/16 14:36	1
1,2-Dichloropropane	ND		1.0		ug/L			10/07/16 14:36	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/07/16 14:36	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/07/16 14:36	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 14:36	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/07/16 14:36	1
1,4-Dioxane	ND		50		ug/L			10/07/16 14:36	1
2,2-Dichloropropane	ND		1.0		ug/L			10/07/16 14:36	1
2-Butanone (MEK)	ND		10		ug/L			10/07/16 14:36	1
2-Chlorotoluene	ND		1.0		ug/L			10/07/16 14:36	1
2-Hexanone	ND		10		ug/L			10/07/16 14:36	1
4-Chlorotoluene	ND		1.0		ug/L			10/07/16 14:36	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 14:36	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/07/16 14:36	1
Acetone	ND		50		ug/L			10/07/16 14:36	1
Benzene	ND		1.0		ug/L			10/07/16 14:36	1
Bromobenzene	ND		1.0		ug/L			10/07/16 14:36	1
Bromoform	ND		1.0		ug/L			10/07/16 14:36	1
Bromomethane	ND		2.0		ug/L			10/07/16 14:36	1
Carbon disulfide	ND		10		ug/L			10/07/16 14:36	1
Carbon tetrachloride	ND		1.0		ug/L			10/07/16 14:36	1
Chlorobenzene	ND		1.0		ug/L			10/07/16 14:36	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 14:36	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 14:36	1
Chloroethane	ND		2.0		ug/L			10/07/16 14:36	1
Chloroform	ND		1.0		ug/L			10/07/16 14:36	1
Chloromethane	ND		2.0		ug/L			10/07/16 14:36	1
cis-1,2-Dichloroethene	**2.5**		1.0		ug/L			10/07/16 14:36	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 14:36	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 14:36	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/07/16 14:36	1
Ethyl ether	ND		1.0		ug/L			10/07/16 14:36	1
Ethylbenzene	ND		1.0		ug/L			10/07/16 14:36	1
Ethylene Dibromide	ND		1.0		ug/L			10/07/16 14:36	1
Hexachlorobutadiene	ND		0.40		ug/L			10/07/16 14:36	1
Isopropyl ether	ND		10		ug/L			10/07/16 14:36	1

Client Sample ID: MW-269Ma-20161005

Lab Sample ID: 480-107127-1

Date Collected: 10/05/16 08:15

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			10/07/16 14:36	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/07/16 14:36	1
Methylene Chloride	ND		1.0		ug/L			10/07/16 14:36	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/07/16 14:36	1
Naphthalene	ND		5.0		ug/L			10/07/16 14:36	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 14:36	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 14:36	1
o-Xylene	ND		1.0		ug/L			10/07/16 14:36	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 14:36	1
Styrene	ND		1.0		ug/L			10/07/16 14:36	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/07/16 14:36	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/07/16 14:36	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 14:36	1
Tetrachloroethene	ND		1.0		ug/L			10/07/16 14:36	1
Tetrahydrofuran	ND		10		ug/L			10/07/16 14:36	1
Toluene	ND		1.0		ug/L			10/07/16 14:36	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 14:36	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 14:36	1
Trichloroethene	**1.3**		1.0		ug/L			10/07/16 14:36	1
Trichlorofluoromethane	ND		1.0		ug/L			10/07/16 14:36	1
Vinyl chloride	ND		1.0		ug/L			10/07/16 14:36	1
Dibromomethane	ND		1.0		ug/L			10/07/16 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*89*		*70 - 130*		*10/07/16 14:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*		*10/07/16 14:36*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/07/16 14:36*	*1*

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.1**		0.20		ug/L		10/12/16 19:30	10/13/16 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*73*		*70 - 130*	*10/12/16 19:30*	*10/13/16 14:34*	*1*

Client Sample ID: REW-7-20161005

Lab Sample ID: 480-107127-2

Date Collected: 10/05/16 11:20

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/07/16 15:00	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/07/16 15:00	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 15:00	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/07/16 15:00	1
1,1-Dichloroethane	ND		1.0		ug/L			10/07/16 15:00	1
1,1-Dichloroethene	ND		1.0		ug/L			10/07/16 15:00	1
1,1-Dichloropropene	ND		1.0		ug/L			10/07/16 15:00	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/16 15:00	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/07/16 15:00	1

Client Sample ID: REW-7-20161005

Lab Sample ID: 480-107127-2

Date Collected: 10/05/16 11:20

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/16 15:00	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/07/16 15:00	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/16 15:00	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/07/16 15:00	1
1,2-Dichloroethane	ND		1.0		ug/L			10/07/16 15:00	1
1,2-Dichloropropane	ND		1.0		ug/L			10/07/16 15:00	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/07/16 15:00	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/07/16 15:00	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 15:00	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/07/16 15:00	1
1,4-Dioxane	ND		50		ug/L			10/07/16 15:00	1
2,2-Dichloropropane	ND		1.0		ug/L			10/07/16 15:00	1
2-Butanone (MEK)	**38**		10		ug/L			10/07/16 15:00	1
2-Chlorotoluene	ND		1.0		ug/L			10/07/16 15:00	1
2-Hexanone	ND		10		ug/L			10/07/16 15:00	1
4-Chlorotoluene	ND		1.0		ug/L			10/07/16 15:00	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 15:00	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/07/16 15:00	1
Acetone	ND		50		ug/L			10/07/16 15:00	1
Benzene	ND		1.0		ug/L			10/07/16 15:00	1
Bromobenzene	ND		1.0		ug/L			10/07/16 15:00	1
Bromoform	ND		1.0		ug/L			10/07/16 15:00	1
Bromomethane	ND		2.0		ug/L			10/07/16 15:00	1
Carbon disulfide	ND		10		ug/L			10/07/16 15:00	1
Carbon tetrachloride	ND		1.0		ug/L			10/07/16 15:00	1
Chlorobenzene	ND		1.0		ug/L			10/07/16 15:00	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 15:00	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 15:00	1
Chloroethane	ND		2.0		ug/L			10/07/16 15:00	1
Chloroform	ND		1.0		ug/L			10/07/16 15:00	1
Chloromethane	ND		2.0		ug/L			10/07/16 15:00	1
cis-1,2-Dichloroethene	**9.7**		1.0		ug/L			10/07/16 15:00	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 15:00	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 15:00	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/07/16 15:00	1
Ethyl ether	ND		1.0		ug/L			10/07/16 15:00	1
Ethylbenzene	ND		1.0		ug/L			10/07/16 15:00	1
Ethylene Dibromide	ND		1.0		ug/L			10/07/16 15:00	1
Hexachlorobutadiene	ND		0.40		ug/L			10/07/16 15:00	1
Isopropyl ether	ND		10		ug/L			10/07/16 15:00	1
Isopropylbenzene	ND		1.0		ug/L			10/07/16 15:00	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/07/16 15:00	1
Methylene Chloride	ND		1.0		ug/L			10/07/16 15:00	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/07/16 15:00	1
Naphthalene	ND		5.0		ug/L			10/07/16 15:00	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 15:00	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 15:00	1
o-Xylene	ND		1.0		ug/L			10/07/16 15:00	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 15:00	1

Client Sample ID: REW-7-20161005

Lab Sample ID: 480-107127-2

Date Collected: 10/05/16 11:20

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0		ug/L			10/07/16 15:00	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/07/16 15:00	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/07/16 15:00	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 15:00	1
Tetrachloroethene	ND		1.0		ug/L			10/07/16 15:00	1
Tetrahydrofuran	ND		10		ug/L			10/07/16 15:00	1
Toluene	**58**		1.0		ug/L			10/07/16 15:00	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 15:00	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 15:00	1
Trichloroethene	ND		1.0		ug/L			10/07/16 15:00	1
Trichlorofluoromethane	ND		1.0		ug/L			10/07/16 15:00	1
Vinyl chloride	**8.6**		1.0		ug/L			10/07/16 15:00	1
Dibromomethane	ND		1.0		ug/L			10/07/16 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*70 - 130*		*10/07/16 15:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*10/07/16 15:00*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/07/16 15:00*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**61**		0.050		mg/L		10/07/16 09:30	10/08/16 11:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**23**		2.5		mg/L			10/07/16 08:48	5
Sulfate	ND		2.0		mg/L			10/10/16 13:56	1
Ammonia	ND		0.20		mg/L		10/09/16 13:43	10/09/16 14:15	1
Nitrate as N	ND		0.050		mg/L			10/06/16 14:28	1
TOC Result 1	**26**		1.0		mg/L			10/07/16 20:42	1
TOC Result 2	**28**		1.0		mg/L			10/07/16 20:42	1
Total Organic Carbon - Duplicates	**27**		1.0		mg/L			10/07/16 20:42	1
Alkalinity, Total	**260**		5.0		mg/L			10/06/16 18:45	1
ortho-Phosphate	ND		0.020		mg/L			10/06/16 14:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.7**	**HF**	0.1		SU			10/06/16 18:36	1

Client Sample ID: REW-8-20161005

Lab Sample ID: 480-107127-3

Date Collected: 10/05/16 10:25

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/07/16 15:24	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/07/16 15:24	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 15:24	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/07/16 15:24	1
1,1-Dichloroethane	ND		1.0		ug/L			10/07/16 15:24	1
1,1-Dichloroethene	ND		1.0		ug/L			10/07/16 15:24	1
1,1-Dichloropropene	ND		1.0		ug/L			10/07/16 15:24	1

Client Sample ID: REW-8-20161005

Date Collected: 10/05/16 10:25
Date Received: 10/06/16 01:45

Lab Sample ID: 480-107127-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/16 15:24	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/07/16 15:24	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/16 15:24	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/07/16 15:24	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/16 15:24	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/07/16 15:24	1
1,2-Dichloroethane	ND		1.0		ug/L			10/07/16 15:24	1
1,2-Dichloropropane	ND		1.0		ug/L			10/07/16 15:24	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/07/16 15:24	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/07/16 15:24	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 15:24	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/07/16 15:24	1
1,4-Dioxane	ND		50		ug/L			10/07/16 15:24	1
2,2-Dichloropropane	ND		1.0		ug/L			10/07/16 15:24	1
2-Butanone (MEK)	ND		10		ug/L			10/07/16 15:24	1
2-Chlorotoluene	ND		1.0		ug/L			10/07/16 15:24	1
2-Hexanone	ND		10		ug/L			10/07/16 15:24	1
4-Chlorotoluene	ND		1.0		ug/L			10/07/16 15:24	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 15:24	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/07/16 15:24	1
Acetone	ND		50		ug/L			10/07/16 15:24	1
Benzene	ND		1.0		ug/L			10/07/16 15:24	1
Bromobenzene	ND		1.0		ug/L			10/07/16 15:24	1
Bromoform	ND		1.0		ug/L			10/07/16 15:24	1
Bromomethane	ND		2.0		ug/L			10/07/16 15:24	1
Carbon disulfide	ND		10		ug/L			10/07/16 15:24	1
Carbon tetrachloride	ND		1.0		ug/L			10/07/16 15:24	1
Chlorobenzene	ND		1.0		ug/L			10/07/16 15:24	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 15:24	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 15:24	1
Chloroethane	ND		2.0		ug/L			10/07/16 15:24	1
Chloroform	ND		1.0		ug/L			10/07/16 15:24	1
Chloromethane	ND		2.0		ug/L			10/07/16 15:24	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 15:24	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 15:24	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 15:24	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/07/16 15:24	1
Ethyl ether	ND		1.0		ug/L			10/07/16 15:24	1
Ethylbenzene	ND		1.0		ug/L			10/07/16 15:24	1
Ethylene Dibromide	ND		1.0		ug/L			10/07/16 15:24	1
Hexachlorobutadiene	ND		0.40		ug/L			10/07/16 15:24	1
Isopropyl ether	ND		10		ug/L			10/07/16 15:24	1
Isopropylbenzene	ND		1.0		ug/L			10/07/16 15:24	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/07/16 15:24	1
Methylene Chloride	ND		1.0		ug/L			10/07/16 15:24	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/07/16 15:24	1
Naphthalene	ND		5.0		ug/L			10/07/16 15:24	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 15:24	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 15:24	1

Client Sample ID: REW-8-20161005

Lab Sample ID: 480-107127-3

Date Collected: 10/05/16 10:25

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			10/07/16 15:24	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 15:24	1
Styrene	ND		1.0		ug/L			10/07/16 15:24	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/07/16 15:24	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/07/16 15:24	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 15:24	1
Tetrachloroethene	ND		1.0		ug/L			10/07/16 15:24	1
Tetrahydrofuran	ND		10		ug/L			10/07/16 15:24	1
Toluene	**9.4**		1.0		ug/L			10/07/16 15:24	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 15:24	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 15:24	1
Trichloroethene	ND		1.0		ug/L			10/07/16 15:24	1
Trichlorofluoromethane	ND		1.0		ug/L			10/07/16 15:24	1
Vinyl chloride	ND		1.0		ug/L			10/07/16 15:24	1
Dibromomethane	ND		1.0		ug/L			10/07/16 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*90*		*70 - 130*		*10/07/16 15:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*		*10/07/16 15:24*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/07/16 15:24*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**49**		0.050		mg/L		10/07/16 09:30	10/08/16 11:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35**		2.5		mg/L			10/07/16 08:56	5
Sulfate	ND		2.0		mg/L			10/10/16 14:04	1
Ammonia	**6.7**		1.0		mg/L		10/09/16 13:43	10/09/16 14:16	1
Nitrate as N	ND		0.050		mg/L			10/06/16 14:29	1
TOC Result 1	**13**		1.0		mg/L			10/07/16 21:38	1
TOC Result 2	**14**		1.0		mg/L			10/07/16 21:38	1
Total Organic Carbon - Duplicates	**13**		1.0		mg/L			10/07/16 21:38	1
Alkalinity, Total	**260**		5.0		mg/L			10/06/16 19:05	1
ortho-Phosphate	**0.21**		0.020		mg/L			10/06/16 14:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.8**	**HF**	0.1		SU			10/06/16 18:41	1

Client Sample ID: REW-9-20161005

Lab Sample ID: 480-107127-4

Date Collected: 10/05/16 09:30

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/07/16 15:48	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/07/16 15:48	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 15:48	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/07/16 15:48	1
1,1-Dichloroethane	ND		1.0		ug/L			10/07/16 15:48	1

Client Sample ID: REW-9-20161005
Date Collected: 10/05/16 09:30
Date Received: 10/06/16 01:45

Lab Sample ID: 480-107127-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0		ug/L			10/07/16 15:48	1
1,1-Dichloropropene	ND		1.0		ug/L			10/07/16 15:48	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/16 15:48	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/07/16 15:48	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/16 15:48	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/07/16 15:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/16 15:48	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/07/16 15:48	1
1,2-Dichloroethane	ND		1.0		ug/L			10/07/16 15:48	1
1,2-Dichloropropane	ND		1.0		ug/L			10/07/16 15:48	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/07/16 15:48	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/07/16 15:48	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 15:48	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/07/16 15:48	1
1,4-Dioxane	ND		50		ug/L			10/07/16 15:48	1
2,2-Dichloropropane	ND		1.0		ug/L			10/07/16 15:48	1
2-Butanone (MEK)	**140**		10		ug/L			10/07/16 15:48	1
2-Chlorotoluene	ND		1.0		ug/L			10/07/16 15:48	1
2-Hexanone	ND		10		ug/L			10/07/16 15:48	1
4-Chlorotoluene	ND		1.0		ug/L			10/07/16 15:48	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 15:48	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/07/16 15:48	1
Acetone	ND		50		ug/L			10/07/16 15:48	1
Benzene	ND		1.0		ug/L			10/07/16 15:48	1
Bromobenzene	ND		1.0		ug/L			10/07/16 15:48	1
Bromoform	ND		1.0		ug/L			10/07/16 15:48	1
Bromomethane	ND		2.0		ug/L			10/07/16 15:48	1
Carbon disulfide	ND		10		ug/L			10/07/16 15:48	1
Carbon tetrachloride	ND		1.0		ug/L			10/07/16 15:48	1
Chlorobenzene	ND		1.0		ug/L			10/07/16 15:48	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 15:48	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 15:48	1
Chloroethane	ND		2.0		ug/L			10/07/16 15:48	1
Chloroform	ND		1.0		ug/L			10/07/16 15:48	1
Chloromethane	ND		2.0		ug/L			10/07/16 15:48	1
cis-1,2-Dichloroethene	**24**		1.0		ug/L			10/07/16 15:48	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 15:48	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 15:48	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/07/16 15:48	1
Ethyl ether	ND		1.0		ug/L			10/07/16 15:48	1
Ethylbenzene	**1.1**		1.0		ug/L			10/07/16 15:48	1
Ethylene Dibromide	ND		1.0		ug/L			10/07/16 15:48	1
Hexachlorobutadiene	ND		0.40		ug/L			10/07/16 15:48	1
Isopropyl ether	ND		10		ug/L			10/07/16 15:48	1
Isopropylbenzene	ND		1.0		ug/L			10/07/16 15:48	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/07/16 15:48	1
Methylene Chloride	ND		1.0		ug/L			10/07/16 15:48	1
m-Xylene & p-Xylene	**3.9**		2.0		ug/L			10/07/16 15:48	1
Naphthalene	ND		5.0		ug/L			10/07/16 15:48	1

Client Sample ID: REW-9-20161005

Lab Sample ID: 480-107127-4

Date Collected: 10/05/16 09:30

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			10/07/16 15:48	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 15:48	1
o-Xylene	ND		1.0		ug/L			10/07/16 15:48	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 15:48	1
Styrene	ND		1.0		ug/L			10/07/16 15:48	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/07/16 15:48	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/07/16 15:48	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 15:48	1
Tetrachloroethene	ND		1.0		ug/L			10/07/16 15:48	1
Tetrahydrofuran	ND		10		ug/L			10/07/16 15:48	1
Toluene	**48**		1.0		ug/L			10/07/16 15:48	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 15:48	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 15:48	1
Trichloroethene	ND		1.0		ug/L			10/07/16 15:48	1
Trichlorofluoromethane	ND		1.0		ug/L			10/07/16 15:48	1
Vinyl chloride	**13**		1.0		ug/L			10/07/16 15:48	1
Dibromomethane	ND		1.0		ug/L			10/07/16 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*70 - 130*		*10/07/16 15:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*		*10/07/16 15:48*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/07/16 15:48*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**100**		0.050		mg/L		10/07/16 09:30	10/08/16 12:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28**		2.5		mg/L			10/07/16 09:04	5
Sulfate	**8.6**		2.0		mg/L			10/11/16 11:13	1
Ammonia	**0.20**		0.20		mg/L		10/09/16 13:43	10/09/16 14:18	1
Nitrate as N	ND		0.050		mg/L			10/06/16 14:31	1
TOC Result 1	**250**		5.0		mg/L			10/12/16 00:41	5
TOC Result 2	**250**		5.0		mg/L			10/12/16 00:41	5
Total Organic Carbon - Duplicates	**250**		5.0		mg/L			10/12/16 00:41	5
Alkalinity, Total	**380**		5.0		mg/L			10/06/16 19:12	1
ortho-Phosphate	**0.077**		0.020		mg/L			10/06/16 14:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.4**	**HF**	0.1		SU			10/06/16 18:46	1

Client Sample ID: REW-10-20161005

Lab Sample ID: 480-107127-5

Date Collected: 10/05/16 08:55

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/07/16 16:12	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/07/16 16:12	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 16:12	1

Client Sample ID: REW-10-20161005

Lab Sample ID: 480-107127-5

Date Collected: 10/05/16 08:55

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0		ug/L			10/07/16 16:12	1
1,1-Dichloroethane	ND		1.0		ug/L			10/07/16 16:12	1
1,1-Dichloroethene	ND		1.0		ug/L			10/07/16 16:12	1
1,1-Dichloropropene	ND		1.0		ug/L			10/07/16 16:12	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/16 16:12	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/07/16 16:12	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/16 16:12	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/07/16 16:12	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/16 16:12	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/07/16 16:12	1
1,2-Dichloroethane	ND		1.0		ug/L			10/07/16 16:12	1
1,2-Dichloropropane	ND		1.0		ug/L			10/07/16 16:12	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/07/16 16:12	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/07/16 16:12	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 16:12	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/07/16 16:12	1
1,4-Dioxane	ND		50		ug/L			10/07/16 16:12	1
2,2-Dichloropropane	ND		1.0		ug/L			10/07/16 16:12	1
2-Butanone (MEK)	ND		10		ug/L			10/07/16 16:12	1
2-Chlorotoluene	ND		1.0		ug/L			10/07/16 16:12	1
2-Hexanone	ND		10		ug/L			10/07/16 16:12	1
4-Chlorotoluene	ND		1.0		ug/L			10/07/16 16:12	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 16:12	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/07/16 16:12	1
Acetone	ND		50		ug/L			10/07/16 16:12	1
Benzene	ND		1.0		ug/L			10/07/16 16:12	1
Bromobenzene	ND		1.0		ug/L			10/07/16 16:12	1
Bromoform	ND		1.0		ug/L			10/07/16 16:12	1
Bromomethane	ND		2.0		ug/L			10/07/16 16:12	1
Carbon disulfide	ND		10		ug/L			10/07/16 16:12	1
Carbon tetrachloride	ND		1.0		ug/L			10/07/16 16:12	1
Chlorobenzene	ND		1.0		ug/L			10/07/16 16:12	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 16:12	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 16:12	1
Chloroethane	ND		2.0		ug/L			10/07/16 16:12	1
Chloroform	ND		1.0		ug/L			10/07/16 16:12	1
Chloromethane	ND		2.0		ug/L			10/07/16 16:12	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 16:12	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 16:12	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 16:12	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/07/16 16:12	1
Ethyl ether	ND		1.0		ug/L			10/07/16 16:12	1
Ethylbenzene	ND		1.0		ug/L			10/07/16 16:12	1
Ethylene Dibromide	ND		1.0		ug/L			10/07/16 16:12	1
Hexachlorobutadiene	ND		0.40		ug/L			10/07/16 16:12	1
Isopropyl ether	ND		10		ug/L			10/07/16 16:12	1
Isopropylbenzene	ND		1.0		ug/L			10/07/16 16:12	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/07/16 16:12	1
Methylene Chloride	ND		1.0		ug/L			10/07/16 16:12	1

Client Sample ID: REW-10-20161005

Lab Sample ID: 480-107127-5

Date Collected: 10/05/16 08:55
Matrix: Water
Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0		ug/L			10/07/16 16:12	1
Naphthalene	ND		5.0		ug/L			10/07/16 16:12	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 16:12	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 16:12	1
o-Xylene	ND		1.0		ug/L			10/07/16 16:12	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 16:12	1
Styrene	ND		1.0		ug/L			10/07/16 16:12	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/07/16 16:12	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/07/16 16:12	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 16:12	1
Tetrachloroethene	ND		1.0		ug/L			10/07/16 16:12	1
Tetrahydrofuran	ND		10		ug/L			10/07/16 16:12	1
Toluene	ND		1.0		ug/L			10/07/16 16:12	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 16:12	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 16:12	1
Trichloroethene	ND		1.0		ug/L			10/07/16 16:12	1
Trichlorofluoromethane	ND		1.0		ug/L			10/07/16 16:12	1
Vinyl chloride	ND		1.0		ug/L			10/07/16 16:12	1
Dibromomethane	ND		1.0		ug/L			10/07/16 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*89*		*70 - 130*		*10/07/16 16:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*10/07/16 16:12*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/07/16 16:12*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.3**		0.050		mg/L		10/07/16 09:30	10/08/16 12:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**68**		1.0		mg/L			10/07/16 09:12	2
Sulfate	**26**		4.0		mg/L			10/07/16 09:12	2
Ammonia	**0.22**		0.20		mg/L		10/09/16 13:43	10/09/16 14:21	1
Nitrate as N	ND		0.050		mg/L			10/06/16 14:32	1
TOC Result 1	ND		1.0		mg/L			10/08/16 01:22	1
TOC Result 2	**1.1**		1.0		mg/L			10/08/16 01:22	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/08/16 01:22	1
Alkalinity, Total	**81**		5.0		mg/L			10/06/16 19:18	1
ortho-Phosphate	**0.029**		0.020		mg/L			10/06/16 14:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.1**	**HF**	0.1		SU			10/06/16 18:48	1

Client Sample ID: REW-11-20161005

Lab Sample ID: 480-107127-6

Date Collected: 10/05/16 12:20
Matrix: Water
Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/07/16 16:36	1

Client Sample ID: REW-11-20161005

Lab Sample ID: 480-107127-6

Date Collected: 10/05/16 12:20

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			10/07/16 16:36	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 16:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/07/16 16:36	1
1,1-Dichloroethane	ND		1.0		ug/L			10/07/16 16:36	1
1,1-Dichloroethene	ND		1.0		ug/L			10/07/16 16:36	1
1,1-Dichloropropene	ND		1.0		ug/L			10/07/16 16:36	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/16 16:36	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/07/16 16:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/16 16:36	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/07/16 16:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/16 16:36	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/07/16 16:36	1
1,2-Dichloroethane	ND		1.0		ug/L			10/07/16 16:36	1
1,2-Dichloropropane	ND		1.0		ug/L			10/07/16 16:36	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/07/16 16:36	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/07/16 16:36	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 16:36	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/07/16 16:36	1
1,4-Dioxane	ND		50		ug/L			10/07/16 16:36	1
2,2-Dichloropropane	ND		1.0		ug/L			10/07/16 16:36	1
2-Butanone (MEK)	**30**		10		ug/L			10/07/16 16:36	1
2-Chlorotoluene	ND		1.0		ug/L			10/07/16 16:36	1
2-Hexanone	ND		10		ug/L			10/07/16 16:36	1
4-Chlorotoluene	ND		1.0		ug/L			10/07/16 16:36	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 16:36	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/07/16 16:36	1
Acetone	ND		50		ug/L			10/07/16 16:36	1
Benzene	ND		1.0		ug/L			10/07/16 16:36	1
Bromobenzene	ND		1.0		ug/L			10/07/16 16:36	1
Bromoform	ND		1.0		ug/L			10/07/16 16:36	1
Bromomethane	ND		2.0		ug/L			10/07/16 16:36	1
Carbon disulfide	ND		10		ug/L			10/07/16 16:36	1
Carbon tetrachloride	ND		1.0		ug/L			10/07/16 16:36	1
Chlorobenzene	ND		1.0		ug/L			10/07/16 16:36	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 16:36	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 16:36	1
Chloroethane	ND		2.0		ug/L			10/07/16 16:36	1
Chloroform	ND		1.0		ug/L			10/07/16 16:36	1
Chloromethane	ND		2.0		ug/L			10/07/16 16:36	1
cis-1,2-Dichloroethene	**20**		1.0		ug/L			10/07/16 16:36	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 16:36	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 16:36	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/07/16 16:36	1
Ethyl ether	ND		1.0		ug/L			10/07/16 16:36	1
Ethylbenzene	ND		1.0		ug/L			10/07/16 16:36	1
Ethylene Dibromide	ND		1.0		ug/L			10/07/16 16:36	1
Hexachlorobutadiene	ND		0.40		ug/L			10/07/16 16:36	1
Isopropyl ether	ND		10		ug/L			10/07/16 16:36	1
Isopropylbenzene	ND		1.0		ug/L			10/07/16 16:36	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Client Sample ID: REW-11-20161005

Lab Sample ID: 480-107127-6

Date Collected: 10/05/16 12:20

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			10/07/16 16:36	1
Methylene Chloride	ND		1.0		ug/L			10/07/16 16:36	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/07/16 16:36	1
Naphthalene	ND		5.0		ug/L			10/07/16 16:36	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 16:36	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 16:36	1
o-Xylene	ND		1.0		ug/L			10/07/16 16:36	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 16:36	1
Styrene	ND		1.0		ug/L			10/07/16 16:36	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/07/16 16:36	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/07/16 16:36	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 16:36	1
Tetrachloroethene	ND		1.0		ug/L			10/07/16 16:36	1
Tetrahydrofuran	ND		10		ug/L			10/07/16 16:36	1
Toluene	**34**		1.0		ug/L			10/07/16 16:36	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 16:36	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 16:36	1
Trichloroethene	**3.4**		1.0		ug/L			10/07/16 16:36	1
Trichlorofluoromethane	ND		1.0		ug/L			10/07/16 16:36	1
Vinyl chloride	**9.7**		1.0		ug/L			10/07/16 16:36	1
Dibromomethane	ND		1.0		ug/L			10/07/16 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*87*		*70 - 130*		*10/07/16 16:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*		*10/07/16 16:36*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*10/07/16 16:36*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**43**		0.050		mg/L		10/07/16 09:30	10/08/16 12:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50**		2.5		mg/L			10/07/16 10:09	5
Sulfate	**19**		10		mg/L			10/07/16 10:09	5
Ammonia	**0.79**		0.20		mg/L		10/09/16 13:43	10/09/16 14:22	1
Nitrate as N	ND		0.050		mg/L			10/06/16 14:33	1
TOC Result 1	**78**		1.0		mg/L			10/08/16 02:19	1
TOC Result 2	**83**		1.0		mg/L			10/08/16 02:19	1
Total Organic Carbon - Duplicates	**80**		1.0		mg/L			10/08/16 02:19	1
Alkalinity, Total	**160**		5.0		mg/L			10/06/16 19:23	1
ortho-Phosphate	**0.027**		0.020		mg/L			10/06/16 14:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.6**	**HF**	0.1		SU			10/06/16 18:51	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Client Sample ID: REW-12-20161005

Lab Sample ID: 480-107127-7

Date Collected: 10/05/16 13:10

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			10/07/16 17:00	2
1,1,1-Trichloroethane	ND		2.0		ug/L			10/07/16 17:00	2
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			10/07/16 17:00	2
1,1,2-Trichloroethane	ND		2.0		ug/L			10/07/16 17:00	2
1,1-Dichloroethane	**2.2**		2.0		ug/L			10/07/16 17:00	2
1,1-Dichloroethene	ND		2.0		ug/L			10/07/16 17:00	2
1,1-Dichloropropene	ND		2.0		ug/L			10/07/16 17:00	2
1,2,3-Trichlorobenzene	ND		2.0		ug/L			10/07/16 17:00	2
1,2,3-Trichloropropane	ND		2.0		ug/L			10/07/16 17:00	2
1,2,4-Trichlorobenzene	ND		2.0		ug/L			10/07/16 17:00	2
1,2,4-Trimethylbenzene	ND		2.0		ug/L			10/07/16 17:00	2
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			10/07/16 17:00	2
1,2-Dichlorobenzene	ND		2.0		ug/L			10/07/16 17:00	2
1,2-Dichloroethane	ND		2.0		ug/L			10/07/16 17:00	2
1,2-Dichloropropane	ND		2.0		ug/L			10/07/16 17:00	2
1,3,5-Trimethylbenzene	ND		2.0		ug/L			10/07/16 17:00	2
1,3-Dichlorobenzene	ND		2.0		ug/L			10/07/16 17:00	2
1,3-Dichloropropane	ND		2.0		ug/L			10/07/16 17:00	2
1,4-Dichlorobenzene	ND		2.0		ug/L			10/07/16 17:00	2
1,4-Dioxane	ND		100		ug/L			10/07/16 17:00	2
2,2-Dichloropropane	ND		2.0		ug/L			10/07/16 17:00	2
2-Butanone (MEK)	**66**		20		ug/L			10/07/16 17:00	2
2-Chlorotoluene	ND		2.0		ug/L			10/07/16 17:00	2
2-Hexanone	ND		20		ug/L			10/07/16 17:00	2
4-Chlorotoluene	ND		2.0		ug/L			10/07/16 17:00	2
4-Isopropyltoluene	ND		2.0		ug/L			10/07/16 17:00	2
4-Methyl-2-pentanone (MIBK)	ND		20		ug/L			10/07/16 17:00	2
Acetone	ND		100		ug/L			10/07/16 17:00	2
Benzene	ND		2.0		ug/L			10/07/16 17:00	2
Bromobenzene	ND		2.0		ug/L			10/07/16 17:00	2
Bromoform	ND		2.0		ug/L			10/07/16 17:00	2
Bromomethane	ND		4.0		ug/L			10/07/16 17:00	2
Carbon disulfide	ND		20		ug/L			10/07/16 17:00	2
Carbon tetrachloride	ND		2.0		ug/L			10/07/16 17:00	2
Chlorobenzene	ND		2.0		ug/L			10/07/16 17:00	2
Chlorobromomethane	ND		2.0		ug/L			10/07/16 17:00	2
Chlorodibromomethane	ND		1.0		ug/L			10/07/16 17:00	2
Chloroethane	ND		4.0		ug/L			10/07/16 17:00	2
Chloroform	ND		2.0		ug/L			10/07/16 17:00	2
Chloromethane	ND		4.0		ug/L			10/07/16 17:00	2
cis-1,2-Dichloroethene	**130**		2.0		ug/L			10/07/16 17:00	2
cis-1,3-Dichloropropene	ND		0.80		ug/L			10/07/16 17:00	2
Dichlorobromomethane	ND		1.0		ug/L			10/07/16 17:00	2
Dichlorodifluoromethane	ND		2.0		ug/L			10/07/16 17:00	2
Ethyl ether	ND		2.0		ug/L			10/07/16 17:00	2
Ethylbenzene	ND		2.0		ug/L			10/07/16 17:00	2
Ethylene Dibromide	ND		2.0		ug/L			10/07/16 17:00	2
Hexachlorobutadiene	ND		0.80		ug/L			10/07/16 17:00	2
Isopropyl ether	ND		20		ug/L			10/07/16 17:00	2

Client Sample ID: REW-12-20161005

Lab Sample ID: 480-107127-7

Date Collected: 10/05/16 13:10

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		2.0		ug/L			10/07/16 17:00	2
Methyl tert-butyl ether	ND		2.0		ug/L			10/07/16 17:00	2
Methylene Chloride	ND		2.0		ug/L			10/07/16 17:00	2
m-Xylene & p-Xylene	ND		4.0		ug/L			10/07/16 17:00	2
Naphthalene	ND		10		ug/L			10/07/16 17:00	2
n-Butylbenzene	ND		2.0		ug/L			10/07/16 17:00	2
N-Propylbenzene	ND		2.0		ug/L			10/07/16 17:00	2
o-Xylene	ND		2.0		ug/L			10/07/16 17:00	2
sec-Butylbenzene	ND		2.0		ug/L			10/07/16 17:00	2
Styrene	ND		2.0		ug/L			10/07/16 17:00	2
Tert-amyl methyl ether	ND		10		ug/L			10/07/16 17:00	2
Tert-butyl ethyl ether	ND		10		ug/L			10/07/16 17:00	2
tert-Butylbenzene	ND		2.0		ug/L			10/07/16 17:00	2
Tetrachloroethene	ND		2.0		ug/L			10/07/16 17:00	2
Tetrahydrofuran	ND		20		ug/L			10/07/16 17:00	2
Toluene	**72**		2.0		ug/L			10/07/16 17:00	2
trans-1,2-Dichloroethene	ND		2.0		ug/L			10/07/16 17:00	2
trans-1,3-Dichloropropene	ND		0.80		ug/L			10/07/16 17:00	2
Trichloroethene	**29**		2.0		ug/L			10/07/16 17:00	2
Trichlorofluoromethane	ND		2.0		ug/L			10/07/16 17:00	2
Vinyl chloride	**53**		2.0		ug/L			10/07/16 17:00	2
Dibromomethane	ND		2.0		ug/L			10/07/16 17:00	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*90*		*70 - 130*		*10/07/16 17:00*	*2*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*10/07/16 17:00*	*2*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*10/07/16 17:00*	*2*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**81**		0.050		mg/L		10/07/16 09:30	10/08/16 12:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**36**		2.5		mg/L			10/07/16 10:17	5
Sulfate	**21**		10		mg/L			10/07/16 10:17	5
Ammonia	**0.27**		0.20		mg/L		10/09/16 13:43	10/09/16 14:23	1
Nitrate as N	ND		0.050		mg/L			10/06/16 14:37	1
TOC Result 1	**94**		1.0		mg/L			10/08/16 02:47	1
TOC Result 2	**99**		1.0		mg/L			10/08/16 02:47	1
Total Organic Carbon - Duplicates	**97**		1.0		mg/L			10/08/16 02:47	1
Alkalinity, Total	**200**		5.0		mg/L			10/06/16 19:30	1
ortho-Phosphate	**0.026**		0.020		mg/L			10/06/16 14:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.5**	**HF**	0.1		SU			10/06/16 18:54	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Client Sample ID: DUP3-20161005

Date Collected: 10/05/16 00:00
Date Received: 10/06/16 01:45

Lab Sample ID: 480-107127-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/07/16 17:24	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/07/16 17:24	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 17:24	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/07/16 17:24	1
1,1-Dichloroethane	ND		1.0		ug/L			10/07/16 17:24	1
1,1-Dichloroethene	ND		1.0		ug/L			10/07/16 17:24	1
1,1-Dichloropropene	ND		1.0		ug/L			10/07/16 17:24	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/16 17:24	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/07/16 17:24	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/16 17:24	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/07/16 17:24	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/16 17:24	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/07/16 17:24	1
1,2-Dichloroethane	ND		1.0		ug/L			10/07/16 17:24	1
1,2-Dichloropropane	ND		1.0		ug/L			10/07/16 17:24	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/07/16 17:24	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/07/16 17:24	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 17:24	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/07/16 17:24	1
1,4-Dioxane	ND		50		ug/L			10/07/16 17:24	1
2,2-Dichloropropane	ND		1.0		ug/L			10/07/16 17:24	1
2-Butanone (MEK)	ND		10		ug/L			10/07/16 17:24	1
2-Chlorotoluene	ND		1.0		ug/L			10/07/16 17:24	1
2-Hexanone	ND		10		ug/L			10/07/16 17:24	1
4-Chlorotoluene	ND		1.0		ug/L			10/07/16 17:24	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 17:24	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/07/16 17:24	1
Acetone	ND		50		ug/L			10/07/16 17:24	1
Benzene	ND		1.0		ug/L			10/07/16 17:24	1
Bromobenzene	ND		1.0		ug/L			10/07/16 17:24	1
Bromoform	ND		1.0		ug/L			10/07/16 17:24	1
Bromomethane	ND		2.0		ug/L			10/07/16 17:24	1
Carbon disulfide	ND		10		ug/L			10/07/16 17:24	1
Carbon tetrachloride	ND		1.0		ug/L			10/07/16 17:24	1
Chlorobenzene	ND		1.0		ug/L			10/07/16 17:24	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 17:24	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 17:24	1
Chloroethane	ND		2.0		ug/L			10/07/16 17:24	1
Chloroform	ND		1.0		ug/L			10/07/16 17:24	1
Chloromethane	ND		2.0		ug/L			10/07/16 17:24	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 17:24	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 17:24	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 17:24	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/07/16 17:24	1
Ethyl ether	ND		1.0		ug/L			10/07/16 17:24	1
Ethylbenzene	ND		1.0		ug/L			10/07/16 17:24	1
Ethylene Dibromide	ND		1.0		ug/L			10/07/16 17:24	1
Hexachlorobutadiene	ND		0.40		ug/L			10/07/16 17:24	1
Isopropyl ether	ND		10		ug/L			10/07/16 17:24	1

Client Sample ID: DUP3-20161005

Lab Sample ID: 480-107127-8

Date Collected: 10/05/16 00:00

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			10/07/16 17:24	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/07/16 17:24	1
Methylene Chloride	ND		1.0		ug/L			10/07/16 17:24	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/07/16 17:24	1
Naphthalene	ND		5.0		ug/L			10/07/16 17:24	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 17:24	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 17:24	1
o-Xylene	ND		1.0		ug/L			10/07/16 17:24	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 17:24	1
Styrene	ND		1.0		ug/L			10/07/16 17:24	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/07/16 17:24	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/07/16 17:24	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 17:24	1
Tetrachloroethene	ND		1.0		ug/L			10/07/16 17:24	1
Tetrahydrofuran	ND		10		ug/L			10/07/16 17:24	1
Toluene	ND		1.0		ug/L			10/07/16 17:24	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 17:24	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 17:24	1
Trichloroethene	ND		1.0		ug/L			10/07/16 17:24	1
Trichlorofluoromethane	ND		1.0		ug/L			10/07/16 17:24	1
Vinyl chloride	ND		1.0		ug/L			10/07/16 17:24	1
Dibromomethane	ND		1.0		ug/L			10/07/16 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*70 - 130*		*10/07/16 17:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*10/07/16 17:24*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/07/16 17:24*	*1*

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-107127-9

Date Collected: 10/05/16 00:00

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/07/16 17:47	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/07/16 17:47	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 17:47	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/07/16 17:47	1
1,1-Dichloroethane	ND		1.0		ug/L			10/07/16 17:47	1
1,1-Dichloroethene	ND		1.0		ug/L			10/07/16 17:47	1
1,1-Dichloropropene	ND		1.0		ug/L			10/07/16 17:47	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/16 17:47	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/07/16 17:47	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/16 17:47	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/07/16 17:47	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/16 17:47	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/07/16 17:47	1
1,2-Dichloroethane	ND		1.0		ug/L			10/07/16 17:47	1
1,2-Dichloropropane	ND		1.0		ug/L			10/07/16 17:47	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/07/16 17:47	1

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-107127-9

Date Collected: 10/05/16 00:00

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			10/07/16 17:47	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 17:47	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/07/16 17:47	1
1,4-Dioxane	ND		50		ug/L			10/07/16 17:47	1
2,2-Dichloropropane	ND		1.0		ug/L			10/07/16 17:47	1
2-Butanone (MEK)	ND		10		ug/L			10/07/16 17:47	1
2-Chlorotoluene	ND		1.0		ug/L			10/07/16 17:47	1
2-Hexanone	ND		10		ug/L			10/07/16 17:47	1
4-Chlorotoluene	ND		1.0		ug/L			10/07/16 17:47	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 17:47	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/07/16 17:47	1
Acetone	ND		50		ug/L			10/07/16 17:47	1
Benzene	ND		1.0		ug/L			10/07/16 17:47	1
Bromobenzene	ND		1.0		ug/L			10/07/16 17:47	1
Bromoform	ND		1.0		ug/L			10/07/16 17:47	1
Bromomethane	ND		2.0		ug/L			10/07/16 17:47	1
Carbon disulfide	ND		10		ug/L			10/07/16 17:47	1
Carbon tetrachloride	ND		1.0		ug/L			10/07/16 17:47	1
Chlorobenzene	ND		1.0		ug/L			10/07/16 17:47	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 17:47	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 17:47	1
Chloroethane	ND		2.0		ug/L			10/07/16 17:47	1
Chloroform	ND		1.0		ug/L			10/07/16 17:47	1
Chloromethane	ND		2.0		ug/L			10/07/16 17:47	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 17:47	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 17:47	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 17:47	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/07/16 17:47	1
Ethyl ether	ND		1.0		ug/L			10/07/16 17:47	1
Ethylbenzene	ND		1.0		ug/L			10/07/16 17:47	1
Ethylene Dibromide	ND		1.0		ug/L			10/07/16 17:47	1
Hexachlorobutadiene	ND		0.40		ug/L			10/07/16 17:47	1
Isopropyl ether	ND		10		ug/L			10/07/16 17:47	1
Isopropylbenzene	ND		1.0		ug/L			10/07/16 17:47	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/07/16 17:47	1
Methylene Chloride	ND		1.0		ug/L			10/07/16 17:47	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/07/16 17:47	1
Naphthalene	ND		5.0		ug/L			10/07/16 17:47	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 17:47	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 17:47	1
o-Xylene	ND		1.0		ug/L			10/07/16 17:47	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 17:47	1
Styrene	ND		1.0		ug/L			10/07/16 17:47	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/07/16 17:47	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/07/16 17:47	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 17:47	1
Tetrachloroethene	ND		1.0		ug/L			10/07/16 17:47	1
Tetrahydrofuran	ND		10		ug/L			10/07/16 17:47	1
Toluene	ND		1.0		ug/L			10/07/16 17:47	1

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-107127-9

Date Collected: 10/05/16 00:00

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 17:47	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 17:47	1
Trichloroethene	ND		1.0		ug/L			10/07/16 17:47	1
Trichlorofluoromethane	ND		1.0		ug/L			10/07/16 17:47	1
Vinyl chloride	ND		1.0		ug/L			10/07/16 17:47	1
Dibromomethane	ND		1.0		ug/L			10/07/16 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*90*		*70 - 130*		*10/07/16 17:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*10/07/16 17:47*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/07/16 17:47*	*1*

Client Sample ID: MW-264M-20161005

Lab Sample ID: 480-107127-10

Date Collected: 10/05/16 11:15

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/07/16 18:11	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/07/16 18:11	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 18:11	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/07/16 18:11	1
1,1-Dichloroethane	ND		1.0		ug/L			10/07/16 18:11	1
1,1-Dichloroethene	ND		1.0		ug/L			10/07/16 18:11	1
1,1-Dichloropropene	ND		1.0		ug/L			10/07/16 18:11	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/16 18:11	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/07/16 18:11	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/16 18:11	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/07/16 18:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/16 18:11	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/07/16 18:11	1
1,2-Dichloroethane	ND		1.0		ug/L			10/07/16 18:11	1
1,2-Dichloropropane	ND		1.0		ug/L			10/07/16 18:11	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/07/16 18:11	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/07/16 18:11	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 18:11	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/07/16 18:11	1
1,4-Dioxane	ND		50		ug/L			10/07/16 18:11	1
2,2-Dichloropropane	ND		1.0		ug/L			10/07/16 18:11	1
2-Butanone (MEK)	ND		10		ug/L			10/07/16 18:11	1
2-Chlorotoluene	ND		1.0		ug/L			10/07/16 18:11	1
2-Hexanone	ND		10		ug/L			10/07/16 18:11	1
4-Chlorotoluene	ND		1.0		ug/L			10/07/16 18:11	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 18:11	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/07/16 18:11	1
Acetone	ND		50		ug/L			10/07/16 18:11	1
Benzene	ND		1.0		ug/L			10/07/16 18:11	1
Bromobenzene	ND		1.0		ug/L			10/07/16 18:11	1
Bromoform	ND		1.0		ug/L			10/07/16 18:11	1
Bromomethane	ND		2.0		ug/L			10/07/16 18:11	1

Client Sample ID: MW-264M-20161005

Lab Sample ID: 480-107127-10

Date Collected: 10/05/16 11:15

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		10		ug/L			10/07/16 18:11	1
Carbon tetrachloride	ND		1.0		ug/L			10/07/16 18:11	1
Chlorobenzene	ND		1.0		ug/L			10/07/16 18:11	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 18:11	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 18:11	1
Chloroethane	ND		2.0		ug/L			10/07/16 18:11	1
Chloroform	ND		1.0		ug/L			10/07/16 18:11	1
Chloromethane	ND		2.0		ug/L			10/07/16 18:11	1
cis-1,2-Dichloroethene	**11**		1.0		ug/L			10/07/16 18:11	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 18:11	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 18:11	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/07/16 18:11	1
Ethyl ether	ND		1.0		ug/L			10/07/16 18:11	1
Ethylbenzene	ND		1.0		ug/L			10/07/16 18:11	1
Ethylene Dibromide	ND		1.0		ug/L			10/07/16 18:11	1
Hexachlorobutadiene	ND		0.40		ug/L			10/07/16 18:11	1
Isopropyl ether	ND		10		ug/L			10/07/16 18:11	1
Isopropylbenzene	ND		1.0		ug/L			10/07/16 18:11	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/07/16 18:11	1
Methylene Chloride	ND		1.0		ug/L			10/07/16 18:11	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/07/16 18:11	1
Naphthalene	ND		5.0		ug/L			10/07/16 18:11	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 18:11	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 18:11	1
o-Xylene	ND		1.0		ug/L			10/07/16 18:11	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 18:11	1
Styrene	ND		1.0		ug/L			10/07/16 18:11	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/07/16 18:11	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/07/16 18:11	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 18:11	1
Tetrachloroethene	**1.6**		1.0		ug/L			10/07/16 18:11	1
Tetrahydrofuran	ND		10		ug/L			10/07/16 18:11	1
Toluene	ND		1.0		ug/L			10/07/16 18:11	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 18:11	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 18:11	1
Trichloroethene	**11**		1.0		ug/L			10/07/16 18:11	1
Trichlorofluoromethane	ND		1.0		ug/L			10/07/16 18:11	1
Vinyl chloride	**8.2**		1.0		ug/L			10/07/16 18:11	1
Dibromomethane	ND		1.0		ug/L			10/07/16 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*70 - 130*		*10/07/16 18:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*10/07/16 18:11*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*10/07/16 18:11*	*1*

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Client Sample ID: MW-266Ma-20161005

Lab Sample ID: 480-107127-11

Date Collected: 10/05/16 10:25
Date Received: 10/06/16 01:45

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/07/16 18:35	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/07/16 18:35	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 18:35	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/07/16 18:35	1
1,1-Dichloroethane	ND		1.0		ug/L			10/07/16 18:35	1
1,1-Dichloroethene	ND		1.0		ug/L			10/07/16 18:35	1
1,1-Dichloropropene	ND		1.0		ug/L			10/07/16 18:35	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/16 18:35	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/07/16 18:35	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/16 18:35	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/07/16 18:35	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/16 18:35	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/07/16 18:35	1
1,2-Dichloroethane	ND		1.0		ug/L			10/07/16 18:35	1
1,2-Dichloropropane	ND		1.0		ug/L			10/07/16 18:35	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/07/16 18:35	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/07/16 18:35	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 18:35	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/07/16 18:35	1
1,4-Dioxane	ND		50		ug/L			10/07/16 18:35	1
2,2-Dichloropropane	ND		1.0		ug/L			10/07/16 18:35	1
2-Butanone (MEK)	ND		10		ug/L			10/07/16 18:35	1
2-Chlorotoluene	ND		1.0		ug/L			10/07/16 18:35	1
2-Hexanone	ND		10		ug/L			10/07/16 18:35	1
4-Chlorotoluene	ND		1.0		ug/L			10/07/16 18:35	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 18:35	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/07/16 18:35	1
Acetone	ND		50		ug/L			10/07/16 18:35	1
Benzene	ND		1.0		ug/L			10/07/16 18:35	1
Bromobenzene	ND		1.0		ug/L			10/07/16 18:35	1
Bromoform	ND		1.0		ug/L			10/07/16 18:35	1
Bromomethane	ND		2.0		ug/L			10/07/16 18:35	1
Carbon disulfide	ND		10		ug/L			10/07/16 18:35	1
Carbon tetrachloride	ND		1.0		ug/L			10/07/16 18:35	1
Chlorobenzene	ND		1.0		ug/L			10/07/16 18:35	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 18:35	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 18:35	1
Chloroethane	ND		2.0		ug/L			10/07/16 18:35	1
Chloroform	ND		1.0		ug/L			10/07/16 18:35	1
Chloromethane	ND		2.0		ug/L			10/07/16 18:35	1
cis-1,2-Dichloroethene	**4.1**		1.0		ug/L			10/07/16 18:35	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 18:35	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 18:35	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/07/16 18:35	1
Ethyl ether	ND		1.0		ug/L			10/07/16 18:35	1
Ethylbenzene	ND		1.0		ug/L			10/07/16 18:35	1
Ethylene Dibromide	ND		1.0		ug/L			10/07/16 18:35	1
Hexachlorobutadiene	ND		0.40		ug/L			10/07/16 18:35	1
Isopropyl ether	ND		10		ug/L			10/07/16 18:35	1

Client Sample ID: MW-266Ma-20161005 — Lab Sample ID: 480-107127-11

Date Collected: 10/05/16 10:25 — **Matrix: Water**
Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			10/07/16 18:35	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/07/16 18:35	1
Methylene Chloride	ND		1.0		ug/L			10/07/16 18:35	1
m-Xylene & p-Xylene	**2.1**		2.0		ug/L			10/07/16 18:35	1
Naphthalene	ND		5.0		ug/L			10/07/16 18:35	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 18:35	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 18:35	1
o-Xylene	ND		1.0		ug/L			10/07/16 18:35	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 18:35	1
Styrene	ND		1.0		ug/L			10/07/16 18:35	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/07/16 18:35	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/07/16 18:35	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 18:35	1
Tetrachloroethene	ND		1.0		ug/L			10/07/16 18:35	1
Tetrahydrofuran	ND		10		ug/L			10/07/16 18:35	1
Toluene	**55**		1.0		ug/L			10/07/16 18:35	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 18:35	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 18:35	1
Trichloroethene	ND		1.0		ug/L			10/07/16 18:35	1
Trichlorofluoromethane	ND		1.0		ug/L			10/07/16 18:35	1
Vinyl chloride	**4.5**		1.0		ug/L			10/07/16 18:35	1
Dibromomethane	ND		1.0		ug/L			10/07/16 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*89*		*70 - 130*		*10/07/16 18:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*10/07/16 18:35*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/07/16 18:35*	*1*

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.5**		0.20		ug/L		10/12/16 19:30	10/13/16 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*82*		*70 - 130*	*10/12/16 19:30*	*10/13/16 14:52*	*1*

Client Sample ID: MW-266Mb-20161005 — Lab Sample ID: 480-107127-12

Date Collected: 10/05/16 09:40 — **Matrix: Water**
Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/07/16 18:59	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/07/16 18:59	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 18:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/07/16 18:59	1
1,1-Dichloroethane	ND		1.0		ug/L			10/07/16 18:59	1
1,1-Dichloroethene	ND		1.0		ug/L			10/07/16 18:59	1
1,1-Dichloropropene	ND		1.0		ug/L			10/07/16 18:59	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/16 18:59	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/07/16 18:59	1

Client Sample ID: MW-266Mb-20161005

Lab Sample ID: 480-107127-12

Date Collected: 10/05/16 09:40

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/16 18:59	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/07/16 18:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/16 18:59	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/07/16 18:59	1
1,2-Dichloroethane	ND		1.0		ug/L			10/07/16 18:59	1
1,2-Dichloropropane	ND		1.0		ug/L			10/07/16 18:59	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/07/16 18:59	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/07/16 18:59	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 18:59	1
1,4-Dichlorobenzene	**1.0**		1.0		ug/L			10/07/16 18:59	1
1,4-Dioxane	ND		50		ug/L			10/07/16 18:59	1
2,2-Dichloropropane	ND		1.0		ug/L			10/07/16 18:59	1
2-Butanone (MEK)	ND		10		ug/L			10/07/16 18:59	1
2-Chlorotoluene	ND		1.0		ug/L			10/07/16 18:59	1
2-Hexanone	ND		10		ug/L			10/07/16 18:59	1
4-Chlorotoluene	ND		1.0		ug/L			10/07/16 18:59	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 18:59	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/07/16 18:59	1
Acetone	ND		50		ug/L			10/07/16 18:59	1
Benzene	ND		1.0		ug/L			10/07/16 18:59	1
Bromobenzene	ND		1.0		ug/L			10/07/16 18:59	1
Bromoform	ND		1.0		ug/L			10/07/16 18:59	1
Bromomethane	ND		2.0		ug/L			10/07/16 18:59	1
Carbon disulfide	ND		10		ug/L			10/07/16 18:59	1
Carbon tetrachloride	ND		1.0		ug/L			10/07/16 18:59	1
Chlorobenzene	ND		1.0		ug/L			10/07/16 18:59	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 18:59	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 18:59	1
Chloroethane	ND		2.0		ug/L			10/07/16 18:59	1
Chloroform	ND		1.0		ug/L			10/07/16 18:59	1
Chloromethane	ND		2.0		ug/L			10/07/16 18:59	1
cis-1,2-Dichloroethene	**5.3**		1.0		ug/L			10/07/16 18:59	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 18:59	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 18:59	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/07/16 18:59	1
Ethyl ether	ND		1.0		ug/L			10/07/16 18:59	1
Ethylbenzene	ND		1.0		ug/L			10/07/16 18:59	1
Ethylene Dibromide	ND		1.0		ug/L			10/07/16 18:59	1
Hexachlorobutadiene	ND		0.40		ug/L			10/07/16 18:59	1
Isopropyl ether	ND		10		ug/L			10/07/16 18:59	1
Isopropylbenzene	ND		1.0		ug/L			10/07/16 18:59	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/07/16 18:59	1
Methylene Chloride	ND		1.0		ug/L			10/07/16 18:59	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/07/16 18:59	1
Naphthalene	ND		5.0		ug/L			10/07/16 18:59	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 18:59	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 18:59	1
o-Xylene	ND		1.0		ug/L			10/07/16 18:59	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 18:59	1

Client Sample ID: MW-266Mb-20161005

Lab Sample ID: 480-107127-12

Date Collected: 10/05/16 09:40
Matrix: Water
Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0		ug/L			10/07/16 18:59	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/07/16 18:59	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/07/16 18:59	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 18:59	1
Tetrachloroethene	ND		1.0		ug/L			10/07/16 18:59	1
Tetrahydrofuran	ND		10		ug/L			10/07/16 18:59	1
Toluene	**3.9**		1.0		ug/L			10/07/16 18:59	1
trans-1,2-Dichloroethene	**1.6**		1.0		ug/L			10/07/16 18:59	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 18:59	1
Trichloroethene	**2.9**		1.0		ug/L			10/07/16 18:59	1
Trichlorofluoromethane	ND		1.0		ug/L			10/07/16 18:59	1
Vinyl chloride	**23**		1.0		ug/L			10/07/16 18:59	1
Dibromomethane	ND		1.0		ug/L			10/07/16 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*87*		*70 - 130*		*10/07/16 18:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*10/07/16 18:59*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*10/07/16 18:59*	*1*

Client Sample ID: MW-560-20161005

Lab Sample ID: 480-107127-13

Date Collected: 10/05/16 13:00
Matrix: Water
Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/08/16 02:01	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/08/16 02:01	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/08/16 02:01	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/08/16 02:01	1
1,1-Dichloroethane	ND		1.0		ug/L			10/08/16 02:01	1
1,1-Dichloroethene	ND		1.0		ug/L			10/08/16 02:01	1
1,1-Dichloropropene	ND		1.0		ug/L			10/08/16 02:01	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/08/16 02:01	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/08/16 02:01	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/08/16 02:01	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/08/16 02:01	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/08/16 02:01	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/08/16 02:01	1
1,2-Dichloroethane	ND		1.0		ug/L			10/08/16 02:01	1
1,2-Dichloropropane	ND		1.0		ug/L			10/08/16 02:01	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/08/16 02:01	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/08/16 02:01	1
1,3-Dichloropropane	ND		1.0		ug/L			10/08/16 02:01	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/08/16 02:01	1
1,4-Dioxane	ND	*	50		ug/L			10/08/16 02:01	1
2,2-Dichloropropane	ND		1.0		ug/L			10/08/16 02:01	1
2-Butanone (MEK)	**22**		10		ug/L			10/08/16 02:01	1
2-Chlorotoluene	ND		1.0		ug/L			10/08/16 02:01	1
2-Hexanone	ND		10		ug/L			10/08/16 02:01	1
4-Chlorotoluene	ND		1.0		ug/L			10/08/16 02:01	1

Client Sample ID: MW-560-20161005

Lab Sample ID: 480-107127-13

Date Collected: 10/05/16 13:00

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		1.0		ug/L			10/08/16 02:01	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/08/16 02:01	1
Acetone	ND		50		ug/L			10/08/16 02:01	1
Benzene	ND		1.0		ug/L			10/08/16 02:01	1
Bromobenzene	ND		1.0		ug/L			10/08/16 02:01	1
Bromoform	ND		1.0		ug/L			10/08/16 02:01	1
Bromomethane	ND		2.0		ug/L			10/08/16 02:01	1
Carbon disulfide	ND		10		ug/L			10/08/16 02:01	1
Carbon tetrachloride	ND		1.0		ug/L			10/08/16 02:01	1
Chlorobenzene	ND		1.0		ug/L			10/08/16 02:01	1
Chlorobromomethane	ND		1.0		ug/L			10/08/16 02:01	1
Chlorodibromomethane	ND		0.50		ug/L			10/08/16 02:01	1
Chloroethane	ND		2.0		ug/L			10/08/16 02:01	1
Chloroform	ND		1.0		ug/L			10/08/16 02:01	1
Chloromethane	ND		2.0		ug/L			10/08/16 02:01	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/08/16 02:01	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/08/16 02:01	1
Dichlorobromomethane	ND		0.50		ug/L			10/08/16 02:01	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/08/16 02:01	1
Ethyl ether	ND		1.0		ug/L			10/08/16 02:01	1
Ethylbenzene	ND		1.0		ug/L			10/08/16 02:01	1
Ethylene Dibromide	ND		1.0		ug/L			10/08/16 02:01	1
Hexachlorobutadiene	ND		0.40		ug/L			10/08/16 02:01	1
Isopropyl ether	ND		10		ug/L			10/08/16 02:01	1
Isopropylbenzene	ND		1.0		ug/L			10/08/16 02:01	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/08/16 02:01	1
Methylene Chloride	ND		1.0		ug/L			10/08/16 02:01	1
m-Xylene & p-Xylene	**2.7**		2.0		ug/L			10/08/16 02:01	1
Naphthalene	ND		5.0		ug/L			10/08/16 02:01	1
n-Butylbenzene	ND		1.0		ug/L			10/08/16 02:01	1
N-Propylbenzene	ND		1.0		ug/L			10/08/16 02:01	1
o-Xylene	ND		1.0		ug/L			10/08/16 02:01	1
sec-Butylbenzene	ND		1.0		ug/L			10/08/16 02:01	1
Styrene	ND		1.0		ug/L			10/08/16 02:01	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/08/16 02:01	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/08/16 02:01	1
tert-Butylbenzene	ND		1.0		ug/L			10/08/16 02:01	1
Tetrachloroethene	ND		1.0		ug/L			10/08/16 02:01	1
Tetrahydrofuran	ND		10		ug/L			10/08/16 02:01	1
Toluene	**11**		1.0		ug/L			10/08/16 02:01	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/08/16 02:01	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/08/16 02:01	1
Trichloroethene	ND		1.0		ug/L			10/08/16 02:01	1
Trichlorofluoromethane	ND		1.0		ug/L			10/08/16 02:01	1
Vinyl chloride	**1.2**		1.0		ug/L			10/08/16 02:01	1
Dibromomethane	ND		1.0		ug/L			10/08/16 02:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*10/08/16 02:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*10/08/16 02:01*	*1*

Client Sample ID: MW-560-20161005

Lab Sample ID: 480-107127-13

Date Collected: 10/05/16 13:00
Matrix: Water
Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*10/08/16 02:01*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**110**		0.050		mg/L		10/07/16 09:30	10/08/16 12:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**34**		2.5		mg/L			10/07/16 10:25	5
Sulfate	ND		2.0		mg/L			10/10/16 14:12	1
Ammonia	ND		0.20		mg/L		10/09/16 13:43	10/09/16 14:24	1
Nitrate as N	ND		0.050		mg/L			10/06/16 14:38	1
TOC Result 1	**5.3**		1.0		mg/L			10/08/16 03:43	1
TOC Result 2	**6.3**		1.0		mg/L			10/08/16 03:43	1
Total Organic Carbon - Duplicates	**5.8**		1.0		mg/L			10/08/16 03:43	1
Alkalinity, Total	**520**		5.0		mg/L			10/06/16 19:38	1
ortho-Phosphate	ND		0.020		mg/L			10/06/16 14:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.9**	**HF**	0.1		SU			10/06/16 18:57	1

Client Sample ID: MW-561-20161005

Lab Sample ID: 480-107127-14

Date Collected: 10/05/16 12:00
Matrix: Water
Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/10/16 00:47	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/10/16 00:47	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/10/16 00:47	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/10/16 00:47	1
1,1-Dichloroethane	ND		1.0		ug/L			10/10/16 00:47	1
1,1-Dichloroethene	ND		1.0		ug/L			10/10/16 00:47	1
1,1-Dichloropropene	ND		1.0		ug/L			10/10/16 00:47	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/10/16 00:47	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/10/16 00:47	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/10/16 00:47	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/10/16 00:47	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/10/16 00:47	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/10/16 00:47	1
1,2-Dichloroethane	ND		1.0		ug/L			10/10/16 00:47	1
1,2-Dichloropropane	ND		1.0		ug/L			10/10/16 00:47	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/10/16 00:47	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/10/16 00:47	1
1,3-Dichloropropane	ND		1.0		ug/L			10/10/16 00:47	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/10/16 00:47	1
1,4-Dioxane	ND	*	50		ug/L			10/10/16 00:47	1
2,2-Dichloropropane	ND		1.0		ug/L			10/10/16 00:47	1
2-Butanone (MEK)	ND		10		ug/L			10/10/16 00:47	1
2-Chlorotoluene	ND		1.0		ug/L			10/10/16 00:47	1

Client Sample ID: MW-561-20161005

Lab Sample ID: 480-107127-14

Date Collected: 10/05/16 12:00

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	ND		10		ug/L			10/10/16 00:47	1
4-Chlorotoluene	ND		1.0		ug/L			10/10/16 00:47	1
4-Isopropyltoluene	ND		1.0		ug/L			10/10/16 00:47	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/10/16 00:47	1
Acetone	ND		50		ug/L			10/10/16 00:47	1
Benzene	ND		1.0		ug/L			10/10/16 00:47	1
Bromobenzene	ND		1.0		ug/L			10/10/16 00:47	1
Bromoform	ND		1.0		ug/L			10/10/16 00:47	1
Bromomethane	ND		2.0		ug/L			10/10/16 00:47	1
Carbon disulfide	ND		10		ug/L			10/10/16 00:47	1
Carbon tetrachloride	ND		1.0		ug/L			10/10/16 00:47	1
Chlorobenzene	ND		1.0		ug/L			10/10/16 00:47	1
Chlorobromomethane	ND		1.0		ug/L			10/10/16 00:47	1
Chlorodibromomethane	ND		0.50		ug/L			10/10/16 00:47	1
Chloroethane	ND		2.0		ug/L			10/10/16 00:47	1
Chloroform	ND		1.0		ug/L			10/10/16 00:47	1
Chloromethane	ND		2.0		ug/L			10/10/16 00:47	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/10/16 00:47	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/10/16 00:47	1
Dichlorobromomethane	ND		0.50		ug/L			10/10/16 00:47	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/10/16 00:47	1
Ethyl ether	ND		1.0		ug/L			10/10/16 00:47	1
Ethylbenzene	ND		1.0		ug/L			10/10/16 00:47	1
Ethylene Dibromide	ND		1.0		ug/L			10/10/16 00:47	1
Hexachlorobutadiene	ND		0.40		ug/L			10/10/16 00:47	1
Isopropyl ether	ND		10		ug/L			10/10/16 00:47	1
Isopropylbenzene	ND		1.0		ug/L			10/10/16 00:47	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/10/16 00:47	1
Methylene Chloride	ND		1.0		ug/L			10/10/16 00:47	1
m-Xylene & p-Xylene	**2.5**		2.0		ug/L			10/10/16 00:47	1
Naphthalene	ND		5.0		ug/L			10/10/16 00:47	1
n-Butylbenzene	ND		1.0		ug/L			10/10/16 00:47	1
N-Propylbenzene	ND		1.0		ug/L			10/10/16 00:47	1
o-Xylene	ND		1.0		ug/L			10/10/16 00:47	1
sec-Butylbenzene	ND		1.0		ug/L			10/10/16 00:47	1
Styrene	ND		1.0		ug/L			10/10/16 00:47	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/10/16 00:47	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/10/16 00:47	1
tert-Butylbenzene	ND		1.0		ug/L			10/10/16 00:47	1
Tetrachloroethene	ND		1.0		ug/L			10/10/16 00:47	1
Tetrahydrofuran	ND		10		ug/L			10/10/16 00:47	1
Toluene	ND		1.0		ug/L			10/10/16 00:47	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/10/16 00:47	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/10/16 00:47	1
Trichloroethene	ND		1.0		ug/L			10/10/16 00:47	1
Trichlorofluoromethane	ND		1.0		ug/L			10/10/16 00:47	1
Vinyl chloride	ND		1.0		ug/L			10/10/16 00:47	1
Dibromomethane	ND		1.0		ug/L			10/10/16 00:47	1

Client Sample ID: MW-561-20161005

Lab Sample ID: 480-107127-14

Date Collected: 10/05/16 12:00
Matrix: Water
Date Received: 10/06/16 01:45

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*70 - 130*		*10/10/16 00:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*		*10/10/16 00:47*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/10/16 00:47*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**110**		0.050		mg/L		10/07/16 09:30	10/08/16 12:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**43**		2.5		mg/L			10/07/16 10:33	5
Sulfate	ND		2.0		mg/L			10/10/16 14:20	1
Ammonia	**3.9**		1.0		mg/L		10/09/16 13:43	10/09/16 14:33	5
Nitrate as N	ND		0.050		mg/L			10/06/16 14:40	1
TOC Result 1	**8.1**		1.0		mg/L			10/08/16 06:03	1
TOC Result 2	**9.1**		1.0		mg/L			10/08/16 06:03	1
Total Organic Carbon - Duplicates	**8.6**		1.0		mg/L			10/08/16 06:03	1
Alkalinity, Total	**370**		5.0		mg/L			10/06/16 19:46	1
ortho-Phosphate	ND		0.020		mg/L			10/06/16 14:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.7**	**HF**	0.1		SU			10/06/16 18:59	1

Client Sample ID: MW-563-20161005

Lab Sample ID: 480-107127-15

Date Collected: 10/05/16 13:55
Matrix: Water
Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/08/16 02:49	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/08/16 02:49	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/08/16 02:49	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/08/16 02:49	1
1,1-Dichloroethane	ND		1.0		ug/L			10/08/16 02:49	1
1,1-Dichloroethene	ND		1.0		ug/L			10/08/16 02:49	1
1,1-Dichloropropene	ND		1.0		ug/L			10/08/16 02:49	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/08/16 02:49	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/08/16 02:49	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/08/16 02:49	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/08/16 02:49	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/08/16 02:49	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/08/16 02:49	1
1,2-Dichloroethane	ND		1.0		ug/L			10/08/16 02:49	1
1,2-Dichloropropane	ND		1.0		ug/L			10/08/16 02:49	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/08/16 02:49	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/08/16 02:49	1
1,3-Dichloropropane	ND		1.0		ug/L			10/08/16 02:49	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/08/16 02:49	1
1,4-Dioxane	ND	*	50		ug/L			10/08/16 02:49	1
2,2-Dichloropropane	ND		1.0		ug/L			10/08/16 02:49	1
2-Butanone (MEK)	ND		10		ug/L			10/08/16 02:49	1

Client Sample ID: MW-563-20161005

Lab Sample ID: 480-107127-15

Date Collected: 10/05/16 13:55

Matrix: Water

Date Received: 10/06/16 01:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		1.0		ug/L			10/08/16 02:49	1
2-Hexanone	ND		10		ug/L			10/08/16 02:49	1
4-Chlorotoluene	ND		1.0		ug/L			10/08/16 02:49	1
4-Isopropyltoluene	ND		1.0		ug/L			10/08/16 02:49	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/08/16 02:49	1
Acetone	ND		50		ug/L			10/08/16 02:49	1
Benzene	ND		1.0		ug/L			10/08/16 02:49	1
Bromobenzene	ND		1.0		ug/L			10/08/16 02:49	1
Bromoform	ND		1.0		ug/L			10/08/16 02:49	1
Bromomethane	ND		2.0		ug/L			10/08/16 02:49	1
Carbon disulfide	ND		10		ug/L			10/08/16 02:49	1
Carbon tetrachloride	ND		1.0		ug/L			10/08/16 02:49	1
Chlorobenzene	ND		1.0		ug/L			10/08/16 02:49	1
Chlorobromomethane	ND		1.0		ug/L			10/08/16 02:49	1
Chlorodibromomethane	ND		0.50		ug/L			10/08/16 02:49	1
Chloroethane	ND		2.0		ug/L			10/08/16 02:49	1
Chloroform	ND		1.0		ug/L			10/08/16 02:49	1
Chloromethane	ND		2.0		ug/L			10/08/16 02:49	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/08/16 02:49	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/08/16 02:49	1
Dichlorobromomethane	ND		0.50		ug/L			10/08/16 02:49	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/08/16 02:49	1
Ethyl ether	ND		1.0		ug/L			10/08/16 02:49	1
Ethylbenzene	ND		1.0		ug/L			10/08/16 02:49	1
Ethylene Dibromide	ND		1.0		ug/L			10/08/16 02:49	1
Hexachlorobutadiene	ND		0.40		ug/L			10/08/16 02:49	1
Isopropyl ether	ND		10		ug/L			10/08/16 02:49	1
Isopropylbenzene	ND		1.0		ug/L			10/08/16 02:49	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/08/16 02:49	1
Methylene Chloride	ND		1.0		ug/L			10/08/16 02:49	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/08/16 02:49	1
Naphthalene	ND		5.0		ug/L			10/08/16 02:49	1
n-Butylbenzene	ND		1.0		ug/L			10/08/16 02:49	1
N-Propylbenzene	ND		1.0		ug/L			10/08/16 02:49	1
o-Xylene	ND		1.0		ug/L			10/08/16 02:49	1
sec-Butylbenzene	ND		1.0		ug/L			10/08/16 02:49	1
Styrene	ND		1.0		ug/L			10/08/16 02:49	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/08/16 02:49	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/08/16 02:49	1
tert-Butylbenzene	ND		1.0		ug/L			10/08/16 02:49	1
Tetrachloroethene	ND		1.0		ug/L			10/08/16 02:49	1
Tetrahydrofuran	ND		10		ug/L			10/08/16 02:49	1
Toluene	ND		1.0		ug/L			10/08/16 02:49	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/08/16 02:49	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/08/16 02:49	1
Trichloroethene	ND		1.0		ug/L			10/08/16 02:49	1
Trichlorofluoromethane	ND		1.0		ug/L			10/08/16 02:49	1
Vinyl chloride	ND		1.0		ug/L			10/08/16 02:49	1
Dibromomethane	ND		1.0		ug/L			10/08/16 02:49	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Client Sample ID: MW-563-20161005

Lab Sample ID: 480-107127-15

Date Collected: 10/05/16 13:55

Matrix: Water

Date Received: 10/06/16 01:45

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*87*		*70 - 130*		*10/08/16 02:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*10/08/16 02:49*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/08/16 02:49*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**58**		0.050		mg/L		10/07/16 09:30	10/08/16 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**42**		2.5		mg/L			10/07/16 10:42	5
Sulfate	ND		2.0		mg/L			10/10/16 14:28	1
Ammonia	**1.3**		0.20		mg/L		10/09/16 13:43	10/09/16 14:25	1
Nitrate as N	ND		0.050		mg/L			10/06/16 14:41	1
TOC Result 1	**1.6**		1.0		mg/L			10/12/16 01:09	1
TOC Result 2	**1.7**		1.0		mg/L			10/12/16 01:09	1
Total Organic Carbon - Duplicates	**1.6**		1.0		mg/L			10/12/16 01:09	1
Alkalinity, Total	**230**		5.0		mg/L			10/06/16 19:52	1
ortho-Phosphate	ND		0.020		mg/L			10/06/16 14:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.6**	**HF**	0.1		SU			10/06/16 19:02	1

Surrogate Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	12DCE	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
480-107127-1	MW-269Ma-20161005	89	85	97
480-107127-2	REW-7-20161005	88	88	98
480-107127-3	REW-8-20161005	90	83	97
480-107127-4	REW-9-20161005	88	85	98
480-107127-5	REW-10-20161005	89	87	98
480-107127-6	REW-11-20161005	87	86	95
480-107127-7	REW-12-20161005	90	93	100
480-107127-8	DUP3-20161005	88	92	97
480-107127-9	TRIP BLANKS	90	90	98
480-107127-10	MW-264M-20161005	88	88	100
480-107127-11	MW-266Ma-20161005	89	91	98
480-107127-12	MW-266Mb-20161005	87	88	96
480-107127-13	MW-560-20161005	91	88	100
480-107127-14	MW-561-20161005	86	83	98
480-107127-15	MW-563-20161005	87	89	98
LCS 480-324317/6	Lab Control Sample	87	82	100
LCS 480-324456/5	Lab Control Sample	88	82	100
LCS 480-324621/5	Lab Control Sample	86	79	103
LCSD 480-324317/7	Lab Control Sample Dup	89	81	101
LCSD 480-324456/6	Lab Control Sample Dup	87	82	97
LCSD 480-324621/6	Lab Control Sample Dup	84	83	99
MB 480-324317/9	Method Blank	91	90	98
MB 480-324456/8	Method Blank	88	86	96
MB 480-324621/8	Method Blank	88	84	98

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		14DD8
Lab Sample ID	Client Sample ID	(70-130)
480-107127-1	MW-269Ma-20161005	73
480-107127-11	MW-266Ma-20161005	82
LCS 200-110109/2-A	Lab Control Sample	78
MB 200-110109/1-A	Method Blank	71

Surrogate Legend

14DD8 = 1,4-Dioxane-d8 (Surr)

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-324317/9
Matrix: Water
Analysis Batch: 324317

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/07/16 12:14	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/07/16 12:14	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 12:14	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/07/16 12:14	1
1,1-Dichloroethane	ND		1.0		ug/L			10/07/16 12:14	1
1,1-Dichloroethene	ND		1.0		ug/L			10/07/16 12:14	1
1,1-Dichloropropene	ND		1.0		ug/L			10/07/16 12:14	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/16 12:14	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/07/16 12:14	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/16 12:14	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/07/16 12:14	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/16 12:14	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/07/16 12:14	1
1,2-Dichloroethane	ND		1.0		ug/L			10/07/16 12:14	1
1,2-Dichloropropane	ND		1.0		ug/L			10/07/16 12:14	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/07/16 12:14	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/07/16 12:14	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 12:14	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/07/16 12:14	1
1,4-Dioxane	ND		50		ug/L			10/07/16 12:14	1
2,2-Dichloropropane	ND		1.0		ug/L			10/07/16 12:14	1
2-Butanone (MEK)	ND		10		ug/L			10/07/16 12:14	1
2-Chlorotoluene	ND		1.0		ug/L			10/07/16 12:14	1
2-Hexanone	ND		10		ug/L			10/07/16 12:14	1
4-Chlorotoluene	ND		1.0		ug/L			10/07/16 12:14	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 12:14	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/07/16 12:14	1
Acetone	ND		50		ug/L			10/07/16 12:14	1
Benzene	ND		1.0		ug/L			10/07/16 12:14	1
Bromobenzene	ND		1.0		ug/L			10/07/16 12:14	1
Bromoform	ND		1.0		ug/L			10/07/16 12:14	1
Bromomethane	ND		2.0		ug/L			10/07/16 12:14	1
Carbon disulfide	ND		10		ug/L			10/07/16 12:14	1
Carbon tetrachloride	ND		1.0		ug/L			10/07/16 12:14	1
Chlorobenzene	ND		1.0		ug/L			10/07/16 12:14	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 12:14	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 12:14	1
Chloroethane	ND		2.0		ug/L			10/07/16 12:14	1
Chloroform	ND		1.0		ug/L			10/07/16 12:14	1
Chloromethane	ND		2.0		ug/L			10/07/16 12:14	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 12:14	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 12:14	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 12:14	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/07/16 12:14	1
Ethyl ether	ND		1.0		ug/L			10/07/16 12:14	1
Ethylbenzene	ND		1.0		ug/L			10/07/16 12:14	1
Ethylene Dibromide	ND		1.0		ug/L			10/07/16 12:14	1
Hexachlorobutadiene	ND		0.40		ug/L			10/07/16 12:14	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-324317/9
Matrix: Water
Analysis Batch: 324317

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			10/07/16 12:14	1
Isopropylbenzene	ND		1.0		ug/L			10/07/16 12:14	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/07/16 12:14	1
Methylene Chloride	ND		1.0		ug/L			10/07/16 12:14	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/07/16 12:14	1
Naphthalene	ND		5.0		ug/L			10/07/16 12:14	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 12:14	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 12:14	1
o-Xylene	ND		1.0		ug/L			10/07/16 12:14	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 12:14	1
Styrene	ND		1.0		ug/L			10/07/16 12:14	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/07/16 12:14	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/07/16 12:14	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 12:14	1
Tetrachloroethene	ND		1.0		ug/L			10/07/16 12:14	1
Tetrahydrofuran	ND		10		ug/L			10/07/16 12:14	1
Toluene	ND		1.0		ug/L			10/07/16 12:14	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 12:14	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 12:14	1
Trichloroethene	ND		1.0		ug/L			10/07/16 12:14	1
Trichlorofluoromethane	ND		1.0		ug/L			10/07/16 12:14	1
Vinyl chloride	ND		1.0		ug/L			10/07/16 12:14	1
Dibromomethane	ND		1.0		ug/L			10/07/16 12:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*10/07/16 12:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*10/07/16 12:14*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/07/16 12:14*	*1*

Lab Sample ID: LCS 480-324317/6
Matrix: Water
Analysis Batch: 324317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.1		ug/L		96	70 - 130
1,1,1-Trichloroethane	25.0	25.5		ug/L		102	70 - 130
1,1,2,2-Tetrachloroethane	25.0	21.5		ug/L		86	70 - 130
1,1,2-Trichloroethane	25.0	22.4		ug/L		90	70 - 130
1,1-Dichloroethane	25.0	24.8		ug/L		99	70 - 130
1,1-Dichloroethene	25.0	24.5		ug/L		98	70 - 130
1,1-Dichloropropene	25.0	24.3		ug/L		97	70 - 130
1,2,3-Trichlorobenzene	25.0	21.3		ug/L		85	70 - 130
1,2,3-Trichloropropane	25.0	19.9		ug/L		80	70 - 130
1,2,4-Trichlorobenzene	25.0	22.9		ug/L		92	70 - 130
1,2,4-Trimethylbenzene	25.0	23.9		ug/L		96	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	21.1		ug/L		84	70 - 130
1,2-Dichlorobenzene	25.0	22.8		ug/L		91	70 - 130
1,2-Dichloroethane	25.0	22.1		ug/L		89	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-324317/6
Matrix: Water
Analysis Batch: 324317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	23.9		ug/L		96	70 - 130
1,3,5-Trimethylbenzene	25.0	24.6		ug/L		98	70 - 130
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	70 - 130
1,3-Dichloropropane	25.0	20.6		ug/L		82	70 - 130
1,4-Dichlorobenzene	25.0	23.8		ug/L		95	70 - 130
1,4-Dioxane	500	363		ug/L		73	70 - 130
2,2-Dichloropropane	25.0	24.3		ug/L		97	70 - 130
2-Butanone (MEK)	125	104		ug/L		84	70 - 130
2-Chlorotoluene	25.0	23.6		ug/L		95	70 - 130
2-Hexanone	125	105		ug/L		84	70 - 130
4-Chlorotoluene	25.0	25.7		ug/L		103	70 - 130
4-Isopropyltoluene	25.0	25.4		ug/L		102	70 - 130
4-Methyl-2-pentanone (MIBK)	125	99.2		ug/L		79	70 - 130
Acetone	125	109		ug/L		88	70 - 130
Benzene	25.0	24.0		ug/L		96	70 - 130
Bromobenzene	25.0	23.5		ug/L		94	70 - 130
Bromoform	25.0	22.9		ug/L		91	70 - 130
Bromomethane	25.0	24.2		ug/L		97	70 - 130
Carbon disulfide	25.0	24.8		ug/L		99	70 - 130
Carbon tetrachloride	25.0	25.1		ug/L		101	70 - 130
Chlorobenzene	25.0	23.8		ug/L		95	70 - 130
Chlorobromomethane	25.0	24.4		ug/L		98	70 - 130
Chlorodibromomethane	25.0	24.4		ug/L		97	70 - 130
Chloroethane	25.0	26.5		ug/L		106	70 - 130
Chloroform	25.0	23.5		ug/L		94	70 - 130
Chloromethane	25.0	24.7		ug/L		99	70 - 130
cis-1,2-Dichloroethene	25.0	24.9		ug/L		99	70 - 130
cis-1,3-Dichloropropene	25.0	24.7		ug/L		99	70 - 130
Dichlorobromomethane	25.0	24.3		ug/L		97	70 - 130
Dichlorodifluoromethane	25.0	25.4		ug/L		101	70 - 130
Ethyl ether	25.0	21.8		ug/L		87	70 - 130
Ethylbenzene	25.0	23.7		ug/L		95	70 - 130
Ethylene Dibromide	25.0	21.8		ug/L		87	70 - 130
Hexachlorobutadiene	25.0	24.5		ug/L		98	70 - 130
Isopropyl ether	25.0	23.4		ug/L		93	70 - 130
Isopropylbenzene	25.0	23.7		ug/L		95	70 - 130
Methyl tert-butyl ether	25.0	21.7		ug/L		87	70 - 130
Methylene Chloride	25.0	26.8		ug/L		107	70 - 130
m-Xylene & p-Xylene	25.0	23.3		ug/L		93	70 - 130
Naphthalene	25.0	20.1		ug/L		80	70 - 130
n-Butylbenzene	25.0	24.5		ug/L		98	70 - 130
N-Propylbenzene	25.0	24.1		ug/L		97	70 - 130
o-Xylene	25.0	24.0		ug/L		96	70 - 130
sec-Butylbenzene	25.0	24.1		ug/L		96	70 - 130
Styrene	25.0	24.9		ug/L		100	70 - 130
Tert-amyl methyl ether	25.0	22.8		ug/L		91	70 - 130
Tert-butyl ethyl ether	25.0	23.0		ug/L		92	70 - 130
tert-Butylbenzene	25.0	24.7		ug/L		99	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-324317/6
Matrix: Water
Analysis Batch: 324317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	25.0	26.1		ug/L		105	70 - 130
Tetrahydrofuran	50.0	54.5		ug/L		109	70 - 130
Toluene	25.0	23.2		ug/L		93	70 - 130
trans-1,2-Dichloroethene	25.0	25.1		ug/L		100	70 - 130
trans-1,3-Dichloropropene	25.0	22.4		ug/L		90	70 - 130
Trichloroethene	25.0	24.8		ug/L		99	70 - 130
Trichlorofluoromethane	25.0	28.6		ug/L		114	70 - 130
Vinyl chloride	25.0	25.4		ug/L		101	70 - 130
Dibromomethane	25.0	23.4		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*87*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 480-324317/7
Matrix: Water
Analysis Batch: 324317

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	25.1		ug/L		100	70 - 130	4	20
1,1,1-Trichloroethane	25.0	24.1		ug/L		97	70 - 130	5	20
1,1,2,2-Tetrachloroethane	25.0	22.0		ug/L		88	70 - 130	2	20
1,1,2-Trichloroethane	25.0	22.4		ug/L		90	70 - 130	0	20
1,1-Dichloroethane	25.0	23.3		ug/L		93	70 - 130	6	20
1,1-Dichloroethene	25.0	22.6		ug/L		90	70 - 130	8	20
1,1-Dichloropropene	25.0	22.8		ug/L		91	70 - 130	6	20
1,2,3-Trichlorobenzene	25.0	22.1		ug/L		88	70 - 130	3	20
1,2,3-Trichloropropane	25.0	21.1		ug/L		85	70 - 130	6	20
1,2,4-Trichlorobenzene	25.0	23.1		ug/L		92	70 - 130	1	20
1,2,4-Trimethylbenzene	25.0	24.7		ug/L		99	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	25.0	21.6		ug/L		87	70 - 130	2	20
1,2-Dichlorobenzene	25.0	24.1		ug/L		96	70 - 130	5	20
1,2-Dichloroethane	25.0	22.0		ug/L		88	70 - 130	1	20
1,2-Dichloropropane	25.0	23.1		ug/L		92	70 - 130	3	20
1,3,5-Trimethylbenzene	25.0	24.3		ug/L		97	70 - 130	1	20
1,3-Dichlorobenzene	25.0	24.1		ug/L		96	70 - 130	0	20
1,3-Dichloropropane	25.0	21.2		ug/L		85	70 - 130	3	20
1,4-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130	3	20
1,4-Dioxane	500	379		ug/L		76	70 - 130	4	20
2,2-Dichloropropane	25.0	23.7		ug/L		95	70 - 130	3	20
2-Butanone (MEK)	125	106		ug/L		85	70 - 130	1	20
2-Chlorotoluene	25.0	24.1		ug/L		96	70 - 130	2	20
2-Hexanone	125	105		ug/L		84	70 - 130	1	20
4-Chlorotoluene	25.0	26.3		ug/L		105	70 - 130	2	20
4-Isopropyltoluene	25.0	25.1		ug/L		100	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	125	102		ug/L		82	70 - 130	3	20
Acetone	125	108		ug/L		87	70 - 130	1	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-324317/7
Matrix: Water
Analysis Batch: 324317

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	25.0	23.4		ug/L		94	70 - 130	3	20
Bromobenzene	25.0	24.0		ug/L		96	70 - 130	2	20
Bromoform	25.0	24.3		ug/L		97	70 - 130	6	20
Bromomethane	25.0	23.5		ug/L		94	70 - 130	3	20
Carbon disulfide	25.0	23.3		ug/L		93	70 - 130	6	20
Carbon tetrachloride	25.0	24.3		ug/L		97	70 - 130	4	20
Chlorobenzene	25.0	23.9		ug/L		96	70 - 130	0	20
Chlorobromomethane	25.0	23.7		ug/L		95	70 - 130	3	20
Chlorodibromomethane	25.0	25.1		ug/L		100	70 - 130	3	20
Chloroethane	25.0	25.3		ug/L		101	70 - 130	5	20
Chloroform	25.0	22.6		ug/L		91	70 - 130	4	20
Chloromethane	25.0	23.7		ug/L		95	70 - 130	4	20
cis-1,2-Dichloroethene	25.0	23.3		ug/L		93	70 - 130	7	20
cis-1,3-Dichloropropene	25.0	24.5		ug/L		98	70 - 130	1	20
Dichlorobromomethane	25.0	24.2		ug/L		97	70 - 130	1	20
Dichlorodifluoromethane	25.0	23.6		ug/L		95	70 - 130	7	20
Ethyl ether	25.0	21.7		ug/L		87	70 - 130	1	20
Ethylbenzene	25.0	23.2		ug/L		93	70 - 130	2	20
Ethylene Dibromide	25.0	22.5		ug/L		90	70 - 130	3	20
Hexachlorobutadiene	25.0	24.9		ug/L		100	70 - 130	2	20
Isopropyl ether	25.0	22.5		ug/L		90	70 - 130	4	20
Isopropylbenzene	25.0	24.0		ug/L		96	70 - 130	1	20
Methyl tert-butyl ether	25.0	21.3		ug/L		85	70 - 130	2	20
Methylene Chloride	25.0	25.2		ug/L		101	70 - 130	6	20
m-Xylene & p-Xylene	25.0	23.3		ug/L		93	70 - 130	0	20
Naphthalene	25.0	21.1		ug/L		84	70 - 130	5	20
n-Butylbenzene	25.0	24.3		ug/L		97	70 - 130	1	20
N-Propylbenzene	25.0	23.9		ug/L		95	70 - 130	1	20
o-Xylene	25.0	23.8		ug/L		95	70 - 130	1	20
sec-Butylbenzene	25.0	24.4		ug/L		98	70 - 130	1	20
Styrene	25.0	24.5		ug/L		98	70 - 130	2	20
Tert-amyl methyl ether	25.0	22.2		ug/L		89	70 - 130	3	20
Tert-butyl ethyl ether	25.0	22.8		ug/L		91	70 - 130	1	20
tert-Butylbenzene	25.0	24.6		ug/L		98	70 - 130	1	20
Tetrachloroethene	25.0	26.1		ug/L		104	70 - 130	0	20
Tetrahydrofuran	50.0	53.0		ug/L		106	70 - 130	3	20
Toluene	25.0	23.7		ug/L		95	70 - 130	2	20
trans-1,2-Dichloroethene	25.0	24.3		ug/L		97	70 - 130	3	20
trans-1,3-Dichloropropene	25.0	23.1		ug/L		92	70 - 130	3	20
Trichloroethene	25.0	23.6		ug/L		94	70 - 130	5	20
Trichlorofluoromethane	25.0	26.9		ug/L		108	70 - 130	6	20
Vinyl chloride	25.0	24.0		ug/L		96	70 - 130	5	20
Dibromomethane	25.0	23.3		ug/L		93	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*89*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*81*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 480-324456/8
Matrix: Water
Analysis Batch: 324456

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/07/16 22:17	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/07/16 22:17	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 22:17	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/07/16 22:17	1
1,1-Dichloroethane	ND		1.0		ug/L			10/07/16 22:17	1
1,1-Dichloroethene	ND		1.0		ug/L			10/07/16 22:17	1
1,1-Dichloropropene	ND		1.0		ug/L			10/07/16 22:17	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/16 22:17	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/07/16 22:17	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/16 22:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/07/16 22:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/07/16 22:17	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/07/16 22:17	1
1,2-Dichloroethane	ND		1.0		ug/L			10/07/16 22:17	1
1,2-Dichloropropane	ND		1.0		ug/L			10/07/16 22:17	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/07/16 22:17	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/07/16 22:17	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 22:17	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/07/16 22:17	1
1,4-Dioxane	ND		50		ug/L			10/07/16 22:17	1
2,2-Dichloropropane	ND		1.0		ug/L			10/07/16 22:17	1
2-Butanone (MEK)	ND		10		ug/L			10/07/16 22:17	1
2-Chlorotoluene	ND		1.0		ug/L			10/07/16 22:17	1
2-Hexanone	ND		10		ug/L			10/07/16 22:17	1
4-Chlorotoluene	ND		1.0		ug/L			10/07/16 22:17	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 22:17	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/07/16 22:17	1
Acetone	ND		50		ug/L			10/07/16 22:17	1
Benzene	ND		1.0		ug/L			10/07/16 22:17	1
Bromobenzene	ND		1.0		ug/L			10/07/16 22:17	1
Bromoform	ND		1.0		ug/L			10/07/16 22:17	1
Bromomethane	ND		2.0		ug/L			10/07/16 22:17	1
Carbon disulfide	ND		10		ug/L			10/07/16 22:17	1
Carbon tetrachloride	ND		1.0		ug/L			10/07/16 22:17	1
Chlorobenzene	ND		1.0		ug/L			10/07/16 22:17	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 22:17	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 22:17	1
Chloroethane	ND		2.0		ug/L			10/07/16 22:17	1
Chloroform	ND		1.0		ug/L			10/07/16 22:17	1
Chloromethane	ND		2.0		ug/L			10/07/16 22:17	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 22:17	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 22:17	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 22:17	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/07/16 22:17	1
Ethyl ether	ND		1.0		ug/L			10/07/16 22:17	1
Ethylbenzene	ND		1.0		ug/L			10/07/16 22:17	1
Ethylene Dibromide	ND		1.0		ug/L			10/07/16 22:17	1
Hexachlorobutadiene	ND		0.40		ug/L			10/07/16 22:17	1
Isopropyl ether	ND		10		ug/L			10/07/16 22:17	1
Isopropylbenzene	ND		1.0		ug/L			10/07/16 22:17	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-324456/8
Matrix: Water
Analysis Batch: 324456

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			10/07/16 22:17	1
Methylene Chloride	ND		1.0		ug/L			10/07/16 22:17	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/07/16 22:17	1
Naphthalene	ND		5.0		ug/L			10/07/16 22:17	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 22:17	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 22:17	1
o-Xylene	ND		1.0		ug/L			10/07/16 22:17	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 22:17	1
Styrene	ND		1.0		ug/L			10/07/16 22:17	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/07/16 22:17	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/07/16 22:17	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 22:17	1
Tetrachloroethene	ND		1.0		ug/L			10/07/16 22:17	1
Tetrahydrofuran	ND		10		ug/L			10/07/16 22:17	1
Toluene	ND		1.0		ug/L			10/07/16 22:17	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/07/16 22:17	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/07/16 22:17	1
Trichloroethene	ND		1.0		ug/L			10/07/16 22:17	1
Trichlorofluoromethane	ND		1.0		ug/L			10/07/16 22:17	1
Vinyl chloride	ND		1.0		ug/L			10/07/16 22:17	1
Dibromomethane	ND		1.0		ug/L			10/07/16 22:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*70 - 130*		*10/07/16 22:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*		*10/07/16 22:17*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*10/07/16 22:17*	*1*

Lab Sample ID: LCS 480-324456/5
Matrix: Water
Analysis Batch: 324456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	23.1		ug/L		92	70 - 130
1,1,1-Trichloroethane	25.0	24.0		ug/L		96	70 - 130
1,1,2,2-Tetrachloroethane	25.0	20.8		ug/L		83	70 - 130
1,1,2-Trichloroethane	25.0	21.6		ug/L		86	70 - 130
1,1-Dichloroethane	25.0	24.3		ug/L		97	70 - 130
1,1-Dichloroethene	25.0	24.3		ug/L		97	70 - 130
1,1-Dichloropropene	25.0	22.7		ug/L		91	70 - 130
1,2,3-Trichlorobenzene	25.0	20.4		ug/L		82	70 - 130
1,2,3-Trichloropropane	25.0	19.5		ug/L		78	70 - 130
1,2,4-Trichlorobenzene	25.0	21.5		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	25.0	23.0		ug/L		92	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	19.1		ug/L		76	70 - 130
1,2-Dichlorobenzene	25.0	22.5		ug/L		90	70 - 130
1,2-Dichloroethane	25.0	22.0		ug/L		88	70 - 130
1,2-Dichloropropane	25.0	23.0		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	25.0	23.4		ug/L		94	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-324456/5
Matrix: Water
Analysis Batch: 324456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	25.0	22.9		ug/L		91	70 - 130
1,3-Dichloropropane	25.0	20.6		ug/L		82	70 - 130
1,4-Dichlorobenzene	25.0	23.2		ug/L		93	70 - 130
1,4-Dioxane	500	326	*	ug/L		65	70 - 130
2,2-Dichloropropane	25.0	23.3		ug/L		93	70 - 130
2-Butanone (MEK)	125	107		ug/L		86	70 - 130
2-Chlorotoluene	25.0	22.7		ug/L		91	70 - 130
2-Hexanone	125	101		ug/L		80	70 - 130
4-Chlorotoluene	25.0	24.6		ug/L		98	70 - 130
4-Isopropyltoluene	25.0	23.5		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	125	96.2		ug/L		77	70 - 130
Acetone	125	121		ug/L		97	70 - 130
Benzene	25.0	23.2		ug/L		93	70 - 130
Bromobenzene	25.0	23.3		ug/L		93	70 - 130
Bromoform	25.0	22.1		ug/L		88	70 - 130
Bromomethane	25.0	25.5		ug/L		102	70 - 130
Carbon disulfide	25.0	23.6		ug/L		94	70 - 130
Carbon tetrachloride	25.0	24.3		ug/L		97	70 - 130
Chlorobenzene	25.0	22.5		ug/L		90	70 - 130
Chlorobromomethane	25.0	24.8		ug/L		99	70 - 130
Chlorodibromomethane	25.0	23.2		ug/L		93	70 - 130
Chloroethane	25.0	27.5		ug/L		110	70 - 130
Chloroform	25.0	23.3		ug/L		93	70 - 130
Chloromethane	25.0	26.1		ug/L		104	70 - 130
cis-1,2-Dichloroethene	25.0	24.3		ug/L		97	70 - 130
cis-1,3-Dichloropropene	25.0	24.1		ug/L		96	70 - 130
Dichlorobromomethane	25.0	23.7		ug/L		95	70 - 130
Dichlorodifluoromethane	25.0	26.4		ug/L		106	70 - 130
Ethyl ether	25.0	21.0		ug/L		84	70 - 130
Ethylbenzene	25.0	22.1		ug/L		89	70 - 130
Ethylene Dibromide	25.0	21.2		ug/L		85	70 - 130
Hexachlorobutadiene	25.0	23.2		ug/L		93	70 - 130
Isopropyl ether	25.0	23.2		ug/L		93	70 - 130
Isopropylbenzene	25.0	22.6		ug/L		90	70 - 130
Methyl tert-butyl ether	25.0	21.8		ug/L		87	70 - 130
Methylene Chloride	25.0	25.8		ug/L		103	70 - 130
m-Xylene & p-Xylene	25.0	22.2		ug/L		89	70 - 130
Naphthalene	25.0	19.4		ug/L		77	70 - 130
n-Butylbenzene	25.0	22.9		ug/L		92	70 - 130
N-Propylbenzene	25.0	22.6		ug/L		90	70 - 130
o-Xylene	25.0	22.6		ug/L		90	70 - 130
sec-Butylbenzene	25.0	22.8		ug/L		91	70 - 130
Styrene	25.0	23.7		ug/L		95	70 - 130
Tert-amyl methyl ether	25.0	22.6		ug/L		91	70 - 130
Tert-butyl ethyl ether	25.0	22.8		ug/L		91	70 - 130
tert-Butylbenzene	25.0	22.7		ug/L		91	70 - 130
Tetrachloroethene	25.0	24.8		ug/L		99	70 - 130
Tetrahydrofuran	50.0	53.3		ug/L		107	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-324456/5
Matrix: Water
Analysis Batch: 324456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	25.0	21.8		ug/L		87	70 - 130
trans-1,2-Dichloroethene	25.0	23.5		ug/L		94	70 - 130
trans-1,3-Dichloropropene	25.0	21.7		ug/L		87	70 - 130
Trichloroethene	25.0	23.8		ug/L		95	70 - 130
Trichlorofluoromethane	25.0	29.8		ug/L		119	70 - 130
Vinyl chloride	25.0	25.9		ug/L		104	70 - 130
Dibromomethane	25.0	22.8		ug/L		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*88*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 480-324456/6
Matrix: Water
Analysis Batch: 324456

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	22.9		ug/L		92	70 - 130	1	20
1,1,1-Trichloroethane	25.0	24.0		ug/L		96	70 - 130	0	20
1,1,2,2-Tetrachloroethane	25.0	20.9		ug/L		84	70 - 130	1	20
1,1,2-Trichloroethane	25.0	21.0		ug/L		84	70 - 130	3	20
1,1-Dichloroethane	25.0	23.7		ug/L		95	70 - 130	2	20
1,1-Dichloroethene	25.0	23.3		ug/L		93	70 - 130	4	20
1,1-Dichloropropene	25.0	23.4		ug/L		94	70 - 130	3	20
1,2,3-Trichlorobenzene	25.0	21.1		ug/L		84	70 - 130	3	20
1,2,3-Trichloropropane	25.0	19.4		ug/L		78	70 - 130	0	20
1,2,4-Trichlorobenzene	25.0	21.7		ug/L		87	70 - 130	1	20
1,2,4-Trimethylbenzene	25.0	23.7		ug/L		95	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	25.0	20.3		ug/L		81	70 - 130	6	20
1,2-Dichlorobenzene	25.0	23.0		ug/L		92	70 - 130	2	20
1,2-Dichloroethane	25.0	21.7		ug/L		87	70 - 130	1	20
1,2-Dichloropropane	25.0	22.9		ug/L		92	70 - 130	0	20
1,3,5-Trimethylbenzene	25.0	23.9		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	25.0	23.5		ug/L		94	70 - 130	3	20
1,3-Dichloropropane	25.0	20.1		ug/L		80	70 - 130	3	20
1,4-Dichlorobenzene	25.0	23.4		ug/L		94	70 - 130	1	20
1,4-Dioxane	500	386		ug/L		77	70 - 130	17	20
2,2-Dichloropropane	25.0	23.5		ug/L		94	70 - 130	1	20
2-Butanone (MEK)	125	117		ug/L		94	70 - 130	9	20
2-Chlorotoluene	25.0	23.6		ug/L		94	70 - 130	4	20
2-Hexanone	125	102		ug/L		81	70 - 130	1	20
4-Chlorotoluene	25.0	25.0		ug/L		100	70 - 130	2	20
4-Isopropyltoluene	25.0	24.5		ug/L		98	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	125	95.9		ug/L		77	70 - 130	0	20
Acetone	125	116		ug/L		93	70 - 130	4	20
Benzene	25.0	23.2		ug/L		93	70 - 130	0	20
Bromobenzene	25.0	22.8		ug/L		91	70 - 130	2	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-324456/6
Matrix: Water
Analysis Batch: 324456

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	25.0	21.7		ug/L		87	70 - 130	2	20
Bromomethane	25.0	26.6		ug/L		107	70 - 130	4	20
Carbon disulfide	25.0	24.2		ug/L		97	70 - 130	2	20
Carbon tetrachloride	25.0	24.9		ug/L		99	70 - 130	2	20
Chlorobenzene	25.0	23.1		ug/L		93	70 - 130	3	20
Chlorobromomethane	25.0	24.1		ug/L		97	70 - 130	3	20
Chlorodibromomethane	25.0	23.1		ug/L		92	70 - 130	0	20
Chloroethane	25.0	27.2		ug/L		109	70 - 130	1	20
Chloroform	25.0	22.7		ug/L		91	70 - 130	2	20
Chloromethane	25.0	25.7		ug/L		103	70 - 130	2	20
cis-1,2-Dichloroethene	25.0	23.4		ug/L		93	70 - 130	4	20
cis-1,3-Dichloropropene	25.0	23.5		ug/L		94	70 - 130	2	20
Dichlorobromomethane	25.0	23.6		ug/L		94	70 - 130	0	20
Dichlorodifluoromethane	25.0	26.5		ug/L		106	70 - 130	0	20
Ethyl ether	25.0	21.2		ug/L		85	70 - 130	1	20
Ethylbenzene	25.0	22.8		ug/L		91	70 - 130	3	20
Ethylene Dibromide	25.0	21.3		ug/L		85	70 - 130	1	20
Hexachlorobutadiene	25.0	24.2		ug/L		97	70 - 130	4	20
Isopropyl ether	25.0	22.4		ug/L		90	70 - 130	4	20
Isopropylbenzene	25.0	23.2		ug/L		93	70 - 130	3	20
Methyl tert-butyl ether	25.0	20.6		ug/L		82	70 - 130	6	20
Methylene Chloride	25.0	25.1		ug/L		101	70 - 130	3	20
m-Xylene & p-Xylene	25.0	23.6		ug/L		94	70 - 130	6	20
Naphthalene	25.0	19.9		ug/L		80	70 - 130	3	20
n-Butylbenzene	25.0	23.4		ug/L		94	70 - 130	2	20
N-Propylbenzene	25.0	23.4		ug/L		94	70 - 130	4	20
o-Xylene	25.0	23.5		ug/L		94	70 - 130	4	20
sec-Butylbenzene	25.0	23.9		ug/L		95	70 - 130	4	20
Styrene	25.0	23.7		ug/L		95	70 - 130	0	20
Tert-amyl methyl ether	25.0	21.9		ug/L		87	70 - 130	3	20
Tert-butyl ethyl ether	25.0	22.6		ug/L		90	70 - 130	1	20
tert-Butylbenzene	25.0	23.9		ug/L		96	70 - 130	5	20
Tetrachloroethene	25.0	25.4		ug/L		101	70 - 130	2	20
Tetrahydrofuran	50.0	52.2		ug/L		104	70 - 130	2	20
Toluene	25.0	22.4		ug/L		90	70 - 130	3	20
trans-1,2-Dichloroethene	25.0	23.5		ug/L		94	70 - 130	0	20
trans-1,3-Dichloropropene	25.0	21.2		ug/L		85	70 - 130	3	20
Trichloroethene	25.0	24.3		ug/L		97	70 - 130	2	20
Trichlorofluoromethane	25.0	30.0		ug/L		120	70 - 130	1	20
Vinyl chloride	25.0	26.7		ug/L		107	70 - 130	3	20
Dibromomethane	25.0	22.4		ug/L		89	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*87*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-324621/8
Matrix: Water
Analysis Batch: 324621

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/10/16 00:22	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/10/16 00:22	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/10/16 00:22	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/10/16 00:22	1
1,1-Dichloroethane	ND		1.0		ug/L			10/10/16 00:22	1
1,1-Dichloroethene	ND		1.0		ug/L			10/10/16 00:22	1
1,1-Dichloropropene	ND		1.0		ug/L			10/10/16 00:22	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/10/16 00:22	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/10/16 00:22	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/10/16 00:22	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/10/16 00:22	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			10/10/16 00:22	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/10/16 00:22	1
1,2-Dichloroethane	ND		1.0		ug/L			10/10/16 00:22	1
1,2-Dichloropropane	ND		1.0		ug/L			10/10/16 00:22	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/10/16 00:22	1
1,3-Dichlorobenzene	ND		1.0		ug/L			10/10/16 00:22	1
1,3-Dichloropropane	ND		1.0		ug/L			10/10/16 00:22	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/10/16 00:22	1
1,4-Dioxane	ND		50		ug/L			10/10/16 00:22	1
2,2-Dichloropropane	ND		1.0		ug/L			10/10/16 00:22	1
2-Butanone (MEK)	ND		10		ug/L			10/10/16 00:22	1
2-Chlorotoluene	ND		1.0		ug/L			10/10/16 00:22	1
2-Hexanone	ND		10		ug/L			10/10/16 00:22	1
4-Chlorotoluene	ND		1.0		ug/L			10/10/16 00:22	1
4-Isopropyltoluene	ND		1.0		ug/L			10/10/16 00:22	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			10/10/16 00:22	1
Acetone	ND		50		ug/L			10/10/16 00:22	1
Benzene	ND		1.0		ug/L			10/10/16 00:22	1
Bromobenzene	ND		1.0		ug/L			10/10/16 00:22	1
Bromoform	ND		1.0		ug/L			10/10/16 00:22	1
Bromomethane	ND		2.0		ug/L			10/10/16 00:22	1
Carbon disulfide	ND		10		ug/L			10/10/16 00:22	1
Carbon tetrachloride	ND		1.0		ug/L			10/10/16 00:22	1
Chlorobenzene	ND		1.0		ug/L			10/10/16 00:22	1
Chlorobromomethane	ND		1.0		ug/L			10/10/16 00:22	1
Chlorodibromomethane	ND		0.50		ug/L			10/10/16 00:22	1
Chloroethane	ND		2.0		ug/L			10/10/16 00:22	1
Chloroform	ND		1.0		ug/L			10/10/16 00:22	1
Chloromethane	ND		2.0		ug/L			10/10/16 00:22	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/10/16 00:22	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			10/10/16 00:22	1
Dichlorobromomethane	ND		0.50		ug/L			10/10/16 00:22	1
Dichlorodifluoromethane	ND		1.0		ug/L			10/10/16 00:22	1
Ethyl ether	ND		1.0		ug/L			10/10/16 00:22	1
Ethylbenzene	ND		1.0		ug/L			10/10/16 00:22	1
Ethylene Dibromide	ND		1.0		ug/L			10/10/16 00:22	1
Hexachlorobutadiene	ND		0.40		ug/L			10/10/16 00:22	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-324621/8
Matrix: Water
Analysis Batch: 324621

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			10/10/16 00:22	1
Isopropylbenzene	ND		1.0		ug/L			10/10/16 00:22	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/10/16 00:22	1
Methylene Chloride	ND		1.0		ug/L			10/10/16 00:22	1
m-Xylene & p-Xylene	ND		2.0		ug/L			10/10/16 00:22	1
Naphthalene	ND		5.0		ug/L			10/10/16 00:22	1
n-Butylbenzene	ND		1.0		ug/L			10/10/16 00:22	1
N-Propylbenzene	ND		1.0		ug/L			10/10/16 00:22	1
o-Xylene	ND		1.0		ug/L			10/10/16 00:22	1
sec-Butylbenzene	ND		1.0		ug/L			10/10/16 00:22	1
Styrene	ND		1.0		ug/L			10/10/16 00:22	1
Tert-amyl methyl ether	ND		5.0		ug/L			10/10/16 00:22	1
Tert-butyl ethyl ether	ND		5.0		ug/L			10/10/16 00:22	1
tert-Butylbenzene	ND		1.0		ug/L			10/10/16 00:22	1
Tetrachloroethene	ND		1.0		ug/L			10/10/16 00:22	1
Tetrahydrofuran	ND		10		ug/L			10/10/16 00:22	1
Toluene	ND		1.0		ug/L			10/10/16 00:22	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/10/16 00:22	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			10/10/16 00:22	1
Trichloroethene	ND		1.0		ug/L			10/10/16 00:22	1
Trichlorofluoromethane	ND		1.0		ug/L			10/10/16 00:22	1
Vinyl chloride	ND		1.0		ug/L			10/10/16 00:22	1
Dibromomethane	ND		1.0		ug/L			10/10/16 00:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*70 - 130*		*10/10/16 00:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*		*10/10/16 00:22*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/10/16 00:22*	*1*

Lab Sample ID: LCS 480-324621/5
Matrix: Water
Analysis Batch: 324621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.9		ug/L		100	70 - 130
1,1,1-Trichloroethane	25.0	24.9		ug/L		100	70 - 130
1,1,2,2-Tetrachloroethane	25.0	21.5		ug/L		86	70 - 130
1,1,2-Trichloroethane	25.0	22.2		ug/L		89	70 - 130
1,1-Dichloroethane	25.0	24.7		ug/L		99	70 - 130
1,1-Dichloroethene	25.0	23.6		ug/L		95	70 - 130
1,1-Dichloropropene	25.0	23.9		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	25.0	21.5		ug/L		86	70 - 130
1,2,3-Trichloropropane	25.0	19.8		ug/L		79	70 - 130
1,2,4-Trichlorobenzene	25.0	22.7		ug/L		91	70 - 130
1,2,4-Trimethylbenzene	25.0	23.9		ug/L		96	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	18.7		ug/L		75	70 - 130
1,2-Dichlorobenzene	25.0	23.0		ug/L		92	70 - 130
1,2-Dichloroethane	25.0	22.1		ug/L		88	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-324621/5
Matrix: Water
Analysis Batch: 324621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	24.4		ug/L		98	70 - 130
1,3,5-Trimethylbenzene	25.0	24.5		ug/L		98	70 - 130
1,3-Dichlorobenzene	25.0	23.9		ug/L		96	70 - 130
1,3-Dichloropropane	25.0	21.0		ug/L		84	70 - 130
1,4-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130
1,4-Dioxane	500	326	*	ug/L		65	70 - 130
2,2-Dichloropropane	25.0	23.5		ug/L		94	70 - 130
2-Butanone (MEK)	125	110		ug/L		88	70 - 130
2-Chlorotoluene	25.0	23.5		ug/L		94	70 - 130
2-Hexanone	125	105		ug/L		84	70 - 130
4-Chlorotoluene	25.0	25.0		ug/L		100	70 - 130
4-Isopropyltoluene	25.0	24.3		ug/L		97	70 - 130
4-Methyl-2-pentanone (MIBK)	125	96.9		ug/L		78	70 - 130
Acetone	125	126		ug/L		101	70 - 130
Benzene	25.0	24.1		ug/L		97	70 - 130
Bromobenzene	25.0	23.5		ug/L		94	70 - 130
Bromoform	25.0	23.9		ug/L		96	70 - 130
Bromomethane	25.0	25.5		ug/L		102	70 - 130
Carbon disulfide	25.0	23.8		ug/L		95	70 - 130
Carbon tetrachloride	25.0	25.5		ug/L		102	70 - 130
Chlorobenzene	25.0	23.7		ug/L		95	70 - 130
Chlorobromomethane	25.0	24.4		ug/L		98	70 - 130
Chlorodibromomethane	25.0	24.8		ug/L		99	70 - 130
Chloroethane	25.0	25.4		ug/L		102	70 - 130
Chloroform	25.0	23.8		ug/L		95	70 - 130
Chloromethane	25.0	24.6		ug/L		98	70 - 130
cis-1,2-Dichloroethene	25.0	24.9		ug/L		100	70 - 130
cis-1,3-Dichloropropene	25.0	25.1		ug/L		100	70 - 130
Dichlorobromomethane	25.0	24.7		ug/L		99	70 - 130
Dichlorodifluoromethane	25.0	23.2		ug/L		93	70 - 130
Ethyl ether	25.0	22.3		ug/L		89	70 - 130
Ethylbenzene	25.0	23.4		ug/L		94	70 - 130
Ethylene Dibromide	25.0	22.3		ug/L		89	70 - 130
Hexachlorobutadiene	25.0	24.8		ug/L		99	70 - 130
Isopropyl ether	25.0	22.9		ug/L		92	70 - 130
Isopropylbenzene	25.0	23.6		ug/L		94	70 - 130
Methyl tert-butyl ether	25.0	22.0		ug/L		88	70 - 130
Methylene Chloride	25.0	25.2		ug/L		101	70 - 130
m-Xylene & p-Xylene	25.0	23.6		ug/L		94	70 - 130
Naphthalene	25.0	19.8		ug/L		79	70 - 130
n-Butylbenzene	25.0	23.2		ug/L		93	70 - 130
N-Propylbenzene	25.0	23.6		ug/L		94	70 - 130
o-Xylene	25.0	23.7		ug/L		95	70 - 130
sec-Butylbenzene	25.0	23.6		ug/L		94	70 - 130
Styrene	25.0	24.2		ug/L		97	70 - 130
Tert-amyl methyl ether	25.0	22.5		ug/L		90	70 - 130
Tert-butyl ethyl ether	25.0	22.4		ug/L		89	70 - 130
tert-Butylbenzene	25.0	24.4		ug/L		98	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-324621/5
Matrix: Water
Analysis Batch: 324621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	25.0	26.7		ug/L		107	70 - 130
Tetrahydrofuran	50.0	54.6		ug/L		109	70 - 130
Toluene	25.0	22.6		ug/L		91	70 - 130
trans-1,2-Dichloroethene	25.0	24.6		ug/L		98	70 - 130
trans-1,3-Dichloropropene	25.0	22.8		ug/L		91	70 - 130
Trichloroethene	25.0	24.9		ug/L		99	70 - 130
Trichlorofluoromethane	25.0	28.0		ug/L		112	70 - 130
Vinyl chloride	25.0	24.9		ug/L		100	70 - 130
Dibromomethane	25.0	23.4		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*86*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*79*		*70 - 130*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 480-324621/6
Matrix: Water
Analysis Batch: 324621

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.0		ug/L		96	70 - 130	4	20
1,1,1-Trichloroethane	25.0	24.5		ug/L		98	70 - 130	2	20
1,1,2,2-Tetrachloroethane	25.0	22.5		ug/L		90	70 - 130	5	20
1,1,2-Trichloroethane	25.0	21.9		ug/L		88	70 - 130	1	20
1,1-Dichloroethane	25.0	24.2		ug/L		97	70 - 130	2	20
1,1-Dichloroethene	25.0	23.2		ug/L		93	70 - 130	2	20
1,1-Dichloropropene	25.0	22.9		ug/L		92	70 - 130	4	20
1,2,3-Trichlorobenzene	25.0	21.8		ug/L		87	70 - 130	1	20
1,2,3-Trichloropropane	25.0	21.3		ug/L		85	70 - 130	7	20
1,2,4-Trichlorobenzene	25.0	22.0		ug/L		88	70 - 130	3	20
1,2,4-Trimethylbenzene	25.0	23.8		ug/L		95	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	25.0	21.5		ug/L		86	70 - 130	14	20
1,2-Dichlorobenzene	25.0	23.2		ug/L		93	70 - 130	1	20
1,2-Dichloroethane	25.0	22.5		ug/L		90	70 - 130	2	20
1,2-Dichloropropane	25.0	23.7		ug/L		95	70 - 130	3	20
1,3,5-Trimethylbenzene	25.0	23.8		ug/L		95	70 - 130	3	20
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	70 - 130	1	20
1,3-Dichloropropane	25.0	20.8		ug/L		83	70 - 130	1	20
1,4-Dichlorobenzene	25.0	23.9		ug/L		96	70 - 130	2	20
1,4-Dioxane	500	349		ug/L		70	70 - 130	7	20
2,2-Dichloropropane	25.0	22.7		ug/L		91	70 - 130	3	20
2-Butanone (MEK)	125	105		ug/L		84	70 - 130	4	20
2-Chlorotoluene	25.0	23.0		ug/L		92	70 - 130	2	20
2-Hexanone	125	105		ug/L		84	70 - 130	0	20
4-Chlorotoluene	25.0	24.8		ug/L		99	70 - 130	1	20
4-Isopropyltoluene	25.0	24.1		ug/L		96	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	125	96.6		ug/L		77	70 - 130	0	20
Acetone	125	127		ug/L		101	70 - 130	0	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-324621/6
Matrix: Water
Analysis Batch: 324621

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	25.0	23.8		ug/L		95	70 - 130	1	20
Bromobenzene	25.0	23.6		ug/L		94	70 - 130	0	20
Bromoform	25.0	23.5		ug/L		94	70 - 130	2	20
Bromomethane	25.0	25.2		ug/L		101	70 - 130	1	20
Carbon disulfide	25.0	23.3		ug/L		93	70 - 130	2	20
Carbon tetrachloride	25.0	24.3		ug/L		97	70 - 130	5	20
Chlorobenzene	25.0	23.0		ug/L		92	70 - 130	3	20
Chlorobromomethane	25.0	24.8		ug/L		99	70 - 130	1	20
Chlorodibromomethane	25.0	24.0		ug/L		96	70 - 130	3	20
Chloroethane	25.0	26.4		ug/L		106	70 - 130	4	20
Chloroform	25.0	23.3		ug/L		93	70 - 130	2	20
Chloromethane	25.0	23.9		ug/L		95	70 - 130	3	20
cis-1,2-Dichloroethene	25.0	24.4		ug/L		98	70 - 130	2	20
cis-1,3-Dichloropropene	25.0	25.1		ug/L		100	70 - 130	0	20
Dichlorobromomethane	25.0	24.6		ug/L		99	70 - 130	0	20
Dichlorodifluoromethane	25.0	21.8		ug/L		87	70 - 130	6	20
Ethyl ether	25.0	22.1		ug/L		89	70 - 130	1	20
Ethylbenzene	25.0	22.4		ug/L		90	70 - 130	4	20
Ethylene Dibromide	25.0	22.0		ug/L		88	70 - 130	1	20
Hexachlorobutadiene	25.0	24.0		ug/L		96	70 - 130	4	20
Isopropyl ether	25.0	22.9		ug/L		92	70 - 130	0	20
Isopropylbenzene	25.0	23.0		ug/L		92	70 - 130	2	20
Methyl tert-butyl ether	25.0	22.5		ug/L		90	70 - 130	2	20
Methylene Chloride	25.0	25.7		ug/L		103	70 - 130	2	20
m-Xylene & p-Xylene	25.0	22.6		ug/L		90	70 - 130	4	20
Naphthalene	25.0	20.1		ug/L		80	70 - 130	1	20
n-Butylbenzene	25.0	22.7		ug/L		91	70 - 130	2	20
N-Propylbenzene	25.0	23.0		ug/L		92	70 - 130	3	20
o-Xylene	25.0	22.8		ug/L		91	70 - 130	4	20
sec-Butylbenzene	25.0	23.0		ug/L		92	70 - 130	3	20
Styrene	25.0	24.0		ug/L		96	70 - 130	1	20
Tert-amyl methyl ether	25.0	22.5		ug/L		90	70 - 130	0	20
Tert-butyl ethyl ether	25.0	23.4		ug/L		94	70 - 130	5	20
tert-Butylbenzene	25.0	23.4		ug/L		94	70 - 130	4	20
Tetrachloroethene	25.0	24.8		ug/L		99	70 - 130	7	20
Tetrahydrofuran	50.0	52.2		ug/L		104	70 - 130	4	20
Toluene	25.0	21.8		ug/L		87	70 - 130	4	20
trans-1,2-Dichloroethene	25.0	24.3		ug/L		97	70 - 130	1	20
trans-1,3-Dichloropropene	25.0	22.1		ug/L		88	70 - 130	3	20
Trichloroethene	25.0	24.8		ug/L		99	70 - 130	0	20
Trichlorofluoromethane	25.0	27.8		ug/L		111	70 - 130	1	20
Vinyl chloride	25.0	23.6		ug/L		94	70 - 130	6	20
Dibromomethane	25.0	22.7		ug/L		91	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*84*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Lab Sample ID: MB 200-110109/1-A
Matrix: Water
Analysis Batch: 110131

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 110109

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		10/12/16 19:30	10/13/16 12:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*71*		*70 - 130*	*10/12/16 19:30*	*10/13/16 12:03*	*1*

Lab Sample ID: LCS 200-110109/2-A
Matrix: Water
Analysis Batch: 110131

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 110109

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.200	0.149	J	ug/L		75	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*78*		*70 - 130*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-324299/1-A
Matrix: Water
Analysis Batch: 324706

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 324299

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050		mg/L		10/07/16 09:30	10/08/16 10:36	1

Lab Sample ID: LCS 480-324299/2-A
Matrix: Water
Analysis Batch: 324706

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 324299

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.6		mg/L		106	80 - 120

Lab Sample ID: LCSD 480-324299/3-A
Matrix: Water
Analysis Batch: 324706

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 324299

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	10.0	10.6		mg/L		106	80 - 120	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-324265/30
Matrix: Water
Analysis Batch: 324265

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			10/07/16 10:01	1
Sulfate	ND		2.0		mg/L			10/07/16 10:01	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 480-324265/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324265

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			10/07/16 06:29	1
Sulfate	ND		2.0		mg/L			10/07/16 06:29	1

Lab Sample ID: LCS 480-324265/29 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324265

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.2		mg/L		98	90 - 110
Sulfate	50.0	49.2		mg/L		98	90 - 110

Lab Sample ID: LCS 480-324265/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324265

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	48.5		mg/L		97	90 - 110
Sulfate	50.0	48.6		mg/L		97	90 - 110

Lab Sample ID: 480-107127-5 MS — **Client Sample ID: REW-10-20161005**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324265

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	68		100	162		mg/L		94	81 - 120
Sulfate	26		100	121		mg/L		96	80 - 120

Lab Sample ID: MB 480-324714/30 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324714

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			10/10/16 15:41	1
Sulfate	ND		2.0		mg/L			10/10/16 15:41	1

Lab Sample ID: MB 480-324714/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324714

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			10/10/16 12:10	1
Sulfate	ND		2.0		mg/L			10/10/16 12:10	1

Lab Sample ID: LCS 480-324714/29 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324714

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.4		mg/L		101	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 480-324714/29
Matrix: Water
Analysis Batch: 324714

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	50.0	49.6		mg/L		99	90 - 110

Lab Sample ID: LCS 480-324714/3
Matrix: Water
Analysis Batch: 324714

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.1		mg/L		100	90 - 110
Sulfate	50.0	50.3		mg/L		101	90 - 110

Lab Sample ID: MB 480-324850/4
Matrix: Water
Analysis Batch: 324850

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			10/11/16 10:32	1
Sulfate	ND		2.0		mg/L			10/11/16 10:32	1

Lab Sample ID: LCS 480-324850/3
Matrix: Water
Analysis Batch: 324850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.4		mg/L		101	90 - 110
Sulfate	50.0	50.1		mg/L		100	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-324600/2-A
Matrix: Water
Analysis Batch: 324604

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 324600

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L		10/09/16 13:43	10/09/16 14:12	1

Lab Sample ID: LCS 480-324600/1-A
Matrix: Water
Analysis Batch: 324604

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 324600

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.00		mg/L		100	90 - 110

Lab Sample ID: 480-107127-4 MS
Matrix: Water
Analysis Batch: 324604

Client Sample ID: REW-9-20161005
Prep Type: Total/NA
Prep Batch: 324600

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.20		0.500	0.669		mg/L		94	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 480-107127-3 DU — **Client Sample ID: REW-8-20161005**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324604 — **Prep Batch: 324600**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Ammonia	6.7			7.25		mg/L				8	20

Method: 9040C - pH

Lab Sample ID: 480-107127-3 DU — **Client Sample ID: REW-8-20161005**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324329

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	6.8	HF		6.9		SU				0.1	5

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-324587/28 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324587

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			10/08/16 05:08	1
TOC Result 2	ND		1.0		mg/L			10/08/16 05:08	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/08/16 05:08	1

Lab Sample ID: MB 480-324587/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324587

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			10/07/16 17:53	1
TOC Result 2	ND		1.0		mg/L			10/07/16 17:53	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/07/16 17:53	1

Lab Sample ID: MB 480-324587/52 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324587

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			10/08/16 16:20	1
TOC Result 2	ND		1.0		mg/L			10/08/16 16:20	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/08/16 16:20	1

Lab Sample ID: LCS 480-324587/29 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324587

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
TOC Result 1			60.0	55.5		mg/L		93	90 - 110		
TOC Result 2			60.0	58.8		mg/L		98	90 - 110		
Total Organic Carbon - Duplicates			60.0	57.1		mg/L		95	90 - 110		

QC Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Lab Sample ID: LCS 480-324587/5
Matrix: Water
Analysis Batch: 324587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	57.8		mg/L		96	90 - 110
TOC Result 2	60.0	60.9		mg/L		101	90 - 110
Total Organic Carbon - Duplicates	60.0	59.3		mg/L		99	90 - 110

Lab Sample ID: LCS 480-324587/53
Matrix: Water
Analysis Batch: 324587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	55.6		mg/L		93	90 - 110
TOC Result 2	60.0	59.2		mg/L		99	90 - 110
Total Organic Carbon - Duplicates	60.0	57.4		mg/L		96	90 - 110

Lab Sample ID: 480-107127-2 MS
Matrix: Water
Analysis Batch: 324587

Client Sample ID: REW-7-20161005
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	26		20.0	44.8		mg/L		95	54 - 131
TOC Result 2	28		20.0	48.1		mg/L		99	54 - 131
Total Organic Carbon - Duplicates	27		20.0	46.4		mg/L		97	54 - 131

Lab Sample ID: 480-107127-14 MS
Matrix: Water
Analysis Batch: 324587

Client Sample ID: MW-561-20161005
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	8.1		20.0	28.4		mg/L		102	54 - 131
TOC Result 2	9.1		20.0	30.3		mg/L		106	54 - 131
Total Organic Carbon - Duplicates	8.6		20.0	29.4		mg/L		104	54 - 131

Lab Sample ID: 480-107127-3 DU
Matrix: Water
Analysis Batch: 324587

Client Sample ID: REW-8-20161005
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
TOC Result 1	13		13.1		mg/L		4	20
TOC Result 2	14		14.3		mg/L		3	20
Total Organic Carbon - Duplicates	13		13.7		mg/L		3	20

Lab Sample ID: 480-107127-5 DU
Matrix: Water
Analysis Batch: 324587

Client Sample ID: REW-10-20161005
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
TOC Result 1	ND		ND		mg/L		NC	20
TOC Result 2	1.1		ND		mg/L		NC	20

Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 480-107127-5 DU — **Client Sample ID: REW-10-20161005**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324587

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Organic Carbon - Duplicates	ND			ND		mg/L				NC	20

Lab Sample ID: MB 480-325086/28 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 325086

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			10/11/16 18:37	1
TOC Result 2	ND		1.0		mg/L			10/11/16 18:37	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			10/11/16 18:37	1

Lab Sample ID: LCS 480-325086/29 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 325086

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
TOC Result 1			60.0	61.0		mg/L		102	90 - 110		
TOC Result 2			60.0	60.7		mg/L		101	90 - 110		
Total Organic Carbon - Duplicates			60.0	60.8		mg/L		101	90 - 110		

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-324328/30 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324328

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0		mg/L			10/06/16 15:01	1

Lab Sample ID: MB 480-324328/54 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324328

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0		mg/L			10/06/16 17:27	1

Lab Sample ID: LCS 480-324328/31 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324328

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity, Total			100	98.6		mg/L		99	90 - 110		

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 480-324328/55 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324328

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	99.6		mg/L		100	90 - 110

Method: SM 4500 P E - Orthophosphate

Lab Sample ID: MB 480-324228/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324228

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ortho-Phosphate	ND		0.020		mg/L			10/06/16 14:30	1

Lab Sample ID: LCS 480-324228/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324228

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
ortho-Phosphate	0.200	0.218		mg/L		109	90 - 110

Lab Sample ID: 480-107127-5 MS — **Client Sample ID: REW-10-20161005**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324228

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
ortho-Phosphate	0.029		1.00	1.04		mg/L		101	49 - 138

Lab Sample ID: 480-107127-5 MSD — **Client Sample ID: REW-10-20161005**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 324228

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
ortho-Phosphate	0.029		1.00	1.04		mg/L		101	49 - 138	0	20

QC Association Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

GC/MS VOA

Analysis Batch: 324317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-1	MW-269Ma-20161005	Total/NA	Water	8260C	
480-107127-2	REW-7-20161005	Total/NA	Water	8260C	
480-107127-3	REW-8-20161005	Total/NA	Water	8260C	
480-107127-4	REW-9-20161005	Total/NA	Water	8260C	
480-107127-5	REW-10-20161005	Total/NA	Water	8260C	
480-107127-6	REW-11-20161005	Total/NA	Water	8260C	
480-107127-7	REW-12-20161005	Total/NA	Water	8260C	
480-107127-8	DUP3-20161005	Total/NA	Water	8260C	
480-107127-9	TRIP BLANKS	Total/NA	Water	8260C	
480-107127-10	MW-264M-20161005	Total/NA	Water	8260C	
480-107127-11	MW-266Ma-20161005	Total/NA	Water	8260C	
480-107127-12	MW-266Mb-20161005	Total/NA	Water	8260C	
MB 480-324317/9	Method Blank	Total/NA	Water	8260C	
LCS 480-324317/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-324317/7	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 324456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-13	MW-560-20161005	Total/NA	Water	8260C	
480-107127-15	MW-563-20161005	Total/NA	Water	8260C	
MB 480-324456/8	Method Blank	Total/NA	Water	8260C	
LCS 480-324456/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-324456/6	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 324621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-14	MW-561-20161005	Total/NA	Water	8260C	
MB 480-324621/8	Method Blank	Total/NA	Water	8260C	
LCS 480-324621/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-324621/6	Lab Control Sample Dup	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 110109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-1	MW-269Ma-20161005	Total/NA	Water	3535A	
480-107127-11	MW-266Ma-20161005	Total/NA	Water	3535A	
MB 200-110109/1-A	Method Blank	Total/NA	Water	3535A	
LCS 200-110109/2-A	Lab Control Sample	Total/NA	Water	3535A	

Analysis Batch: 110131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-1	MW-269Ma-20161005	Total/NA	Water	522	110109
480-107127-11	MW-266Ma-20161005	Total/NA	Water	522	110109
MB 200-110109/1-A	Method Blank	Total/NA	Water	522	110109
LCS 200-110109/2-A	Lab Control Sample	Total/NA	Water	522	110109

QC Association Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Metals

Prep Batch: 324299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-2	REW-7-20161005	Total/NA	Water	3005A	
480-107127-3	REW-8-20161005	Total/NA	Water	3005A	
480-107127-4	REW-9-20161005	Total/NA	Water	3005A	
480-107127-5	REW-10-20161005	Total/NA	Water	3005A	
480-107127-6	REW-11-20161005	Total/NA	Water	3005A	
480-107127-7	REW-12-20161005	Total/NA	Water	3005A	
480-107127-13	MW-560-20161005	Total/NA	Water	3005A	
480-107127-14	MW-561-20161005	Total/NA	Water	3005A	
480-107127-15	MW-563-20161005	Total/NA	Water	3005A	
MB 480-324299/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-324299/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-324299/3-A	Lab Control Sample Dup	Total/NA	Water	3005A	

Analysis Batch: 324706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-2	REW-7-20161005	Total/NA	Water	6010	324299
480-107127-3	REW-8-20161005	Total/NA	Water	6010	324299
480-107127-4	REW-9-20161005	Total/NA	Water	6010	324299
480-107127-5	REW-10-20161005	Total/NA	Water	6010	324299
480-107127-6	REW-11-20161005	Total/NA	Water	6010	324299
480-107127-7	REW-12-20161005	Total/NA	Water	6010	324299
480-107127-13	MW-560-20161005	Total/NA	Water	6010	324299
480-107127-14	MW-561-20161005	Total/NA	Water	6010	324299
480-107127-15	MW-563-20161005	Total/NA	Water	6010	324299
MB 480-324299/1-A	Method Blank	Total/NA	Water	6010	324299
LCS 480-324299/2-A	Lab Control Sample	Total/NA	Water	6010	324299
LCSD 480-324299/3-A	Lab Control Sample Dup	Total/NA	Water	6010	324299

General Chemistry

Analysis Batch: 324228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-2	REW-7-20161005	Total/NA	Water	SM 4500 P E	
480-107127-3	REW-8-20161005	Total/NA	Water	SM 4500 P E	
480-107127-4	REW-9-20161005	Total/NA	Water	SM 4500 P E	
480-107127-5	REW-10-20161005	Total/NA	Water	SM 4500 P E	
480-107127-6	REW-11-20161005	Total/NA	Water	SM 4500 P E	
480-107127-7	REW-12-20161005	Total/NA	Water	SM 4500 P E	
480-107127-13	MW-560-20161005	Total/NA	Water	SM 4500 P E	
480-107127-14	MW-561-20161005	Total/NA	Water	SM 4500 P E	
480-107127-15	MW-563-20161005	Total/NA	Water	SM 4500 P E	
MB 480-324228/3	Method Blank	Total/NA	Water	SM 4500 P E	
LCS 480-324228/4	Lab Control Sample	Total/NA	Water	SM 4500 P E	
480-107127-5 MS	REW-10-20161005	Total/NA	Water	SM 4500 P E	
480-107127-5 MSD	REW-10-20161005	Total/NA	Water	SM 4500 P E	

Analysis Batch: 324264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-2	REW-7-20161005	Total/NA	Water	353.2	
480-107127-3	REW-8-20161005	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 324264 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-4	REW-9-20161005	Total/NA	Water	353.2	
480-107127-5	REW-10-20161005	Total/NA	Water	353.2	
480-107127-6	REW-11-20161005	Total/NA	Water	353.2	
480-107127-7	REW-12-20161005	Total/NA	Water	353.2	
480-107127-13	MW-560-20161005	Total/NA	Water	353.2	
480-107127-14	MW-561-20161005	Total/NA	Water	353.2	
480-107127-15	MW-563-20161005	Total/NA	Water	353.2	

Analysis Batch: 324265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-2	REW-7-20161005	Total/NA	Water	300.0	
480-107127-3	REW-8-20161005	Total/NA	Water	300.0	
480-107127-4	REW-9-20161005	Total/NA	Water	300.0	
480-107127-5	REW-10-20161005	Total/NA	Water	300.0	
480-107127-6	REW-11-20161005	Total/NA	Water	300.0	
480-107127-7	REW-12-20161005	Total/NA	Water	300.0	
480-107127-13	MW-560-20161005	Total/NA	Water	300.0	
480-107127-14	MW-561-20161005	Total/NA	Water	300.0	
480-107127-15	MW-563-20161005	Total/NA	Water	300.0	
MB 480-324265/30	Method Blank	Total/NA	Water	300.0	
MB 480-324265/4	Method Blank	Total/NA	Water	300.0	
LCS 480-324265/29	Lab Control Sample	Total/NA	Water	300.0	
LCS 480-324265/3	Lab Control Sample	Total/NA	Water	300.0	
480-107127-5 MS	REW-10-20161005	Total/NA	Water	300.0	

Analysis Batch: 324328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-2	REW-7-20161005	Total/NA	Water	SM 2320B	
480-107127-3	REW-8-20161005	Total/NA	Water	SM 2320B	
480-107127-4	REW-9-20161005	Total/NA	Water	SM 2320B	
480-107127-5	REW-10-20161005	Total/NA	Water	SM 2320B	
480-107127-6	REW-11-20161005	Total/NA	Water	SM 2320B	
480-107127-7	REW-12-20161005	Total/NA	Water	SM 2320B	
480-107127-13	MW-560-20161005	Total/NA	Water	SM 2320B	
480-107127-14	MW-561-20161005	Total/NA	Water	SM 2320B	
480-107127-15	MW-563-20161005	Total/NA	Water	SM 2320B	
MB 480-324328/30	Method Blank	Total/NA	Water	SM 2320B	
MB 480-324328/54	Method Blank	Total/NA	Water	SM 2320B	
LCS 480-324328/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 480-324328/55	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 324329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-2	REW-7-20161005	Total/NA	Water	9040C	
480-107127-3	REW-8-20161005	Total/NA	Water	9040C	
480-107127-4	REW-9-20161005	Total/NA	Water	9040C	
480-107127-5	REW-10-20161005	Total/NA	Water	9040C	
480-107127-6	REW-11-20161005	Total/NA	Water	9040C	
480-107127-7	REW-12-20161005	Total/NA	Water	9040C	
480-107127-13	MW-560-20161005	Total/NA	Water	9040C	
480-107127-14	MW-561-20161005	Total/NA	Water	9040C	

General Chemistry (Continued)

Analysis Batch: 324329 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-15	MW-563-20161005	Total/NA	Water	9040C	
LCS 480-324329/1	Lab Control Sample	Total/NA	Water	9040C	
LCS 480-324329/23	Lab Control Sample	Total/NA	Water	9040C	
480-107127-3 DU	REW-8-20161005	Total/NA	Water	9040C	

Analysis Batch: 324587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-2	REW-7-20161005	Total/NA	Water	9060A	
480-107127-3	REW-8-20161005	Total/NA	Water	9060A	
480-107127-5	REW-10-20161005	Total/NA	Water	9060A	
480-107127-6	REW-11-20161005	Total/NA	Water	9060A	
480-107127-7	REW-12-20161005	Total/NA	Water	9060A	
480-107127-13	MW-560-20161005	Total/NA	Water	9060A	
480-107127-14	MW-561-20161005	Total/NA	Water	9060A	
MB 480-324587/28	Method Blank	Total/NA	Water	9060A	
MB 480-324587/4	Method Blank	Total/NA	Water	9060A	
MB 480-324587/52	Method Blank	Total/NA	Water	9060A	
LCS 480-324587/29	Lab Control Sample	Total/NA	Water	9060A	
LCS 480-324587/5	Lab Control Sample	Total/NA	Water	9060A	
LCS 480-324587/53	Lab Control Sample	Total/NA	Water	9060A	
480-107127-2 MS	REW-7-20161005	Total/NA	Water	9060A	
480-107127-14 MS	MW-561-20161005	Total/NA	Water	9060A	
480-107127-3 DU	REW-8-20161005	Total/NA	Water	9060A	
480-107127-5 DU	REW-10-20161005	Total/NA	Water	9060A	

Prep Batch: 324600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-2	REW-7-20161005	Total/NA	Water	Distill/Ammonia	
480-107127-3	REW-8-20161005	Total/NA	Water	Distill/Ammonia	
480-107127-4	REW-9-20161005	Total/NA	Water	Distill/Ammonia	
480-107127-5	REW-10-20161005	Total/NA	Water	Distill/Ammonia	
480-107127-6	REW-11-20161005	Total/NA	Water	Distill/Ammonia	
480-107127-7	REW-12-20161005	Total/NA	Water	Distill/Ammonia	
480-107127-13	MW-560-20161005	Total/NA	Water	Distill/Ammonia	
480-107127-14	MW-561-20161005	Total/NA	Water	Distill/Ammonia	
480-107127-15	MW-563-20161005	Total/NA	Water	Distill/Ammonia	
MB 480-324600/2-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 480-324600/1-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	
480-107127-4 MS	REW-9-20161005	Total/NA	Water	Distill/Ammonia	
480-107127-3 DU	REW-8-20161005	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 324604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-2	REW-7-20161005	Total/NA	Water	350.1	324600
480-107127-3	REW-8-20161005	Total/NA	Water	350.1	324600
480-107127-4	REW-9-20161005	Total/NA	Water	350.1	324600
480-107127-5	REW-10-20161005	Total/NA	Water	350.1	324600
480-107127-6	REW-11-20161005	Total/NA	Water	350.1	324600
480-107127-7	REW-12-20161005	Total/NA	Water	350.1	324600
480-107127-13	MW-560-20161005	Total/NA	Water	350.1	324600
480-107127-14	MW-561-20161005	Total/NA	Water	350.1	324600

General Chemistry (Continued)

Analysis Batch: 324604 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-15	MW-563-20161005	Total/NA	Water	350.1	324600
MB 480-324600/2-A	Method Blank	Total/NA	Water	350.1	324600
LCS 480-324600/1-A	Lab Control Sample	Total/NA	Water	350.1	324600
480-107127-4 MS	REW-9-20161005	Total/NA	Water	350.1	324600
480-107127-3 DU	REW-8-20161005	Total/NA	Water	350.1	324600

Analysis Batch: 324714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-2	REW-7-20161005	Total/NA	Water	300.0	
480-107127-3	REW-8-20161005	Total/NA	Water	300.0	
480-107127-13	MW-560-20161005	Total/NA	Water	300.0	
480-107127-14	MW-561-20161005	Total/NA	Water	300.0	
480-107127-15	MW-563-20161005	Total/NA	Water	300.0	
MB 480-324714/30	Method Blank	Total/NA	Water	300.0	
MB 480-324714/4	Method Blank	Total/NA	Water	300.0	
LCS 480-324714/29	Lab Control Sample	Total/NA	Water	300.0	
LCS 480-324714/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 324850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-4	REW-9-20161005	Total/NA	Water	300.0	
MB 480-324850/4	Method Blank	Total/NA	Water	300.0	
LCS 480-324850/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 325086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-107127-4	REW-9-20161005	Total/NA	Water	9060A	
480-107127-15	MW-563-20161005	Total/NA	Water	9060A	
MB 480-325086/28	Method Blank	Total/NA	Water	9060A	
LCS 480-325086/29	Lab Control Sample	Total/NA	Water	9060A	

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Client Sample ID: MW-269Ma-20161005 — Lab Sample ID: 480-107127-1

Date Collected: 10/05/16 08:15 — **Matrix: Water**
Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324317	10/07/16 14:36	RRS	TAL BUF
Total/NA	Prep	3535A			110109	10/12/16 19:30	BDL	TAL BUR
Total/NA	Analysis	522		1	110131	10/13/16 14:34	TPB	TAL BUR

Client Sample ID: REW-7-20161005 — Lab Sample ID: 480-107127-2

Date Collected: 10/05/16 11:20 — **Matrix: Water**
Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324317	10/07/16 15:00	RRS	TAL BUF
Total/NA	Prep	3005A			324299	10/07/16 09:30	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324706	10/08/16 11:43	TRB	TAL BUF
Total/NA	Analysis	300.0		5	324265	10/07/16 08:48	CAV	TAL BUF
Total/NA	Analysis	300.0		1	324714	10/10/16 13:56	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			324600	10/09/16 13:43	CEA	TAL BUF
Total/NA	Analysis	350.1		1	324604	10/09/16 14:15	CEA	TAL BUF
Total/NA	Analysis	353.2		1	324264	10/06/16 14:28	ELR	TAL BUF
Total/NA	Analysis	9040C		1	324329	10/06/16 18:36	KMF	TAL BUF
Total/NA	Analysis	9060A		1	324587	10/07/16 20:42	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324328	10/06/16 18:45	KMF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	324228	10/06/16 14:30	LED	TAL BUF

Client Sample ID: REW-8-20161005 — Lab Sample ID: 480-107127-3

Date Collected: 10/05/16 10:25 — **Matrix: Water**
Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324317	10/07/16 15:24	RRS	TAL BUF
Total/NA	Prep	3005A			324299	10/07/16 09:30	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324706	10/08/16 11:46	TRB	TAL BUF
Total/NA	Analysis	300.0		5	324265	10/07/16 08:56	CAV	TAL BUF
Total/NA	Analysis	300.0		1	324714	10/10/16 14:04	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			324600	10/09/16 13:43	CEA	TAL BUF
Total/NA	Analysis	350.1		1	324604	10/09/16 14:16	CEA	TAL BUF
Total/NA	Analysis	353.2		1	324264	10/06/16 14:29	ELR	TAL BUF
Total/NA	Analysis	9040C		1	324329	10/06/16 18:41	KMF	TAL BUF
Total/NA	Analysis	9060A		1	324587	10/07/16 21:38	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324328	10/06/16 19:05	KMF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	324228	10/06/16 14:30	LED	TAL BUF

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Client Sample ID: REW-9-20161005 — Lab Sample ID: 480-107127-4

Date Collected: 10/05/16 09:30 — **Matrix: Water**
Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324317	10/07/16 15:48	RRS	TAL BUF
Total/NA	Prep	3005A			324299	10/07/16 09:30	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324706	10/08/16 12:00	TRB	TAL BUF
Total/NA	Analysis	300.0		5	324265	10/07/16 09:04	CAV	TAL BUF
Total/NA	Analysis	300.0		1	324850	10/11/16 11:13	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			324600	10/09/16 13:43	CEA	TAL BUF
Total/NA	Analysis	350.1		1	324604	10/09/16 14:18	CEA	TAL BUF
Total/NA	Analysis	353.2		1	324264	10/06/16 14:31	ELR	TAL BUF
Total/NA	Analysis	9040C		1	324329	10/06/16 18:46	KMF	TAL BUF
Total/NA	Analysis	9060A		5	325086	10/12/16 00:41	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324328	10/06/16 19:12	KMF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	324228	10/06/16 14:30	LED	TAL BUF

Client Sample ID: REW-10-20161005 — Lab Sample ID: 480-107127-5

Date Collected: 10/05/16 08:55 — **Matrix: Water**
Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324317	10/07/16 16:12	RRS	TAL BUF
Total/NA	Prep	3005A			324299	10/07/16 09:30	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324706	10/08/16 12:04	TRB	TAL BUF
Total/NA	Analysis	300.0		2	324265	10/07/16 09:12	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			324600	10/09/16 13:43	CEA	TAL BUF
Total/NA	Analysis	350.1		1	324604	10/09/16 14:21	CEA	TAL BUF
Total/NA	Analysis	353.2		1	324264	10/06/16 14:32	ELR	TAL BUF
Total/NA	Analysis	9040C		1	324329	10/06/16 18:48	KMF	TAL BUF
Total/NA	Analysis	9060A		1	324587	10/08/16 01:22	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324328	10/06/16 19:18	KMF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	324228	10/06/16 14:30	LED	TAL BUF

Client Sample ID: REW-11-20161005 — Lab Sample ID: 480-107127-6

Date Collected: 10/05/16 12:20 — **Matrix: Water**
Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324317	10/07/16 16:36	RRS	TAL BUF
Total/NA	Prep	3005A			324299	10/07/16 09:30	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324706	10/08/16 12:07	TRB	TAL BUF
Total/NA	Analysis	300.0		5	324265	10/07/16 10:09	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			324600	10/09/16 13:43	CEA	TAL BUF
Total/NA	Analysis	350.1		1	324604	10/09/16 14:22	CEA	TAL BUF

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Client Sample ID: REW-11-20161005 — Lab Sample ID: 480-107127-6

Date Collected: 10/05/16 12:20 — **Matrix: Water**
Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	324264	10/06/16 14:33	ELR	TAL BUF
Total/NA	Analysis	9040C		1	324329	10/06/16 18:51	KMF	TAL BUF
Total/NA	Analysis	9060A		1	324587	10/08/16 02:19	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324328	10/06/16 19:23	KMF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	324228	10/06/16 14:30	LED	TAL BUF

Client Sample ID: REW-12-20161005 — Lab Sample ID: 480-107127-7

Date Collected: 10/05/16 13:10 — **Matrix: Water**
Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	324317	10/07/16 17:00	RRS	TAL BUF
Total/NA	Prep	3005A			324299	10/07/16 09:30	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324706	10/08/16 12:11	TRB	TAL BUF
Total/NA	Analysis	300.0		5	324265	10/07/16 10:17	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			324600	10/09/16 13:43	CEA	TAL BUF
Total/NA	Analysis	350.1		1	324604	10/09/16 14:23	CEA	TAL BUF
Total/NA	Analysis	353.2		1	324264	10/06/16 14:37	ELR	TAL BUF
Total/NA	Analysis	9040C		1	324329	10/06/16 18:54	KMF	TAL BUF
Total/NA	Analysis	9060A		1	324587	10/08/16 02:47	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324328	10/06/16 19:30	KMF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	324228	10/06/16 14:30	LED	TAL BUF

Client Sample ID: DUP3-20161005 — Lab Sample ID: 480-107127-8

Date Collected: 10/05/16 00:00 — **Matrix: Water**
Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324317	10/07/16 17:24	RRS	TAL BUF

Client Sample ID: TRIP BLANKS — Lab Sample ID: 480-107127-9

Date Collected: 10/05/16 00:00 — **Matrix: Water**
Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324317	10/07/16 17:47	RRS	TAL BUF

Client Sample ID: MW-264M-20161005 — Lab Sample ID: 480-107127-10

Date Collected: 10/05/16 11:15 — **Matrix: Water**
Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324317	10/07/16 18:11	RRS	TAL BUF

Client Sample ID: MW-266Ma-20161005 — Lab Sample ID: 480-107127-11

Date Collected: 10/05/16 10:25 — **Matrix: Water**
Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324317	10/07/16 18:35	RRS	TAL BUF
Total/NA	Prep	3535A			110109	10/12/16 19:30	BDL	TAL BUR
Total/NA	Analysis	522		1	110131	10/13/16 14:52	TPB	TAL BUR

Client Sample ID: MW-266Mb-20161005 — Lab Sample ID: 480-107127-12

Date Collected: 10/05/16 09:40 — **Matrix: Water**
Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324317	10/07/16 18:59	RRS	TAL BUF

Client Sample ID: MW-560-20161005 — Lab Sample ID: 480-107127-13

Date Collected: 10/05/16 13:00 — **Matrix: Water**
Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324456	10/08/16 02:01	JWG	TAL BUF
Total/NA	Prep	3005A			324299	10/07/16 09:30	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324706	10/08/16 12:14	TRB	TAL BUF
Total/NA	Analysis	300.0		5	324265	10/07/16 10:25	CAV	TAL BUF
Total/NA	Analysis	300.0		1	324714	10/10/16 14:12	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			324600	10/09/16 13:43	CEA	TAL BUF
Total/NA	Analysis	350.1		1	324604	10/09/16 14:24	CEA	TAL BUF
Total/NA	Analysis	353.2		1	324264	10/06/16 14:38	ELR	TAL BUF
Total/NA	Analysis	9040C		1	324329	10/06/16 18:57	KMF	TAL BUF
Total/NA	Analysis	9060A		1	324587	10/08/16 03:43	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324328	10/06/16 19:38	KMF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	324228	10/06/16 14:30	LED	TAL BUF

Client Sample ID: MW-561-20161005 — Lab Sample ID: 480-107127-14

Date Collected: 10/05/16 12:00 — **Matrix: Water**
Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324621	10/10/16 00:47	JWG	TAL BUF

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			324299	10/07/16 09:30	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324706	10/08/16 12:18	TRB	TAL BUF
Total/NA	Analysis	300.0		5	324265	10/07/16 10:33	CAV	TAL BUF
Total/NA	Analysis	300.0		1	324714	10/10/16 14:20	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			324600	10/09/16 13:43	CEA	TAL BUF
Total/NA	Analysis	350.1		5	324604	10/09/16 14:33	CEA	TAL BUF
Total/NA	Analysis	353.2		1	324264	10/06/16 14:40	ELR	TAL BUF
Total/NA	Analysis	9040C		1	324329	10/06/16 18:59	KMF	TAL BUF
Total/NA	Analysis	9060A		1	324587	10/08/16 06:03	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324328	10/06/16 19:46	KMF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	324228	10/06/16 14:30	LED	TAL BUF

Client Sample ID: MW-563-20161005

Lab Sample ID: 480-107127-15

Date Collected: 10/05/16 13:55

Matrix: Water

Date Received: 10/06/16 01:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	324456	10/08/16 02:49	JWG	TAL BUF
Total/NA	Prep	3005A			324299	10/07/16 09:30	MVZ	TAL BUF
Total/NA	Analysis	6010		1	324706	10/08/16 12:22	TRB	TAL BUF
Total/NA	Analysis	300.0		5	324265	10/07/16 10:42	CAV	TAL BUF
Total/NA	Analysis	300.0		1	324714	10/10/16 14:28	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			324600	10/09/16 13:43	CEA	TAL BUF
Total/NA	Analysis	350.1		1	324604	10/09/16 14:25	CEA	TAL BUF
Total/NA	Analysis	353.2		1	324264	10/06/16 14:41	ELR	TAL BUF
Total/NA	Analysis	9040C		1	324329	10/06/16 19:02	KMF	TAL BUF
Total/NA	Analysis	9060A		1	325086	10/12/16 01:09	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	324328	10/06/16 19:52	KMF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	324228	10/06/16 14:30	LED	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Certification Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-17
California	State Program	9	1169CA	09-30-17
Connecticut	State Program	1	PH-0568	09-30-18
Florida	NELAP	4	E87672	06-30-17
Georgia	State Program	4	N/A	03-31-17
Georgia	State Program	4	956	03-31-17
Illinois	NELAP	5	200003	09-30-16 *
Iowa	State Program	7	374	03-01-17
Kansas	NELAP	7	E-10187	10-31-16
Kentucky (DW)	State Program	4	90029	12-31-16
Kentucky (UST)	State Program	4	30	03-31-17
Kentucky (WW)	State Program	4	90029	12-31-16
Louisiana	NELAP	6	02031	06-30-17
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-17
Massachusetts	State Program	1	M-NY044	06-30-17
Michigan	State Program	5	9937	03-31-17
Minnesota	NELAP	5	036-999-337	12-31-16
New Hampshire	NELAP Primary AB	1	2973	09-11-17
New Hampshire	NELAP Secondary AB	1	2337	11-17-16
New Jersey	NELAP	2	NY455	06-30-17
New York	NELAP	2	10026	03-31-17
North Dakota	State Program	8	R-176	03-31-17
Oklahoma	State Program	6	9421	08-31-17
Oregon	NELAP	10	NY200003	06-09-17
Pennsylvania	NELAP	3	68-00281	07-31-17
Rhode Island	State Program	1	LAO00328	12-30-16
Tennessee	State Program	4	TN02970	03-31-17
Texas	NELAP	6	T104704412-15-6	07-31-17
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-17
Washington	State Program	10	C784	02-10-17
West Virginia DEP	State Program	3	252	09-30-16 *
Wisconsin	State Program	5	998310390	08-31-17

Laboratory: TestAmerica Burlington

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-17
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-02-17
Florida	NELAP	4	E87467	06-30-17
L-A-B	DoD ELAP		L2336	02-26-17
Maine	State Program	1	VT00008	04-17-17
Minnesota	NELAP	5	050-999-436	12-31-16
New Hampshire	NELAP	1	2006	12-18-16
New Jersey	NELAP	2	VT972	06-30-17
New York	NELAP	2	10391	04-01-17
Pennsylvania	NELAP	3	68-00489	04-30-17
Rhode Island	State Program	1	LAO00298	12-30-16

* Certification renewal pending - certification considered valid.

Certification Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Laboratory: TestAmerica Burlington (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
US Fish & Wildlife	Federal		LE-058448-0	10-31-16
USDA	Federal		P330-11-00093	10-28-16
Vermont	State Program	1	VT-4000	12-31-16
Virginia	NELAP	3	460209	12-14-16

Method Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
522	1,4 Dioxane (GC/MS SIM)	EPA	TAL BUR
6010	Metals (ICP)	SW846	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
9040C	pH	SW846	TAL BUF
9060A	Organic Carbon, Total (TOC)	SW846	TAL BUF
SM 2320B	Alkalinity	SM	TAL BUF
SM 4500 P E	Orthophosphate	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency
MA DEP = Massachusetts Department Of Environmental Protection
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-107127-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-107127-1	MW-269Ma-20161005	Water	10/05/16 08:15	10/06/16 01:45
480-107127-2	REW-7-20161005	Water	10/05/16 11:20	10/06/16 01:45
480-107127-3	REW-8-20161005	Water	10/05/16 10:25	10/06/16 01:45
480-107127-4	REW-9-20161005	Water	10/05/16 09:30	10/06/16 01:45
480-107127-5	REW-10-20161005	Water	10/05/16 08:55	10/06/16 01:45
480-107127-6	REW-11-20161005	Water	10/05/16 12:20	10/06/16 01:45
480-107127-7	REW-12-20161005	Water	10/05/16 13:10	10/06/16 01:45
480-107127-8	DUP3-20161005	Water	10/05/16 00:00	10/06/16 01:45
480-107127-9	TRIP BLANKS	Water	10/05/16 00:00	10/06/16 01:45
480-107127-10	MW-264M-20161005	Water	10/05/16 11:15	10/06/16 01:45
480-107127-11	MW-266Ma-20161005	Water	10/05/16 10:25	10/06/16 01:45
480-107127-12	MW-266Mb-20161005	Water	10/05/16 09:40	10/06/16 01:45
480-107127-13	MW-560-20161005	Water	10/05/16 13:00	10/06/16 01:45
480-107127-14	MW-561-20161005	Water	10/05/16 12:00	10/06/16 01:45
480-107127-15	MW-563-20161005	Water	10/05/16 13:55	10/06/16 01:45

Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 480-107127-1

Login Number: 107127
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	IESI
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 480-107127-1

Login Number: 107127
List Number: 2
Creator: Lavigne, Scott M

List Source: TestAmerica Burlington
List Creation: 10/06/16 01:13 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.2ºC,2.2Cº,2.4Cº
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

360325-Boston

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road -- Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:	Sample Collector's Name (Please Print Neatly): Dave Sorg	Lab PM:	Lab COC Barcode Label	COC No: 37051
Client Contact: Vicki Perryer	Sample Collector's Phone: 508-404-3192	E-Mail:		Page: 1 of 2
Company: Innovative Engineering Solutions Inc				Job #:
Address: 25 Spring St	Due Date Requested: 10/12/16			
City: Walpole	Turnaround Time (TAT) Requested (business days): 5 days			
State and Zip: MA 02081				
Client's Phone: 508-668-0033	Quote # or Project #:			
Client's Contact Email: v.perryer@iesinonline.com	PO #: RA-008			
Client's Project Name/Number: Raytheon - Wayland RA008	WO #:			
Sample Collection Site Name & Location: Wayland MA	PWS ID #:			

480-107127 COC

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP ☐ GW1/S1 ☐
RCP ☐ CT RSR ☐
DEP Form ☐ EDD Required ☐
eDEP Filing ☐ NPDES ☐

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit Test-America to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	8260 MCP	522-MOD Dioxane	6020 MCP Total Iron	9060A TOC	350.1 NH3	4500-P-E Ortho Phos	300.0-28 Days Cl, Br, NO3								Total Number of Containers (enter total for each line)	Special Instructions & Notes:
			Preservation Codes →		A	A	D	A	J	N	N								↓	
MW-269Mg - 20161005	10/5/16	0815	G	W	X	X													5	
REW-7 - 20161005	10/5/16	1120	G	W	X		X	X	X	X	X								9	
REW-8 - 20161005	10/5/16	1025	G	W	X		X	X	X	X	X								9	
REW-9 - 20161005	10/5/16	0930	G	W	X		X	X	X	X	X								9	
REW-10 - 20161005	10/5/16	0855	G	W	X		X	X	X	X	X								9	
REW-11 - 20161005	10/5/16	1220	G	W	X		X	X	X	X	X								9	
REW-12 - 20161005	10/5/16	1310	G	W	X		X	X	X	X	X								9	
Dup3 - 20161005	10/5/16	—	G	W	X														3	
Trip Blanks	—	—	—	W	X														2	

Possible Hazard Identification (please check off each that may apply):
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month):
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

** **Matrix Types:** A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► **NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !!** ◄

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	10/5/16 1450	IESI	[signature]	10-5-16 1600	[signature]
[signature]	10-5-16 1800	[signature]	[signature]	10-6-16 0145	TAB

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.1, 1.6 #1

WI-QA-010 rev 8

Revised 10/29/2014
TAL-8245-360R

360325-Boston

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road -- Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:	Sample Collector's Name (Please Print Neatly): Garth Hresch	Lab PM:	Lab COC Barcode Label	COC No: 37053
Client Contact: Vicki Perinyar	Sample Collector's Phone:	E-Mail:		Page: 2 of 2
Company: Innovative Engineering Solutions Inc				Job #:
Address: 95 Spring St	Due Date Requested: 10/12/16			
City: Walpole	Turnaround Time (TAT) Requested (business days): 5 days			
State and Zip: MA 02081				
Client's Phone: 508-668-0033	Quote # or Project #:			
Client's Contact Email: v.perinyar@IESIonline.com	PO #: RA-008			
Client's Project Name/Number: Raytheon - Wayland RA-008	WO #:			
Sample Collection Site Name & Location: Wayland MA	PWS ID #:			

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP ☐ GW1/S1 ☐
RCP ☐ CT RSR ☐
DEP Form ☐ EDD Required ☐
eDEP Filing ☐ NPDES ☐

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Analysis Requested

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	8260 MCP	522 - MOD Dioxane	6010 MCP Total Iron	9060A TOC	350.1 NH3	300.0 - P Ortho PO4 - P	300.0 - 28D Nitrate Total NO3	Total Number of Containers (enter total for each line)	Special Instructions & Notes:
			Preservation Codes ►		A	A	D	A	F	N	N	↓	
MW-264M - 20161005	10/5/16	1115	G	W	X							3	
MW-264Ma - 20161005	10/5/16	1025	G	W	X	X						5	
MW-264Mb - 20161005	10/5/16	0940	G	W	X							3	
MW-560 - 20161005	10/5/16	1300	G	W	X		X	X	X	X	X	9	
MW-561 - 20161005	10/5/16	1200	G	W	X		X	X	X	X	X	9	
MW-563 - 20161005	10/5/16	1355	G	W	X		X	X	X	X	X	9	

Possible Hazard Identification (please check off each that may apply):
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month) :
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

** **Matrix Types:** A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► **NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !!** ◄

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10/5/16 1450	IESI		10-5-16 1600	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10-5-16 1700			10-6-16 0145	TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.1,1.6 #1

WI-QA-010 rev 8

Revised 10/29/2014
TAL-8245-360R

TestAmerica Westfield
501 Southampton Road
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Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road -- Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

360325-Boston

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:

Client Contact: Vicki Parsons
Company: Innovative Engineering Solutions Inc
Address: 23 Spring St
City: Walpole
State and Zip: MA 02081
Client's Phone: 508-668-0033
Client's Contact Email: v.parsons@iessonline.com
Client's Project Name/Number: Raytheon - Wayland RA008
Sample Collection Site Name & Location: Wayland MA

Sample Collector's Name (Please Print Neatly): Danny Sarro
Sample Collector's Phone: 508-404-3192
Lab PM:
E-Mail:
Lab COC Barcode Label
COC No: 37051
Page: 1 of 2
Job #:
Due Date Requested: 10/12/16
Turnaround Time (TAT) Requested (business days): 5 days
Quote # or Project #:
PO #: RA-008
WO #:
PWS ID #:

Analysis Requested

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	8260 MCP	522-MOD Dioxane	6020 MCP Total Hg	9060A TOC	350.1 NH3	4500-P-E Ortho 9056	300.0-28D SO4								Total Number of Containers (enter total for each line)
			Preservation Codes →		A	A	A	A	J	N	N								↓
MW-26A Mg - 20161005	10/5/16	0815	G	W	X	X													5
REW-7 - 20161005	10/5/16	1120	G	W	X		X	X	X	X	X								9
REW-8 - 20161005	10/5/16	1025	G	W	X		X	X	X	X	X								9
REW-9 - 20161005	10/5/16	0930	G	W	X		X	X	X	X	X								9
REW-10 - 20161005	10/5/16	0855	G	W	X		X	X	X	X	X								9
REW-11 - 20161005	10/5/16	1220	G	W	X		X	X	X	X	X								9
REW-12 - 20161005	10/5/16	1310	G	W	X	X	X	X	X	X	X								
Dup3 - 20161005	10/5/16	—	G	W	X														
Trip Blanks	—	—	—	W	X														

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP ☐ GW1/S1 ☐
RCP ☐ CT RSR ☐
DEP Form ☐ EDD Required ☐
eDEP Filing ☐ NPDES ☐

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Special Instructions & Notes:

522 1-4 Dioxane
To Burlington

480-107127 Chain of Custody

Possible Hazard Identification (please check off each that may apply):
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal Require
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

** **Matrix Types**: A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

▶ **NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !!** ◀

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10/5/16 1450	IESI		10-5-16 1600	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10-5-16 1800			10/6/16 1030	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

WI-QA-010 rev 8

Revised 10/29/2014
TAL-8245-360R

TestAmerica Westfield
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Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
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Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

360325 Boston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:	Sample Collector's Name (Please Print Neatly): Sarah Hresch	Lab PM:	Lab COC Barcode Label	COC No: 37053
Client Contact: Vicki Perriyan	Sample Collector's Phone:	E-Mail:		Page: 2 of 2
Company: Innovative Engineering Solutions Inc				Job #:
Address: 95 Spring St	Due Date Requested: 10/12/16			
City: Walpole	Turnaround Time (TAT) Requested (business days): 5 days			
State and Zip: MA 02081				
Client's Phone: 508-668-0033	Quote # or Project #:			
Client's Contact Email: v.perriyan@IESIonline.com	PO #: RA-008			
Client's Project Name/Number: Raytheon -- Wayland RA-008	WO #:			
Sample Collection Site Name & Location: Wayland MA	PWS ID #:			

Analysis Requested

Preservation Codes:
A - Hydrochloric Acid; B - Sodium Hydroxide; C - Zinc Acetate; D - Nitric Acid; E - Sodium Bisulfite; F - Methanol; H - Ascorbic Acid; J - Deionized Water; M - Hexane; N - No Preservative; P - Sodium Sulfate; Q - Sodium Sulfite; R - Sodium Thiosulfate; S - Sulfuric Acid; Z - other (specify)

Regulatory Programs:
MCP ☐ GW1/S1 ☐
RCP ☐ CT RSR ☐
DEP Form ☐ EDD Required ☐
eDEP Filing ☐ NPDES ☐

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit Test-America to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	8260 MCP	522 - mod Dioxane	6010 MCP Total Iron	9060A TOC	350.1 NH3	4500 P-E Ortho PO4	9040C - pH	300.0 - 28D 300.0 Alk + Total NO3	Total Number of Containers (enter total for each line)
			Preservation Codes **		A	A	D	A	F	N	N		
MW-264M - 20161005	10/5/16	1115	G	W	X								3
MW-264Ma - 20161005	10/5/16	1025	G	W	X	X							5
MW-264Mb - 20161005	10/5/16	0940	G	W	X								3
MW-560 - 20161005	10/5/16	1300	G	W	X		X	X	X	X	X		9
MW-561 - 20161005	10/5/16	1200	G	W	X		X	X	X	X	X		9
MW-563 - 20161005	10/5/16	1355	G	W	X		X	X	X	X	X		9

Special Instructions & Notes:

522 - 1-4 Dioxane
To Burlington

Possible Hazard Identification (please check off each that may apply):
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month) :
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

**** Matrix Types:** A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

▶ NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◀

Relinquished by:	Date/Time: 10/5/16 1450	Company IESI	Received by:	Date/Time: 10/5/16 1600	Company
Relinquished by:	Date/Time: 10/5/16 1700	Company	Received by:	Date/Time: 10/6/16 1030	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

WI-QA-010 rev 8

Revised 10/29/2014
TAL-8245-360R

ORIGIN ID:BXCA (781) 466-6900
PAUL HOBART
TESTAMERICA
240 BEAR HILL ROAD
SUITE 104
WALTHAM, MA 02451
UNITED STATES US

SHIP DATE: 05OCT16
ACTWGT: 52.9 LB
CAD: 590687/CAFE2912

BILL RECIPIENT

TO SAMPLE RECEIVING
TESTAMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990
INV:
PO:
REF:
DEPT:

538C1/E52E/3298

FedEx Express

J1513150813011

1 of 3

TRK# 0201 4258 8390 8167

MASTER

THU - 06 OCT 10:30A
PRIORITY OVERNIGHT

NC BTVA

05403
VT-US BTV

Part # 156148V-434 RIT2 02/17

ORIGIN ID:BXCA (781) 466-6900
PAUL HOBART
TESTAMERICA
240 BEAR HILL ROAD
SUITE 104
WALTHAM, MA 02451
UNITED STATES US

SHIP DATE: 05OCT16
ACTWGT: 50.5 LB
CAD: 590687/CAFE2912

BILL RECIPIENT

TO SAMPLE RECEIVING
TESTAMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990
INV:
PO:
REF:
DEPT:

538C1/E52E/3298

FedEx Express

J1513150813011

2 of 3

MPS# 0263 4258 8390 8178

Mstr# 4258 8390 8167

0204

THU - 06 OCT 10:30A
PRIORITY OVERNIGHT

NC BTVA

05403
VT-US BTV

Part # 156148V-434 RIT2 02/17

Svce: PRIORITY OVERNIG

ORIGIN ID:BXCA (781) 466-6900
PAUL HOBART
TESTAMERICA
240 BEAR HILL ROAD
SUITE 104
WALTHAM, MA 02451
UNITED STATES US

SHIP DATE: 05OCT16
ACTWGT: 46.2 LB
CAD: 590687/CAFE2912

BILL RECIPIENT

TO SAMPLE RECEIVING
TESTAMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990
INV:
PO:
REF:
DEPT:

FedEx Express

3 of 3
MPS# 0263 4258 8390 8189
Mstr# 4258 8390 8167
0201

THU - 06 OCT 10:30A
PRIORITY OVERNIGHT

NC BTVA

05403
VT-US BTV

Part # 156148V-434 RIT2 02/17

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-102619-1
Client Project/Site: IDS Wayland

For:
Innovative Engineering Solutions, Inc
25 Spring Street
Walpole, Massachusetts 02081

Attn: Vicki Pariyar

Authorized for release by:
7/13/2016 10:48:40 AM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-102619-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-102619-1

Comments
No additional comments.

Receipt
The samples were received on 7/6/2016 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9º C.

GC/MS VOA
Method 8260C: Due to the dilutions required, per question G on the MassDEP Analytical Protocol Certification Form, the CAM reporting limits specified in this CAM protocol could not be achieved for some or all samples/analytes.

Method 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-dibromo-3-chloropropane, Carbon Disulfide, Isopropyl Ether, Naphthalene, tert-Amyl Methyl Ether and Tetrahydrofuran.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-267S-20160705 (480-102619-1) and MW-268S-20160705 (480-102619-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) for Dichlorodifluoromethane and Chloromethane associated with batch 480-309931 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples were affected : MW-267S-20160705 (480-102619-1), MW-267M-20160705 (480-102619-2), MW-268S-20160705 (480-102619-3), MW-563-20160705 (480-102619-6) and TRIP BLANK (480-102619-8).

Method(s) 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-309931 exceeded control limits for the following analyte: 2-Hexanone . Unlike the calibration standards, this is due to the coelution with N-Butyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : MW-267S-20160705 (480-102619-1), MW-267M-20160705 (480-102619-2), MW-268S-20160705 (480-102619-3), MW-563-20160705 (480-102619-6) and TRIP BLANK (480-102619-8).

Method(s) 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-309931 exceeded control limits for the following analyte: Dichlorodifluoromethane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-267S-20160705 (480-102619-1), MW-267M-20160705 (480-102619-2), MW-268S-20160705 (480-102619-3), MW-563-20160705 (480-102619-6) and TRIP BLANK (480-102619-8).

Method(s) 8260C: The laboratory control sample (LCS) for batch 480-309931 exceeded control limits for the following analytes: Chloromethane and Vinyl chloride. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-267S-20160705 (480-102619-1), MW-267M-20160705 (480-102619-2), MW-268S-20160705 (480-102619-3), MW-563-20160705 (480-102619-6) and TRIP BLANK (480-102619-8).

Method(s) 8260C: The continuing calibration verification (CCV) for carbon disulfide associated with batch 480-309992 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following samples were affected : MW-268M-20160705 (480-102619-4), MW-561-20160705 (480-102619-5) and DUP1-20160705 (480-102619-7).

Method(s) 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-309992 exceeded control limits for the following analytes: Carbon disulfide and Dichlorodifluoromethane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-268M-20160705 (480-102619-4), MW-561-20160705 (480-102619-5) and DUP1-20160705 (480-102619-7).

Job ID: 480-102619-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-309992 exceeded control limits for the following analyte: 2-Hexanone . Unlike the calibration standards, this is due to the coelution with n-butyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : MW-268M-20160705 (480-102619-4), MW-561-20160705 (480-102619-5) and DUP1-20160705 (480-102619-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HPLC/IC
Method(s) 300.0: The following samples were diluted due to the nature of the sample matrix: MW-267S-20160705 (480-102619-1), MW-267M-20160705 (480-102619-2), MW-561-20160705 (480-102619-5) and MW-563-20160705 (480-102619-6). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following sample was diluted due to the abundance of non-target analytes: MW-268M-20160705 (480-102619-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010C: At the request of the client, an abbreviated MCP compound list was reported for this job.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: MW-267S-20160705 (480-102619-1), MW-267M-20160705 (480-102619-2), MW-268S-20160705 (480-102619-3), MW-268M-20160705 (480-102619-4), MW-561-20160705 (480-102619-5) and MW-563-20160705 (480-102619-6).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-102619-1**

Project Location: **Wayland** RTN:

This form provides certifications for the following data set: list Laboratory Sample ID Number(s):

480-102619-1(1-8)

Matrices: [x] Groundwater/Surface Water [ ] Soil/Sediment [ ] Drinking Water [ ] Air [ ] Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A [x]	7470/7471 Hg CAM III B	Mass DEP VPH CAM IV A [ ]	8081 Pesticides CAM V B [ ]	7196 Hex Cr CAM VI B [ ]	Mass DEP APH CAM IX A [ ]
8270 SVOC CAM II B [ ]	7010 Metals CAM III C [ ]	Mass DEP EPH CAM IV B [ ]	8151 Herbicides CAM V C [ ]	8330 Explosives CAM VIII A [ ]	TO-15 VOC CAM IX B [ ]
6010 Metals CAM III A [x]	6020 Metals CAM III D [ ]	8082 PCB CAM V A [ ]	9014 Total Cyanide/PAC CAM VI A [ ]	6860 Perchlorate CAM VIII B [ ]	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	[x] Yes [ ] No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	[x] Yes [ ] No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	[x] Yes [ ] No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	[x] Yes [ ] No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	[ ] Yes [ ] No [ ] Yes [ ] No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	[x] Yes [ ] No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	[ ] Yes [x] No[1]

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350***

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	[ ] Yes [x] No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	[ ] Yes [x] No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: Position: Project Management Assistant

Printed Name: Rebecca Jones Date: 7/13/16 10:48

Detection Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Client Sample ID: MW-267S-20160705 — Lab Sample ID: 480-102619-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	350		40		ug/L	4		8260C	Total/NA
cis-1,2-Dichloroethene	270		4.0		ug/L	4		8260C	Total/NA
Toluene	96		4.0		ug/L	4		8260C	Total/NA
Vinyl chloride	14	*	4.0		ug/L	4		8260C	Total/NA
Iron	340		0.050		mg/L	1		6010	Total/NA
Chloride	56		5.0		mg/L	10		300.0	Total/NA
Ammonia	0.40	F1	0.20		mg/L	1		350.1	Total/NA
TOC Result 1	1900		50		mg/L	50		9060A	Total/NA
TOC Result 2	2000		50		mg/L	50		9060A	Total/NA
Total Organic Carbon - Duplicates	2000		50		mg/L	50		9060A	Total/NA
Alkalinity, Total	510		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.43		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	5.17	HF	0.100		SU	1		9040C	Total/NA

Client Sample ID: MW-267M-20160705 — Lab Sample ID: 480-102619-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	3.4		1.0		ug/L	1		8260C	Total/NA
Iron	97		0.050		mg/L	1		6010	Total/NA
Chloride	23		2.5		mg/L	5		300.0	Total/NA
Sulfate	2.7		2.0		mg/L	1		300.0	Total/NA
Ammonia	0.77		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	8.1		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	8.1		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	8.1		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	280		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.12		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.68	HF	0.100		SU	1		9040C	Total/NA

Client Sample ID: MW-268S-20160705 — Lab Sample ID: 480-102619-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	70		5.0		ug/L	5		8260C	Total/NA
Trichloroethene	150		5.0		ug/L	5		8260C	Total/NA
Vinyl chloride	5.2	*	5.0		ug/L	5		8260C	Total/NA
Iron	0.40		0.050		mg/L	1		6010	Total/NA
Chloride	14		0.50		mg/L	1		300.0	Total/NA
Sulfate	35		2.0		mg/L	1		300.0	Total/NA
Ammonia	0.29		0.20		mg/L	1		350.1	Total/NA
Alkalinity, Total	40		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.087		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	7.06	HF	0.100		SU	1		9040C	Total/NA

Client Sample ID: MW-268M-20160705 — Lab Sample ID: 480-102619-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	110		10		ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Client Sample ID: MW-268M-20160705 (Continued) — Lab Sample ID: 480-102619-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.4		1.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	58		1.0		ug/L	1		8260C	Total/NA
Toluene	8.1		1.0		ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	2.0		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	43		1.0		ug/L	1		8260C	Total/NA
Iron	82		0.050		mg/L	1		6010	Total/NA
Chloride	41		1.0		mg/L	2		300.0	Total/NA
Ammonia	1.9		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	81		2.0		mg/L	2		9060A	Total/NA
TOC Result 2	84		2.0		mg/L	2		9060A	Total/NA
Total Organic Carbon - Duplicates	82		2.0		mg/L	2		9060A	Total/NA
Alkalinity, Total	280		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.13		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.76	HF	0.100		SU	1		9040C	Total/NA

Client Sample ID: MW-561-20160705 — Lab Sample ID: 480-102619-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	18		10		ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	3.1		2.0		ug/L	1		8260C	Total/NA
Toluene	14		1.0		ug/L	1		8260C	Total/NA
Iron	190		0.050		mg/L	1		6010	Total/NA
Chloride	44		5.0		mg/L	10		300.0	Total/NA
Ammonia	2.2		0.40		mg/L	2		350.1	Total/NA
TOC Result 1	13		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	13		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	13		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	530		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.21		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.82	HF	0.100		SU	1		9040C	Total/NA

Client Sample ID: MW-563-20160705 — Lab Sample ID: 480-102619-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	80		0.050		mg/L	1		6010	Total/NA
Chloride	28		2.5		mg/L	5		300.0	Total/NA
Ammonia	1.9		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	1.6		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	1.7		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	1.6		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	340		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.091		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.78	HF	0.100		SU	1		9040C	Total/NA

Client Sample ID: DUP1-20160705 — Lab Sample ID: 480-102619-7

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Client Sample ID: DUP1-20160705 (Continued) — Lab Sample ID: 480-102619-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	120		10		ug/L	1		8260C	Total/NA
Benzene	1.3		1.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	46		1.0		ug/L	1		8260C	Total/NA
Toluene	8.4		1.0		ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	1.9		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	38		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-102619-8

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-267S-20160705 **Lab Sample ID: 480-102619-1**

Date Collected: 07/05/16 10:50 **Matrix: Water**

Date Received: 07/06/16 09:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.0		ug/L			07/07/16 01:33	4
1,1,1-Trichloroethane	ND		4.0		ug/L			07/07/16 01:33	4
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L			07/07/16 01:33	4
1,1,2-Trichloroethane	ND		4.0		ug/L			07/07/16 01:33	4
1,1-Dichloroethane	ND		4.0		ug/L			07/07/16 01:33	4
1,1-Dichloroethene	ND		4.0		ug/L			07/07/16 01:33	4
1,1-Dichloropropene	ND		4.0		ug/L			07/07/16 01:33	4
1,2,3-Trichlorobenzene	ND		4.0		ug/L			07/07/16 01:33	4
1,2,3-Trichloropropane	ND		4.0		ug/L			07/07/16 01:33	4
1,2,4-Trichlorobenzene	ND		4.0		ug/L			07/07/16 01:33	4
1,2,4-Trimethylbenzene	ND		4.0		ug/L			07/07/16 01:33	4
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			07/07/16 01:33	4
1,2-Dichlorobenzene	ND		4.0		ug/L			07/07/16 01:33	4
1,2-Dichloroethane	ND		4.0		ug/L			07/07/16 01:33	4
1,2-Dichloropropane	ND		4.0		ug/L			07/07/16 01:33	4
1,3,5-Trimethylbenzene	ND		4.0		ug/L			07/07/16 01:33	4
1,3-Dichlorobenzene	ND		4.0		ug/L			07/07/16 01:33	4
1,3-Dichloropropane	ND		4.0		ug/L			07/07/16 01:33	4
1,4-Dichlorobenzene	ND		4.0		ug/L			07/07/16 01:33	4
1,4-Dioxane	ND		200		ug/L			07/07/16 01:33	4
2,2-Dichloropropane	ND		4.0		ug/L			07/07/16 01:33	4
2-Butanone (MEK)	**350**		40		ug/L			07/07/16 01:33	4
2-Chlorotoluene	ND		4.0		ug/L			07/07/16 01:33	4
2-Hexanone	ND	*	40		ug/L			07/07/16 01:33	4
4-Chlorotoluene	ND		4.0		ug/L			07/07/16 01:33	4
4-Isopropyltoluene	ND		4.0		ug/L			07/07/16 01:33	4
4-Methyl-2-pentanone (MIBK)	ND		40		ug/L			07/07/16 01:33	4
Acetone	ND		200		ug/L			07/07/16 01:33	4
Benzene	ND		4.0		ug/L			07/07/16 01:33	4
Bromobenzene	ND		4.0		ug/L			07/07/16 01:33	4
Bromoform	ND		4.0		ug/L			07/07/16 01:33	4
Bromomethane	ND		8.0		ug/L			07/07/16 01:33	4
Carbon disulfide	ND		40		ug/L			07/07/16 01:33	4
Carbon tetrachloride	ND		4.0		ug/L			07/07/16 01:33	4
Chlorobenzene	ND		4.0		ug/L			07/07/16 01:33	4
Chlorobromomethane	ND		4.0		ug/L			07/07/16 01:33	4
Chlorodibromomethane	ND		2.0		ug/L			07/07/16 01:33	4
Chloroethane	ND		8.0		ug/L			07/07/16 01:33	4
Chloroform	ND		4.0		ug/L			07/07/16 01:33	4
Chloromethane	ND	*	8.0		ug/L			07/07/16 01:33	4
cis-1,2-Dichloroethene	**270**		4.0		ug/L			07/07/16 01:33	4
cis-1,3-Dichloropropene	ND		1.6		ug/L			07/07/16 01:33	4
Dichlorobromomethane	ND		2.0		ug/L			07/07/16 01:33	4
Dichlorodifluoromethane	ND	*	4.0		ug/L			07/07/16 01:33	4
Ethyl ether	ND		4.0		ug/L			07/07/16 01:33	4
Ethylbenzene	ND		4.0		ug/L			07/07/16 01:33	4
Ethylene Dibromide	ND		4.0		ug/L			07/07/16 01:33	4
Hexachlorobutadiene	ND		1.6		ug/L			07/07/16 01:33	4
Isopropyl ether	ND		40		ug/L			07/07/16 01:33	4

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Client Sample ID: MW-267S-20160705

Lab Sample ID: 480-102619-1

Date Collected: 07/05/16 10:50

Matrix: Water

Date Received: 07/06/16 09:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		4.0		ug/L			07/07/16 01:33	4
Methyl tert-butyl ether	ND		4.0		ug/L			07/07/16 01:33	4
Methylene Chloride	ND		4.0		ug/L			07/07/16 01:33	4
m-Xylene & p-Xylene	ND		8.0		ug/L			07/07/16 01:33	4
Naphthalene	ND		20		ug/L			07/07/16 01:33	4
n-Butylbenzene	ND		4.0		ug/L			07/07/16 01:33	4
N-Propylbenzene	ND		4.0		ug/L			07/07/16 01:33	4
o-Xylene	ND		4.0		ug/L			07/07/16 01:33	4
sec-Butylbenzene	ND		4.0		ug/L			07/07/16 01:33	4
Styrene	ND		4.0		ug/L			07/07/16 01:33	4
Tert-amyl methyl ether	ND		20		ug/L			07/07/16 01:33	4
Tert-butyl ethyl ether	ND		20		ug/L			07/07/16 01:33	4
tert-Butylbenzene	ND		4.0		ug/L			07/07/16 01:33	4
Tetrachloroethene	ND		4.0		ug/L			07/07/16 01:33	4
Tetrahydrofuran	ND		40		ug/L			07/07/16 01:33	4
Toluene	**96**		4.0		ug/L			07/07/16 01:33	4
trans-1,2-Dichloroethene	ND		4.0		ug/L			07/07/16 01:33	4
trans-1,3-Dichloropropene	ND		1.6		ug/L			07/07/16 01:33	4
Trichloroethene	ND		4.0		ug/L			07/07/16 01:33	4
Trichlorofluoromethane	ND		4.0		ug/L			07/07/16 01:33	4
Vinyl chloride	**14**	*	4.0		ug/L			07/07/16 01:33	4
Dibromomethane	ND		4.0		ug/L			07/07/16 01:33	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*70 - 130*		*07/07/16 01:33*	*4*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*07/07/16 01:33*	*4*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*07/07/16 01:33*	*4*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**340**		0.050		mg/L		07/07/16 08:55	07/07/16 18:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**56**		5.0		mg/L			07/07/16 12:22	10
Sulfate	ND		20		mg/L			07/07/16 12:22	10
Ammonia	**0.40**	**F1**	0.20		mg/L		07/07/16 20:47	07/08/16 17:18	1
Nitrate as N	ND		0.050		mg/L			07/06/16 16:23	1
TOC Result 1	**1900**		50		mg/L			07/08/16 04:59	50
TOC Result 2	**2000**		50		mg/L			07/08/16 04:59	50
Total Organic Carbon - Duplicates	**2000**		50		mg/L			07/08/16 04:59	50
Alkalinity, Total	**510**		5.0		mg/L			07/06/16 17:59	1
ortho-Phosphate	**0.43**		0.020		mg/L			07/06/16 11:33	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.17**	**HF**	0.100		SU			07/07/16 11:12	1

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Client Sample ID: MW-267M-20160705
Date Collected: 07/05/16 11:30
Date Received: 07/06/16 09:45

Lab Sample ID: 480-102619-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 01:58	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/07/16 01:58	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/07/16 01:58	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/07/16 01:58	1
1,1-Dichloroethane	ND		1.0		ug/L			07/07/16 01:58	1
1,1-Dichloroethene	ND		1.0		ug/L			07/07/16 01:58	1
1,1-Dichloropropene	ND		1.0		ug/L			07/07/16 01:58	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/07/16 01:58	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/07/16 01:58	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/07/16 01:58	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/07/16 01:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/07/16 01:58	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/07/16 01:58	1
1,2-Dichloroethane	ND		1.0		ug/L			07/07/16 01:58	1
1,2-Dichloropropane	ND		1.0		ug/L			07/07/16 01:58	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/07/16 01:58	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/07/16 01:58	1
1,3-Dichloropropane	ND		1.0		ug/L			07/07/16 01:58	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/07/16 01:58	1
1,4-Dioxane	ND		50		ug/L			07/07/16 01:58	1
2,2-Dichloropropane	ND		1.0		ug/L			07/07/16 01:58	1
2-Butanone (MEK)	ND		10		ug/L			07/07/16 01:58	1
2-Chlorotoluene	ND		1.0		ug/L			07/07/16 01:58	1
2-Hexanone	ND	*	10		ug/L			07/07/16 01:58	1
4-Chlorotoluene	ND		1.0		ug/L			07/07/16 01:58	1
4-Isopropyltoluene	ND		1.0		ug/L			07/07/16 01:58	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/07/16 01:58	1
Acetone	ND		50		ug/L			07/07/16 01:58	1
Benzene	ND		1.0		ug/L			07/07/16 01:58	1
Bromobenzene	ND		1.0		ug/L			07/07/16 01:58	1
Bromoform	ND		1.0		ug/L			07/07/16 01:58	1
Bromomethane	ND		2.0		ug/L			07/07/16 01:58	1
Carbon disulfide	ND		10		ug/L			07/07/16 01:58	1
Carbon tetrachloride	ND		1.0		ug/L			07/07/16 01:58	1
Chlorobenzene	ND		1.0		ug/L			07/07/16 01:58	1
Chlorobromomethane	ND		1.0		ug/L			07/07/16 01:58	1
Chlorodibromomethane	ND		0.50		ug/L			07/07/16 01:58	1
Chloroethane	ND		2.0		ug/L			07/07/16 01:58	1
Chloroform	ND		1.0		ug/L			07/07/16 01:58	1
Chloromethane	ND	*	2.0		ug/L			07/07/16 01:58	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 01:58	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 01:58	1
Dichlorobromomethane	ND		0.50		ug/L			07/07/16 01:58	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			07/07/16 01:58	1
Ethyl ether	ND		1.0		ug/L			07/07/16 01:58	1
Ethylbenzene	ND		1.0		ug/L			07/07/16 01:58	1
Ethylene Dibromide	ND		1.0		ug/L			07/07/16 01:58	1
Hexachlorobutadiene	ND		0.40		ug/L			07/07/16 01:58	1
Isopropyl ether	ND		10		ug/L			07/07/16 01:58	1

Client Sample ID: MW-267M-20160705

Lab Sample ID: 480-102619-2

Date Collected: 07/05/16 11:30

Matrix: Water

Date Received: 07/06/16 09:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			07/07/16 01:58	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/07/16 01:58	1
Methylene Chloride	ND		1.0		ug/L			07/07/16 01:58	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/07/16 01:58	1
Naphthalene	ND		5.0		ug/L			07/07/16 01:58	1
n-Butylbenzene	ND		1.0		ug/L			07/07/16 01:58	1
N-Propylbenzene	ND		1.0		ug/L			07/07/16 01:58	1
o-Xylene	ND		1.0		ug/L			07/07/16 01:58	1
sec-Butylbenzene	ND		1.0		ug/L			07/07/16 01:58	1
Styrene	ND		1.0		ug/L			07/07/16 01:58	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/07/16 01:58	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/07/16 01:58	1
tert-Butylbenzene	ND		1.0		ug/L			07/07/16 01:58	1
Tetrachloroethene	ND		1.0		ug/L			07/07/16 01:58	1
Tetrahydrofuran	ND		10		ug/L			07/07/16 01:58	1
Toluene	**3.4**		1.0		ug/L			07/07/16 01:58	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 01:58	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 01:58	1
Trichloroethene	ND		1.0		ug/L			07/07/16 01:58	1
Trichlorofluoromethane	ND		1.0		ug/L			07/07/16 01:58	1
Vinyl chloride	ND	*	1.0		ug/L			07/07/16 01:58	1
Dibromomethane	ND		1.0		ug/L			07/07/16 01:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*07/07/16 01:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*07/07/16 01:58*	*1*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*07/07/16 01:58*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**97**		0.050		mg/L		07/07/16 08:55	07/07/16 19:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**23**		2.5		mg/L			07/07/16 12:30	5
Sulfate	**2.7**		2.0		mg/L			07/08/16 13:37	1
Ammonia	**0.77**		0.20		mg/L		07/07/16 20:47	07/08/16 17:20	1
Nitrate as N	ND		0.050		mg/L			07/06/16 16:24	1
TOC Result 1	**8.1**		1.0		mg/L			07/08/16 05:28	1
TOC Result 2	**8.1**		1.0		mg/L			07/08/16 05:28	1
Total Organic Carbon - Duplicates	**8.1**		1.0		mg/L			07/08/16 05:28	1
Alkalinity, Total	**280**		5.0		mg/L			07/06/16 18:06	1
ortho-Phosphate	**0.12**		0.020		mg/L			07/06/16 11:33	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.68**	**HF**	0.100		SU			07/07/16 11:15	1

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Client Sample ID: MW-268S-20160705
Date Collected: 07/05/16 09:15
Date Received: 07/06/16 09:45

Lab Sample ID: 480-102619-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			07/07/16 02:23	5
1,1,1-Trichloroethane	ND		5.0		ug/L			07/07/16 02:23	5
1,1,2,2-Tetrachloroethane	ND		2.5		ug/L			07/07/16 02:23	5
1,1,2-Trichloroethane	ND		5.0		ug/L			07/07/16 02:23	5
1,1-Dichloroethane	ND		5.0		ug/L			07/07/16 02:23	5
1,1-Dichloroethene	ND		5.0		ug/L			07/07/16 02:23	5
1,1-Dichloropropene	ND		5.0		ug/L			07/07/16 02:23	5
1,2,3-Trichlorobenzene	ND		5.0		ug/L			07/07/16 02:23	5
1,2,3-Trichloropropane	ND		5.0		ug/L			07/07/16 02:23	5
1,2,4-Trichlorobenzene	ND		5.0		ug/L			07/07/16 02:23	5
1,2,4-Trimethylbenzene	ND		5.0		ug/L			07/07/16 02:23	5
1,2-Dibromo-3-Chloropropane	ND		25		ug/L			07/07/16 02:23	5
1,2-Dichlorobenzene	ND		5.0		ug/L			07/07/16 02:23	5
1,2-Dichloroethane	ND		5.0		ug/L			07/07/16 02:23	5
1,2-Dichloropropane	ND		5.0		ug/L			07/07/16 02:23	5
1,3,5-Trimethylbenzene	ND		5.0		ug/L			07/07/16 02:23	5
1,3-Dichlorobenzene	ND		5.0		ug/L			07/07/16 02:23	5
1,3-Dichloropropane	ND		5.0		ug/L			07/07/16 02:23	5
1,4-Dichlorobenzene	ND		5.0		ug/L			07/07/16 02:23	5
1,4-Dioxane	ND		250		ug/L			07/07/16 02:23	5
2,2-Dichloropropane	ND		5.0		ug/L			07/07/16 02:23	5
2-Butanone (MEK)	ND		50		ug/L			07/07/16 02:23	5
2-Chlorotoluene	ND		5.0		ug/L			07/07/16 02:23	5
2-Hexanone	ND	*	50		ug/L			07/07/16 02:23	5
4-Chlorotoluene	ND		5.0		ug/L			07/07/16 02:23	5
4-Isopropyltoluene	ND		5.0		ug/L			07/07/16 02:23	5
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			07/07/16 02:23	5
Acetone	ND		250		ug/L			07/07/16 02:23	5
Benzene	ND		5.0		ug/L			07/07/16 02:23	5
Bromobenzene	ND		5.0		ug/L			07/07/16 02:23	5
Bromoform	ND		5.0		ug/L			07/07/16 02:23	5
Bromomethane	ND		10		ug/L			07/07/16 02:23	5
Carbon disulfide	ND		50		ug/L			07/07/16 02:23	5
Carbon tetrachloride	ND		5.0		ug/L			07/07/16 02:23	5
Chlorobenzene	ND		5.0		ug/L			07/07/16 02:23	5
Chlorobromomethane	ND		5.0		ug/L			07/07/16 02:23	5
Chlorodibromomethane	ND		2.5		ug/L			07/07/16 02:23	5
Chloroethane	ND		10		ug/L			07/07/16 02:23	5
Chloroform	ND		5.0		ug/L			07/07/16 02:23	5
Chloromethane	ND	*	10		ug/L			07/07/16 02:23	5
cis-1,2-Dichloroethene	**70**		5.0		ug/L			07/07/16 02:23	5
cis-1,3-Dichloropropene	ND		2.0		ug/L			07/07/16 02:23	5
Dichlorobromomethane	ND		2.5		ug/L			07/07/16 02:23	5
Dichlorodifluoromethane	ND	*	5.0		ug/L			07/07/16 02:23	5
Ethyl ether	ND		5.0		ug/L			07/07/16 02:23	5
Ethylbenzene	ND		5.0		ug/L			07/07/16 02:23	5
Ethylene Dibromide	ND		5.0		ug/L			07/07/16 02:23	5
Hexachlorobutadiene	ND		2.0		ug/L			07/07/16 02:23	5
Isopropyl ether	ND		50		ug/L			07/07/16 02:23	5

Client Sample ID: MW-268S-20160705

Lab Sample ID: 480-102619-3

Date Collected: 07/05/16 09:15

Matrix: Water

Date Received: 07/06/16 09:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0		ug/L			07/07/16 02:23	5
Methyl tert-butyl ether	ND		5.0		ug/L			07/07/16 02:23	5
Methylene Chloride	ND		5.0		ug/L			07/07/16 02:23	5
m-Xylene & p-Xylene	ND		10		ug/L			07/07/16 02:23	5
Naphthalene	ND		25		ug/L			07/07/16 02:23	5
n-Butylbenzene	ND		5.0		ug/L			07/07/16 02:23	5
N-Propylbenzene	ND		5.0		ug/L			07/07/16 02:23	5
o-Xylene	ND		5.0		ug/L			07/07/16 02:23	5
sec-Butylbenzene	ND		5.0		ug/L			07/07/16 02:23	5
Styrene	ND		5.0		ug/L			07/07/16 02:23	5
Tert-amyl methyl ether	ND		25		ug/L			07/07/16 02:23	5
Tert-butyl ethyl ether	ND		25		ug/L			07/07/16 02:23	5
tert-Butylbenzene	ND		5.0		ug/L			07/07/16 02:23	5
Tetrachloroethene	ND		5.0		ug/L			07/07/16 02:23	5
Tetrahydrofuran	ND		50		ug/L			07/07/16 02:23	5
Toluene	ND		5.0		ug/L			07/07/16 02:23	5
trans-1,2-Dichloroethene	ND		5.0		ug/L			07/07/16 02:23	5
trans-1,3-Dichloropropene	ND		2.0		ug/L			07/07/16 02:23	5
Trichloroethene	**150**		5.0		ug/L			07/07/16 02:23	5
Trichlorofluoromethane	ND		5.0		ug/L			07/07/16 02:23	5
Vinyl chloride	**5.2**	*	5.0		ug/L			07/07/16 02:23	5
Dibromomethane	ND		5.0		ug/L			07/07/16 02:23	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/07/16 02:23*	*5*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*07/07/16 02:23*	*5*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*07/07/16 02:23*	*5*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.40**		0.050		mg/L		07/07/16 08:55	07/07/16 19:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14**		0.50		mg/L			07/07/16 12:39	1
Sulfate	**35**		2.0		mg/L			07/07/16 12:39	1
Ammonia	**0.29**		0.20		mg/L		07/07/16 20:47	07/08/16 17:20	1
Nitrate as N	ND		0.050		mg/L			07/06/16 16:25	1
TOC Result 1	ND		1.0		mg/L			07/08/16 06:27	1
TOC Result 2	ND		1.0		mg/L			07/08/16 06:27	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			07/08/16 06:27	1
Alkalinity, Total	**40**		5.0		mg/L			07/06/16 18:12	1
ortho-Phosphate	**0.087**		0.020		mg/L			07/06/16 11:33	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.06**	**HF**	0.100		SU			07/07/16 11:18	1

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Client Sample ID: MW-268M-20160705
Date Collected: 07/05/16 09:55
Date Received: 07/06/16 09:45

Lab Sample ID: 480-102619-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 12:31	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/07/16 12:31	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/07/16 12:31	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/07/16 12:31	1
1,1-Dichloroethane	ND		1.0		ug/L			07/07/16 12:31	1
1,1-Dichloroethene	ND		1.0		ug/L			07/07/16 12:31	1
1,1-Dichloropropene	ND		1.0		ug/L			07/07/16 12:31	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/07/16 12:31	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/07/16 12:31	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/07/16 12:31	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/07/16 12:31	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/07/16 12:31	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/07/16 12:31	1
1,2-Dichloroethane	ND		1.0		ug/L			07/07/16 12:31	1
1,2-Dichloropropane	ND		1.0		ug/L			07/07/16 12:31	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/07/16 12:31	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/07/16 12:31	1
1,3-Dichloropropane	ND		1.0		ug/L			07/07/16 12:31	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/07/16 12:31	1
1,4-Dioxane	ND		50		ug/L			07/07/16 12:31	1
2,2-Dichloropropane	ND		1.0		ug/L			07/07/16 12:31	1
2-Butanone (MEK)	**110**		10		ug/L			07/07/16 12:31	1
2-Chlorotoluene	ND		1.0		ug/L			07/07/16 12:31	1
2-Hexanone	ND	*	10		ug/L			07/07/16 12:31	1
4-Chlorotoluene	ND		1.0		ug/L			07/07/16 12:31	1
4-Isopropyltoluene	ND		1.0		ug/L			07/07/16 12:31	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/07/16 12:31	1
Acetone	ND		50		ug/L			07/07/16 12:31	1
Benzene	**1.4**		1.0		ug/L			07/07/16 12:31	1
Bromobenzene	ND		1.0		ug/L			07/07/16 12:31	1
Bromoform	ND		1.0		ug/L			07/07/16 12:31	1
Bromomethane	ND		2.0		ug/L			07/07/16 12:31	1
Carbon disulfide	ND	*	10		ug/L			07/07/16 12:31	1
Carbon tetrachloride	ND		1.0		ug/L			07/07/16 12:31	1
Chlorobenzene	ND		1.0		ug/L			07/07/16 12:31	1
Chlorobromomethane	ND		1.0		ug/L			07/07/16 12:31	1
Chlorodibromomethane	ND		0.50		ug/L			07/07/16 12:31	1
Chloroethane	ND		2.0		ug/L			07/07/16 12:31	1
Chloroform	ND		1.0		ug/L			07/07/16 12:31	1
Chloromethane	ND		2.0		ug/L			07/07/16 12:31	1
cis-1,2-Dichloroethene	**58**		1.0		ug/L			07/07/16 12:31	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 12:31	1
Dichlorobromomethane	ND		0.50		ug/L			07/07/16 12:31	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			07/07/16 12:31	1
Ethyl ether	ND		1.0		ug/L			07/07/16 12:31	1
Ethylbenzene	ND		1.0		ug/L			07/07/16 12:31	1
Ethylene Dibromide	ND		1.0		ug/L			07/07/16 12:31	1
Hexachlorobutadiene	ND		0.40		ug/L			07/07/16 12:31	1
Isopropyl ether	ND		10		ug/L			07/07/16 12:31	1

Client Sample ID: MW-268M-20160705

Lab Sample ID: 480-102619-4

Date Collected: 07/05/16 09:55

Matrix: Water

Date Received: 07/06/16 09:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			07/07/16 12:31	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/07/16 12:31	1
Methylene Chloride	ND		1.0		ug/L			07/07/16 12:31	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/07/16 12:31	1
Naphthalene	ND		5.0		ug/L			07/07/16 12:31	1
n-Butylbenzene	ND		1.0		ug/L			07/07/16 12:31	1
N-Propylbenzene	ND		1.0		ug/L			07/07/16 12:31	1
o-Xylene	ND		1.0		ug/L			07/07/16 12:31	1
sec-Butylbenzene	ND		1.0		ug/L			07/07/16 12:31	1
Styrene	ND		1.0		ug/L			07/07/16 12:31	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/07/16 12:31	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/07/16 12:31	1
tert-Butylbenzene	ND		1.0		ug/L			07/07/16 12:31	1
Tetrachloroethene	ND		1.0		ug/L			07/07/16 12:31	1
Tetrahydrofuran	ND		10		ug/L			07/07/16 12:31	1
Toluene	**8.1**		1.0		ug/L			07/07/16 12:31	1
trans-1,2-Dichloroethene	**2.0**		1.0		ug/L			07/07/16 12:31	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 12:31	1
Trichloroethene	ND		1.0		ug/L			07/07/16 12:31	1
Trichlorofluoromethane	ND		1.0		ug/L			07/07/16 12:31	1
Vinyl chloride	**43**		1.0		ug/L			07/07/16 12:31	1
Dibromomethane	ND		1.0		ug/L			07/07/16 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/07/16 12:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*07/07/16 12:31*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*07/07/16 12:31*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**82**		0.050		mg/L		07/07/16 08:55	07/07/16 19:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**41**		1.0		mg/L			07/08/16 13:52	2
Sulfate	ND		4.0		mg/L			07/08/16 13:52	2
Ammonia	**1.9**		0.20		mg/L		07/07/16 20:47	07/08/16 17:21	1
Nitrate as N	ND		0.050		mg/L			07/06/16 16:26	1
TOC Result 1	**81**		2.0		mg/L			07/08/16 08:20	2
TOC Result 2	**84**		2.0		mg/L			07/08/16 08:20	2
Total Organic Carbon - Duplicates	**82**		2.0		mg/L			07/08/16 08:20	2
Alkalinity, Total	**280**		5.0		mg/L			07/06/16 18:18	1
ortho-Phosphate	**0.13**		0.020		mg/L			07/06/16 11:33	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.76**	**HF**	0.100		SU			07/07/16 11:23	1

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Client Sample ID: MW-561-20160705
Date Collected: 07/05/16 12:10
Date Received: 07/06/16 09:45

Lab Sample ID: 480-102619-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 12:56	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/07/16 12:56	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/07/16 12:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/07/16 12:56	1
1,1-Dichloroethane	ND		1.0		ug/L			07/07/16 12:56	1
1,1-Dichloroethene	ND		1.0		ug/L			07/07/16 12:56	1
1,1-Dichloropropene	ND		1.0		ug/L			07/07/16 12:56	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/07/16 12:56	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/07/16 12:56	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/07/16 12:56	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/07/16 12:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/07/16 12:56	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/07/16 12:56	1
1,2-Dichloroethane	ND		1.0		ug/L			07/07/16 12:56	1
1,2-Dichloropropane	ND		1.0		ug/L			07/07/16 12:56	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/07/16 12:56	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/07/16 12:56	1
1,3-Dichloropropane	ND		1.0		ug/L			07/07/16 12:56	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/07/16 12:56	1
1,4-Dioxane	ND		50		ug/L			07/07/16 12:56	1
2,2-Dichloropropane	ND		1.0		ug/L			07/07/16 12:56	1
2-Butanone (MEK)	**18**		10		ug/L			07/07/16 12:56	1
2-Chlorotoluene	ND		1.0		ug/L			07/07/16 12:56	1
2-Hexanone	ND	*	10		ug/L			07/07/16 12:56	1
4-Chlorotoluene	ND		1.0		ug/L			07/07/16 12:56	1
4-Isopropyltoluene	ND		1.0		ug/L			07/07/16 12:56	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/07/16 12:56	1
Acetone	ND		50		ug/L			07/07/16 12:56	1
Benzene	ND		1.0		ug/L			07/07/16 12:56	1
Bromobenzene	ND		1.0		ug/L			07/07/16 12:56	1
Bromoform	ND		1.0		ug/L			07/07/16 12:56	1
Bromomethane	ND		2.0		ug/L			07/07/16 12:56	1
Carbon disulfide	ND	*	10		ug/L			07/07/16 12:56	1
Carbon tetrachloride	ND		1.0		ug/L			07/07/16 12:56	1
Chlorobenzene	ND		1.0		ug/L			07/07/16 12:56	1
Chlorobromomethane	ND		1.0		ug/L			07/07/16 12:56	1
Chlorodibromomethane	ND		0.50		ug/L			07/07/16 12:56	1
Chloroethane	ND		2.0		ug/L			07/07/16 12:56	1
Chloroform	ND		1.0		ug/L			07/07/16 12:56	1
Chloromethane	ND		2.0		ug/L			07/07/16 12:56	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 12:56	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 12:56	1
Dichlorobromomethane	ND		0.50		ug/L			07/07/16 12:56	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			07/07/16 12:56	1
Ethyl ether	ND		1.0		ug/L			07/07/16 12:56	1
Ethylbenzene	ND		1.0		ug/L			07/07/16 12:56	1
Ethylene Dibromide	ND		1.0		ug/L			07/07/16 12:56	1
Hexachlorobutadiene	ND		0.40		ug/L			07/07/16 12:56	1
Isopropyl ether	ND		10		ug/L			07/07/16 12:56	1

Client Sample ID: MW-561-20160705

Lab Sample ID: 480-102619-5

Date Collected: 07/05/16 12:10

Matrix: Water

Date Received: 07/06/16 09:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			07/07/16 12:56	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/07/16 12:56	1
Methylene Chloride	ND		1.0		ug/L			07/07/16 12:56	1
m-Xylene & p-Xylene	**3.1**		2.0		ug/L			07/07/16 12:56	1
Naphthalene	ND		5.0		ug/L			07/07/16 12:56	1
n-Butylbenzene	ND		1.0		ug/L			07/07/16 12:56	1
N-Propylbenzene	ND		1.0		ug/L			07/07/16 12:56	1
o-Xylene	ND		1.0		ug/L			07/07/16 12:56	1
sec-Butylbenzene	ND		1.0		ug/L			07/07/16 12:56	1
Styrene	ND		1.0		ug/L			07/07/16 12:56	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/07/16 12:56	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/07/16 12:56	1
tert-Butylbenzene	ND		1.0		ug/L			07/07/16 12:56	1
Tetrachloroethene	ND		1.0		ug/L			07/07/16 12:56	1
Tetrahydrofuran	ND		10		ug/L			07/07/16 12:56	1
Toluene	**14**		1.0		ug/L			07/07/16 12:56	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 12:56	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 12:56	1
Trichloroethene	ND		1.0		ug/L			07/07/16 12:56	1
Trichlorofluoromethane	ND		1.0		ug/L			07/07/16 12:56	1
Vinyl chloride	ND		1.0		ug/L			07/07/16 12:56	1
Dibromomethane	ND		1.0		ug/L			07/07/16 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/07/16 12:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*07/07/16 12:56*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*07/07/16 12:56*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**190**		0.050		mg/L		07/07/16 08:55	07/07/16 19:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**44**		5.0		mg/L			07/07/16 13:58	10
Sulfate	ND		2.0		mg/L			07/08/16 14:06	1
Ammonia	**2.2**		0.40		mg/L		07/07/16 20:47	07/08/16 17:44	2
Nitrate as N	ND		0.050		mg/L			07/06/16 16:28	1
TOC Result 1	**13**		1.0		mg/L			07/11/16 15:27	1
TOC Result 2	**13**		1.0		mg/L			07/11/16 15:27	1
Total Organic Carbon - Duplicates	**13**		1.0		mg/L			07/11/16 15:27	1
Alkalinity, Total	**530**		5.0		mg/L			07/06/16 18:27	1
ortho-Phosphate	**0.21**		0.020		mg/L			07/06/16 11:33	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.82**	**HF**	0.100		SU			07/07/16 11:26	1

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Client Sample ID: MW-563-20160705
Date Collected: 07/05/16 12:55
Date Received: 07/06/16 09:45

Lab Sample ID: 480-102619-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 03:38	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/07/16 03:38	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/07/16 03:38	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/07/16 03:38	1
1,1-Dichloroethane	ND		1.0		ug/L			07/07/16 03:38	1
1,1-Dichloroethene	ND		1.0		ug/L			07/07/16 03:38	1
1,1-Dichloropropene	ND		1.0		ug/L			07/07/16 03:38	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/07/16 03:38	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/07/16 03:38	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/07/16 03:38	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/07/16 03:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/07/16 03:38	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/07/16 03:38	1
1,2-Dichloroethane	ND		1.0		ug/L			07/07/16 03:38	1
1,2-Dichloropropane	ND		1.0		ug/L			07/07/16 03:38	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/07/16 03:38	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/07/16 03:38	1
1,3-Dichloropropane	ND		1.0		ug/L			07/07/16 03:38	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/07/16 03:38	1
1,4-Dioxane	ND		50		ug/L			07/07/16 03:38	1
2,2-Dichloropropane	ND		1.0		ug/L			07/07/16 03:38	1
2-Butanone (MEK)	ND		10		ug/L			07/07/16 03:38	1
2-Chlorotoluene	ND		1.0		ug/L			07/07/16 03:38	1
2-Hexanone	ND	*	10		ug/L			07/07/16 03:38	1
4-Chlorotoluene	ND		1.0		ug/L			07/07/16 03:38	1
4-Isopropyltoluene	ND		1.0		ug/L			07/07/16 03:38	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/07/16 03:38	1
Acetone	ND		50		ug/L			07/07/16 03:38	1
Benzene	ND		1.0		ug/L			07/07/16 03:38	1
Bromobenzene	ND		1.0		ug/L			07/07/16 03:38	1
Bromoform	ND		1.0		ug/L			07/07/16 03:38	1
Bromomethane	ND		2.0		ug/L			07/07/16 03:38	1
Carbon disulfide	ND		10		ug/L			07/07/16 03:38	1
Carbon tetrachloride	ND		1.0		ug/L			07/07/16 03:38	1
Chlorobenzene	ND		1.0		ug/L			07/07/16 03:38	1
Chlorobromomethane	ND		1.0		ug/L			07/07/16 03:38	1
Chlorodibromomethane	ND		0.50		ug/L			07/07/16 03:38	1
Chloroethane	ND		2.0		ug/L			07/07/16 03:38	1
Chloroform	ND		1.0		ug/L			07/07/16 03:38	1
Chloromethane	ND	*	2.0		ug/L			07/07/16 03:38	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 03:38	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 03:38	1
Dichlorobromomethane	ND		0.50		ug/L			07/07/16 03:38	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			07/07/16 03:38	1
Ethyl ether	ND		1.0		ug/L			07/07/16 03:38	1
Ethylbenzene	ND		1.0		ug/L			07/07/16 03:38	1
Ethylene Dibromide	ND		1.0		ug/L			07/07/16 03:38	1
Hexachlorobutadiene	ND		0.40		ug/L			07/07/16 03:38	1
Isopropyl ether	ND		10		ug/L			07/07/16 03:38	1

Client Sample ID: MW-563-20160705

Lab Sample ID: 480-102619-6

Date Collected: 07/05/16 12:55

Matrix: Water

Date Received: 07/06/16 09:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			07/07/16 03:38	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/07/16 03:38	1
Methylene Chloride	ND		1.0		ug/L			07/07/16 03:38	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/07/16 03:38	1
Naphthalene	ND		5.0		ug/L			07/07/16 03:38	1
n-Butylbenzene	ND		1.0		ug/L			07/07/16 03:38	1
N-Propylbenzene	ND		1.0		ug/L			07/07/16 03:38	1
o-Xylene	ND		1.0		ug/L			07/07/16 03:38	1
sec-Butylbenzene	ND		1.0		ug/L			07/07/16 03:38	1
Styrene	ND		1.0		ug/L			07/07/16 03:38	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/07/16 03:38	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/07/16 03:38	1
tert-Butylbenzene	ND		1.0		ug/L			07/07/16 03:38	1
Tetrachloroethene	ND		1.0		ug/L			07/07/16 03:38	1
Tetrahydrofuran	ND		10		ug/L			07/07/16 03:38	1
Toluene	ND		1.0		ug/L			07/07/16 03:38	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 03:38	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 03:38	1
Trichloroethene	ND		1.0		ug/L			07/07/16 03:38	1
Trichlorofluoromethane	ND		1.0		ug/L			07/07/16 03:38	1
Vinyl chloride	ND	*	1.0		ug/L			07/07/16 03:38	1
Dibromomethane	ND		1.0		ug/L			07/07/16 03:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*70 - 130*		*07/07/16 03:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*07/07/16 03:38*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*07/07/16 03:38*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**80**		0.050		mg/L		07/07/16 08:55	07/07/16 19:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28**		2.5		mg/L			07/07/16 14:07	5
Sulfate	ND		2.0		mg/L			07/08/16 14:21	1
Ammonia	**1.9**		0.20		mg/L		07/07/16 20:47	07/08/16 17:23	1
Nitrate as N	ND		0.050		mg/L			07/06/16 16:29	1
TOC Result 1	**1.6**		1.0		mg/L			07/08/16 09:47	1
TOC Result 2	**1.7**		1.0		mg/L			07/08/16 09:47	1
Total Organic Carbon - Duplicates	**1.6**		1.0		mg/L			07/08/16 09:47	1
Alkalinity, Total	**340**		5.0		mg/L			07/06/16 18:33	1
ortho-Phosphate	**0.091**		0.020		mg/L			07/06/16 11:33	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.78**	**HF**	0.100		SU			07/07/16 11:29	1

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Client Sample ID: DUP1-20160705
Date Collected: 07/05/16 00:00
Date Received: 07/06/16 09:45

Lab Sample ID: 480-102619-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 13:21	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/07/16 13:21	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/07/16 13:21	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/07/16 13:21	1
1,1-Dichloroethane	ND		1.0		ug/L			07/07/16 13:21	1
1,1-Dichloroethene	ND		1.0		ug/L			07/07/16 13:21	1
1,1-Dichloropropene	ND		1.0		ug/L			07/07/16 13:21	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/07/16 13:21	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/07/16 13:21	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/07/16 13:21	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/07/16 13:21	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/07/16 13:21	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/07/16 13:21	1
1,2-Dichloroethane	ND		1.0		ug/L			07/07/16 13:21	1
1,2-Dichloropropane	ND		1.0		ug/L			07/07/16 13:21	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/07/16 13:21	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/07/16 13:21	1
1,3-Dichloropropane	ND		1.0		ug/L			07/07/16 13:21	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/07/16 13:21	1
1,4-Dioxane	ND		50		ug/L			07/07/16 13:21	1
2,2-Dichloropropane	ND		1.0		ug/L			07/07/16 13:21	1
2-Butanone (MEK)	**120**		10		ug/L			07/07/16 13:21	1
2-Chlorotoluene	ND		1.0		ug/L			07/07/16 13:21	1
2-Hexanone	ND	*	10		ug/L			07/07/16 13:21	1
4-Chlorotoluene	ND		1.0		ug/L			07/07/16 13:21	1
4-Isopropyltoluene	ND		1.0		ug/L			07/07/16 13:21	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/07/16 13:21	1
Acetone	ND		50		ug/L			07/07/16 13:21	1
Benzene	**1.3**		1.0		ug/L			07/07/16 13:21	1
Bromobenzene	ND		1.0		ug/L			07/07/16 13:21	1
Bromoform	ND		1.0		ug/L			07/07/16 13:21	1
Bromomethane	ND		2.0		ug/L			07/07/16 13:21	1
Carbon disulfide	ND	*	10		ug/L			07/07/16 13:21	1
Carbon tetrachloride	ND		1.0		ug/L			07/07/16 13:21	1
Chlorobenzene	ND		1.0		ug/L			07/07/16 13:21	1
Chlorobromomethane	ND		1.0		ug/L			07/07/16 13:21	1
Chlorodibromomethane	ND		0.50		ug/L			07/07/16 13:21	1
Chloroethane	ND		2.0		ug/L			07/07/16 13:21	1
Chloroform	ND		1.0		ug/L			07/07/16 13:21	1
Chloromethane	ND		2.0		ug/L			07/07/16 13:21	1
cis-1,2-Dichloroethene	**46**		1.0		ug/L			07/07/16 13:21	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 13:21	1
Dichlorobromomethane	ND		0.50		ug/L			07/07/16 13:21	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			07/07/16 13:21	1
Ethyl ether	ND		1.0		ug/L			07/07/16 13:21	1
Ethylbenzene	ND		1.0		ug/L			07/07/16 13:21	1
Ethylene Dibromide	ND		1.0		ug/L			07/07/16 13:21	1
Hexachlorobutadiene	ND		0.40		ug/L			07/07/16 13:21	1
Isopropyl ether	ND		10		ug/L			07/07/16 13:21	1

Client Sample ID: DUP1-20160705

Lab Sample ID: 480-102619-7

Date Collected: 07/05/16 00:00

Matrix: Water

Date Received: 07/06/16 09:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			07/07/16 13:21	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/07/16 13:21	1
Methylene Chloride	ND		1.0		ug/L			07/07/16 13:21	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/07/16 13:21	1
Naphthalene	ND		5.0		ug/L			07/07/16 13:21	1
n-Butylbenzene	ND		1.0		ug/L			07/07/16 13:21	1
N-Propylbenzene	ND		1.0		ug/L			07/07/16 13:21	1
o-Xylene	ND		1.0		ug/L			07/07/16 13:21	1
sec-Butylbenzene	ND		1.0		ug/L			07/07/16 13:21	1
Styrene	ND		1.0		ug/L			07/07/16 13:21	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/07/16 13:21	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/07/16 13:21	1
tert-Butylbenzene	ND		1.0		ug/L			07/07/16 13:21	1
Tetrachloroethene	ND		1.0		ug/L			07/07/16 13:21	1
Tetrahydrofuran	ND		10		ug/L			07/07/16 13:21	1
Toluene	**8.4**		1.0		ug/L			07/07/16 13:21	1
trans-1,2-Dichloroethene	**1.9**		1.0		ug/L			07/07/16 13:21	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 13:21	1
Trichloroethene	ND		1.0		ug/L			07/07/16 13:21	1
Trichlorofluoromethane	ND		1.0		ug/L			07/07/16 13:21	1
Vinyl chloride	**38**		1.0		ug/L			07/07/16 13:21	1
Dibromomethane	ND		1.0		ug/L			07/07/16 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/07/16 13:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*07/07/16 13:21*	*1*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*07/07/16 13:21*	*1*

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-102619-8

Date Collected: 07/05/16 00:00

Matrix: Water

Date Received: 07/06/16 09:45

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 04:28	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/07/16 04:28	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/07/16 04:28	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/07/16 04:28	1
1,1-Dichloroethane	ND		1.0		ug/L			07/07/16 04:28	1
1,1-Dichloroethene	ND		1.0		ug/L			07/07/16 04:28	1
1,1-Dichloropropene	ND		1.0		ug/L			07/07/16 04:28	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/07/16 04:28	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/07/16 04:28	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/07/16 04:28	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/07/16 04:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/07/16 04:28	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/07/16 04:28	1
1,2-Dichloroethane	ND		1.0		ug/L			07/07/16 04:28	1
1,2-Dichloropropane	ND		1.0		ug/L			07/07/16 04:28	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/07/16 04:28	1

Client Sample ID: TRIP BLANK
Date Collected: 07/05/16 00:00
Date Received: 07/06/16 09:45

Lab Sample ID: 480-102619-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			07/07/16 04:28	1
1,3-Dichloropropane	ND		1.0		ug/L			07/07/16 04:28	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/07/16 04:28	1
1,4-Dioxane	ND		50		ug/L			07/07/16 04:28	1
2,2-Dichloropropane	ND		1.0		ug/L			07/07/16 04:28	1
2-Butanone (MEK)	ND		10		ug/L			07/07/16 04:28	1
2-Chlorotoluene	ND		1.0		ug/L			07/07/16 04:28	1
2-Hexanone	ND	*	10		ug/L			07/07/16 04:28	1
4-Chlorotoluene	ND		1.0		ug/L			07/07/16 04:28	1
4-Isopropyltoluene	ND		1.0		ug/L			07/07/16 04:28	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/07/16 04:28	1
Acetone	ND		50		ug/L			07/07/16 04:28	1
Benzene	ND		1.0		ug/L			07/07/16 04:28	1
Bromobenzene	ND		1.0		ug/L			07/07/16 04:28	1
Bromoform	ND		1.0		ug/L			07/07/16 04:28	1
Bromomethane	ND		2.0		ug/L			07/07/16 04:28	1
Carbon disulfide	ND		10		ug/L			07/07/16 04:28	1
Carbon tetrachloride	ND		1.0		ug/L			07/07/16 04:28	1
Chlorobenzene	ND		1.0		ug/L			07/07/16 04:28	1
Chlorobromomethane	ND		1.0		ug/L			07/07/16 04:28	1
Chlorodibromomethane	ND		0.50		ug/L			07/07/16 04:28	1
Chloroethane	ND		2.0		ug/L			07/07/16 04:28	1
Chloroform	ND		1.0		ug/L			07/07/16 04:28	1
Chloromethane	ND	*	2.0		ug/L			07/07/16 04:28	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 04:28	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 04:28	1
Dichlorobromomethane	ND		0.50		ug/L			07/07/16 04:28	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			07/07/16 04:28	1
Ethyl ether	ND		1.0		ug/L			07/07/16 04:28	1
Ethylbenzene	ND		1.0		ug/L			07/07/16 04:28	1
Ethylene Dibromide	ND		1.0		ug/L			07/07/16 04:28	1
Hexachlorobutadiene	ND		0.40		ug/L			07/07/16 04:28	1
Isopropyl ether	ND		10		ug/L			07/07/16 04:28	1
Isopropylbenzene	ND		1.0		ug/L			07/07/16 04:28	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/07/16 04:28	1
Methylene Chloride	ND		1.0		ug/L			07/07/16 04:28	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/07/16 04:28	1
Naphthalene	ND		5.0		ug/L			07/07/16 04:28	1
n-Butylbenzene	ND		1.0		ug/L			07/07/16 04:28	1
N-Propylbenzene	ND		1.0		ug/L			07/07/16 04:28	1
o-Xylene	ND		1.0		ug/L			07/07/16 04:28	1
sec-Butylbenzene	ND		1.0		ug/L			07/07/16 04:28	1
Styrene	ND		1.0		ug/L			07/07/16 04:28	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/07/16 04:28	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/07/16 04:28	1
tert-Butylbenzene	ND		1.0		ug/L			07/07/16 04:28	1
Tetrachloroethene	ND		1.0		ug/L			07/07/16 04:28	1
Tetrahydrofuran	ND		10		ug/L			07/07/16 04:28	1
Toluene	ND		1.0		ug/L			07/07/16 04:28	1

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-102619-8

Date Collected: 07/05/16 00:00

Matrix: Water

Date Received: 07/06/16 09:45

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 04:28	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 04:28	1
Trichloroethene	ND		1.0		ug/L			07/07/16 04:28	1
Trichlorofluoromethane	ND		1.0		ug/L			07/07/16 04:28	1
Vinyl chloride	ND	*	1.0		ug/L			07/07/16 04:28	1
Dibromomethane	ND		1.0		ug/L			07/07/16 04:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*70 - 130*		*07/07/16 04:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*07/07/16 04:28*	*1*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*		*07/07/16 04:28*	*1*

Surrogate Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	12DCE	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
480-102619-1	MW-267S-20160705	102	99	93
480-102619-2	MW-267M-20160705	91	107	91
480-102619-3	MW-268S-20160705	94	102	90
480-102619-4	MW-268M-20160705	94	103	92
480-102619-5	MW-561-20160705	94	109	93
480-102619-6	MW-563-20160705	93	107	93
480-102619-7	DUP1-20160705	94	102	91
480-102619-8	TRIP BLANK	92	112	88
LCS 480-309931/10	Lab Control Sample	92	92	94
LCS 480-309992/5	Lab Control Sample	96	98	98
LCSD 480-309931/8	Lab Control Sample Dup	94	87	96
LCSD 480-309992/6	Lab Control Sample Dup	95	85	99
MB 480-309931/7	Method Blank	94	101	93
MB 480-309992/8	Method Blank	91	105	89

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-309931/7
Matrix: Water
Analysis Batch: 309931

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 00:55	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/07/16 00:55	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/07/16 00:55	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/07/16 00:55	1
1,1-Dichloroethane	ND		1.0		ug/L			07/07/16 00:55	1
1,1-Dichloroethene	ND		1.0		ug/L			07/07/16 00:55	1
1,1-Dichloropropene	ND		1.0		ug/L			07/07/16 00:55	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/07/16 00:55	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/07/16 00:55	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/07/16 00:55	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/07/16 00:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/07/16 00:55	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/07/16 00:55	1
1,2-Dichloroethane	ND		1.0		ug/L			07/07/16 00:55	1
1,2-Dichloropropane	ND		1.0		ug/L			07/07/16 00:55	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/07/16 00:55	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/07/16 00:55	1
1,3-Dichloropropane	ND		1.0		ug/L			07/07/16 00:55	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/07/16 00:55	1
1,4-Dioxane	ND		50		ug/L			07/07/16 00:55	1
2,2-Dichloropropane	ND		1.0		ug/L			07/07/16 00:55	1
2-Butanone (MEK)	ND		10		ug/L			07/07/16 00:55	1
2-Chlorotoluene	ND		1.0		ug/L			07/07/16 00:55	1
2-Hexanone	ND		10		ug/L			07/07/16 00:55	1
4-Chlorotoluene	ND		1.0		ug/L			07/07/16 00:55	1
4-Isopropyltoluene	ND		1.0		ug/L			07/07/16 00:55	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/07/16 00:55	1
Acetone	ND		50		ug/L			07/07/16 00:55	1
Benzene	ND		1.0		ug/L			07/07/16 00:55	1
Bromobenzene	ND		1.0		ug/L			07/07/16 00:55	1
Bromoform	ND		1.0		ug/L			07/07/16 00:55	1
Bromomethane	ND		2.0		ug/L			07/07/16 00:55	1
Carbon disulfide	ND		10		ug/L			07/07/16 00:55	1
Carbon tetrachloride	ND		1.0		ug/L			07/07/16 00:55	1
Chlorobenzene	ND		1.0		ug/L			07/07/16 00:55	1
Chlorobromomethane	ND		1.0		ug/L			07/07/16 00:55	1
Chlorodibromomethane	ND		0.50		ug/L			07/07/16 00:55	1
Chloroethane	ND		2.0		ug/L			07/07/16 00:55	1
Chloroform	ND		1.0		ug/L			07/07/16 00:55	1
Chloromethane	ND		2.0		ug/L			07/07/16 00:55	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 00:55	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 00:55	1
Dichlorobromomethane	ND		0.50		ug/L			07/07/16 00:55	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/07/16 00:55	1
Ethyl ether	ND		1.0		ug/L			07/07/16 00:55	1
Ethylbenzene	ND		1.0		ug/L			07/07/16 00:55	1
Ethylene Dibromide	ND		1.0		ug/L			07/07/16 00:55	1
Hexachlorobutadiene	ND		0.40		ug/L			07/07/16 00:55	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-309931/7
Matrix: Water
Analysis Batch: 309931

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			07/07/16 00:55	1
Isopropylbenzene	ND		1.0		ug/L			07/07/16 00:55	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/07/16 00:55	1
Methylene Chloride	ND		1.0		ug/L			07/07/16 00:55	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/07/16 00:55	1
Naphthalene	ND		5.0		ug/L			07/07/16 00:55	1
n-Butylbenzene	ND		1.0		ug/L			07/07/16 00:55	1
N-Propylbenzene	ND		1.0		ug/L			07/07/16 00:55	1
o-Xylene	ND		1.0		ug/L			07/07/16 00:55	1
sec-Butylbenzene	ND		1.0		ug/L			07/07/16 00:55	1
Styrene	ND		1.0		ug/L			07/07/16 00:55	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/07/16 00:55	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/07/16 00:55	1
tert-Butylbenzene	ND		1.0		ug/L			07/07/16 00:55	1
Tetrachloroethene	ND		1.0		ug/L			07/07/16 00:55	1
Tetrahydrofuran	ND		10		ug/L			07/07/16 00:55	1
Toluene	ND		1.0		ug/L			07/07/16 00:55	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 00:55	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 00:55	1
Trichloroethene	ND		1.0		ug/L			07/07/16 00:55	1
Trichlorofluoromethane	ND		1.0		ug/L			07/07/16 00:55	1
Vinyl chloride	ND		1.0		ug/L			07/07/16 00:55	1
Dibromomethane	ND		1.0		ug/L			07/07/16 00:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/07/16 00:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*07/07/16 00:55*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*07/07/16 00:55*	*1*

Lab Sample ID: LCS 480-309931/10
Matrix: Water
Analysis Batch: 309931

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	22.6		ug/L		90	70 - 130
1,1,1-Trichloroethane	25.0	18.7		ug/L		75	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.7		ug/L		95	70 - 130
1,1,2-Trichloroethane	25.0	22.5		ug/L		90	70 - 130
1,1-Dichloroethane	25.0	19.6		ug/L		78	70 - 130
1,1-Dichloroethene	25.0	20.0		ug/L		80	70 - 130
1,1-Dichloropropene	25.0	20.5		ug/L		82	70 - 130
1,2,3-Trichlorobenzene	25.0	24.0		ug/L		96	70 - 130
1,2,3-Trichloropropane	25.0	24.3		ug/L		97	70 - 130
1,2,4-Trichlorobenzene	25.0	24.6		ug/L		98	70 - 130
1,2,4-Trimethylbenzene	25.0	25.9		ug/L		103	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	23.7		ug/L		95	70 - 130
1,2-Dichlorobenzene	25.0	22.3		ug/L		89	70 - 130
1,2-Dichloroethane	25.0	18.9		ug/L		75	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-309931/10
Matrix: Water
Analysis Batch: 309931

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	20.8		ug/L		83	70 - 130
1,3,5-Trimethylbenzene	25.0	25.1		ug/L		100	70 - 130
1,3-Dichlorobenzene	25.0	22.6		ug/L		91	70 - 130
1,3-Dichloropropane	25.0	22.5		ug/L		90	70 - 130
1,4-Dichlorobenzene	25.0	22.2		ug/L		89	70 - 130
1,4-Dioxane	500	444		ug/L		89	70 - 130
2,2-Dichloropropane	25.0	18.9		ug/L		76	70 - 130
2-Butanone (MEK)	125	117		ug/L		94	70 - 130
2-Chlorotoluene	25.0	25.3		ug/L		101	70 - 130
2-Hexanone	125	185	*	ug/L		148	70 - 130
4-Chlorotoluene	25.0	23.7		ug/L		95	70 - 130
4-Isopropyltoluene	25.0	25.5		ug/L		102	70 - 130
4-Methyl-2-pentanone (MIBK)	125	122		ug/L		98	70 - 130
Acetone	125	115		ug/L		92	70 - 130
Benzene	25.0	19.7		ug/L		79	70 - 130
Bromobenzene	25.0	22.5		ug/L		90	70 - 130
Bromoform	25.0	24.2		ug/L		97	70 - 130
Bromomethane	25.0	19.2		ug/L		77	70 - 130
Carbon disulfide	25.0	21.4		ug/L		86	70 - 130
Carbon tetrachloride	25.0	19.4		ug/L		77	70 - 130
Chlorobenzene	25.0	21.4		ug/L		86	70 - 130
Chlorobromomethane	25.0	18.9		ug/L		76	70 - 130
Chlorodibromomethane	25.0	23.3		ug/L		93	70 - 130
Chloroethane	25.0	20.1		ug/L		80	70 - 130
Chloroform	25.0	18.8		ug/L		75	70 - 130
Chloromethane	25.0	16.8	*	ug/L		67	70 - 130
cis-1,2-Dichloroethene	25.0	19.9		ug/L		80	70 - 130
cis-1,3-Dichloropropene	25.0	22.6		ug/L		90	70 - 130
Dichlorobromomethane	25.0	20.3		ug/L		81	70 - 130
Dichlorodifluoromethane	25.0	15.5	*	ug/L		62	70 - 130
Ethyl ether	25.0	20.8		ug/L		83	70 - 130
Ethylbenzene	25.0	22.7		ug/L		91	70 - 130
Ethylene Dibromide	25.0	22.4		ug/L		90	70 - 130
Hexachlorobutadiene	25.0	23.2		ug/L		93	70 - 130
Isopropyl ether	25.0	23.8		ug/L		95	70 - 130
Isopropylbenzene	25.0	24.3		ug/L		97	70 - 130
Methyl tert-butyl ether	25.0	20.4		ug/L		82	70 - 130
Methylene Chloride	25.0	20.6		ug/L		83	70 - 130
m-Xylene & p-Xylene	25.0	23.1		ug/L		92	70 - 130
Naphthalene	25.0	21.7		ug/L		87	70 - 130
n-Butylbenzene	25.0	25.2		ug/L		101	70 - 130
N-Propylbenzene	25.0	24.1		ug/L		96	70 - 130
o-Xylene	25.0	23.9		ug/L		96	70 - 130
sec-Butylbenzene	25.0	24.5		ug/L		98	70 - 130
Styrene	25.0	24.5		ug/L		98	70 - 130
Tert-amyl methyl ether	25.0	25.5		ug/L		102	70 - 130
Tert-butyl ethyl ether	25.0	23.5		ug/L		94	70 - 130
tert-Butylbenzene	25.0	24.0		ug/L		96	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-309931/10
Matrix: Water
Analysis Batch: 309931

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	25.0	21.6		ug/L		86	70 - 130
Tetrahydrofuran	50.0	42.8		ug/L		86	70 - 130
Toluene	25.0	22.1		ug/L		88	70 - 130
trans-1,2-Dichloroethene	25.0	19.1		ug/L		76	70 - 130
trans-1,3-Dichloropropene	25.0	24.2		ug/L		97	70 - 130
Trichloroethene	25.0	20.7		ug/L		83	70 - 130
Trichlorofluoromethane	25.0	19.6		ug/L		78	70 - 130
Vinyl chloride	25.0	17.2	*	ug/L		69	70 - 130
Dibromomethane	25.0	19.8		ug/L		79	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*92*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 480-309931/8
Matrix: Water
Analysis Batch: 309931

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	23.0		ug/L		92	70 - 130	2	20
1,1,1-Trichloroethane	25.0	19.8		ug/L		79	70 - 130	6	20
1,1,2,2-Tetrachloroethane	25.0	24.1		ug/L		96	70 - 130	1	20
1,1,2-Trichloroethane	25.0	22.5		ug/L		90	70 - 130	0	20
1,1-Dichloroethane	25.0	20.8		ug/L		83	70 - 130	6	20
1,1-Dichloroethene	25.0	19.7		ug/L		79	70 - 130	1	20
1,1-Dichloropropene	25.0	21.6		ug/L		87	70 - 130	6	20
1,2,3-Trichlorobenzene	25.0	24.5		ug/L		98	70 - 130	2	20
1,2,3-Trichloropropane	25.0	24.0		ug/L		96	70 - 130	1	20
1,2,4-Trichlorobenzene	25.0	24.8		ug/L		99	70 - 130	1	20
1,2,4-Trimethylbenzene	25.0	26.8		ug/L		107	70 - 130	4	20
1,2-Dibromo-3-Chloropropane	25.0	23.4		ug/L		94	70 - 130	1	20
1,2-Dichlorobenzene	25.0	22.8		ug/L		91	70 - 130	2	20
1,2-Dichloroethane	25.0	19.2		ug/L		77	70 - 130	2	20
1,2-Dichloropropane	25.0	21.3		ug/L		85	70 - 130	2	20
1,3,5-Trimethylbenzene	25.0	26.0		ug/L		104	70 - 130	3	20
1,3-Dichlorobenzene	25.0	23.3		ug/L		93	70 - 130	3	20
1,3-Dichloropropane	25.0	22.6		ug/L		91	70 - 130	1	20
1,4-Dichlorobenzene	25.0	22.4		ug/L		89	70 - 130	1	20
1,4-Dioxane	500	426		ug/L		85	70 - 130	4	20
2,2-Dichloropropane	25.0	19.6		ug/L		78	70 - 130	4	20
2-Butanone (MEK)	125	121		ug/L		97	70 - 130	3	20
2-Chlorotoluene	25.0	26.3		ug/L		105	70 - 130	4	20
2-Hexanone	125	185	*	ug/L		148	70 - 130	0	20
4-Chlorotoluene	25.0	25.1		ug/L		101	70 - 130	6	20
4-Isopropyltoluene	25.0	26.9		ug/L		107	70 - 130	5	20
4-Methyl-2-pentanone (MIBK)	125	123		ug/L		98	70 - 130	0	20
Acetone	125	112		ug/L		90	70 - 130	2	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-309931/8
Matrix: Water
Analysis Batch: 309931

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	25.0	20.3		ug/L		81	70 - 130	3	20
Bromobenzene	25.0	22.6		ug/L		90	70 - 130	1	20
Bromoform	25.0	24.2		ug/L		97	70 - 130	0	20
Bromomethane	25.0	20.3		ug/L		81	70 - 130	6	20
Carbon disulfide	25.0	22.6		ug/L		91	70 - 130	5	20
Carbon tetrachloride	25.0	20.7		ug/L		83	70 - 130	7	20
Chlorobenzene	25.0	22.2		ug/L		89	70 - 130	4	20
Chlorobromomethane	25.0	19.5		ug/L		78	70 - 130	3	20
Chlorodibromomethane	25.0	23.8		ug/L		95	70 - 130	2	20
Chloroethane	25.0	20.5		ug/L		82	70 - 130	2	20
Chloroform	25.0	19.6		ug/L		78	70 - 130	4	20
Chloromethane	25.0	17.5		ug/L		70	70 - 130	4	20
cis-1,2-Dichloroethene	25.0	20.4		ug/L		82	70 - 130	3	20
cis-1,3-Dichloropropene	25.0	22.9		ug/L		92	70 - 130	1	20
Dichlorobromomethane	25.0	20.9		ug/L		84	70 - 130	3	20
Dichlorodifluoromethane	25.0	16.4	*	ug/L		66	70 - 130	6	20
Ethyl ether	25.0	21.7		ug/L		87	70 - 130	4	20
Ethylbenzene	25.0	23.6		ug/L		94	70 - 130	4	20
Ethylene Dibromide	25.0	22.8		ug/L		91	70 - 130	1	20
Hexachlorobutadiene	25.0	24.4		ug/L		98	70 - 130	5	20
Isopropyl ether	25.0	24.4		ug/L		98	70 - 130	3	20
Isopropylbenzene	25.0	25.8		ug/L		103	70 - 130	6	20
Methyl tert-butyl ether	25.0	21.1		ug/L		84	70 - 130	3	20
Methylene Chloride	25.0	20.7		ug/L		83	70 - 130	0	20
m-Xylene & p-Xylene	25.0	24.2		ug/L		97	70 - 130	4	20
Naphthalene	25.0	22.4		ug/L		90	70 - 130	3	20
n-Butylbenzene	25.0	26.4		ug/L		105	70 - 130	4	20
N-Propylbenzene	25.0	24.9		ug/L		100	70 - 130	3	20
o-Xylene	25.0	24.4		ug/L		98	70 - 130	2	20
sec-Butylbenzene	25.0	25.4		ug/L		101	70 - 130	4	20
Styrene	25.0	25.3		ug/L		101	70 - 130	3	20
Tert-amyl methyl ether	25.0	25.9		ug/L		104	70 - 130	1	20
Tert-butyl ethyl ether	25.0	24.1		ug/L		96	70 - 130	2	20
tert-Butylbenzene	25.0	25.1		ug/L		100	70 - 130	4	20
Tetrachloroethene	25.0	22.5		ug/L		90	70 - 130	4	20
Tetrahydrofuran	50.0	43.2		ug/L		86	70 - 130	1	20
Toluene	25.0	23.1		ug/L		92	70 - 130	5	20
trans-1,2-Dichloroethene	25.0	20.6		ug/L		83	70 - 130	8	20
trans-1,3-Dichloropropene	25.0	24.8		ug/L		99	70 - 130	3	20
Trichloroethene	25.0	21.3		ug/L		85	70 - 130	3	20
Trichlorofluoromethane	25.0	20.6		ug/L		82	70 - 130	5	20
Vinyl chloride	25.0	18.4		ug/L		74	70 - 130	7	20
Dibromomethane	25.0	20.3		ug/L		81	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: MB 480-309992/8
Matrix: Water
Analysis Batch: 309992

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 11:17	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/07/16 11:17	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/07/16 11:17	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/07/16 11:17	1
1,1-Dichloroethane	ND		1.0		ug/L			07/07/16 11:17	1
1,1-Dichloroethene	ND		1.0		ug/L			07/07/16 11:17	1
1,1-Dichloropropene	ND		1.0		ug/L			07/07/16 11:17	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/07/16 11:17	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/07/16 11:17	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/07/16 11:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/07/16 11:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/07/16 11:17	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/07/16 11:17	1
1,2-Dichloroethane	ND		1.0		ug/L			07/07/16 11:17	1
1,2-Dichloropropane	ND		1.0		ug/L			07/07/16 11:17	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/07/16 11:17	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/07/16 11:17	1
1,3-Dichloropropane	ND		1.0		ug/L			07/07/16 11:17	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/07/16 11:17	1
1,4-Dioxane	ND		50		ug/L			07/07/16 11:17	1
2,2-Dichloropropane	ND		1.0		ug/L			07/07/16 11:17	1
2-Butanone (MEK)	ND		10		ug/L			07/07/16 11:17	1
2-Chlorotoluene	ND		1.0		ug/L			07/07/16 11:17	1
2-Hexanone	ND		10		ug/L			07/07/16 11:17	1
4-Chlorotoluene	ND		1.0		ug/L			07/07/16 11:17	1
4-Isopropyltoluene	ND		1.0		ug/L			07/07/16 11:17	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/07/16 11:17	1
Acetone	ND		50		ug/L			07/07/16 11:17	1
Benzene	ND		1.0		ug/L			07/07/16 11:17	1
Bromobenzene	ND		1.0		ug/L			07/07/16 11:17	1
Bromoform	ND		1.0		ug/L			07/07/16 11:17	1
Bromomethane	ND		2.0		ug/L			07/07/16 11:17	1
Carbon disulfide	ND		10		ug/L			07/07/16 11:17	1
Carbon tetrachloride	ND		1.0		ug/L			07/07/16 11:17	1
Chlorobenzene	ND		1.0		ug/L			07/07/16 11:17	1
Chlorobromomethane	ND		1.0		ug/L			07/07/16 11:17	1
Chlorodibromomethane	ND		0.50		ug/L			07/07/16 11:17	1
Chloroethane	ND		2.0		ug/L			07/07/16 11:17	1
Chloroform	ND		1.0		ug/L			07/07/16 11:17	1
Chloromethane	ND		2.0		ug/L			07/07/16 11:17	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 11:17	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 11:17	1
Dichlorobromomethane	ND		0.50		ug/L			07/07/16 11:17	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/07/16 11:17	1
Ethyl ether	ND		1.0		ug/L			07/07/16 11:17	1
Ethylbenzene	ND		1.0		ug/L			07/07/16 11:17	1
Ethylene Dibromide	ND		1.0		ug/L			07/07/16 11:17	1
Hexachlorobutadiene	ND		0.40		ug/L			07/07/16 11:17	1
Isopropyl ether	ND		10		ug/L			07/07/16 11:17	1
Isopropylbenzene	ND		1.0		ug/L			07/07/16 11:17	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-309992/8
Matrix: Water
Analysis Batch: 309992

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			07/07/16 11:17	1
Methylene Chloride	ND		1.0		ug/L			07/07/16 11:17	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/07/16 11:17	1
Naphthalene	ND		5.0		ug/L			07/07/16 11:17	1
n-Butylbenzene	ND		1.0		ug/L			07/07/16 11:17	1
N-Propylbenzene	ND		1.0		ug/L			07/07/16 11:17	1
o-Xylene	ND		1.0		ug/L			07/07/16 11:17	1
sec-Butylbenzene	ND		1.0		ug/L			07/07/16 11:17	1
Styrene	ND		1.0		ug/L			07/07/16 11:17	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/07/16 11:17	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/07/16 11:17	1
tert-Butylbenzene	ND		1.0		ug/L			07/07/16 11:17	1
Tetrachloroethene	ND		1.0		ug/L			07/07/16 11:17	1
Tetrahydrofuran	ND		10		ug/L			07/07/16 11:17	1
Toluene	ND		1.0		ug/L			07/07/16 11:17	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 11:17	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 11:17	1
Trichloroethene	ND		1.0		ug/L			07/07/16 11:17	1
Trichlorofluoromethane	ND		1.0		ug/L			07/07/16 11:17	1
Vinyl chloride	ND		1.0		ug/L			07/07/16 11:17	1
Dibromomethane	ND		1.0		ug/L			07/07/16 11:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*07/07/16 11:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*07/07/16 11:17*	*1*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*		*07/07/16 11:17*	*1*

Lab Sample ID: LCS 480-309992/5
Matrix: Water
Analysis Batch: 309992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.5		ug/L		98	70 - 130
1,1,1-Trichloroethane	25.0	21.5		ug/L		86	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.9		ug/L		96	70 - 130
1,1,2-Trichloroethane	25.0	23.9		ug/L		96	70 - 130
1,1-Dichloroethane	25.0	22.7		ug/L		91	70 - 130
1,1-Dichloroethene	25.0	22.2		ug/L		89	70 - 130
1,1-Dichloropropene	25.0	23.5		ug/L		94	70 - 130
1,2,3-Trichlorobenzene	25.0	24.5		ug/L		98	70 - 130
1,2,3-Trichloropropane	25.0	24.8		ug/L		99	70 - 130
1,2,4-Trichlorobenzene	25.0	24.2		ug/L		97	70 - 130
1,2,4-Trimethylbenzene	25.0	27.0		ug/L		108	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	23.0		ug/L		92	70 - 130
1,2-Dichlorobenzene	25.0	23.3		ug/L		93	70 - 130
1,2-Dichloroethane	25.0	21.0		ug/L		84	70 - 130
1,2-Dichloropropane	25.0	23.1		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	25.0	25.9		ug/L		104	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-309992/5
Matrix: Water
Analysis Batch: 309992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	25.0	23.6		ug/L		94	70 - 130
1,3-Dichloropropane	25.0	24.1		ug/L		96	70 - 130
1,4-Dichlorobenzene	25.0	23.2		ug/L		93	70 - 130
1,4-Dioxane	500	449		ug/L		90	70 - 130
2,2-Dichloropropane	25.0	21.1		ug/L		85	70 - 130
2-Butanone (MEK)	125	127		ug/L		101	70 - 130
2-Chlorotoluene	25.0	27.2		ug/L		109	70 - 130
2-Hexanone	125	192	*	ug/L		154	70 - 130
4-Chlorotoluene	25.0	25.6		ug/L		103	70 - 130
4-Isopropyltoluene	25.0	27.1		ug/L		109	70 - 130
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		102	70 - 130
Acetone	125	122		ug/L		98	70 - 130
Benzene	25.0	22.4		ug/L		90	70 - 130
Bromobenzene	25.0	23.3		ug/L		93	70 - 130
Bromoform	25.0	26.3		ug/L		105	70 - 130
Bromomethane	25.0	22.7		ug/L		91	70 - 130
Carbon disulfide	25.0	16.4	*	ug/L		66	70 - 130
Carbon tetrachloride	25.0	22.7		ug/L		91	70 - 130
Chlorobenzene	25.0	23.8		ug/L		95	70 - 130
Chlorobromomethane	25.0	21.2		ug/L		85	70 - 130
Chlorodibromomethane	25.0	24.8		ug/L		99	70 - 130
Chloroethane	25.0	23.7		ug/L		95	70 - 130
Chloroform	25.0	21.5		ug/L		86	70 - 130
Chloromethane	25.0	20.6		ug/L		82	70 - 130
cis-1,2-Dichloroethene	25.0	22.2		ug/L		89	70 - 130
cis-1,3-Dichloropropene	25.0	24.3		ug/L		97	70 - 130
Dichlorobromomethane	25.0	22.7		ug/L		91	70 - 130
Dichlorodifluoromethane	25.0	20.3		ug/L		81	70 - 130
Ethyl ether	25.0	22.2		ug/L		89	70 - 130
Ethylbenzene	25.0	25.5		ug/L		102	70 - 130
Ethylene Dibromide	25.0	23.6		ug/L		94	70 - 130
Hexachlorobutadiene	25.0	24.5		ug/L		98	70 - 130
Isopropyl ether	25.0	25.6		ug/L		102	70 - 130
Isopropylbenzene	25.0	25.7		ug/L		103	70 - 130
Methyl tert-butyl ether	25.0	21.8		ug/L		87	70 - 130
Methylene Chloride	25.0	23.8		ug/L		95	70 - 130
m-Xylene & p-Xylene	25.0	26.1		ug/L		104	70 - 130
Naphthalene	25.0	21.2		ug/L		85	70 - 130
n-Butylbenzene	25.0	26.9		ug/L		108	70 - 130
N-Propylbenzene	25.0	25.5		ug/L		102	70 - 130
o-Xylene	25.0	26.1		ug/L		105	70 - 130
sec-Butylbenzene	25.0	26.0		ug/L		104	70 - 130
Styrene	25.0	27.2		ug/L		109	70 - 130
Tert-amyl methyl ether	25.0	27.3		ug/L		109	70 - 130
Tert-butyl ethyl ether	25.0	24.8		ug/L		99	70 - 130
tert-Butylbenzene	25.0	25.4		ug/L		101	70 - 130
Tetrachloroethene	25.0	24.7		ug/L		99	70 - 130
Tetrahydrofuran	50.0	47.3		ug/L		95	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-309992/5
Matrix: Water
Analysis Batch: 309992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	25.0	25.0		ug/L		100	70 - 130
trans-1,2-Dichloroethene	25.0	22.5		ug/L		90	70 - 130
trans-1,3-Dichloropropene	25.0	25.7		ug/L		103	70 - 130
Trichloroethene	25.0	23.4		ug/L		93	70 - 130
Trichlorofluoromethane	25.0	22.9		ug/L		91	70 - 130
Vinyl chloride	25.0	21.3		ug/L		85	70 - 130
Dibromomethane	25.0	21.9		ug/L		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 480-309992/6
Matrix: Water
Analysis Batch: 309992

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.0		ug/L		96	70 - 130	2	20
1,1,1-Trichloroethane	25.0	19.6		ug/L		78	70 - 130	9	20
1,1,2,2-Tetrachloroethane	25.0	24.5		ug/L		98	70 - 130	3	20
1,1,2-Trichloroethane	25.0	23.3		ug/L		93	70 - 130	3	20
1,1-Dichloroethane	25.0	20.8		ug/L		83	70 - 130	9	20
1,1-Dichloroethene	25.0	19.7		ug/L		79	70 - 130	12	20
1,1-Dichloropropene	25.0	21.4		ug/L		86	70 - 130	9	20
1,2,3-Trichlorobenzene	25.0	24.9		ug/L		99	70 - 130	2	20
1,2,3-Trichloropropane	25.0	25.9		ug/L		103	70 - 130	4	20
1,2,4-Trichlorobenzene	25.0	25.5		ug/L		102	70 - 130	5	20
1,2,4-Trimethylbenzene	25.0	27.0		ug/L		108	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	25.0	23.0		ug/L		92	70 - 130	0	20
1,2-Dichlorobenzene	25.0	23.4		ug/L		94	70 - 130	0	20
1,2-Dichloroethane	25.0	19.6		ug/L		78	70 - 130	7	20
1,2-Dichloropropane	25.0	21.5		ug/L		86	70 - 130	7	20
1,3,5-Trimethylbenzene	25.0	26.0		ug/L		104	70 - 130	0	20
1,3-Dichlorobenzene	25.0	23.7		ug/L		95	70 - 130	0	20
1,3-Dichloropropane	25.0	23.5		ug/L		94	70 - 130	2	20
1,4-Dichlorobenzene	25.0	23.4		ug/L		94	70 - 130	1	20
1,4-Dioxane	500	463		ug/L		93	70 - 130	3	20
2,2-Dichloropropane	25.0	19.2		ug/L		77	70 - 130	9	20
2-Butanone (MEK)	125	118		ug/L		95	70 - 130	7	20
2-Chlorotoluene	25.0	26.9		ug/L		108	70 - 130	1	20
2-Hexanone	125	190	*	ug/L		152	70 - 130	1	20
4-Chlorotoluene	25.0	25.2		ug/L		101	70 - 130	2	20
4-Isopropyltoluene	25.0	26.8		ug/L		107	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	125	127		ug/L		101	70 - 130	1	20
Acetone	125	114		ug/L		91	70 - 130	7	20
Benzene	25.0	20.8		ug/L		83	70 - 130	8	20
Bromobenzene	25.0	23.4		ug/L		94	70 - 130	0	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-309992/6
Matrix: Water
Analysis Batch: 309992

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	25.0	25.5		ug/L		102	70 - 130	3	20
Bromomethane	25.0	20.7		ug/L		83	70 - 130	9	20
Carbon disulfide	25.0	15.2	*	ug/L		61	70 - 130	8	20
Carbon tetrachloride	25.0	20.3		ug/L		81	70 - 130	11	20
Chlorobenzene	25.0	23.0		ug/L		92	70 - 130	4	20
Chlorobromomethane	25.0	19.9		ug/L		80	70 - 130	6	20
Chlorodibromomethane	25.0	24.6		ug/L		98	70 - 130	1	20
Chloroethane	25.0	21.5		ug/L		86	70 - 130	10	20
Chloroform	25.0	19.8		ug/L		79	70 - 130	8	20
Chloromethane	25.0	18.0		ug/L		72	70 - 130	13	20
cis-1,2-Dichloroethene	25.0	20.4		ug/L		82	70 - 130	8	20
cis-1,3-Dichloropropene	25.0	23.7		ug/L		95	70 - 130	2	20
Dichlorobromomethane	25.0	21.3		ug/L		85	70 - 130	6	20
Dichlorodifluoromethane	25.0	16.8	*	ug/L		67	70 - 130	19	20
Ethyl ether	25.0	21.7		ug/L		87	70 - 130	2	20
Ethylbenzene	25.0	24.0		ug/L		96	70 - 130	6	20
Ethylene Dibromide	25.0	23.5		ug/L		94	70 - 130	0	20
Hexachlorobutadiene	25.0	24.3		ug/L		97	70 - 130	1	20
Isopropyl ether	25.0	24.2		ug/L		97	70 - 130	5	20
Isopropylbenzene	25.0	25.5		ug/L		102	70 - 130	1	20
Methyl tert-butyl ether	25.0	21.1		ug/L		84	70 - 130	3	20
Methylene Chloride	25.0	22.1		ug/L		88	70 - 130	7	20
m-Xylene & p-Xylene	25.0	24.6		ug/L		99	70 - 130	6	20
Naphthalene	25.0	22.3		ug/L		89	70 - 130	5	20
n-Butylbenzene	25.0	26.2		ug/L		105	70 - 130	3	20
N-Propylbenzene	25.0	25.1		ug/L		101	70 - 130	2	20
o-Xylene	25.0	25.0		ug/L		100	70 - 130	5	20
sec-Butylbenzene	25.0	25.5		ug/L		102	70 - 130	2	20
Styrene	25.0	26.3		ug/L		105	70 - 130	3	20
Tert-amyl methyl ether	25.0	26.2		ug/L		105	70 - 130	4	20
Tert-butyl ethyl ether	25.0	24.0		ug/L		96	70 - 130	3	20
tert-Butylbenzene	25.0	25.2		ug/L		101	70 - 130	0	20
Tetrachloroethene	25.0	22.9		ug/L		91	70 - 130	8	20
Tetrahydrofuran	50.0	43.5		ug/L		87	70 - 130	8	20
Toluene	25.0	23.5		ug/L		94	70 - 130	6	20
trans-1,2-Dichloroethene	25.0	20.7		ug/L		83	70 - 130	9	20
trans-1,3-Dichloropropene	25.0	25.3		ug/L		101	70 - 130	1	20
Trichloroethene	25.0	21.9		ug/L		87	70 - 130	7	20
Trichlorofluoromethane	25.0	20.7		ug/L		83	70 - 130	10	20
Vinyl chloride	25.0	19.1		ug/L		76	70 - 130	11	20
Dibromomethane	25.0	20.8		ug/L		83	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-309926/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310221 — **Prep Batch: 309926**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050		mg/L		07/07/16 08:55	07/07/16 18:22	1

Lab Sample ID: LCS 480-309926/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310221 — **Prep Batch: 309926**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.2		mg/L		102	80 - 120

Lab Sample ID: LCSD 480-309926/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310221 — **Prep Batch: 309926**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	10.0	10.2		mg/L		102	80 - 120	0	20

Lab Sample ID: 480-102619-1 MS — **Client Sample ID: MW-267S-20160705**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310221 — **Prep Batch: 309926**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	340		10.0	329	4	mg/L		-82	75 - 125

Lab Sample ID: 480-102619-1 MSD — **Client Sample ID: MW-267S-20160705**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310221 — **Prep Batch: 309926**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	340		10.0	336	4	mg/L		-10	75 - 125	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-310031/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310031

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			07/07/16 11:33	1
Sulfate	ND		2.0		mg/L			07/07/16 11:33	1

Lab Sample ID: LCS 480-310031/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310031

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	51.0		mg/L		102	90 - 110
Sulfate	50.0	50.1		mg/L		100	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 480-310196/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310196

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			07/08/16 10:24	1
Sulfate	ND		2.0		mg/L			07/08/16 10:24	1

Lab Sample ID: LCS 480-310196/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310196

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	48.9		mg/L		98	90 - 110
Sulfate	50.0	50.1		mg/L		100	90 - 110

Lab Sample ID: 480-102619-6 MS — **Client Sample ID: MW-563-20160705**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310196

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	ND		25.0	28.2		mg/L		113	80 - 120

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-310158/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310327 — **Prep Batch: 310158**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L		07/07/16 20:47	07/08/16 17:07	1

Lab Sample ID: LCS 480-310158/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310327 — **Prep Batch: 310158**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.05		mg/L		105	90 - 110

Lab Sample ID: 480-102619-1 MS — **Client Sample ID: MW-267S-20160705**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310327 — **Prep Batch: 310158**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.40	F1	0.500	0.999	F1	mg/L		120	90 - 110

Method: 9040C - pH

Lab Sample ID: 480-102619-3 DU — **Client Sample ID: MW-268S-20160705**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310078

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.06	HF	7.150		SU		1	5

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-310276/27 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310276

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			07/08/16 02:33	1
TOC Result 2	ND		1.0		mg/L			07/08/16 02:33	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			07/08/16 02:33	1

Lab Sample ID: LCS 480-310276/28 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310276

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	57.8		mg/L		96	90 - 110
TOC Result 2	60.0	59.1		mg/L		99	90 - 110
Total Organic Carbon - Duplicates	60.0	58.4		mg/L		97	90 - 110

Lab Sample ID: 480-102619-3 MS — **Client Sample ID: MW-268S-20160705**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310276

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	ND		20.0	19.5		mg/L		98	54 - 131
TOC Result 2	ND		20.0	19.9		mg/L		100	54 - 131
Total Organic Carbon - Duplicates	ND		20.0	19.7		mg/L		99	54 - 131

Lab Sample ID: 480-102619-6 MS — **Client Sample ID: MW-563-20160705**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310276

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	1.6		20.0	21.2		mg/L		98	54 - 131
TOC Result 2	1.7		20.0	21.7		mg/L		100	54 - 131
Total Organic Carbon - Duplicates	1.6		20.0	21.5		mg/L		99	54 - 131

Lab Sample ID: 480-102619-2 DU — **Client Sample ID: MW-267M-20160705**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310276

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
TOC Result 1	8.1		8.52		mg/L		4	20
TOC Result 2	8.1		8.13		mg/L		0.9	20
Total Organic Carbon - Duplicates	8.1		8.33		mg/L		3	20

Lab Sample ID: 480-102619-4 DU — **Client Sample ID: MW-268M-20160705**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310276

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
TOC Result 1	81		80.6		mg/L		0.2	20

Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 480-102619-4 DU — **Client Sample ID: MW-268M-20160705**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310276

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
TOC Result 2	84		83.3		mg/L		0.6	20
Total Organic Carbon - Duplicates	82		81.9		mg/L		0.4	20

Lab Sample ID: MB 480-310699/27 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310699

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			07/12/16 01:49	1
TOC Result 2	ND		1.0		mg/L			07/12/16 01:49	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			07/12/16 01:49	1

Lab Sample ID: MB 480-310699/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310699

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			07/11/16 14:30	1
TOC Result 2	ND		1.0		mg/L			07/11/16 14:30	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			07/11/16 14:30	1

Lab Sample ID: LCS 480-310699/28 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310699

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	58.6		mg/L		98	90 - 110
TOC Result 2	60.0	60.9		mg/L		102	90 - 110
Total Organic Carbon - Duplicates	60.0	59.7		mg/L		100	90 - 110

Lab Sample ID: LCS 480-310699/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310699

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	58.9		mg/L		98	90 - 110
TOC Result 2	60.0	61.3		mg/L		102	90 - 110
Total Organic Carbon - Duplicates	60.0	60.1		mg/L		100	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-309990/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309990

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0		mg/L			07/06/16 16:31	1

Lab Sample ID: LCS 480-309990/8 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309990

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	96.6		mg/L		97	90 - 110

Method: SM 4500 P E - Orthophosphate

Lab Sample ID: MB 480-309911/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309911

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ortho-Phosphate	ND		0.020		mg/L			07/06/16 11:33	1

Lab Sample ID: LCS 480-309911/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309911

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
ortho-Phosphate	0.200	0.202		mg/L		101	90 - 110

Lab Sample ID: 480-102619-1 MS — **Client Sample ID: MW-267S-20160705**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309911

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
ortho-Phosphate	0.43		1.00	1.32		mg/L		89	49 - 138

Lab Sample ID: 480-102619-1 MSD — **Client Sample ID: MW-267S-20160705**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309911

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
ortho-Phosphate	0.43		1.00	1.34		mg/L		91	49 - 138	2	20

Lab Sample ID: 480-102619-2 MS — **Client Sample ID: MW-267M-20160705**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309911

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
ortho-Phosphate	0.12		1.00	1.04		mg/L		92	49 - 138

Lab Sample ID: 480-102619-2 MSD — **Client Sample ID: MW-267M-20160705**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 309911

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
ortho-Phosphate	0.12		1.00	1.03		mg/L		91	49 - 138	1	20

QC Association Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

GC/MS VOA

Analysis Batch: 309931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102619-1	MW-267S-20160705	Total/NA	Water	8260C	
480-102619-2	MW-267M-20160705	Total/NA	Water	8260C	
480-102619-3	MW-268S-20160705	Total/NA	Water	8260C	
480-102619-6	MW-563-20160705	Total/NA	Water	8260C	
480-102619-8	TRIP BLANK	Total/NA	Water	8260C	
LCS 480-309931/10	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-309931/8	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-309931/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 309992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102619-4	MW-268M-20160705	Total/NA	Water	8260C	
480-102619-5	MW-561-20160705	Total/NA	Water	8260C	
480-102619-7	DUP1-20160705	Total/NA	Water	8260C	
LCS 480-309992/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-309992/6	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-309992/8	Method Blank	Total/NA	Water	8260C	

Metals

Prep Batch: 309926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102619-1	MW-267S-20160705	Total/NA	Water	3005A	
480-102619-1 MS	MW-267S-20160705	Total/NA	Water	3005A	
480-102619-1 MSD	MW-267S-20160705	Total/NA	Water	3005A	
480-102619-2	MW-267M-20160705	Total/NA	Water	3005A	
480-102619-3	MW-268S-20160705	Total/NA	Water	3005A	
480-102619-4	MW-268M-20160705	Total/NA	Water	3005A	
480-102619-5	MW-561-20160705	Total/NA	Water	3005A	
480-102619-6	MW-563-20160705	Total/NA	Water	3005A	
LCS 480-309926/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-309926/3-A	Lab Control Sample Dup	Total/NA	Water	3005A	
MB 480-309926/1-A	Method Blank	Total/NA	Water	3005A	

Analysis Batch: 310221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102619-1	MW-267S-20160705	Total/NA	Water	6010	309926
480-102619-1 MS	MW-267S-20160705	Total/NA	Water	6010	309926
480-102619-1 MSD	MW-267S-20160705	Total/NA	Water	6010	309926
480-102619-2	MW-267M-20160705	Total/NA	Water	6010	309926
480-102619-3	MW-268S-20160705	Total/NA	Water	6010	309926
480-102619-4	MW-268M-20160705	Total/NA	Water	6010	309926
480-102619-5	MW-561-20160705	Total/NA	Water	6010	309926
480-102619-6	MW-563-20160705	Total/NA	Water	6010	309926
LCS 480-309926/2-A	Lab Control Sample	Total/NA	Water	6010	309926
LCSD 480-309926/3-A	Lab Control Sample Dup	Total/NA	Water	6010	309926
MB 480-309926/1-A	Method Blank	Total/NA	Water	6010	309926

General Chemistry

Analysis Batch: 309911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102619-1	MW-267S-20160705	Total/NA	Water	SM 4500 P E	
480-102619-1 MS	MW-267S-20160705	Total/NA	Water	SM 4500 P E	
480-102619-1 MSD	MW-267S-20160705	Total/NA	Water	SM 4500 P E	
480-102619-2	MW-267M-20160705	Total/NA	Water	SM 4500 P E	
480-102619-2 MS	MW-267M-20160705	Total/NA	Water	SM 4500 P E	
480-102619-2 MSD	MW-267M-20160705	Total/NA	Water	SM 4500 P E	
480-102619-3	MW-268S-20160705	Total/NA	Water	SM 4500 P E	
480-102619-4	MW-268M-20160705	Total/NA	Water	SM 4500 P E	
480-102619-5	MW-561-20160705	Total/NA	Water	SM 4500 P E	
480-102619-6	MW-563-20160705	Total/NA	Water	SM 4500 P E	
LCS 480-309911/4	Lab Control Sample	Total/NA	Water	SM 4500 P E	
MB 480-309911/3	Method Blank	Total/NA	Water	SM 4500 P E	

Analysis Batch: 309953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102619-1	MW-267S-20160705	Total/NA	Water	353.2	
480-102619-2	MW-267M-20160705	Total/NA	Water	353.2	
480-102619-3	MW-268S-20160705	Total/NA	Water	353.2	
480-102619-4	MW-268M-20160705	Total/NA	Water	353.2	
480-102619-5	MW-561-20160705	Total/NA	Water	353.2	
480-102619-6	MW-563-20160705	Total/NA	Water	353.2	

Analysis Batch: 309990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102619-1	MW-267S-20160705	Total/NA	Water	SM 2320B	
480-102619-2	MW-267M-20160705	Total/NA	Water	SM 2320B	
480-102619-3	MW-268S-20160705	Total/NA	Water	SM 2320B	
480-102619-4	MW-268M-20160705	Total/NA	Water	SM 2320B	
480-102619-5	MW-561-20160705	Total/NA	Water	SM 2320B	
480-102619-6	MW-563-20160705	Total/NA	Water	SM 2320B	
LCS 480-309990/8	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 480-309990/7	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 310031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102619-1	MW-267S-20160705	Total/NA	Water	300.0	
480-102619-2	MW-267M-20160705	Total/NA	Water	300.0	
480-102619-3	MW-268S-20160705	Total/NA	Water	300.0	
480-102619-5	MW-561-20160705	Total/NA	Water	300.0	
480-102619-6	MW-563-20160705	Total/NA	Water	300.0	
LCS 480-310031/3	Lab Control Sample	Total/NA	Water	300.0	
MB 480-310031/4	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 310078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102619-1	MW-267S-20160705	Total/NA	Water	9040C	
480-102619-2	MW-267M-20160705	Total/NA	Water	9040C	
480-102619-3	MW-268S-20160705	Total/NA	Water	9040C	
480-102619-3 DU	MW-268S-20160705	Total/NA	Water	9040C	
480-102619-4	MW-268M-20160705	Total/NA	Water	9040C	
480-102619-5	MW-561-20160705	Total/NA	Water	9040C	

General Chemistry (Continued)

Analysis Batch: 310078 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102619-6	MW-563-20160705	Total/NA	Water	9040C	
LCS 480-310078/1	Lab Control Sample	Total/NA	Water	9040C	

Prep Batch: 310158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102619-1	MW-267S-20160705	Total/NA	Water	Distill/Ammonia	
480-102619-1 MS	MW-267S-20160705	Total/NA	Water	Distill/Ammonia	
480-102619-2	MW-267M-20160705	Total/NA	Water	Distill/Ammonia	
480-102619-3	MW-268S-20160705	Total/NA	Water	Distill/Ammonia	
480-102619-4	MW-268M-20160705	Total/NA	Water	Distill/Ammonia	
480-102619-5	MW-561-20160705	Total/NA	Water	Distill/Ammonia	
480-102619-6	MW-563-20160705	Total/NA	Water	Distill/Ammonia	
LCS 480-310158/1-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	
MB 480-310158/2-A	Method Blank	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 310196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102619-2	MW-267M-20160705	Total/NA	Water	300.0	
480-102619-4	MW-268M-20160705	Total/NA	Water	300.0	
480-102619-5	MW-561-20160705	Total/NA	Water	300.0	
480-102619-6	MW-563-20160705	Total/NA	Water	300.0	
480-102619-6 MS	MW-563-20160705	Total/NA	Water	300.0	
LCS 480-310196/3	Lab Control Sample	Total/NA	Water	300.0	
MB 480-310196/4	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 310276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102619-1	MW-267S-20160705	Total/NA	Water	9060A	
480-102619-2	MW-267M-20160705	Total/NA	Water	9060A	
480-102619-2 DU	MW-267M-20160705	Total/NA	Water	9060A	
480-102619-3	MW-268S-20160705	Total/NA	Water	9060A	
480-102619-3 MS	MW-268S-20160705	Total/NA	Water	9060A	
480-102619-4	MW-268M-20160705	Total/NA	Water	9060A	
480-102619-4 DU	MW-268M-20160705	Total/NA	Water	9060A	
480-102619-6	MW-563-20160705	Total/NA	Water	9060A	
480-102619-6 MS	MW-563-20160705	Total/NA	Water	9060A	
LCS 480-310276/28	Lab Control Sample	Total/NA	Water	9060A	
MB 480-310276/27	Method Blank	Total/NA	Water	9060A	

Analysis Batch: 310327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102619-1	MW-267S-20160705	Total/NA	Water	350.1	310158
480-102619-1 MS	MW-267S-20160705	Total/NA	Water	350.1	310158
480-102619-2	MW-267M-20160705	Total/NA	Water	350.1	310158
480-102619-3	MW-268S-20160705	Total/NA	Water	350.1	310158
480-102619-4	MW-268M-20160705	Total/NA	Water	350.1	310158
480-102619-5	MW-561-20160705	Total/NA	Water	350.1	310158
480-102619-6	MW-563-20160705	Total/NA	Water	350.1	310158
LCS 480-310158/1-A	Lab Control Sample	Total/NA	Water	350.1	310158
MB 480-310158/2-A	Method Blank	Total/NA	Water	350.1	310158

General Chemistry (Continued)

Analysis Batch: 310699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102619-5	MW-561-20160705	Total/NA	Water	9060A	
LCS 480-310699/28	Lab Control Sample	Total/NA	Water	9060A	
LCS 480-310699/4	Lab Control Sample	Total/NA	Water	9060A	
MB 480-310699/27	Method Blank	Total/NA	Water	9060A	
MB 480-310699/3	Method Blank	Total/NA	Water	9060A	

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Client Sample ID: MW-267S-20160705

Lab Sample ID: 480-102619-1

Date Collected: 07/05/16 10:50

Matrix: Water

Date Received: 07/06/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	309931	07/07/16 01:33	GTG	TAL BUF
Total/NA	Prep	3005A			309926	07/07/16 08:55	BAE	TAL BUF
Total/NA	Analysis	6010		1	310221	07/07/16 18:43	AMH	TAL BUF
Total/NA	Analysis	300.0		10	310031	07/07/16 12:22	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			310158	07/07/16 20:47	CEA	TAL BUF
Total/NA	Analysis	350.1		1	310327	07/08/16 17:18	CEA	TAL BUF
Total/NA	Analysis	353.2		1	309953	07/06/16 16:23	CLT	TAL BUF
Total/NA	Analysis	9040C		1	310078	07/07/16 11:12	ELR	TAL BUF
Total/NA	Analysis	9060A		50	310276	07/08/16 04:59	DLG	TAL BUF
Total/NA	Analysis	SM 2320B		1	309990	07/06/16 17:59	EKB	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	309911	07/06/16 11:33	ELR	TAL BUF

Client Sample ID: MW-267M-20160705

Lab Sample ID: 480-102619-2

Date Collected: 07/05/16 11:30

Matrix: Water

Date Received: 07/06/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	309931	07/07/16 01:58	GTG	TAL BUF
Total/NA	Prep	3005A			309926	07/07/16 08:55	BAE	TAL BUF
Total/NA	Analysis	6010		1	310221	07/07/16 19:02	AMH	TAL BUF
Total/NA	Analysis	300.0		1	310196	07/08/16 13:37	CAV	TAL BUF
Total/NA	Analysis	300.0		5	310031	07/07/16 12:30	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			310158	07/07/16 20:47	CEA	TAL BUF
Total/NA	Analysis	350.1		1	310327	07/08/16 17:20	CEA	TAL BUF
Total/NA	Analysis	353.2		1	309953	07/06/16 16:24	CLT	TAL BUF
Total/NA	Analysis	9040C		1	310078	07/07/16 11:15	ELR	TAL BUF
Total/NA	Analysis	9060A		1	310276	07/08/16 05:28	DLG	TAL BUF
Total/NA	Analysis	SM 2320B		1	309990	07/06/16 18:06	EKB	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	309911	07/06/16 11:33	ELR	TAL BUF

Client Sample ID: MW-268S-20160705

Lab Sample ID: 480-102619-3

Date Collected: 07/05/16 09:15

Matrix: Water

Date Received: 07/06/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	309931	07/07/16 02:23	GTG	TAL BUF
Total/NA	Prep	3005A			309926	07/07/16 08:55	BAE	TAL BUF
Total/NA	Analysis	6010		1	310221	07/07/16 19:05	AMH	TAL BUF
Total/NA	Analysis	300.0		1	310031	07/07/16 12:39	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			310158	07/07/16 20:47	CEA	TAL BUF
Total/NA	Analysis	350.1		1	310327	07/08/16 17:20	CEA	TAL BUF

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Client Sample ID: MW-268S-20160705

Lab Sample ID: 480-102619-3

Date Collected: 07/05/16 09:15
Matrix: Water
Date Received: 07/06/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	309953	07/06/16 16:25	CLT	TAL BUF
Total/NA	Analysis	9040C		1	310078	07/07/16 11:18	ELR	TAL BUF
Total/NA	Analysis	9060A		1	310276	07/08/16 06:27	DLG	TAL BUF
Total/NA	Analysis	SM 2320B		1	309990	07/06/16 18:12	EKB	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	309911	07/06/16 11:33	ELR	TAL BUF

Client Sample ID: MW-268M-20160705

Lab Sample ID: 480-102619-4

Date Collected: 07/05/16 09:55
Matrix: Water
Date Received: 07/06/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	309992	07/07/16 12:31	RRS	TAL BUF
Total/NA	Prep	3005A			309926	07/07/16 08:55	BAE	TAL BUF
Total/NA	Analysis	6010		1	310221	07/07/16 19:09	AMH	TAL BUF
Total/NA	Analysis	300.0		2	310196	07/08/16 13:52	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			310158	07/07/16 20:47	CEA	TAL BUF
Total/NA	Analysis	350.1		1	310327	07/08/16 17:21	CEA	TAL BUF
Total/NA	Analysis	353.2		1	309953	07/06/16 16:26	CLT	TAL BUF
Total/NA	Analysis	9040C		1	310078	07/07/16 11:23	ELR	TAL BUF
Total/NA	Analysis	9060A		2	310276	07/08/16 08:20	DLG	TAL BUF
Total/NA	Analysis	SM 2320B		1	309990	07/06/16 18:18	EKB	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	309911	07/06/16 11:33	ELR	TAL BUF

Client Sample ID: MW-561-20160705

Lab Sample ID: 480-102619-5

Date Collected: 07/05/16 12:10
Matrix: Water
Date Received: 07/06/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	309992	07/07/16 12:56	RRS	TAL BUF
Total/NA	Prep	3005A			309926	07/07/16 08:55	BAE	TAL BUF
Total/NA	Analysis	6010		1	310221	07/07/16 19:23	AMH	TAL BUF
Total/NA	Analysis	300.0		1	310196	07/08/16 14:06	CAV	TAL BUF
Total/NA	Analysis	300.0		10	310031	07/07/16 13:58	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			310158	07/07/16 20:47	CEA	TAL BUF
Total/NA	Analysis	350.1		2	310327	07/08/16 17:44	CEA	TAL BUF
Total/NA	Analysis	353.2		1	309953	07/06/16 16:28	CLT	TAL BUF
Total/NA	Analysis	9040C		1	310078	07/07/16 11:26	ELR	TAL BUF
Total/NA	Analysis	9060A		1	310699	07/11/16 15:27	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	309990	07/06/16 18:27	EKB	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	309911	07/06/16 11:33	ELR	TAL BUF

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Client Sample ID: MW-563-20160705

Lab Sample ID: 480-102619-6

Date Collected: 07/05/16 12:55
Matrix: Water
Date Received: 07/06/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	309931	07/07/16 03:38	GTG	TAL BUF
Total/NA	Prep	3005A			309926	07/07/16 08:55	BAE	TAL BUF
Total/NA	Analysis	6010		1	310221	07/07/16 19:27	AMH	TAL BUF
Total/NA	Analysis	300.0		1	310196	07/08/16 14:21	CAV	TAL BUF
Total/NA	Analysis	300.0		5	310031	07/07/16 14:07	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			310158	07/07/16 20:47	CEA	TAL BUF
Total/NA	Analysis	350.1		1	310327	07/08/16 17:23	CEA	TAL BUF
Total/NA	Analysis	353.2		1	309953	07/06/16 16:29	CLT	TAL BUF
Total/NA	Analysis	9040C		1	310078	07/07/16 11:29	ELR	TAL BUF
Total/NA	Analysis	9060A		1	310276	07/08/16 09:47	DLG	TAL BUF
Total/NA	Analysis	SM 2320B		1	309990	07/06/16 18:33	EKB	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	309911	07/06/16 11:33	ELR	TAL BUF

Client Sample ID: DUP1-20160705

Lab Sample ID: 480-102619-7

Date Collected: 07/05/16 00:00
Matrix: Water
Date Received: 07/06/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	309992	07/07/16 13:21	RRS	TAL BUF

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-102619-8

Date Collected: 07/05/16 00:00
Matrix: Water
Date Received: 07/06/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	309931	07/07/16 04:28	GTG	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-17
California	State Program	9	1169CA	09-30-17
Connecticut	State Program	1	PH-0568	09-30-16
Florida	NELAP	4	E87672	06-30-16 *
Georgia	State Program	4	N/A	03-31-17
Georgia	State Program	4	956	03-31-17
Illinois	NELAP	5	200003	09-30-16
Iowa	State Program	7	374	03-01-17
Kentucky (DW)	State Program	4	90029	12-31-16
Kentucky (UST)	State Program	4	30	03-31-17
Kentucky (WW)	State Program	4	90029	12-31-16
Louisiana	NELAP	6	02031	06-30-17
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-17
Massachusetts	State Program	1	M-NY044	06-30-17
Michigan	State Program	5	9937	03-31-16 *
Minnesota	NELAP	5	036-999-337	12-31-16
New Hampshire	NELAP Primary AB	1	2973	09-11-16
New Hampshire	NELAP Secondary AB	1	2337	11-17-16
New Jersey	NELAP	2	NY455	06-30-17
New York	NELAP	2	10026	03-31-17
North Dakota	State Program	8	R-176	03-31-17
Oklahoma	State Program	6	9421	08-31-16
Oregon	NELAP	10	NY200003	06-09-17
Pennsylvania	NELAP	3	68-00281	07-31-16 *
Rhode Island	State Program	1	LAO00328	12-30-16
Tennessee	State Program	4	TN02970	03-31-17
Texas	NELAP	6	T104704412-15-6	07-31-16 *
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-16
Washington	State Program	10	C784	02-10-17
West Virginia DEP	State Program	3	252	09-30-16
Wisconsin	State Program	5	998310390	08-31-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
9040C	pH	SW846	TAL BUF
9060A	Organic Carbon, Total (TOC)	SW846	TAL BUF
SM 2320B	Alkalinity	SM	TAL BUF
SM 4500 P E	Orthophosphate	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102619-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-102619-1	MW-267S-20160705	Water	07/05/16 10:50	07/06/16 09:45
480-102619-2	MW-267M-20160705	Water	07/05/16 11:30	07/06/16 09:45
480-102619-3	MW-268S-20160705	Water	07/05/16 09:15	07/06/16 09:45
480-102619-4	MW-268M-20160705	Water	07/05/16 09:55	07/06/16 09:45
480-102619-5	MW-561-20160705	Water	07/05/16 12:10	07/06/16 09:45
480-102619-6	MW-563-20160705	Water	07/05/16 12:55	07/06/16 09:45
480-102619-7	DUP1-20160705	Water	07/05/16 00:00	07/06/16 09:45
480-102619-8	TRIP BLANK	Water	07/05/16 00:00	07/06/16 09:45

Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 480-102619-1

Login Number: 102619

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	IES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

360325-Boston

360325-Boston

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road -- Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:	Sample Collector's Name (Please Print Neatly): Dany Soors	Lab PM:	Lab COC Barcode Label	COC No: 36966
Client Contact: Vicki Perryman	Sample Collector's Phone: 508-628-0023	E-Mail:		Page: 1 of 1
Company: Innovative Engineering Solutions Inc				Job #:
Address: 25 Spring St	Due Date Requested: 7/13/16			
City: Walpole	Turnaround Time (TAT) Requested (business days): 5 day			
State and Zip: MA 02081				
Client's Phone: 508-628-0033	Quote # or Project #:			
Client's Contact Email: vperryman@IESIonline.com	PO #: RA-008			
Client's Project Name/Number: Raytheon Wayland RA-008	WO #:			
Sample Collection Site Name & Location: Wayland MA	PWS ID #:			

480-102619 Chain of Custody

Analysis Requested

Preservation Codes: Deionized Water; ative; lfate; lfite; iosulfate; id; cify)

Regulatory Programs: MCP ☐ GW1/S1 ☐ RCP ☐ CT RSR ☐ DEP Form ☐ EDD Required ☐ eDEP Filing ☐ NPDES ☐

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit Test-America to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	8260 MCP	9060A TOC	8330B Alkalinity	Lab Filt Total Metals 6010B	Lab Filt Dissolved Metals 6010B	NO3, NO2, Ortho Phos 353.1	NH3 350.1	SO4, Cl, Hardness 300.0								Total Number of Containers	Special Instructions & Notes:
			Preservation Codes →		N	A	N	N	N	N	N									↓	
MW-267S-20160705	7/5/16	1050	G	W	X	X	X	X	X	X	X									10	
MW-267M-20160705	7/5/16	1130	G	W	X	X	X	X	X	X	X									10	
MW-268S-20160705	7/5/16	0915	G	W	X	X	X	X	X	X	X									10	
MW-268M-20160705	7/5/16	0955	G	W	X	X	X	X	X	X	X									10	
MW-561-20160705	7/5/16	1210	G	W	X	X	X	X	X	X	X									10	
MW-563-20160705	7/5/16	1255	G	W	X	X	X	X	X	X	X									10	
Dupl-20160705	7/5/16	—	G	W	X	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~									3	
Trip Blanks	—	—	—	W	X															2	

Possible Hazard Identification (please check off each that may apply):
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month) :
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

**** Matrix Types:** A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◄

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	7/5/16 1355	IESI		7-5- 1355	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	7-5-16 1700	TA		7/6/16 0945	TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: #1 2.9

7/13/2016

WI-QA-010 rev 8

Revised 10/29/2014
TAL-8245-360R

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-102681-1
Client Project/Site: IDS Wayland

For:
Innovative Engineering Solutions, Inc
25 Spring Street
Walpole, Massachusetts 02081

Attn: Vicki Pariyar

Authorized for release by:
7/13/2016 11:13:57 AM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

LINKS

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Visit us at: www.testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-102681-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-102681-1

Comments
No additional comments.

Receipt
The samples were received on 7/7/2016 2:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9º C.

GC/MS VOA
Method 8260C: Due to the dilutions required, per question G on the MassDEP Analytical Protocol Certification Form, the CAM reporting limits specified in this CAM protocol could not be achieved for some or all samples/analytes.

Method 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-dibromo-3-chloropropane, Carbon Disulfide, Isopropyl Ether, Naphthalene, tert-Amyl Methyl Ether and Tetrahydrofuran.

Method(s) 8260C: The continuing calibration verification (CCV) for Carbon Disulfide associated with batch 480-309992 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following samples were affected : MW-265M-20160706 (480-102681-1), MW-562-20160706 (480-102681-2), REW-8-20160706 (480-102681-4), REW-11-20160706 (480-102681-5), REW-12-20160706 (480-102681-6) and TRIP BLANKS (480-102681-8).

Method(s) 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-309992 exceeded control limits for the following analytes: Carbon disulfide and Dichlorodifluoromethane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-265M-20160706 (480-102681-1), MW-562-20160706 (480-102681-2), REW-8-20160706 (480-102681-4), REW-11-20160706 (480-102681-5), REW-12-20160706 (480-102681-6) and TRIP BLANKS (480-102681-8).

Method(s) 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-309992 exceeded control limits for the following analyte: 2-Hexanone . Unlike the calibration standards, this is due to the coelution with n-butyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : MW-265M-20160706 (480-102681-1), MW-562-20160706 (480-102681-2), REW-8-20160706 (480-102681-4), REW-11-20160706 (480-102681-5), REW-12-20160706 (480-102681-6) and TRIP BLANKS (480-102681-8).

Method(s) 8260C: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: MW-265M-20160706 (480-102681-1). The sample was analyzed within 7 days per EPA recommendation.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-265M-20160706 (480-102681-1) and REW-12-20160706 (480-102681-6). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was diluted due to the abundance of non-target analytes: MW-562-20160706 (480-102681-2). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) for Naphthalene and Dichlorodifluoromethane associated with batch 480-310121 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples were affected : REW-7-20160706 (480-102681-3) and DUP2-20160706 (480-102681-7).

Method(s) 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-310121 exceeded control limits for the following analyte: 2-Hexanone. Unlike the calibration standards, this is due to the coelution with N-Butyl

Job ID: 480-102681-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : REW-7-20160706 (480-102681-3) and DUP2-20160706 (480-102681-7).

Method(s) 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-310121 exceeded control limits for the following analyte: Dichlorodifluoromethane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : REW-7-20160706 (480-102681-3) and DUP2-20160706 (480-102681-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HPLC/IC
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method 6010C: At the request of the client, an abbreviated MCP compound list was reported for this job.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: MW-265M-20160706 (480-102681-1), MW-562-20160706 (480-102681-2), REW-7-20160706 (480-102681-3), REW-8-20160706 (480-102681-4), REW-11-20160706 (480-102681-5) and REW-12-20160706 (480-102681-6).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-102681-1**

Project Location: **Wayland** RTN:

This form provides certifications for the following data set: list Laboratory Sample ID Number(s):

480-102681-1(1-8)

Matrices: [x] Groundwater/Surface Water [ ] Soil/Sediment [ ] Drinking Water [ ] Air [ ] Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A [x]	7470/7471 Hg CAM III B	Mass DEP VPH CAM IV A [ ]	8081 Pesticides CAM V B [ ]	7196 Hex Cr CAM VI B [ ]	Mass DEP APH CAM IX A [ ]
8270 SVOC CAM II B [ ]	7010 Metals CAM III C [ ]	Mass DEP EPH CAM IV B [ ]	8151 Herbicides CAM V C [ ]	8330 Explosives CAM VIII A [ ]	TO-15 VOC CAM IX B [ ]
6010 Metals CAM III A [x]	6020 Metals CAM III D [ ]	8082 PCB CAM V A [ ]	9014 Total Cyanide/PAC CAM VI A [ ]	6860 Perchlorate CAM VIII B [ ]	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	[x] Yes [ ] No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	[x] Yes [ ] No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	[x] Yes [ ] No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	[x] Yes [ ] No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	[ ] Yes [ ] No [ ] Yes [ ] No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	[x] Yes [ ] No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	[ ] Yes [x] No[1]

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350***

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	[ ] Yes [x] No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	[ ] Yes [x] No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: Position: Project Management Assistant

Printed Name: Rebecca Jones Date: 7/13/16 11:13

Detection Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: MW-265M-20160706 — Lab Sample ID: 480-102681-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	100		50		ug/L	5		8260C	Total/NA
Acetone	600		250		ug/L	5		8260C	Total/NA
m-Xylene & p-Xylene	11		10		ug/L	5		8260C	Total/NA
Toluene	7.9		5.0		ug/L	5		8260C	Total/NA
Vinyl chloride	5.7		5.0		ug/L	5		8260C	Total/NA
Iron	390		0.050		mg/L	1		6010	Total/NA
Chloride	64		5.0		mg/L	10		300.0	Total/NA
Ammonia	0.20		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	1200		10		mg/L	10		9060A	Total/NA
TOC Result 2	1100		10		mg/L	10		9060A	Total/NA
Total Organic Carbon - Duplicates	1100		10		mg/L	10		9060A	Total/NA
Alkalinity, Total	720		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.24		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	5.30	HF	0.100		SU	1		9040C	Total/NA

Client Sample ID: MW-562-20160706 — Lab Sample ID: 480-102681-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	200		40		ug/L	4		8260C	Total/NA
cis-1,2-Dichloroethene	8.4		4.0		ug/L	4		8260C	Total/NA
Toluene	13		4.0		ug/L	4		8260C	Total/NA
Vinyl chloride	4.3		4.0		ug/L	4		8260C	Total/NA
Iron	260		0.050		mg/L	1		6010	Total/NA
Chloride	37		5.0		mg/L	10		300.0	Total/NA
Ammonia	2.6		0.40		mg/L	2		350.1	Total/NA
TOC Result 1	580		10		mg/L	10		9060A	Total/NA
TOC Result 2	590		10		mg/L	10		9060A	Total/NA
Total Organic Carbon - Duplicates	580		10		mg/L	10		9060A	Total/NA
Alkalinity, Total	580		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.79		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.46	HF	0.100		SU	1		9040C	Total/NA

Client Sample ID: REW-7-20160706 — Lab Sample ID: 480-102681-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	70		10		ug/L	1		8260C	Total/NA
Acetone	50		50		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	30		1.0		ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	2.2		2.0		ug/L	1		8260C	Total/NA
Toluene	83		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	23		1.0		ug/L	1		8260C	Total/NA
Iron	62		0.050		mg/L	1		6010	Total/NA
Chloride	24		2.5		mg/L	5		300.0	Total/NA
Ammonia	0.40		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	75		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	74		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	74		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	220		5.0		mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: REW-7-20160706 (Continued) — Lab Sample ID: 480-102681-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
ortho-Phosphate	0.15		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.79	HF	0.100		SU	1		9040C	Total/NA

Client Sample ID: REW-8-20160706 — Lab Sample ID: 480-102681-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	37		10		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	4.1		1.0		ug/L	1		8260C	Total/NA
Toluene	31		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	3.9		1.0		ug/L	1		8260C	Total/NA
Iron	66		0.050		mg/L	1		6010	Total/NA
Chloride	32		2.5		mg/L	5		300.0	Total/NA
Ammonia	0.23		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	80		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	79		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	79		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	240		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.22		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.80	HF	0.100		SU	1		9040C	Total/NA

Client Sample ID: REW-11-20160706 — Lab Sample ID: 480-102681-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	32		10		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	32		1.0		ug/L	1		8260C	Total/NA
Toluene	24		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	4.8		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	13		1.0		ug/L	1		8260C	Total/NA
Iron	68		0.050		mg/L	1		6010	Total/NA
Chloride	51		2.5		mg/L	5		300.0	Total/NA
Sulfate	18		10		mg/L	5		300.0	Total/NA
Ammonia	0.81		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	200		5.0		mg/L	5		9060A	Total/NA
TOC Result 2	190		5.0		mg/L	5		9060A	Total/NA
Total Organic Carbon - Duplicates	200		5.0		mg/L	5		9060A	Total/NA
Alkalinity, Total	150		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.23		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.74	HF	0.100		SU	1		9040C	Total/NA

Client Sample ID: REW-12-20160706 — Lab Sample ID: 480-102681-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	38		20		ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	58		2.0		ug/L	2		8260C	Total/NA
Toluene	33		2.0		ug/L	2		8260C	Total/NA
Trichloroethene	5.9		2.0		ug/L	2		8260C	Total/NA
Vinyl chloride	21		2.0		ug/L	2		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: REW-12-20160706 (Continued) — Lab Sample ID: 480-102681-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	99		0.050		mg/L	1		6010	Total/NA
Chloride	40		2.5		mg/L	5		300.0	Total/NA
Sulfate	15		10		mg/L	5		300.0	Total/NA
Ammonia	0.45		0.20		mg/L	1		350.1	Total/NA
TOC Result 1	150		5.0		mg/L	5		9060A	Total/NA
TOC Result 2	160		5.0		mg/L	5		9060A	Total/NA
Total Organic Carbon - Duplicates	160		5.0		mg/L	5		9060A	Total/NA
Alkalinity, Total	200		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.15		0.020		mg/L	1		SM 4500 P E	Total/NA

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.65	HF	0.100		SU	1		9040C	Total/NA

Client Sample ID: DUP2-20160706 — Lab Sample ID: 480-102681-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	70		10		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	29		1.0		ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	2.0		2.0		ug/L	1		8260C	Total/NA
Toluene	77		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	20		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: TRIP BLANKS — Lab Sample ID: 480-102681-8

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: MW-265M-20160706

Lab Sample ID: 480-102681-1

Date Collected: 07/06/16 11:35
Matrix: Water
Date Received: 07/07/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			07/07/16 13:46	5
1,1,1-Trichloroethane	ND		5.0		ug/L			07/07/16 13:46	5
1,1,2,2-Tetrachloroethane	ND		2.5		ug/L			07/07/16 13:46	5
1,1,2-Trichloroethane	ND		5.0		ug/L			07/07/16 13:46	5
1,1-Dichloroethane	ND		5.0		ug/L			07/07/16 13:46	5
1,1-Dichloroethene	ND		5.0		ug/L			07/07/16 13:46	5
1,1-Dichloropropene	ND		5.0		ug/L			07/07/16 13:46	5
1,2,3-Trichlorobenzene	ND		5.0		ug/L			07/07/16 13:46	5
1,2,3-Trichloropropane	ND		5.0		ug/L			07/07/16 13:46	5
1,2,4-Trichlorobenzene	ND		5.0		ug/L			07/07/16 13:46	5
1,2,4-Trimethylbenzene	ND		5.0		ug/L			07/07/16 13:46	5
1,2-Dibromo-3-Chloropropane	ND		25		ug/L			07/07/16 13:46	5
1,2-Dichlorobenzene	ND		5.0		ug/L			07/07/16 13:46	5
1,2-Dichloroethane	ND		5.0		ug/L			07/07/16 13:46	5
1,2-Dichloropropane	ND		5.0		ug/L			07/07/16 13:46	5
1,3,5-Trimethylbenzene	ND		5.0		ug/L			07/07/16 13:46	5
1,3-Dichlorobenzene	ND		5.0		ug/L			07/07/16 13:46	5
1,3-Dichloropropane	ND		5.0		ug/L			07/07/16 13:46	5
1,4-Dichlorobenzene	ND		5.0		ug/L			07/07/16 13:46	5
1,4-Dioxane	ND		250		ug/L			07/07/16 13:46	5
2,2-Dichloropropane	ND		5.0		ug/L			07/07/16 13:46	5
2-Butanone (MEK)	**100**		50		ug/L			07/07/16 13:46	5
2-Chlorotoluene	ND		5.0		ug/L			07/07/16 13:46	5
2-Hexanone	ND	*	50		ug/L			07/07/16 13:46	5
4-Chlorotoluene	ND		5.0		ug/L			07/07/16 13:46	5
4-Isopropyltoluene	ND		5.0		ug/L			07/07/16 13:46	5
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			07/07/16 13:46	5
Acetone	**600**		250		ug/L			07/07/16 13:46	5
Benzene	ND		5.0		ug/L			07/07/16 13:46	5
Bromobenzene	ND		5.0		ug/L			07/07/16 13:46	5
Bromoform	ND		5.0		ug/L			07/07/16 13:46	5
Bromomethane	ND		10		ug/L			07/07/16 13:46	5
Carbon disulfide	ND	*	50		ug/L			07/07/16 13:46	5
Carbon tetrachloride	ND		5.0		ug/L			07/07/16 13:46	5
Chlorobenzene	ND		5.0		ug/L			07/07/16 13:46	5
Chlorobromomethane	ND		5.0		ug/L			07/07/16 13:46	5
Chlorodibromomethane	ND		2.5		ug/L			07/07/16 13:46	5
Chloroethane	ND		10		ug/L			07/07/16 13:46	5
Chloroform	ND		5.0		ug/L			07/07/16 13:46	5
Chloromethane	ND		10		ug/L			07/07/16 13:46	5
cis-1,2-Dichloroethene	ND		5.0		ug/L			07/07/16 13:46	5
cis-1,3-Dichloropropene	ND		2.0		ug/L			07/07/16 13:46	5
Dichlorobromomethane	ND		2.5		ug/L			07/07/16 13:46	5
Dichlorodifluoromethane	ND	*	5.0		ug/L			07/07/16 13:46	5
Ethyl ether	ND		5.0		ug/L			07/07/16 13:46	5
Ethylbenzene	ND		5.0		ug/L			07/07/16 13:46	5
Ethylene Dibromide	ND		5.0		ug/L			07/07/16 13:46	5
Hexachlorobutadiene	ND		2.0		ug/L			07/07/16 13:46	5
Isopropyl ether	ND		50		ug/L			07/07/16 13:46	5

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: MW-265M-20160706

Lab Sample ID: 480-102681-1

Date Collected: 07/06/16 11:35

Matrix: Water

Date Received: 07/07/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0		ug/L			07/07/16 13:46	5
Methyl tert-butyl ether	ND		5.0		ug/L			07/07/16 13:46	5
Methylene Chloride	ND		5.0		ug/L			07/07/16 13:46	5
m-Xylene & p-Xylene	**11**		10		ug/L			07/07/16 13:46	5
Naphthalene	ND		25		ug/L			07/07/16 13:46	5
n-Butylbenzene	ND		5.0		ug/L			07/07/16 13:46	5
N-Propylbenzene	ND		5.0		ug/L			07/07/16 13:46	5
o-Xylene	ND		5.0		ug/L			07/07/16 13:46	5
sec-Butylbenzene	ND		5.0		ug/L			07/07/16 13:46	5
Styrene	ND		5.0		ug/L			07/07/16 13:46	5
Tert-amyl methyl ether	ND		25		ug/L			07/07/16 13:46	5
Tert-butyl ethyl ether	ND		25		ug/L			07/07/16 13:46	5
tert-Butylbenzene	ND		5.0		ug/L			07/07/16 13:46	5
Tetrachloroethene	ND		5.0		ug/L			07/07/16 13:46	5
Tetrahydrofuran	ND		50		ug/L			07/07/16 13:46	5
Toluene	**7.9**		5.0		ug/L			07/07/16 13:46	5
trans-1,2-Dichloroethene	ND		5.0		ug/L			07/07/16 13:46	5
trans-1,3-Dichloropropene	ND		2.0		ug/L			07/07/16 13:46	5
Trichloroethene	ND		5.0		ug/L			07/07/16 13:46	5
Trichlorofluoromethane	ND		5.0		ug/L			07/07/16 13:46	5
Vinyl chloride	**5.7**		5.0		ug/L			07/07/16 13:46	5
Dibromomethane	ND		5.0		ug/L			07/07/16 13:46	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/07/16 13:46*	*5*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*07/07/16 13:46*	*5*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*07/07/16 13:46*	*5*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**390**		0.050		mg/L		07/07/16 08:55	07/07/16 20:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**64**		5.0		mg/L			07/08/16 14:19	10
Sulfate	ND		20		mg/L			07/08/16 14:19	10
Ammonia	**0.20**		0.20		mg/L		07/07/16 20:52	07/08/16 17:39	1
Nitrate as N	ND		0.050		mg/L			07/07/16 11:08	1
TOC Result 1	**1200**		10		mg/L			07/07/16 22:35	10
TOC Result 2	**1100**		10		mg/L			07/07/16 22:35	10
Total Organic Carbon - Duplicates	**1100**		10		mg/L			07/07/16 22:35	10
Alkalinity, Total	**720**		5.0		mg/L			07/07/16 17:43	1
ortho-Phosphate	**0.24**		0.020		mg/L			07/07/16 11:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.30**	**HF**	0.100		SU			07/07/16 11:52	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: MW-562-20160706

Date Collected: 07/06/16 10:55
Date Received: 07/07/16 02:00

Lab Sample ID: 480-102681-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.0		ug/L			07/07/16 14:12	4
1,1,1-Trichloroethane	ND		4.0		ug/L			07/07/16 14:12	4
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L			07/07/16 14:12	4
1,1,2-Trichloroethane	ND		4.0		ug/L			07/07/16 14:12	4
1,1-Dichloroethane	ND		4.0		ug/L			07/07/16 14:12	4
1,1-Dichloroethene	ND		4.0		ug/L			07/07/16 14:12	4
1,1-Dichloropropene	ND		4.0		ug/L			07/07/16 14:12	4
1,2,3-Trichlorobenzene	ND		4.0		ug/L			07/07/16 14:12	4
1,2,3-Trichloropropane	ND		4.0		ug/L			07/07/16 14:12	4
1,2,4-Trichlorobenzene	ND		4.0		ug/L			07/07/16 14:12	4
1,2,4-Trimethylbenzene	ND		4.0		ug/L			07/07/16 14:12	4
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			07/07/16 14:12	4
1,2-Dichlorobenzene	ND		4.0		ug/L			07/07/16 14:12	4
1,2-Dichloroethane	ND		4.0		ug/L			07/07/16 14:12	4
1,2-Dichloropropane	ND		4.0		ug/L			07/07/16 14:12	4
1,3,5-Trimethylbenzene	ND		4.0		ug/L			07/07/16 14:12	4
1,3-Dichlorobenzene	ND		4.0		ug/L			07/07/16 14:12	4
1,3-Dichloropropane	ND		4.0		ug/L			07/07/16 14:12	4
1,4-Dichlorobenzene	ND		4.0		ug/L			07/07/16 14:12	4
1,4-Dioxane	ND		200		ug/L			07/07/16 14:12	4
2,2-Dichloropropane	ND		4.0		ug/L			07/07/16 14:12	4
2-Butanone (MEK)	**200**		40		ug/L			07/07/16 14:12	4
2-Chlorotoluene	ND		4.0		ug/L			07/07/16 14:12	4
2-Hexanone	ND	*	40		ug/L			07/07/16 14:12	4
4-Chlorotoluene	ND		4.0		ug/L			07/07/16 14:12	4
4-Isopropyltoluene	ND		4.0		ug/L			07/07/16 14:12	4
4-Methyl-2-pentanone (MIBK)	ND		40		ug/L			07/07/16 14:12	4
Acetone	ND		200		ug/L			07/07/16 14:12	4
Benzene	ND		4.0		ug/L			07/07/16 14:12	4
Bromobenzene	ND		4.0		ug/L			07/07/16 14:12	4
Bromoform	ND		4.0		ug/L			07/07/16 14:12	4
Bromomethane	ND		8.0		ug/L			07/07/16 14:12	4
Carbon disulfide	ND	*	40		ug/L			07/07/16 14:12	4
Carbon tetrachloride	ND		4.0		ug/L			07/07/16 14:12	4
Chlorobenzene	ND		4.0		ug/L			07/07/16 14:12	4
Chlorobromomethane	ND		4.0		ug/L			07/07/16 14:12	4
Chlorodibromomethane	ND		2.0		ug/L			07/07/16 14:12	4
Chloroethane	ND		8.0		ug/L			07/07/16 14:12	4
Chloroform	ND		4.0		ug/L			07/07/16 14:12	4
Chloromethane	ND		8.0		ug/L			07/07/16 14:12	4
cis-1,2-Dichloroethene	**8.4**		4.0		ug/L			07/07/16 14:12	4
cis-1,3-Dichloropropene	ND		1.6		ug/L			07/07/16 14:12	4
Dichlorobromomethane	ND		2.0		ug/L			07/07/16 14:12	4
Dichlorodifluoromethane	ND	*	4.0		ug/L			07/07/16 14:12	4
Ethyl ether	ND		4.0		ug/L			07/07/16 14:12	4
Ethylbenzene	ND		4.0		ug/L			07/07/16 14:12	4
Ethylene Dibromide	ND		4.0		ug/L			07/07/16 14:12	4
Hexachlorobutadiene	ND		1.6		ug/L			07/07/16 14:12	4
Isopropyl ether	ND		40		ug/L			07/07/16 14:12	4

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: MW-562-20160706

Date Collected: 07/06/16 10:55
Date Received: 07/07/16 02:00

Lab Sample ID: 480-102681-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		4.0		ug/L			07/07/16 14:12	4
Methyl tert-butyl ether	ND		4.0		ug/L			07/07/16 14:12	4
Methylene Chloride	ND		4.0		ug/L			07/07/16 14:12	4
m-Xylene & p-Xylene	ND		8.0		ug/L			07/07/16 14:12	4
Naphthalene	ND		20		ug/L			07/07/16 14:12	4
n-Butylbenzene	ND		4.0		ug/L			07/07/16 14:12	4
N-Propylbenzene	ND		4.0		ug/L			07/07/16 14:12	4
o-Xylene	ND		4.0		ug/L			07/07/16 14:12	4
sec-Butylbenzene	ND		4.0		ug/L			07/07/16 14:12	4
Styrene	ND		4.0		ug/L			07/07/16 14:12	4
Tert-amyl methyl ether	ND		20		ug/L			07/07/16 14:12	4
Tert-butyl ethyl ether	ND		20		ug/L			07/07/16 14:12	4
tert-Butylbenzene	ND		4.0		ug/L			07/07/16 14:12	4
Tetrachloroethene	ND		4.0		ug/L			07/07/16 14:12	4
Tetrahydrofuran	ND		40		ug/L			07/07/16 14:12	4
Toluene	**13**		4.0		ug/L			07/07/16 14:12	4
trans-1,2-Dichloroethene	ND		4.0		ug/L			07/07/16 14:12	4
trans-1,3-Dichloropropene	ND		1.6		ug/L			07/07/16 14:12	4
Trichloroethene	ND		4.0		ug/L			07/07/16 14:12	4
Trichlorofluoromethane	ND		4.0		ug/L			07/07/16 14:12	4
Vinyl chloride	**4.3**		4.0		ug/L			07/07/16 14:12	4
Dibromomethane	ND		4.0		ug/L			07/07/16 14:12	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*70 - 130*		*07/07/16 14:12*	*4*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*07/07/16 14:12*	*4*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*07/07/16 14:12*	*4*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**260**		0.050		mg/L		07/07/16 08:55	07/07/16 20:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37**		5.0		mg/L			07/08/16 14:27	10
Sulfate	ND		20		mg/L			07/08/16 14:27	10
Ammonia	**2.6**		0.40		mg/L		07/07/16 20:52	07/08/16 17:48	2
Nitrate as N	ND		0.050		mg/L			07/07/16 11:07	1
TOC Result 1	**580**		10		mg/L			07/11/16 15:56	10
TOC Result 2	**590**		10		mg/L			07/11/16 15:56	10
Total Organic Carbon - Duplicates	**580**		10		mg/L			07/11/16 15:56	10
Alkalinity, Total	**580**		5.0		mg/L			07/07/16 17:52	1
ortho-Phosphate	**0.79**		0.020		mg/L			07/07/16 11:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.46**	**HF**	0.100		SU			07/07/16 11:55	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: REW-7-20160706

Lab Sample ID: 480-102681-3

Date Collected: 07/06/16 09:30

Matrix: Water

Date Received: 07/07/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 20:02	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/07/16 20:02	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/07/16 20:02	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/07/16 20:02	1
1,1-Dichloroethane	ND		1.0		ug/L			07/07/16 20:02	1
1,1-Dichloroethene	ND		1.0		ug/L			07/07/16 20:02	1
1,1-Dichloropropene	ND		1.0		ug/L			07/07/16 20:02	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/07/16 20:02	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/07/16 20:02	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/07/16 20:02	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/07/16 20:02	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/07/16 20:02	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/07/16 20:02	1
1,2-Dichloroethane	ND		1.0		ug/L			07/07/16 20:02	1
1,2-Dichloropropane	ND		1.0		ug/L			07/07/16 20:02	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/07/16 20:02	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/07/16 20:02	1
1,3-Dichloropropane	ND		1.0		ug/L			07/07/16 20:02	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/07/16 20:02	1
1,4-Dioxane	ND		50		ug/L			07/07/16 20:02	1
2,2-Dichloropropane	ND		1.0		ug/L			07/07/16 20:02	1
2-Butanone (MEK)	**70**		10		ug/L			07/07/16 20:02	1
2-Chlorotoluene	ND		1.0		ug/L			07/07/16 20:02	1
2-Hexanone	ND	*	10		ug/L			07/07/16 20:02	1
4-Chlorotoluene	ND		1.0		ug/L			07/07/16 20:02	1
4-Isopropyltoluene	ND		1.0		ug/L			07/07/16 20:02	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/07/16 20:02	1
Acetone	**50**		50		ug/L			07/07/16 20:02	1
Benzene	ND		1.0		ug/L			07/07/16 20:02	1
Bromobenzene	ND		1.0		ug/L			07/07/16 20:02	1
Bromoform	ND		1.0		ug/L			07/07/16 20:02	1
Bromomethane	ND		2.0		ug/L			07/07/16 20:02	1
Carbon disulfide	ND		10		ug/L			07/07/16 20:02	1
Carbon tetrachloride	ND		1.0		ug/L			07/07/16 20:02	1
Chlorobenzene	ND		1.0		ug/L			07/07/16 20:02	1
Chlorobromomethane	ND		1.0		ug/L			07/07/16 20:02	1
Chlorodibromomethane	ND		0.50		ug/L			07/07/16 20:02	1
Chloroethane	ND		2.0		ug/L			07/07/16 20:02	1
Chloroform	ND		1.0		ug/L			07/07/16 20:02	1
Chloromethane	ND		2.0		ug/L			07/07/16 20:02	1
cis-1,2-Dichloroethene	**30**		1.0		ug/L			07/07/16 20:02	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 20:02	1
Dichlorobromomethane	ND		0.50		ug/L			07/07/16 20:02	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			07/07/16 20:02	1
Ethyl ether	ND		1.0		ug/L			07/07/16 20:02	1
Ethylbenzene	ND		1.0		ug/L			07/07/16 20:02	1
Ethylene Dibromide	ND		1.0		ug/L			07/07/16 20:02	1
Hexachlorobutadiene	ND		0.40		ug/L			07/07/16 20:02	1
Isopropyl ether	ND		10		ug/L			07/07/16 20:02	1

Client Sample ID: REW-7-20160706

Lab Sample ID: 480-102681-3

Date Collected: 07/06/16 09:30

Matrix: Water

Date Received: 07/07/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			07/07/16 20:02	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/07/16 20:02	1
Methylene Chloride	ND		1.0		ug/L			07/07/16 20:02	1
m-Xylene & p-Xylene	**2.2**		2.0		ug/L			07/07/16 20:02	1
Naphthalene	ND		5.0		ug/L			07/07/16 20:02	1
n-Butylbenzene	ND		1.0		ug/L			07/07/16 20:02	1
N-Propylbenzene	ND		1.0		ug/L			07/07/16 20:02	1
o-Xylene	ND		1.0		ug/L			07/07/16 20:02	1
sec-Butylbenzene	ND		1.0		ug/L			07/07/16 20:02	1
Styrene	ND		1.0		ug/L			07/07/16 20:02	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/07/16 20:02	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/07/16 20:02	1
tert-Butylbenzene	ND		1.0		ug/L			07/07/16 20:02	1
Tetrachloroethene	ND		1.0		ug/L			07/07/16 20:02	1
Tetrahydrofuran	ND		10		ug/L			07/07/16 20:02	1
Toluene	**83**		1.0		ug/L			07/07/16 20:02	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 20:02	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 20:02	1
Trichloroethene	ND		1.0		ug/L			07/07/16 20:02	1
Trichlorofluoromethane	ND		1.0		ug/L			07/07/16 20:02	1
Vinyl chloride	**23**		1.0		ug/L			07/07/16 20:02	1
Dibromomethane	ND		1.0		ug/L			07/07/16 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*70 - 130*		*07/07/16 20:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*07/07/16 20:02*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*07/07/16 20:02*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**62**		0.050		mg/L		07/07/16 08:55	07/07/16 20:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**24**		2.5		mg/L			07/08/16 14:35	5
Sulfate	ND		10		mg/L			07/08/16 14:35	5
Ammonia	**0.40**		0.20		mg/L		07/07/16 20:52	07/08/16 17:41	1
Nitrate as N	ND		0.050		mg/L			07/07/16 11:03	1
TOC Result 1	**75**		1.0		mg/L			07/07/16 23:31	1
TOC Result 2	**74**		1.0		mg/L			07/07/16 23:31	1
Total Organic Carbon - Duplicates	**74**		1.0		mg/L			07/07/16 23:31	1
Alkalinity, Total	**220**		5.0		mg/L			07/07/16 17:58	1
ortho-Phosphate	**0.15**		0.020		mg/L			07/07/16 11:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.79**	**HF**	0.100		SU			07/07/16 11:58	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: REW-8-20160706

Date Collected: 07/06/16 08:40
Date Received: 07/07/16 02:00

Lab Sample ID: 480-102681-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 15:03	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/07/16 15:03	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/07/16 15:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/07/16 15:03	1
1,1-Dichloroethane	ND		1.0		ug/L			07/07/16 15:03	1
1,1-Dichloroethene	ND		1.0		ug/L			07/07/16 15:03	1
1,1-Dichloropropene	ND		1.0		ug/L			07/07/16 15:03	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/07/16 15:03	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/07/16 15:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/07/16 15:03	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/07/16 15:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/07/16 15:03	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/07/16 15:03	1
1,2-Dichloroethane	ND		1.0		ug/L			07/07/16 15:03	1
1,2-Dichloropropane	ND		1.0		ug/L			07/07/16 15:03	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/07/16 15:03	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/07/16 15:03	1
1,3-Dichloropropane	ND		1.0		ug/L			07/07/16 15:03	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/07/16 15:03	1
1,4-Dioxane	ND		50		ug/L			07/07/16 15:03	1
2,2-Dichloropropane	ND		1.0		ug/L			07/07/16 15:03	1
2-Butanone (MEK)	**37**		10		ug/L			07/07/16 15:03	1
2-Chlorotoluene	ND		1.0		ug/L			07/07/16 15:03	1
2-Hexanone	ND	*	10		ug/L			07/07/16 15:03	1
4-Chlorotoluene	ND		1.0		ug/L			07/07/16 15:03	1
4-Isopropyltoluene	ND		1.0		ug/L			07/07/16 15:03	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/07/16 15:03	1
Acetone	ND		50		ug/L			07/07/16 15:03	1
Benzene	ND		1.0		ug/L			07/07/16 15:03	1
Bromobenzene	ND		1.0		ug/L			07/07/16 15:03	1
Bromoform	ND		1.0		ug/L			07/07/16 15:03	1
Bromomethane	ND		2.0		ug/L			07/07/16 15:03	1
Carbon disulfide	ND	*	10		ug/L			07/07/16 15:03	1
Carbon tetrachloride	ND		1.0		ug/L			07/07/16 15:03	1
Chlorobenzene	ND		1.0		ug/L			07/07/16 15:03	1
Chlorobromomethane	ND		1.0		ug/L			07/07/16 15:03	1
Chlorodibromomethane	ND		0.50		ug/L			07/07/16 15:03	1
Chloroethane	ND		2.0		ug/L			07/07/16 15:03	1
Chloroform	ND		1.0		ug/L			07/07/16 15:03	1
Chloromethane	ND		2.0		ug/L			07/07/16 15:03	1
cis-1,2-Dichloroethene	**4.1**		1.0		ug/L			07/07/16 15:03	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 15:03	1
Dichlorobromomethane	ND		0.50		ug/L			07/07/16 15:03	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			07/07/16 15:03	1
Ethyl ether	ND		1.0		ug/L			07/07/16 15:03	1
Ethylbenzene	ND		1.0		ug/L			07/07/16 15:03	1
Ethylene Dibromide	ND		1.0		ug/L			07/07/16 15:03	1
Hexachlorobutadiene	ND		0.40		ug/L			07/07/16 15:03	1
Isopropyl ether	ND		10		ug/L			07/07/16 15:03	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: REW-8-20160706

Date Collected: 07/06/16 08:40
Date Received: 07/07/16 02:00

Lab Sample ID: 480-102681-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			07/07/16 15:03	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/07/16 15:03	1
Methylene Chloride	ND		1.0		ug/L			07/07/16 15:03	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/07/16 15:03	1
Naphthalene	ND		5.0		ug/L			07/07/16 15:03	1
n-Butylbenzene	ND		1.0		ug/L			07/07/16 15:03	1
N-Propylbenzene	ND		1.0		ug/L			07/07/16 15:03	1
o-Xylene	ND		1.0		ug/L			07/07/16 15:03	1
sec-Butylbenzene	ND		1.0		ug/L			07/07/16 15:03	1
Styrene	ND		1.0		ug/L			07/07/16 15:03	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/07/16 15:03	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/07/16 15:03	1
tert-Butylbenzene	ND		1.0		ug/L			07/07/16 15:03	1
Tetrachloroethene	ND		1.0		ug/L			07/07/16 15:03	1
Tetrahydrofuran	ND		10		ug/L			07/07/16 15:03	1
Toluene	**31**		1.0		ug/L			07/07/16 15:03	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 15:03	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 15:03	1
Trichloroethene	ND		1.0		ug/L			07/07/16 15:03	1
Trichlorofluoromethane	ND		1.0		ug/L			07/07/16 15:03	1
Vinyl chloride	**3.9**		1.0		ug/L			07/07/16 15:03	1
Dibromomethane	ND		1.0		ug/L			07/07/16 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*07/07/16 15:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*07/07/16 15:03*	*1*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*		*07/07/16 15:03*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**66**		0.050		mg/L		07/07/16 08:55	07/07/16 20:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**32**		2.5		mg/L			07/08/16 15:32	5
Sulfate	ND		10		mg/L			07/08/16 15:32	5
Ammonia	**0.23**		0.20		mg/L		07/07/16 20:52	07/08/16 17:41	1
Nitrate as N	ND		0.050		mg/L			07/07/16 11:02	1
TOC Result 1	**80**		1.0		mg/L			07/08/16 00:26	1
TOC Result 2	**79**		1.0		mg/L			07/08/16 00:26	1
Total Organic Carbon - Duplicates	**79**		1.0		mg/L			07/08/16 00:26	1
Alkalinity, Total	**240**		5.0		mg/L			07/07/16 18:06	1
ortho-Phosphate	**0.22**		0.020		mg/L			07/07/16 11:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.80**	**HF**	0.100		SU			07/07/16 12:01	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: REW-11-20160706

Date Collected: 07/06/16 10:15
Date Received: 07/07/16 02:00

Lab Sample ID: 480-102681-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 15:28	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/07/16 15:28	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/07/16 15:28	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/07/16 15:28	1
1,1-Dichloroethane	ND		1.0		ug/L			07/07/16 15:28	1
1,1-Dichloroethene	ND		1.0		ug/L			07/07/16 15:28	1
1,1-Dichloropropene	ND		1.0		ug/L			07/07/16 15:28	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/07/16 15:28	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/07/16 15:28	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/07/16 15:28	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/07/16 15:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/07/16 15:28	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/07/16 15:28	1
1,2-Dichloroethane	ND		1.0		ug/L			07/07/16 15:28	1
1,2-Dichloropropane	ND		1.0		ug/L			07/07/16 15:28	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/07/16 15:28	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/07/16 15:28	1
1,3-Dichloropropane	ND		1.0		ug/L			07/07/16 15:28	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/07/16 15:28	1
1,4-Dioxane	ND		50		ug/L			07/07/16 15:28	1
2,2-Dichloropropane	ND		1.0		ug/L			07/07/16 15:28	1
2-Butanone (MEK)	**32**		10		ug/L			07/07/16 15:28	1
2-Chlorotoluene	ND		1.0		ug/L			07/07/16 15:28	1
2-Hexanone	ND	*	10		ug/L			07/07/16 15:28	1
4-Chlorotoluene	ND		1.0		ug/L			07/07/16 15:28	1
4-Isopropyltoluene	ND		1.0		ug/L			07/07/16 15:28	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/07/16 15:28	1
Acetone	ND		50		ug/L			07/07/16 15:28	1
Benzene	ND		1.0		ug/L			07/07/16 15:28	1
Bromobenzene	ND		1.0		ug/L			07/07/16 15:28	1
Bromoform	ND		1.0		ug/L			07/07/16 15:28	1
Bromomethane	ND		2.0		ug/L			07/07/16 15:28	1
Carbon disulfide	ND	*	10		ug/L			07/07/16 15:28	1
Carbon tetrachloride	ND		1.0		ug/L			07/07/16 15:28	1
Chlorobenzene	ND		1.0		ug/L			07/07/16 15:28	1
Chlorobromomethane	ND		1.0		ug/L			07/07/16 15:28	1
Chlorodibromomethane	ND		0.50		ug/L			07/07/16 15:28	1
Chloroethane	ND		2.0		ug/L			07/07/16 15:28	1
Chloroform	ND		1.0		ug/L			07/07/16 15:28	1
Chloromethane	ND		2.0		ug/L			07/07/16 15:28	1
cis-1,2-Dichloroethene	**32**		1.0		ug/L			07/07/16 15:28	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 15:28	1
Dichlorobromomethane	ND		0.50		ug/L			07/07/16 15:28	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			07/07/16 15:28	1
Ethyl ether	ND		1.0		ug/L			07/07/16 15:28	1
Ethylbenzene	ND		1.0		ug/L			07/07/16 15:28	1
Ethylene Dibromide	ND		1.0		ug/L			07/07/16 15:28	1
Hexachlorobutadiene	ND		0.40		ug/L			07/07/16 15:28	1
Isopropyl ether	ND		10		ug/L			07/07/16 15:28	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: REW-11-20160706

Lab Sample ID: 480-102681-5

Date Collected: 07/06/16 10:15

Matrix: Water

Date Received: 07/07/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			07/07/16 15:28	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/07/16 15:28	1
Methylene Chloride	ND		1.0		ug/L			07/07/16 15:28	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/07/16 15:28	1
Naphthalene	ND		5.0		ug/L			07/07/16 15:28	1
n-Butylbenzene	ND		1.0		ug/L			07/07/16 15:28	1
N-Propylbenzene	ND		1.0		ug/L			07/07/16 15:28	1
o-Xylene	ND		1.0		ug/L			07/07/16 15:28	1
sec-Butylbenzene	ND		1.0		ug/L			07/07/16 15:28	1
Styrene	ND		1.0		ug/L			07/07/16 15:28	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/07/16 15:28	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/07/16 15:28	1
tert-Butylbenzene	ND		1.0		ug/L			07/07/16 15:28	1
Tetrachloroethene	ND		1.0		ug/L			07/07/16 15:28	1
Tetrahydrofuran	ND		10		ug/L			07/07/16 15:28	1
Toluene	**24**		1.0		ug/L			07/07/16 15:28	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 15:28	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 15:28	1
Trichloroethene	**4.8**		1.0		ug/L			07/07/16 15:28	1
Trichlorofluoromethane	ND		1.0		ug/L			07/07/16 15:28	1
Vinyl chloride	**13**		1.0		ug/L			07/07/16 15:28	1
Dibromomethane	ND		1.0		ug/L			07/07/16 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*70 - 130*		*07/07/16 15:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*07/07/16 15:28*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*07/07/16 15:28*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**68**		0.050		mg/L		07/07/16 08:55	07/07/16 20:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**51**		2.5		mg/L			07/08/16 15:40	5
Sulfate	**18**		10		mg/L			07/08/16 15:40	5
Ammonia	**0.81**		0.20		mg/L		07/07/16 20:52	07/08/16 17:42	1
Nitrate as N	ND		0.050		mg/L			07/07/16 11:05	1
TOC Result 1	**200**		5.0		mg/L			07/08/16 01:22	5
TOC Result 2	**190**		5.0		mg/L			07/08/16 01:22	5
Total Organic Carbon - Duplicates	**200**		5.0		mg/L			07/08/16 01:22	5
Alkalinity, Total	**150**		5.0		mg/L			07/07/16 18:12	1
ortho-Phosphate	**0.23**		0.020		mg/L			07/07/16 11:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.74**	**HF**	0.100		SU			07/07/16 12:04	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: REW-12-20160706

Date Collected: 07/06/16 08:05
Date Received: 07/07/16 02:00

Lab Sample ID: 480-102681-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			07/07/16 15:53	2
1,1,1-Trichloroethane	ND		2.0		ug/L			07/07/16 15:53	2
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 15:53	2
1,1,2-Trichloroethane	ND		2.0		ug/L			07/07/16 15:53	2
1,1-Dichloroethane	ND		2.0		ug/L			07/07/16 15:53	2
1,1-Dichloroethene	ND		2.0		ug/L			07/07/16 15:53	2
1,1-Dichloropropene	ND		2.0		ug/L			07/07/16 15:53	2
1,2,3-Trichlorobenzene	ND		2.0		ug/L			07/07/16 15:53	2
1,2,3-Trichloropropane	ND		2.0		ug/L			07/07/16 15:53	2
1,2,4-Trichlorobenzene	ND		2.0		ug/L			07/07/16 15:53	2
1,2,4-Trimethylbenzene	ND		2.0		ug/L			07/07/16 15:53	2
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			07/07/16 15:53	2
1,2-Dichlorobenzene	ND		2.0		ug/L			07/07/16 15:53	2
1,2-Dichloroethane	ND		2.0		ug/L			07/07/16 15:53	2
1,2-Dichloropropane	ND		2.0		ug/L			07/07/16 15:53	2
1,3,5-Trimethylbenzene	ND		2.0		ug/L			07/07/16 15:53	2
1,3-Dichlorobenzene	ND		2.0		ug/L			07/07/16 15:53	2
1,3-Dichloropropane	ND		2.0		ug/L			07/07/16 15:53	2
1,4-Dichlorobenzene	ND		2.0		ug/L			07/07/16 15:53	2
1,4-Dioxane	ND		100		ug/L			07/07/16 15:53	2
2,2-Dichloropropane	ND		2.0		ug/L			07/07/16 15:53	2
2-Butanone (MEK)	**38**		20		ug/L			07/07/16 15:53	2
2-Chlorotoluene	ND		2.0		ug/L			07/07/16 15:53	2
2-Hexanone	ND	*	20		ug/L			07/07/16 15:53	2
4-Chlorotoluene	ND		2.0		ug/L			07/07/16 15:53	2
4-Isopropyltoluene	ND		2.0		ug/L			07/07/16 15:53	2
4-Methyl-2-pentanone (MIBK)	ND		20		ug/L			07/07/16 15:53	2
Acetone	ND		100		ug/L			07/07/16 15:53	2
Benzene	ND		2.0		ug/L			07/07/16 15:53	2
Bromobenzene	ND		2.0		ug/L			07/07/16 15:53	2
Bromoform	ND		2.0		ug/L			07/07/16 15:53	2
Bromomethane	ND		4.0		ug/L			07/07/16 15:53	2
Carbon disulfide	ND	*	20		ug/L			07/07/16 15:53	2
Carbon tetrachloride	ND		2.0		ug/L			07/07/16 15:53	2
Chlorobenzene	ND		2.0		ug/L			07/07/16 15:53	2
Chlorobromomethane	ND		2.0		ug/L			07/07/16 15:53	2
Chlorodibromomethane	ND		1.0		ug/L			07/07/16 15:53	2
Chloroethane	ND		4.0		ug/L			07/07/16 15:53	2
Chloroform	ND		2.0		ug/L			07/07/16 15:53	2
Chloromethane	ND		4.0		ug/L			07/07/16 15:53	2
cis-1,2-Dichloroethene	**58**		2.0		ug/L			07/07/16 15:53	2
cis-1,3-Dichloropropene	ND		0.80		ug/L			07/07/16 15:53	2
Dichlorobromomethane	ND		1.0		ug/L			07/07/16 15:53	2
Dichlorodifluoromethane	ND	*	2.0		ug/L			07/07/16 15:53	2
Ethyl ether	ND		2.0		ug/L			07/07/16 15:53	2
Ethylbenzene	ND		2.0		ug/L			07/07/16 15:53	2
Ethylene Dibromide	ND		2.0		ug/L			07/07/16 15:53	2
Hexachlorobutadiene	ND		0.80		ug/L			07/07/16 15:53	2
Isopropyl ether	ND		20		ug/L			07/07/16 15:53	2

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: REW-12-20160706

Date Collected: 07/06/16 08:05
Date Received: 07/07/16 02:00

Lab Sample ID: 480-102681-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		2.0		ug/L			07/07/16 15:53	2
Methyl tert-butyl ether	ND		2.0		ug/L			07/07/16 15:53	2
Methylene Chloride	ND		2.0		ug/L			07/07/16 15:53	2
m-Xylene & p-Xylene	ND		4.0		ug/L			07/07/16 15:53	2
Naphthalene	ND		10		ug/L			07/07/16 15:53	2
n-Butylbenzene	ND		2.0		ug/L			07/07/16 15:53	2
N-Propylbenzene	ND		2.0		ug/L			07/07/16 15:53	2
o-Xylene	ND		2.0		ug/L			07/07/16 15:53	2
sec-Butylbenzene	ND		2.0		ug/L			07/07/16 15:53	2
Styrene	ND		2.0		ug/L			07/07/16 15:53	2
Tert-amyl methyl ether	ND		10		ug/L			07/07/16 15:53	2
Tert-butyl ethyl ether	ND		10		ug/L			07/07/16 15:53	2
tert-Butylbenzene	ND		2.0		ug/L			07/07/16 15:53	2
Tetrachloroethene	ND		2.0		ug/L			07/07/16 15:53	2
Tetrahydrofuran	ND		20		ug/L			07/07/16 15:53	2
Toluene	**33**		2.0		ug/L			07/07/16 15:53	2
trans-1,2-Dichloroethene	ND		2.0		ug/L			07/07/16 15:53	2
trans-1,3-Dichloropropene	ND		0.80		ug/L			07/07/16 15:53	2
Trichloroethene	**5.9**		2.0		ug/L			07/07/16 15:53	2
Trichlorofluoromethane	ND		2.0		ug/L			07/07/16 15:53	2
Vinyl chloride	**21**		2.0		ug/L			07/07/16 15:53	2
Dibromomethane	ND		2.0		ug/L			07/07/16 15:53	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*90*		*70 - 130*		*07/07/16 15:53*	*2*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*07/07/16 15:53*	*2*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*07/07/16 15:53*	*2*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**99**		0.050		mg/L		07/07/16 08:55	07/07/16 20:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**40**		2.5		mg/L			07/08/16 15:48	5
Sulfate	**15**		10		mg/L			07/08/16 15:48	5
Ammonia	**0.45**		0.20		mg/L		07/07/16 20:52	07/08/16 17:43	1
Nitrate as N	ND		0.050		mg/L			07/07/16 11:00	1
TOC Result 1	**150**		5.0		mg/L			07/11/16 16:24	5
TOC Result 2	**160**		5.0		mg/L			07/11/16 16:24	5
Total Organic Carbon - Duplicates	**160**		5.0		mg/L			07/11/16 16:24	5
Alkalinity, Total	**200**		5.0		mg/L			07/07/16 18:31	1
ortho-Phosphate	**0.15**		0.020		mg/L			07/07/16 11:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.65**	**HF**	0.100		SU			07/07/16 12:07	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: DUP2-20160706

Lab Sample ID: 480-102681-7

Date Collected: 07/06/16 00:00

Matrix: Water

Date Received: 07/07/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 20:28	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/07/16 20:28	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/07/16 20:28	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/07/16 20:28	1
1,1-Dichloroethane	ND		1.0		ug/L			07/07/16 20:28	1
1,1-Dichloroethene	ND		1.0		ug/L			07/07/16 20:28	1
1,1-Dichloropropene	ND		1.0		ug/L			07/07/16 20:28	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/07/16 20:28	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/07/16 20:28	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/07/16 20:28	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/07/16 20:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/07/16 20:28	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/07/16 20:28	1
1,2-Dichloroethane	ND		1.0		ug/L			07/07/16 20:28	1
1,2-Dichloropropane	ND		1.0		ug/L			07/07/16 20:28	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/07/16 20:28	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/07/16 20:28	1
1,3-Dichloropropane	ND		1.0		ug/L			07/07/16 20:28	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/07/16 20:28	1
1,4-Dioxane	ND		50		ug/L			07/07/16 20:28	1
2,2-Dichloropropane	ND		1.0		ug/L			07/07/16 20:28	1
2-Butanone (MEK)	**70**		10		ug/L			07/07/16 20:28	1
2-Chlorotoluene	ND		1.0		ug/L			07/07/16 20:28	1
2-Hexanone	ND	*	10		ug/L			07/07/16 20:28	1
4-Chlorotoluene	ND		1.0		ug/L			07/07/16 20:28	1
4-Isopropyltoluene	ND		1.0		ug/L			07/07/16 20:28	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/07/16 20:28	1
Acetone	ND		50		ug/L			07/07/16 20:28	1
Benzene	ND		1.0		ug/L			07/07/16 20:28	1
Bromobenzene	ND		1.0		ug/L			07/07/16 20:28	1
Bromoform	ND		1.0		ug/L			07/07/16 20:28	1
Bromomethane	ND		2.0		ug/L			07/07/16 20:28	1
Carbon disulfide	ND		10		ug/L			07/07/16 20:28	1
Carbon tetrachloride	ND		1.0		ug/L			07/07/16 20:28	1
Chlorobenzene	ND		1.0		ug/L			07/07/16 20:28	1
Chlorobromomethane	ND		1.0		ug/L			07/07/16 20:28	1
Chlorodibromomethane	ND		0.50		ug/L			07/07/16 20:28	1
Chloroethane	ND		2.0		ug/L			07/07/16 20:28	1
Chloroform	ND		1.0		ug/L			07/07/16 20:28	1
Chloromethane	ND		2.0		ug/L			07/07/16 20:28	1
cis-1,2-Dichloroethene	**29**		1.0		ug/L			07/07/16 20:28	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 20:28	1
Dichlorobromomethane	ND		0.50		ug/L			07/07/16 20:28	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			07/07/16 20:28	1
Ethyl ether	ND		1.0		ug/L			07/07/16 20:28	1
Ethylbenzene	ND		1.0		ug/L			07/07/16 20:28	1
Ethylene Dibromide	ND		1.0		ug/L			07/07/16 20:28	1
Hexachlorobutadiene	ND		0.40		ug/L			07/07/16 20:28	1
Isopropyl ether	ND		10		ug/L			07/07/16 20:28	1

Client Sample ID: DUP2-20160706

Lab Sample ID: 480-102681-7

Date Collected: 07/06/16 00:00
Matrix: Water
Date Received: 07/07/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			07/07/16 20:28	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/07/16 20:28	1
Methylene Chloride	ND		1.0		ug/L			07/07/16 20:28	1
m-Xylene & p-Xylene	**2.0**		2.0		ug/L			07/07/16 20:28	1
Naphthalene	ND		5.0		ug/L			07/07/16 20:28	1
n-Butylbenzene	ND		1.0		ug/L			07/07/16 20:28	1
N-Propylbenzene	ND		1.0		ug/L			07/07/16 20:28	1
o-Xylene	ND		1.0		ug/L			07/07/16 20:28	1
sec-Butylbenzene	ND		1.0		ug/L			07/07/16 20:28	1
Styrene	ND		1.0		ug/L			07/07/16 20:28	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/07/16 20:28	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/07/16 20:28	1
tert-Butylbenzene	ND		1.0		ug/L			07/07/16 20:28	1
Tetrachloroethene	ND		1.0		ug/L			07/07/16 20:28	1
Tetrahydrofuran	ND		10		ug/L			07/07/16 20:28	1
Toluene	**77**		1.0		ug/L			07/07/16 20:28	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 20:28	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 20:28	1
Trichloroethene	ND		1.0		ug/L			07/07/16 20:28	1
Trichlorofluoromethane	ND		1.0		ug/L			07/07/16 20:28	1
Vinyl chloride	**20**		1.0		ug/L			07/07/16 20:28	1
Dibromomethane	ND		1.0		ug/L			07/07/16 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*07/07/16 20:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*07/07/16 20:28*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*07/07/16 20:28*	*1*

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-102681-8

Date Collected: 07/06/16 00:00
Matrix: Water
Date Received: 07/07/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 11:43	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/07/16 11:43	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/07/16 11:43	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/07/16 11:43	1
1,1-Dichloroethane	ND		1.0		ug/L			07/07/16 11:43	1
1,1-Dichloroethene	ND		1.0		ug/L			07/07/16 11:43	1
1,1-Dichloropropene	ND		1.0		ug/L			07/07/16 11:43	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/07/16 11:43	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/07/16 11:43	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/07/16 11:43	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/07/16 11:43	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/07/16 11:43	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/07/16 11:43	1
1,2-Dichloroethane	ND		1.0		ug/L			07/07/16 11:43	1
1,2-Dichloropropane	ND		1.0		ug/L			07/07/16 11:43	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/07/16 11:43	1

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-102681-8

Date Collected: 07/06/16 00:00

Matrix: Water

Date Received: 07/07/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			07/07/16 11:43	1
1,3-Dichloropropane	ND		1.0		ug/L			07/07/16 11:43	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/07/16 11:43	1
1,4-Dioxane	ND		50		ug/L			07/07/16 11:43	1
2,2-Dichloropropane	ND		1.0		ug/L			07/07/16 11:43	1
2-Butanone (MEK)	ND		10		ug/L			07/07/16 11:43	1
2-Chlorotoluene	ND		1.0		ug/L			07/07/16 11:43	1
2-Hexanone	ND	*	10		ug/L			07/07/16 11:43	1
4-Chlorotoluene	ND		1.0		ug/L			07/07/16 11:43	1
4-Isopropyltoluene	ND		1.0		ug/L			07/07/16 11:43	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/07/16 11:43	1
Acetone	ND		50		ug/L			07/07/16 11:43	1
Benzene	ND		1.0		ug/L			07/07/16 11:43	1
Bromobenzene	ND		1.0		ug/L			07/07/16 11:43	1
Bromoform	ND		1.0		ug/L			07/07/16 11:43	1
Bromomethane	ND		2.0		ug/L			07/07/16 11:43	1
Carbon disulfide	ND	*	10		ug/L			07/07/16 11:43	1
Carbon tetrachloride	ND		1.0		ug/L			07/07/16 11:43	1
Chlorobenzene	ND		1.0		ug/L			07/07/16 11:43	1
Chlorobromomethane	ND		1.0		ug/L			07/07/16 11:43	1
Chlorodibromomethane	ND		0.50		ug/L			07/07/16 11:43	1
Chloroethane	ND		2.0		ug/L			07/07/16 11:43	1
Chloroform	ND		1.0		ug/L			07/07/16 11:43	1
Chloromethane	ND		2.0		ug/L			07/07/16 11:43	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 11:43	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 11:43	1
Dichlorobromomethane	ND		0.50		ug/L			07/07/16 11:43	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			07/07/16 11:43	1
Ethyl ether	ND		1.0		ug/L			07/07/16 11:43	1
Ethylbenzene	ND		1.0		ug/L			07/07/16 11:43	1
Ethylene Dibromide	ND		1.0		ug/L			07/07/16 11:43	1
Hexachlorobutadiene	ND		0.40		ug/L			07/07/16 11:43	1
Isopropyl ether	ND		10		ug/L			07/07/16 11:43	1
Isopropylbenzene	ND		1.0		ug/L			07/07/16 11:43	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/07/16 11:43	1
Methylene Chloride	ND		1.0		ug/L			07/07/16 11:43	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/07/16 11:43	1
Naphthalene	ND		5.0		ug/L			07/07/16 11:43	1
n-Butylbenzene	ND		1.0		ug/L			07/07/16 11:43	1
N-Propylbenzene	ND		1.0		ug/L			07/07/16 11:43	1
o-Xylene	ND		1.0		ug/L			07/07/16 11:43	1
sec-Butylbenzene	ND		1.0		ug/L			07/07/16 11:43	1
Styrene	ND		1.0		ug/L			07/07/16 11:43	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/07/16 11:43	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/07/16 11:43	1
tert-Butylbenzene	ND		1.0		ug/L			07/07/16 11:43	1
Tetrachloroethene	ND		1.0		ug/L			07/07/16 11:43	1
Tetrahydrofuran	ND		10		ug/L			07/07/16 11:43	1
Toluene	ND		1.0		ug/L			07/07/16 11:43	1

Client Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-102681-8

Date Collected: 07/06/16 00:00

Matrix: Water

Date Received: 07/07/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 11:43	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 11:43	1
Trichloroethene	ND		1.0		ug/L			07/07/16 11:43	1
Trichlorofluoromethane	ND		1.0		ug/L			07/07/16 11:43	1
Vinyl chloride	ND		1.0		ug/L			07/07/16 11:43	1
Dibromomethane	ND		1.0		ug/L			07/07/16 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*70 - 130*		*07/07/16 11:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*07/07/16 11:43*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*07/07/16 11:43*	*1*

Surrogate Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	12DCE	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
480-102681-1	MW-265M-20160706	96	110	91
480-102681-2	MW-562-20160706	93	107	91
480-102681-3	REW-7-20160706	92	100	93
480-102681-4	REW-8-20160706	91	105	88
480-102681-5	REW-11-20160706	92	107	90
480-102681-6	REW-12-20160706	90	110	90
480-102681-7	DUP2-20160706	91	101	93
480-102681-8	TRIP BLANKS	92	105	90
LCS 480-309992/5	Lab Control Sample	96	98	98
LCS 480-310121/5	Lab Control Sample	93	92	95
LCSD 480-309992/6	Lab Control Sample Dup	95	85	99
LCSD 480-310121/8	Lab Control Sample Dup	93	84	97
MB 480-309992/8	Method Blank	91	105	89
MB 480-310121/7	Method Blank	94	100	91

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-309992/8
Matrix: Water
Analysis Batch: 309992

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 11:17	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/07/16 11:17	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/07/16 11:17	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/07/16 11:17	1
1,1-Dichloroethane	ND		1.0		ug/L			07/07/16 11:17	1
1,1-Dichloroethene	ND		1.0		ug/L			07/07/16 11:17	1
1,1-Dichloropropene	ND		1.0		ug/L			07/07/16 11:17	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/07/16 11:17	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/07/16 11:17	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/07/16 11:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/07/16 11:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/07/16 11:17	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/07/16 11:17	1
1,2-Dichloroethane	ND		1.0		ug/L			07/07/16 11:17	1
1,2-Dichloropropane	ND		1.0		ug/L			07/07/16 11:17	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/07/16 11:17	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/07/16 11:17	1
1,3-Dichloropropane	ND		1.0		ug/L			07/07/16 11:17	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/07/16 11:17	1
1,4-Dioxane	ND		50		ug/L			07/07/16 11:17	1
2,2-Dichloropropane	ND		1.0		ug/L			07/07/16 11:17	1
2-Butanone (MEK)	ND		10		ug/L			07/07/16 11:17	1
2-Chlorotoluene	ND		1.0		ug/L			07/07/16 11:17	1
2-Hexanone	ND		10		ug/L			07/07/16 11:17	1
4-Chlorotoluene	ND		1.0		ug/L			07/07/16 11:17	1
4-Isopropyltoluene	ND		1.0		ug/L			07/07/16 11:17	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/07/16 11:17	1
Acetone	ND		50		ug/L			07/07/16 11:17	1
Benzene	ND		1.0		ug/L			07/07/16 11:17	1
Bromobenzene	ND		1.0		ug/L			07/07/16 11:17	1
Bromoform	ND		1.0		ug/L			07/07/16 11:17	1
Bromomethane	ND		2.0		ug/L			07/07/16 11:17	1
Carbon disulfide	ND		10		ug/L			07/07/16 11:17	1
Carbon tetrachloride	ND		1.0		ug/L			07/07/16 11:17	1
Chlorobenzene	ND		1.0		ug/L			07/07/16 11:17	1
Chlorobromomethane	ND		1.0		ug/L			07/07/16 11:17	1
Chlorodibromomethane	ND		0.50		ug/L			07/07/16 11:17	1
Chloroethane	ND		2.0		ug/L			07/07/16 11:17	1
Chloroform	ND		1.0		ug/L			07/07/16 11:17	1
Chloromethane	ND		2.0		ug/L			07/07/16 11:17	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 11:17	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 11:17	1
Dichlorobromomethane	ND		0.50		ug/L			07/07/16 11:17	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/07/16 11:17	1
Ethyl ether	ND		1.0		ug/L			07/07/16 11:17	1
Ethylbenzene	ND		1.0		ug/L			07/07/16 11:17	1
Ethylene Dibromide	ND		1.0		ug/L			07/07/16 11:17	1
Hexachlorobutadiene	ND		0.40		ug/L			07/07/16 11:17	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-309992/8
Matrix: Water
Analysis Batch: 309992

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			07/07/16 11:17	1
Isopropylbenzene	ND		1.0		ug/L			07/07/16 11:17	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/07/16 11:17	1
Methylene Chloride	ND		1.0		ug/L			07/07/16 11:17	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/07/16 11:17	1
Naphthalene	ND		5.0		ug/L			07/07/16 11:17	1
n-Butylbenzene	ND		1.0		ug/L			07/07/16 11:17	1
N-Propylbenzene	ND		1.0		ug/L			07/07/16 11:17	1
o-Xylene	ND		1.0		ug/L			07/07/16 11:17	1
sec-Butylbenzene	ND		1.0		ug/L			07/07/16 11:17	1
Styrene	ND		1.0		ug/L			07/07/16 11:17	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/07/16 11:17	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/07/16 11:17	1
tert-Butylbenzene	ND		1.0		ug/L			07/07/16 11:17	1
Tetrachloroethene	ND		1.0		ug/L			07/07/16 11:17	1
Tetrahydrofuran	ND		10		ug/L			07/07/16 11:17	1
Toluene	ND		1.0		ug/L			07/07/16 11:17	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 11:17	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 11:17	1
Trichloroethene	ND		1.0		ug/L			07/07/16 11:17	1
Trichlorofluoromethane	ND		1.0		ug/L			07/07/16 11:17	1
Vinyl chloride	ND		1.0		ug/L			07/07/16 11:17	1
Dibromomethane	ND		1.0		ug/L			07/07/16 11:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*07/07/16 11:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*07/07/16 11:17*	*1*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*		*07/07/16 11:17*	*1*

Lab Sample ID: LCS 480-309992/5
Matrix: Water
Analysis Batch: 309992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.5		ug/L		98	70 - 130
1,1,1-Trichloroethane	25.0	21.5		ug/L		86	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.9		ug/L		96	70 - 130
1,1,2-Trichloroethane	25.0	23.9		ug/L		96	70 - 130
1,1-Dichloroethane	25.0	22.7		ug/L		91	70 - 130
1,1-Dichloroethene	25.0	22.2		ug/L		89	70 - 130
1,1-Dichloropropene	25.0	23.5		ug/L		94	70 - 130
1,2,3-Trichlorobenzene	25.0	24.5		ug/L		98	70 - 130
1,2,3-Trichloropropane	25.0	24.8		ug/L		99	70 - 130
1,2,4-Trichlorobenzene	25.0	24.2		ug/L		97	70 - 130
1,2,4-Trimethylbenzene	25.0	27.0		ug/L		108	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	23.0		ug/L		92	70 - 130
1,2-Dichlorobenzene	25.0	23.3		ug/L		93	70 - 130
1,2-Dichloroethane	25.0	21.0		ug/L		84	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-309992/5
Matrix: Water
Analysis Batch: 309992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	23.1		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	25.0	25.9		ug/L		104	70 - 130
1,3-Dichlorobenzene	25.0	23.6		ug/L		94	70 - 130
1,3-Dichloropropane	25.0	24.1		ug/L		96	70 - 130
1,4-Dichlorobenzene	25.0	23.2		ug/L		93	70 - 130
1,4-Dioxane	500	449		ug/L		90	70 - 130
2,2-Dichloropropane	25.0	21.1		ug/L		85	70 - 130
2-Butanone (MEK)	125	127		ug/L		101	70 - 130
2-Chlorotoluene	25.0	27.2		ug/L		109	70 - 130
2-Hexanone	125	192	*	ug/L		154	70 - 130
4-Chlorotoluene	25.0	25.6		ug/L		103	70 - 130
4-Isopropyltoluene	25.0	27.1		ug/L		109	70 - 130
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		102	70 - 130
Acetone	125	122		ug/L		98	70 - 130
Benzene	25.0	22.4		ug/L		90	70 - 130
Bromobenzene	25.0	23.3		ug/L		93	70 - 130
Bromoform	25.0	26.3		ug/L		105	70 - 130
Bromomethane	25.0	22.7		ug/L		91	70 - 130
Carbon disulfide	25.0	16.4	*	ug/L		66	70 - 130
Carbon tetrachloride	25.0	22.7		ug/L		91	70 - 130
Chlorobenzene	25.0	23.8		ug/L		95	70 - 130
Chlorobromomethane	25.0	21.2		ug/L		85	70 - 130
Chlorodibromomethane	25.0	24.8		ug/L		99	70 - 130
Chloroethane	25.0	23.7		ug/L		95	70 - 130
Chloroform	25.0	21.5		ug/L		86	70 - 130
Chloromethane	25.0	20.6		ug/L		82	70 - 130
cis-1,2-Dichloroethene	25.0	22.2		ug/L		89	70 - 130
cis-1,3-Dichloropropene	25.0	24.3		ug/L		97	70 - 130
Dichlorobromomethane	25.0	22.7		ug/L		91	70 - 130
Dichlorodifluoromethane	25.0	20.3		ug/L		81	70 - 130
Ethyl ether	25.0	22.2		ug/L		89	70 - 130
Ethylbenzene	25.0	25.5		ug/L		102	70 - 130
Ethylene Dibromide	25.0	23.6		ug/L		94	70 - 130
Hexachlorobutadiene	25.0	24.5		ug/L		98	70 - 130
Isopropyl ether	25.0	25.6		ug/L		102	70 - 130
Isopropylbenzene	25.0	25.7		ug/L		103	70 - 130
Methyl tert-butyl ether	25.0	21.8		ug/L		87	70 - 130
Methylene Chloride	25.0	23.8		ug/L		95	70 - 130
m-Xylene & p-Xylene	25.0	26.1		ug/L		104	70 - 130
Naphthalene	25.0	21.2		ug/L		85	70 - 130
n-Butylbenzene	25.0	26.9		ug/L		108	70 - 130
N-Propylbenzene	25.0	25.5		ug/L		102	70 - 130
o-Xylene	25.0	26.1		ug/L		105	70 - 130
sec-Butylbenzene	25.0	26.0		ug/L		104	70 - 130
Styrene	25.0	27.2		ug/L		109	70 - 130
Tert-amyl methyl ether	25.0	27.3		ug/L		109	70 - 130
Tert-butyl ethyl ether	25.0	24.8		ug/L		99	70 - 130
tert-Butylbenzene	25.0	25.4		ug/L		101	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-309992/5
Matrix: Water
Analysis Batch: 309992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	25.0	24.7		ug/L		99	70 - 130
Tetrahydrofuran	50.0	47.3		ug/L		95	70 - 130
Toluene	25.0	25.0		ug/L		100	70 - 130
trans-1,2-Dichloroethene	25.0	22.5		ug/L		90	70 - 130
trans-1,3-Dichloropropene	25.0	25.7		ug/L		103	70 - 130
Trichloroethene	25.0	23.4		ug/L		93	70 - 130
Trichlorofluoromethane	25.0	22.9		ug/L		91	70 - 130
Vinyl chloride	25.0	21.3		ug/L		85	70 - 130
Dibromomethane	25.0	21.9		ug/L		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 480-309992/6
Matrix: Water
Analysis Batch: 309992

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.0		ug/L		96	70 - 130	2	20
1,1,1-Trichloroethane	25.0	19.6		ug/L		78	70 - 130	9	20
1,1,2,2-Tetrachloroethane	25.0	24.5		ug/L		98	70 - 130	3	20
1,1,2-Trichloroethane	25.0	23.3		ug/L		93	70 - 130	3	20
1,1-Dichloroethane	25.0	20.8		ug/L		83	70 - 130	9	20
1,1-Dichloroethene	25.0	19.7		ug/L		79	70 - 130	12	20
1,1-Dichloropropene	25.0	21.4		ug/L		86	70 - 130	9	20
1,2,3-Trichlorobenzene	25.0	24.9		ug/L		99	70 - 130	2	20
1,2,3-Trichloropropane	25.0	25.9		ug/L		103	70 - 130	4	20
1,2,4-Trichlorobenzene	25.0	25.5		ug/L		102	70 - 130	5	20
1,2,4-Trimethylbenzene	25.0	27.0		ug/L		108	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	25.0	23.0		ug/L		92	70 - 130	0	20
1,2-Dichlorobenzene	25.0	23.4		ug/L		94	70 - 130	0	20
1,2-Dichloroethane	25.0	19.6		ug/L		78	70 - 130	7	20
1,2-Dichloropropane	25.0	21.5		ug/L		86	70 - 130	7	20
1,3,5-Trimethylbenzene	25.0	26.0		ug/L		104	70 - 130	0	20
1,3-Dichlorobenzene	25.0	23.7		ug/L		95	70 - 130	0	20
1,3-Dichloropropane	25.0	23.5		ug/L		94	70 - 130	2	20
1,4-Dichlorobenzene	25.0	23.4		ug/L		94	70 - 130	1	20
1,4-Dioxane	500	463		ug/L		93	70 - 130	3	20
2,2-Dichloropropane	25.0	19.2		ug/L		77	70 - 130	9	20
2-Butanone (MEK)	125	118		ug/L		95	70 - 130	7	20
2-Chlorotoluene	25.0	26.9		ug/L		108	70 - 130	1	20
2-Hexanone	125	190	*	ug/L		152	70 - 130	1	20
4-Chlorotoluene	25.0	25.2		ug/L		101	70 - 130	2	20
4-Isopropyltoluene	25.0	26.8		ug/L		107	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	125	127		ug/L		101	70 - 130	1	20
Acetone	125	114		ug/L		91	70 - 130	7	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-309992/6
Matrix: Water
Analysis Batch: 309992

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			25.0	20.8		ug/L		83	70 - 130	8	20
Bromobenzene			25.0	23.4		ug/L		94	70 - 130	0	20
Bromoform			25.0	25.5		ug/L		102	70 - 130	3	20
Bromomethane			25.0	20.7		ug/L		83	70 - 130	9	20
Carbon disulfide			25.0	15.2	*	ug/L		61	70 - 130	8	20
Carbon tetrachloride			25.0	20.3		ug/L		81	70 - 130	11	20
Chlorobenzene			25.0	23.0		ug/L		92	70 - 130	4	20
Chlorobromomethane			25.0	19.9		ug/L		80	70 - 130	6	20
Chlorodibromomethane			25.0	24.6		ug/L		98	70 - 130	1	20
Chloroethane			25.0	21.5		ug/L		86	70 - 130	10	20
Chloroform			25.0	19.8		ug/L		79	70 - 130	8	20
Chloromethane			25.0	18.0		ug/L		72	70 - 130	13	20
cis-1,2-Dichloroethene			25.0	20.4		ug/L		82	70 - 130	8	20
cis-1,3-Dichloropropene			25.0	23.7		ug/L		95	70 - 130	2	20
Dichlorobromomethane			25.0	21.3		ug/L		85	70 - 130	6	20
Dichlorodifluoromethane			25.0	16.8	*	ug/L		67	70 - 130	19	20
Ethyl ether			25.0	21.7		ug/L		87	70 - 130	2	20
Ethylbenzene			25.0	24.0		ug/L		96	70 - 130	6	20
Ethylene Dibromide			25.0	23.5		ug/L		94	70 - 130	0	20
Hexachlorobutadiene			25.0	24.3		ug/L		97	70 - 130	1	20
Isopropyl ether			25.0	24.2		ug/L		97	70 - 130	5	20
Isopropylbenzene			25.0	25.5		ug/L		102	70 - 130	1	20
Methyl tert-butyl ether			25.0	21.1		ug/L		84	70 - 130	3	20
Methylene Chloride			25.0	22.1		ug/L		88	70 - 130	7	20
m-Xylene & p-Xylene			25.0	24.6		ug/L		99	70 - 130	6	20
Naphthalene			25.0	22.3		ug/L		89	70 - 130	5	20
n-Butylbenzene			25.0	26.2		ug/L		105	70 - 130	3	20
N-Propylbenzene			25.0	25.1		ug/L		101	70 - 130	2	20
o-Xylene			25.0	25.0		ug/L		100	70 - 130	5	20
sec-Butylbenzene			25.0	25.5		ug/L		102	70 - 130	2	20
Styrene			25.0	26.3		ug/L		105	70 - 130	3	20
Tert-amyl methyl ether			25.0	26.2		ug/L		105	70 - 130	4	20
Tert-butyl ethyl ether			25.0	24.0		ug/L		96	70 - 130	3	20
tert-Butylbenzene			25.0	25.2		ug/L		101	70 - 130	0	20
Tetrachloroethene			25.0	22.9		ug/L		91	70 - 130	8	20
Tetrahydrofuran			50.0	43.5		ug/L		87	70 - 130	8	20
Toluene			25.0	23.5		ug/L		94	70 - 130	6	20
trans-1,2-Dichloroethene			25.0	20.7		ug/L		83	70 - 130	9	20
trans-1,3-Dichloropropene			25.0	25.3		ug/L		101	70 - 130	1	20
Trichloroethene			25.0	21.9		ug/L		87	70 - 130	7	20
Trichlorofluoromethane			25.0	20.7		ug/L		83	70 - 130	10	20
Vinyl chloride			25.0	19.1		ug/L		76	70 - 130	11	20
Dibromomethane			25.0	20.8		ug/L		83	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 480-310121/7
Matrix: Water
Analysis Batch: 310121

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/07/16 19:22	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/07/16 19:22	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/07/16 19:22	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/07/16 19:22	1
1,1-Dichloroethane	ND		1.0		ug/L			07/07/16 19:22	1
1,1-Dichloroethene	ND		1.0		ug/L			07/07/16 19:22	1
1,1-Dichloropropene	ND		1.0		ug/L			07/07/16 19:22	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/07/16 19:22	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/07/16 19:22	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/07/16 19:22	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/07/16 19:22	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/07/16 19:22	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/07/16 19:22	1
1,2-Dichloroethane	ND		1.0		ug/L			07/07/16 19:22	1
1,2-Dichloropropane	ND		1.0		ug/L			07/07/16 19:22	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/07/16 19:22	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/07/16 19:22	1
1,3-Dichloropropane	ND		1.0		ug/L			07/07/16 19:22	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/07/16 19:22	1
1,4-Dioxane	ND		50		ug/L			07/07/16 19:22	1
2,2-Dichloropropane	ND		1.0		ug/L			07/07/16 19:22	1
2-Butanone (MEK)	ND		10		ug/L			07/07/16 19:22	1
2-Chlorotoluene	ND		1.0		ug/L			07/07/16 19:22	1
2-Hexanone	ND		10		ug/L			07/07/16 19:22	1
4-Chlorotoluene	ND		1.0		ug/L			07/07/16 19:22	1
4-Isopropyltoluene	ND		1.0		ug/L			07/07/16 19:22	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/07/16 19:22	1
Acetone	ND		50		ug/L			07/07/16 19:22	1
Benzene	ND		1.0		ug/L			07/07/16 19:22	1
Bromobenzene	ND		1.0		ug/L			07/07/16 19:22	1
Bromoform	ND		1.0		ug/L			07/07/16 19:22	1
Bromomethane	ND		2.0		ug/L			07/07/16 19:22	1
Carbon disulfide	ND		10		ug/L			07/07/16 19:22	1
Carbon tetrachloride	ND		1.0		ug/L			07/07/16 19:22	1
Chlorobenzene	ND		1.0		ug/L			07/07/16 19:22	1
Chlorobromomethane	ND		1.0		ug/L			07/07/16 19:22	1
Chlorodibromomethane	ND		0.50		ug/L			07/07/16 19:22	1
Chloroethane	ND		2.0		ug/L			07/07/16 19:22	1
Chloroform	ND		1.0		ug/L			07/07/16 19:22	1
Chloromethane	ND		2.0		ug/L			07/07/16 19:22	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 19:22	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 19:22	1
Dichlorobromomethane	ND		0.50		ug/L			07/07/16 19:22	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/07/16 19:22	1
Ethyl ether	ND		1.0		ug/L			07/07/16 19:22	1
Ethylbenzene	ND		1.0		ug/L			07/07/16 19:22	1
Ethylene Dibromide	ND		1.0		ug/L			07/07/16 19:22	1
Hexachlorobutadiene	ND		0.40		ug/L			07/07/16 19:22	1
Isopropyl ether	ND		10		ug/L			07/07/16 19:22	1
Isopropylbenzene	ND		1.0		ug/L			07/07/16 19:22	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-310121/7
Matrix: Water
Analysis Batch: 310121

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			07/07/16 19:22	1
Methylene Chloride	ND		1.0		ug/L			07/07/16 19:22	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/07/16 19:22	1
Naphthalene	ND		5.0		ug/L			07/07/16 19:22	1
n-Butylbenzene	ND		1.0		ug/L			07/07/16 19:22	1
N-Propylbenzene	ND		1.0		ug/L			07/07/16 19:22	1
o-Xylene	ND		1.0		ug/L			07/07/16 19:22	1
sec-Butylbenzene	ND		1.0		ug/L			07/07/16 19:22	1
Styrene	ND		1.0		ug/L			07/07/16 19:22	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/07/16 19:22	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/07/16 19:22	1
tert-Butylbenzene	ND		1.0		ug/L			07/07/16 19:22	1
Tetrachloroethene	ND		1.0		ug/L			07/07/16 19:22	1
Tetrahydrofuran	ND		10		ug/L			07/07/16 19:22	1
Toluene	ND		1.0		ug/L			07/07/16 19:22	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/07/16 19:22	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/07/16 19:22	1
Trichloroethene	ND		1.0		ug/L			07/07/16 19:22	1
Trichlorofluoromethane	ND		1.0		ug/L			07/07/16 19:22	1
Vinyl chloride	ND		1.0		ug/L			07/07/16 19:22	1
Dibromomethane	ND		1.0		ug/L			07/07/16 19:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/07/16 19:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*07/07/16 19:22*	*1*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*07/07/16 19:22*	*1*

Lab Sample ID: LCS 480-310121/5
Matrix: Water
Analysis Batch: 310121

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	22.9		ug/L		91	70 - 130
1,1,1-Trichloroethane	25.0	18.9		ug/L		75	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.8		ug/L		95	70 - 130
1,1,2-Trichloroethane	25.0	22.7		ug/L		91	70 - 130
1,1-Dichloroethane	25.0	20.2		ug/L		81	70 - 130
1,1-Dichloroethene	25.0	19.6		ug/L		78	70 - 130
1,1-Dichloropropene	25.0	20.5		ug/L		82	70 - 130
1,2,3-Trichlorobenzene	25.0	22.7		ug/L		91	70 - 130
1,2,3-Trichloropropane	25.0	24.4		ug/L		98	70 - 130
1,2,4-Trichlorobenzene	25.0	23.3		ug/L		93	70 - 130
1,2,4-Trimethylbenzene	25.0	25.6		ug/L		102	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	21.7		ug/L		87	70 - 130
1,2-Dichlorobenzene	25.0	22.1		ug/L		88	70 - 130
1,2-Dichloroethane	25.0	19.0		ug/L		76	70 - 130
1,2-Dichloropropane	25.0	21.4		ug/L		85	70 - 130
1,3,5-Trimethylbenzene	25.0	24.3		ug/L		97	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-310121/5
Matrix: Water
Analysis Batch: 310121

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	25.0	22.2		ug/L		89	70 - 130
1,3-Dichloropropane	25.0	22.4		ug/L		90	70 - 130
1,4-Dichlorobenzene	25.0	22.7		ug/L		91	70 - 130
1,4-Dioxane	500	380		ug/L		76	70 - 130
2,2-Dichloropropane	25.0	18.8		ug/L		75	70 - 130
2-Butanone (MEK)	125	124		ug/L		99	70 - 130
2-Chlorotoluene	25.0	24.8		ug/L		99	70 - 130
2-Hexanone	125	183	*	ug/L		147	70 - 130
4-Chlorotoluene	25.0	24.3		ug/L		97	70 - 130
4-Isopropyltoluene	25.0	25.0		ug/L		100	70 - 130
4-Methyl-2-pentanone (MIBK)	125	119		ug/L		95	70 - 130
Acetone	125	118		ug/L		94	70 - 130
Benzene	25.0	20.1		ug/L		80	70 - 130
Bromobenzene	25.0	22.3		ug/L		89	70 - 130
Bromoform	25.0	23.8		ug/L		95	70 - 130
Bromomethane	25.0	20.1		ug/L		80	70 - 130
Carbon disulfide	25.0	21.0		ug/L		84	70 - 130
Carbon tetrachloride	25.0	19.8		ug/L		79	70 - 130
Chlorobenzene	25.0	22.2		ug/L		89	70 - 130
Chlorobromomethane	25.0	19.4		ug/L		77	70 - 130
Chlorodibromomethane	25.0	23.3		ug/L		93	70 - 130
Chloroethane	25.0	20.5		ug/L		82	70 - 130
Chloroform	25.0	19.3		ug/L		77	70 - 130
Chloromethane	25.0	17.7		ug/L		71	70 - 130
cis-1,2-Dichloroethene	25.0	19.8		ug/L		79	70 - 130
cis-1,3-Dichloropropene	25.0	22.2		ug/L		89	70 - 130
Dichlorobromomethane	25.0	20.6		ug/L		82	70 - 130
Dichlorodifluoromethane	25.0	16.2	*	ug/L		65	70 - 130
Ethyl ether	25.0	20.3		ug/L		81	70 - 130
Ethylbenzene	25.0	22.8		ug/L		91	70 - 130
Ethylene Dibromide	25.0	22.3		ug/L		89	70 - 130
Hexachlorobutadiene	25.0	23.3		ug/L		93	70 - 130
Isopropyl ether	25.0	23.4		ug/L		94	70 - 130
Isopropylbenzene	25.0	23.9		ug/L		96	70 - 130
Methyl tert-butyl ether	25.0	19.6		ug/L		78	70 - 130
Methylene Chloride	25.0	20.9		ug/L		84	70 - 130
m-Xylene & p-Xylene	25.0	23.5		ug/L		94	70 - 130
Naphthalene	25.0	20.1		ug/L		80	70 - 130
n-Butylbenzene	25.0	24.7		ug/L		99	70 - 130
N-Propylbenzene	25.0	23.4		ug/L		93	70 - 130
o-Xylene	25.0	23.5		ug/L		94	70 - 130
sec-Butylbenzene	25.0	23.8		ug/L		95	70 - 130
Styrene	25.0	24.7		ug/L		99	70 - 130
Tert-amyl methyl ether	25.0	24.7		ug/L		99	70 - 130
Tert-butyl ethyl ether	25.0	22.6		ug/L		90	70 - 130
tert-Butylbenzene	25.0	23.4		ug/L		94	70 - 130
Tetrachloroethene	25.0	22.0		ug/L		88	70 - 130
Tetrahydrofuran	50.0	41.9		ug/L		84	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-310121/5
Matrix: Water
Analysis Batch: 310121

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	25.0	22.6		ug/L		90	70 - 130
trans-1,2-Dichloroethene	25.0	19.6		ug/L		79	70 - 130
trans-1,3-Dichloropropene	25.0	23.4		ug/L		94	70 - 130
Trichloroethene	25.0	21.1		ug/L		84	70 - 130
Trichlorofluoromethane	25.0	20.3		ug/L		81	70 - 130
Vinyl chloride	25.0	19.7		ug/L		79	70 - 130
Dibromomethane	25.0	20.1		ug/L		80	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*93*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 480-310121/8
Matrix: Water
Analysis Batch: 310121

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.0		ug/L		96	70 - 130	5	20
1,1,1-Trichloroethane	25.0	19.3		ug/L		77	70 - 130	2	20
1,1,2,2-Tetrachloroethane	25.0	23.1		ug/L		92	70 - 130	3	20
1,1,2-Trichloroethane	25.0	22.9		ug/L		92	70 - 130	1	20
1,1-Dichloroethane	25.0	20.3		ug/L		81	70 - 130	1	20
1,1-Dichloroethene	25.0	19.4		ug/L		78	70 - 130	1	20
1,1-Dichloropropene	25.0	21.0		ug/L		84	70 - 130	2	20
1,2,3-Trichlorobenzene	25.0	23.8		ug/L		95	70 - 130	5	20
1,2,3-Trichloropropane	25.0	23.6		ug/L		94	70 - 130	3	20
1,2,4-Trichlorobenzene	25.0	24.5		ug/L		98	70 - 130	5	20
1,2,4-Trimethylbenzene	25.0	26.7		ug/L		107	70 - 130	4	20
1,2-Dibromo-3-Chloropropane	25.0	22.3		ug/L		89	70 - 130	3	20
1,2-Dichlorobenzene	25.0	22.6		ug/L		90	70 - 130	2	20
1,2-Dichloroethane	25.0	18.8		ug/L		75	70 - 130	1	20
1,2-Dichloropropane	25.0	20.9		ug/L		84	70 - 130	2	20
1,3,5-Trimethylbenzene	25.0	25.5		ug/L		102	70 - 130	5	20
1,3-Dichlorobenzene	25.0	23.2		ug/L		93	70 - 130	4	20
1,3-Dichloropropane	25.0	22.6		ug/L		90	70 - 130	1	20
1,4-Dichlorobenzene	25.0	22.6		ug/L		90	70 - 130	0	20
1,4-Dioxane	500	386		ug/L		77	70 - 130	1	20
2,2-Dichloropropane	25.0	19.0		ug/L		76	70 - 130	1	20
2-Butanone (MEK)	125	115		ug/L		92	70 - 130	7	20
2-Chlorotoluene	25.0	26.0		ug/L		104	70 - 130	5	20
2-Hexanone	125	181	*	ug/L		145	70 - 130	1	20
4-Chlorotoluene	25.0	25.0		ug/L		100	70 - 130	3	20
4-Isopropyltoluene	25.0	26.3		ug/L		105	70 - 130	5	20
4-Methyl-2-pentanone (MIBK)	125	122		ug/L		97	70 - 130	2	20
Acetone	125	111		ug/L		89	70 - 130	6	20
Benzene	25.0	20.4		ug/L		82	70 - 130	2	20
Bromobenzene	25.0	22.9		ug/L		92	70 - 130	3	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-310121/8
Matrix: Water
Analysis Batch: 310121

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	25.0	24.1		ug/L		96	70 - 130	1	20
Bromomethane	25.0	20.4		ug/L		81	70 - 130	1	20
Carbon disulfide	25.0	21.8		ug/L		87	70 - 130	4	20
Carbon tetrachloride	25.0	20.5		ug/L		82	70 - 130	3	20
Chlorobenzene	25.0	22.5		ug/L		90	70 - 130	2	20
Chlorobromomethane	25.0	18.9		ug/L		76	70 - 130	2	20
Chlorodibromomethane	25.0	23.5		ug/L		94	70 - 130	1	20
Chloroethane	25.0	21.2		ug/L		85	70 - 130	3	20
Chloroform	25.0	19.3		ug/L		77	70 - 130	0	20
Chloromethane	25.0	17.9		ug/L		71	70 - 130	1	20
cis-1,2-Dichloroethene	25.0	19.9		ug/L		80	70 - 130	1	20
cis-1,3-Dichloropropene	25.0	22.2		ug/L		89	70 - 130	0	20
Dichlorobromomethane	25.0	20.7		ug/L		83	70 - 130	1	20
Dichlorodifluoromethane	25.0	15.9	*	ug/L		64	70 - 130	2	20
Ethyl ether	25.0	20.1		ug/L		80	70 - 130	1	20
Ethylbenzene	25.0	24.0		ug/L		96	70 - 130	5	20
Ethylene Dibromide	25.0	22.8		ug/L		91	70 - 130	2	20
Hexachlorobutadiene	25.0	24.5		ug/L		98	70 - 130	5	20
Isopropyl ether	25.0	23.4		ug/L		94	70 - 130	0	20
Isopropylbenzene	25.0	25.2		ug/L		101	70 - 130	5	20
Methyl tert-butyl ether	25.0	19.6		ug/L		78	70 - 130	0	20
Methylene Chloride	25.0	21.3		ug/L		85	70 - 130	2	20
m-Xylene & p-Xylene	25.0	24.6		ug/L		99	70 - 130	5	20
Naphthalene	25.0	20.8		ug/L		83	70 - 130	4	20
n-Butylbenzene	25.0	26.4		ug/L		106	70 - 130	7	20
N-Propylbenzene	25.0	24.8		ug/L		99	70 - 130	6	20
o-Xylene	25.0	24.8		ug/L		99	70 - 130	6	20
sec-Butylbenzene	25.0	25.3		ug/L		101	70 - 130	6	20
Styrene	25.0	25.8		ug/L		103	70 - 130	4	20
Tert-amyl methyl ether	25.0	24.8		ug/L		99	70 - 130	1	20
Tert-butyl ethyl ether	25.0	22.9		ug/L		92	70 - 130	1	20
tert-Butylbenzene	25.0	24.9		ug/L		100	70 - 130	6	20
Tetrachloroethene	25.0	22.9		ug/L		92	70 - 130	4	20
Tetrahydrofuran	50.0	41.1		ug/L		82	70 - 130	2	20
Toluene	25.0	23.6		ug/L		95	70 - 130	5	20
trans-1,2-Dichloroethene	25.0	20.1		ug/L		80	70 - 130	2	20
trans-1,3-Dichloropropene	25.0	24.1		ug/L		96	70 - 130	3	20
Trichloroethene	25.0	21.1		ug/L		84	70 - 130	0	20
Trichlorofluoromethane	25.0	20.6		ug/L		82	70 - 130	1	20
Vinyl chloride	25.0	20.8		ug/L		83	70 - 130	5	20
Dibromomethane	25.0	20.1		ug/L		80	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*93*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*

QC Sample Results

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-309994/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310221 — **Prep Batch: 309994**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050		mg/L		07/07/16 08:55	07/07/16 20:17	1

Lab Sample ID: LCS 480-309994/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310221 — **Prep Batch: 309994**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.4		mg/L		104	80 - 120

Lab Sample ID: LCSD 480-309994/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310221 — **Prep Batch: 309994**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	10.0	10.1		mg/L		101	80 - 120	3	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-310245/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310245

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			07/08/16 13:44	1
Sulfate	ND		2.0		mg/L			07/08/16 13:44	1

Lab Sample ID: LCS 480-310245/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310245

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	51.2		mg/L		102	90 - 110
Sulfate	50.0	50.6		mg/L		101	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-310159/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310327 — **Prep Batch: 310159**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L		07/07/16 20:52	07/08/16 17:08	1

Lab Sample ID: LCS 480-310159/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310327 — **Prep Batch: 310159**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.02		mg/L		102	90 - 110

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-310337/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310337

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			07/07/16 17:04	1
TOC Result 2	ND		1.0		mg/L			07/07/16 17:04	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			07/07/16 17:04	1

Lab Sample ID: LCS 480-310337/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310337

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	60.8		mg/L		101	90 - 110
TOC Result 2	60.0	58.8		mg/L		98	90 - 110
Total Organic Carbon - Duplicates	60.0	59.8		mg/L		100	90 - 110

Lab Sample ID: 480-102681-4 MS — **Client Sample ID: REW-8-20160706**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310337

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	80		20.0	97.7		mg/L		90	54 - 131
TOC Result 2	79		20.0	97.2		mg/L		89	54 - 131
Total Organic Carbon - Duplicates	79		20.0	97.4		mg/L		90	54 - 131

Lab Sample ID: 480-102681-3 DU — **Client Sample ID: REW-7-20160706**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310337

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
TOC Result 1	75		74.8		mg/L		0	20
TOC Result 2	74		74.4		mg/L		0.9	20
Total Organic Carbon - Duplicates	74		74.6		mg/L		0.4	20

Lab Sample ID: MB 480-310699/27 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310699

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			07/12/16 01:49	1
TOC Result 2	ND		1.0		mg/L			07/12/16 01:49	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			07/12/16 01:49	1

Lab Sample ID: MB 480-310699/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310699

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			07/11/16 14:30	1
TOC Result 2	ND		1.0		mg/L			07/11/16 14:30	1

Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: MB 480-310699/3
Matrix: Water
Analysis Batch: 310699

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		1.0		mg/L			07/11/16 14:30	1

Lab Sample ID: LCS 480-310699/28
Matrix: Water
Analysis Batch: 310699

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	58.6		mg/L		98	90 - 110
TOC Result 2	60.0	60.9		mg/L		102	90 - 110
Total Organic Carbon - Duplicates	60.0	59.7		mg/L		100	90 - 110

Lab Sample ID: LCS 480-310699/4
Matrix: Water
Analysis Batch: 310699

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	58.9		mg/L		98	90 - 110
TOC Result 2	60.0	61.3		mg/L		102	90 - 110
Total Organic Carbon - Duplicates	60.0	60.1		mg/L		100	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-310227/30
Matrix: Water
Analysis Batch: 310227

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0		mg/L			07/07/16 16:47	1

Lab Sample ID: MB 480-310227/7
Matrix: Water
Analysis Batch: 310227

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0		mg/L			07/07/16 13:52	1

Lab Sample ID: LCS 480-310227/31
Matrix: Water
Analysis Batch: 310227

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	97.4		mg/L		97	90 - 110

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 480-310227/8 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310227

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	97.1		mg/L		97	90 - 110

Method: SM 4500 P E - Orthophosphate

Lab Sample ID: MB 480-310075/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310075

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ortho-Phosphate	ND		0.020		mg/L			07/07/16 11:15	1

Lab Sample ID: LCS 480-310075/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
ortho-Phosphate	0.200	0.185		mg/L		93	90 - 110

Lab Sample ID: 480-102681-1 MS — **Client Sample ID: MW-265M-20160706**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310075

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
ortho-Phosphate	0.24		1.00	1.33		mg/L		108	49 - 138

Lab Sample ID: 480-102681-1 MSD — **Client Sample ID: MW-265M-20160706**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 310075

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
ortho-Phosphate	0.24		1.00	1.25		mg/L		101	49 - 138	6	20

QC Association Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

GC/MS VOA

Analysis Batch: 309992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102681-1	MW-265M-20160706	Total/NA	Water	8260C	
480-102681-2	MW-562-20160706	Total/NA	Water	8260C	
480-102681-4	REW-8-20160706	Total/NA	Water	8260C	
480-102681-5	REW-11-20160706	Total/NA	Water	8260C	
480-102681-6	REW-12-20160706	Total/NA	Water	8260C	
480-102681-8	TRIP BLANKS	Total/NA	Water	8260C	
LCS 480-309992/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-309992/6	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-309992/8	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 310121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102681-3	REW-7-20160706	Total/NA	Water	8260C	
480-102681-7	DUP2-20160706	Total/NA	Water	8260C	
LCS 480-310121/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-310121/8	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-310121/7	Method Blank	Total/NA	Water	8260C	

Metals

Prep Batch: 309994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102681-1	MW-265M-20160706	Total/NA	Water	3005A	
480-102681-2	MW-562-20160706	Total/NA	Water	3005A	
480-102681-3	REW-7-20160706	Total/NA	Water	3005A	
480-102681-4	REW-8-20160706	Total/NA	Water	3005A	
480-102681-5	REW-11-20160706	Total/NA	Water	3005A	
480-102681-6	REW-12-20160706	Total/NA	Water	3005A	
LCS 480-309994/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-309994/3-A	Lab Control Sample Dup	Total/NA	Water	3005A	
MB 480-309994/1-A	Method Blank	Total/NA	Water	3005A	

Analysis Batch: 310221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102681-1	MW-265M-20160706	Total/NA	Water	6010	309994
480-102681-2	MW-562-20160706	Total/NA	Water	6010	309994
480-102681-3	REW-7-20160706	Total/NA	Water	6010	309994
480-102681-4	REW-8-20160706	Total/NA	Water	6010	309994
480-102681-5	REW-11-20160706	Total/NA	Water	6010	309994
480-102681-6	REW-12-20160706	Total/NA	Water	6010	309994
LCS 480-309994/2-A	Lab Control Sample	Total/NA	Water	6010	309994
LCSD 480-309994/3-A	Lab Control Sample Dup	Total/NA	Water	6010	309994
MB 480-309994/1-A	Method Blank	Total/NA	Water	6010	309994

General Chemistry

Analysis Batch: 310075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102681-1	MW-265M-20160706	Total/NA	Water	SM 4500 P E	
480-102681-1 MS	MW-265M-20160706	Total/NA	Water	SM 4500 P E	

General Chemistry (Continued)

Analysis Batch: 310075 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102681-1 MSD	MW-265M-20160706	Total/NA	Water	SM 4500 P E	
480-102681-2	MW-562-20160706	Total/NA	Water	SM 4500 P E	
480-102681-3	REW-7-20160706	Total/NA	Water	SM 4500 P E	
480-102681-4	REW-8-20160706	Total/NA	Water	SM 4500 P E	
480-102681-5	REW-11-20160706	Total/NA	Water	SM 4500 P E	
480-102681-6	REW-12-20160706	Total/NA	Water	SM 4500 P E	
LCS 480-310075/4	Lab Control Sample	Total/NA	Water	SM 4500 P E	
MB 480-310075/3	Method Blank	Total/NA	Water	SM 4500 P E	

Analysis Batch: 310078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102681-1	MW-265M-20160706	Total/NA	Water	9040C	
480-102681-2	MW-562-20160706	Total/NA	Water	9040C	
480-102681-3	REW-7-20160706	Total/NA	Water	9040C	
480-102681-4	REW-8-20160706	Total/NA	Water	9040C	
480-102681-5	REW-11-20160706	Total/NA	Water	9040C	
480-102681-6	REW-12-20160706	Total/NA	Water	9040C	
LCS 480-310078/1	Lab Control Sample	Total/NA	Water	9040C	

Analysis Batch: 310101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102681-1	MW-265M-20160706	Total/NA	Water	353.2	
480-102681-2	MW-562-20160706	Total/NA	Water	353.2	
480-102681-3	REW-7-20160706	Total/NA	Water	353.2	
480-102681-4	REW-8-20160706	Total/NA	Water	353.2	
480-102681-5	REW-11-20160706	Total/NA	Water	353.2	
480-102681-6	REW-12-20160706	Total/NA	Water	353.2	

Prep Batch: 310159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102681-1	MW-265M-20160706	Total/NA	Water	Distill/Ammonia	
480-102681-2	MW-562-20160706	Total/NA	Water	Distill/Ammonia	
480-102681-3	REW-7-20160706	Total/NA	Water	Distill/Ammonia	
480-102681-4	REW-8-20160706	Total/NA	Water	Distill/Ammonia	
480-102681-5	REW-11-20160706	Total/NA	Water	Distill/Ammonia	
480-102681-6	REW-12-20160706	Total/NA	Water	Distill/Ammonia	
LCS 480-310159/1-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	
MB 480-310159/2-A	Method Blank	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 310227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102681-1	MW-265M-20160706	Total/NA	Water	SM 2320B	
480-102681-2	MW-562-20160706	Total/NA	Water	SM 2320B	
480-102681-3	REW-7-20160706	Total/NA	Water	SM 2320B	
480-102681-4	REW-8-20160706	Total/NA	Water	SM 2320B	
480-102681-5	REW-11-20160706	Total/NA	Water	SM 2320B	
480-102681-6	REW-12-20160706	Total/NA	Water	SM 2320B	
LCS 480-310227/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 480-310227/8	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 480-310227/30	Method Blank	Total/NA	Water	SM 2320B	
MB 480-310227/7	Method Blank	Total/NA	Water	SM 2320B	

QC Association Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Analysis Batch: 310245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102681-1	MW-265M-20160706	Total/NA	Water	300.0	
480-102681-2	MW-562-20160706	Total/NA	Water	300.0	
480-102681-3	REW-7-20160706	Total/NA	Water	300.0	
480-102681-4	REW-8-20160706	Total/NA	Water	300.0	
480-102681-5	REW-11-20160706	Total/NA	Water	300.0	
480-102681-6	REW-12-20160706	Total/NA	Water	300.0	
LCS 480-310245/3	Lab Control Sample	Total/NA	Water	300.0	
MB 480-310245/4	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 310327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102681-1	MW-265M-20160706	Total/NA	Water	350.1	310159
480-102681-2	MW-562-20160706	Total/NA	Water	350.1	310159
480-102681-3	REW-7-20160706	Total/NA	Water	350.1	310159
480-102681-4	REW-8-20160706	Total/NA	Water	350.1	310159
480-102681-5	REW-11-20160706	Total/NA	Water	350.1	310159
480-102681-6	REW-12-20160706	Total/NA	Water	350.1	310159
LCS 480-310159/1-A	Lab Control Sample	Total/NA	Water	350.1	310159
MB 480-310159/2-A	Method Blank	Total/NA	Water	350.1	310159

Analysis Batch: 310337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102681-1	MW-265M-20160706	Total/NA	Water	9060A	
480-102681-3	REW-7-20160706	Total/NA	Water	9060A	
480-102681-3 DU	REW-7-20160706	Total/NA	Water	9060A	
480-102681-4	REW-8-20160706	Total/NA	Water	9060A	
480-102681-4 MS	REW-8-20160706	Total/NA	Water	9060A	
480-102681-5	REW-11-20160706	Total/NA	Water	9060A	
LCS 480-310337/4	Lab Control Sample	Total/NA	Water	9060A	
MB 480-310337/3	Method Blank	Total/NA	Water	9060A	

Analysis Batch: 310699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-102681-2	MW-562-20160706	Total/NA	Water	9060A	
480-102681-6	REW-12-20160706	Total/NA	Water	9060A	
LCS 480-310699/28	Lab Control Sample	Total/NA	Water	9060A	
LCS 480-310699/4	Lab Control Sample	Total/NA	Water	9060A	
MB 480-310699/27	Method Blank	Total/NA	Water	9060A	
MB 480-310699/3	Method Blank	Total/NA	Water	9060A	

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: MW-265M-20160706 — Lab Sample ID: 480-102681-1

Date Collected: 07/06/16 11:35 — **Matrix: Water**
Date Received: 07/07/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	309992	07/07/16 13:46	RRS	TAL BUF
Total/NA	Prep	3005A			309994	07/07/16 08:55	BAE	TAL BUF
Total/NA	Analysis	6010		1	310221	07/07/16 20:27	AMH	TAL BUF
Total/NA	Analysis	300.0		10	310245	07/08/16 14:19	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			310159	07/07/16 20:52	CEA	TAL BUF
Total/NA	Analysis	350.1		1	310327	07/08/16 17:39	CEA	TAL BUF
Total/NA	Analysis	353.2		1	310101	07/07/16 11:08	ELR	TAL BUF
Total/NA	Analysis	9040C		1	310078	07/07/16 11:52	ELR	TAL BUF
Total/NA	Analysis	9060A		10	310337	07/07/16 22:35	DLG	TAL BUF
Total/NA	Analysis	SM 2320B		1	310227	07/07/16 17:43	ELR	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	310075	07/07/16 11:15	DLG	TAL BUF

Client Sample ID: MW-562-20160706 — Lab Sample ID: 480-102681-2

Date Collected: 07/06/16 10:55 — **Matrix: Water**
Date Received: 07/07/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	309992	07/07/16 14:12	RRS	TAL BUF
Total/NA	Prep	3005A			309994	07/07/16 08:55	BAE	TAL BUF
Total/NA	Analysis	6010		1	310221	07/07/16 20:31	AMH	TAL BUF
Total/NA	Analysis	300.0		10	310245	07/08/16 14:27	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			310159	07/07/16 20:52	CEA	TAL BUF
Total/NA	Analysis	350.1		2	310327	07/08/16 17:48	CEA	TAL BUF
Total/NA	Analysis	353.2		1	310101	07/07/16 11:07	ELR	TAL BUF
Total/NA	Analysis	9040C		1	310078	07/07/16 11:55	ELR	TAL BUF
Total/NA	Analysis	9060A		10	310699	07/11/16 15:56	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	310227	07/07/16 17:52	ELR	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	310075	07/07/16 11:15	DLG	TAL BUF

Client Sample ID: REW-7-20160706 — Lab Sample ID: 480-102681-3

Date Collected: 07/06/16 09:30 — **Matrix: Water**
Date Received: 07/07/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	310121	07/07/16 20:02	GTG	TAL BUF
Total/NA	Prep	3005A			309994	07/07/16 08:55	BAE	TAL BUF
Total/NA	Analysis	6010		1	310221	07/07/16 20:35	AMH	TAL BUF
Total/NA	Analysis	300.0		5	310245	07/08/16 14:35	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			310159	07/07/16 20:52	CEA	TAL BUF
Total/NA	Analysis	350.1		1	310327	07/08/16 17:41	CEA	TAL BUF
Total/NA	Analysis	353.2		1	310101	07/07/16 11:03	ELR	TAL BUF

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: REW-7-20160706 — Lab Sample ID: 480-102681-3

Date Collected: 07/06/16 09:30 — **Matrix: Water**
Date Received: 07/07/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9040C		1	310078	07/07/16 11:58	ELR	TAL BUF
Total/NA	Analysis	9060A		1	310337	07/07/16 23:31	DLG	TAL BUF
Total/NA	Analysis	SM 2320B		1	310227	07/07/16 17:58	ELR	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	310075	07/07/16 11:15	DLG	TAL BUF

Client Sample ID: REW-8-20160706 — Lab Sample ID: 480-102681-4

Date Collected: 07/06/16 08:40 — **Matrix: Water**
Date Received: 07/07/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	309992	07/07/16 15:03	RRS	TAL BUF
Total/NA	Prep	3005A			309994	07/07/16 08:55	BAE	TAL BUF
Total/NA	Analysis	6010		1	310221	07/07/16 20:49	AMH	TAL BUF
Total/NA	Analysis	300.0		5	310245	07/08/16 15:32	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			310159	07/07/16 20:52	CEA	TAL BUF
Total/NA	Analysis	350.1		1	310327	07/08/16 17:41	CEA	TAL BUF
Total/NA	Analysis	353.2		1	310101	07/07/16 11:02	ELR	TAL BUF
Total/NA	Analysis	9040C		1	310078	07/07/16 12:01	ELR	TAL BUF
Total/NA	Analysis	9060A		1	310337	07/08/16 00:26	DLG	TAL BUF
Total/NA	Analysis	SM 2320B		1	310227	07/07/16 18:06	ELR	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	310075	07/07/16 11:15	DLG	TAL BUF

Client Sample ID: REW-11-20160706 — Lab Sample ID: 480-102681-5

Date Collected: 07/06/16 10:15 — **Matrix: Water**
Date Received: 07/07/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	309992	07/07/16 15:28	RRS	TAL BUF
Total/NA	Prep	3005A			309994	07/07/16 08:55	BAE	TAL BUF
Total/NA	Analysis	6010		1	310221	07/07/16 20:52	AMH	TAL BUF
Total/NA	Analysis	300.0		5	310245	07/08/16 15:40	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			310159	07/07/16 20:52	CEA	TAL BUF
Total/NA	Analysis	350.1		1	310327	07/08/16 17:42	CEA	TAL BUF
Total/NA	Analysis	353.2		1	310101	07/07/16 11:05	ELR	TAL BUF
Total/NA	Analysis	9040C		1	310078	07/07/16 12:04	ELR	TAL BUF
Total/NA	Analysis	9060A		5	310337	07/08/16 01:22	DLG	TAL BUF
Total/NA	Analysis	SM 2320B		1	310227	07/07/16 18:12	ELR	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	310075	07/07/16 11:15	DLG	TAL BUF

Lab Chronicle

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Client Sample ID: REW-12-20160706 — Lab Sample ID: 480-102681-6

Date Collected: 07/06/16 08:05
Date Received: 07/07/16 02:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	309992	07/07/16 15:53	RRS	TAL BUF
Total/NA	Prep	3005A			309994	07/07/16 08:55	BAE	TAL BUF
Total/NA	Analysis	6010		1	310221	07/07/16 20:56	AMH	TAL BUF
Total/NA	Analysis	300.0		5	310245	07/08/16 15:48	CAV	TAL BUF
Total/NA	Prep	Distill/Ammonia			310159	07/07/16 20:52	CEA	TAL BUF
Total/NA	Analysis	350.1		1	310327	07/08/16 17:43	CEA	TAL BUF
Total/NA	Analysis	353.2		1	310101	07/07/16 11:00	ELR	TAL BUF
Total/NA	Analysis	9040C		1	310078	07/07/16 12:07	ELR	TAL BUF
Total/NA	Analysis	9060A		5	310699	07/11/16 16:24	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	310227	07/07/16 18:31	ELR	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	310075	07/07/16 11:15	DLG	TAL BUF

Client Sample ID: DUP2-20160706 — Lab Sample ID: 480-102681-7

Date Collected: 07/06/16 00:00
Date Received: 07/07/16 02:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	310121	07/07/16 20:28	GTG	TAL BUF

Client Sample ID: TRIP BLANKS — Lab Sample ID: 480-102681-8

Date Collected: 07/06/16 00:00
Date Received: 07/07/16 02:00
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	309992	07/07/16 11:43	RRS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-17
California	State Program	9	1169CA	09-30-17
Connecticut	State Program	1	PH-0568	09-30-16
Florida	NELAP	4	E87672	06-30-16 *
Georgia	State Program	4	N/A	03-31-17
Georgia	State Program	4	956	03-31-17
Illinois	NELAP	5	200003	09-30-16
Iowa	State Program	7	374	03-01-17
Kentucky (DW)	State Program	4	90029	12-31-16
Kentucky (UST)	State Program	4	30	03-31-17
Kentucky (WW)	State Program	4	90029	12-31-16
Louisiana	NELAP	6	02031	06-30-17
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-17
Massachusetts	State Program	1	M-NY044	06-30-17
Michigan	State Program	5	9937	03-31-16 *
Minnesota	NELAP	5	036-999-337	12-31-16
New Hampshire	NELAP Primary AB	1	2973	09-11-16
New Hampshire	NELAP Secondary AB	1	2337	11-17-16
New Jersey	NELAP	2	NY455	06-30-17
New York	NELAP	2	10026	03-31-17
North Dakota	State Program	8	R-176	03-31-17
Oklahoma	State Program	6	9421	08-31-16
Oregon	NELAP	10	NY200003	06-09-17
Pennsylvania	NELAP	3	68-00281	07-31-16 *
Rhode Island	State Program	1	LAO00328	12-30-16
Tennessee	State Program	4	TN02970	03-31-17
Texas	NELAP	6	T104704412-15-6	07-31-16 *
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-16
Washington	State Program	10	C784	02-10-17
West Virginia DEP	State Program	3	252	09-30-16
Wisconsin	State Program	5	998310390	08-31-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
9040C	pH	SW846	TAL BUF
9060A	Organic Carbon, Total (TOC)	SW846	TAL BUF
SM 2320B	Alkalinity	SM	TAL BUF
SM 4500 P E	Orthophosphate	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency
MA DEP = Massachusetts Department Of Environmental Protection
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Innovative Engineering Solutions, Inc
Project/Site: IDS Wayland

TestAmerica Job ID: 480-102681-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-102681-1	MW-265M-20160706	Water	07/06/16 11:35	07/07/16 02:00
480-102681-2	MW-562-20160706	Water	07/06/16 10:55	07/07/16 02:00
480-102681-3	REW-7-20160706	Water	07/06/16 09:30	07/07/16 02:00
480-102681-4	REW-8-20160706	Water	07/06/16 08:40	07/07/16 02:00
480-102681-5	REW-11-20160706	Water	07/06/16 10:15	07/07/16 02:00
480-102681-6	REW-12-20160706	Water	07/06/16 08:05	07/07/16 02:00
480-102681-7	DUP2-20160706	Water	07/06/16 00:00	07/07/16 02:00
480-102681-8	TRIP BLANKS	Water	07/06/16 00:00	07/07/16 02:00

Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 480-102681-1

Login Number: 102681
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	IESI
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 467-7247

TestAmerica Boston
240 Bear Hill Road -- Suite 104
Waltham MA 02451
Phone: (781) 466-6900 Fax: (781) 466-6901

360320-Boston

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-102681 Chain of Custody

COC No: 36965
Page: 1 of 1
Job #:

Client Information:

Client Contact: Vicki Perkins
Company: Innovative Engineering Solutions Inc
Address: 25 Spring St
City: Walpole
State and Zip: MA 02081
Client's Phone: 508-668-0033
Client's Contact Email: v.perkins@TESTonline.com
Client's Project Name/Number: Raytheon Wayland RA-008
Sample Collection Site Name & Location: Wayland MA

Sample Collector's Name (Please Print Neatly): Dave Jones
Sample Collector's Phone: 508-668-0033
Lab PM:
E-Mail:

Due Date Requested: 7/14/16
Turnaround Time (TAT) Requested (business days): 5 days
Quote # or Project #:
PO #: RA-008
WO #:
PWS ID #:

Analysis Requested

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	8260 MSD	8260 B TOC	8260 B Alkalinity	8010 MCP Total	NO3, NO2, ortho PO4	NH3	SO4, Cl, pH	Total Number of Containers (enter total for each line)	Special Instructions & Notes:
Preservation Codes →					A	A	N	N	N	N	N		
MW-265M-20160706	7/6/16	1135	G	W	X	X	X	X	X	X	X	10	
MW-562-20160706	7/6/16	1055	G	W	X	X	X	X	X	X	X	10	
REW-7-20160706	7/6/16	0930	G	W	X	X	X	X	X	X	X	10	
REW-8-20160706	7/6/16	0840	G	W	X	X	X	X	X	X	X	10	
REW-11-20160706	7/6/16	1015	G	W	X	X	X	X	X	X	X	10	
REW12-20160706	7/6/16	0805	G	W	X	X	X	X	X	X	X	10	
Dup2-20160706	7/6/16	—	G	W	X							3	
Trip Blanks	—	—	—	W	X							2	

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
H - Ascorbic Acid
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
R - Sodium Thiosulfate
S - Sulfuric Acid
Z - other (specify)

Regulatory Programs:
MCP ☐ GW1/S1 ☐
RCP ☐ CT RSR ☐
DEP Form ☐ EDD Required ☐
eDEP Filing ☐ NPDES ☐

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit Test-America to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Possible Hazard Identification (please check off each that may apply):
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month) :
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

** **Matrix Types:** A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: _____

► **NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !!** ◄

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	7/6/16 1210	IESI	[signature]	7-6-16 1300	TA
[signature]	7-6-16 1800	TA	[signature]	7-7-16 0200	TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.9 #1

WI-QA-010 rev 8

Revised 10/29/2014
TAL-8245-360R

ANALYTICAL REPORT

Lab Number:	L1620742
Client:	Innovative Engineering Solutions, Inc. 25 Spring Street Walpole, MA 02081
ATTN:	Vicki Pariyar
Phone:	(508) 668-0033
Project Name:	RAYTHEON WAYLAND
Project Number:	RA-008
Report Date:	07/14/16

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), ME (MA00030), PA (68-02089), VA (460194), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), USFWS (Permit #LE2069641), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON WAYLAND
Project Number: RA-008

Lab Number: L1620742
Report Date: 07/14/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1620742-01	MW-265M-20160706	WATER	WAYLAND, MA	07/06/16 11:35	07/06/16
L1620742-02	MW-267S-20160705	WATER	WAYLAND, MA	07/05/16 10:50	07/06/16
L1620742-03	MW-267M-20160705	WATER	WAYLAND, MA	07/05/16 11:30	07/06/16
L1620742-04	MW-268S-20160705	WATER	WAYLAND, MA	07/05/16 09:15	07/06/16
L1620742-05	MW-268M-20160705	WATER	WAYLAND, MA	07/05/16 09:55	07/06/16
L1620742-06	MW-561-20160705	WATER	WAYLAND, MA	07/05/16 12:10	07/06/16
L1620742-07	MW-562-20160706	WATER	WAYLAND, MA	07/06/16 10:55	07/06/16
L1620742-08	MW-563-20160705	WATER	WAYLAND, MA	07/05/16 12:55	07/06/16
L1620742-09	REW-7-20160706	WATER	WAYLAND, MA	07/06/16 09:30	07/06/16
L1620742-10	REW-8-20160706	WATER	WAYLAND, MA	07/06/16 08:40	07/06/16
L1620742-11	REW-11-20160706	WATER	WAYLAND, MA	07/06/16 10:15	07/06/16
L1620742-12	REW-12-20160706	WATER	WAYLAND, MA	07/06/16 08:05	07/06/16

Project Name: RAYTHEON WAYLAND **Lab Number:** L1620742

Project Number: RA-008 **Report Date:** 07/14/16

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: RAYTHEON WAYLAND **Lab Number:** L1620742
Project Number: RA-008 **Report Date:** 07/14/16

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L1620742
Project Number:	RA-008	**Report Date:**	07/14/16

Case Narrative (continued)

Dissolved Gases

L1620742-01, -02, -03, -05, -06, -07, -08, -09, -10, -11 and -12.: The samples were re-analyzed on dilution in order to quantify the results within the calibration range. The results should be considered estimated, and are qualified with an E flag, for any compound that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound that exceeded the calibration range.

L1620742-01, -02, -03, -06, -07, -08 and -10 were collected in pre-preserved vials; however, the pH of the samples was determined to be greater than two.

The WG911525-5 MS recovery, performed on L1620742-04, is outside the acceptance criteria for methane (73%). The unacceptable percent recovery is attributed to the elevated concentrations of target compounds present in the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 07/14/16

ORGANICS

VOLATILES

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-01
Client ID: MW-265M-20160706
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/08/16 11:55
Analyst: LB

Date Collected: 07/06/16 11:35
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	15300	E	ug/l	0.500	--	1	A
Ethene	0.961		ug/l	0.500	--	1	A
Ethane	1.07		ug/l	0.500	--	1	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-01 D
Client ID: MW-265M-20160706
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/11/16 11:06
Analyst: LB

Date Collected: 07/06/16 11:35
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	15400		ug/l	2.50	--	5	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-02
Client ID: MW-267S-20160705
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/08/16 12:10
Analyst: LB

Date Collected: 07/05/16 10:50
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	21200	E	ug/l	0.500	--	1	A
Ethene	2.87		ug/l	0.500	--	1	A
Ethane	ND		ug/l	0.500	--	1	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008

Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-02 D
Client ID: MW-267S-20160705
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/11/16 11:20
Analyst: LB

Date Collected: 07/05/16 10:50
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	15700		ug/l	2.50	--	5	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-03
Client ID: MW-267M-20160705
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/08/16 12:25
Analyst: LB

Date Collected: 07/05/16 11:30
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	30900	E	ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	18.1		ug/l	0.500	--	1	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-03 D
Client ID: MW-267M-20160705
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/11/16 11:35
Analyst: LB

Date Collected: 07/05/16 11:30
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	29100		ug/l	2.50	--	5	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-04
Client ID: MW-268S-20160705
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/08/16 12:39
Analyst: LB

Date Collected: 07/05/16 09:15
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	1200		ug/l	0.500	--	1	A
Ethene	2.30		ug/l	0.500	--	1	A
Ethane	ND		ug/l	0.500	--	1	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-05
Client ID: MW-268M-20160705
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/08/16 12:54
Analyst: LB

Date Collected: 07/05/16 09:55
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	34000	E	ug/l	0.500	--	1	A
Ethene	10.3		ug/l	0.500	--	1	A
Ethane	48.8		ug/l	0.500	--	1	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-05 D
Client ID: MW-268M-20160705
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/11/16 14:18
Analyst: LB

Date Collected: 07/05/16 09:55
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	27300		ug/l	5.00	--	10	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-06
Client ID: MW-561-20160705
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/08/16 13:08
Analyst: LB

Date Collected: 07/05/16 12:10
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	20500	E	ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	24.3		ug/l	0.500	--	1	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008

Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-06 D
Client ID: MW-561-20160705
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/11/16 11:49
Analyst: LB

Date Collected: 07/05/16 12:10
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	17600		ug/l	2.50	--	5	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-07
Client ID: MW-562-20160706
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/08/16 13:23
Analyst: LB

Date Collected: 07/06/16 10:55
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	20000	E	ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	1.78		ug/l	0.500	--	1	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008

Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID:	L1620742-07	D	Date Collected:	07/06/16 10:55
Client ID:	MW-562-20160706		Date Received:	07/06/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	07/11/16 12:04			
Analyst:	LB			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	17400		ug/l	2.50	--	5	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-08
Client ID: MW-563-20160705
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/08/16 13:37
Analyst: LB

Date Collected: 07/05/16 12:55
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	19600	E	ug/l	0.500	--	1	A
Ethene	ND		ug/l	0.500	--	1	A
Ethane	4.49		ug/l	0.500	--	1	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008

Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID:	L1620742-08	D	Date Collected:	07/05/16 12:55
Client ID:	MW-563-20160705		Date Received:	07/06/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	07/11/16 12:18			
Analyst:	LB			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	17300		ug/l	2.50	--	5	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-09
Client ID: REW-7-20160706
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/08/16 13:52
Analyst: LB

Date Collected: 07/06/16 09:30
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	19600	E	ug/l	0.500	--	1	A
Ethene	7.90		ug/l	0.500	--	1	A
Ethane	9.94		ug/l	0.500	--	1	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-09 D
Client ID: REW-7-20160706
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/11/16 12:33
Analyst: LB

Date Collected: 07/06/16 09:30
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	17500		ug/l	2.50	--	5	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-10
Client ID: REW-8-20160706
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/08/16 14:06
Analyst: LB

Date Collected: 07/06/16 08:40
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	21900	E	ug/l	0.500	--	1	A
Ethene	2.72		ug/l	0.500	--	1	A
Ethane	8.09		ug/l	0.500	--	1	A

Project Name: RAYTHEON WAYLAND **Lab Number:** L1620742

Project Number: RA-008 **Report Date:** 07/14/16

SAMPLE RESULTS

Lab ID:	L1620742-10	D	Date Collected:	07/06/16 08:40
Client ID:	REW-8-20160706		Date Received:	07/06/16
Sample Location:	WAYLAND, MA		Field Prep:	Not Specified
Matrix:	Water			
Analytical Method:	117,-			
Analytical Date:	07/11/16 12:47			
Analyst:	LB			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	19000		ug/l	2.50	--	5	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-11
Client ID: REW-11-20160706
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/08/16 15:20
Analyst: LB

Date Collected: 07/06/16 10:15
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	21900	E	ug/l	0.500	--	1	A
Ethene	6.83		ug/l	0.500	--	1	A
Ethane	7.47		ug/l	0.500	--	1	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008

Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-11 D
Client ID: REW-11-20160706
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/11/16 13:02
Analyst: LB

Date Collected: 07/06/16 10:15
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	20400		ug/l	2.50	--	5	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-12
Client ID: REW-12-20160706
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/08/16 15:34
Analyst: LB

Date Collected: 07/06/16 08:05
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	27800	E	ug/l	0.500	--	1	A
Ethene	11.7		ug/l	0.500	--	1	A
Ethane	11.3		ug/l	0.500	--	1	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008

Lab Number: L1620742
Report Date: 07/14/16

SAMPLE RESULTS

Lab ID: L1620742-12 D
Client ID: REW-12-20160706
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/11/16 13:16
Analyst: LB

Date Collected: 07/06/16 08:05
Date Received: 07/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	22200		ug/l	2.50	--	5	A

Project Name: RAYTHEON WAYLAND **Lab Number:** L1620742

Project Number: RA-008 **Report Date:** 07/14/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 117,-
Analytical Date: 07/08/16 11:12
Analyst: LB

Parameter	Result	Qualifier	Units	RL	MDL	
Dissolved Gases by GC - Mansfield Lab for sample(s): 01-12 Batch: WG911525-3						
Methane	ND		ug/l	0.500	--	A
Ethene	ND		ug/l	0.500	--	A
Ethane	ND		ug/l	0.500	--	A

Project Name: RAYTHEON WAYLAND **Lab Number:** L1620742

Project Number: RA-008 **Report Date:** 07/14/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 117,-
Analytical Date: 07/11/16 10:16
Analyst: LB

Parameter	Result	Qualifier	Units	RL	MDL	
Dissolved Gases by GC - Mansfield Lab for sample(s): 01-03,05-12 Batch: WG911525-9						
Methane	ND		ug/l	0.500	--	A
Ethene	ND		ug/l	0.500	--	A
Ethane	ND		ug/l	0.500	--	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: RA-008

Lab Number: L1620742

Report Date: 07/14/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 01-12 Batch: WG911525-2									
Methane	103		-		80-120	-		25	A
Ethene	104		-		80-120	-		25	A
Ethane	107		-		80-120	-		25	A

Matrix Spike Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: RA-008

Lab Number: L1620742
Report Date: 07/14/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 01-12 QC Batch ID: WG911525-5 QC Sample: L1620742-04 Client ID: MW-268S-20160705													
Methane	1200	54.6	1240	**73**	Q	-	-		80-120	-		25	A
Ethene	2.30	95.5	111	114		-	-		80-120	-		25	A
Ethane	ND	102	118	115		-	-		80-120	-		25	A

Lab Duplicate Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: RA-008

Lab Number: L1620742
Report Date: 07/14/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits	
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 01-12 QC Batch ID: WG911525-4 QC Sample: L1620742-04 Client ID: MW-268S-20160705							
Methane	1200	1200	ug/l	0		25	A
Ethene	2.30	2.23	ug/l	3		25	A
Ethane	ND	ND	ug/l	NC		25	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008

Lab Number: L1620742
Report Date: 07/14/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information	Custody Seal
Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1620742-01A	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-01B	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-02A	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-02B	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-03A	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-03B	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-04A	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-04B	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-05A	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-05B	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-06A	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-06B	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-07A	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-07B	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-08A	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-08B	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-09A	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-09B	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-10A	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-10B	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-11A	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-11B	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-12A	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)
L1620742-12B	20ml Vial HCl preserved	A	N/A	2.1	Y	Absent	DISSGAS(14)

*Values in parentheses indicate holding time in days

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L1620742
Project Number:	RA-008	**Report Date:**	07/14/16

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L1620742
Project Number:	RA-008	**Report Date:**	07/14/16

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: RAYTHEON WAYLAND **Lab Number:** L1620742
Project Number: RA-008 **Report Date:** 07/14/16

REFERENCES

117 Technical Guidance for the Natural Attenuation Indicators: Methane, Ethane, and Ethene, EPA-NE, Revision 1, February 21, 2002 and Sample Preparation & Calculations for Dissolved Gas Analysis in Water Samples using a GC Headspace Equilibration Technique, EPA RSKSOP-175, Revision 2, May 2004.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene
EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene
EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol.
EPA 1010A: NPW: Ignitability
EPA 6010C: NPW: Strontium; SCM: Strontium
EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 9010: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: Sulfate
EPA 9050A: NPW: Specific Conductance
EPA 9056: NPW: Chloride, Nitrate, Sulfate
EPA 9065: NPW: Phenols
EPA 9251: NPW: Chloride
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
EPA 8270D: NPW: Biphenyl; SCM: Biphenyl, Caprolactam
EPA 8270D-SIM Isotope Dilution: SCM: 1,4-Dioxane
SM 2540D: TSS
SM2540G: SCM: Percent Solids
EPA 1631E: SCM: Mercury
EPA 7474: SCM: Mercury
EPA 8081B: NPW and SCM: Mirex, Hexachlorobenzene.
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA 8270-SIM: NPW and SCM: Alkylated PAHs.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene, n-Butylbenzene, n-Propylbenzene, sec-Butylbenzene, tert-Butylbenzene.
Biological Tissue Matrix: ***8270D-SIM; 3050B; 3051A; 7471B; 8081B; 8082A; 6020A:*** Lead***; 8270D:*** bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Diethyl phthalate, Dimethyl phthalate, Di-n-butyl phthalate, Di-n-octyl phthalate, Fluoranthene, Pentachlorophenol.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 2

ALPHA ANALYTICAL
8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220
320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Date Rec'd in Lab: 7/6/16

ALPHA Job #: L1620742

Client Information

Client: Innovative Engineering Solutions Inc.
Address: 25 Spring St
Walpole MA 02081
Phone: 508-668-0033
Email: vipariyar@IESIonline.com

Project Information

Project Name: Raytheon Wayland
Project Location: Wayland MA
Project #: RA-008
Project Manager: Vidhi Pariyar
ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 7/14/16

Report Information - Data Deliverables

☐ ADEx ☒ EMAIL

Billing Information

☒ Same as Client info PO #: RA-008

Regulatory Requirements & Project Information Requirements

☐ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☐ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

Additional Project Information:

ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2; SVOC: ☐ ABN ☐ PAH; METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15; METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13; EPH: ☐ Ranges & Targets ☐ Ranges Only; VPH: ☐ Ranges & Targets ☐ Ranges Only; ☐ PCB ☐ PEST; TPH: ☐ Quant Only ☐ Fingerprint; Disposal; Sample

SAMPLE INFO
Filtration: ☐ Field ☐ Lab to do
Preservation: ☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	Disposal	Sample Comments	Total # Bottles
20742.01	MW-265M-20160706	7/6/16	1135	GW	[illegible]	X		
.02	MW-267S-20160705	7/5/16	1050	GW	[illegible]	X		
.03	MW-267M-20160705	7/5/16	1130	GW	[illegible]	X		
.04	MW-268S-20160705	7/5/16	0915	GW	[illegible]	X		
.05	MW-268M-20160705	7/5/16	0955	GW	[illegible]	X		
.06	MW-561-20160705	7/5/16	1210	GW	[illegible]	X		
.07	MW-562-20160706	7/6/16	1055	GW	[illegible]	X		
.08	MW-563-20160705	7/5/16	1255	GW	[illegible]	X		
	~~REW-6-20160706~~	~~7/6/16~~		~~GW~~	~~[illegible]~~	~~X~~	Deleted	
.09	REW-7-20160706	7/6/16	0930	GW	[illegible]	X		
					Container Type	V		
					Preservative	B		

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	7/6/16 1330	AAL	7/6/16 1330
[signature]			

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

CHAIN OF CUSTODY

PAGE 2 OF 2

ALPHA ANALYTICAL — World Class Chemistry

8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Date Rec'd in Lab: 7/6/16

ALPHA Job #: L1620742

Project Information

Project Name: Raytheon Waylnd
Project Location: Waylnd MA
Project #: RA-008
Project Manager: Vicki Parilyer
ALPHA Quote #:

Report Information - Data Deliverables

☐ ADEx ☒ EMAIL

Billing Information

☒ Same as Client info PO #: RA-008

Client Information

Client: Innovative Engineering Solutions Inc
Address: 25 Spring St
Walpole MA 02081
Phone: 508-668-0033
Email: vparilyer@IESolutions.com

Regulatory Requirements & Project Information Requirements

☐ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☐ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 7/14/16

Additional Project Information:

ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2; SVOC: ☐ ABN ☐ PAH; METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15; METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13; EPH: ☐ Ranges & Targets ☐ Ranges Only; VPH: ☐ Ranges & Targets ☐ Ranges Only; ☐ PCB ☐ PEST; TPH: ☐ Quant Only ☐ Fingerprint; Dissolved Copper

SAMPLE INFO: Filtration ☐ Field ☐ Lab to do; Preservation ☐ Lab to do

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	Dissolved Copper	Sample Comments	Total # Bottles
20742, 10	RLW-8-20160706	7/5/16	0840	GW	[illegible]	X		
, 11	RLW-11-20160706	7/5/16	1015	GW	[illegible]	X		
, 12	RLW-12-20160706	7/5/16	0805	GW	[illegible]	X		
Container Type						V		
Preservative						B		

Container Type: P= Plastic, A= Amber glass, V= Vial, G= Glass, B= Bacteria cup, C= Cube, O= Other, E= Encore, D= BOD Bottle

Preservative: A= None, B= HCl, C= HNO_3, D= H_2SO_4, E= NaOH, F= MeOH, G= $NaHSO_4$, H = $Na_2S_2O_3$, I= Ascorbic Acid, J = NH_4Cl, K= Zn Acetate, O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	7/6/16 1330	→ AAL	7/6/16 1330
[signature]			

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	**RA-008**	JOB NUMBER	N/A
WELL ID	**MW-265M**	DATE	6-Jul-16
TIME	START 1110 END 1145		

Innovative Engineering Solutions, Inc.
25 Spring Street
Walpole Massachusetts 02081

WATER LEVEL/PUMP SETTINGS

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	14.22 FT	WELL DEPTH	48.40 FT	WELL DIAMETER	2 IN
FINAL DEPTH TO WATER	15.52 FT	SCREEN LENGTH	____ FT	PID AMBIENT AIR	NA PPM
DRAWDOWN VOLUME	0.21 GAL				

(initial - final x 0.163 {2-inch} or x 0.654 {4-inch})

TOTAL VOLUME PURGED: 1.82 GAL

(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/millilter)

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/min)	TEMP (deg C)	SPECIFIC CONDUCTANCE (mg/cm)	pH (units)	DISS. O_2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
1120	15.43	200	15.63	1533	5.19	0.59	N/A	79.9	
1125	15.45	200	15.44	1526	5.18	0.30	N/A	79.7	
1130	15.48	200	15.61	1532	5.18	0.25	N/A	79.2	
1135	15.52	200	15.54	1532	5.18	0.23	N/A	79	
									sampled @ 1135

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL
GEO 2	SILICON/ POLY	Peristaltic

ANALYTICAL PARAMETERS

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE RESULTS
X	TA	8260B	HCL/4 DEG C	3 x 40 ml	X	
X	TA	9060A TOC	HCL/4 DEG C	2 x 40 ml	X	
X	TA	2320B Alkalinity	None/4 DEG C	1 x 125 ml	X	
X	TA	6010MCP Total Iron	HNO3/4 DEG C	1 x 250 ml	X	
X	TA	NO3, NO4, Ortho PO4	4 DEG C	1 x 250 ml	X	
X	TA	350.1 NH3	H2SO4/4 DEG C	1 x 125 ml	X	
X	TA	pH, Cl, SO4	None/4 DEG C	1 x 250 ml	X	
X	Alpha	Dissolved Gases	HCL/4 DEG C	2 x 40 ml	X	

PURGE WATER DESCRIPTION: cloudy, gaseous, moderate bio odor

NOTES

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	**RA-008**	JOB NUMBER	N/A
WELL ID	**MW-267S**	DATE	5-Jul-16
TIME	START 1025 END 1100		

Innovative Engineering Solutions, Inc.
25 Spring Street
Walpole Massachusetts 02081

WATER LEVEL/PUMP SETTINGS

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	10.25 FT	WELL DEPTH	76.40 FT	WELL DIAMETER	2 IN
FINAL DEPTH TO WATER	17.06 FT	SCREEN LENGTH	____ FT	PID AMBIENT AIR	NA PPM
DRAWDOWN VOLUME	1.11 GAL				

(initial - final x 0.163 {2-inch} or x 0.654 {4-inch})

TOTAL VOLUME PURGED: 1.82 GAL

(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/millilter)

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/min)	TEMP (deg C)	SPECIFIC CONDUCTANCE (mg/cm)	pH (units)	DISS. O_2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
1035	14.38	200	12.83	1136	5.09	0.87	N/A	75.1	
1040	15.50	200	13.09	1117	5.10	0.60	N/A	73.1	
1045	16.51	200	12.96	1086	5.10	0.58	N/A	71.6	
1050	17.06	200	12.90	1074	5.10	0.55	N/A	70.9	
									sampled @ 1050

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL
GEO 2	SILICON/ POLY	Peristaltic

ANALYTICAL PARAMETERS

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE RESULTS
X	TA	8260B	HCL/4 DEG C	3 x 40 ml	X	
X	TA	9060A TOC	HCL/4 DEG C	2 x 40 ml	X	
X	TA	2320B Alkalinity	None/4 DEG C	1 x 125 ml	X	
X	TA	6010MCP Total Iron	HNO3/4 DEG C	1 x 250 ml	X	
X	TA	NO3, NO4, Ortho PO4	4 DEG C	1 x 250 ml	X	
X	TA	350.1 NH3	H2SO4/4 DEG C	1 x 125 ml	X	
X	TA	pH, Cl, SO4	None/4 DEG C	1 x 250 ml	X	
X	Alpha	Dissolved Gases	HCL/4 DEG C	2 x 40 ml	X	

PURGE WATER DESCRIPTION: cloudy, gaseous, moderate bio odor

NOTES

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	**RA-008**	JOB NUMBER	N/A
WELL ID	**MW-267M**	DATE	5-Jul-16
TIME	START 1105 END 1140		

Innovative Engineering Solutions, Inc.
25 Spring Street
Walpole Massachusetts 02081

WATER LEVEL/PUMP SETTINGS

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	11.59 FT	WELL DEPTH	98.20 FT	WELL DIAMETER	2 IN
FINAL DEPTH TO WATER	14.24 FT	SCREEN LENGTH	____ FT	PID AMBIENT AIR	NA PPM
DRAWDOWN VOLUME	0.43 GAL				

(initial - final x 0.163 {2-inch} or x 0.654 {4-inch})

TOTAL VOLUME PURGED: 1.82 GAL

(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/millilter)

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/min)	TEMP (deg C)	SPECIFIC CONDUCTANCE (mg/cm)	pH (units)	DISS. O_2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
1115	13.48	200	12.14	468	6.79	0.43	N/A	-142.4	
1120	13.88	200	12.02	467	6.84	0.38	N/A	-148.2	
1125	14.10	200	11.94	466	6.85	0.40	N/A	-148.8	
1130	14.24	200	12.05	471	6.85	0.40	N/A	-148.2	
									sampled @ 1130

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL
GEO 2	SILICON/ POLY	Peristaltic

ANALYTICAL PARAMETERS

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE RESULTS
X	TA	8260B	HCL/4 DEG C	3 x 40 ml	X	
X	TA	9060A TOC	HCL/4 DEG C	2 x 40 ml	X	
X	TA	2320B Alkalinity	None/4 DEG C	1 x 125 ml	X	
X	TA	6010MCP Total Iron	HNO3/4 DEG C	1 x 250 ml	X	
X	TA	NO3, NO4, Ortho PO4	4 DEG C	1 x 250 ml	X	
X	TA	350.1 NH3	H2SO4/4 DEG C	1 x 125 ml	X	
X	TA	pH, Cl, SO4	None/4 DEG C	1 x 250 ml	X	
X	Alpha	Dissolved Gases	HCL/4 DEG C	2 x 40 ml	X	

PURGE WATER DESCRIPTION: cloudy, gaseous, slight bio odor

NOTES

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	**RA-008**	JOB NUMBER	N/A
WELL ID	**MW-268S**	DATE	5-Jul-16
TIME	START 0850 END 0925		

Innovative Engineering Solutions, Inc.
25 Spring Street
Walpole Massachusetts 02081

WATER LEVEL/PUMP SETTINGS

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	9.85 FT	WELL DEPTH	77.00 FT	WELL DIAMETER	2 IN
FINAL DEPTH TO WATER	15.7 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	NA PPM
DRAWDOWN VOLUME	0.95 GAL				

(initial - final x 0.163 {2-inch} or x 0.654 {4-inch})

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

TOTAL VOLUME PURGED: 1.82 GAL

(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/millilter)

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/min)	TEMP (deg C)	SPECIFIC CONDUCTANCE (mg/cm)	pH (units)	DISS. O_2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
0900	13.43	200	11.84	150	7.35	0.67	N/A	-33.2	
0905	14.02	200	11.96	144	7.30	0.61	N/A	-28.5	
0910	15.08	200	11.86	146	7.27	0.62	N/A	-22.7	
0915	15.70	200	12.03	146	7.24	0.62	N/A	-21.2	
									sampled @ 0915

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL
GEO 2	SILICON/ POLY	Peristaltic

ANALYTICAL PARAMETERS

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE RESULTS
X	TA	8260B	HCL/4 DEG C	3 x 40 ml	X	
X	TA	9060A TOC	HCL/4 DEG C	2 x 40 ml	X	
X	TA	2320B Alkalinity	None/4 DEG C	1 x 125 ml	X	
X	TA	6010MCP Total Iron	HNO3/4 DEG C	1 x 250 ml	X	
X	TA	NO3, NO4, Ortho PO4	4 DEG C	1 x 250 ml	X	
X	TA	350.1 NH3	H2SO4/4 DEG C	1 x 125 ml	X	
X	TA	pH, Cl, SO4	None/4 DEG C	1 x 250 ml	X	
X	Alpha	Dissolved Gases	HCL/4 DEG C	2 x 40 ml	X	

PURGE WATER DESCRIPTION: cloudy, no odor

NOTES

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	**RA-008**	JOB NUMBER	N/A
WELL ID	**MW-268M**	DATE	5-Jul-16
TIME	START 0930 END 1015		

Innovative Engineering Solutions, Inc.
25 Spring Street
Walpole Massachusetts 02081

WATER LEVEL/PUMP SETTINGS

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	9.92 FT	WELL DEPTH	93.80 FT	WELL DIAMETER	2 IN
FINAL DEPTH TO WATER	11.01 FT	SCREEN LENGTH	____ FT	PID AMBIENT AIR	NA PPM
DRAWDOWN VOLUME	0.18 GAL				

(initial - final x 0.163 {2-inch} or x 0.654 {4-inch})

TOTAL VOLUME PURGED: 2.34 GAL

(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/millilter)

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/min)	TEMP (deg C)	SPECIFIC CONDUCTANCE (mg/cm)	pH (units)	DISS. O_2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
0940	10.96	200	13.28	471	7.09	0.46	N/A	-176.9	Dup1
0945	11.01	200	12.77	496	7.05	0.37	N/A	-175.6	
0950	11.01	200	13.05	515	7.04	0.35	N/A	-173.6	
0955	11.01	200	12.95	520	7.02	0.35	N/A	-171.8	
									sampled @ 0955

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL
GEO 2	SILICON/ POLY	Peristaltic

ANALYTICAL PARAMETERS

	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE RESULTS
X TA	8260B	HCL/4 DEG C	3 x 40 ml	X	
X TA	9060A TOC	HCL/4 DEG C	2 x 40 ml	X	
X TA	2320B Alkalinity	None/4 DEG C	1 x 125 ml	X	
X TA	6010MCP Total Iron	HNO3/4 DEG C	1 x 250 ml	X	
X TA	NO3, NO4, Ortho PO4	4 DEG C	1 x 250 ml	X	
X TA	350.1 NH3	H2SO4/4 DEG C	1 x 125 ml	X	
X TA	pH, Cl, SO4	None/4 DEG C	1 x 250 ml	X	
X Alpha	Dissolved Gases	HCL/4 DEG C	2 x 40 ml	X	

PURGE WATER DESCRIPTION: cloudy, no odor, gaseous

NOTES

Dup1

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	**RA-008**	JOB NUMBER	N/A
WELL ID	**MW-561**	DATE	5-Jul-16
TIME	START 1145 END 1220		

Innovative Engineering Solutions, Inc.
25 Spring Street
Walpole Massachusetts 02081

WATER LEVEL/PUMP SETTINGS

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	12.31 FT	WELL DEPTH	53.65 FT	WELL DIAMETER	2 IN
FINAL DEPTH TO WATER	13.28 FT	SCREEN LENGTH	____ FT	PID AMBIENT AIR	NA PPM
DRAWDOWN VOLUME	0.97 GAL				

(initial - final x 0.163 {2-inch} or x 0.654 {4-inch})

TOTAL VOLUME PURGED: 1.82 GAL

(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/millilter)

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/min)	TEMP (deg C)	SPECIFIC CONDUCTANCE (mg/cm)	pH (units)	DISS. O_2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
1155	13.41	200	13.84	893	6.97	0.43	N/A	-188.3	
1200	13.36	200	14.11	899	6.96	0.49	N/A	-187.9	
1205	13.31	200	14.30	902	6.95	0.47	N/A	-186.3	
1210	13.28	200	14.73	907	6.94	0.45	N/A	-185.9	
									sampled @ 1210

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL
GEO 2	SILICON/ POLY	Peristaltic

ANALYTICAL PARAMETERS

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE RESULTS
X	TA	8260B	HCL/4 DEG C	3 x 40 ml	X	
X	TA	9060A TOC	HCL/4 DEG C	2 x 40 ml	X	
X	TA	2320B Alkalinity	None/4 DEG C	1 x 125 ml	X	
X	TA	6010MCP Total Iron	HNO3/4 DEG C	1 x 250 ml	X	
X	TA	NO3, NO4, Ortho PO4	4 DEG C	1 x 250 ml	X	
X	TA	350.1 NH3	H2SO4/4 DEG C	1 x 125 ml	X	
X	TA	pH, Cl, SO4	None/4 DEG C	1 x 250 ml	X	
X	Alpha	Dissolved Gases	HCL/4 DEG C	2 x 40 ml	X	

PURGE WATER DESCRIPTION: cloudy, slight bio odor, gaseous

NOTES

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	**RA-008**	JOB NUMBER	N/A
WELL ID	**MW-562**	DATE	6-Jul-16
TIME	START 1030 END 1105		

Innovative Engineering Solutions, Inc.
25 Spring Street
Walpole Massachusetts 02081

WATER LEVEL/PUMP SETTINGS

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	11.25 FT	WELL DEPTH	41.60 FT	WELL DIAMETER	1 1/2 IN
FINAL DEPTH TO WATER	12.94 FT	SCREEN LENGTH	____ FT	PID AMBIENT AIR	NA PPM
DRAWDOWN VOLUME	0.28 GAL				

(initial - final x 0.163 {2-inch} or x 0.654 {4-inch})

TOTAL VOLUME PURGED: 1.82 GAL

(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/millilter)

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/min)	TEMP (deg C)	SPECIFIC CONDUCTANCE (mg/cm)	pH (units)	DISS. O_2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
1040	12.89	200	15.31	11.90	6.18	0.40	N/A	-89.1	
1045	12.90	200	15.32	11.54	6.16	0.25	N/A	-92	
1050	12.92	200	15.40	1140	6.14	0.23	N/A	-92.2	
1055	12.94	200	15.35	1131	6.12	0.21	N/A	-92	
									sampled @ 1055

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL
GEO 2	SILICON/ POLY	Peristaltic

ANALYTICAL PARAMETERS

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE RESULTS
X	TA	8260B	HCL/4 DEG C	3 x 40 ml	X	
X	TA	9060A TOC	HCL/4 DEG C	2 x 40 ml	X	
X	TA	2320B Alkalinity	None/4 DEG C	1 x 125 ml	X	
X	TA	6010MCP Total Iron	HNO3/4 DEG C	1 x 250 ml	X	
X	TA	NO3, NO4, Ortho PO4	4 DEG C	1 x 250 ml	X	
X	TA	350.1 NH3	H2SO4/4 DEG C	1 x 125 ml	X	
X	TA	pH, Cl, SO4	None/4 DEG C	1 x 250 ml	X	
X	Alpha	Dissolved Gases	HCL/4 DEG C	2 x 40 ml	X	

PURGE WATER DESCRIPTION: cloudy, moderate bio odor, gaseous

NOTES

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	**RA-008**	JOB NUMBER	N/A
WELL ID	**MW-563**	DATE	6-Jul-16
TIME	START 1230 END 1305		

Innovative Engineering Solutions, Inc.
25 Spring Street
Walpole Massachusetts 02081

WATER LEVEL/PUMP SETTINGS

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	9.23 FT	WELL DEPTH	65.20 FT	WELL DIAMETER	2 IN
FINAL DEPTH TO WATER	13.28 FT	SCREEN LENGTH	____ FT	PID AMBIENT AIR	NA PPM
DRAWDOWN VOLUME	0.66 GAL				

(initial - final x 0.163 {2-inch} or x 0.654 {4-inch})

TOTAL VOLUME PURGED: 1.82 GAL

(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/millilter)

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/min)	TEMP (deg C)	SPECIFIC CONDUCTANCE (mg/cm)	pH (units)	DISS. O_2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
1240	12.08	200	14.09	552	6.74	0.47	N/A	-126	
1245	12.61	200	14.09	552	6.75	0.30	N/A	-128.4	
1250	12.83	200	14.01	554	6.75	0.27	N/A	-129.2	
1255	13.23	200	13.60	551	6.75	0.24	N/A	-129.8	
									sampled @ 1255

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL
GEO 2	SILICON/ POLY	Peristaltic

ANALYTICAL PARAMETERS

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE RESULTS
X	TA	8260B	HCL/4 DEG C	3 x 40 ml	X	
X	TA	9060A TOC	HCL/4 DEG C	2 x 40 ml	X	
X	TA	2320B Alkalinity	None/4 DEG C	1 x 125 ml	X	
X	TA	6010MCP Total Iron	HNO3/4 DEG C	1 x 250 ml	X	
X	TA	NO3, NO4, Ortho PO4	4 DEG C	1 x 250 ml	X	
X	TA	350.1 NH3	H2SO4/4 DEG C	1 x 125 ml	X	
X	TA	pH, Cl, SO4	None/4 DEG C	1 x 250 ml	X	
X	Alpha	Dissolved Gases	HCL/4 DEG C	2 x 40 ml	X	

PURGE WATER DESCRIPTION: cloudy, slight bio odor, gaseous

NOTES

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	**RA-008**	JOB NUMBER	N/A
WELL ID	**REW-7**	DATE	6-Jul-16
TIME	START 0905 END 0950		

Innovative Engineering Solutions, Inc.
25 Spring Street
Walpole Massachusetts 02081

WATER LEVEL/PUMP SETTINGS

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	Note 1 FT	WELL DEPTH	Note 1 FT	WELL DIAMETER	4 IN
FINAL DEPTH TO WATER	Note 1 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	NA PPM
DRAWDOWN VOLUME	Note 1 GAL				

(initial - final x 0.163 {2-inch} or x 0.654 {4-inch})

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

TOTAL VOLUME PURGED: 3.51 GAL

(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/millilter)

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/min)	TEMP (deg C)	SPECIFIC CONDUCTANCE (mg/cm)	pH (units)	DISS. O_2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
0915	Note 1	300	13.19	478	6.69	0.78	N/A	-108.7	Dup 2
0920	Note 1	300	13.01	473	6.70	0.68	N/A	-112.7	
0925	Note 1	300	13.08	470	6.68	0.62	N/A	-113.2	
0930	Note 1	300	13.03	467	6.68	0.60	N/A	-115.9	
									sampled @ 0930

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL
GEO 2	SILICON/ POLY	Peristaltic

ANALYTICAL PARAMETERS

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE RESULTS
X	TA	8260B	HCL/4 DEG C	3 x 40 ml	X	
X	TA	9060A TOC	HCL/4 DEG C	2 x 40 ml	X	
X	TA	2320B Alkalinity	None/4 DEG C	1 x 125 ml	X	
X	TA	6010MCP Total Iron	HNO3/4 DEG C	1 x 250 ml	X	
X	TA	NO3, NO4, Ortho PO4	4 DEG C	1 x 250 ml	X	
X	TA	350.1 NH3	H2SO4/4 DEG C	1 x 125 ml	X	
X	TA	pH, Cl, SO4	None/4 DEG C	1 x 250 ml	X	
X	Alpha	Dissolved Gases	HCL/4 DEG C	2 x 40 ml	X	

PURGE WATER DESCRIPTION: cloudy, slight bio odor, gaseous

NOTES

Note 1: pump inwell and operating

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	**RA-008**	JOB NUMBER	N/A
WELL ID	**REW-8**	DATE	6-Jul-16
TIME	START 0815 END 0850		

Innovative Engineering Solutions, Inc.
25 Spring Street
Walpole Massachusetts 02081

WATER LEVEL/PUMP SETTINGS

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	Note 1 FT	WELL DEPTH	Note 1 FT	WELL DIAMETER	4 IN
FINAL DEPTH TO WATER	Note 1 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	NA PPM
DRAWDOWN VOLUME	Note 1 GAL				

(initial - final x 0.163 {2-inch} or x 0.654 {4-inch})

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

TOTAL VOLUME PURGED: 2.73 GAL

(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/millilter)

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/min)	TEMP (deg C)	SPECIFIC CONDUCTANCE (mg/cm)	pH (units)	DISS. O_2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
0825	Note 1	300	16.39	533	6.72	2.86	N/A	-120.7	
0830	Note 1	300	13.90	498	6.70	1.01	N/A	-123.2	
0835	Note 1	300	13.73	490	6.72	0.87	N/A	-127.2	
0840	Note 1	300	13.49	487	6.72	0.78	N/A	-129.7	
									sampled @ 0840

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL
GEO 2	SILICON/ POLY	Peristaltic

ANALYTICAL PARAMETERS

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE RESULTS
X	TA	8260B	HCL/4 DEG C	3 x 40 ml	X	
X	TA	9060A TOC	HCL/4 DEG C	2 x 40 ml	X	
X	TA	2320B Alkalinity	None/4 DEG C	1 x 125 ml	X	
X	TA	6010MCP Total Iron	HNO3/4 DEG C	1 x 250 ml	X	
X	TA	NO3, NO4, Ortho PO4	4 DEG C	1 x 250 ml	X	
X	TA	350.1 NH3	H2SO4/4 DEG C	1 x 125 ml	X	
X	TA	pH, Cl, SO4	None/4 DEG C	1 x 250 ml	X	
X	Alpha	Dissolved Gases	HCL/4 DEG C	2 x 40 ml	X	

PURGE WATER DESCRIPTION: cloudy, slight bio odor, gaseous

NOTES

Note 1: pump inwell and operating

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	**RA-008**	JOB NUMBER	N/A
WELL ID	**REW-11**	DATE	6-Jul-16
TIME	START 0950 END 1025		

Innovative Engineering Solutions, Inc.
25 Spring Street
Walpole Massachusetts 02081

WATER LEVEL/PUMP SETTINGS

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	Note 1 FT	WELL DEPTH	Note 1 FT	WELL DIAMETER	4 IN
FINAL DEPTH TO WATER	Note 1 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	NA PPM
DRAWDOWN VOLUME	Note 1 GAL				

(initial - final x 0.163 {2-inch} or x 0.654 {4-inch})

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

TOTAL VOLUME PURGED: 2.73 GAL

(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/millilter)

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/min)	TEMP (deg C)	SPECIFIC CONDUCTANCE (mg/cm)	pH (units)	DISS. O_2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
1000	Note 1	300	17.99	612	6.79	0.73	N/A	-104.1	
1005	Note 1	300	17.30	570	6.73	0.52	N/A	-104.2	
1010	Note 1	300	17.48	584	6.70	0.50	N/A	-110.4	
1015	Note 1	300	17.20	544	6.74	0.43	N/A	-109.2	
									sampled @ 1015

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL
GEO 2	SILICON/ POLY	Peristaltic

ANALYTICAL PARAMETERS

		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE RESULTS
X	TA	8260B	HCL/4 DEG C	3 x 40 ml	X	
X	TA	9060A TOC	HCL/4 DEG C	2 x 40 ml	X	
X	TA	2320B Alkalinity	None/4 DEG C	1 x 125 ml	X	
X	TA	6010MCP Total Iron	HNO3/4 DEG C	1 x 250 ml	X	
X	TA	NO3, NO4, Ortho PO4	4 DEG C	1 x 250 ml	X	
X	TA	350.1 NH3	H2SO4/4 DEG C	1 x 125 ml	X	
X	TA	pH, Cl, SO4	None/4 DEG C	1 x 250 ml	X	
X	Alpha	Dissolved Gases	HCL/4 DEG C	2 x 40 ml	X	

PURGE WATER DESCRIPTION: cloudy, moderate bio odor, gaseous

NOTES

Note 1: pump inwell and operating

FIELD DATA RECORD - LOW FLOW GROUNDWATER SAMPLING

PROJECT	**RA-008**	JOB NUMBER	N/A
WELL ID	**REW-12**	DATE	6-Jul-16
TIME	START 0740 END 0815		

Innovative Engineering Solutions, Inc.
25 Spring Street
Walpole Massachusetts 02081

WATER LEVEL/PUMP SETTINGS

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	Note 1 FT	WELL DEPTH	Note 1 FT	WELL DIAMETER	4 IN
FINAL DEPTH TO WATER	Note 1 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	NA PPM
DRAWDOWN VOLUME	Note 1 GAL				

(initial - final x 0.163 {2-inch} or x 0.654 {4-inch})

WELL INTEGRITY	YES	NO	N/A
CAP			
CASING			
LOCKED			
COLLAR			

TOTAL VOLUME PURGED: 2.73 GAL

(purge rate (milliliters per minute) x time duration (minutes) x 0.00026 gal/millilter)

PURGE DATA

TIME	DEPTH TO WATER (ft)	PURGE RATE (ml/min)	TEMP (deg C)	SPECIFIC CONDUCTANCE (mg/cm)	pH (units)	DISS. O_2 (mg/L)	TURBIDITY (ntu)	REDOX (mv)	COMMENTS
0750	Note 1	300	12.08	474	6.52	0.80	N/A	-106.5	
0755	Note 1	300	12.27	478	6.53	0.70	N/A	-111.6	
0800	Note 1	300	12.29	479	6.53	0.68	N/A	-114.5	
0805	Note 1	300	12.40	481	6.55	0.67	N/A	-118.5	
									sampled @ 0805

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	TYPE OF TUBING	TYPE OF PUMP MATERIAL
GEO 2	SILICON/ POLY	Peristaltic

ANALYTICAL PARAMETERS

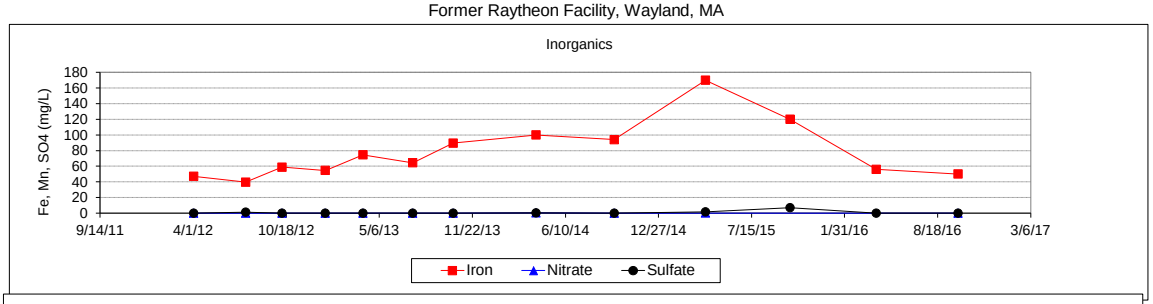
		METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	SAMPLE RESULTS
X	TA	8260B	HCL/4 DEG C	3 x 40 ml	X	
X	TA	9060A TOC	HCL/4 DEG C	2 x 40 ml	X	
X	TA	2320B Alkalinity	None/4 DEG C	1 x 125 ml	X	
X	TA	6010MCP Total Iron	HNO3/4 DEG C	1 x 250 ml	X	
X	TA	NO3, NO4, Ortho PO4	4 DEG C	1 x 250 ml	X	
X	TA	350.1 NH3	H2SO4/4 DEG C	1 x 125 ml	X	
X	TA	pH, Cl, SO4	None/4 DEG C	1 x 250 ml	X	
X	Alpha	Dissolved Gases	HCL/4 DEG C	2 x 40 ml	X	

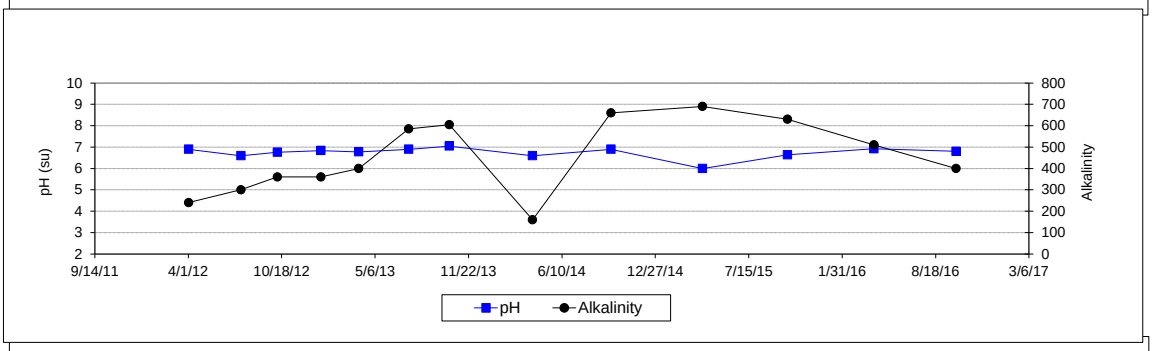
PURGE WATER DESCRIPTION: cloudy, slight bio odor, gaseous

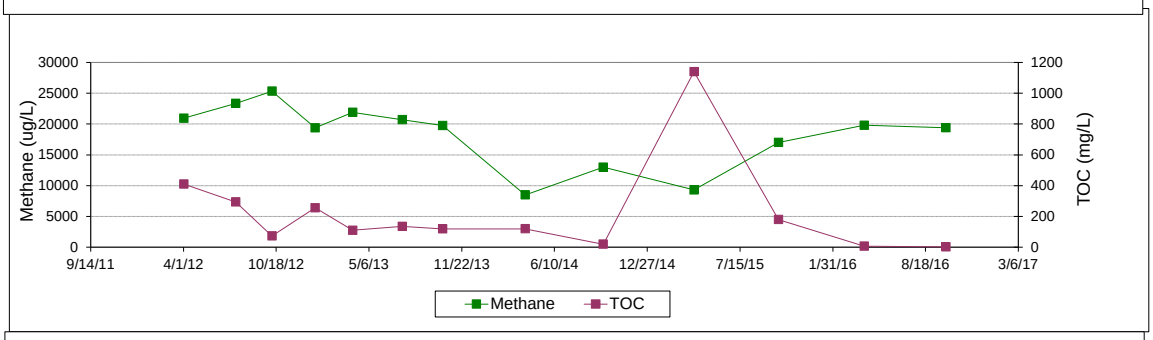
NOTES

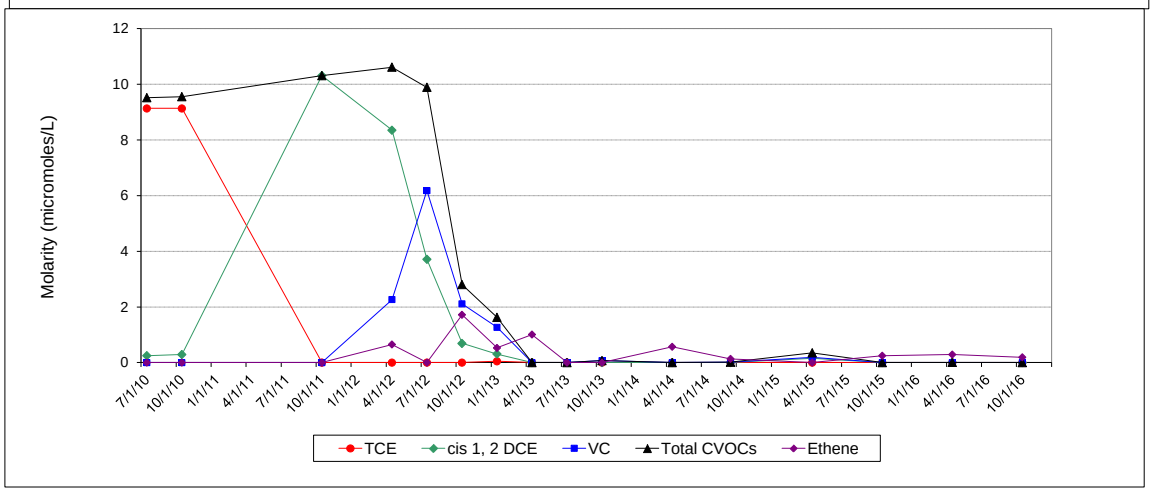
Note 1: pump inwell and operating

Northern Area Remediation Monitoring Data
MW-261S
Former Raytheon Facility, Wayland, MA

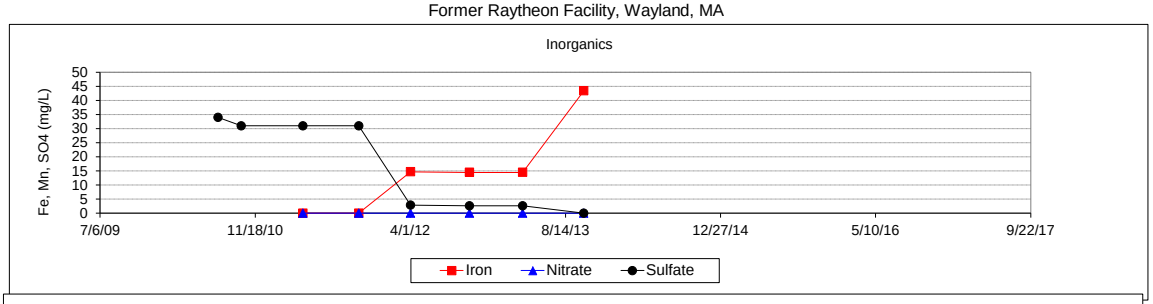


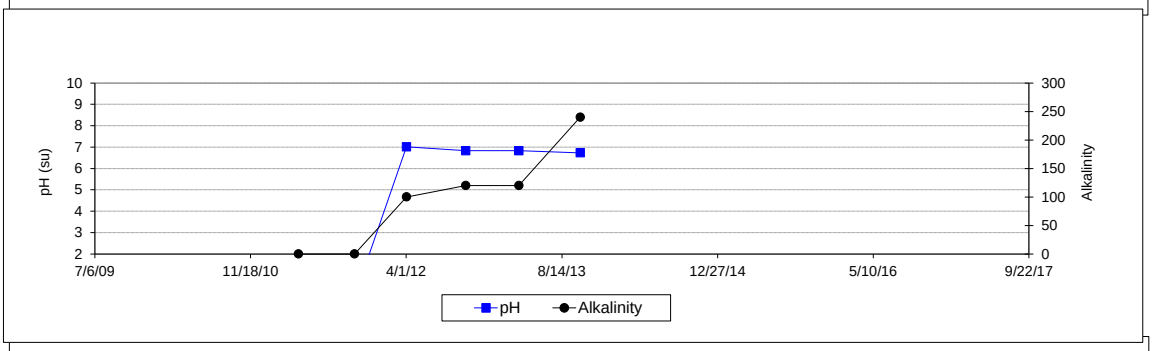


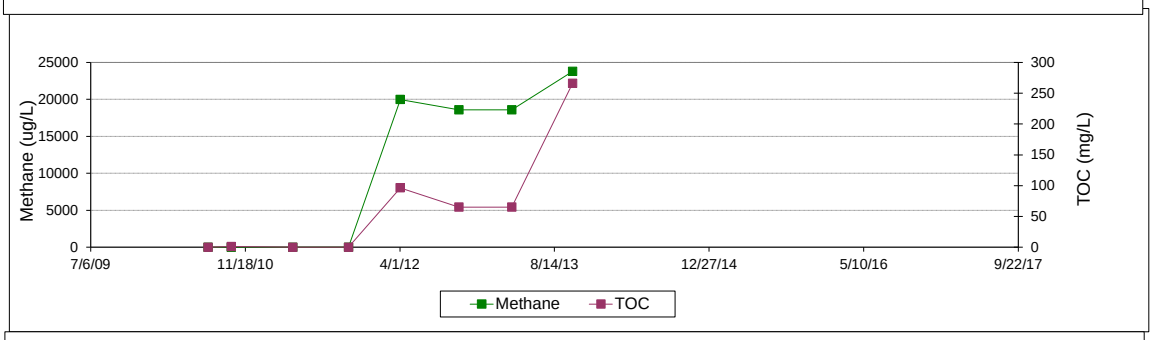


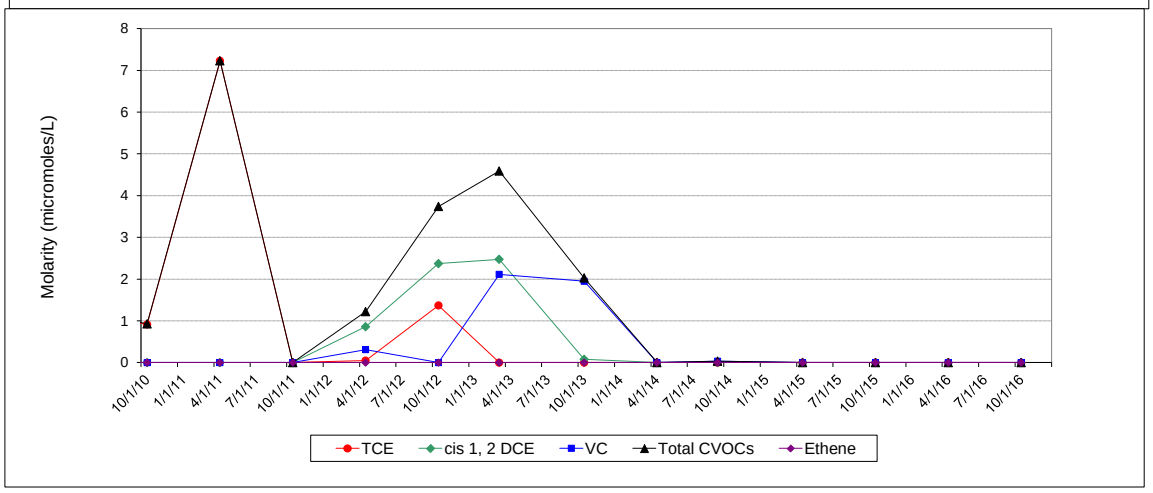


Northern Area Remediation Monitoring Data
MW-551
Former Raytheon Facility, Wayland, MA

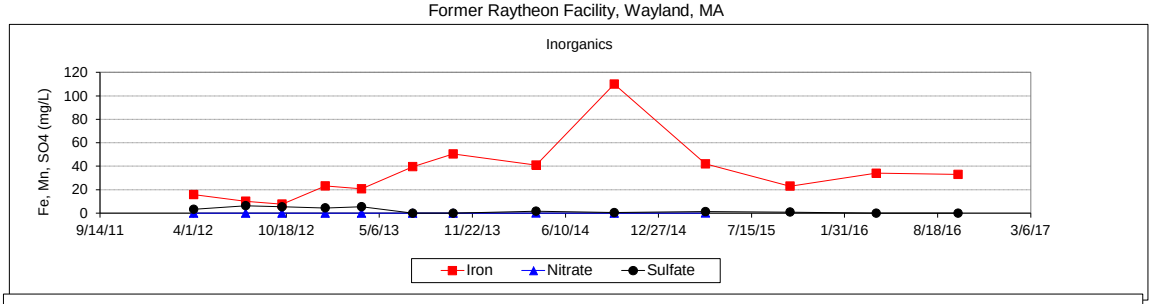


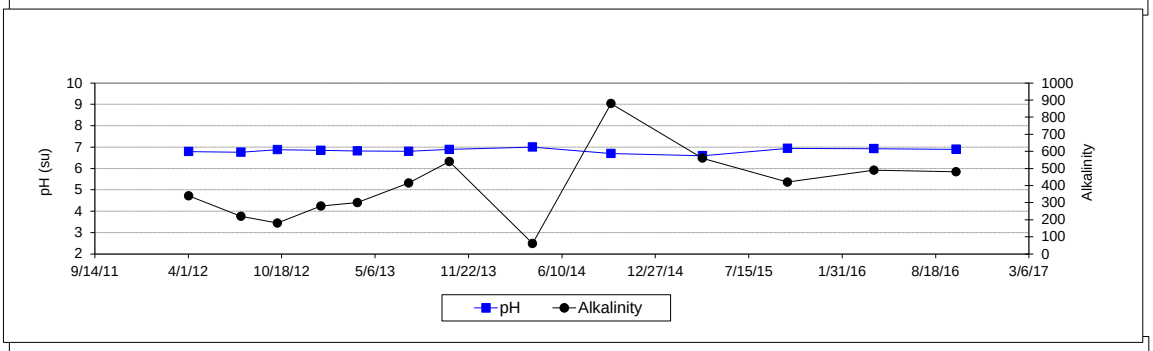


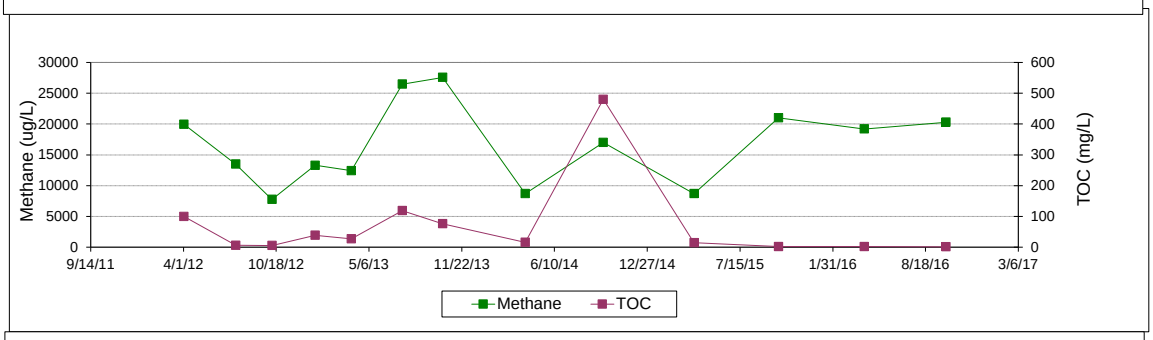


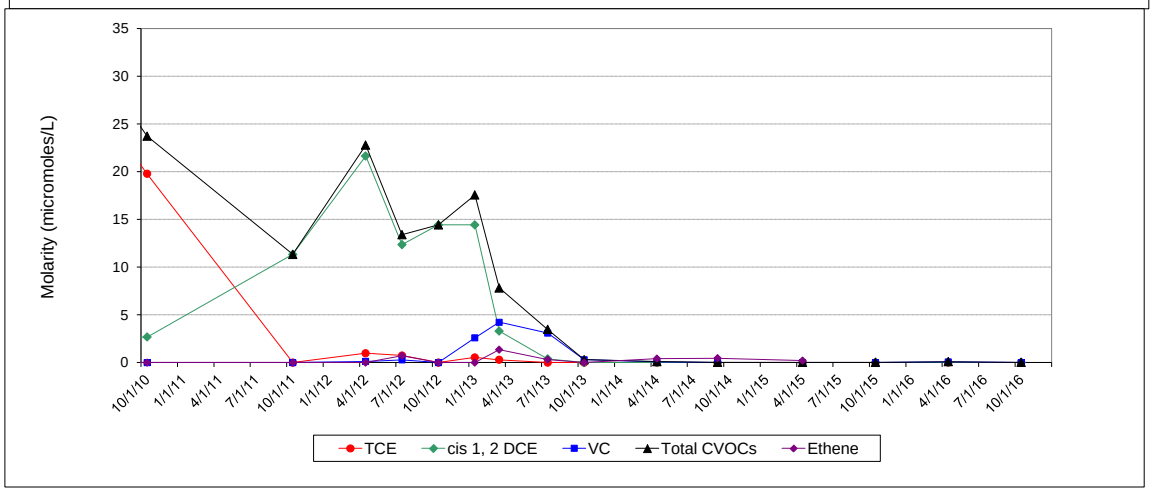


Northern Area Remediation Monitoring Data
MW-552
Former Raytheon Facility, Wayland, MA

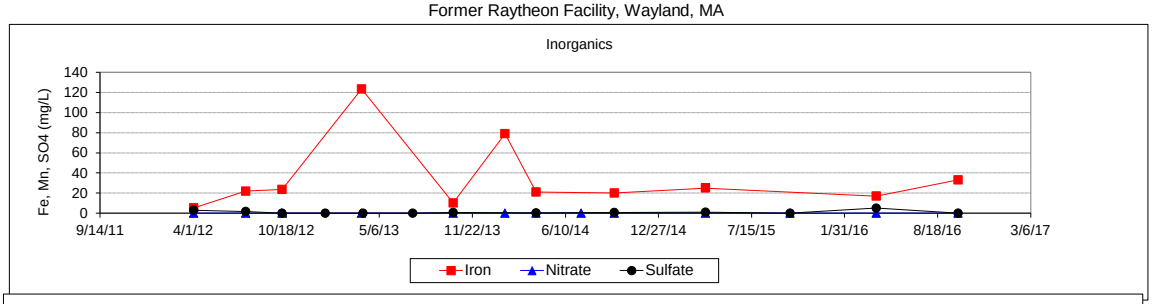


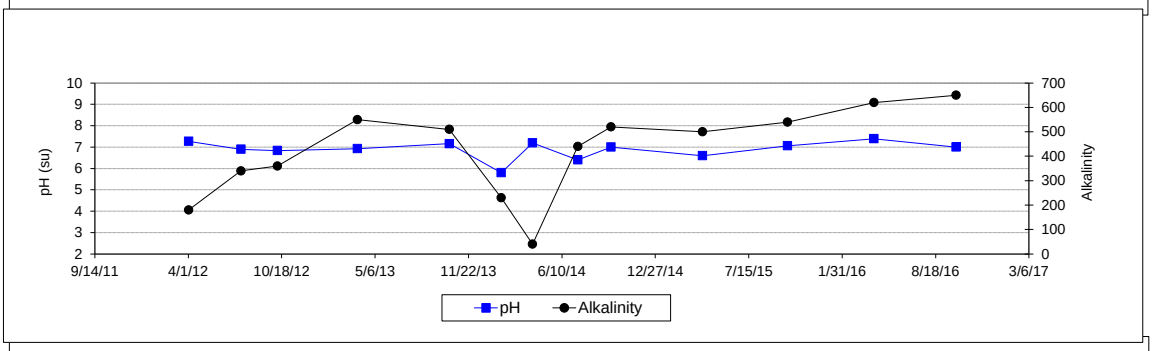


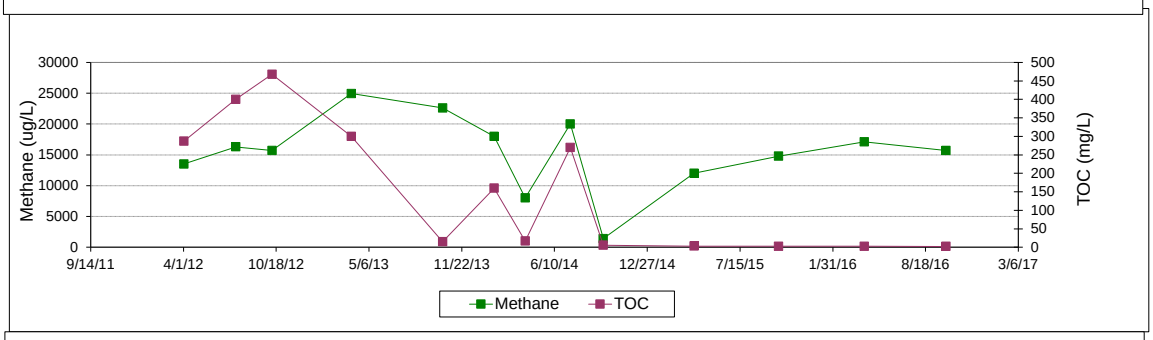


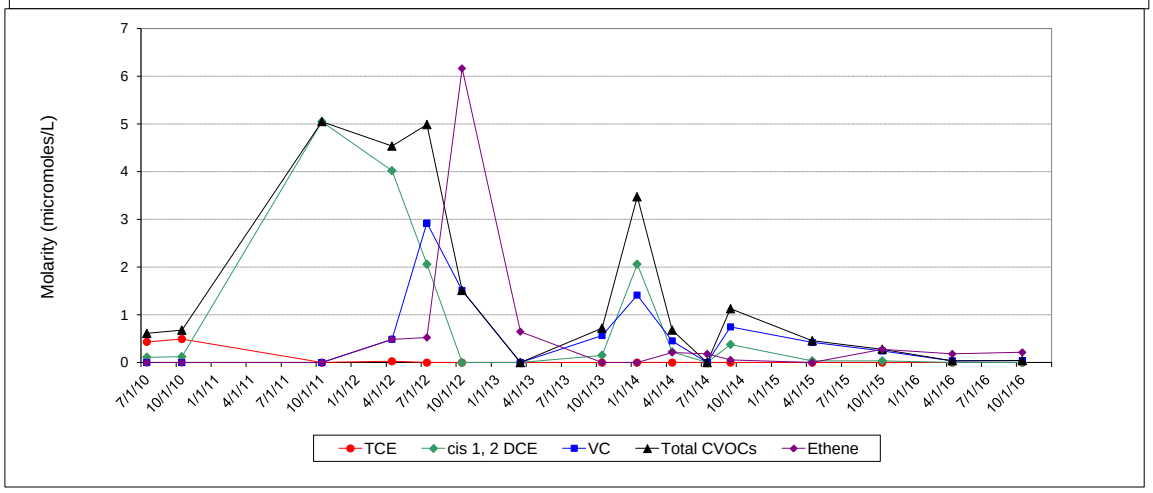


Northern Area Remediation Monitoring Data
MW-553
Former Raytheon Facility, Wayland, MA

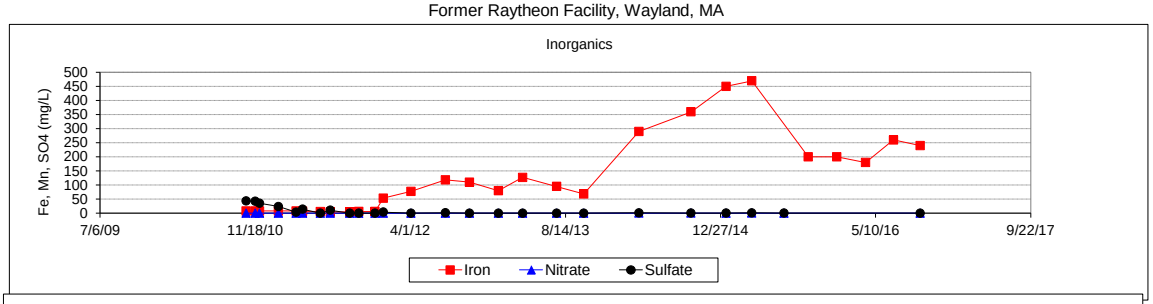


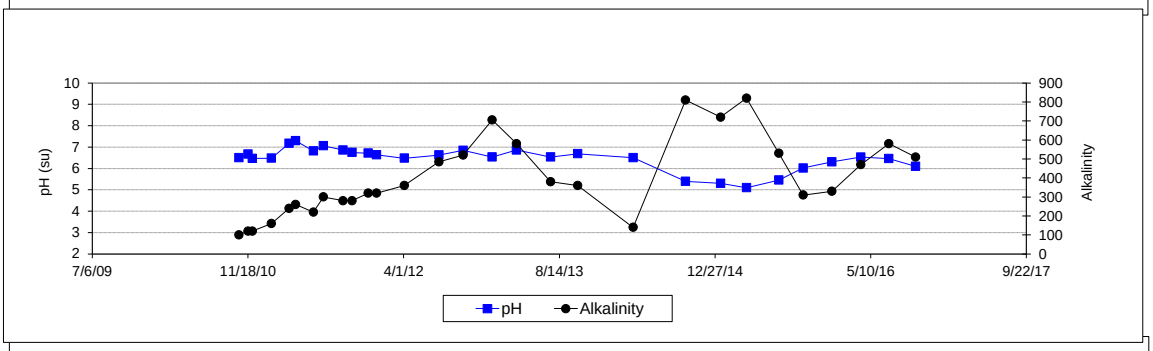


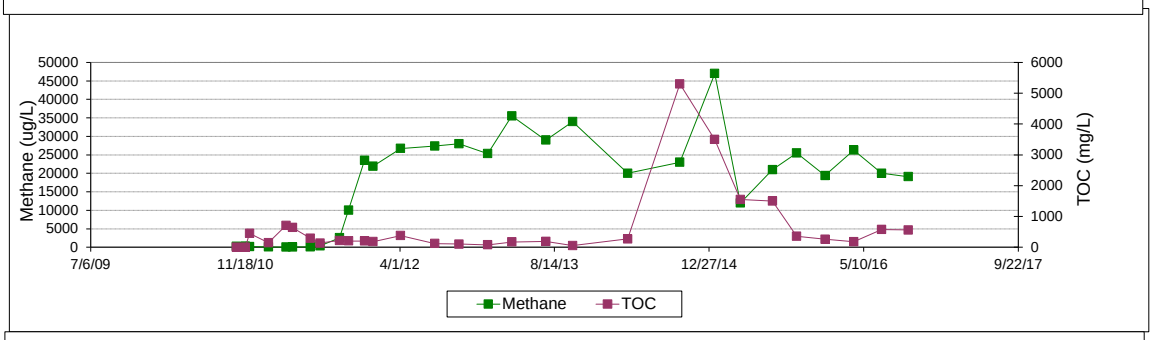


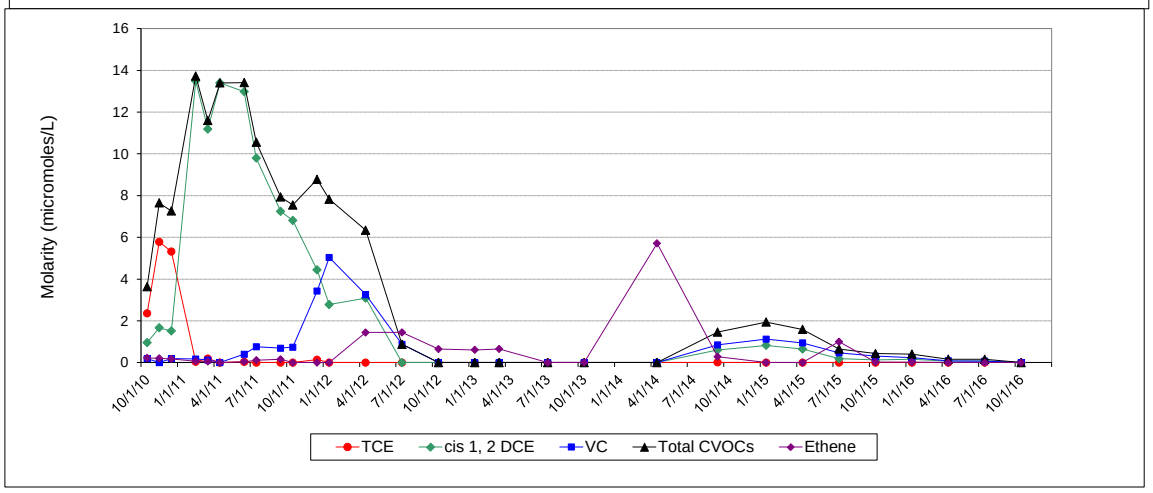


Northern Area Remediation Monitoring Data
MW-562
Former Raytheon Facility, Wayland, MA

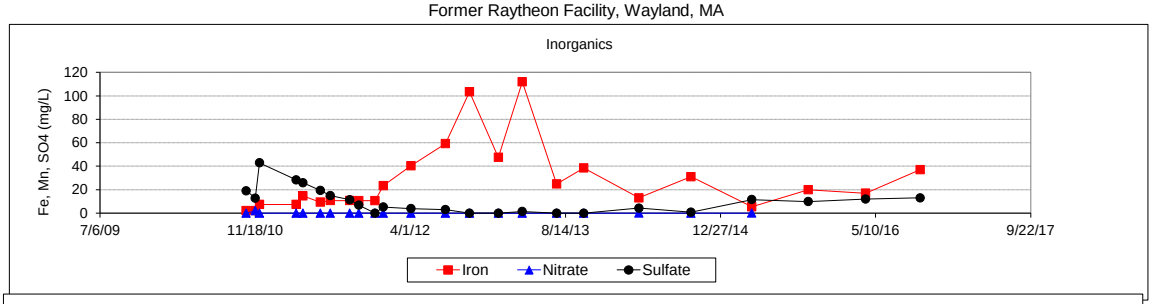


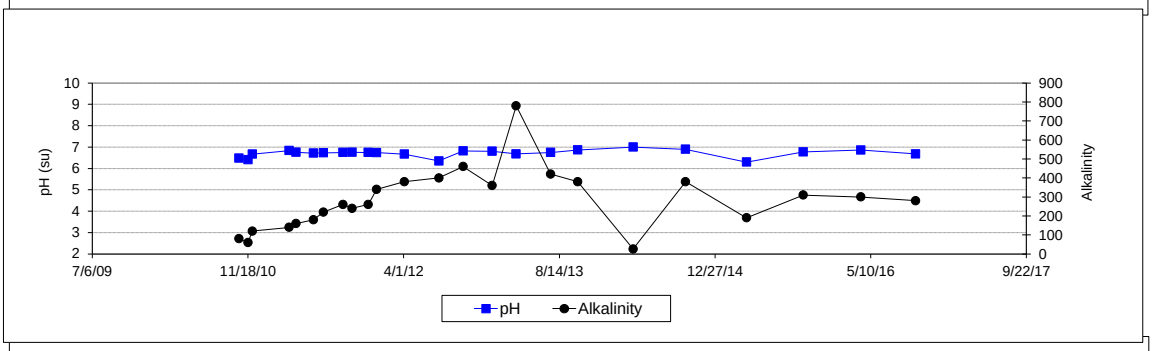


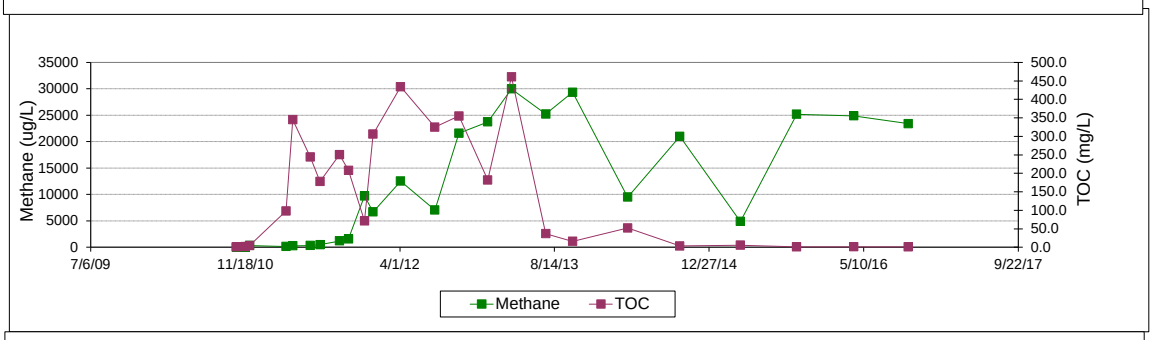


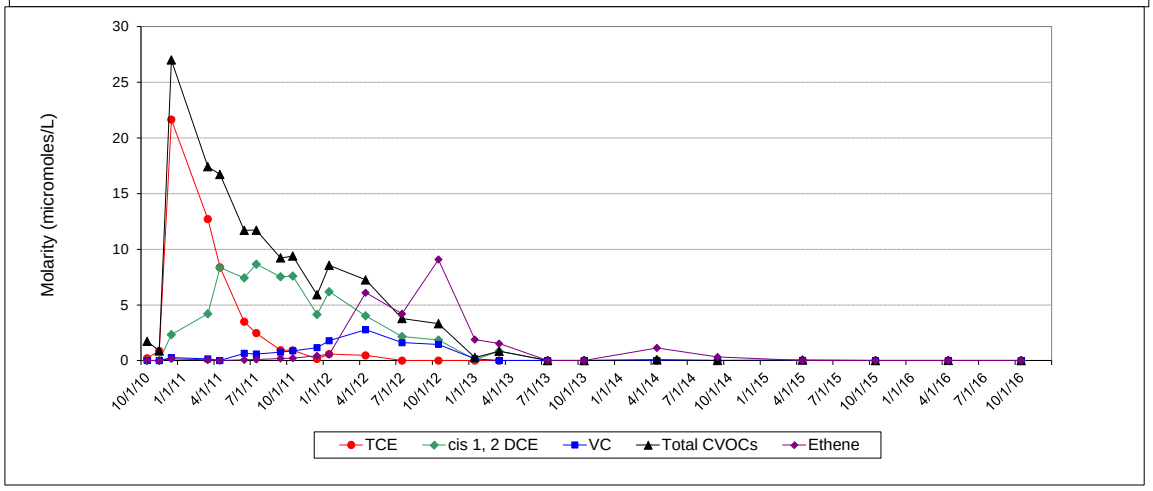


Northern Area Remediation Monitoring Data
REW-1
Former Raytheon Facility, Wayland, MA

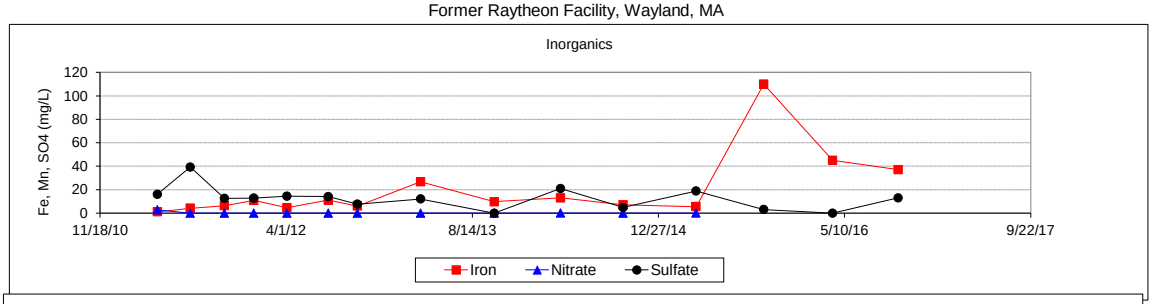


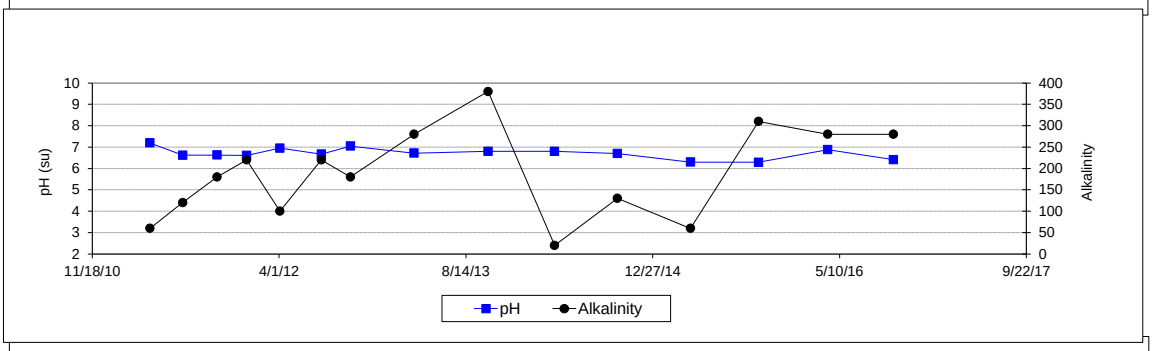


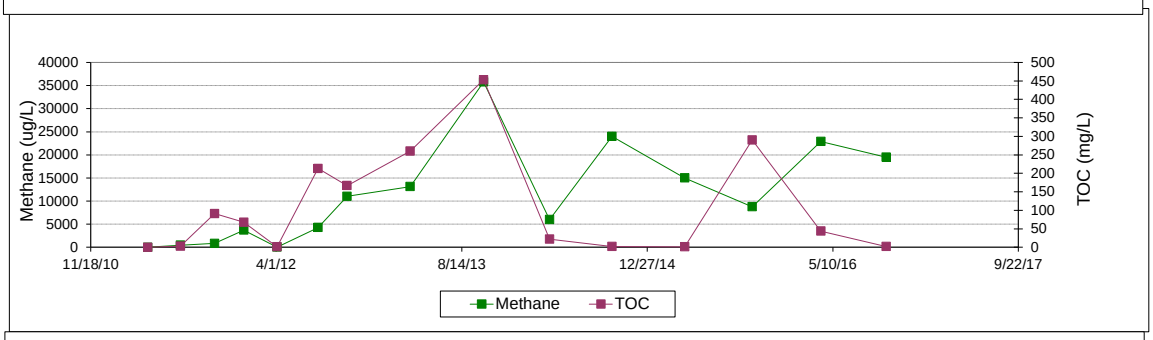


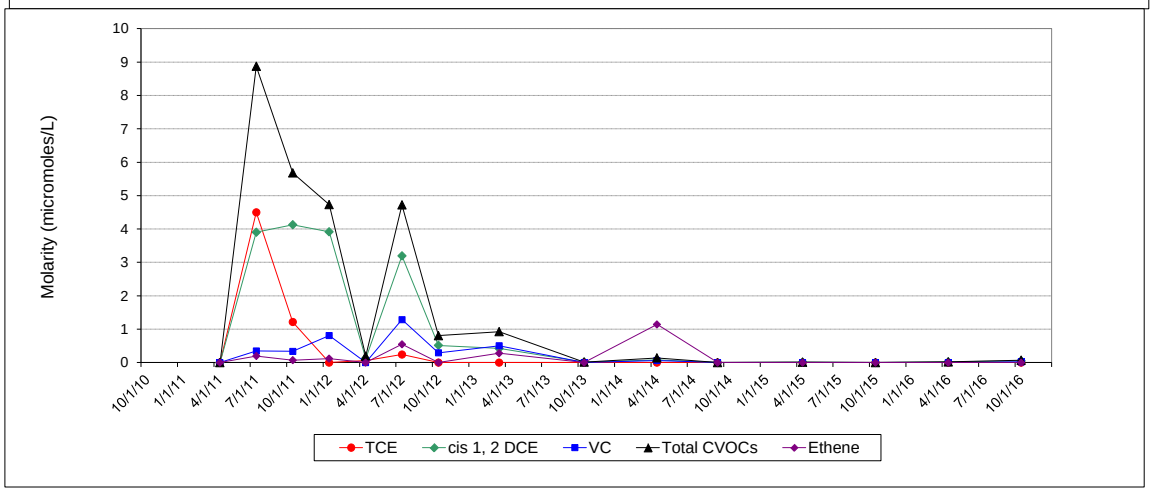


Northern Area Remediation Monitoring Data
REW-4
Former Raytheon Facility, Wayland, MA

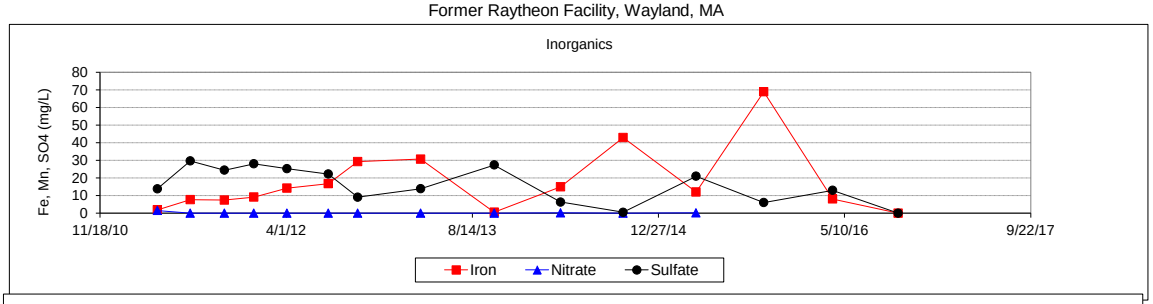


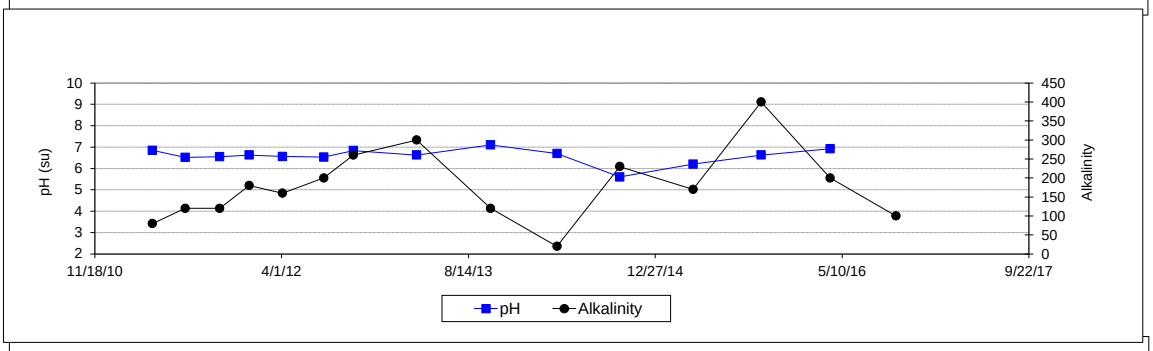


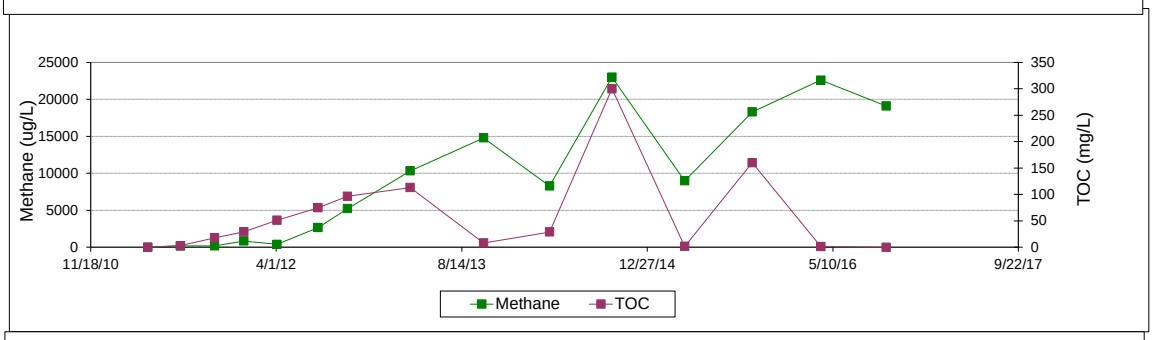


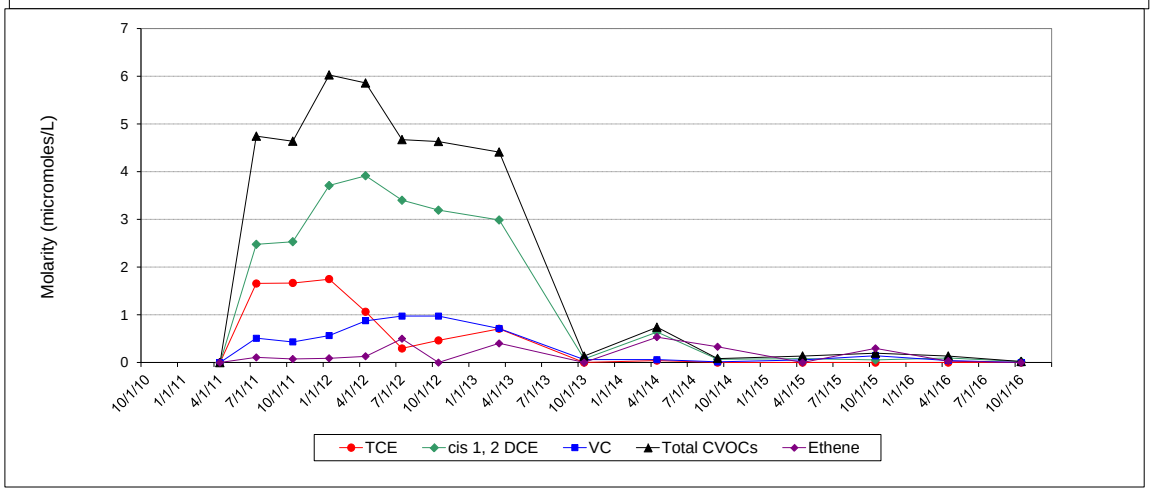


Northern Area Remediation Monitoring Data
REW-5
Former Raytheon Facility, Wayland, MA

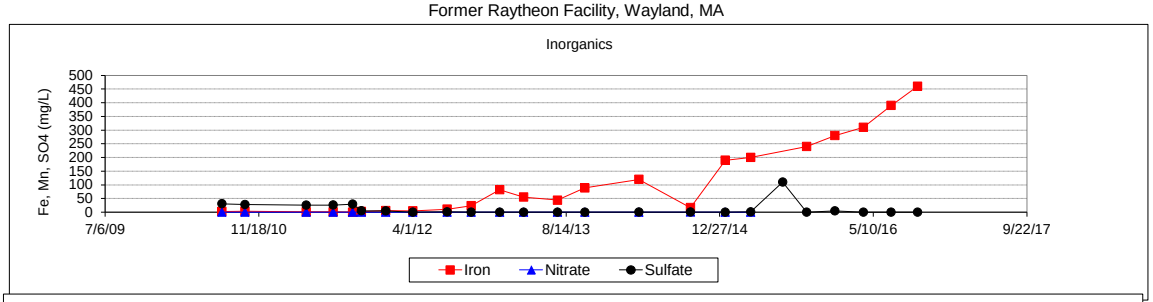


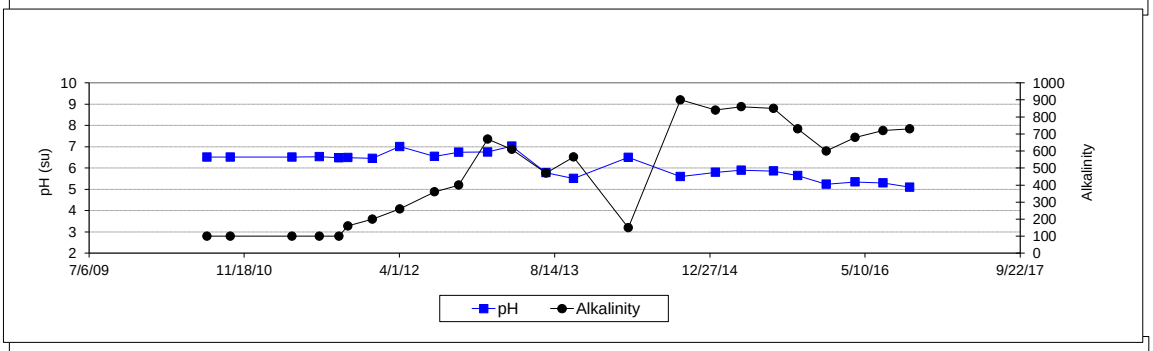


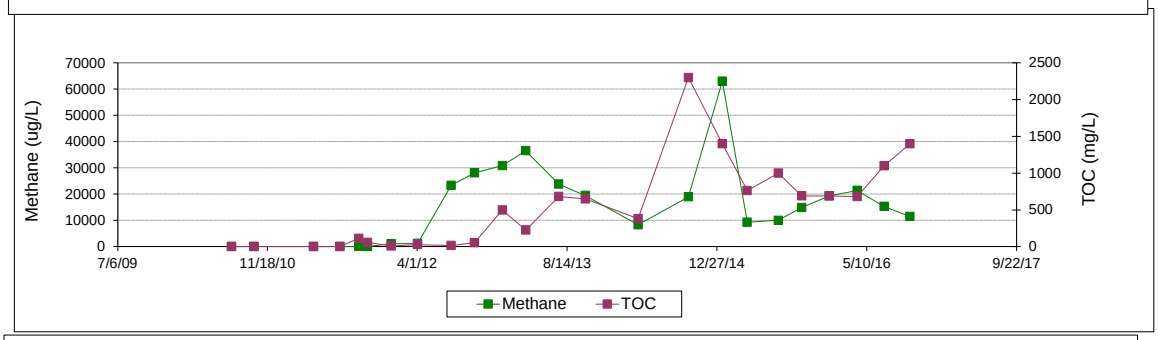


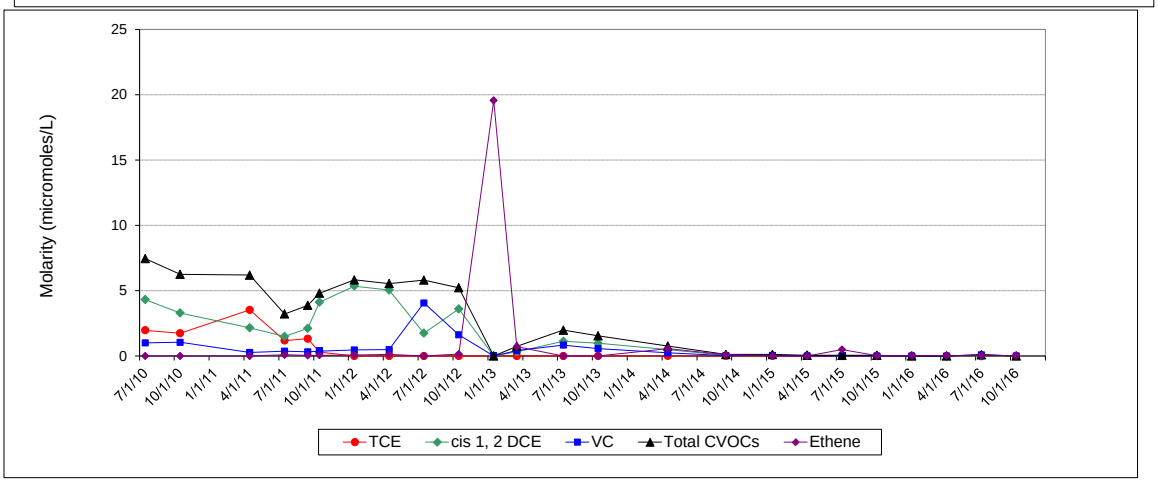


Northern Area Remediation Monitoring Data
MW-265M
Former Raytheon Facility, Wayland, MA

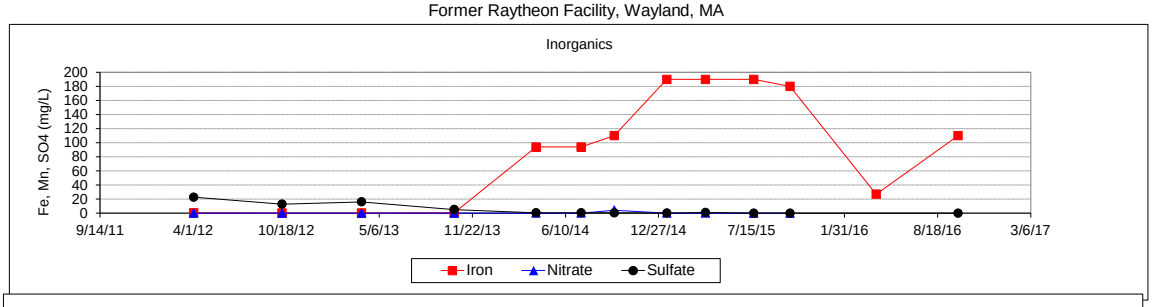


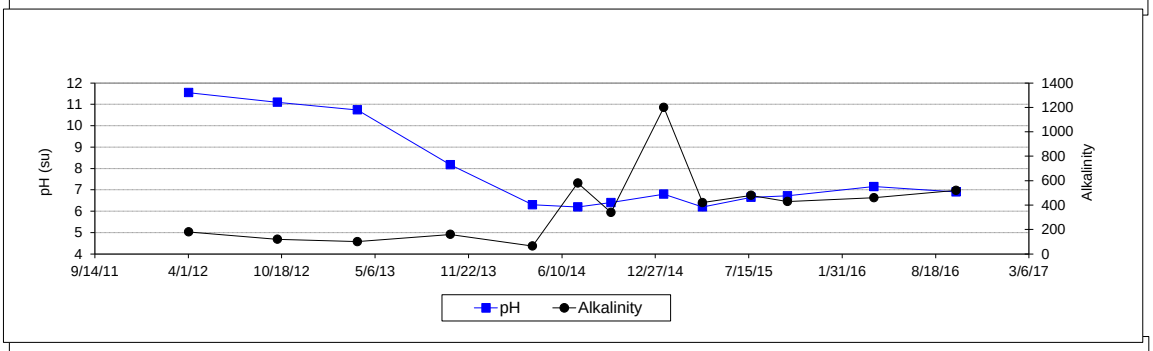


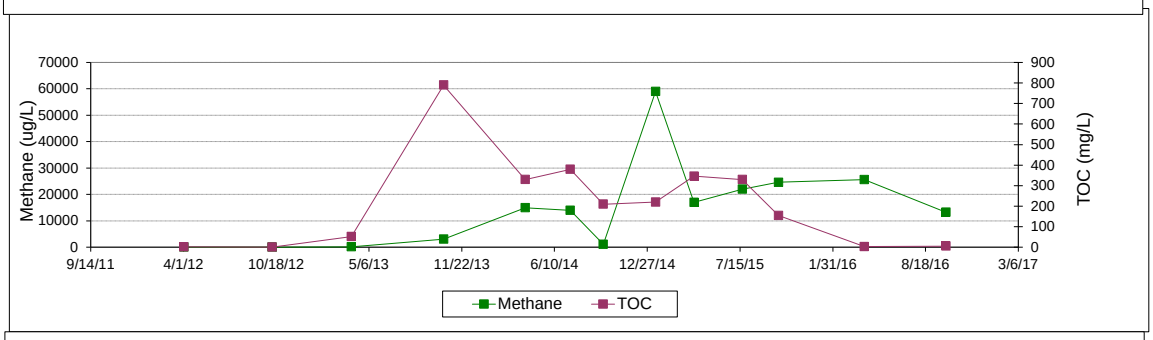


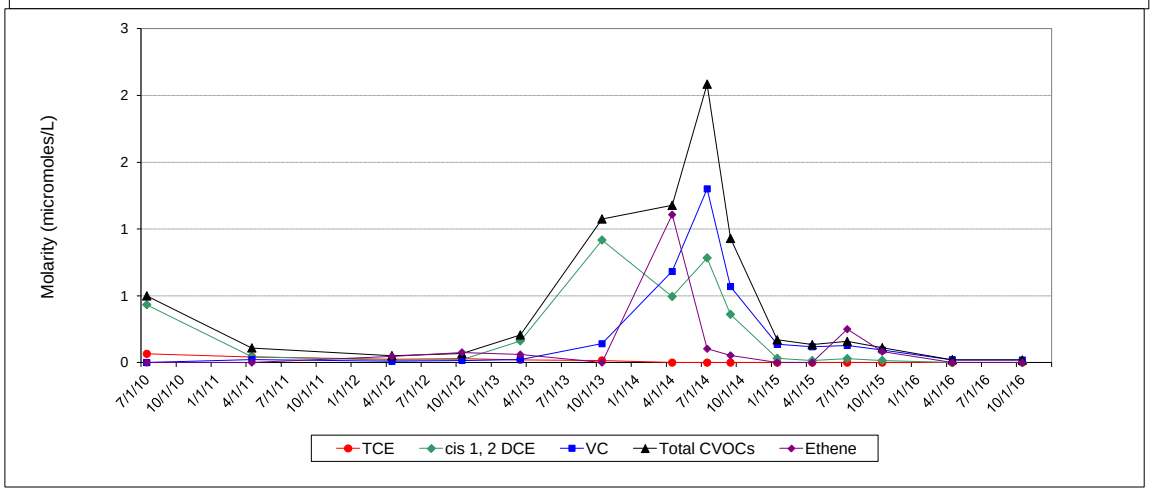


Northern Area Remediation Monitoring Data
MW-560
Former Raytheon Facility, Wayland, MA

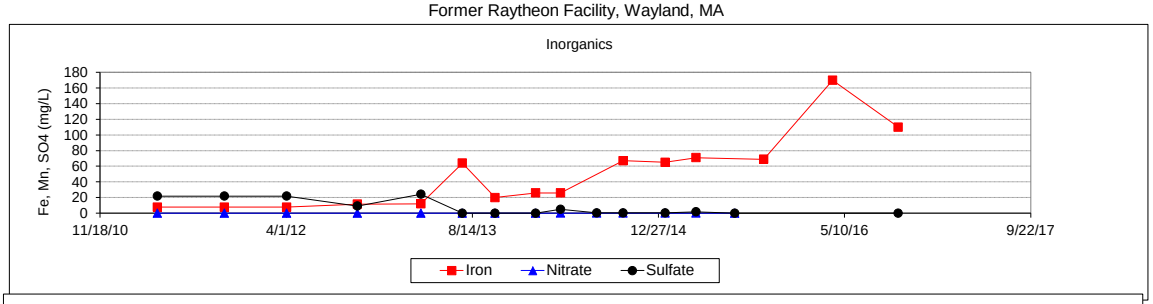


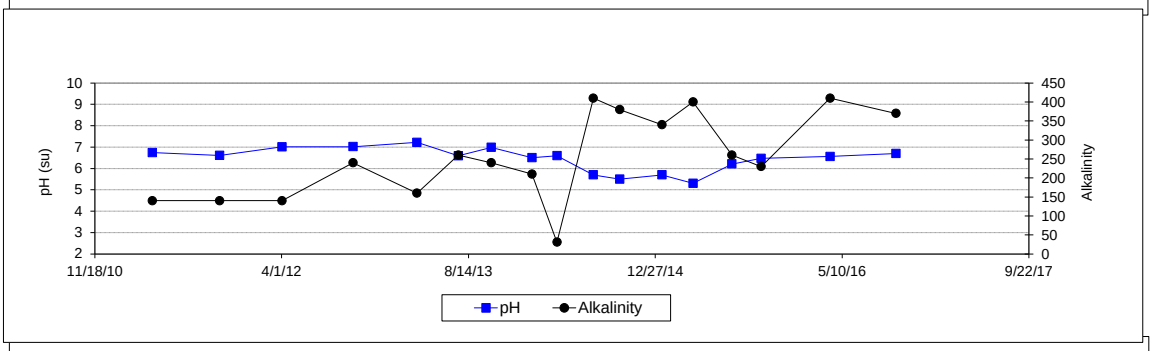


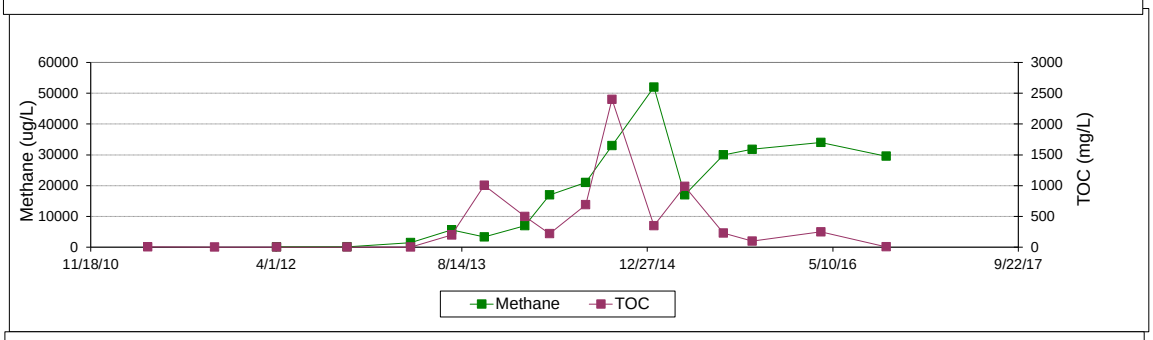


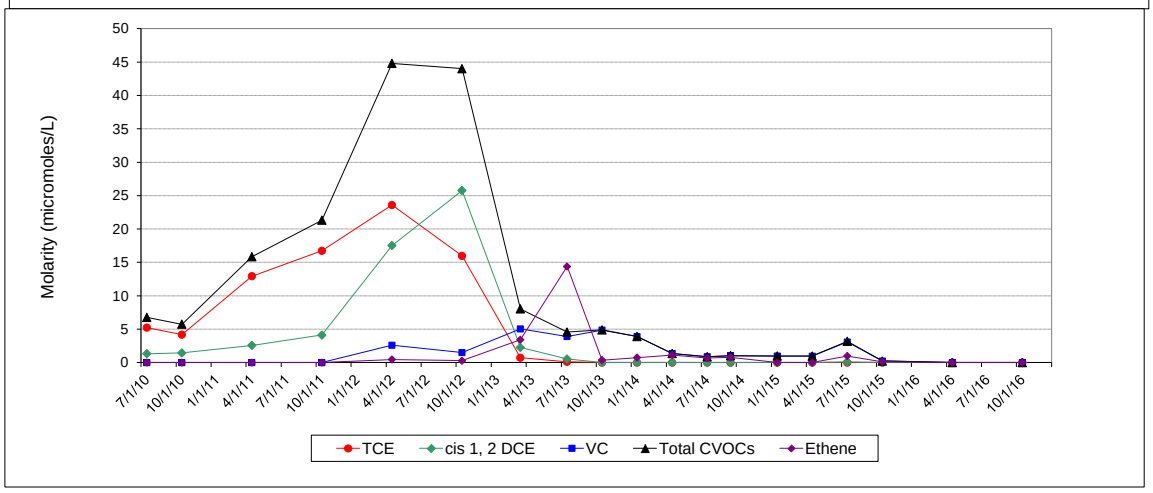


Northern Area Remediation Monitoring Data
MW-561
Former Raytheon Facility, Wayland, MA

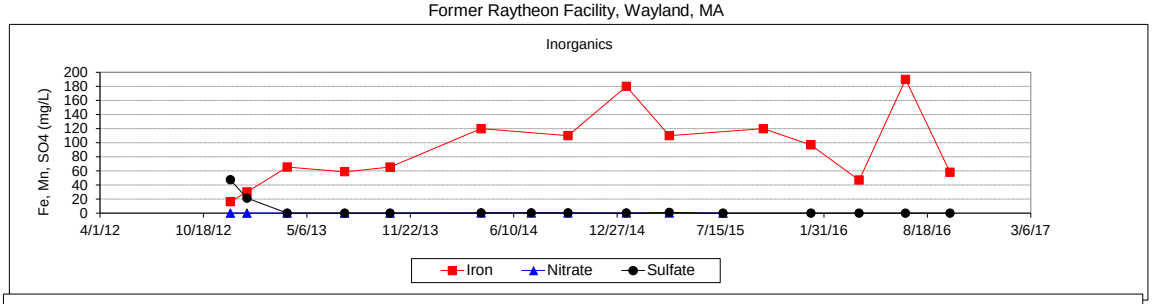


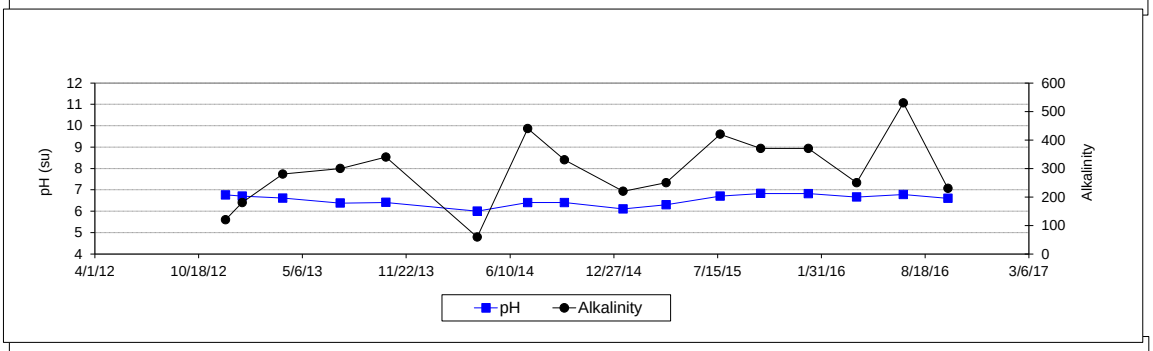


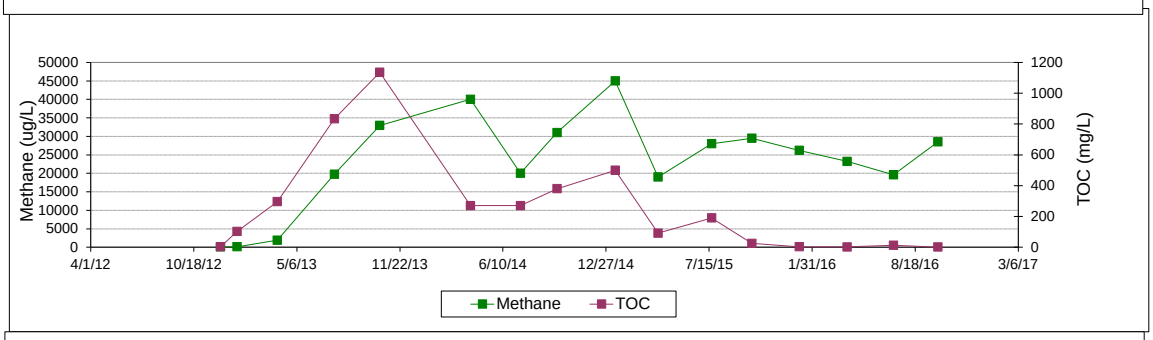


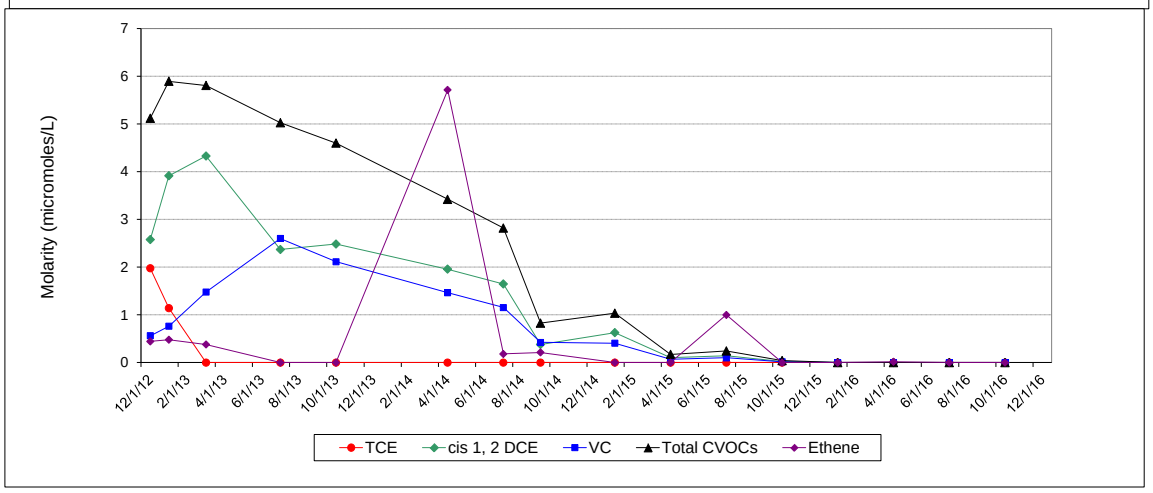


Northern Area Remediation Monitoring Data
MW-563
Former Raytheon Facility, Wayland, MA

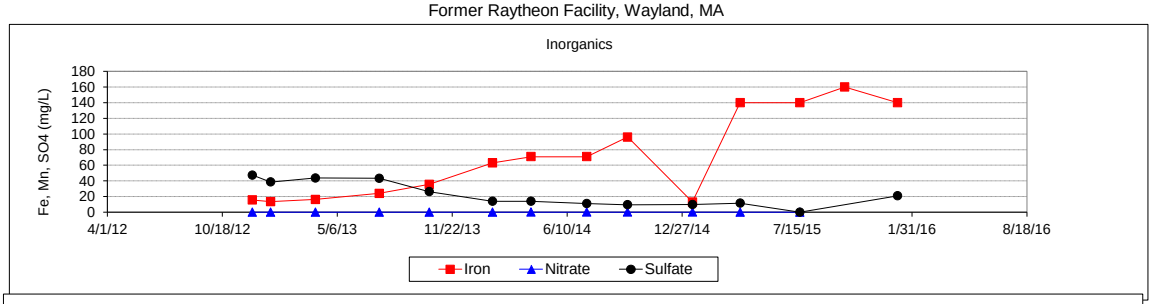


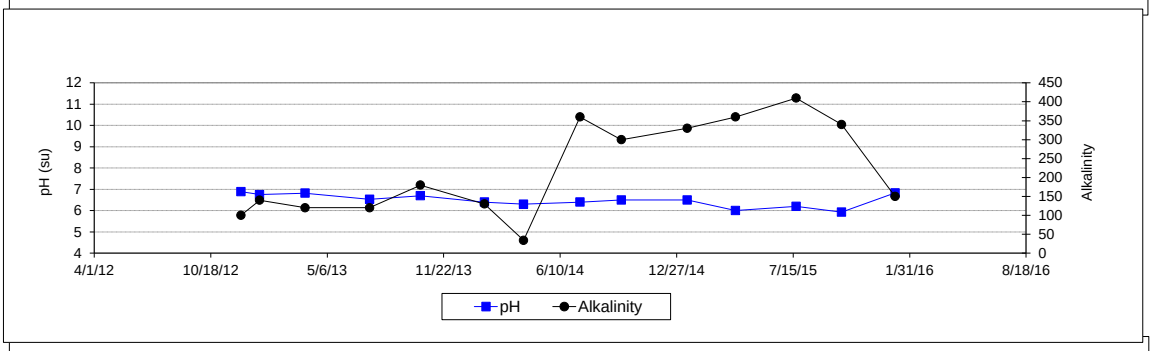


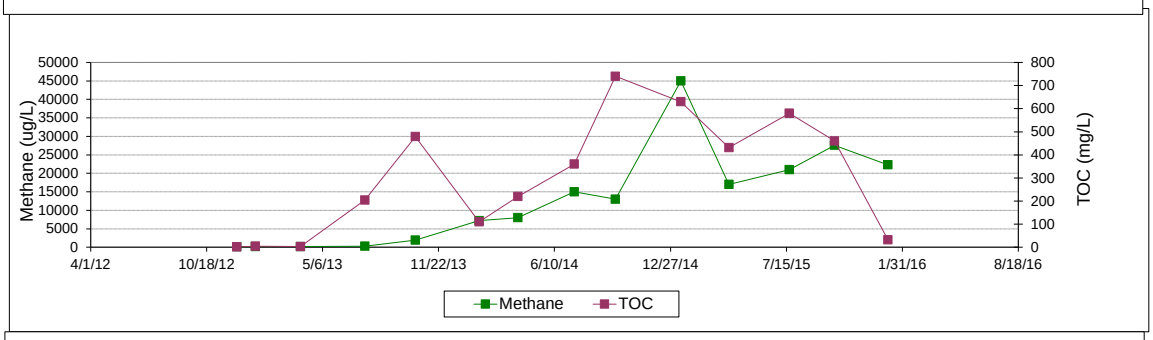


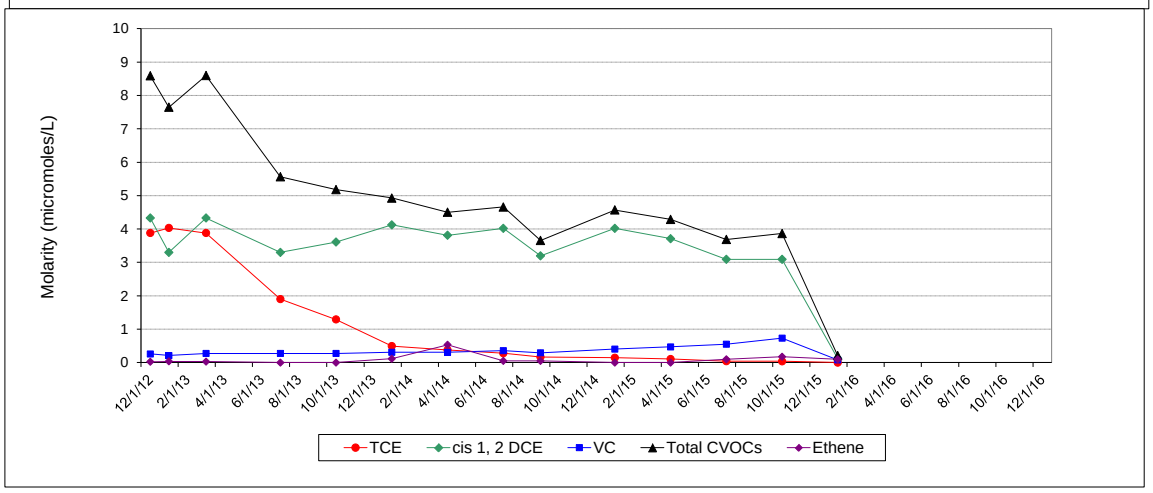


Northern Area Remediation Monitoring Data
REW-6
Former Raytheon Facility, Wayland, MA

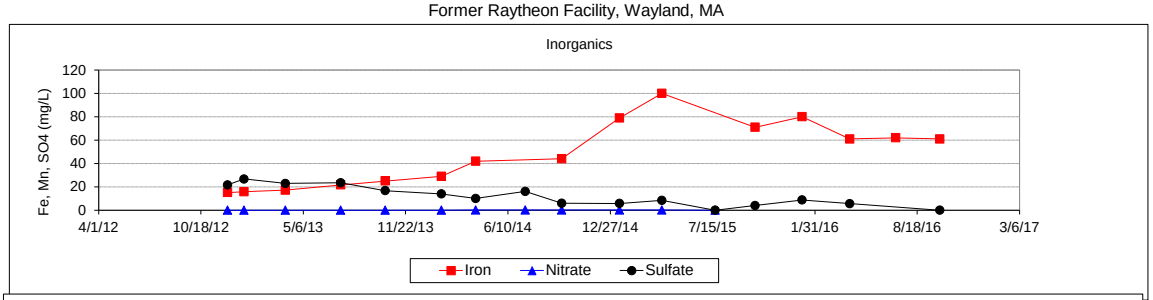


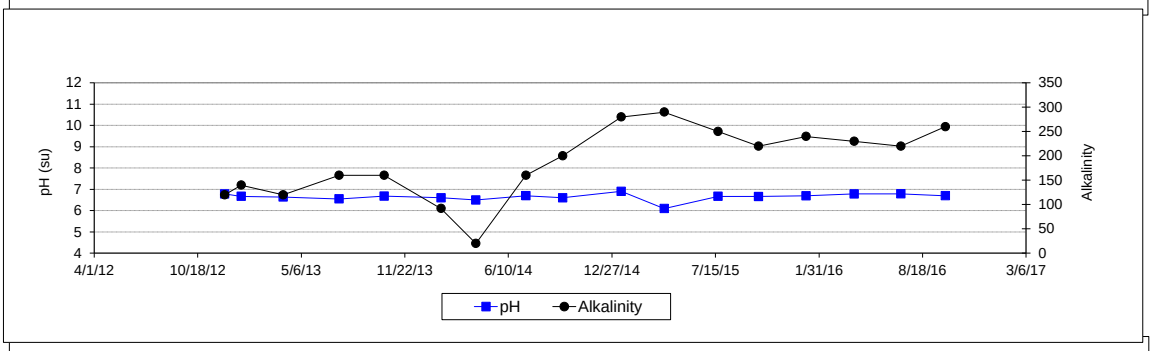


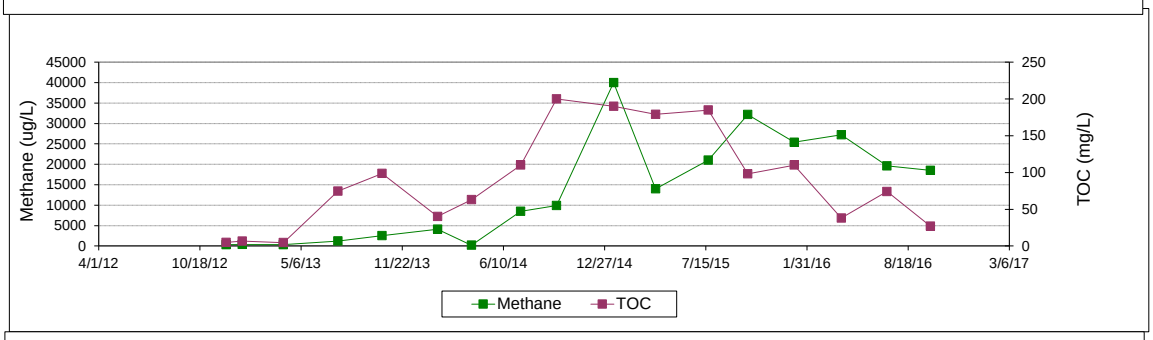


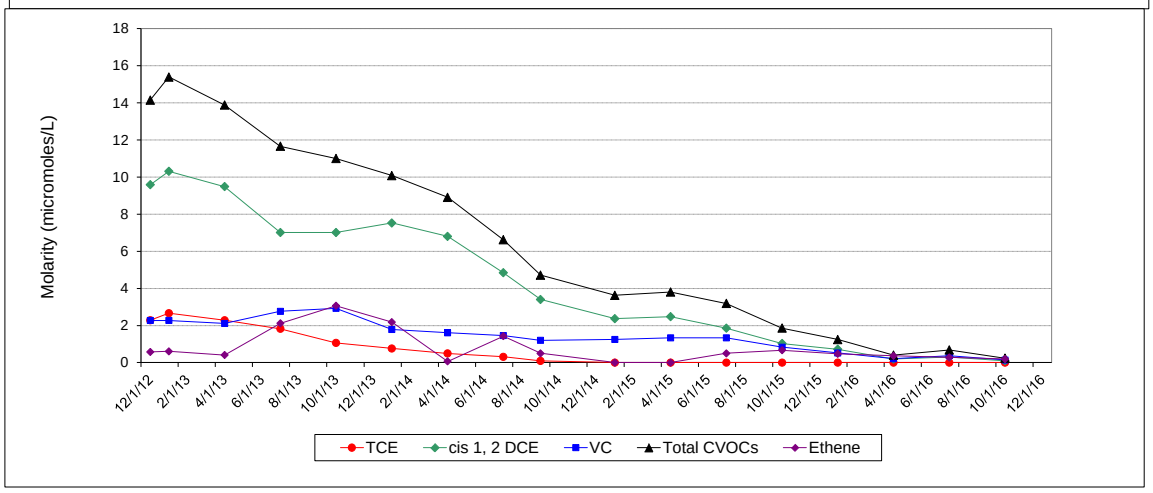


Northern Area Remediation Monitoring Data
REW-7
Former Raytheon Facility, Wayland, MA

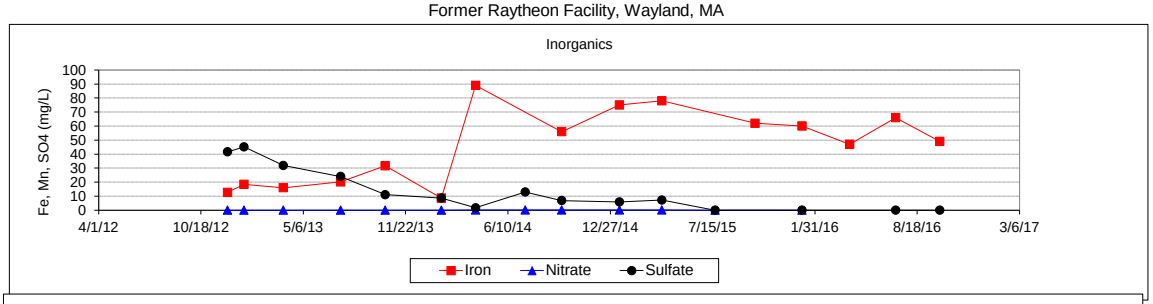


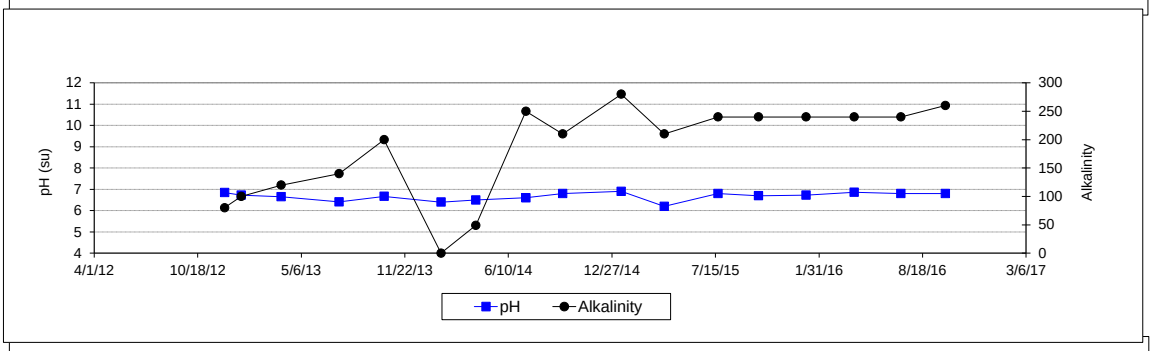


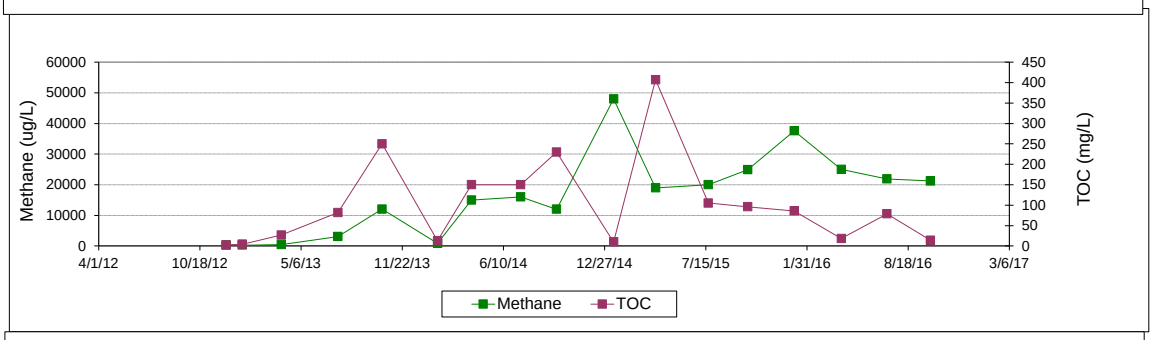


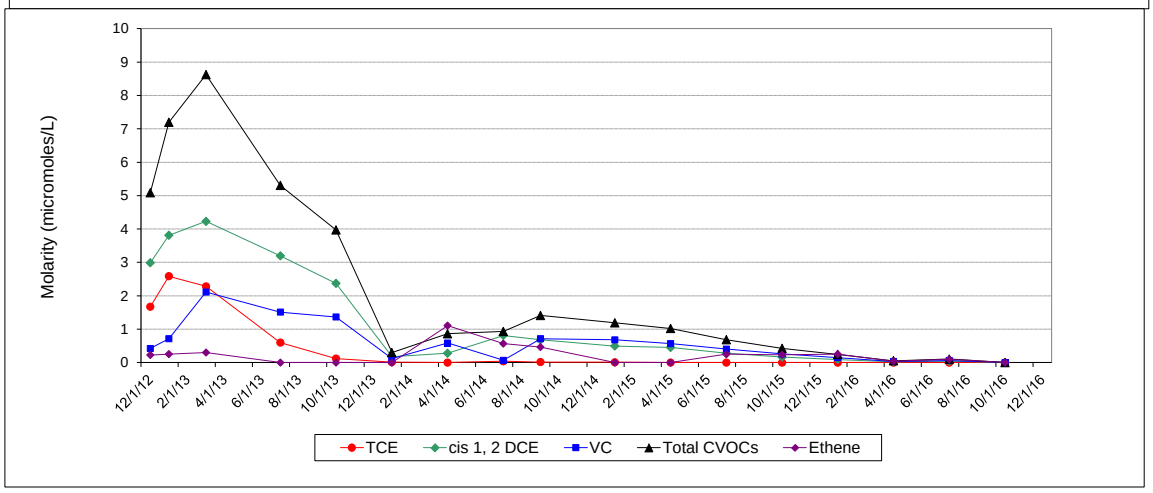


Northern Area Remediation Monitoring Data
REW-8
Former Raytheon Facility, Wayland, MA

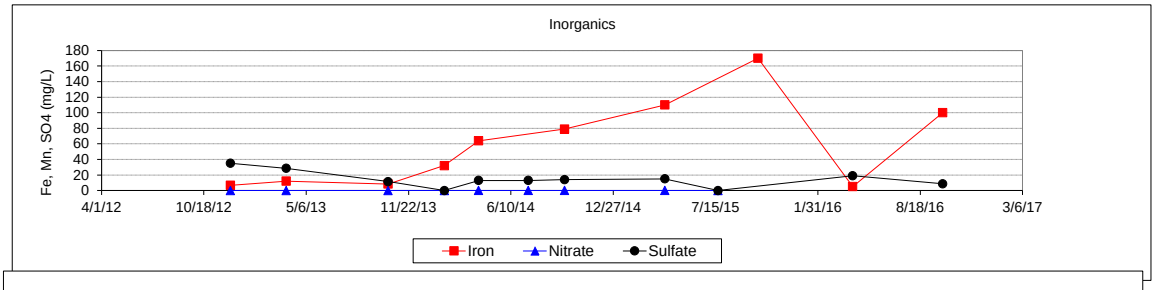


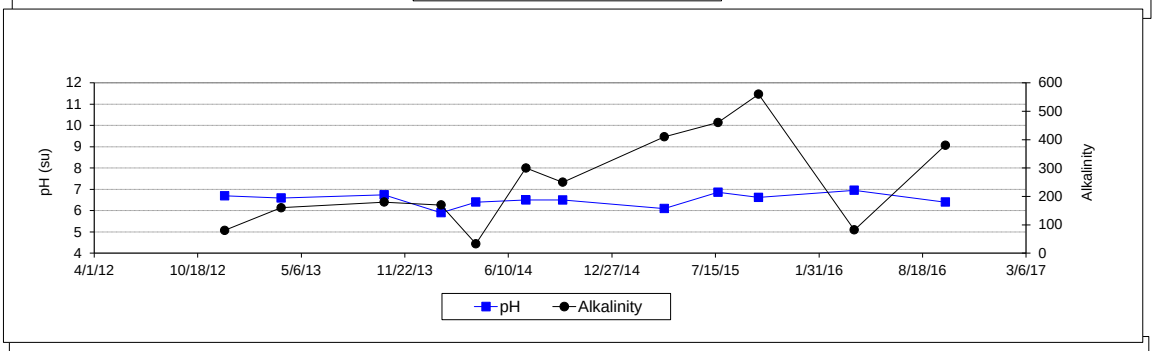


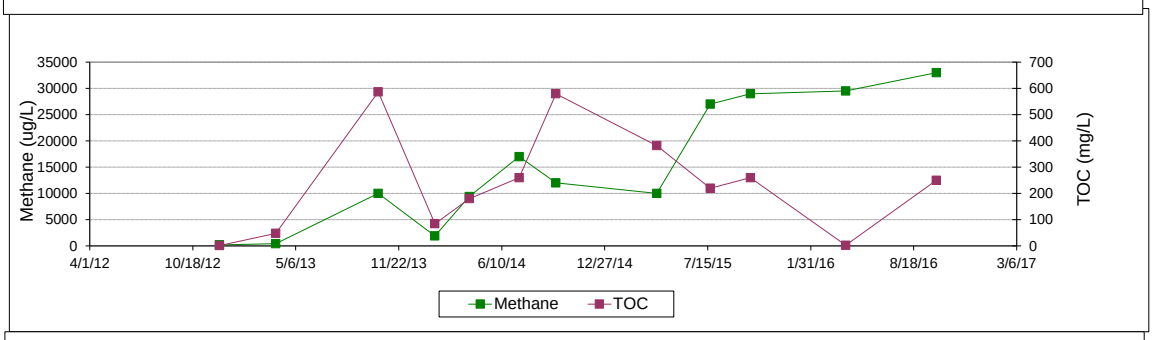


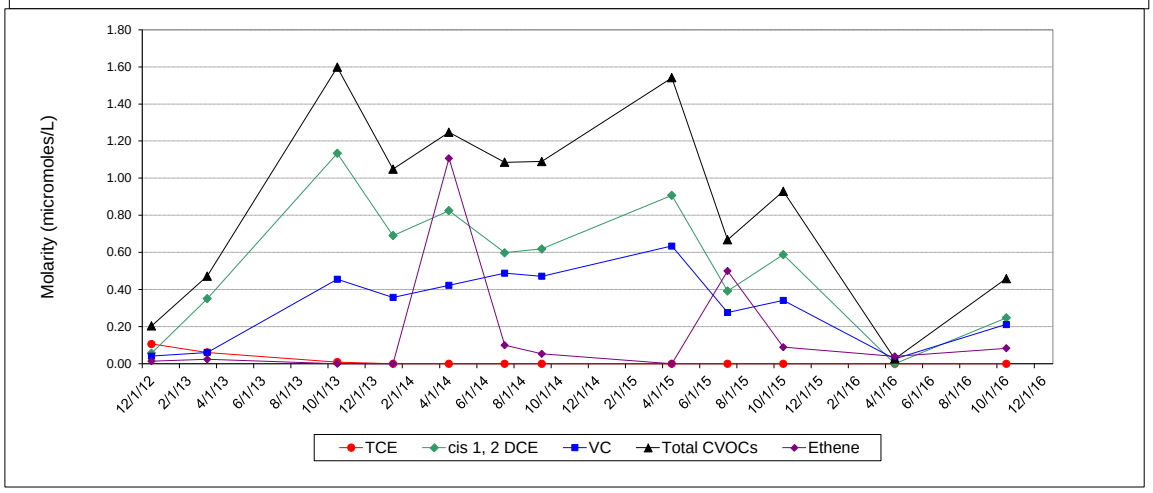


Northern Area Remediation Monitoring Data
REW-9
Former Raytheon Facility, Wayland, MA

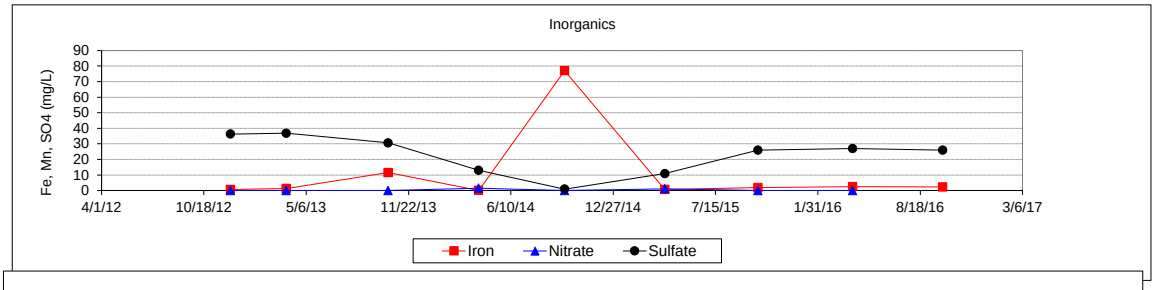


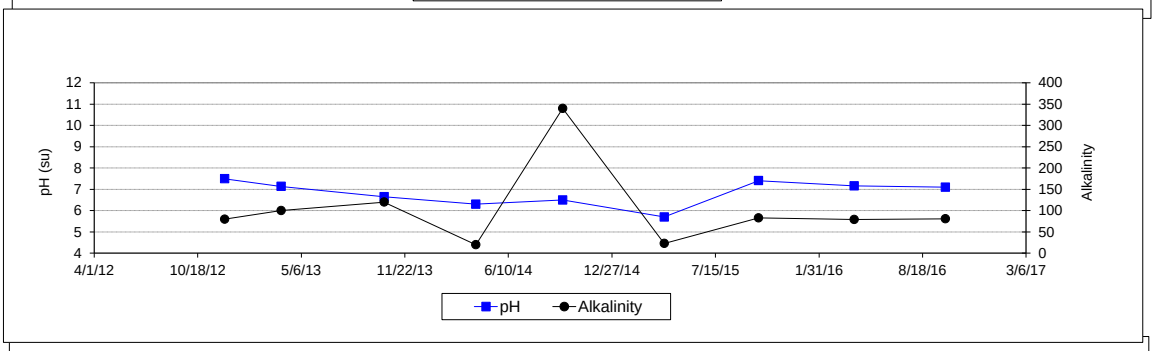


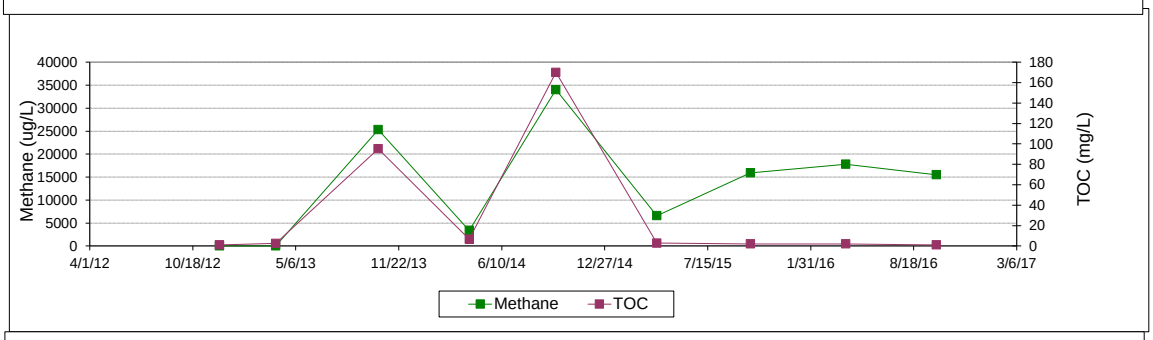


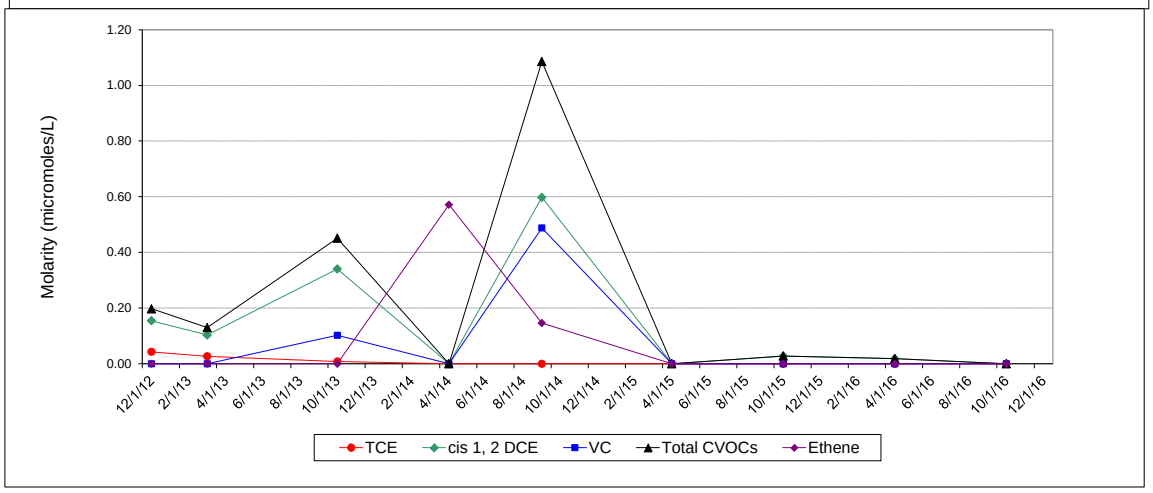


Northern Area Remediation Monitoring Data
REW-10
Former Raytheon Facility, Wayland, MA

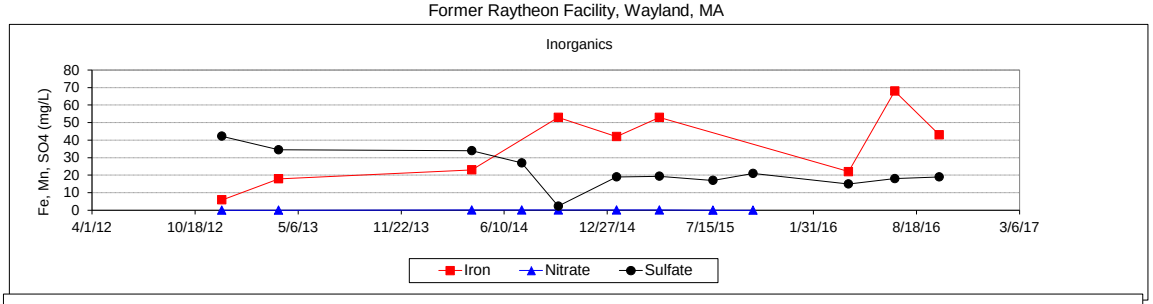


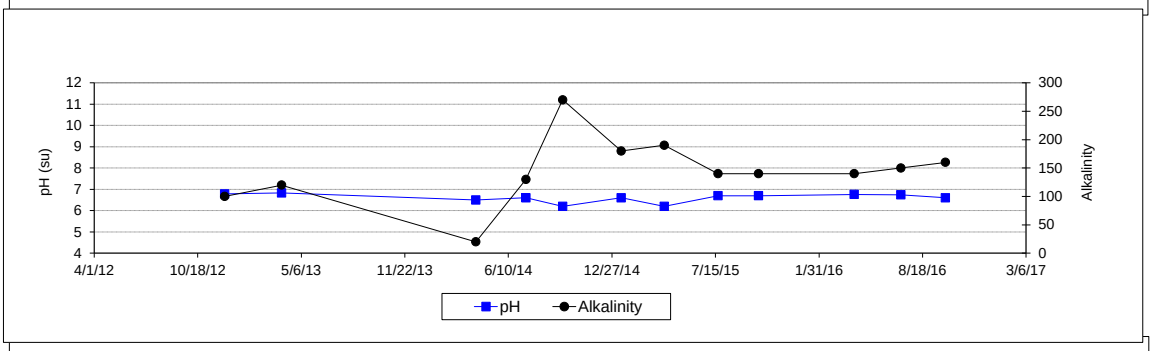


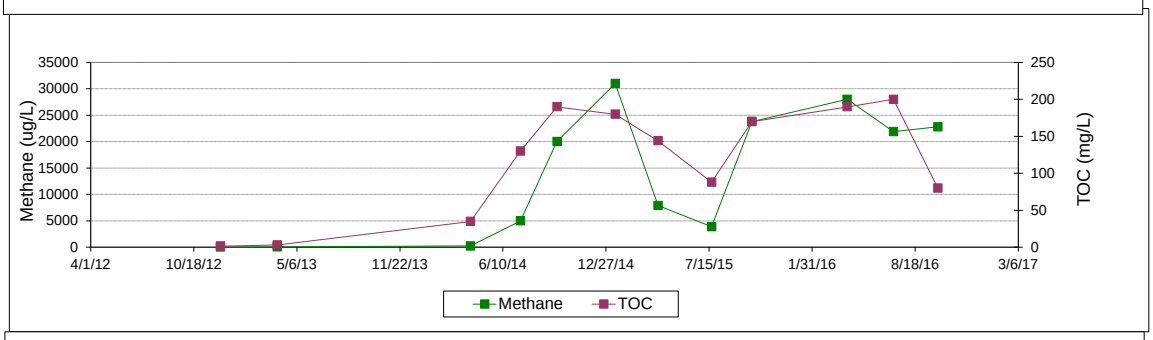


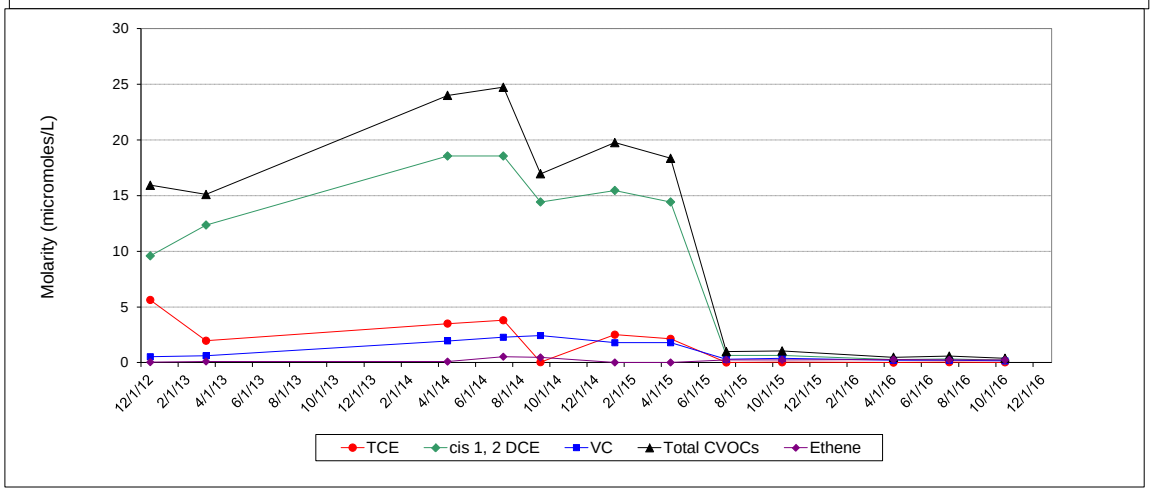


Northern Area Remediation Monitoring Data
REW-11
Former Raytheon Facility, Wayland, MA

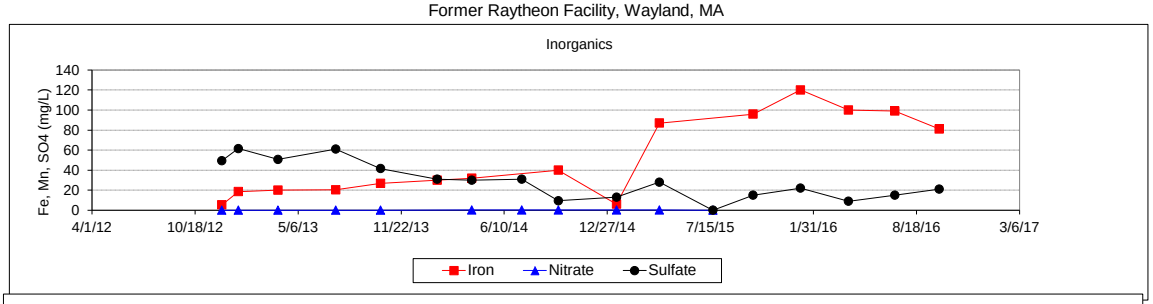


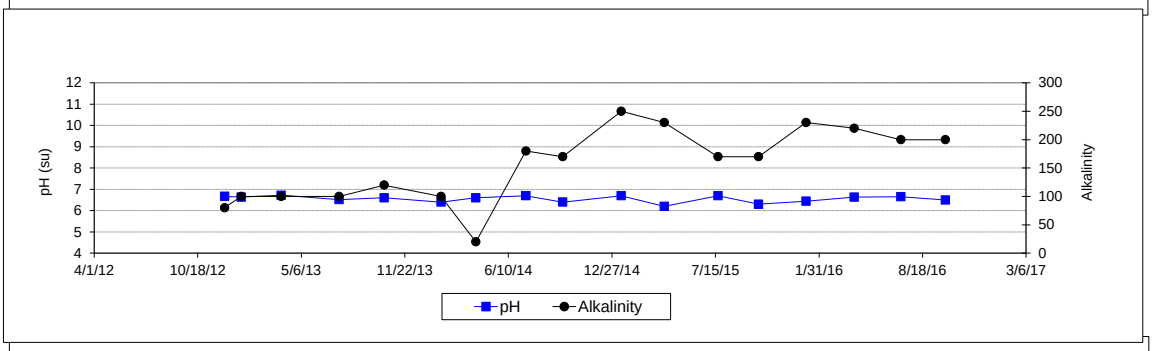


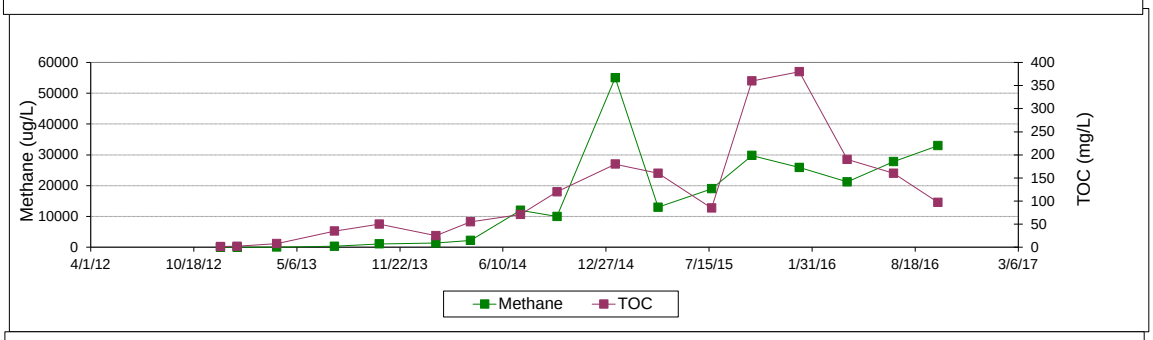


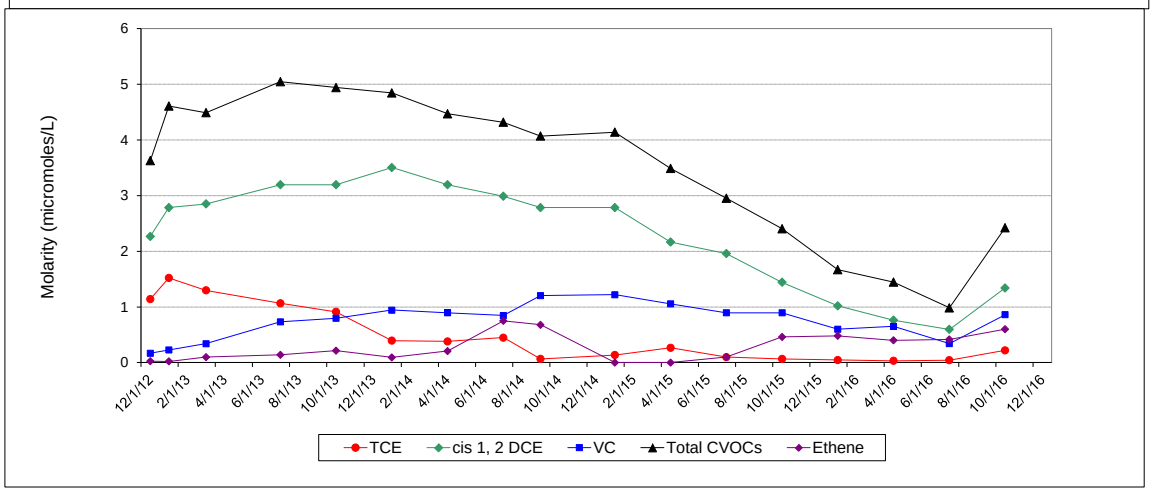


Northern Area Remediation Monitoring Data
REW-12
Former Raytheon Facility, Wayland, MA

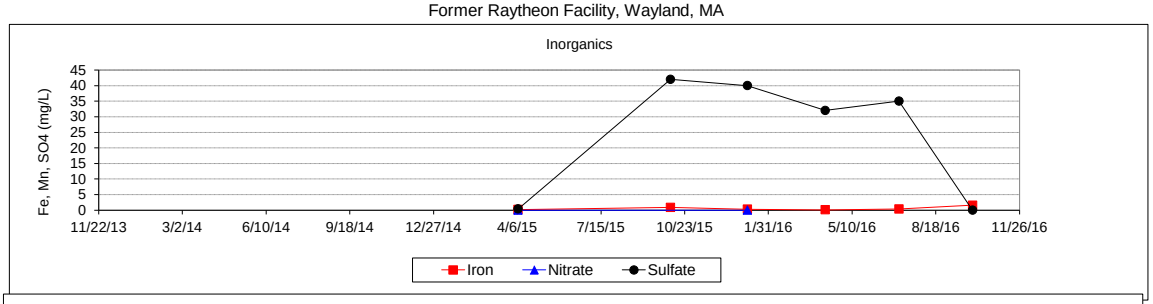


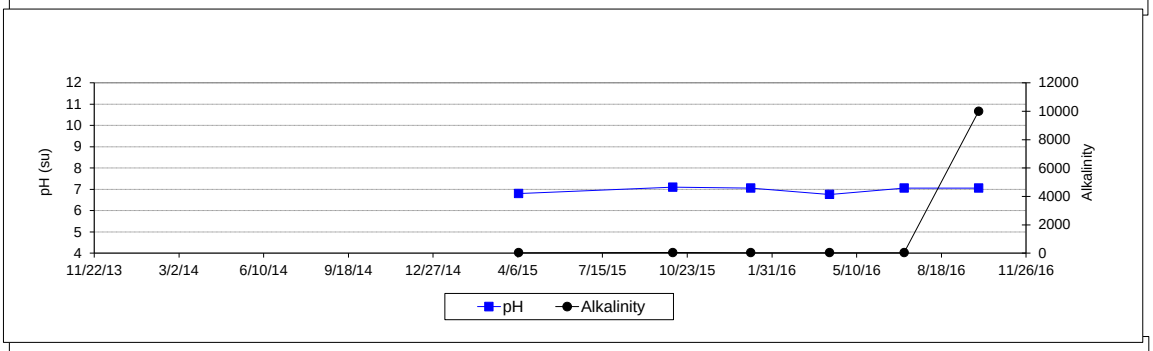


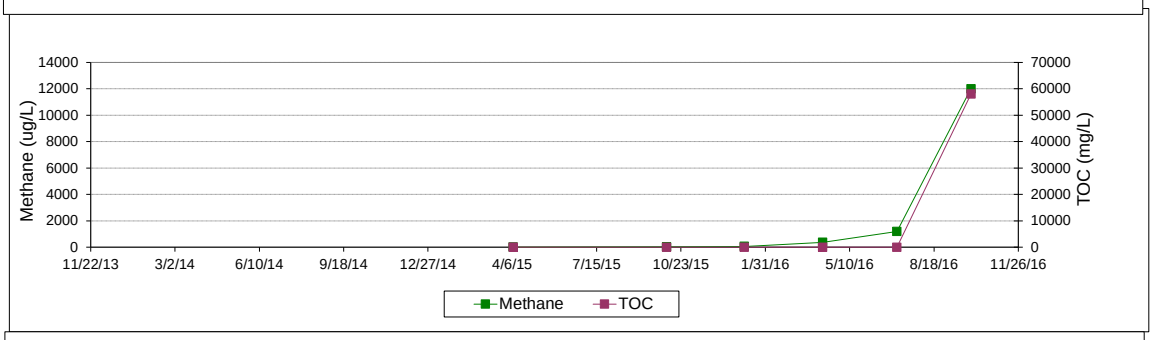


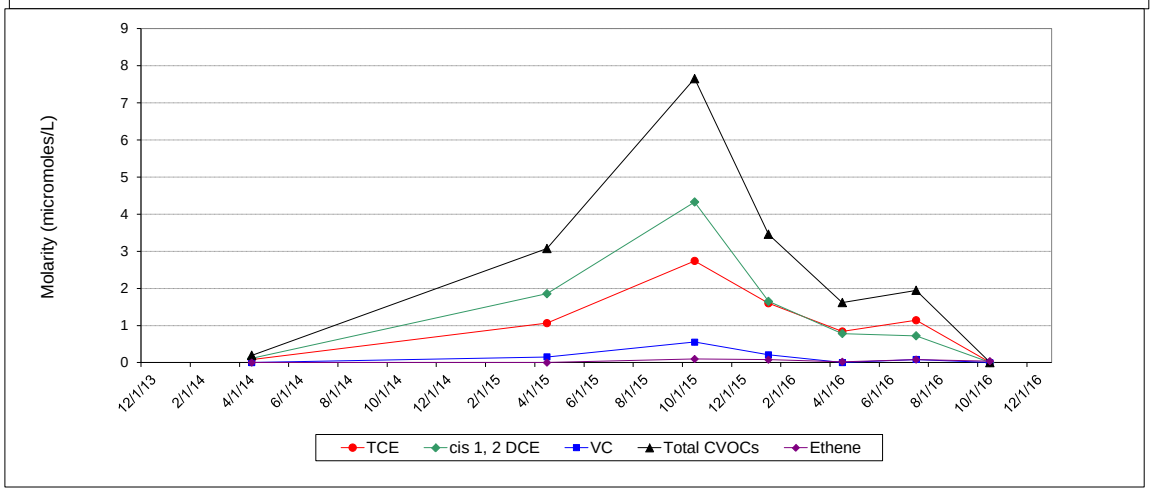


Northern Area Remediation Monitoring Data
MW-268S
Former Raytheon Facility, Wayland, MA

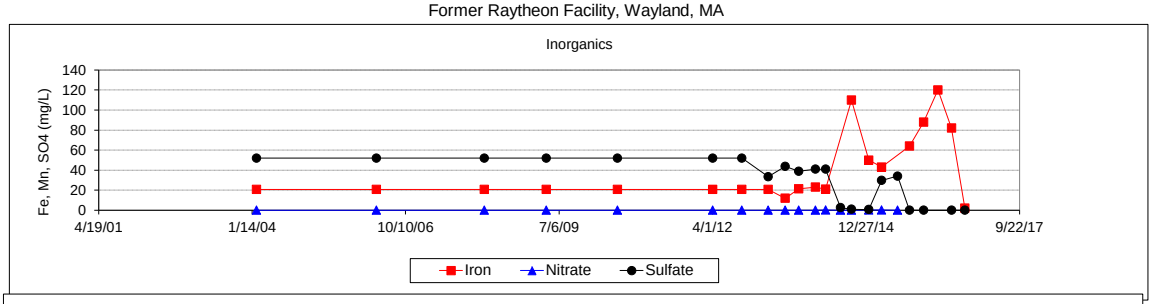


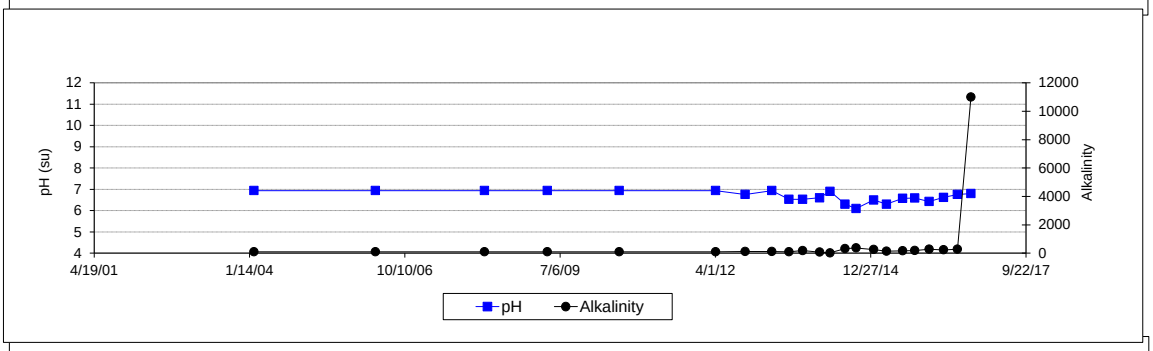


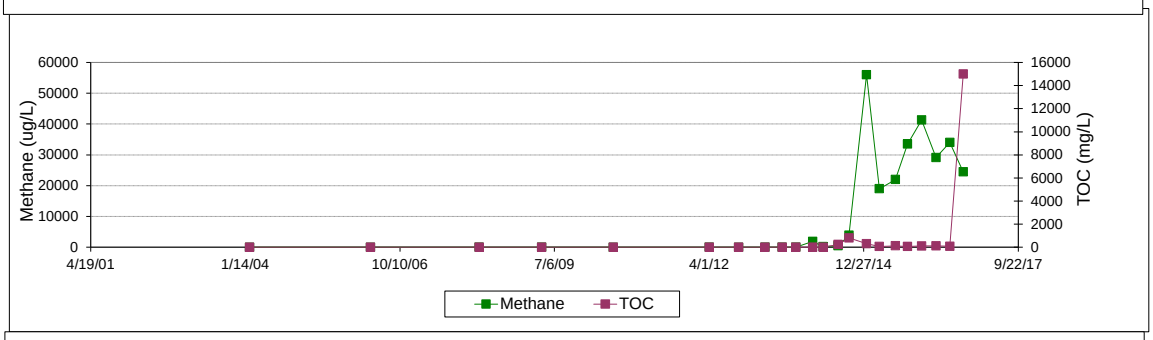


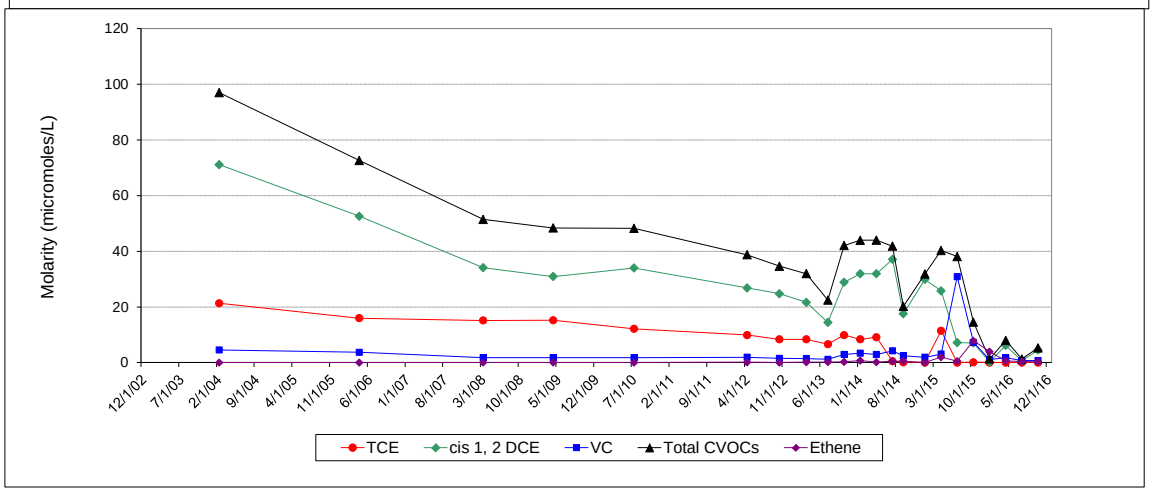


Northern Area Remediation Monitoring Data
MW-268M
Former Raytheon Facility, Wayland, MA

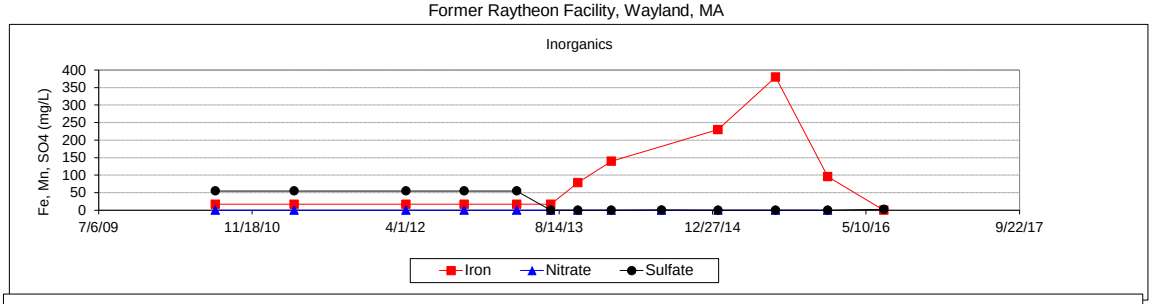


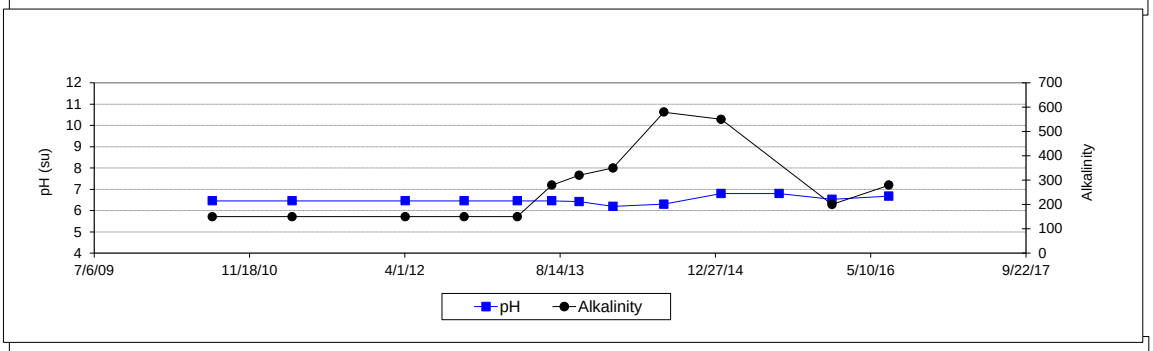


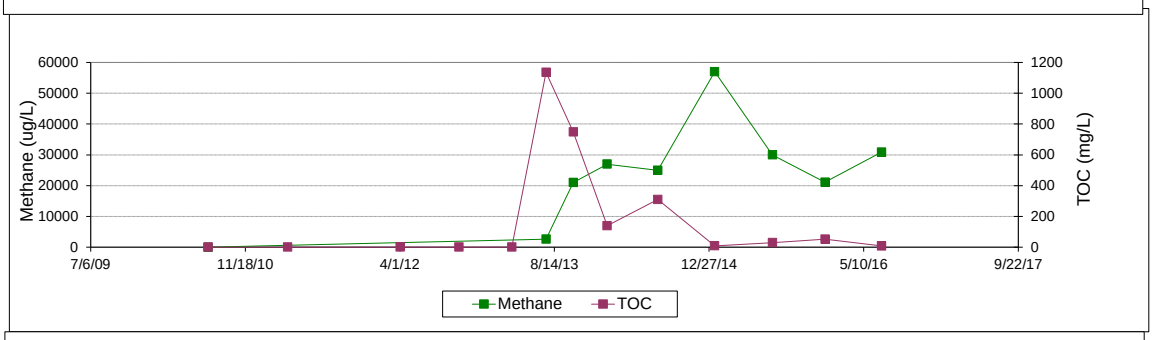


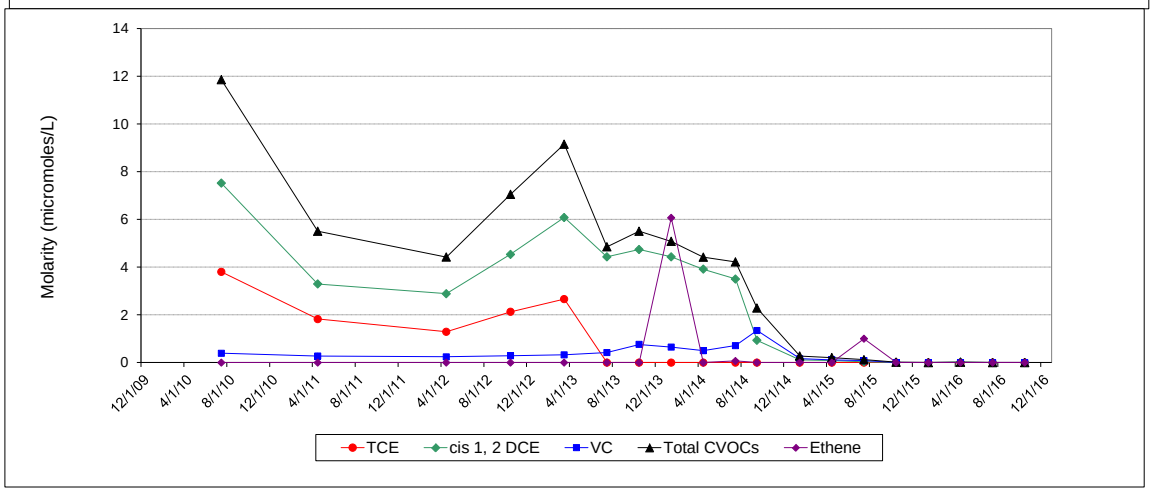


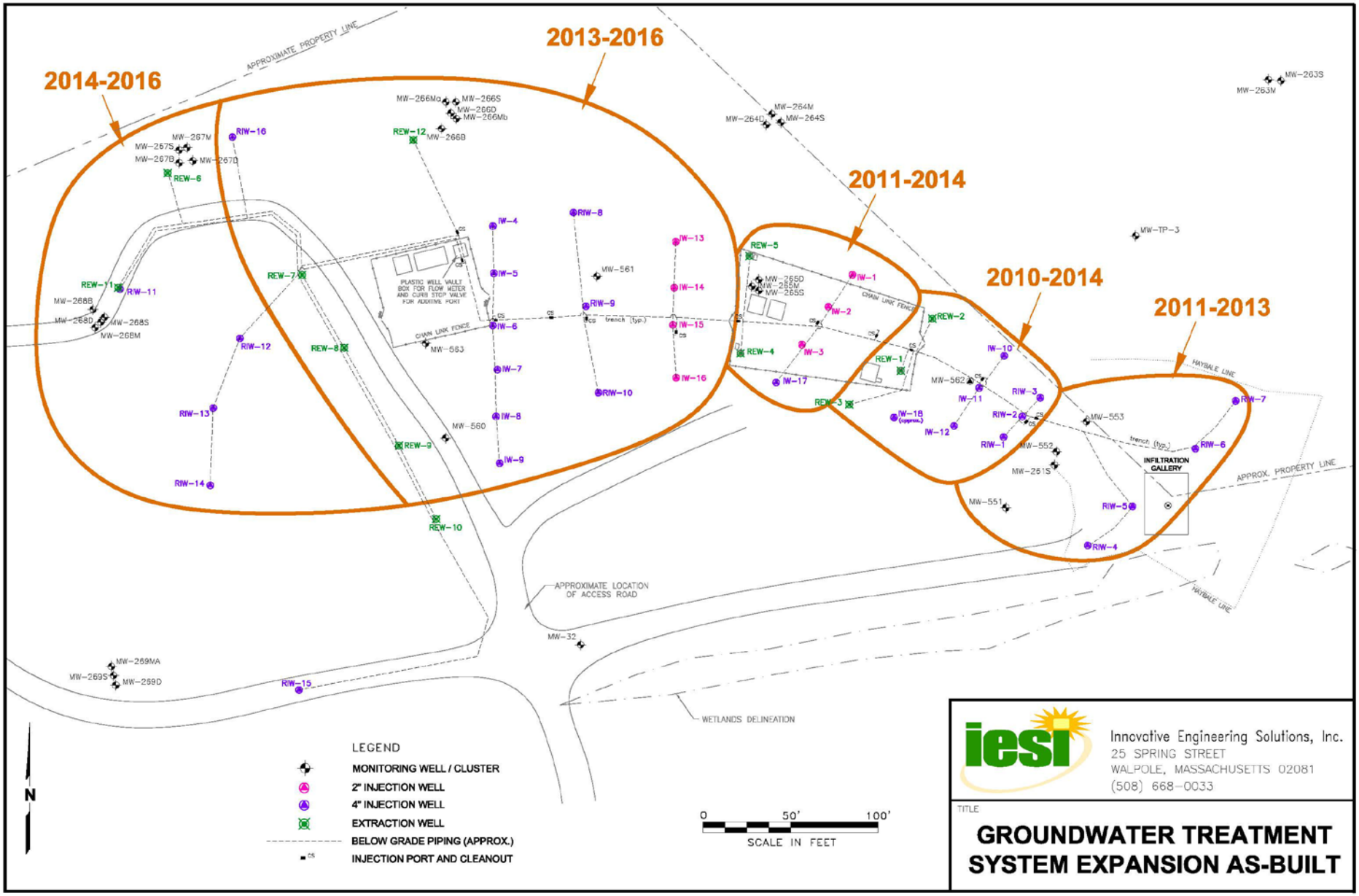
Northern Area Remediation Monitoring Data
MW-267M
Former Raytheon Facility, Wayland, MA











Innovative Engineering Solutions, Inc.
25 SPRING STREET
WALPOLE, MASSACHUSETTS 02081
(508) 668-0033

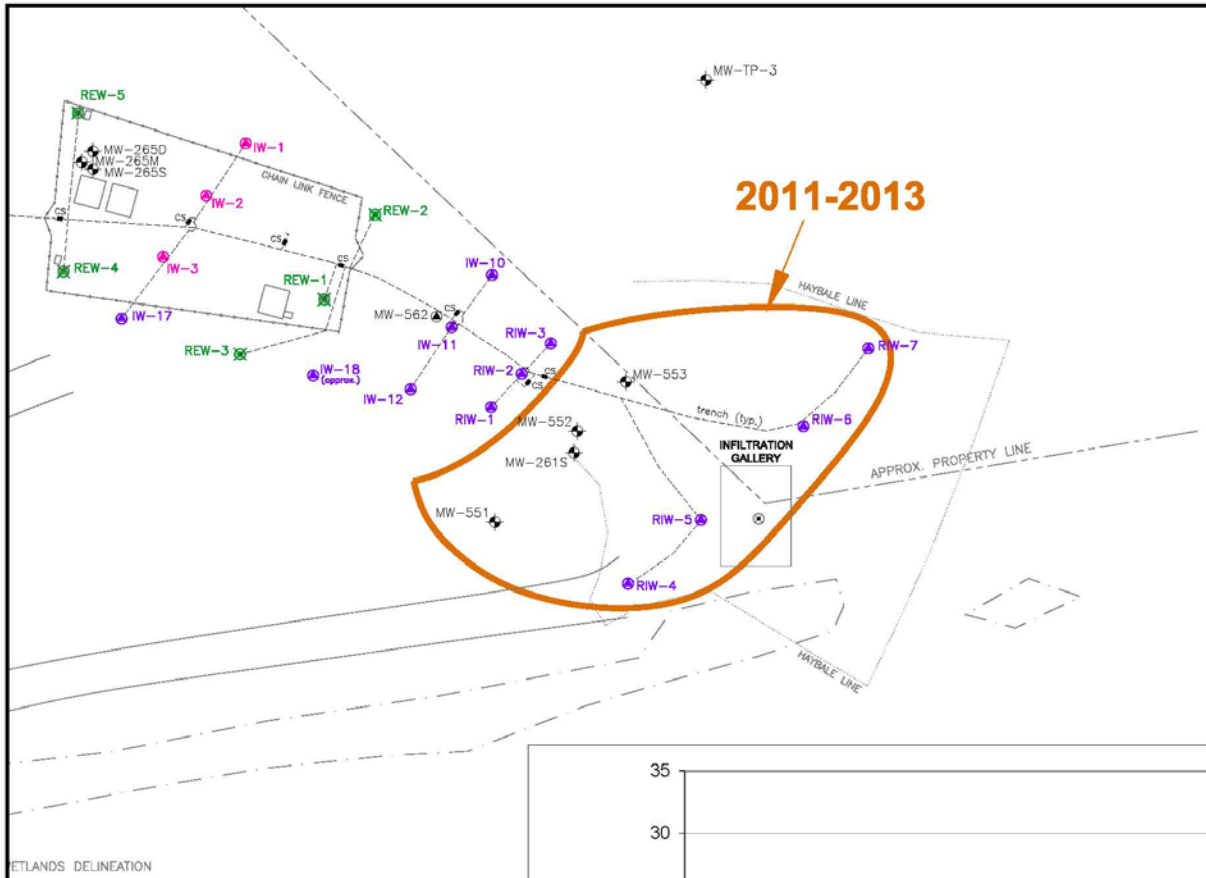
TITLE

GROUNDWATER TREATMENT SYSTEM EXPANSION AS-BUILT

Innovative Engineering Solutions, Inc.
25 SPRING STREET
WALPOLE, MASSACHUSETTS 02081
(508) 668-0033

TITLE

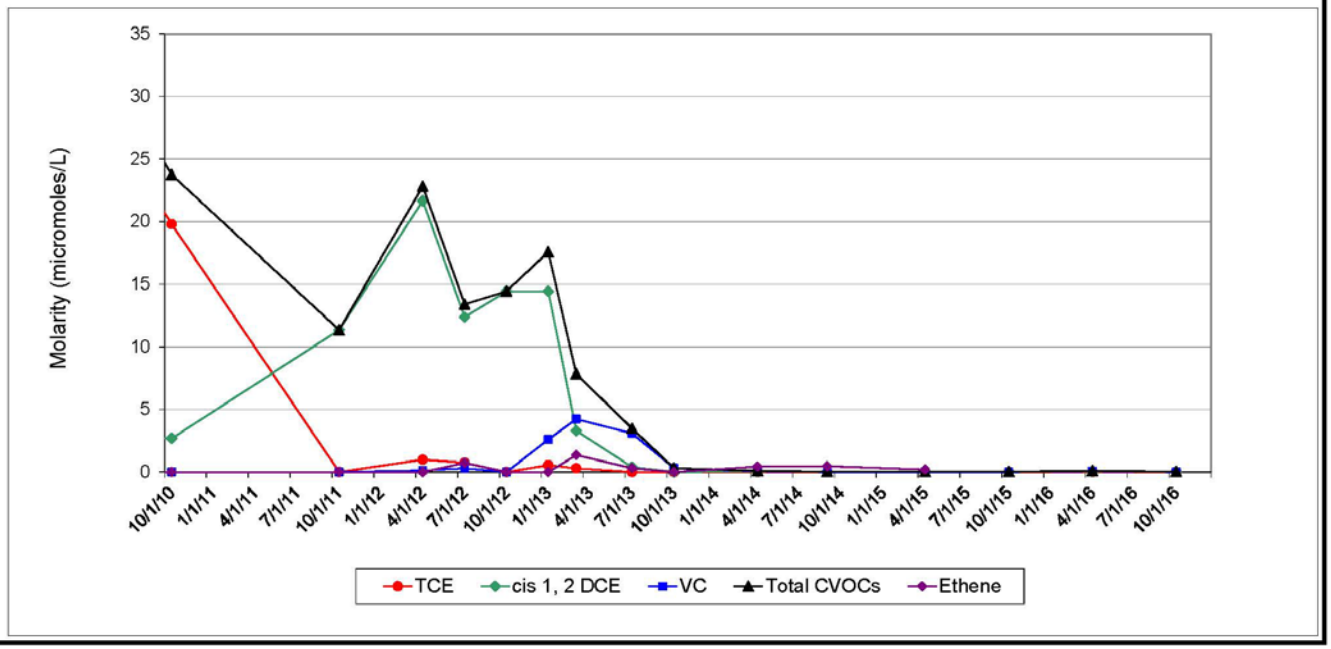
TREATMENT AREA WITH MW-552 MONITORING DATA



LEGEND

- MONITORING WELL / CLUSTER
- 2" INJECTION WELL
- 4" INJECTION WELL
- EXTRACTION WELL
- BELOW GRADE PIPING (APPROX.)
- INJECTION PORT AND CLEANOUT

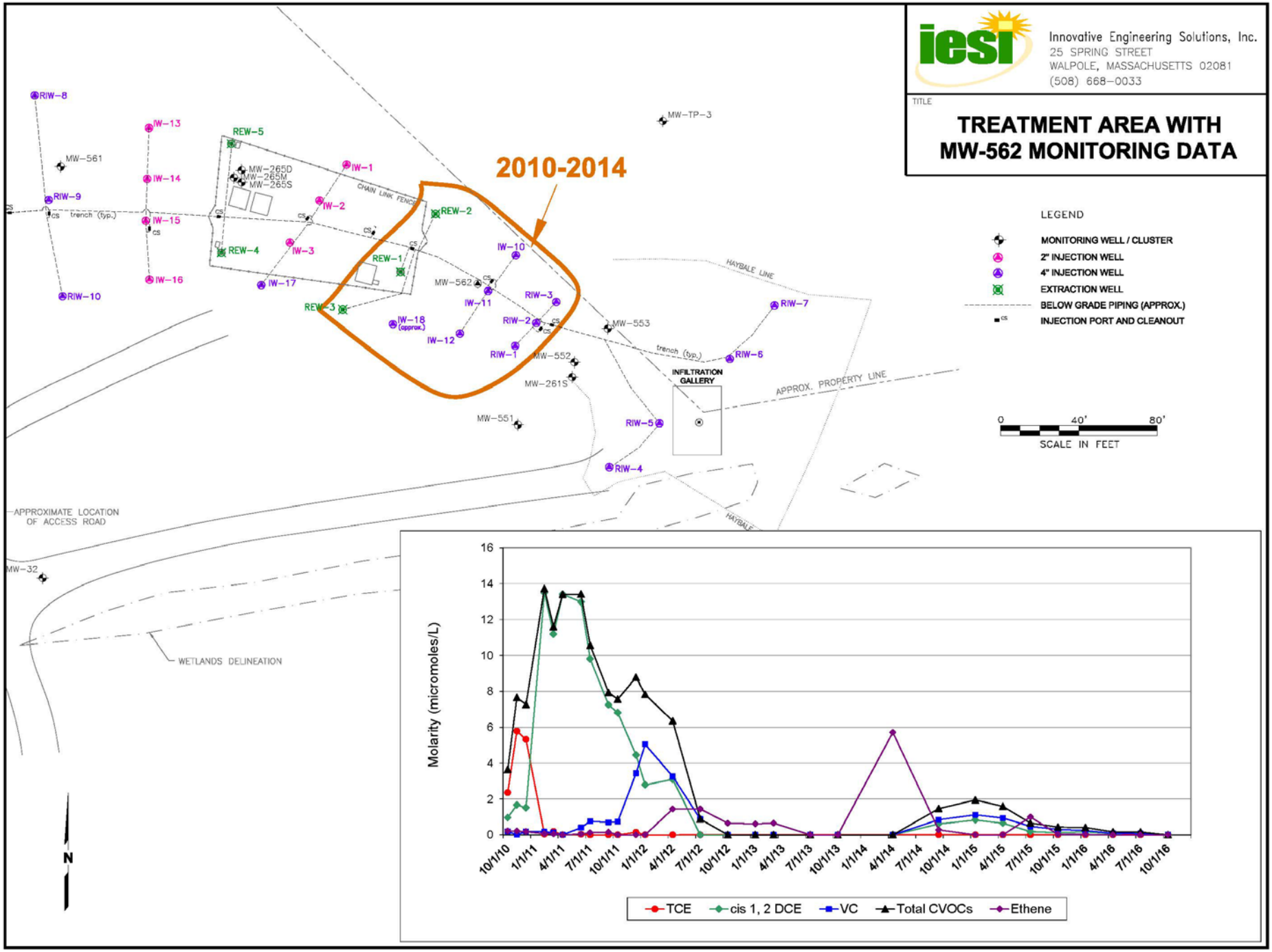
0 40' 80'
SCALE IN FEET



Innovative Engineering Solutions, Inc.
25 SPRING STREET
WALPOLE, MASSACHUSETTS 02081
(508) 668-0033

TITLE

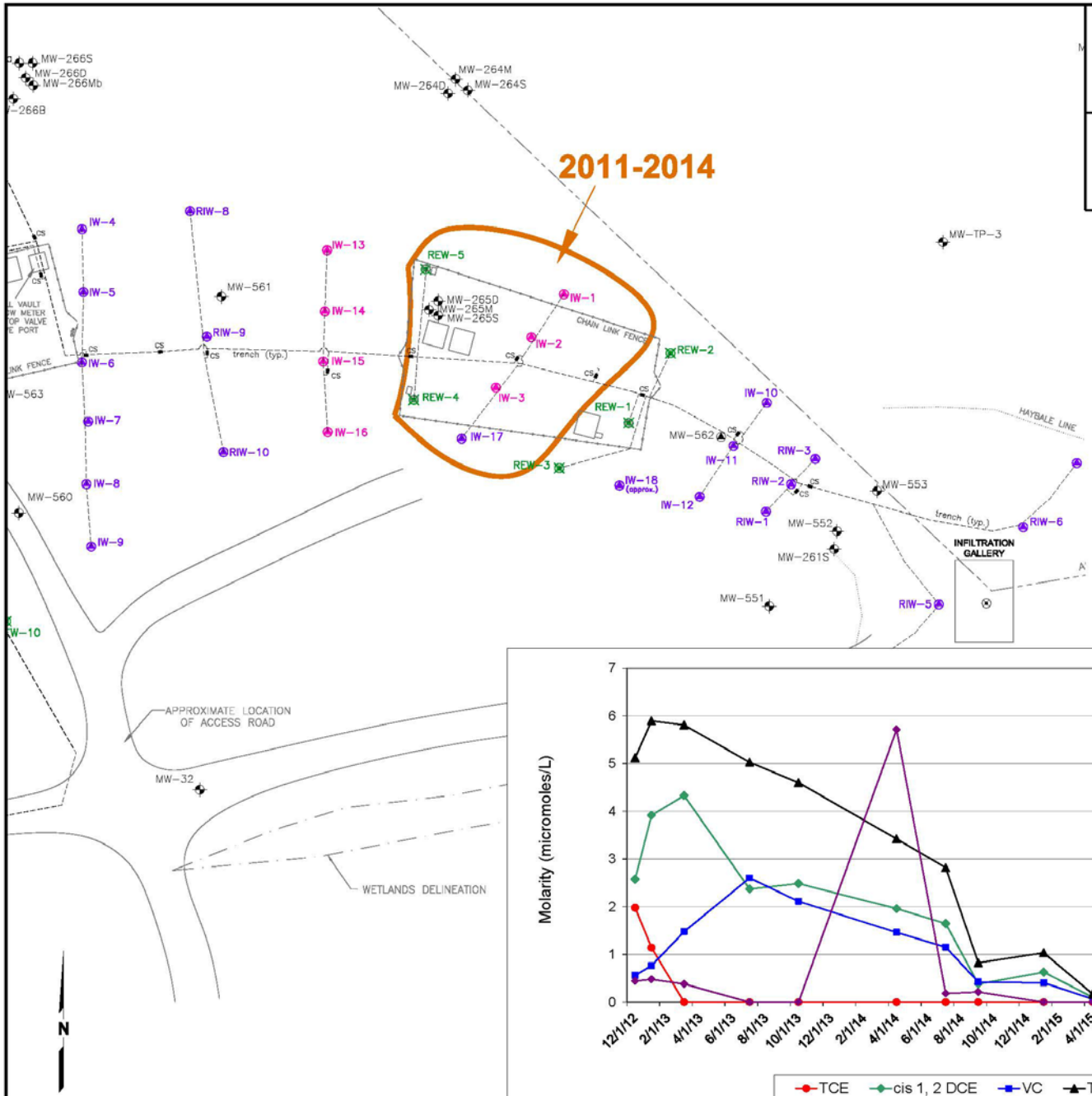
TREATMENT AREA WITH MW-562 MONITORING DATA

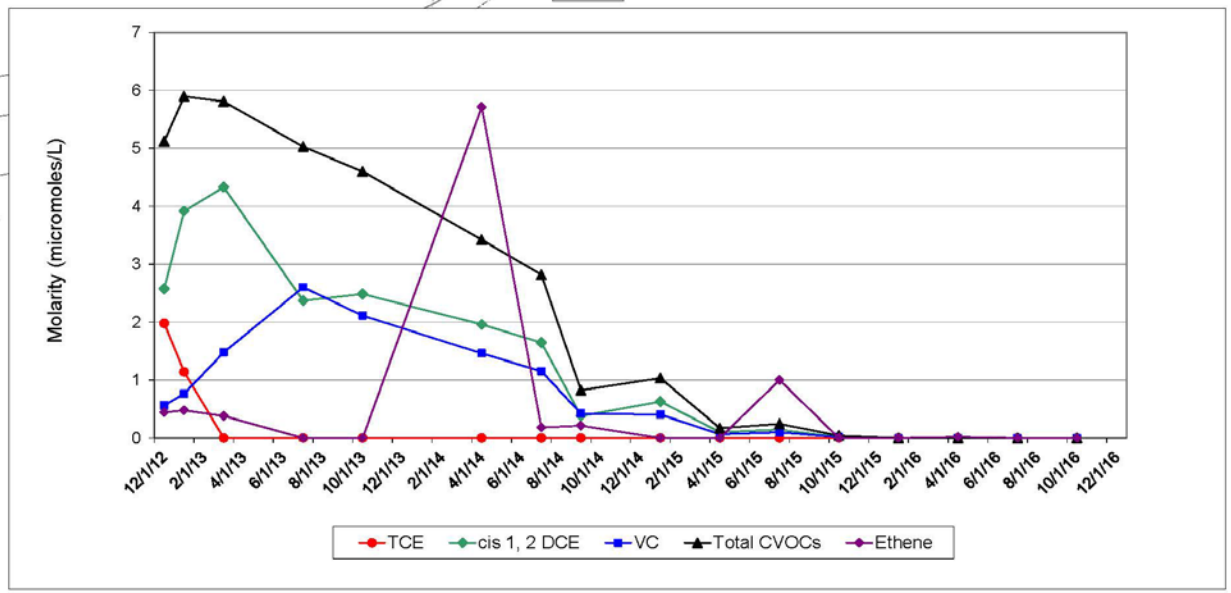


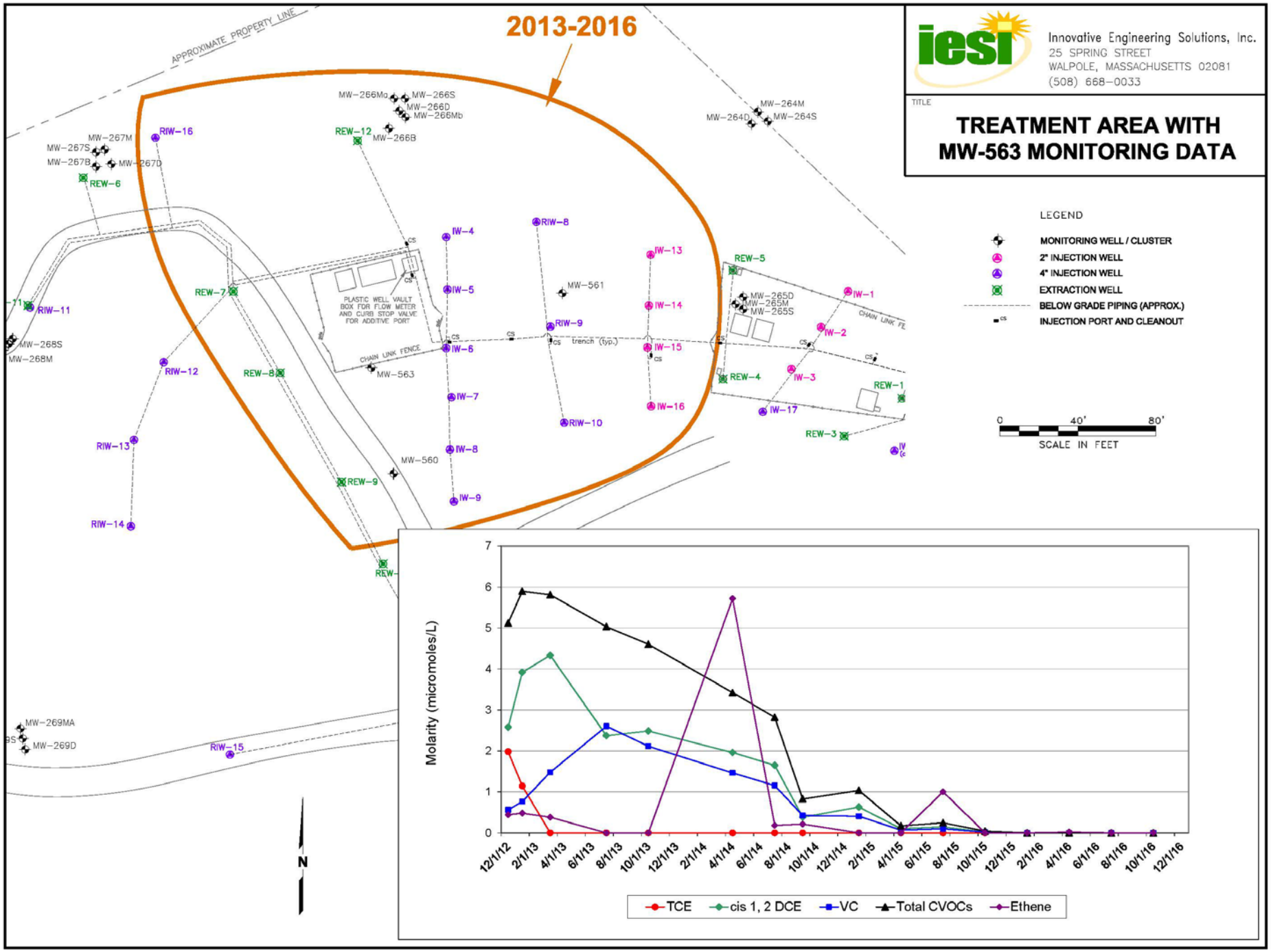
Innovative Engineering Solutions, Inc.
25 SPRING STREET
WALPOLE, MASSACHUSETTS 02081
(508) 668-0033

TITLE

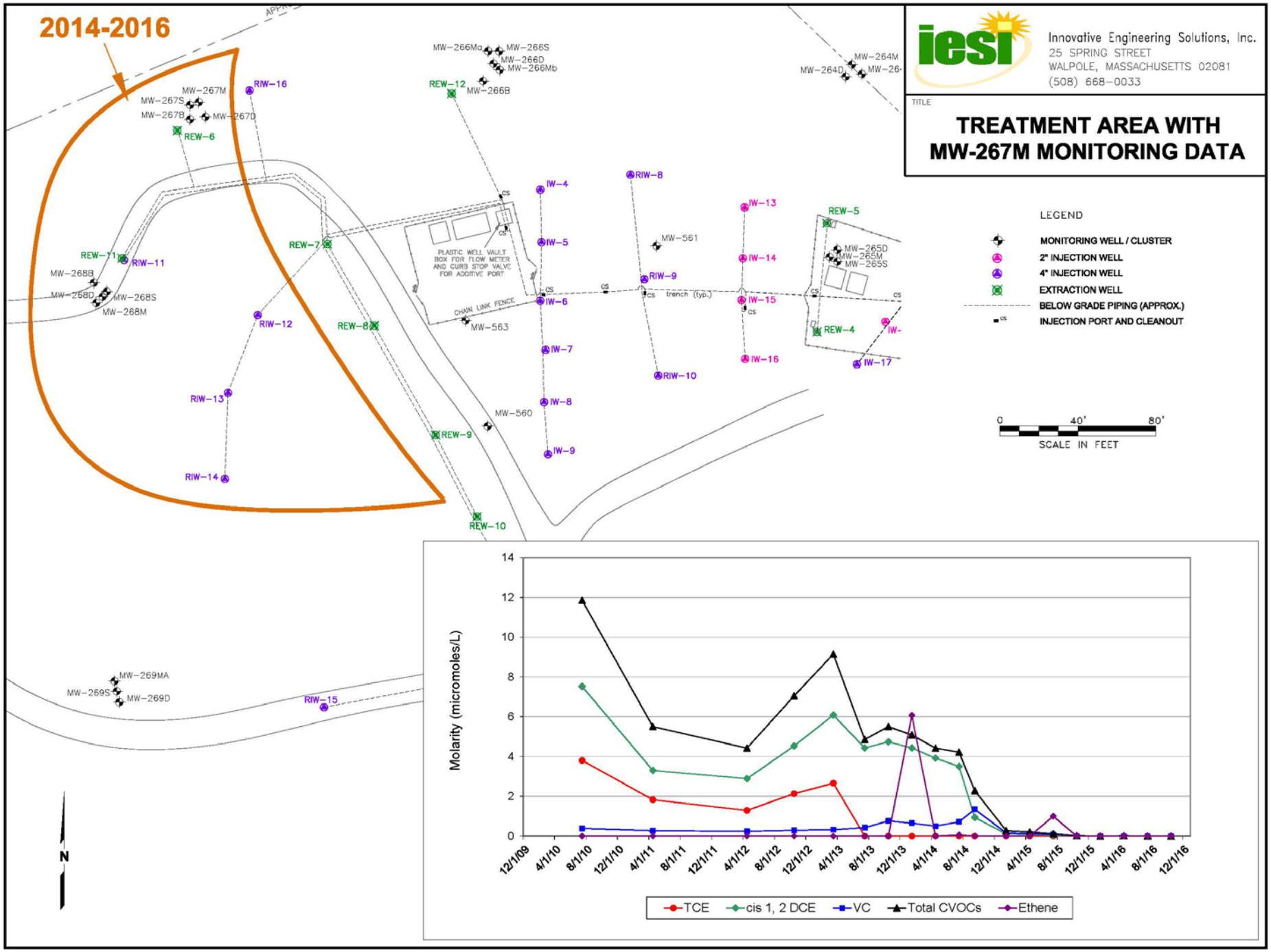
TREATMENT AREA WITH REW-4 MONITORING DATA

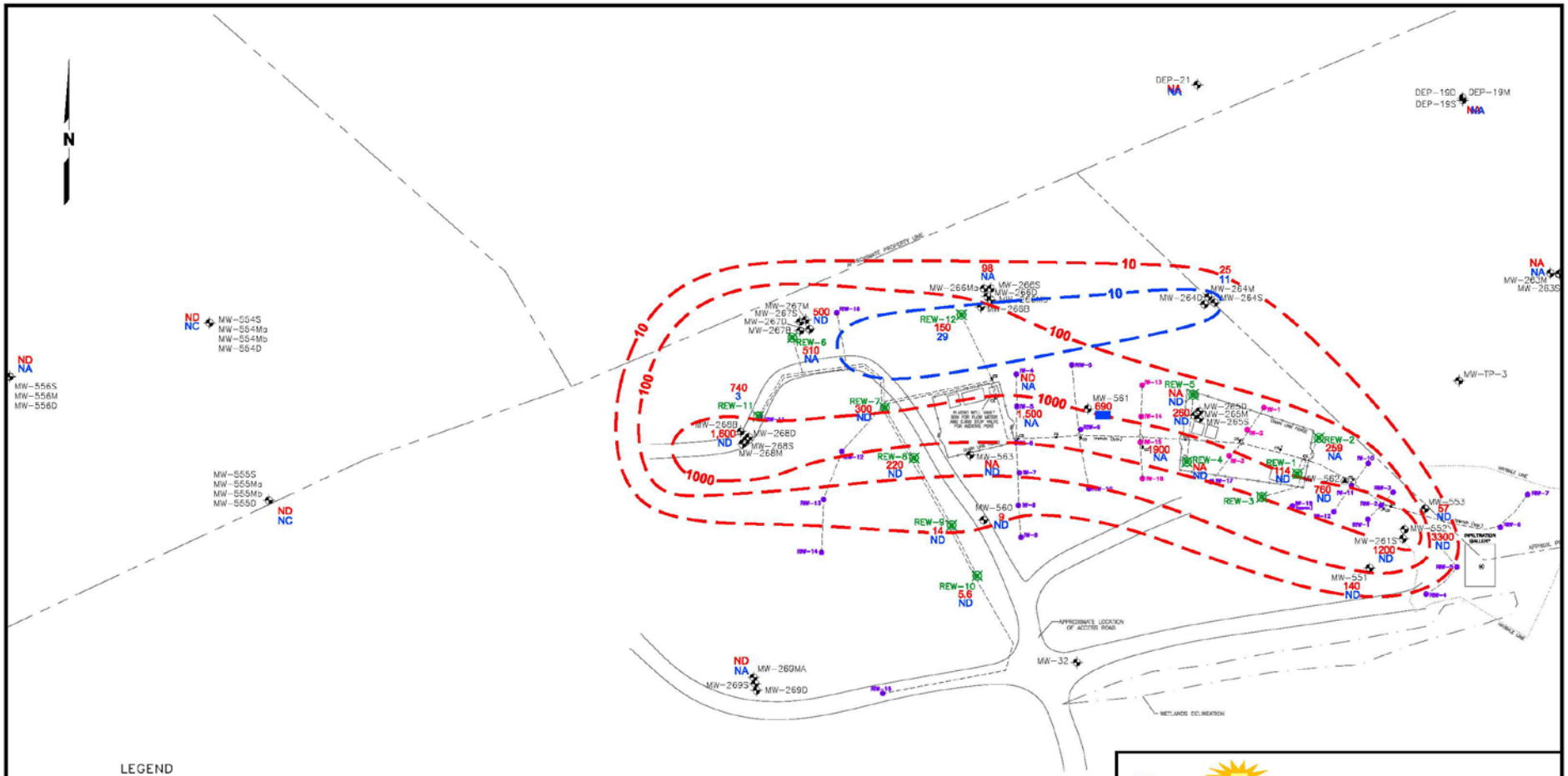





2013-2016
APPROXIMATE PROPERTY LINE
Innovative Engineering Solutions, Inc.
25 SPRING STREET
WALPOLE, MASSACHUSETTS 02081
(508) 668-0033
TITLE
TREATMENT AREA WITH MW-563 MONITORING DATA
LEGEND
MONITORING WELL / CLUSTER
2" INJECTION WELL
4" INJECTION WELL
EXTRACTION WELL
BELOW GRADE PIPING (APPROX.)
INJECTION PORT AND CLEANOUT
0 40' 80'
SCALE IN FEET
N
PLASTIC WELL VAULT BOX FOR FLOW METER AND CURB STOP VALVE FOR ADDITIVE PORT
CHAIN LINK FENCE
trench (typ.)
MW-266Ma
MW-266S
MW-266D
MW-266Mb
MW-266B
MW-264M
MW-264D
MW-264S
MW-267M
MW-267S
MW-267B
MW-267D
MW-268S
MW-268M
MW-561
MW-563
MW-560
MW-265D
MW-265M
MW-265S
MW-269MA
MW-269D
RIW-16
REW-12
REW-6
IW-4
RIW-8
IW-13
REW-5
IW-1
IW-5
IW-14
IW-2
REW-7
RIW-11
RIW-9
IW-6
IW-15
REW-4
IW-3
REW-1
RIW-12
REW-8
IW-7
IW-16
IW-17
RIW-10
REW-3
RIW-13
IW-8
REW-9
IW-9
RIW-14
RIW-15

Molarity (micromoles/L)
0
1
2
3
4
5
6
7
12/1/12
2/1/13
4/1/13
6/1/13
8/1/13
10/1/13
12/1/13
2/1/14
4/1/14
6/1/14
8/1/14
10/1/14
12/1/14
2/1/15
4/1/15
6/1/15
8/1/15
10/1/15
12/1/15
2/1/16
4/1/16
6/1/16
8/1/16
10/1/16
12/1/16
TCE
cis 1, 2 DCE
VC
Total CVOCs
Ethene


2014-2016
Innovative Engineering Solutions, Inc.
25 SPRING STREET
WALPOLE, MASSACHUSETTS 02081
(508) 668-0033
TITLE
TREATMENT AREA WITH MW-267M MONITORING DATA
LEGEND
MONITORING WELL / CLUSTER
2" INJECTION WELL
4" INJECTION WELL
EXTRACTION WELL
BELOW GRADE PIPING (APPROX.)
INJECTION PORT AND CLEANOUT
0 40' 80'
SCALE IN FEET
N
MW-267M
MW-267S
MW-267B
MW-267D
REW-6
RIW-16
MW-266Ma
MW-266S
MW-266D
MW-266Mb
REW-12
MW-266B
MW-264M
MW-264D
REW-11
RIW-11
MW-268B
MW-268D
MW-268S
MW-268M
REW-7
RIW-12
REW-8
RIW-13
RIW-14
REW-9
REW-10
PLASTIC WELL VAULT BOX FOR FLOW METER AND CURB STOP VALVE FOR ADDITIVE PORT
CHAIN LINK FENCE
MW-563
MW-560
IW-4
IW-5
IW-6
IW-7
IW-8
IW-9
RIW-8
MW-561
RIW-9
RIW-10
trench (typ.)
IW-13
IW-14
IW-15
IW-16
REW-5
MW-265D
MW-265M
MW-265S
REW-4
IW-17
MW-269MA
MW-269S
MW-269D
RIW-15
Molarity (micromoles/L)
14
12
10
8
6
4
2
0
12/1/09
4/1/10
8/1/10
12/1/10
4/1/11
8/1/11
12/1/11
4/1/12
8/1/12
12/1/12
4/1/13
8/1/13
12/1/13
4/1/14
8/1/14
12/1/14
4/1/15
8/1/15
12/1/15
4/1/16
8/1/16
12/1/16
TCE
cis 1, 2 DCE
VC
Total CVOCs
Ethene



LEGEND

- MONITORING WELL / CLUSTER
- 2" INJECTION WELL
- 4" INJECTION WELL
- EXTRACTION WELL
- BELOW GRADE PIPING (APPROX.)
- INJECTION PORT AND CLEANOUT

1,600 — PRE-REMEDIATION TCE RESULT IN 2010 (ug/L) (HIGHEST RESULT AT WELL CLUSTER SHOWN)

CONTOUR OF PRE-REMEDIATION RESULTS

29 — POST-REMEDIATION TCE RESULT IN 2016 (ug/L) (HIGHEST RESULTS AT WELL CLUSTER SHOWN)

CONTOUR OF POST-REMEDIATION RESULTS

NA = NOT AVAILABLE
NC = NOT ACCESSIBLE
ND = NOT DETECTED

0 80' 160'
SCALE IN FEET

iesi
Innovative Engineering Solutions, Inc.
25 SPRING STREET
WALPOLE, MASSACHUSETTS 02081
(508) 668-0033

TITLE

TCE
PRE REMEDIATION 2010
POST REMEDIATION 2016

Appendix B
Laboratory Analytical Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
Tel: (802)660-1990

TestAmerica Job ID: 200-35035-2
Client Project/Site: IDS Wayland

For:
ERM-Northeast
One Beacon Steet
5th Floor
Boston, Massachusetts 02108

Attn: Lyndsey Colburn

Authorized for release by:
9/2/2016 9:05:57 AM

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary 14
Chain of Custody 15
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Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-2

Job ID: 200-35035-2

Laboratory: TestAmerica Burlington

Narrative

Job Narrative
200-35035-2

Receipt
The samples were received on 8/27/2016 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4º C.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-2

Client Sample ID: MW-1026D-20160826-01 — Lab Sample ID: 200-35035-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.37		0.20		ug/L	1		522	Total/NA

Client Sample ID: MW-1020-20160826-01 — Lab Sample ID: 200-35035-9

No Detections.

Client Sample ID: MW-1011-20160826-01 — Lab Sample ID: 200-35035-10

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-2

Client Sample ID: MW-1026D-20160826-01

Lab Sample ID: 200-35035-8
Date Collected: 08/26/16 08:20
Matrix: Water
Date Received: 08/27/16 09:45

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.37**		0.20		ug/L		08/29/16 19:30	08/31/16 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*78*		*70 - 130*	*08/29/16 19:30*	*08/31/16 15:55*	*1*

Client Sample ID: MW-1020-20160826-01

Lab Sample ID: 200-35035-9
Date Collected: 08/26/16 08:30
Matrix: Water
Date Received: 08/27/16 09:45

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		08/29/16 19:30	08/31/16 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*78*		*70 - 130*	*08/29/16 19:30*	*08/31/16 16:33*	*1*

Client Sample ID: MW-1011-20160826-01

Lab Sample ID: 200-35035-10
Date Collected: 08/26/16 08:45
Matrix: Water
Date Received: 08/27/16 09:45

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		08/29/16 19:30	08/31/16 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*71*		*70 - 130*	*08/29/16 19:30*	*08/31/16 16:53*	*1*

Surrogate Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-2

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	**Client Sample ID**	**14DD8 (70-130)**							
200-35035-8	MW-1026D-20160826-01	78							
200-35035-9	MW-1020-20160826-01	78							
200-35035-10	MW-1011-20160826-01	71							
LCS 200-108692/2-A	Lab Control Sample	93							
MB 200-108692/1-A	Method Blank	87							

Surrogate Legend

14DD8 = 1,4-Dioxane-d8 (Surr)

QC Sample Results

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-2

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Lab Sample ID: MB 200-108692/1-A
Matrix: Water
Analysis Batch: 108712

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 108692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		08/29/16 19:30	08/30/16 13:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*87*		*70 - 130*	*08/29/16 19:30*	*08/30/16 13:58*	*1*

Lab Sample ID: LCS 200-108692/2-A
Matrix: Water
Analysis Batch: 108712

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 108692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	8.00	7.16		ug/L		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*93*		*70 - 130*

QC Association Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-2

GC/MS Semi VOA

Prep Batch: 108692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-35035-8	MW-1026D-20160826-01	Total/NA	Water	3535A	
200-35035-9	MW-1020-20160826-01	Total/NA	Water	3535A	
200-35035-10	MW-1011-20160826-01	Total/NA	Water	3535A	
MB 200-108692/1-A	Method Blank	Total/NA	Water	3535A	
LCS 200-108692/2-A	Lab Control Sample	Total/NA	Water	3535A	

Analysis Batch: 108712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 200-108692/1-A	Method Blank	Total/NA	Water	522	108692
LCS 200-108692/2-A	Lab Control Sample	Total/NA	Water	522	108692

Analysis Batch: 108748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-35035-8	MW-1026D-20160826-01	Total/NA	Water	522	108692
200-35035-9	MW-1020-20160826-01	Total/NA	Water	522	108692
200-35035-10	MW-1011-20160826-01	Total/NA	Water	522	108692

Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-2

Client Sample ID: MW-1026D-20160826-01 — Lab Sample ID: 200-35035-8

Date Collected: 08/26/16 08:20 — **Matrix: Water**
Date Received: 08/27/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			108692	08/29/16 19:30	BDL	TAL BUR
Total/NA	Analysis	522		1	108748	08/31/16 15:55	P1M	TAL BUR

Client Sample ID: MW-1020-20160826-01 — Lab Sample ID: 200-35035-9

Date Collected: 08/26/16 08:30 — **Matrix: Water**
Date Received: 08/27/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			108692	08/29/16 19:30	BDL	TAL BUR
Total/NA	Analysis	522		1	108748	08/31/16 16:33	P1M	TAL BUR

Client Sample ID: MW-1011-20160826-01 — Lab Sample ID: 200-35035-10

Date Collected: 08/26/16 08:45 — **Matrix: Water**
Date Received: 08/27/16 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			108692	08/29/16 19:30	BDL	TAL BUR
Total/NA	Analysis	522		1	108748	08/31/16 16:53	P1M	TAL BUR

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Certification Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-2

Laboratory: TestAmerica Burlington

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-17
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-02-17
Florida	NELAP	4	E87467	06-30-17
L-A-B	DoD ELAP		L2336	02-26-17
Maine	State Program	1	VT00008	04-17-17
Minnesota	NELAP	5	050-999-436	12-31-16
New Hampshire	NELAP	1	2006	12-18-16
New Jersey	NELAP	2	VT972	06-30-17
New York	NELAP	2	10391	04-01-17
Pennsylvania	NELAP	3	68-00489	04-30-17
Rhode Island	State Program	1	LAO00298	12-30-16
US Fish & Wildlife	Federal		LE-058448-0	10-31-16
USDA	Federal		P330-11-00093	10-28-16
Vermont	State Program	1	VT-4000	12-31-16
Virginia	NELAP	3	460209	12-14-16

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-17
California	State Program	9	1169CA	09-30-17
Connecticut	State Program	1	PH-0568	09-30-16 *
Florida	NELAP	4	E87672	06-30-17
Georgia	State Program	4	N/A	03-31-17
Georgia	State Program	4	956	03-31-17
Illinois	NELAP	5	200003	09-30-16 *
Iowa	State Program	7	374	03-01-17
Kansas	NELAP	7	E-10187	10-31-16
Kentucky (DW)	State Program	4	90029	12-31-16
Kentucky (UST)	State Program	4	30	03-31-17
Kentucky (WW)	State Program	4	90029	12-31-16
Louisiana	NELAP	6	02031	06-30-17
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-17
Massachusetts	State Program	1	M-NY044	06-30-17
Michigan	State Program	5	9937	03-31-16 *
Minnesota	NELAP	5	036-999-337	12-31-16
New Hampshire	NELAP Primary AB	1	2973	09-11-16 *
New Hampshire	NELAP Secondary AB	1	2337	11-17-16
New Jersey	NELAP	2	NY455	06-30-17
New York	NELAP	2	10026	03-31-17
North Dakota	State Program	8	R-176	03-31-17
Oklahoma	State Program	6	9421	08-31-16 *
Oregon	NELAP	10	NY200003	06-09-17
Pennsylvania	NELAP	3	68-00281	07-31-17
Rhode Island	State Program	1	LAO00328	12-30-16
Tennessee	State Program	4	TN02970	03-31-17
Texas	NELAP	6	T104704412-15-6	07-31-17
USDA	Federal		P330-11-00386	11-26-17

* Certification renewal pending - certification considered valid.

Certification Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-2

Laboratory: TestAmerica Buffalo (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Virginia	NELAP	3	460185	09-14-16 *
Washington	State Program	10	C784	02-10-17
West Virginia DEP	State Program	3	252	09-30-16 *
Wisconsin	State Program	5	998310390	08-31-16 *

* Certification renewal pending - certification considered valid.

Method Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-2

Method	Method Description	Protocol	Laboratory
522	1,4 Dioxane (GC/MS SIM)	EPA	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-35035-8	MW-1026D-20160826-01	Water	08/26/16 08:20	08/27/16 09:45
200-35035-9	MW-1020-20160826-01	Water	08/26/16 08:30	08/27/16 09:45
200-35035-10	MW-1011-20160826-01	Water	08/26/16 08:45	08/27/16 09:45

TestAmerica Westfield
Westfield Executive Park 53 Southampton Road
Westfield, MA 01085
Phone (413) 572-4000 Fax (413) 572-3707

360325-Boston

Chain of Custody Record

TestAmerica
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Client Information	Sampler: Ellie LeBlanc	Lab PM: Mason, Becky C	Carrier Tracking No(s):	COC No: 480-58452-15333.5
Client Contact: ~~Joshua Klement~~ Lyndsey Colburn	Phone: 240 682 1855	E-Mail: becky.mason@testamericainc.com		Page: Page 1 of 1
Company: ERM-Northeast				Job #:
Address: One Beacon Steet 5th Floor	Due Date Requested:			
City: Boston	TAT Requested (days): standard			
State, Zip: MA, 02108				
Phone: 617-646-7800	PO #: Purchase Order not required			
Email: ~~Joshua.Klement@erm.com~~ lyndsey.colburn@erm.com elise.leblanc@erm.com	WO #: 0321744			
Project Name: IDS ~~Burlington~~ Wayland	Project #: 48007496			
Site: Wayland	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - (MOD) Pick a reference price	300.0_28D - Sulfate	6010MCP - (MOD) 6010 MCP Custom analyte list	522_MOD-1,4Dioxane	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	D	A		
MW-1026D-20160826-01	8/26/16	0820	G	Water						X	1	Please keep results from these 3 samples on a separate lab report from the other samples.
MW-1020-20160826-01	↓	0830	↓	Water						X	1	
MW-1011-20160826-01		0845		Water						X	1	
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	08/26/16 10:05	ERM		8/26/16 10:05	TA
	8/26/16	TA		8/27/16 945	TABTV

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: N/A | Cooler Temperature(s) °C and Other Remarks: 2.4°C

Login Sample Receipt Checklist

Client: ERM-Northeast

Job Number: 200-35035-2

Login Number: 35035
List Number: 1
Creator: Lavigne III, Scott M

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
Tel: (802)660-1990

TestAmerica Job ID: 200-35035-1
Client Project/Site: IDS Wayland

For:
ERM-Northeast
One Beacon Steet
5th Floor
Boston, Massachusetts 02108

Attn: Lyndsey Colburn

Authorized for release by:
9/19/2016 9:07:47 AM
Denise Giglia, Project Management Assistant II
denise.giglia@testamericainc.com

Designee for

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

LINKS

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Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 200-35035-1

Laboratory: TestAmerica Burlington

Narrative

Job Narrative
200-35035-1

Receipt
The samples were received on 8/27/2016 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4º C.

GC/MS Semi VOA
Method 522: Surrogate recovery for the following samples was outside control limits: MW-1025D-20160826-01 (200-35035-1), MW-1025M-20160826-01 (200-35035-2), MW-1024D-20160826-01 (200-35035-3) and MW-1034-20160826-01 (200-35035-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 522: Surrogate recovery for the following samples was outside control limits: MW-1025D-20160826-01 (200-35035-1), MW-1025M-20160826-01 (200-35035-2) and MW-1024D-20160826-01 (200-35035-3). Evidence of matrix interferences is not obvious. Reanalysis confirms data

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-1

Client Sample ID: MW-1025D-20160826-01 — Lab Sample ID: 200-35035-1

No Detections.

Client Sample ID: MW-1025M-20160826-01 — Lab Sample ID: 200-35035-2

No Detections.

Client Sample ID: MW-1024D-20160826-01 — Lab Sample ID: 200-35035-3

No Detections.

Client Sample ID: MW-1023-20160826-01 — Lab Sample ID: 200-35035-4

No Detections.

Client Sample ID: MW-1022-20160826-01 — Lab Sample ID: 200-35035-5

No Detections.

Client Sample ID: MW-1033-20160826-01 — Lab Sample ID: 200-35035-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.49		0.20		ug/L	1		522	Total/NA

Client Sample ID: MW-1034-20160826-01 — Lab Sample ID: 200-35035-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-1

Client Sample ID: MW-1025D-20160826-01 — Lab Sample ID: 200-35035-1

Date Collected: 08/26/16 07:25
Date Received: 08/27/16 09:45
Matrix: Water

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		08/29/16 19:30	08/31/16 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*66*	*X*	*70 - 130*	*08/29/16 19:30*	*08/31/16 13:38*	*1*

Client Sample ID: MW-1025M-20160826-01 — Lab Sample ID: 200-35035-2

Date Collected: 08/26/16 07:30
Date Received: 08/27/16 09:45
Matrix: Water

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		08/29/16 19:30	08/31/16 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*65*	*X*	*70 - 130*	*08/29/16 19:30*	*08/31/16 13:58*	*1*

Client Sample ID: MW-1024D-20160826-01 — Lab Sample ID: 200-35035-3

Date Collected: 08/26/16 07:40
Date Received: 08/27/16 09:45
Matrix: Water

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		08/29/16 19:30	08/31/16 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*51*	*X*	*70 - 130*	*08/29/16 19:30*	*08/31/16 14:17*	*1*

Client Sample ID: MW-1023-20160826-01 — Lab Sample ID: 200-35035-4

Date Collected: 08/26/16 07:50
Date Received: 08/27/16 09:45
Matrix: Water

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		08/29/16 19:30	08/31/16 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*77*		*70 - 130*	*08/29/16 19:30*	*08/31/16 14:37*	*1*

Client Sample ID: MW-1022-20160826-01 — Lab Sample ID: 200-35035-5

Date Collected: 08/26/16 08:05
Date Received: 08/27/16 09:45
Matrix: Water

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		08/29/16 19:30	08/31/16 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*70*		*70 - 130*	*08/29/16 19:30*	*08/31/16 14:55*	*1*

Client Sample Results

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-1

Client Sample ID: MW-1033-20160826-01

Lab Sample ID: 200-35035-6
Date Collected: 08/26/16 08:55
Matrix: Water
Date Received: 08/27/16 09:45

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.49**		0.20		ug/L		08/29/16 19:30	08/31/16 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*72*		*70 - 130*	*08/29/16 19:30*	*08/31/16 15:15*	*1*

Client Sample ID: MW-1034-20160826-01

Lab Sample ID: 200-35035-7
Date Collected: 08/26/16 09:05
Matrix: Water
Date Received: 08/27/16 09:45

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		08/29/16 19:30	08/31/16 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*70*		*70 - 130*	*08/29/16 19:30*	*08/31/16 15:34*	*1*

Surrogate Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-1

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	**Client Sample ID**	**14DD8 (70-130)**							
200-35035-1	MW-1025D-20160826-01	66 X							
200-35035-2	MW-1025M-20160826-01	65 X							
200-35035-3	MW-1024D-20160826-01	51 X							
200-35035-4	MW-1023-20160826-01	77							
200-35035-5	MW-1022-20160826-01	70							
200-35035-6	MW-1033-20160826-01	72							
200-35035-7	MW-1034-20160826-01	70							
LCS 200-108692/2-A	Lab Control Sample	93							
MB 200-108692/1-A	Method Blank	87							

Surrogate Legend

14DD8 = 1,4-Dioxane-d8 (Surr)

QC Sample Results

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-1

Method: 522 - 1,4 Dioxane (GC/MS SIM)

Lab Sample ID: MB 200-108692/1-A
Matrix: Water
Analysis Batch: 108712

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 108692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		08/29/16 19:30	08/30/16 13:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*87*		*70 - 130*	*08/29/16 19:30*	*08/30/16 13:58*	*1*

Lab Sample ID: LCS 200-108692/2-A
Matrix: Water
Analysis Batch: 108712

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 108692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	8.00	7.16		ug/L		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*93*		*70 - 130*

QC Association Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-1

GC/MS Semi VOA

Prep Batch: 108692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-35035-1	MW-1025D-20160826-01	Total/NA	Water	3535A	
200-35035-2	MW-1025M-20160826-01	Total/NA	Water	3535A	
200-35035-3	MW-1024D-20160826-01	Total/NA	Water	3535A	
200-35035-4	MW-1023-20160826-01	Total/NA	Water	3535A	
200-35035-5	MW-1022-20160826-01	Total/NA	Water	3535A	
200-35035-6	MW-1033-20160826-01	Total/NA	Water	3535A	
200-35035-7	MW-1034-20160826-01	Total/NA	Water	3535A	
MB 200-108692/1-A	Method Blank	Total/NA	Water	3535A	
LCS 200-108692/2-A	Lab Control Sample	Total/NA	Water	3535A	

Analysis Batch: 108712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 200-108692/1-A	Method Blank	Total/NA	Water	522	108692
LCS 200-108692/2-A	Lab Control Sample	Total/NA	Water	522	108692

Analysis Batch: 108748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-35035-1	MW-1025D-20160826-01	Total/NA	Water	522	108692
200-35035-2	MW-1025M-20160826-01	Total/NA	Water	522	108692
200-35035-3	MW-1024D-20160826-01	Total/NA	Water	522	108692
200-35035-4	MW-1023-20160826-01	Total/NA	Water	522	108692
200-35035-5	MW-1022-20160826-01	Total/NA	Water	522	108692
200-35035-6	MW-1033-20160826-01	Total/NA	Water	522	108692
200-35035-7	MW-1034-20160826-01	Total/NA	Water	522	108692

Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-1

Client Sample ID: MW-1025D-20160826-01 — Lab Sample ID: 200-35035-1

Date Collected: 08/26/16 07:25
Date Received: 08/27/16 09:45
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			108692	08/29/16 19:30	BDL	TAL BUR
Total/NA	Analysis	522		1	108748	08/31/16 13:38	P1M	TAL BUR

Client Sample ID: MW-1025M-20160826-01 — Lab Sample ID: 200-35035-2

Date Collected: 08/26/16 07:30
Date Received: 08/27/16 09:45
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			108692	08/29/16 19:30	BDL	TAL BUR
Total/NA	Analysis	522		1	108748	08/31/16 13:58	P1M	TAL BUR

Client Sample ID: MW-1024D-20160826-01 — Lab Sample ID: 200-35035-3

Date Collected: 08/26/16 07:40
Date Received: 08/27/16 09:45
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			108692	08/29/16 19:30	BDL	TAL BUR
Total/NA	Analysis	522		1	108748	08/31/16 14:17	P1M	TAL BUR

Client Sample ID: MW-1023-20160826-01 — Lab Sample ID: 200-35035-4

Date Collected: 08/26/16 07:50
Date Received: 08/27/16 09:45
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			108692	08/29/16 19:30	BDL	TAL BUR
Total/NA	Analysis	522		1	108748	08/31/16 14:37	P1M	TAL BUR

Client Sample ID: MW-1022-20160826-01 — Lab Sample ID: 200-35035-5

Date Collected: 08/26/16 08:05
Date Received: 08/27/16 09:45
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			108692	08/29/16 19:30	BDL	TAL BUR
Total/NA	Analysis	522		1	108748	08/31/16 14:55	P1M	TAL BUR

Client Sample ID: MW-1033-20160826-01 — Lab Sample ID: 200-35035-6

Date Collected: 08/26/16 08:55
Date Received: 08/27/16 09:45
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			108692	08/29/16 19:30	BDL	TAL BUR
Total/NA	Analysis	522		1	108748	08/31/16 15:15	P1M	TAL BUR

Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-1

Client Sample ID: MW-1034-20160826-01

Lab Sample ID: 200-35035-7

Date Collected: 08/26/16 09:05
Date Received: 08/27/16 09:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			108692	08/29/16 19:30	BDL	TAL BUR
Total/NA	Analysis	522		1	108748	08/31/16 15:34	P1M	TAL BUR

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Certification Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-1

Laboratory: TestAmerica Burlington

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-17
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-02-17
Florida	NELAP	4	E87467	06-30-17
L-A-B	DoD ELAP		L2336	02-26-17
Maine	State Program	1	VT00008	04-17-17
Minnesota	NELAP	5	050-999-436	12-31-16
New Hampshire	NELAP	1	2006	12-18-16
New Jersey	NELAP	2	VT972	06-30-17
New York	NELAP	2	10391	04-01-17
Pennsylvania	NELAP	3	68-00489	04-30-17
Rhode Island	State Program	1	LAO00298	12-30-16
US Fish & Wildlife	Federal		LE-058448-0	10-31-16
USDA	Federal		P330-11-00093	10-28-16
Vermont	State Program	1	VT-4000	12-31-16
Virginia	NELAP	3	460209	12-14-16

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-17
California	State Program	9	1169CA	09-30-17
Connecticut	State Program	1	PH-0568	09-30-16 *
Florida	NELAP	4	E87672	06-30-17
Georgia	State Program	4	N/A	03-31-17
Georgia	State Program	4	956	03-31-17
Illinois	NELAP	5	200003	09-30-16 *
Iowa	State Program	7	374	03-01-17
Kansas	NELAP	7	E-10187	10-31-16
Kentucky (DW)	State Program	4	90029	12-31-16
Kentucky (UST)	State Program	4	30	03-31-17
Kentucky (WW)	State Program	4	90029	12-31-16
Louisiana	NELAP	6	02031	06-30-17
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-17
Massachusetts	State Program	1	M-NY044	06-30-17
Michigan	State Program	5	9937	03-31-16 *
Minnesota	NELAP	5	036-999-337	12-31-16
New Hampshire	NELAP Primary AB	1	2973	09-11-16 *
New Hampshire	NELAP Secondary AB	1	2337	11-17-16
New Jersey	NELAP	2	NY455	06-30-17
New York	NELAP	2	10026	03-31-17
North Dakota	State Program	8	R-176	03-31-17
Oklahoma	State Program	6	9421	08-31-17
Oregon	NELAP	10	NY200003	06-09-17
Pennsylvania	NELAP	3	68-00281	07-31-17
Rhode Island	State Program	1	LAO00328	12-30-16
Tennessee	State Program	4	TN02970	03-31-17
Texas	NELAP	6	T104704412-15-6	07-31-17
USDA	Federal		P330-11-00386	11-26-17

* Certification renewal pending - certification considered valid.

Certification Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-1

Laboratory: TestAmerica Buffalo (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Virginia	NELAP	3	460185	09-14-17
Washington	State Program	10	C784	02-10-17
West Virginia DEP	State Program	3	252	09-30-16 *
Wisconsin	State Program	5	998310390	08-31-17

* Certification renewal pending - certification considered valid.

Method Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-1

Method	Method Description	Protocol	Laboratory
522	1,4 Dioxane (GC/MS SIM)	EPA	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 200-35035-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-35035-1	MW-1025D-20160826-01	Water	08/26/16 07:25	08/27/16 09:45
200-35035-2	MW-1025M-20160826-01	Water	08/26/16 07:30	08/27/16 09:45
200-35035-3	MW-1024D-20160826-01	Water	08/26/16 07:40	08/27/16 09:45
200-35035-4	MW-1023-20160826-01	Water	08/26/16 07:50	08/27/16 09:45
200-35035-5	MW-1022-20160826-01	Water	08/26/16 08:05	08/27/16 09:45
200-35035-6	MW-1033-20160826-01	Water	08/26/16 08:55	08/27/16 09:45
200-35035-7	MW-1034-20160826-01	Water	08/26/16 09:05	08/27/16 09:45

TestAmerica Westfield
Westfield Executive Park 53 Southampton Road
Westfield, MA 01085
Phone (413) 572-4000 Fax (413) 572-3707

360325-Boston

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Elise LeBlanc	Lab PM: Mason, Becky C	Carrier Tracking No(s):	COC No: 480-58452-15333.4
Client Contact: ~~Joshua Klement~~ Lyndsey Colburn	Phone: 240-682-1855	E-Mail: becky.mason@testamericainc.com		Page: Page 1 of 1
Company: ERM-Northeast				Job #:
Address: One Beacon Steet 5th Floor	Due Date Requested:			
City: Boston	TAT Requested (days): standard			
State, Zip: MA, 02108				
Phone: 617-646-7800	PO #: Purchase Order not required			
Email: ~~Joshua.Klement@erm.com~~ lyndsey.colburn@erm.com elise.leblanc@erm.com	WO #: 0321744			
Project Name: IDS ~~Burlington~~ Wayland	Project #: 48007496			
Site: Wayland	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - (MOD) Pick a reference price	300.0_28D - Sulfate	6010MCP - (MOD) 6010 MCP Custom analyte list	522_MOD - 1,4-Dioxane	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	D	A		
MW-1025D-20160826-01	08/26/16	0725	G	Water						X	1	
MW-1025M-20160826-01		0730	G	Water						X	1	
MW-1024D-20160826-01		0740	G	Water						X	1	
MW-1023-20160826-01		0750	G	Water						X	1	
MW-1022-20160826-01		0805	G	Water						X	1	
MW-1033-20160826-01		0855	G	Water						X	1	
MW-1034-20160826-01		0905	G	Water						X	1	200-35035 COC
				Water								
				Water								
				Water								
				Water								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	08/26/16 10:05	ERM		8/26/16 10:05	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8/26/16	TA		8/27/16 9:45	TA BTU
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: N/A | Cooler Temperature(s) °C and Other Remarks: 2.4°C

Login Sample Receipt Checklist

Client: ERM-Northeast

Job Number: 200-35035-1

Login Number: 35035
List Number: 1
Creator: Lavigne III, Scott M

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-104990-1
Client Project/Site: IDS Wayland
Revision: 1

For:
ERM-Northeast
One Beacon Steet
5th Floor
Boston, Massachusetts 02108

Attn: Lyndsey Colburn

Authorized for release by:
10/6/2016 8:34:35 AM

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-104990-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-104990-1

Revised report: Per client request updated 8260 VOC compound list. We are now reporting full MCP list. The MCP cert page has also been updated, and case narrative adjusted due to changed in compound list.

Receipt
The samples were received on 8/25/2016 2:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

GC/MS VOA
Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-1035-20160824-01 (480-104990-6), MW-1037-20160824-01 (480-104990-8), MW-1038-20160824-01 (480-104990-9), (480-104990-A-9 MS) and (480-104990-A-9 MSD). Elevated reporting limits (RLs) are provided.

Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MW-1011-20160824-01 (480-104990-1), MW-1020-20160824-01 (480-104990-3), MW-1026D-20160824-01 (480-104990-4), MW-1032-20160824-01 (480-104990-5), MW-1035-20160824-01 (480-104990-6), MW-1036-20160824-01 (480-104990-7), MW-1037-20160824-01 (480-104990-8), MW-1038-20160824-01 (480-104990-9), MW-1039-20160824-01 (480-104990-10) and DUP-005-20160824-01 (480-104990-11). The requested target analyte list includes 2-chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260C: The continuing calibration verification (CCV) for Carbon tetrachloride associated with batch 480-317749 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference.The following samples were affected : MW-1011-20160824-01 (480-104990-1), MW-1020-20160824-01 (480-104990-3), MW-1026D-20160824-01 (480-104990-4), MW-1032-20160824-01 (480-104990-5), MW-1035-20160824-01 (480-104990-6), MW-1036-20160824-01 (480-104990-7), MW-1037-20160824-01 (480-104990-8), MW-1038-20160824-01 (480-104990-9), MW-1039-20160824-01 (480-104990-10) and DUP-005-20160824-01 (480-104990-11).

Method 8260C: The laboratory control sample duplicate (LCSD) for batch 480-317749 exceeded control limits for the following analytes: Carbon tetrachloride. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-1011-20160824-01 (480-104990-1), MW-1020-20160824-01 (480-104990-3), MW-1026D-20160824-01 (480-104990-4), MW-1032-20160824-01 (480-104990-5), MW-1035-20160824-01 (480-104990-6), MW-1036-20160824-01 (480-104990-7), MW-1037-20160824-01 (480-104990-8), MW-1038-20160824-01 (480-104990-9), MW-1039-20160824-01 (480-104990-10) and DUP-005-20160824-01 (480-104990-11).

Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid: MW-1018-20160824-01 (480-104990-2). The requested target analyte list includes 2-chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260C: The continuing calibration verification (CCV) for 1,1,1-Trichloroethane, Carbon tetrachloride, and Dichlorodifluoromethane associated with batch 480-317839 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following sample was affected : MW-1018-20160824-01 (480-104990-2).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-317839 exceeded control limits for the following analytes: Carbon tetrachloride. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following sample was affected : MW-1018-20160824-01 (480-104990-2).

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for batch 480-317749 exceeded control limits for the following analytes: Acetone and Tetrahydrofuran. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-1011-20160824-01 (480-104990-1), MW-1020-20160824-01 (480-104990-3), MW-1026D-20160824-01 (480-104990-4), MW-1032-20160824-01 (480-104990-5), MW-1035-20160824-01 (480-104990-6), MW-1036-20160824-01 (480-104990-7), MW-1037-20160824-01 (480-104990-8), MW-1038-20160824-01 (480-104990-9), MW-1039-20160824-01 (480-104990-10) and DUP-005-20160824-01 (480-104990-11).

Job ID: 480-104990-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 480-317839 was outside the method criteria for the following analyte: Acetone. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated. The following sample is impacted: MW-1018-20160824-01 (480-104990-2).

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for batch 480-317839 exceeded control limits for the following analytes: Acetone and Tetrahydrofuran. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following sample was affected : MW-1018-20160824-01 (480-104990-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-104990-1**

Project Location: **IDS Wayland** RTN:

This form provides certifications for the data set for the following Laboratory Sample ID Number(s):

480-104990-1[1-11]

Matrices: ☒ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ☒	7470/7471 Hg CAM III B ☐	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9012 / 9014/ 4500CN Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	☒ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☒ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☒ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☒ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ☐ No[1]

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350***

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ☒ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	☒ Yes ☐ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: Position: Project Manager

Printed Name: Becky Mason Date: 10/6/16 8:18

This form has been electronically signed and approved

Detection Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Client Sample ID: MW-1011-20160824-01 — Lab Sample ID: 480-104990-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	6.6		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	16		1.0		ug/L	1		8260C	Total/NA
Acetone	59	*	50		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1018-20160824-01 — Lab Sample ID: 480-104990-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.4		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	5.9		1.0		ug/L	1		8260C	Total/NA
Acetone	130	*	50		ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	1.3		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1020-20160824-01 — Lab Sample ID: 480-104990-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.1		1.0		ug/L	1		8260C	Total/NA
1,1-Dichloroethane	1.0		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	16		1.0		ug/L	1		8260C	Total/NA
Acetone	51	*	50		ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	24		1.0		ug/L	1		8260C	Total/NA
Tert-amyl methyl ether	14		5.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1026D-20160824-01 — Lab Sample ID: 480-104990-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	40		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	43		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1032-20160824-01 — Lab Sample ID: 480-104990-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.5		1.0		ug/L	1		8260C	Total/NA
1,1-Dichloroethene	2.0		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	6.9		1.0		ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	47		1.0		ug/L	1		8260C	Total/NA
Tert-amyl methyl ether	14		5.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1035-20160824-01 — Lab Sample ID: 480-104990-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	34		4.0		ug/L	4		8260C	Total/NA
Trichloroethene	140		4.0		ug/L	4		8260C	Total/NA

Client Sample ID: MW-1036-20160824-01 — Lab Sample ID: 480-104990-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.6		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	11		1.0		ug/L	1		8260C	Total/NA
Acetone	110	*	50		ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Client Sample ID: MW-1037-20160824-01 — Lab Sample ID: 480-104990-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	31		5.0		ug/L	5		8260C	Total/NA
Trichloroethene	100		5.0		ug/L	5		8260C	Total/NA

Client Sample ID: MW-1038-20160824-01 — Lab Sample ID: 480-104990-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	310		20		ug/L	20		8260C	Total/NA
Trichloroethene	1100	F1	20		ug/L	20		8260C	Total/NA

Client Sample ID: MW-1039-20160824-01 — Lab Sample ID: 480-104990-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	29		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	48		1.0		ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	1.9		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: DUP-005-20160824-01 — Lab Sample ID: 480-104990-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.5		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	10		1.0		ug/L	1		8260C	Total/NA
Acetone	110	*	50		ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-1011-20160824-01

Lab Sample ID: 480-104990-1

Date Collected: 08/24/16 11:20

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/25/16 23:55	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/25/16 23:55	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 23:55	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/25/16 23:55	1
1,1-Dichloroethane	ND		1.0		ug/L			08/25/16 23:55	1
1,1-Dichloroethene	ND		1.0		ug/L			08/25/16 23:55	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/25/16 23:55	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/25/16 23:55	1
1,2-Dichloroethane	ND		1.0		ug/L			08/25/16 23:55	1
1,2-Dichloropropane	ND		1.0		ug/L			08/25/16 23:55	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/25/16 23:55	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/25/16 23:55	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/25/16 23:55	1
Bromobenzene	ND		1.0		ug/L			08/25/16 23:55	1
Bromoform	ND		1.0		ug/L			08/25/16 23:55	1
Bromomethane	ND		2.0		ug/L			08/25/16 23:55	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/25/16 23:55	1
Chlorobenzene	ND		1.0		ug/L			08/25/16 23:55	1
Chlorodibromomethane	ND		0.50		ug/L			08/25/16 23:55	1
Chloroethane	ND		2.0		ug/L			08/25/16 23:55	1
Chloroform	ND		1.0		ug/L			08/25/16 23:55	1
Chloromethane	ND		2.0		ug/L			08/25/16 23:55	1
cis-1,2-Dichloroethene	**6.6**		1.0		ug/L			08/25/16 23:55	1
Dibromomethane	ND		1.0		ug/L			08/25/16 23:55	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/25/16 23:55	1
Methylene Chloride	ND		1.0		ug/L			08/25/16 23:55	1
Tetrachloroethene	ND		1.0		ug/L			08/25/16 23:55	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/25/16 23:55	1
Trichloroethene	**16**		1.0		ug/L			08/25/16 23:55	1
Trichlorofluoromethane	ND		1.0		ug/L			08/25/16 23:55	1
Vinyl chloride	ND		1.0		ug/L			08/25/16 23:55	1
Benzene	ND		1.0		ug/L			08/25/16 23:55	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/25/16 23:55	1
Carbon disulfide	ND		10		ug/L			08/25/16 23:55	1
Chlorobromomethane	ND		1.0		ug/L			08/25/16 23:55	1
Ethyl ether	ND		1.0		ug/L			08/25/16 23:55	1
Acetone	**59**	*	50		ug/L			08/25/16 23:55	1
Tetrahydrofuran	ND	*	10		ug/L			08/25/16 23:55	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/25/16 23:55	1
Hexachlorobutadiene	ND		0.40		ug/L			08/25/16 23:55	1
n-Butylbenzene	ND		1.0		ug/L			08/25/16 23:55	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/25/16 23:55	1
2-Chlorotoluene	ND		1.0		ug/L			08/25/16 23:55	1
1,1-Dichloropropene	ND		1.0		ug/L			08/25/16 23:55	1
Toluene	ND		1.0		ug/L			08/25/16 23:55	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/25/16 23:55	1
o-Xylene	ND		1.0		ug/L			08/25/16 23:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/25/16 23:55	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/25/16 23:55	1

Client Sample ID: MW-1011-20160824-01

Lab Sample ID: 480-104990-1

Date Collected: 08/24/16 11:20

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/25/16 23:55	1
Styrene	ND		1.0		ug/L			08/25/16 23:55	1
4-Chlorotoluene	ND		1.0		ug/L			08/25/16 23:55	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/25/16 23:55	1
1,4-Dioxane	ND		50		ug/L			08/25/16 23:55	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/25/16 23:55	1
sec-Butylbenzene	ND		1.0		ug/L			08/25/16 23:55	1
2-Hexanone	ND		10		ug/L			08/25/16 23:55	1
2-Butanone (MEK)	ND		10		ug/L			08/25/16 23:55	1
Ethylbenzene	ND		1.0		ug/L			08/25/16 23:55	1
Isopropylbenzene	ND		1.0		ug/L			08/25/16 23:55	1
2,2-Dichloropropane	ND		1.0		ug/L			08/25/16 23:55	1
N-Propylbenzene	ND		1.0		ug/L			08/25/16 23:55	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/25/16 23:55	1
Isopropyl ether	ND		10		ug/L			08/25/16 23:55	1
4-Isopropyltoluene	ND		1.0		ug/L			08/25/16 23:55	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/25/16 23:55	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/25/16 23:55	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/25/16 23:55	1
Ethylene Dibromide	ND		1.0		ug/L			08/25/16 23:55	1
tert-Butylbenzene	ND		1.0		ug/L			08/25/16 23:55	1
1,3-Dichloropropane	ND		1.0		ug/L			08/25/16 23:55	1
Dichlorobromomethane	ND		0.50		ug/L			08/25/16 23:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*08/25/16 23:55*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/25/16 23:55*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/25/16 23:55*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*08/25/16 23:55*	*1*

Client Sample ID: MW-1018-20160824-01

Lab Sample ID: 480-104990-2

Date Collected: 08/24/16 13:10

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 15:23	1
1,1,1-Trichloroethane	**1.4**		1.0		ug/L			08/26/16 15:23	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 15:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 15:23	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 15:23	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 15:23	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 15:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 15:23	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 15:23	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 15:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 15:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 15:23	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 15:23	1
Bromobenzene	ND		1.0		ug/L			08/26/16 15:23	1

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Client Sample ID: MW-1018-20160824-01
Date Collected: 08/24/16 13:10
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104990-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			08/26/16 15:23	1
Bromomethane	ND		2.0		ug/L			08/26/16 15:23	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 15:23	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 15:23	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 15:23	1
Chloroethane	ND		2.0		ug/L			08/26/16 15:23	1
Chloroform	ND		1.0		ug/L			08/26/16 15:23	1
Chloromethane	ND		2.0		ug/L			08/26/16 15:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 15:23	1
Dibromomethane	ND		1.0		ug/L			08/26/16 15:23	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 15:23	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 15:23	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 15:23	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 15:23	1
Trichloroethene	**5.9**		1.0		ug/L			08/26/16 15:23	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 15:23	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 15:23	1
Benzene	ND		1.0		ug/L			08/26/16 15:23	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 15:23	1
Carbon disulfide	ND		10		ug/L			08/26/16 15:23	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 15:23	1
Ethyl ether	ND		1.0		ug/L			08/26/16 15:23	1
Acetone	**130**	*	50		ug/L			08/26/16 15:23	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 15:23	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 15:23	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 15:23	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 15:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 15:23	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 15:23	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 15:23	1
Toluene	ND		1.0		ug/L			08/26/16 15:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 15:23	1
o-Xylene	ND		1.0		ug/L			08/26/16 15:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 15:23	1
Methyl tert-butyl ether	**1.3**		1.0		ug/L			08/26/16 15:23	1
Naphthalene	ND		5.0		ug/L			08/26/16 15:23	1
Styrene	ND		1.0		ug/L			08/26/16 15:23	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 15:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 15:23	1
1,4-Dioxane	ND	*	50		ug/L			08/26/16 15:23	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 15:23	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 15:23	1
2-Hexanone	ND		10		ug/L			08/26/16 15:23	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 15:23	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 15:23	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 15:23	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 15:23	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 15:23	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 15:23	1

Client Sample ID: MW-1018-20160824-01

Lab Sample ID: 480-104990-2

Date Collected: 08/24/16 13:10

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			08/26/16 15:23	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 15:23	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 15:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 15:23	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 15:23	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 15:23	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 15:23	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 15:23	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*08/26/16 15:23*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/26/16 15:23*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/26/16 15:23*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/26/16 15:23*	*1*

Client Sample ID: MW-1020-20160824-01

Lab Sample ID: 480-104990-3

Date Collected: 08/24/16 09:55

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 00:43	1
1,1,1-Trichloroethane	**1.1**		1.0		ug/L			08/26/16 00:43	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 00:43	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 00:43	1
1,1-Dichloroethane	**1.0**		1.0		ug/L			08/26/16 00:43	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 00:43	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 00:43	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 00:43	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 00:43	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 00:43	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 00:43	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 00:43	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 00:43	1
Bromobenzene	ND		1.0		ug/L			08/26/16 00:43	1
Bromoform	ND		1.0		ug/L			08/26/16 00:43	1
Bromomethane	ND		2.0		ug/L			08/26/16 00:43	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 00:43	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 00:43	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 00:43	1
Chloroethane	ND		2.0		ug/L			08/26/16 00:43	1
Chloroform	ND		1.0		ug/L			08/26/16 00:43	1
Chloromethane	ND		2.0		ug/L			08/26/16 00:43	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 00:43	1
Dibromomethane	ND		1.0		ug/L			08/26/16 00:43	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 00:43	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 00:43	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 00:43	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 00:43	1

Client Sample ID: MW-1020-20160824-01

Lab Sample ID: 480-104990-3

Date Collected: 08/24/16 09:55

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**16**		1.0		ug/L			08/26/16 00:43	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 00:43	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 00:43	1
Benzene	ND		1.0		ug/L			08/26/16 00:43	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 00:43	1
Carbon disulfide	ND		10		ug/L			08/26/16 00:43	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 00:43	1
Ethyl ether	ND		1.0		ug/L			08/26/16 00:43	1
Acetone	**51**	*	50		ug/L			08/26/16 00:43	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 00:43	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 00:43	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 00:43	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 00:43	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 00:43	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 00:43	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 00:43	1
Toluene	ND		1.0		ug/L			08/26/16 00:43	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 00:43	1
o-Xylene	ND		1.0		ug/L			08/26/16 00:43	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 00:43	1
Methyl tert-butyl ether	**24**		1.0		ug/L			08/26/16 00:43	1
Naphthalene	ND		5.0		ug/L			08/26/16 00:43	1
Styrene	ND		1.0		ug/L			08/26/16 00:43	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 00:43	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 00:43	1
1,4-Dioxane	ND		50		ug/L			08/26/16 00:43	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 00:43	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 00:43	1
2-Hexanone	ND		10		ug/L			08/26/16 00:43	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 00:43	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 00:43	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 00:43	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 00:43	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 00:43	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 00:43	1
Isopropyl ether	ND		10		ug/L			08/26/16 00:43	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 00:43	1
Tert-amyl methyl ether	**14**		5.0		ug/L			08/26/16 00:43	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 00:43	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 00:43	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 00:43	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 00:43	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 00:43	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*08/26/16 00:43*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/26/16 00:43*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/26/16 00:43*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*08/26/16 00:43*	*1*

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Client Sample ID: MW-1026D-20160824-01
Date Collected: 08/24/16 09:45
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104990-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 01:07	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 01:07	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 01:07	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 01:07	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 01:07	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 01:07	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 01:07	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 01:07	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 01:07	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 01:07	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 01:07	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 01:07	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 01:07	1
Bromobenzene	ND		1.0		ug/L			08/26/16 01:07	1
Bromoform	ND		1.0		ug/L			08/26/16 01:07	1
Bromomethane	ND		2.0		ug/L			08/26/16 01:07	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 01:07	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 01:07	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 01:07	1
Chloroethane	ND		2.0		ug/L			08/26/16 01:07	1
Chloroform	ND		1.0		ug/L			08/26/16 01:07	1
Chloromethane	ND		2.0		ug/L			08/26/16 01:07	1
cis-1,2-Dichloroethene	**40**		1.0		ug/L			08/26/16 01:07	1
Dibromomethane	ND		1.0		ug/L			08/26/16 01:07	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 01:07	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 01:07	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 01:07	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 01:07	1
Trichloroethene	**43**		1.0		ug/L			08/26/16 01:07	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 01:07	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 01:07	1
Benzene	ND		1.0		ug/L			08/26/16 01:07	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 01:07	1
Carbon disulfide	ND		10		ug/L			08/26/16 01:07	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 01:07	1
Ethyl ether	ND		1.0		ug/L			08/26/16 01:07	1
Acetone	ND	*	50		ug/L			08/26/16 01:07	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 01:07	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 01:07	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 01:07	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 01:07	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 01:07	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 01:07	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 01:07	1
Toluene	ND		1.0		ug/L			08/26/16 01:07	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 01:07	1
o-Xylene	ND		1.0		ug/L			08/26/16 01:07	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 01:07	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 01:07	1

Client Sample ID: MW-1026D-20160824-01

Lab Sample ID: 480-104990-4

Date Collected: 08/24/16 09:45

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/26/16 01:07	1
Styrene	ND		1.0		ug/L			08/26/16 01:07	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 01:07	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 01:07	1
1,4-Dioxane	ND		50		ug/L			08/26/16 01:07	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 01:07	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 01:07	1
2-Hexanone	ND		10		ug/L			08/26/16 01:07	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 01:07	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 01:07	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 01:07	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 01:07	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 01:07	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 01:07	1
Isopropyl ether	ND		10		ug/L			08/26/16 01:07	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 01:07	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 01:07	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 01:07	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 01:07	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 01:07	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 01:07	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 01:07	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 01:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*08/26/16 01:07*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/26/16 01:07*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/26/16 01:07*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/26/16 01:07*	*1*

Client Sample ID: MW-1032-20160824-01

Lab Sample ID: 480-104990-5

Date Collected: 08/24/16 09:15

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 01:32	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 01:32	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 01:32	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 01:32	1
1,1-Dichloroethane	**1.5**		1.0		ug/L			08/26/16 01:32	1
1,1-Dichloroethene	**2.0**		1.0		ug/L			08/26/16 01:32	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 01:32	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 01:32	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 01:32	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 01:32	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 01:32	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 01:32	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 01:32	1
Bromobenzene	ND		1.0		ug/L			08/26/16 01:32	1

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Client Sample ID: MW-1032-20160824-01
Date Collected: 08/24/16 09:15
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104990-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			08/26/16 01:32	1
Bromomethane	ND		2.0		ug/L			08/26/16 01:32	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 01:32	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 01:32	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 01:32	1
Chloroethane	ND		2.0		ug/L			08/26/16 01:32	1
Chloroform	ND		1.0		ug/L			08/26/16 01:32	1
Chloromethane	ND		2.0		ug/L			08/26/16 01:32	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 01:32	1
Dibromomethane	ND		1.0		ug/L			08/26/16 01:32	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 01:32	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 01:32	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 01:32	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 01:32	1
Trichloroethene	**6.9**		1.0		ug/L			08/26/16 01:32	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 01:32	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 01:32	1
Benzene	ND		1.0		ug/L			08/26/16 01:32	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 01:32	1
Carbon disulfide	ND		10		ug/L			08/26/16 01:32	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 01:32	1
Ethyl ether	ND		1.0		ug/L			08/26/16 01:32	1
Acetone	ND	*	50		ug/L			08/26/16 01:32	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 01:32	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 01:32	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 01:32	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 01:32	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 01:32	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 01:32	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 01:32	1
Toluene	ND		1.0		ug/L			08/26/16 01:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 01:32	1
o-Xylene	ND		1.0		ug/L			08/26/16 01:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 01:32	1
Methyl tert-butyl ether	**47**		1.0		ug/L			08/26/16 01:32	1
Naphthalene	ND		5.0		ug/L			08/26/16 01:32	1
Styrene	ND		1.0		ug/L			08/26/16 01:32	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 01:32	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 01:32	1
1,4-Dioxane	ND		50		ug/L			08/26/16 01:32	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 01:32	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 01:32	1
2-Hexanone	ND		10		ug/L			08/26/16 01:32	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 01:32	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 01:32	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 01:32	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 01:32	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 01:32	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 01:32	1

Client Sample ID: MW-1032-20160824-01

Lab Sample ID: 480-104990-5

Date Collected: 08/24/16 09:15

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			08/26/16 01:32	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 01:32	1
Tert-amyl methyl ether	**14**		5.0		ug/L			08/26/16 01:32	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 01:32	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 01:32	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 01:32	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 01:32	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 01:32	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*08/26/16 01:32*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/26/16 01:32*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/26/16 01:32*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/26/16 01:32*	*1*

Client Sample ID: MW-1035-20160824-01

Lab Sample ID: 480-104990-6

Date Collected: 08/24/16 12:45

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.0		ug/L			08/26/16 01:56	4
1,1,1-Trichloroethane	**34**		4.0		ug/L			08/26/16 01:56	4
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L			08/26/16 01:56	4
1,1,2-Trichloroethane	ND		4.0		ug/L			08/26/16 01:56	4
1,1-Dichloroethane	ND		4.0		ug/L			08/26/16 01:56	4
1,1-Dichloroethene	ND		4.0		ug/L			08/26/16 01:56	4
1,2,3-Trichloropropane	ND		4.0		ug/L			08/26/16 01:56	4
1,2-Dichlorobenzene	ND		4.0		ug/L			08/26/16 01:56	4
1,2-Dichloroethane	ND		4.0		ug/L			08/26/16 01:56	4
1,2-Dichloropropane	ND		4.0		ug/L			08/26/16 01:56	4
1,3-Dichlorobenzene	ND		4.0		ug/L			08/26/16 01:56	4
1,4-Dichlorobenzene	ND		4.0		ug/L			08/26/16 01:56	4
2-Chloroethyl vinyl ether	ND		40		ug/L			08/26/16 01:56	4
Bromobenzene	ND		4.0		ug/L			08/26/16 01:56	4
Bromoform	ND		4.0		ug/L			08/26/16 01:56	4
Bromomethane	ND		8.0		ug/L			08/26/16 01:56	4
Carbon tetrachloride	ND	*	4.0		ug/L			08/26/16 01:56	4
Chlorobenzene	ND		4.0		ug/L			08/26/16 01:56	4
Chlorodibromomethane	ND		2.0		ug/L			08/26/16 01:56	4
Chloroethane	ND		8.0		ug/L			08/26/16 01:56	4
Chloroform	ND		4.0		ug/L			08/26/16 01:56	4
Chloromethane	ND		8.0		ug/L			08/26/16 01:56	4
cis-1,2-Dichloroethene	ND		4.0		ug/L			08/26/16 01:56	4
Dibromomethane	ND		4.0		ug/L			08/26/16 01:56	4
Dichlorodifluoromethane	ND		4.0		ug/L			08/26/16 01:56	4
Methylene Chloride	ND		4.0		ug/L			08/26/16 01:56	4
Tetrachloroethene	ND		4.0		ug/L			08/26/16 01:56	4
trans-1,3-Dichloropropene	ND		1.6		ug/L			08/26/16 01:56	4

Client Sample Results

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Client Sample ID: MW-1035-20160824-01

Lab Sample ID: 480-104990-6

Date Collected: 08/24/16 12:45
Matrix: Water
Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**140**		4.0		ug/L			08/26/16 01:56	4
Trichlorofluoromethane	ND		4.0		ug/L			08/26/16 01:56	4
Vinyl chloride	ND		4.0		ug/L			08/26/16 01:56	4
Benzene	ND		4.0		ug/L			08/26/16 01:56	4
cis-1,3-Dichloropropene	ND		1.6		ug/L			08/26/16 01:56	4
Carbon disulfide	ND		40		ug/L			08/26/16 01:56	4
Chlorobromomethane	ND		4.0		ug/L			08/26/16 01:56	4
Ethyl ether	ND		4.0		ug/L			08/26/16 01:56	4
Acetone	ND	*	200		ug/L			08/26/16 01:56	4
Tetrahydrofuran	ND	*	40		ug/L			08/26/16 01:56	4
4-Methyl-2-pentanone (MIBK)	ND		40		ug/L			08/26/16 01:56	4
Hexachlorobutadiene	ND		1.6		ug/L			08/26/16 01:56	4
n-Butylbenzene	ND		4.0		ug/L			08/26/16 01:56	4
1,2,4-Trimethylbenzene	ND		4.0		ug/L			08/26/16 01:56	4
2-Chlorotoluene	ND		4.0		ug/L			08/26/16 01:56	4
1,1-Dichloropropene	ND		4.0		ug/L			08/26/16 01:56	4
Toluene	ND		4.0		ug/L			08/26/16 01:56	4
1,2,4-Trichlorobenzene	ND		4.0		ug/L			08/26/16 01:56	4
o-Xylene	ND		4.0		ug/L			08/26/16 01:56	4
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			08/26/16 01:56	4
Methyl tert-butyl ether	ND		4.0		ug/L			08/26/16 01:56	4
Naphthalene	ND		20		ug/L			08/26/16 01:56	4
Styrene	ND		4.0		ug/L			08/26/16 01:56	4
4-Chlorotoluene	ND		4.0		ug/L			08/26/16 01:56	4
trans-1,2-Dichloroethene	ND		4.0		ug/L			08/26/16 01:56	4
1,4-Dioxane	ND		200		ug/L			08/26/16 01:56	4
1,2,3-Trichlorobenzene	ND		4.0		ug/L			08/26/16 01:56	4
sec-Butylbenzene	ND		4.0		ug/L			08/26/16 01:56	4
2-Hexanone	ND		40		ug/L			08/26/16 01:56	4
2-Butanone (MEK)	ND		40		ug/L			08/26/16 01:56	4
Ethylbenzene	ND		4.0		ug/L			08/26/16 01:56	4
Isopropylbenzene	ND		4.0		ug/L			08/26/16 01:56	4
2,2-Dichloropropane	ND		4.0		ug/L			08/26/16 01:56	4
N-Propylbenzene	ND		4.0		ug/L			08/26/16 01:56	4
Tert-butyl ethyl ether	ND		20		ug/L			08/26/16 01:56	4
Isopropyl ether	ND		40		ug/L			08/26/16 01:56	4
4-Isopropyltoluene	ND		4.0		ug/L			08/26/16 01:56	4
Tert-amyl methyl ether	ND		20		ug/L			08/26/16 01:56	4
1,3,5-Trimethylbenzene	ND		4.0		ug/L			08/26/16 01:56	4
m-Xylene & p-Xylene	ND		8.0		ug/L			08/26/16 01:56	4
Ethylene Dibromide	ND		4.0		ug/L			08/26/16 01:56	4
tert-Butylbenzene	ND		4.0		ug/L			08/26/16 01:56	4
1,3-Dichloropropane	ND		4.0		ug/L			08/26/16 01:56	4
Dichlorobromomethane	ND		2.0		ug/L			08/26/16 01:56	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*08/26/16 01:56*	*4*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/26/16 01:56*	*4*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/26/16 01:56*	*4*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/26/16 01:56*	*4*

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Client Sample ID: MW-1036-20160824-01
Date Collected: 08/24/16 12:35
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104990-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 02:20	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 02:20	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 02:20	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 02:20	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 02:20	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 02:20	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 02:20	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 02:20	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 02:20	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 02:20	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 02:20	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 02:20	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 02:20	1
Bromobenzene	ND		1.0		ug/L			08/26/16 02:20	1
Bromoform	ND		1.0		ug/L			08/26/16 02:20	1
Bromomethane	ND		2.0		ug/L			08/26/16 02:20	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 02:20	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 02:20	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 02:20	1
Chloroethane	ND		2.0		ug/L			08/26/16 02:20	1
Chloroform	ND		1.0		ug/L			08/26/16 02:20	1
Chloromethane	ND		2.0		ug/L			08/26/16 02:20	1
cis-1,2-Dichloroethene	**4.6**		1.0		ug/L			08/26/16 02:20	1
Dibromomethane	ND		1.0		ug/L			08/26/16 02:20	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 02:20	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 02:20	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 02:20	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 02:20	1
Trichloroethene	**11**		1.0		ug/L			08/26/16 02:20	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 02:20	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 02:20	1
Benzene	ND		1.0		ug/L			08/26/16 02:20	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 02:20	1
Carbon disulfide	ND		10		ug/L			08/26/16 02:20	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 02:20	1
Ethyl ether	ND		1.0		ug/L			08/26/16 02:20	1
Acetone	**110**	*	50		ug/L			08/26/16 02:20	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 02:20	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 02:20	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 02:20	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 02:20	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 02:20	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 02:20	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 02:20	1
Toluene	ND		1.0		ug/L			08/26/16 02:20	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 02:20	1
o-Xylene	ND		1.0		ug/L			08/26/16 02:20	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 02:20	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 02:20	1

Client Sample ID: MW-1036-20160824-01

Lab Sample ID: 480-104990-7

Date Collected: 08/24/16 12:35

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/26/16 02:20	1
Styrene	ND		1.0		ug/L			08/26/16 02:20	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 02:20	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 02:20	1
1,4-Dioxane	ND		50		ug/L			08/26/16 02:20	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 02:20	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 02:20	1
2-Hexanone	ND		10		ug/L			08/26/16 02:20	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 02:20	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 02:20	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 02:20	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 02:20	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 02:20	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 02:20	1
Isopropyl ether	ND		10		ug/L			08/26/16 02:20	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 02:20	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 02:20	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 02:20	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 02:20	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 02:20	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 02:20	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 02:20	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*08/26/16 02:20*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/26/16 02:20*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/26/16 02:20*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*08/26/16 02:20*	*1*

Client Sample ID: MW-1037-20160824-01

Lab Sample ID: 480-104990-8

Date Collected: 08/24/16 12:10

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			08/26/16 02:43	5
1,1,1-Trichloroethane	**31**		5.0		ug/L			08/26/16 02:43	5
1,1,2,2-Tetrachloroethane	ND		2.5		ug/L			08/26/16 02:43	5
1,1,2-Trichloroethane	ND		5.0		ug/L			08/26/16 02:43	5
1,1-Dichloroethane	ND		5.0		ug/L			08/26/16 02:43	5
1,1-Dichloroethene	ND		5.0		ug/L			08/26/16 02:43	5
1,2,3-Trichloropropane	ND		5.0		ug/L			08/26/16 02:43	5
1,2-Dichlorobenzene	ND		5.0		ug/L			08/26/16 02:43	5
1,2-Dichloroethane	ND		5.0		ug/L			08/26/16 02:43	5
1,2-Dichloropropane	ND		5.0		ug/L			08/26/16 02:43	5
1,3-Dichlorobenzene	ND		5.0		ug/L			08/26/16 02:43	5
1,4-Dichlorobenzene	ND		5.0		ug/L			08/26/16 02:43	5
2-Chloroethyl vinyl ether	ND		50		ug/L			08/26/16 02:43	5
Bromobenzene	ND		5.0		ug/L			08/26/16 02:43	5

Client Sample ID: MW-1037-20160824-01
Date Collected: 08/24/16 12:10
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104990-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		5.0		ug/L			08/26/16 02:43	5
Bromomethane	ND		10		ug/L			08/26/16 02:43	5
Carbon tetrachloride	ND	*	5.0		ug/L			08/26/16 02:43	5
Chlorobenzene	ND		5.0		ug/L			08/26/16 02:43	5
Chlorodibromomethane	ND		2.5		ug/L			08/26/16 02:43	5
Chloroethane	ND		10		ug/L			08/26/16 02:43	5
Chloroform	ND		5.0		ug/L			08/26/16 02:43	5
Chloromethane	ND		10		ug/L			08/26/16 02:43	5
cis-1,2-Dichloroethene	ND		5.0		ug/L			08/26/16 02:43	5
Dibromomethane	ND		5.0		ug/L			08/26/16 02:43	5
Dichlorodifluoromethane	ND		5.0		ug/L			08/26/16 02:43	5
Methylene Chloride	ND		5.0		ug/L			08/26/16 02:43	5
Tetrachloroethene	ND		5.0		ug/L			08/26/16 02:43	5
trans-1,3-Dichloropropene	ND		2.0		ug/L			08/26/16 02:43	5
Trichloroethene	**100**		5.0		ug/L			08/26/16 02:43	5
Trichlorofluoromethane	ND		5.0		ug/L			08/26/16 02:43	5
Vinyl chloride	ND		5.0		ug/L			08/26/16 02:43	5
Benzene	ND		5.0		ug/L			08/26/16 02:43	5
cis-1,3-Dichloropropene	ND		2.0		ug/L			08/26/16 02:43	5
Carbon disulfide	ND		50		ug/L			08/26/16 02:43	5
Chlorobromomethane	ND		5.0		ug/L			08/26/16 02:43	5
Ethyl ether	ND		5.0		ug/L			08/26/16 02:43	5
Acetone	ND	*	250		ug/L			08/26/16 02:43	5
Tetrahydrofuran	ND	*	50		ug/L			08/26/16 02:43	5
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			08/26/16 02:43	5
Hexachlorobutadiene	ND		2.0		ug/L			08/26/16 02:43	5
n-Butylbenzene	ND		5.0		ug/L			08/26/16 02:43	5
1,2,4-Trimethylbenzene	ND		5.0		ug/L			08/26/16 02:43	5
2-Chlorotoluene	ND		5.0		ug/L			08/26/16 02:43	5
1,1-Dichloropropene	ND		5.0		ug/L			08/26/16 02:43	5
Toluene	ND		5.0		ug/L			08/26/16 02:43	5
1,2,4-Trichlorobenzene	ND		5.0		ug/L			08/26/16 02:43	5
o-Xylene	ND		5.0		ug/L			08/26/16 02:43	5
1,2-Dibromo-3-Chloropropane	ND		25		ug/L			08/26/16 02:43	5
Methyl tert-butyl ether	ND		5.0		ug/L			08/26/16 02:43	5
Naphthalene	ND		25		ug/L			08/26/16 02:43	5
Styrene	ND		5.0		ug/L			08/26/16 02:43	5
4-Chlorotoluene	ND		5.0		ug/L			08/26/16 02:43	5
trans-1,2-Dichloroethene	ND		5.0		ug/L			08/26/16 02:43	5
1,4-Dioxane	ND		250		ug/L			08/26/16 02:43	5
1,2,3-Trichlorobenzene	ND		5.0		ug/L			08/26/16 02:43	5
sec-Butylbenzene	ND		5.0		ug/L			08/26/16 02:43	5
2-Hexanone	ND		50		ug/L			08/26/16 02:43	5
2-Butanone (MEK)	ND		50		ug/L			08/26/16 02:43	5
Ethylbenzene	ND		5.0		ug/L			08/26/16 02:43	5
Isopropylbenzene	ND		5.0		ug/L			08/26/16 02:43	5
2,2-Dichloropropane	ND		5.0		ug/L			08/26/16 02:43	5
N-Propylbenzene	ND		5.0		ug/L			08/26/16 02:43	5
Tert-butyl ethyl ether	ND		25		ug/L			08/26/16 02:43	5

Client Sample ID: MW-1037-20160824-01

Lab Sample ID: 480-104990-8

Date Collected: 08/24/16 12:10

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		50		ug/L			08/26/16 02:43	5
4-Isopropyltoluene	ND		5.0		ug/L			08/26/16 02:43	5
Tert-amyl methyl ether	ND		25		ug/L			08/26/16 02:43	5
1,3,5-Trimethylbenzene	ND		5.0		ug/L			08/26/16 02:43	5
m-Xylene & p-Xylene	ND		10		ug/L			08/26/16 02:43	5
Ethylene Dibromide	ND		5.0		ug/L			08/26/16 02:43	5
tert-Butylbenzene	ND		5.0		ug/L			08/26/16 02:43	5
1,3-Dichloropropane	ND		5.0		ug/L			08/26/16 02:43	5
Dichlorobromomethane	ND		2.5		ug/L			08/26/16 02:43	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*08/26/16 02:43*	*5*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/26/16 02:43*	*5*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/26/16 02:43*	*5*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*08/26/16 02:43*	*5*

Client Sample ID: MW-1038-20160824-01

Lab Sample ID: 480-104990-9

Date Collected: 08/24/16 12:00

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		20		ug/L			08/26/16 03:07	20
1,1,1-Trichloroethane	**310**		20		ug/L			08/26/16 03:07	20
1,1,2,2-Tetrachloroethane	ND		10		ug/L			08/26/16 03:07	20
1,1,2-Trichloroethane	ND		20		ug/L			08/26/16 03:07	20
1,1-Dichloroethane	ND		20		ug/L			08/26/16 03:07	20
1,1-Dichloroethene	ND		20		ug/L			08/26/16 03:07	20
1,2,3-Trichloropropane	ND		20		ug/L			08/26/16 03:07	20
1,2-Dichlorobenzene	ND		20		ug/L			08/26/16 03:07	20
1,2-Dichloroethane	ND		20		ug/L			08/26/16 03:07	20
1,2-Dichloropropane	ND		20		ug/L			08/26/16 03:07	20
1,3-Dichlorobenzene	ND		20		ug/L			08/26/16 03:07	20
1,4-Dichlorobenzene	ND		20		ug/L			08/26/16 03:07	20
2-Chloroethyl vinyl ether	ND		200		ug/L			08/26/16 03:07	20
Bromobenzene	ND		20		ug/L			08/26/16 03:07	20
Bromoform	ND		20		ug/L			08/26/16 03:07	20
Bromomethane	ND		40		ug/L			08/26/16 03:07	20
Carbon tetrachloride	ND	F1 *	20		ug/L			08/26/16 03:07	20
Chlorobenzene	ND		20		ug/L			08/26/16 03:07	20
Chlorodibromomethane	ND		10		ug/L			08/26/16 03:07	20
Chloroethane	ND		40		ug/L			08/26/16 03:07	20
Chloroform	ND		20		ug/L			08/26/16 03:07	20
Chloromethane	ND		40		ug/L			08/26/16 03:07	20
cis-1,2-Dichloroethene	ND		20		ug/L			08/26/16 03:07	20
Dibromomethane	ND		20		ug/L			08/26/16 03:07	20
Dichlorodifluoromethane	ND		20		ug/L			08/26/16 03:07	20
Methylene Chloride	ND		20		ug/L			08/26/16 03:07	20
Tetrachloroethene	ND		20		ug/L			08/26/16 03:07	20
trans-1,3-Dichloropropene	ND		8.0		ug/L			08/26/16 03:07	20

Client Sample ID: MW-1038-20160824-01

Lab Sample ID: 480-104990-9

Date Collected: 08/24/16 12:00

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**1100**	**F1**	20		ug/L			08/26/16 03:07	20
Trichlorofluoromethane	ND		20		ug/L			08/26/16 03:07	20
Vinyl chloride	ND		20		ug/L			08/26/16 03:07	20
Benzene	ND		20		ug/L			08/26/16 03:07	20
cis-1,3-Dichloropropene	ND		8.0		ug/L			08/26/16 03:07	20
Carbon disulfide	ND		200		ug/L			08/26/16 03:07	20
Chlorobromomethane	ND		20		ug/L			08/26/16 03:07	20
Ethyl ether	ND		20		ug/L			08/26/16 03:07	20
Acetone	ND	*	1000		ug/L			08/26/16 03:07	20
Tetrahydrofuran	ND	*	200		ug/L			08/26/16 03:07	20
4-Methyl-2-pentanone (MIBK)	ND		200		ug/L			08/26/16 03:07	20
Hexachlorobutadiene	ND		8.0		ug/L			08/26/16 03:07	20
n-Butylbenzene	ND		20		ug/L			08/26/16 03:07	20
1,2,4-Trimethylbenzene	ND		20		ug/L			08/26/16 03:07	20
2-Chlorotoluene	ND		20		ug/L			08/26/16 03:07	20
1,1-Dichloropropene	ND		20		ug/L			08/26/16 03:07	20
Toluene	ND		20		ug/L			08/26/16 03:07	20
1,2,4-Trichlorobenzene	ND		20		ug/L			08/26/16 03:07	20
o-Xylene	ND		20		ug/L			08/26/16 03:07	20
1,2-Dibromo-3-Chloropropane	ND		100		ug/L			08/26/16 03:07	20
Methyl tert-butyl ether	ND		20		ug/L			08/26/16 03:07	20
Naphthalene	ND		100		ug/L			08/26/16 03:07	20
Styrene	ND		20		ug/L			08/26/16 03:07	20
4-Chlorotoluene	ND		20		ug/L			08/26/16 03:07	20
trans-1,2-Dichloroethene	ND		20		ug/L			08/26/16 03:07	20
1,4-Dioxane	ND		1000		ug/L			08/26/16 03:07	20
1,2,3-Trichlorobenzene	ND		20		ug/L			08/26/16 03:07	20
sec-Butylbenzene	ND		20		ug/L			08/26/16 03:07	20
2-Hexanone	ND		200		ug/L			08/26/16 03:07	20
2-Butanone (MEK)	ND		200		ug/L			08/26/16 03:07	20
Ethylbenzene	ND		20		ug/L			08/26/16 03:07	20
Isopropylbenzene	ND		20		ug/L			08/26/16 03:07	20
2,2-Dichloropropane	ND		20		ug/L			08/26/16 03:07	20
N-Propylbenzene	ND		20		ug/L			08/26/16 03:07	20
Tert-butyl ethyl ether	ND		100		ug/L			08/26/16 03:07	20
Isopropyl ether	ND		200		ug/L			08/26/16 03:07	20
4-Isopropyltoluene	ND		20		ug/L			08/26/16 03:07	20
Tert-amyl methyl ether	ND		100		ug/L			08/26/16 03:07	20
1,3,5-Trimethylbenzene	ND		20		ug/L			08/26/16 03:07	20
m-Xylene & p-Xylene	ND		40		ug/L			08/26/16 03:07	20
Ethylene Dibromide	ND		20		ug/L			08/26/16 03:07	20
tert-Butylbenzene	ND		20		ug/L			08/26/16 03:07	20
1,3-Dichloropropane	ND		20		ug/L			08/26/16 03:07	20
Dichlorobromomethane	ND		10		ug/L			08/26/16 03:07	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*		*08/26/16 03:07*	*20*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/26/16 03:07*	*20*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/26/16 03:07*	*20*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*08/26/16 03:07*	*20*

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Client Sample ID: MW-1039-20160824-01
Date Collected: 08/24/16 11:30
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104990-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 03:31	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 03:31	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 03:31	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 03:31	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 03:31	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 03:31	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 03:31	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 03:31	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 03:31	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 03:31	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 03:31	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 03:31	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 03:31	1
Bromobenzene	ND		1.0		ug/L			08/26/16 03:31	1
Bromoform	ND		1.0		ug/L			08/26/16 03:31	1
Bromomethane	ND		2.0		ug/L			08/26/16 03:31	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 03:31	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 03:31	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 03:31	1
Chloroethane	ND		2.0		ug/L			08/26/16 03:31	1
Chloroform	ND		1.0		ug/L			08/26/16 03:31	1
Chloromethane	ND		2.0		ug/L			08/26/16 03:31	1
cis-1,2-Dichloroethene	**29**		1.0		ug/L			08/26/16 03:31	1
Dibromomethane	ND		1.0		ug/L			08/26/16 03:31	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 03:31	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 03:31	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 03:31	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 03:31	1
Trichloroethene	**48**		1.0		ug/L			08/26/16 03:31	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 03:31	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 03:31	1
Benzene	ND		1.0		ug/L			08/26/16 03:31	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 03:31	1
Carbon disulfide	ND		10		ug/L			08/26/16 03:31	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 03:31	1
Ethyl ether	ND		1.0		ug/L			08/26/16 03:31	1
Acetone	ND	*	50		ug/L			08/26/16 03:31	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 03:31	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 03:31	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 03:31	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 03:31	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 03:31	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 03:31	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 03:31	1
Toluene	ND		1.0		ug/L			08/26/16 03:31	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 03:31	1
o-Xylene	ND		1.0		ug/L			08/26/16 03:31	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 03:31	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 03:31	1

Client Sample ID: MW-1039-20160824-01

Lab Sample ID: 480-104990-10

Date Collected: 08/24/16 11:30

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/26/16 03:31	1
Styrene	ND		1.0		ug/L			08/26/16 03:31	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 03:31	1
trans-1,2-Dichloroethene	**1.9**		1.0		ug/L			08/26/16 03:31	1
1,4-Dioxane	ND		50		ug/L			08/26/16 03:31	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 03:31	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 03:31	1
2-Hexanone	ND		10		ug/L			08/26/16 03:31	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 03:31	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 03:31	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 03:31	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 03:31	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 03:31	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 03:31	1
Isopropyl ether	ND		10		ug/L			08/26/16 03:31	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 03:31	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 03:31	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 03:31	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 03:31	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 03:31	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 03:31	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 03:31	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 03:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*08/26/16 03:31*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/26/16 03:31*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/26/16 03:31*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/26/16 03:31*	*1*

Client Sample ID: DUP-005-20160824-01

Lab Sample ID: 480-104990-11

Date Collected: 08/24/16 12:12

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 03:55	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 03:55	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 03:55	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 03:55	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 03:55	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 03:55	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 03:55	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 03:55	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 03:55	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 03:55	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 03:55	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 03:55	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 03:55	1
Bromobenzene	ND		1.0		ug/L			08/26/16 03:55	1

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Client Sample ID: DUP-005-20160824-01
Date Collected: 08/24/16 12:12
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104990-11
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			08/26/16 03:55	1
Bromomethane	ND		2.0		ug/L			08/26/16 03:55	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 03:55	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 03:55	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 03:55	1
Chloroethane	ND		2.0		ug/L			08/26/16 03:55	1
Chloroform	ND		1.0		ug/L			08/26/16 03:55	1
Chloromethane	ND		2.0		ug/L			08/26/16 03:55	1
cis-1,2-Dichloroethene	**4.5**		1.0		ug/L			08/26/16 03:55	1
Dibromomethane	ND		1.0		ug/L			08/26/16 03:55	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 03:55	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 03:55	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 03:55	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 03:55	1
Trichloroethene	**10**		1.0		ug/L			08/26/16 03:55	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 03:55	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 03:55	1
Benzene	ND		1.0		ug/L			08/26/16 03:55	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 03:55	1
Carbon disulfide	ND		10		ug/L			08/26/16 03:55	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 03:55	1
Ethyl ether	ND		1.0		ug/L			08/26/16 03:55	1
Acetone	**110**	*	50		ug/L			08/26/16 03:55	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 03:55	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 03:55	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 03:55	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 03:55	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 03:55	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 03:55	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 03:55	1
Toluene	ND		1.0		ug/L			08/26/16 03:55	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 03:55	1
o-Xylene	ND		1.0		ug/L			08/26/16 03:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 03:55	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 03:55	1
Naphthalene	ND		5.0		ug/L			08/26/16 03:55	1
Styrene	ND		1.0		ug/L			08/26/16 03:55	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 03:55	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 03:55	1
1,4-Dioxane	ND		50		ug/L			08/26/16 03:55	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 03:55	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 03:55	1
2-Hexanone	ND		10		ug/L			08/26/16 03:55	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 03:55	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 03:55	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 03:55	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 03:55	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 03:55	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 03:55	1

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Client Sample ID: DUP-005-20160824-01
Date Collected: 08/24/16 12:12
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104990-11
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			08/26/16 03:55	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 03:55	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 03:55	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 03:55	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 03:55	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 03:55	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 03:55	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 03:55	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 03:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*08/26/16 03:55*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/26/16 03:55*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/26/16 03:55*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/26/16 03:55*	*1*

Surrogate Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-104990-1	MW-1011-20160824-01	117	91	102	109
480-104990-2	MW-1018-20160824-01	117	92	97	110
480-104990-3	MW-1020-20160824-01	114	92	101	111
480-104990-4	MW-1026D-20160824-01	110	95	102	107
480-104990-5	MW-1032-20160824-01	115	93	103	112
480-104990-6	MW-1035-20160824-01	113	94	103	110
480-104990-7	MW-1036-20160824-01	112	91	98	108
480-104990-8	MW-1037-20160824-01	115	92	98	111
480-104990-9	MW-1038-20160824-01	118	95	102	113
480-104990-9 MS	MW-1038-20160824-01	113	94	100	
480-104990-9 MSD	MW-1038-20160824-01	112	92	101	
480-104990-10	MW-1039-20160824-01	109	91	99	105
480-104990-11	DUP-005-20160824-01	117	92	100	110
LCS 480-317749/5	Lab Control Sample	116	93	100	113
LCS 480-317839/4	Lab Control Sample	112	94	102	110
LCSD 480-317749/26	Lab Control Sample Dup	113	94	105	114
LCSD 480-317839/5	Lab Control Sample Dup	110	93	104	109
MB 480-317749/7	Method Blank	114	91	99	110
MB 480-317839/7	Method Blank	115	91	101	107

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-317749/7
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/25/16 22:58	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/25/16 22:58	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 22:58	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/25/16 22:58	1
1,1-Dichloroethane	ND		1.0		ug/L			08/25/16 22:58	1
1,1-Dichloroethene	ND		1.0		ug/L			08/25/16 22:58	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/25/16 22:58	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
1,2-Dichloroethane	ND		1.0		ug/L			08/25/16 22:58	1
1,2-Dichloropropane	ND		1.0		ug/L			08/25/16 22:58	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/25/16 22:58	1
Bromobenzene	ND		1.0		ug/L			08/25/16 22:58	1
Bromoform	ND		1.0		ug/L			08/25/16 22:58	1
Bromomethane	ND		2.0		ug/L			08/25/16 22:58	1
Carbon tetrachloride	ND		1.0		ug/L			08/25/16 22:58	1
Chlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
Chlorodibromomethane	ND		0.50		ug/L			08/25/16 22:58	1
Chloroethane	ND		2.0		ug/L			08/25/16 22:58	1
Chloroform	ND		1.0		ug/L			08/25/16 22:58	1
Chloromethane	ND		2.0		ug/L			08/25/16 22:58	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/25/16 22:58	1
Dibromomethane	ND		1.0		ug/L			08/25/16 22:58	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/25/16 22:58	1
Methylene Chloride	ND		1.0		ug/L			08/25/16 22:58	1
Tetrachloroethene	ND		1.0		ug/L			08/25/16 22:58	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/25/16 22:58	1
Trichloroethene	ND		1.0		ug/L			08/25/16 22:58	1
Trichlorofluoromethane	ND		1.0		ug/L			08/25/16 22:58	1
Vinyl chloride	ND		1.0		ug/L			08/25/16 22:58	1
Benzene	ND		1.0		ug/L			08/25/16 22:58	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/25/16 22:58	1
Carbon disulfide	ND		10		ug/L			08/25/16 22:58	1
Chlorobromomethane	ND		1.0		ug/L			08/25/16 22:58	1
Ethyl ether	ND		1.0		ug/L			08/25/16 22:58	1
Acetone	ND		50		ug/L			08/25/16 22:58	1
Tetrahydrofuran	ND		10		ug/L			08/25/16 22:58	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/25/16 22:58	1
Hexachlorobutadiene	ND		0.40		ug/L			08/25/16 22:58	1
n-Butylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
2-Chlorotoluene	ND		1.0		ug/L			08/25/16 22:58	1
1,1-Dichloropropene	ND		1.0		ug/L			08/25/16 22:58	1
Toluene	ND		1.0		ug/L			08/25/16 22:58	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
o-Xylene	ND		1.0		ug/L			08/25/16 22:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/25/16 22:58	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-317749/7
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			08/25/16 22:58	1
Naphthalene	ND		5.0		ug/L			08/25/16 22:58	1
Styrene	ND		1.0		ug/L			08/25/16 22:58	1
4-Chlorotoluene	ND		1.0		ug/L			08/25/16 22:58	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/25/16 22:58	1
1,4-Dioxane	ND		50		ug/L			08/25/16 22:58	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
sec-Butylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
2-Hexanone	ND		10		ug/L			08/25/16 22:58	1
2-Butanone (MEK)	ND		10		ug/L			08/25/16 22:58	1
Ethylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
Isopropylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
2,2-Dichloropropane	ND		1.0		ug/L			08/25/16 22:58	1
N-Propylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/25/16 22:58	1
Isopropyl ether	ND		10		ug/L			08/25/16 22:58	1
4-Isopropyltoluene	ND		1.0		ug/L			08/25/16 22:58	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/25/16 22:58	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/25/16 22:58	1
Ethylene Dibromide	ND		1.0		ug/L			08/25/16 22:58	1
tert-Butylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
1,3-Dichloropropane	ND		1.0		ug/L			08/25/16 22:58	1
Dichlorobromomethane	ND		0.50		ug/L			08/25/16 22:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*08/25/16 22:58*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/25/16 22:58*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/25/16 22:58*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/25/16 22:58*	*1*

Lab Sample ID: LCS 480-317749/5
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.7		ug/L		103	70 - 130
1,1,1-Trichloroethane	25.0	29.0		ug/L		116	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	70 - 130
1,1,2-Trichloroethane	25.0	23.2		ug/L		93	70 - 130
1,1-Dichloroethane	25.0	26.9		ug/L		108	70 - 130
1,1-Dichloroethene	25.0	25.3		ug/L		101	70 - 130
1,2,3-Trichloropropane	25.0	24.1		ug/L		96	70 - 130
1,2-Dichlorobenzene	25.0	23.8		ug/L		95	70 - 130
1,2-Dichloroethane	25.0	28.7		ug/L		115	70 - 130
1,2-Dichloropropane	25.0	24.9		ug/L		100	70 - 130
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130
1,4-Dichlorobenzene	25.0	24.6		ug/L		98	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-317749/5
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	25.0	25.3		ug/L		101	70 - 130
Bromobenzene	25.0	23.8		ug/L		95	70 - 130
Bromoform	25.0	27.7		ug/L		111	70 - 130
Bromomethane	25.0	23.6		ug/L		94	70 - 130
Carbon tetrachloride	25.0	31.3		ug/L		125	70 - 130
Chlorobenzene	25.0	22.5		ug/L		90	70 - 130
Chlorodibromomethane	25.0	27.4		ug/L		110	70 - 130
Chloroethane	25.0	23.7		ug/L		95	70 - 130
Chloroform	25.0	26.0		ug/L		104	70 - 130
Chloromethane	25.0	22.7		ug/L		91	70 - 130
cis-1,2-Dichloroethene	25.0	26.6		ug/L		106	70 - 130
Dibromomethane	25.0	27.2		ug/L		109	70 - 130
Dichlorodifluoromethane	25.0	21.1		ug/L		84	70 - 130
Methylene Chloride	25.0	24.5		ug/L		98	70 - 130
Tetrachloroethene	25.0	22.9		ug/L		92	70 - 130
trans-1,3-Dichloropropene	25.0	24.1		ug/L		96	70 - 130
Trichloroethene	25.0	27.2		ug/L		109	70 - 130
Trichlorofluoromethane	25.0	25.0		ug/L		100	70 - 130
Vinyl chloride	25.0	22.1		ug/L		88	70 - 130
Benzene	25.0	24.6		ug/L		98	70 - 130
cis-1,3-Dichloropropene	25.0	25.7		ug/L		103	70 - 130
Carbon disulfide	25.0	24.1		ug/L		97	70 - 130
Chlorobromomethane	25.0	28.0		ug/L		112	70 - 130
Ethyl ether	25.0	25.3		ug/L		101	70 - 130
Acetone	125	180	*	ug/L		144	70 - 130
Tetrahydrofuran	50.0	72.4	*	ug/L		145	70 - 130
4-Methyl-2-pentanone (MIBK)	125	132		ug/L		105	70 - 130
Hexachlorobutadiene	25.0	23.9		ug/L		96	70 - 130
n-Butylbenzene	25.0	24.1		ug/L		97	70 - 130
1,2,4-Trimethylbenzene	25.0	24.3		ug/L		97	70 - 130
2-Chlorotoluene	25.0	23.3		ug/L		93	70 - 130
1,1-Dichloropropene	25.0	25.9		ug/L		103	70 - 130
Toluene	25.0	21.5		ug/L		86	70 - 130
1,2,4-Trichlorobenzene	25.0	24.6		ug/L		98	70 - 130
o-Xylene	25.0	22.7		ug/L		91	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	28.0		ug/L		112	70 - 130
Methyl tert-butyl ether	25.0	25.5		ug/L		102	70 - 130
Naphthalene	25.0	24.8		ug/L		99	70 - 130
Styrene	25.0	22.5		ug/L		90	70 - 130
4-Chlorotoluene	25.0	25.6		ug/L		103	70 - 130
trans-1,2-Dichloroethene	25.0	25.4		ug/L		102	70 - 130
1,4-Dioxane	500	433		ug/L		87	70 - 130
1,2,3-Trichlorobenzene	25.0	24.1		ug/L		96	70 - 130
sec-Butylbenzene	25.0	23.8		ug/L		95	70 - 130
2-Hexanone	125	134		ug/L		107	70 - 130
2-Butanone (MEK)	125	146		ug/L		117	70 - 130
Ethylbenzene	25.0	22.8		ug/L		91	70 - 130
Isopropylbenzene	25.0	23.8		ug/L		95	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-317749/5
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	25.0	25.5		ug/L		102	70 - 130
N-Propylbenzene	25.0	23.0		ug/L		92	70 - 130
Tert-butyl ethyl ether	25.0	24.4		ug/L		98	70 - 130
Isopropyl ether	25.0	27.0		ug/L		108	70 - 130
4-Isopropyltoluene	25.0	23.9		ug/L		96	70 - 130
Tert-amyl methyl ether	25.0	24.5		ug/L		98	70 - 130
1,3,5-Trimethylbenzene	25.0	24.0		ug/L		96	70 - 130
m-Xylene & p-Xylene	25.0	22.6		ug/L		90	70 - 130
Ethylene Dibromide	25.0	24.5		ug/L		98	70 - 130
tert-Butylbenzene	25.0	24.1		ug/L		97	70 - 130
1,3-Dichloropropane	25.0	21.7		ug/L		87	70 - 130
Dichlorobromomethane	25.0	28.5		ug/L		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*113*		*70 - 130*

Lab Sample ID: LCSD 480-317749/26
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	27.8		ug/L		111	70 - 130	8	20
1,1,1-Trichloroethane	25.0	30.4		ug/L		121	70 - 130	4	20
1,1,2,2-Tetrachloroethane	25.0	22.1		ug/L		88	70 - 130	5	20
1,1,2-Trichloroethane	25.0	24.8		ug/L		99	70 - 130	7	20
1,1-Dichloroethane	25.0	28.3		ug/L		113	70 - 130	5	20
1,1-Dichloroethene	25.0	27.3		ug/L		109	70 - 130	8	20
1,2,3-Trichloropropane	25.0	24.2		ug/L		97	70 - 130	1	20
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	70 - 130	4	20
1,2-Dichloroethane	25.0	28.1		ug/L		113	70 - 130	2	20
1,2-Dichloropropane	25.0	26.8		ug/L		107	70 - 130	8	20
1,3-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130	3	20
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130	3	20
2-Chloroethyl vinyl ether	25.0	24.1		ug/L		97	70 - 130	5	20
Bromobenzene	25.0	24.7		ug/L		99	70 - 130	4	20
Bromoform	25.0	26.8		ug/L		107	70 - 130	3	20
Bromomethane	25.0	23.7		ug/L		95	70 - 130	0	20
Carbon tetrachloride	25.0	32.7	*	ug/L		131	70 - 130	5	20
Chlorobenzene	25.0	25.0		ug/L		100	70 - 130	10	20
Chlorodibromomethane	25.0	29.2		ug/L		117	70 - 130	6	20
Chloroethane	25.0	25.0		ug/L		100	70 - 130	5	20
Chloroform	25.0	27.0		ug/L		108	70 - 130	4	20
Chloromethane	25.0	23.9		ug/L		96	70 - 130	5	20
cis-1,2-Dichloroethene	25.0	27.5		ug/L		110	70 - 130	3	20
Dibromomethane	25.0	28.0		ug/L		112	70 - 130	3	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-317749/26
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane	25.0	22.5		ug/L		90	70 - 130	6	20
Methylene Chloride	25.0	24.6		ug/L		98	70 - 130	0	20
Tetrachloroethene	25.0	25.5		ug/L		102	70 - 130	11	20
trans-1,3-Dichloropropene	25.0	25.1		ug/L		100	70 - 130	4	20
Trichloroethene	25.0	27.9		ug/L		112	70 - 130	3	20
Trichlorofluoromethane	25.0	26.3		ug/L		105	70 - 130	5	20
Vinyl chloride	25.0	24.1		ug/L		97	70 - 130	9	20
Benzene	25.0	25.7		ug/L		103	70 - 130	4	20
cis-1,3-Dichloropropene	25.0	26.4		ug/L		106	70 - 130	3	20
Carbon disulfide	25.0	26.0		ug/L		104	70 - 130	8	20
Chlorobromomethane	25.0	27.3		ug/L		109	70 - 130	2	20
Ethyl ether	25.0	24.7		ug/L		99	70 - 130	3	20
Acetone	125	171	*	ug/L		137	70 - 130	5	20
Tetrahydrofuran	50.0	70.2	*	ug/L		140	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	125	133		ug/L		106	70 - 130	1	20
Hexachlorobutadiene	25.0	25.6		ug/L		102	70 - 130	7	20
n-Butylbenzene	25.0	25.9		ug/L		104	70 - 130	7	20
1,2,4-Trimethylbenzene	25.0	25.3		ug/L		101	70 - 130	4	20
2-Chlorotoluene	25.0	24.2		ug/L		97	70 - 130	4	20
1,1-Dichloropropene	25.0	27.8		ug/L		111	70 - 130	7	20
Toluene	25.0	24.0		ug/L		96	70 - 130	11	20
1,2,4-Trichlorobenzene	25.0	24.1		ug/L		96	70 - 130	2	20
o-Xylene	25.0	24.1		ug/L		96	70 - 130	6	20
1,2-Dibromo-3-Chloropropane	25.0	26.2		ug/L		105	70 - 130	7	20
Methyl tert-butyl ether	25.0	25.0		ug/L		100	70 - 130	2	20
Naphthalene	25.0	25.0		ug/L		100	70 - 130	1	20
Styrene	25.0	24.2		ug/L		97	70 - 130	7	20
4-Chlorotoluene	25.0	26.2		ug/L		105	70 - 130	2	20
trans-1,2-Dichloroethene	25.0	26.6		ug/L		106	70 - 130	5	20
1,4-Dioxane	500	392		ug/L		78	70 - 130	10	20
1,2,3-Trichlorobenzene	25.0	24.0		ug/L		96	70 - 130	1	20
sec-Butylbenzene	25.0	25.5		ug/L		102	70 - 130	7	20
2-Hexanone	125	133		ug/L		106	70 - 130	1	20
2-Butanone (MEK)	125	138		ug/L		111	70 - 130	6	20
Ethylbenzene	25.0	24.7		ug/L		99	70 - 130	8	20
Isopropylbenzene	25.0	24.8		ug/L		99	70 - 130	4	20
2,2-Dichloropropane	25.0	26.5		ug/L		106	70 - 130	4	20
N-Propylbenzene	25.0	24.0		ug/L		96	70 - 130	4	20
Tert-butyl ethyl ether	25.0	25.1		ug/L		100	70 - 130	3	20
Isopropyl ether	25.0	27.3		ug/L		109	70 - 130	1	20
4-Isopropyltoluene	25.0	25.5		ug/L		102	70 - 130	6	20
Tert-amyl methyl ether	25.0	24.2		ug/L		97	70 - 130	1	20
1,3,5-Trimethylbenzene	25.0	25.2		ug/L		101	70 - 130	5	20
m-Xylene & p-Xylene	25.0	24.5		ug/L		98	70 - 130	8	20
Ethylene Dibromide	25.0	24.8		ug/L		99	70 - 130	1	20
tert-Butylbenzene	25.0	24.9		ug/L		100	70 - 130	3	20
1,3-Dichloropropane	25.0	23.1		ug/L		92	70 - 130	6	20
Dichlorobromomethane	25.0	29.0		ug/L		116	70 - 130	2	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-317749/26
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*114*		*70 - 130*

Lab Sample ID: 480-104990-9 MS
Matrix: Water
Analysis Batch: 317749

Client Sample ID: MW-1038-20160824-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		500	537		ug/L		107	70 - 130
1,1,1-Trichloroethane	310		500	869		ug/L		112	70 - 130
1,1,2,2-Tetrachloroethane	ND		500	460		ug/L		92	70 - 130
1,1,2-Trichloroethane	ND		500	451		ug/L		90	70 - 130
1,1-Dichloroethane	ND		500	562		ug/L		112	70 - 130
1,1-Dichloroethene	ND		500	535		ug/L		104	70 - 130
1,2,3-Trichloropropane	ND		500	464		ug/L		93	70 - 130
1,2-Dichlorobenzene	ND		500	483		ug/L		97	70 - 130
1,2-Dichloroethane	ND		500	594		ug/L		119	70 - 130
1,2-Dichloropropane	ND		500	521		ug/L		104	70 - 130
1,3-Dichlorobenzene	ND		500	500		ug/L		100	70 - 130
1,4-Dichlorobenzene	ND		500	498		ug/L		100	70 - 130
2-Chloroethyl vinyl ether	ND		500	477		ug/L		95	70 - 130
Bromobenzene	ND		500	472		ug/L		94	70 - 130
Bromoform	ND		500	555		ug/L		111	70 - 130
Bromomethane	ND		500	503		ug/L		101	70 - 130
Carbon tetrachloride	ND	F1 *	500	668	F1	ug/L		134	70 - 130
Chlorobenzene	ND		500	474		ug/L		95	70 - 130
Chlorodibromomethane	ND		500	566		ug/L		113	70 - 130
Chloroethane	ND		500	519		ug/L		104	70 - 130
Chloroform	ND		500	544		ug/L		109	70 - 130
Chloromethane	ND		500	486		ug/L		97	70 - 130
cis-1,2-Dichloroethene	ND		500	538		ug/L		108	70 - 130
Dibromomethane	ND		500	558		ug/L		112	70 - 130
Dichlorodifluoromethane	ND		500	467		ug/L		93	70 - 130
Methylene Chloride	ND		500	483		ug/L		97	70 - 130
Tetrachloroethene	ND		500	477		ug/L		95	70 - 130
trans-1,3-Dichloropropene	ND		500	464		ug/L		93	70 - 130
Trichloroethene	1100	F1	500	1390	F1	ug/L		63	70 - 130
Trichlorofluoromethane	ND		500	562		ug/L		112	70 - 130
Vinyl chloride	ND		500	469		ug/L		94	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-104990-9 MSD
Matrix: Water
Analysis Batch: 317749

Client Sample ID: MW-1038-20160824-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		500	507		ug/L		101	70 - 130	6	20
1,1,1-Trichloroethane	310		500	831		ug/L		104	70 - 130	4	20
1,1,2,2-Tetrachloroethane	ND		500	455		ug/L		91	70 - 130	1	20
1,1,2-Trichloroethane	ND		500	444		ug/L		89	70 - 130	1	20
1,1-Dichloroethane	ND		500	542		ug/L		108	70 - 130	4	20
1,1-Dichloroethene	ND		500	522		ug/L		102	70 - 130	2	20
1,2,3-Trichloropropane	ND		500	480		ug/L		96	70 - 130	3	20
1,2-Dichlorobenzene	ND		500	489		ug/L		98	70 - 130	1	20
1,2-Dichloroethane	ND		500	558		ug/L		112	70 - 130	6	20
1,2-Dichloropropane	ND		500	508		ug/L		102	70 - 130	3	20
1,3-Dichlorobenzene	ND		500	489		ug/L		98	70 - 130	2	20
1,4-Dichlorobenzene	ND		500	495		ug/L		99	70 - 130	1	20
2-Chloroethyl vinyl ether	ND		500	472		ug/L		94	70 - 130	1	20
Bromobenzene	ND		500	471		ug/L		94	70 - 130	0	20
Bromoform	ND		500	529		ug/L		106	70 - 130	5	20
Bromomethane	ND		500	500		ug/L		100	70 - 130	1	20
Carbon tetrachloride	ND	F1 *	500	624		ug/L		125	70 - 130	7	20
Chlorobenzene	ND		500	464		ug/L		93	70 - 130	2	20
Chlorodibromomethane	ND		500	546		ug/L		109	70 - 130	4	20
Chloroethane	ND		500	478		ug/L		96	70 - 130	8	20
Chloroform	ND		500	521		ug/L		104	70 - 130	4	20
Chloromethane	ND		500	461		ug/L		92	70 - 130	5	20
cis-1,2-Dichloroethene	ND		500	521		ug/L		104	70 - 130	3	20
Dibromomethane	ND		500	542		ug/L		108	70 - 130	3	20
Dichlorodifluoromethane	ND		500	455		ug/L		91	70 - 130	3	20
Methylene Chloride	ND		500	464		ug/L		93	70 - 130	4	20
Tetrachloroethene	ND		500	459		ug/L		92	70 - 130	4	20
trans-1,3-Dichloropropene	ND		500	460		ug/L		92	70 - 130	1	20
Trichloroethene	1100	F1	500	1320	F1	ug/L		49	70 - 130	6	20
Trichlorofluoromethane	ND		500	542		ug/L		108	70 - 130	4	20
Vinyl chloride	ND		500	459		ug/L		92	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 480-317839/7
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 11:19	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 11:19	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 11:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 11:19	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 11:19	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 11:19	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-317839/7
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 11:19	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 11:19	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 11:19	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 11:19	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 11:19	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 11:19	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 11:19	1
Bromobenzene	ND		1.0		ug/L			08/26/16 11:19	1
Bromoform	ND		1.0		ug/L			08/26/16 11:19	1
Bromomethane	ND		2.0		ug/L			08/26/16 11:19	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 11:19	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 11:19	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 11:19	1
Chloroethane	ND		2.0		ug/L			08/26/16 11:19	1
Chloroform	ND		1.0		ug/L			08/26/16 11:19	1
Chloromethane	ND		2.0		ug/L			08/26/16 11:19	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 11:19	1
Dibromomethane	ND		1.0		ug/L			08/26/16 11:19	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 11:19	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 11:19	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 11:19	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 11:19	1
Trichloroethene	ND		1.0		ug/L			08/26/16 11:19	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 11:19	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 11:19	1
Benzene	ND		1.0		ug/L			08/26/16 11:19	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 11:19	1
Carbon disulfide	ND		10		ug/L			08/26/16 11:19	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 11:19	1
Ethyl ether	ND		1.0		ug/L			08/26/16 11:19	1
Acetone	ND		50		ug/L			08/26/16 11:19	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 11:19	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 11:19	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 11:19	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 11:19	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 11:19	1
Toluene	ND		1.0		ug/L			08/26/16 11:19	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 11:19	1
o-Xylene	ND		1.0		ug/L			08/26/16 11:19	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 11:19	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 11:19	1
Naphthalene	ND		5.0		ug/L			08/26/16 11:19	1
Styrene	ND		1.0		ug/L			08/26/16 11:19	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 11:19	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 11:19	1
1,4-Dioxane	ND		50		ug/L			08/26/16 11:19	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-317839/7
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 11:19	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
2-Hexanone	ND		10		ug/L			08/26/16 11:19	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 11:19	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 11:19	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 11:19	1
Isopropyl ether	ND		10		ug/L			08/26/16 11:19	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 11:19	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 11:19	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 11:19	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 11:19	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 11:19	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 11:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*08/26/16 11:19*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/26/16 11:19*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/26/16 11:19*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/26/16 11:19*	*1*

Lab Sample ID: LCS 480-317839/4
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	26.8		ug/L		107	70 - 130
1,1,1-Trichloroethane	25.0	30.8		ug/L		123	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	70 - 130
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	70 - 130
1,1-Dichloroethane	25.0	27.7		ug/L		111	70 - 130
1,1-Dichloroethene	25.0	27.2		ug/L		109	70 - 130
1,2,3-Trichloropropane	25.0	24.1		ug/L		97	70 - 130
1,2-Dichlorobenzene	25.0	25.0		ug/L		100	70 - 130
1,2-Dichloroethane	25.0	28.2		ug/L		113	70 - 130
1,2-Dichloropropane	25.0	26.6		ug/L		106	70 - 130
1,3-Dichlorobenzene	25.0	26.3		ug/L		105	70 - 130
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130
2-Chloroethyl vinyl ether	25.0	24.4		ug/L		98	70 - 130
Bromobenzene	25.0	24.4		ug/L		97	70 - 130
Bromoform	25.0	28.1		ug/L		112	70 - 130
Bromomethane	25.0	24.5		ug/L		98	70 - 130
Carbon tetrachloride	25.0	33.3	*	ug/L		133	70 - 130
Chlorobenzene	25.0	24.5		ug/L		98	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-317839/4
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorodibromomethane	25.0	28.0		ug/L		112	70 - 130
Chloroethane	25.0	25.1		ug/L		101	70 - 130
Chloroform	25.0	27.1		ug/L		108	70 - 130
Chloromethane	25.0	22.8		ug/L		91	70 - 130
cis-1,2-Dichloroethene	25.0	27.1		ug/L		109	70 - 130
Dibromomethane	25.0	27.0		ug/L		108	70 - 130
Dichlorodifluoromethane	25.0	19.7		ug/L		79	70 - 130
Methylene Chloride	25.0	25.3		ug/L		101	70 - 130
Tetrachloroethene	25.0	25.8		ug/L		103	70 - 130
trans-1,3-Dichloropropene	25.0	24.5		ug/L		98	70 - 130
Trichloroethene	25.0	27.5		ug/L		110	70 - 130
Trichlorofluoromethane	25.0	26.7		ug/L		107	70 - 130
Vinyl chloride	25.0	23.2		ug/L		93	70 - 130
Benzene	25.0	25.8		ug/L		103	70 - 130
cis-1,3-Dichloropropene	25.0	26.6		ug/L		106	70 - 130
Carbon disulfide	25.0	24.9		ug/L		100	70 - 130
Chlorobromomethane	25.0	27.3		ug/L		109	70 - 130
Ethyl ether	25.0	26.5		ug/L		106	70 - 130
Acetone	125	199	*	ug/L		159	70 - 130
Tetrahydrofuran	50.0	68.6	*	ug/L		137	70 - 130
4-Methyl-2-pentanone (MIBK)	125	131		ug/L		105	70 - 130
Hexachlorobutadiene	25.0	26.1		ug/L		105	70 - 130
n-Butylbenzene	25.0	26.5		ug/L		106	70 - 130
1,2,4-Trimethylbenzene	25.0	25.7		ug/L		103	70 - 130
2-Chlorotoluene	25.0	24.2		ug/L		97	70 - 130
1,1-Dichloropropene	25.0	27.6		ug/L		110	70 - 130
Toluene	25.0	23.9		ug/L		96	70 - 130
1,2,4-Trichlorobenzene	25.0	25.1		ug/L		100	70 - 130
o-Xylene	25.0	24.0		ug/L		96	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	27.0		ug/L		108	70 - 130
Methyl tert-butyl ether	25.0	25.1		ug/L		101	70 - 130
Naphthalene	25.0	25.1		ug/L		100	70 - 130
Styrene	25.0	23.4		ug/L		94	70 - 130
4-Chlorotoluene	25.0	27.3		ug/L		109	70 - 130
trans-1,2-Dichloroethene	25.0	26.0		ug/L		104	70 - 130
1,4-Dioxane	500	317	*	ug/L		63	70 - 130
1,2,3-Trichlorobenzene	25.0	24.8		ug/L		99	70 - 130
sec-Butylbenzene	25.0	25.6		ug/L		102	70 - 130
2-Hexanone	125	136		ug/L		108	70 - 130
2-Butanone (MEK)	125	144		ug/L		115	70 - 130
Ethylbenzene	25.0	24.4		ug/L		98	70 - 130
Isopropylbenzene	25.0	24.8		ug/L		99	70 - 130
2,2-Dichloropropane	25.0	26.7		ug/L		107	70 - 130
N-Propylbenzene	25.0	24.7		ug/L		99	70 - 130
Tert-butyl ethyl ether	25.0	25.3		ug/L		101	70 - 130
Isopropyl ether	25.0	27.4		ug/L		110	70 - 130
4-Isopropyltoluene	25.0	26.1		ug/L		104	70 - 130
Tert-amyl methyl ether	25.0	23.7		ug/L		95	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-317839/4
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	25.0	25.5		ug/L		102	70 - 130
m-Xylene & p-Xylene	25.0	24.0		ug/L		96	70 - 130
Ethylene Dibromide	25.0	25.1		ug/L		100	70 - 130
tert-Butylbenzene	25.0	26.3		ug/L		105	70 - 130
1,3-Dichloropropane	25.0	22.4		ug/L		90	70 - 130
Dichlorobromomethane	25.0	27.9		ug/L		111	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*110*		*70 - 130*

Lab Sample ID: LCSD 480-317839/5
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	26.2		ug/L		105	70 - 130	2	20
1,1,1-Trichloroethane	25.0	29.6		ug/L		119	70 - 130	4	20
1,1,2,2-Tetrachloroethane	25.0	22.7		ug/L		91	70 - 130	2	20
1,1,2-Trichloroethane	25.0	23.9		ug/L		96	70 - 130	1	20
1,1-Dichloroethane	25.0	27.1		ug/L		108	70 - 130	2	20
1,1-Dichloroethene	25.0	24.6		ug/L		99	70 - 130	10	20
1,2,3-Trichloropropane	25.0	22.9		ug/L		91	70 - 130	5	20
1,2-Dichlorobenzene	25.0	23.8		ug/L		95	70 - 130	5	20
1,2-Dichloroethane	25.0	28.4		ug/L		113	70 - 130	1	20
1,2-Dichloropropane	25.0	25.6		ug/L		102	70 - 130	4	20
1,3-Dichlorobenzene	25.0	24.4		ug/L		98	70 - 130	7	20
1,4-Dichlorobenzene	25.0	23.9		ug/L		96	70 - 130	6	20
2-Chloroethyl vinyl ether	25.0	24.4		ug/L		97	70 - 130	0	20
Bromobenzene	25.0	23.5		ug/L		94	70 - 130	3	20
Bromoform	25.0	28.7		ug/L		115	70 - 130	2	20
Bromomethane	25.0	22.6		ug/L		91	70 - 130	8	20
Carbon tetrachloride	25.0	31.2		ug/L		125	70 - 130	6	20
Chlorobenzene	25.0	24.0		ug/L		96	70 - 130	2	20
Chlorodibromomethane	25.0	27.6		ug/L		110	70 - 130	2	20
Chloroethane	25.0	23.7		ug/L		95	70 - 130	6	20
Chloroform	25.0	26.1		ug/L		104	70 - 130	4	20
Chloromethane	25.0	21.3		ug/L		85	70 - 130	7	20
cis-1,2-Dichloroethene	25.0	26.2		ug/L		105	70 - 130	3	20
Dibromomethane	25.0	27.0		ug/L		108	70 - 130	0	20
Dichlorodifluoromethane	25.0	17.9		ug/L		72	70 - 130	9	20
Methylene Chloride	25.0	24.2		ug/L		97	70 - 130	5	20
Tetrachloroethene	25.0	24.5		ug/L		98	70 - 130	5	20
trans-1,3-Dichloropropene	25.0	24.2		ug/L		97	70 - 130	1	20
Trichloroethene	25.0	27.5		ug/L		110	70 - 130	0	20
Trichlorofluoromethane	25.0	24.5		ug/L		98	70 - 130	9	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-317839/5
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride	25.0	21.1		ug/L		84	70 - 130	9	20
Benzene	25.0	24.5		ug/L		98	70 - 130	5	20
cis-1,3-Dichloropropene	25.0	25.5		ug/L		102	70 - 130	4	20
Carbon disulfide	25.0	23.3		ug/L		93	70 - 130	7	20
Chlorobromomethane	25.0	27.2		ug/L		109	70 - 130	0	20
Ethyl ether	25.0	25.3		ug/L		101	70 - 130	4	20
Acetone	125	196	*	ug/L		157	70 - 130	2	20
Tetrahydrofuran	50.0	69.0	*	ug/L		138	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	125	129		ug/L		103	70 - 130	2	20
Hexachlorobutadiene	25.0	23.8		ug/L		95	70 - 130	9	20
n-Butylbenzene	25.0	24.5		ug/L		98	70 - 130	8	20
1,2,4-Trimethylbenzene	25.0	23.6		ug/L		94	70 - 130	9	20
2-Chlorotoluene	25.0	22.5		ug/L		90	70 - 130	7	20
1,1-Dichloropropene	25.0	26.7		ug/L		107	70 - 130	3	20
Toluene	25.0	22.7		ug/L		91	70 - 130	5	20
1,2,4-Trichlorobenzene	25.0	24.3		ug/L		97	70 - 130	3	20
o-Xylene	25.0	23.3		ug/L		93	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	25.0	25.0		ug/L		100	70 - 130	8	20
Methyl tert-butyl ether	25.0	25.3		ug/L		101	70 - 130	1	20
Naphthalene	25.0	24.1		ug/L		96	70 - 130	4	20
Styrene	25.0	23.0		ug/L		92	70 - 130	2	20
4-Chlorotoluene	25.0	25.3		ug/L		101	70 - 130	7	20
trans-1,2-Dichloroethene	25.0	24.0		ug/L		96	70 - 130	8	20
1,4-Dioxane	500	368		ug/L		74	70 - 130	15	20
1,2,3-Trichlorobenzene	25.0	24.1		ug/L		96	70 - 130	3	20
sec-Butylbenzene	25.0	23.9		ug/L		95	70 - 130	7	20
2-Hexanone	125	134		ug/L		107	70 - 130	1	20
2-Butanone (MEK)	125	151		ug/L		121	70 - 130	5	20
Ethylbenzene	25.0	23.8		ug/L		95	70 - 130	3	20
Isopropylbenzene	25.0	23.1		ug/L		92	70 - 130	7	20
2,2-Dichloropropane	25.0	25.3		ug/L		101	70 - 130	5	20
N-Propylbenzene	25.0	22.6		ug/L		90	70 - 130	9	20
Tert-butyl ethyl ether	25.0	25.2		ug/L		101	70 - 130	0	20
Isopropyl ether	25.0	27.0		ug/L		108	70 - 130	1	20
4-Isopropyltoluene	25.0	23.7		ug/L		95	70 - 130	10	20
Tert-amyl methyl ether	25.0	23.9		ug/L		96	70 - 130	1	20
1,3,5-Trimethylbenzene	25.0	23.4		ug/L		94	70 - 130	9	20
m-Xylene & p-Xylene	25.0	23.1		ug/L		92	70 - 130	4	20
Ethylene Dibromide	25.0	24.5		ug/L		98	70 - 130	2	20
tert-Butylbenzene	25.0	23.9		ug/L		96	70 - 130	10	20
1,3-Dichloropropane	25.0	21.9		ug/L		88	70 - 130	2	20
Dichlorobromomethane	25.0	28.2		ug/L		113	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*109*		*70 - 130*

QC Association Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

GC/MS VOA

Analysis Batch: 317749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-104990-1	MW-1011-20160824-01	Total/NA	Water	8260C	
480-104990-3	MW-1020-20160824-01	Total/NA	Water	8260C	
480-104990-4	MW-1026D-20160824-01	Total/NA	Water	8260C	
480-104990-5	MW-1032-20160824-01	Total/NA	Water	8260C	
480-104990-6	MW-1035-20160824-01	Total/NA	Water	8260C	
480-104990-7	MW-1036-20160824-01	Total/NA	Water	8260C	
480-104990-8	MW-1037-20160824-01	Total/NA	Water	8260C	
480-104990-9	MW-1038-20160824-01	Total/NA	Water	8260C	
480-104990-10	MW-1039-20160824-01	Total/NA	Water	8260C	
480-104990-11	DUP-005-20160824-01	Total/NA	Water	8260C	
MB 480-317749/7	Method Blank	Total/NA	Water	8260C	
LCS 480-317749/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-317749/26	Lab Control Sample Dup	Total/NA	Water	8260C	
480-104990-9 MS	MW-1038-20160824-01	Total/NA	Water	8260C	
480-104990-9 MSD	MW-1038-20160824-01	Total/NA	Water	8260C	

Analysis Batch: 317839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-104990-2	MW-1018-20160824-01	Total/NA	Water	8260C	
MB 480-317839/7	Method Blank	Total/NA	Water	8260C	
LCS 480-317839/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-317839/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Client Sample ID: MW-1011-20160824-01 — Lab Sample ID: 480-104990-1

Date Collected: 08/24/16 11:20 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317749	08/25/16 23:55	GTG	TAL BUF

Client Sample ID: MW-1018-20160824-01 — Lab Sample ID: 480-104990-2

Date Collected: 08/24/16 13:10 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317839	08/26/16 15:23	RRS	TAL BUF

Client Sample ID: MW-1020-20160824-01 — Lab Sample ID: 480-104990-3

Date Collected: 08/24/16 09:55 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317749	08/26/16 00:43	GTG	TAL BUF

Client Sample ID: MW-1026D-20160824-01 — Lab Sample ID: 480-104990-4

Date Collected: 08/24/16 09:45 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317749	08/26/16 01:07	GTG	TAL BUF

Client Sample ID: MW-1032-20160824-01 — Lab Sample ID: 480-104990-5

Date Collected: 08/24/16 09:15 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317749	08/26/16 01:32	GTG	TAL BUF

Client Sample ID: MW-1035-20160824-01 — Lab Sample ID: 480-104990-6

Date Collected: 08/24/16 12:45 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	317749	08/26/16 01:56	GTG	TAL BUF

Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Client Sample ID: MW-1036-20160824-01 — Lab Sample ID: 480-104990-7

Date Collected: 08/24/16 12:35 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317749	08/26/16 02:20	GTG	TAL BUF

Client Sample ID: MW-1037-20160824-01 — Lab Sample ID: 480-104990-8

Date Collected: 08/24/16 12:10 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	317749	08/26/16 02:43	GTG	TAL BUF

Client Sample ID: MW-1038-20160824-01 — Lab Sample ID: 480-104990-9

Date Collected: 08/24/16 12:00 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	317749	08/26/16 03:07	GTG	TAL BUF

Client Sample ID: MW-1039-20160824-01 — Lab Sample ID: 480-104990-10

Date Collected: 08/24/16 11:30 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317749	08/26/16 03:31	GTG	TAL BUF

Client Sample ID: DUP-005-20160824-01 — Lab Sample ID: 480-104990-11

Date Collected: 08/24/16 12:12 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317749	08/26/16 03:55	GTG	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-17
California	State Program	9	1169CA	09-30-17
Connecticut	State Program	1	PH-0568	09-30-18
Florida	NELAP	4	E87672	06-30-17
Georgia	State Program	4	N/A	03-31-17
Georgia	State Program	4	956	03-31-17
Illinois	NELAP	5	200003	09-30-16 *
Iowa	State Program	7	374	03-01-17
Kansas	NELAP	7	E-10187	10-31-16
Kentucky (DW)	State Program	4	90029	12-31-16
Kentucky (UST)	State Program	4	30	03-31-17
Kentucky (WW)	State Program	4	90029	12-31-16
Louisiana	NELAP	6	02031	06-30-17
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-17
Massachusetts	State Program	1	M-NY044	06-30-17
Michigan	State Program	5	9937	03-31-17
Minnesota	NELAP	5	036-999-337	12-31-16
New Hampshire	NELAP Primary AB	1	2973	09-11-17
New Hampshire	NELAP Secondary AB	1	2337	11-17-16
New Jersey	NELAP	2	NY455	06-30-17
New York	NELAP	2	10026	03-31-17
North Dakota	State Program	8	R-176	03-31-17
Oklahoma	State Program	6	9421	08-31-17
Oregon	NELAP	10	NY200003	06-09-17
Pennsylvania	NELAP	3	68-00281	07-31-17
Rhode Island	State Program	1	LAO00328	12-30-16
Tennessee	State Program	4	TN02970	03-31-17
Texas	NELAP	6	T104704412-15-6	07-31-17
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-17
Washington	State Program	10	C784	02-10-17
West Virginia DEP	State Program	3	252	09-30-16 *
Wisconsin	State Program	5	998310390	08-31-17

* Certification renewal pending - certification considered valid.

Method Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104990-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-104990-1	MW-1011-20160824-01	Water	08/24/16 11:20	08/25/16 02:00
480-104990-2	MW-1018-20160824-01	Water	08/24/16 13:10	08/25/16 02:00
480-104990-3	MW-1020-20160824-01	Water	08/24/16 09:55	08/25/16 02:00
480-104990-4	MW-1026D-20160824-01	Water	08/24/16 09:45	08/25/16 02:00
480-104990-5	MW-1032-20160824-01	Water	08/24/16 09:15	08/25/16 02:00
480-104990-6	MW-1035-20160824-01	Water	08/24/16 12:45	08/25/16 02:00
480-104990-7	MW-1036-20160824-01	Water	08/24/16 12:35	08/25/16 02:00
480-104990-8	MW-1037-20160824-01	Water	08/24/16 12:10	08/25/16 02:00
480-104990-9	MW-1038-20160824-01	Water	08/24/16 12:00	08/25/16 02:00
480-104990-10	MW-1039-20160824-01	Water	08/24/16 11:30	08/25/16 02:00
480-104990-11	DUP-005-20160824-01	Water	08/24/16 12:12	08/25/16 02:00

Login Sample Receipt Checklist

Client: ERM-Northeast

Job Number: 480-104990-1

Login Number: 104990

List Source: TestAmerica Buffalo

List Number: 1

Creator: Conway, Curtis R

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	erm
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

360325-Boston

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Client Information	Sampler: Ellie LeBlanc	Lab PM: Mason, Becky C	Carrier Tracking No(s):	COC No: 480-86051-21030.2
Client Contact: Lyndsey Colburn	Phone: 240-682-1855	E-Mail: becky.mason@testamericainc.com		Page: Page 1 of 1
Company: ERM-Northeast				Job #: 0321744
Address: One Beacon Steet 5th Floor	Due Date Requested: Standard TAT			
City: Boston	TAT Requested (days): 7 days			
State, Zip: MA, 02108				
Phone: 617-646-7800	PO #: Purchase Order not required			
Email: lyndsey.colburn@erm.com, elise.leblanc@erm.com	WO #: 0321744			
Project Name: IDS Wayland	Project #: 48007117			
Site: IDS Wayland	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - Di Wate, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone
Other:

480-104990 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260MCP - VOC 8010 list	522_MOD - 1,4 Dioxane 522	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A		
MW-1011-20160824-01	8/24/16	1120	G	Water			3		3	
MW-1018-20160824-01		1310		Water			3		3	
MW-1020-20160824-01		0955		Water			3		3	
MW-1026D-20160824-01		0945		Water			3		3	
MW-1032-20160824-01		0915		Water			3		3	
MW-1035-20160824-01		1245		Water			3		3	
MW-1036-20160824-01		1235		Water			3		3	
MW-1037-20160824-01		1210		Water			3		3	
MW-1038-20160824-01		1200		Water			3		3	
MW-1039-20160824-01		1130		Water			3		3	
DUP-005-20160824-01		1212		Water			3		3	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 8/24/16 1445	Company: ERM	Received by:	Date/Time: 8/24/16 14:45	Company: TA	
Relinquished by:	Date/Time: 8/24/16 1515	Company: TA	Received by:	Date/Time: 8/25/16 0210	Company: TA	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 3.0

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-104993-1
Client Project/Site: IDS Wayland
Revision: 1

For:
ERM-Northeast
One Beacon Steet
5th Floor
Boston, Massachusetts 02108

Attn: Lyndsey Colburn

Authorized for release by:
10/6/2016 8:54:10 AM

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

LINKS

Review your project results through TotalAccess

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104993-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-104993-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-104993-1

Revised report: Per client request updated 8260 VOC compound list. We are now reporting full MCP list. The MCP cert page has also been updated, and case narrative adjusted due to changed in compound list.

Receipt
The samples were received on 8/25/2016 2:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

GC/MS VOA
Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MW-217S-20160824-01 (480-104993-1), MW-217M-20160824-01 (480-104993-2), MW-217D-20160824-01 (480-104993-3) and (480-104990-A-9). The requested target analyte list includes 2-chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260C: The continuing calibration verification (CCV) for Carbon tetrachloride associated with batch 480-317749 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference.The following samples were affected : MW-217S-20160824-01 (480-104993-1), MW-217M-20160824-01 (480-104993-2), MW-217D-20160824-01 (480-104993-3) and (480-104990-A-9).

Method 8260C: The laboratory control sample duplicate (LCSD) for batch 480-317749 exceeded control limits for the following analytes: Carbon tetrachloride. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-217S-20160824-01 (480-104993-1), MW-217M-20160824-01 (480-104993-2), MW-217D-20160824-01 (480-104993-3) and (480-104990-A-9).

Method 8260C: The laboratory control sample (LCS) for batch 480-317749 exceeded control limits for the following analytes: Carbon tetrachloride, Acetone and Tetrahydrofuran. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-217S-20160824-01 (480-104993-1), MW-217M-20160824-01 (480-104993-2) and MW-217D-20160824-01 (480-104993-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-104993-1**

Project Location: **IDS Wayland** RTN:

This form provides certifications for the data set for the following Laboratory Sample ID Number(s):

480-104993-1[1-3]

Matrices: [X] Groundwater/Surface Water [ ] Soil/Sediment [ ] Drinking Water [ ] Air [ ] Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A [X]	7470/7471 Hg CAM III B [ ]	Mass DEP VPH CAM IV A [ ]	8081 Pesticides CAM V B [ ]	7196 Hex Cr CAM VI B [ ]	Mass DEP APH CAM IX A [ ]
8270 SVOC CAM II B [ ]	7010 Metals CAM III C [ ]	Mass DEP EPH CAM IV B [ ]	8151 Herbicides CAM V C [ ]	8330 Explosives CAM VIII A [ ]	TO-15 VOC CAM IX B [ ]
6010 Metals CAM III A [ ]	6020 Metals CAM III D [ ]	8082 PCB CAM V A [ ]	9012 / 9014/ 4500CN Total Cyanide/PAC CAM VI A [ ]	6860 Perchlorate CAM VIII B [ ]	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	[X] Yes [ ] No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	[X] Yes [ ] No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	[X] Yes [ ] No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	[X] Yes [ ] No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	[ ] Yes [ ] No [ ] Yes [ ] No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	[X] Yes [ ] No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	[ ] Yes [ ] No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350**

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	[ ] Yes [X] No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	[X] Yes [ ] No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: Position: Project Manager

Printed Name: Becky Mason Date: 10/6/16 8:53

This form has been electronically signed and approved

Detection Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104993-1

Client Sample ID: MW-217S-20160824-01 — Lab Sample ID: 480-104993-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	68	*	50		ug/L	1		8260C	Total/NA

Client Sample ID: MW-217M-20160824-01 — Lab Sample ID: 480-104993-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.6		1.0		ug/L	1		8260C	Total/NA
1,2-Dichlorobenzene	1.5		1.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	1.3		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	8.0		1.0		ug/L	1		8260C	Total/NA
Acetone	130	*	50		ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	73		1.0		ug/L	1		8260C	Total/NA
Tert-amyl methyl ether	34		5.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-217D-20160824-01 — Lab Sample ID: 480-104993-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.0		1.0		ug/L	1		8260C	Total/NA
Acetone	140	*	50		ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-217S-20160824-01

Lab Sample ID: 480-104993-1

Date Collected: 08/24/16 10:25

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 04:19	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 04:19	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 04:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 04:19	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 04:19	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 04:19	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 04:19	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 04:19	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 04:19	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 04:19	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 04:19	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 04:19	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 04:19	1
Bromobenzene	ND		1.0		ug/L			08/26/16 04:19	1
Bromoform	ND		1.0		ug/L			08/26/16 04:19	1
Bromomethane	ND		2.0		ug/L			08/26/16 04:19	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 04:19	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 04:19	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 04:19	1
Chloroethane	ND		2.0		ug/L			08/26/16 04:19	1
Chloroform	ND		1.0		ug/L			08/26/16 04:19	1
Chloromethane	ND		2.0		ug/L			08/26/16 04:19	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 04:19	1
Dibromomethane	ND		1.0		ug/L			08/26/16 04:19	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 04:19	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 04:19	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 04:19	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 04:19	1
Trichloroethene	ND		1.0		ug/L			08/26/16 04:19	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 04:19	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 04:19	1
Benzene	ND		1.0		ug/L			08/26/16 04:19	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 04:19	1
Carbon disulfide	ND		10		ug/L			08/26/16 04:19	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 04:19	1
Ethyl ether	ND		1.0		ug/L			08/26/16 04:19	1
Acetone	**68**	*	50		ug/L			08/26/16 04:19	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 04:19	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 04:19	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 04:19	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 04:19	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 04:19	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 04:19	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 04:19	1
Toluene	ND		1.0		ug/L			08/26/16 04:19	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 04:19	1
o-Xylene	ND		1.0		ug/L			08/26/16 04:19	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 04:19	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 04:19	1

Client Sample ID: MW-217S-20160824-01

Lab Sample ID: 480-104993-1

Date Collected: 08/24/16 10:25

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/26/16 04:19	1
Styrene	ND		1.0		ug/L			08/26/16 04:19	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 04:19	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 04:19	1
1,4-Dioxane	ND		50		ug/L			08/26/16 04:19	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 04:19	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 04:19	1
2-Hexanone	ND		10		ug/L			08/26/16 04:19	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 04:19	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 04:19	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 04:19	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 04:19	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 04:19	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 04:19	1
Isopropyl ether	ND		10		ug/L			08/26/16 04:19	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 04:19	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 04:19	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 04:19	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 04:19	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 04:19	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 04:19	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 04:19	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 04:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*		*08/26/16 04:19*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/26/16 04:19*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/26/16 04:19*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/26/16 04:19*	*1*

Client Sample ID: MW-217M-20160824-01

Lab Sample ID: 480-104993-2

Date Collected: 08/24/16 10:35

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 04:42	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 04:42	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 04:42	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 04:42	1
1,1-Dichloroethane	**2.6**		1.0		ug/L			08/26/16 04:42	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 04:42	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 04:42	1
1,2-Dichlorobenzene	**1.5**		1.0		ug/L			08/26/16 04:42	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 04:42	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 04:42	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 04:42	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 04:42	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 04:42	1
Bromobenzene	ND		1.0		ug/L			08/26/16 04:42	1

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104993-1

Client Sample ID: MW-217M-20160824-01
Date Collected: 08/24/16 10:35
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104993-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			08/26/16 04:42	1
Bromomethane	ND		2.0		ug/L			08/26/16 04:42	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 04:42	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 04:42	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 04:42	1
Chloroethane	ND		2.0		ug/L			08/26/16 04:42	1
Chloroform	ND		1.0		ug/L			08/26/16 04:42	1
Chloromethane	ND		2.0		ug/L			08/26/16 04:42	1
cis-1,2-Dichloroethene	**1.3**		1.0		ug/L			08/26/16 04:42	1
Dibromomethane	ND		1.0		ug/L			08/26/16 04:42	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 04:42	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 04:42	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 04:42	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 04:42	1
Trichloroethene	**8.0**		1.0		ug/L			08/26/16 04:42	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 04:42	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 04:42	1
Benzene	ND		1.0		ug/L			08/26/16 04:42	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 04:42	1
Carbon disulfide	ND		10		ug/L			08/26/16 04:42	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 04:42	1
Ethyl ether	ND		1.0		ug/L			08/26/16 04:42	1
Acetone	**130**	*	50		ug/L			08/26/16 04:42	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 04:42	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 04:42	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 04:42	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 04:42	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 04:42	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 04:42	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 04:42	1
Toluene	ND		1.0		ug/L			08/26/16 04:42	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 04:42	1
o-Xylene	ND		1.0		ug/L			08/26/16 04:42	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 04:42	1
Methyl tert-butyl ether	**73**		1.0		ug/L			08/26/16 04:42	1
Naphthalene	ND		5.0		ug/L			08/26/16 04:42	1
Styrene	ND		1.0		ug/L			08/26/16 04:42	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 04:42	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 04:42	1
1,4-Dioxane	ND		50		ug/L			08/26/16 04:42	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 04:42	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 04:42	1
2-Hexanone	ND		10		ug/L			08/26/16 04:42	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 04:42	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 04:42	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 04:42	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 04:42	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 04:42	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 04:42	1

Client Sample ID: MW-217M-20160824-01

Lab Sample ID: 480-104993-2

Date Collected: 08/24/16 10:35

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			08/26/16 04:42	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 04:42	1
Tert-amyl methyl ether	**34**		5.0		ug/L			08/26/16 04:42	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 04:42	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 04:42	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 04:42	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 04:42	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 04:42	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 04:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*08/26/16 04:42*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/26/16 04:42*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/26/16 04:42*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/26/16 04:42*	*1*

Client Sample ID: MW-217D-20160824-01

Lab Sample ID: 480-104993-3

Date Collected: 08/24/16 10:40

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 05:06	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 05:06	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 05:06	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 05:06	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 05:06	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 05:06	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 05:06	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 05:06	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 05:06	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 05:06	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 05:06	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 05:06	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 05:06	1
Bromobenzene	ND		1.0		ug/L			08/26/16 05:06	1
Bromoform	ND		1.0		ug/L			08/26/16 05:06	1
Bromomethane	ND		2.0		ug/L			08/26/16 05:06	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 05:06	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 05:06	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 05:06	1
Chloroethane	ND		2.0		ug/L			08/26/16 05:06	1
Chloroform	ND		1.0		ug/L			08/26/16 05:06	1
Chloromethane	ND		2.0		ug/L			08/26/16 05:06	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 05:06	1
Dibromomethane	ND		1.0		ug/L			08/26/16 05:06	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 05:06	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 05:06	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 05:06	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 05:06	1

Client Sample ID: MW-217D-20160824-01

Lab Sample ID: 480-104993-3

Date Collected: 08/24/16 10:40

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**1.0**		1.0		ug/L			08/26/16 05:06	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 05:06	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 05:06	1
Benzene	ND		1.0		ug/L			08/26/16 05:06	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 05:06	1
Carbon disulfide	ND		10		ug/L			08/26/16 05:06	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 05:06	1
Ethyl ether	ND		1.0		ug/L			08/26/16 05:06	1
Acetone	**140**	*	50		ug/L			08/26/16 05:06	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 05:06	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 05:06	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 05:06	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 05:06	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 05:06	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 05:06	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 05:06	1
Toluene	ND		1.0		ug/L			08/26/16 05:06	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 05:06	1
o-Xylene	ND		1.0		ug/L			08/26/16 05:06	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 05:06	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 05:06	1
Naphthalene	ND		5.0		ug/L			08/26/16 05:06	1
Styrene	ND		1.0		ug/L			08/26/16 05:06	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 05:06	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 05:06	1
1,4-Dioxane	ND		50		ug/L			08/26/16 05:06	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 05:06	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 05:06	1
2-Hexanone	ND		10		ug/L			08/26/16 05:06	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 05:06	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 05:06	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 05:06	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 05:06	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 05:06	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 05:06	1
Isopropyl ether	ND		10		ug/L			08/26/16 05:06	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 05:06	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 05:06	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 05:06	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 05:06	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 05:06	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 05:06	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 05:06	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 05:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*08/26/16 05:06*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*08/26/16 05:06*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/26/16 05:06*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/26/16 05:06*	*1*

Surrogate Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104993-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-104993-1	MW-217S-20160824-01	119	91	99	110
480-104993-2	MW-217M-20160824-01	112	93	101	112
480-104993-3	MW-217D-20160824-01	115	90	96	112
LCS 480-317749/5	Lab Control Sample	116	93	100	113
LCSD 480-317749/26	Lab Control Sample Dup	113	94	105	114
MB 480-317749/7	Method Blank	114	91	99	110

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-317749/7
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/25/16 22:58	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/25/16 22:58	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 22:58	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/25/16 22:58	1
1,1-Dichloroethane	ND		1.0		ug/L			08/25/16 22:58	1
1,1-Dichloroethene	ND		1.0		ug/L			08/25/16 22:58	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/25/16 22:58	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
1,2-Dichloroethane	ND		1.0		ug/L			08/25/16 22:58	1
1,2-Dichloropropane	ND		1.0		ug/L			08/25/16 22:58	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/25/16 22:58	1
Bromobenzene	ND		1.0		ug/L			08/25/16 22:58	1
Bromoform	ND		1.0		ug/L			08/25/16 22:58	1
Bromomethane	ND		2.0		ug/L			08/25/16 22:58	1
Carbon tetrachloride	ND		1.0		ug/L			08/25/16 22:58	1
Chlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
Chlorodibromomethane	ND		0.50		ug/L			08/25/16 22:58	1
Chloroethane	ND		2.0		ug/L			08/25/16 22:58	1
Chloroform	ND		1.0		ug/L			08/25/16 22:58	1
Chloromethane	ND		2.0		ug/L			08/25/16 22:58	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/25/16 22:58	1
Dibromomethane	ND		1.0		ug/L			08/25/16 22:58	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/25/16 22:58	1
Methylene Chloride	ND		1.0		ug/L			08/25/16 22:58	1
Tetrachloroethene	ND		1.0		ug/L			08/25/16 22:58	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/25/16 22:58	1
Trichloroethene	ND		1.0		ug/L			08/25/16 22:58	1
Trichlorofluoromethane	ND		1.0		ug/L			08/25/16 22:58	1
Vinyl chloride	ND		1.0		ug/L			08/25/16 22:58	1
Benzene	ND		1.0		ug/L			08/25/16 22:58	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/25/16 22:58	1
Carbon disulfide	ND		10		ug/L			08/25/16 22:58	1
Chlorobromomethane	ND		1.0		ug/L			08/25/16 22:58	1
Ethyl ether	ND		1.0		ug/L			08/25/16 22:58	1
Acetone	ND		50		ug/L			08/25/16 22:58	1
Tetrahydrofuran	ND		10		ug/L			08/25/16 22:58	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/25/16 22:58	1
Hexachlorobutadiene	ND		0.40		ug/L			08/25/16 22:58	1
n-Butylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
2-Chlorotoluene	ND		1.0		ug/L			08/25/16 22:58	1
1,1-Dichloropropene	ND		1.0		ug/L			08/25/16 22:58	1
Toluene	ND		1.0		ug/L			08/25/16 22:58	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
o-Xylene	ND		1.0		ug/L			08/25/16 22:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/25/16 22:58	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-317749/7
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			08/25/16 22:58	1
Naphthalene	ND		5.0		ug/L			08/25/16 22:58	1
Styrene	ND		1.0		ug/L			08/25/16 22:58	1
4-Chlorotoluene	ND		1.0		ug/L			08/25/16 22:58	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/25/16 22:58	1
1,4-Dioxane	ND		50		ug/L			08/25/16 22:58	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
sec-Butylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
2-Hexanone	ND		10		ug/L			08/25/16 22:58	1
2-Butanone (MEK)	ND		10		ug/L			08/25/16 22:58	1
Ethylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
Isopropylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
2,2-Dichloropropane	ND		1.0		ug/L			08/25/16 22:58	1
N-Propylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/25/16 22:58	1
Isopropyl ether	ND		10		ug/L			08/25/16 22:58	1
4-Isopropyltoluene	ND		1.0		ug/L			08/25/16 22:58	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/25/16 22:58	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/25/16 22:58	1
Ethylene Dibromide	ND		1.0		ug/L			08/25/16 22:58	1
tert-Butylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
1,3-Dichloropropane	ND		1.0		ug/L			08/25/16 22:58	1
Dichlorobromomethane	ND		0.50		ug/L			08/25/16 22:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*08/25/16 22:58*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/25/16 22:58*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/25/16 22:58*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/25/16 22:58*	*1*

Lab Sample ID: LCS 480-317749/5
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.7		ug/L		103	70 - 130
1,1,1-Trichloroethane	25.0	29.0		ug/L		116	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	70 - 130
1,1,2-Trichloroethane	25.0	23.2		ug/L		93	70 - 130
1,1-Dichloroethane	25.0	26.9		ug/L		108	70 - 130
1,1-Dichloroethene	25.0	25.3		ug/L		101	70 - 130
1,2,3-Trichloropropane	25.0	24.1		ug/L		96	70 - 130
1,2-Dichlorobenzene	25.0	23.8		ug/L		95	70 - 130
1,2-Dichloroethane	25.0	28.7		ug/L		115	70 - 130
1,2-Dichloropropane	25.0	24.9		ug/L		100	70 - 130
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130
1,4-Dichlorobenzene	25.0	24.6		ug/L		98	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-317749/5
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	25.0	25.3		ug/L		101	70 - 130
Bromobenzene	25.0	23.8		ug/L		95	70 - 130
Bromoform	25.0	27.7		ug/L		111	70 - 130
Bromomethane	25.0	23.6		ug/L		94	70 - 130
Carbon tetrachloride	25.0	31.3		ug/L		125	70 - 130
Chlorobenzene	25.0	22.5		ug/L		90	70 - 130
Chlorodibromomethane	25.0	27.4		ug/L		110	70 - 130
Chloroethane	25.0	23.7		ug/L		95	70 - 130
Chloroform	25.0	26.0		ug/L		104	70 - 130
Chloromethane	25.0	22.7		ug/L		91	70 - 130
cis-1,2-Dichloroethene	25.0	26.6		ug/L		106	70 - 130
Dibromomethane	25.0	27.2		ug/L		109	70 - 130
Dichlorodifluoromethane	25.0	21.1		ug/L		84	70 - 130
Methylene Chloride	25.0	24.5		ug/L		98	70 - 130
Tetrachloroethene	25.0	22.9		ug/L		92	70 - 130
trans-1,3-Dichloropropene	25.0	24.1		ug/L		96	70 - 130
Trichloroethene	25.0	27.2		ug/L		109	70 - 130
Trichlorofluoromethane	25.0	25.0		ug/L		100	70 - 130
Vinyl chloride	25.0	22.1		ug/L		88	70 - 130
Benzene	25.0	24.6		ug/L		98	70 - 130
cis-1,3-Dichloropropene	25.0	25.7		ug/L		103	70 - 130
Carbon disulfide	25.0	24.1		ug/L		97	70 - 130
Chlorobromomethane	25.0	28.0		ug/L		112	70 - 130
Ethyl ether	25.0	25.3		ug/L		101	70 - 130
Acetone	125	180	*	ug/L		144	70 - 130
Tetrahydrofuran	50.0	72.4	*	ug/L		145	70 - 130
4-Methyl-2-pentanone (MIBK)	125	132		ug/L		105	70 - 130
Hexachlorobutadiene	25.0	23.9		ug/L		96	70 - 130
n-Butylbenzene	25.0	24.1		ug/L		97	70 - 130
1,2,4-Trimethylbenzene	25.0	24.3		ug/L		97	70 - 130
2-Chlorotoluene	25.0	23.3		ug/L		93	70 - 130
1,1-Dichloropropene	25.0	25.9		ug/L		103	70 - 130
Toluene	25.0	21.5		ug/L		86	70 - 130
1,2,4-Trichlorobenzene	25.0	24.6		ug/L		98	70 - 130
o-Xylene	25.0	22.7		ug/L		91	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	28.0		ug/L		112	70 - 130
Methyl tert-butyl ether	25.0	25.5		ug/L		102	70 - 130
Naphthalene	25.0	24.8		ug/L		99	70 - 130
Styrene	25.0	22.5		ug/L		90	70 - 130
4-Chlorotoluene	25.0	25.6		ug/L		103	70 - 130
trans-1,2-Dichloroethene	25.0	25.4		ug/L		102	70 - 130
1,4-Dioxane	500	433		ug/L		87	70 - 130
1,2,3-Trichlorobenzene	25.0	24.1		ug/L		96	70 - 130
sec-Butylbenzene	25.0	23.8		ug/L		95	70 - 130
2-Hexanone	125	134		ug/L		107	70 - 130
2-Butanone (MEK)	125	146		ug/L		117	70 - 130
Ethylbenzene	25.0	22.8		ug/L		91	70 - 130
Isopropylbenzene	25.0	23.8		ug/L		95	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-317749/5
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	25.0	25.5		ug/L		102	70 - 130
N-Propylbenzene	25.0	23.0		ug/L		92	70 - 130
Tert-butyl ethyl ether	25.0	24.4		ug/L		98	70 - 130
Isopropyl ether	25.0	27.0		ug/L		108	70 - 130
4-Isopropyltoluene	25.0	23.9		ug/L		96	70 - 130
Tert-amyl methyl ether	25.0	24.5		ug/L		98	70 - 130
1,3,5-Trimethylbenzene	25.0	24.0		ug/L		96	70 - 130
m-Xylene & p-Xylene	25.0	22.6		ug/L		90	70 - 130
Ethylene Dibromide	25.0	24.5		ug/L		98	70 - 130
tert-Butylbenzene	25.0	24.1		ug/L		97	70 - 130
1,3-Dichloropropane	25.0	21.7		ug/L		87	70 - 130
Dichlorobromomethane	25.0	28.5		ug/L		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*113*		*70 - 130*

Lab Sample ID: LCSD 480-317749/26
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	27.8		ug/L		111	70 - 130	8	20
1,1,1-Trichloroethane	25.0	30.4		ug/L		121	70 - 130	4	20
1,1,2,2-Tetrachloroethane	25.0	22.1		ug/L		88	70 - 130	5	20
1,1,2-Trichloroethane	25.0	24.8		ug/L		99	70 - 130	7	20
1,1-Dichloroethane	25.0	28.3		ug/L		113	70 - 130	5	20
1,1-Dichloroethene	25.0	27.3		ug/L		109	70 - 130	8	20
1,2,3-Trichloropropane	25.0	24.2		ug/L		97	70 - 130	1	20
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	70 - 130	4	20
1,2-Dichloroethane	25.0	28.1		ug/L		113	70 - 130	2	20
1,2-Dichloropropane	25.0	26.8		ug/L		107	70 - 130	8	20
1,3-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130	3	20
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130	3	20
2-Chloroethyl vinyl ether	25.0	24.1		ug/L		97	70 - 130	5	20
Bromobenzene	25.0	24.7		ug/L		99	70 - 130	4	20
Bromoform	25.0	26.8		ug/L		107	70 - 130	3	20
Bromomethane	25.0	23.7		ug/L		95	70 - 130	0	20
Carbon tetrachloride	25.0	32.7	*	ug/L		131	70 - 130	5	20
Chlorobenzene	25.0	25.0		ug/L		100	70 - 130	10	20
Chlorodibromomethane	25.0	29.2		ug/L		117	70 - 130	6	20
Chloroethane	25.0	25.0		ug/L		100	70 - 130	5	20
Chloroform	25.0	27.0		ug/L		108	70 - 130	4	20
Chloromethane	25.0	23.9		ug/L		96	70 - 130	5	20
cis-1,2-Dichloroethene	25.0	27.5		ug/L		110	70 - 130	3	20
Dibromomethane	25.0	28.0		ug/L		112	70 - 130	3	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-317749/26
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane	25.0	22.5		ug/L		90	70 - 130	6	20
Methylene Chloride	25.0	24.6		ug/L		98	70 - 130	0	20
Tetrachloroethene	25.0	25.5		ug/L		102	70 - 130	11	20
trans-1,3-Dichloropropene	25.0	25.1		ug/L		100	70 - 130	4	20
Trichloroethene	25.0	27.9		ug/L		112	70 - 130	3	20
Trichlorofluoromethane	25.0	26.3		ug/L		105	70 - 130	5	20
Vinyl chloride	25.0	24.1		ug/L		97	70 - 130	9	20
Benzene	25.0	25.7		ug/L		103	70 - 130	4	20
cis-1,3-Dichloropropene	25.0	26.4		ug/L		106	70 - 130	3	20
Carbon disulfide	25.0	26.0		ug/L		104	70 - 130	8	20
Chlorobromomethane	25.0	27.3		ug/L		109	70 - 130	2	20
Ethyl ether	25.0	24.7		ug/L		99	70 - 130	3	20
Acetone	125	171	*	ug/L		137	70 - 130	5	20
Tetrahydrofuran	50.0	70.2	*	ug/L		140	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	125	133		ug/L		106	70 - 130	1	20
Hexachlorobutadiene	25.0	25.6		ug/L		102	70 - 130	7	20
n-Butylbenzene	25.0	25.9		ug/L		104	70 - 130	7	20
1,2,4-Trimethylbenzene	25.0	25.3		ug/L		101	70 - 130	4	20
2-Chlorotoluene	25.0	24.2		ug/L		97	70 - 130	4	20
1,1-Dichloropropene	25.0	27.8		ug/L		111	70 - 130	7	20
Toluene	25.0	24.0		ug/L		96	70 - 130	11	20
1,2,4-Trichlorobenzene	25.0	24.1		ug/L		96	70 - 130	2	20
o-Xylene	25.0	24.1		ug/L		96	70 - 130	6	20
1,2-Dibromo-3-Chloropropane	25.0	26.2		ug/L		105	70 - 130	7	20
Methyl tert-butyl ether	25.0	25.0		ug/L		100	70 - 130	2	20
Naphthalene	25.0	25.0		ug/L		100	70 - 130	1	20
Styrene	25.0	24.2		ug/L		97	70 - 130	7	20
4-Chlorotoluene	25.0	26.2		ug/L		105	70 - 130	2	20
trans-1,2-Dichloroethene	25.0	26.6		ug/L		106	70 - 130	5	20
1,4-Dioxane	500	392		ug/L		78	70 - 130	10	20
1,2,3-Trichlorobenzene	25.0	24.0		ug/L		96	70 - 130	1	20
sec-Butylbenzene	25.0	25.5		ug/L		102	70 - 130	7	20
2-Hexanone	125	133		ug/L		106	70 - 130	1	20
2-Butanone (MEK)	125	138		ug/L		111	70 - 130	6	20
Ethylbenzene	25.0	24.7		ug/L		99	70 - 130	8	20
Isopropylbenzene	25.0	24.8		ug/L		99	70 - 130	4	20
2,2-Dichloropropane	25.0	26.5		ug/L		106	70 - 130	4	20
N-Propylbenzene	25.0	24.0		ug/L		96	70 - 130	4	20
Tert-butyl ethyl ether	25.0	25.1		ug/L		100	70 - 130	3	20
Isopropyl ether	25.0	27.3		ug/L		109	70 - 130	1	20
4-Isopropyltoluene	25.0	25.5		ug/L		102	70 - 130	6	20
Tert-amyl methyl ether	25.0	24.2		ug/L		97	70 - 130	1	20
1,3,5-Trimethylbenzene	25.0	25.2		ug/L		101	70 - 130	5	20
m-Xylene & p-Xylene	25.0	24.5		ug/L		98	70 - 130	8	20
Ethylene Dibromide	25.0	24.8		ug/L		99	70 - 130	1	20
tert-Butylbenzene	25.0	24.9		ug/L		100	70 - 130	3	20
1,3-Dichloropropane	25.0	23.1		ug/L		92	70 - 130	6	20
Dichlorobromomethane	25.0	29.0		ug/L		116	70 - 130	2	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-317749/26
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	113		70 - 130
Toluene-d8 (Surr)	94		70 - 130
4-Bromofluorobenzene (Surr)	105		70 - 130
Dibromofluoromethane (Surr)	114		70 - 130

QC Association Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104993-1

GC/MS VOA

Analysis Batch: 317749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-104993-1	MW-217S-20160824-01	Total/NA	Water	8260C	
480-104993-2	MW-217M-20160824-01	Total/NA	Water	8260C	
480-104993-3	MW-217D-20160824-01	Total/NA	Water	8260C	
MB 480-317749/7	Method Blank	Total/NA	Water	8260C	
LCS 480-317749/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-317749/26	Lab Control Sample Dup	Total/NA	Water	8260C	

Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104993-1

Client Sample ID: MW-217S-20160824-01 — Lab Sample ID: 480-104993-1

Date Collected: 08/24/16 10:25 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317749	08/26/16 04:19	GTG	TAL BUF

Client Sample ID: MW-217M-20160824-01 — Lab Sample ID: 480-104993-2

Date Collected: 08/24/16 10:35 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317749	08/26/16 04:42	GTG	TAL BUF

Client Sample ID: MW-217D-20160824-01 — Lab Sample ID: 480-104993-3

Date Collected: 08/24/16 10:40 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317749	08/26/16 05:06	GTG	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104993-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-17
California	State Program	9	1169CA	09-30-17
Connecticut	State Program	1	PH-0568	09-30-18
Florida	NELAP	4	E87672	06-30-17
Georgia	State Program	4	N/A	03-31-17
Georgia	State Program	4	956	03-31-17
Illinois	NELAP	5	200003	09-30-16 *
Iowa	State Program	7	374	03-01-17
Kansas	NELAP	7	E-10187	10-31-16
Kentucky (DW)	State Program	4	90029	12-31-16
Kentucky (UST)	State Program	4	30	03-31-17
Kentucky (WW)	State Program	4	90029	12-31-16
Louisiana	NELAP	6	02031	06-30-17
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-17
Massachusetts	State Program	1	M-NY044	06-30-17
Michigan	State Program	5	9937	03-31-17
Minnesota	NELAP	5	036-999-337	12-31-16
New Hampshire	NELAP Primary AB	1	2973	09-11-17
New Hampshire	NELAP Secondary AB	1	2337	11-17-16
New Jersey	NELAP	2	NY455	06-30-17
New York	NELAP	2	10026	03-31-17
North Dakota	State Program	8	R-176	03-31-17
Oklahoma	State Program	6	9421	08-31-17
Oregon	NELAP	10	NY200003	06-09-17
Pennsylvania	NELAP	3	68-00281	07-31-17
Rhode Island	State Program	1	LAO00328	12-30-16
Tennessee	State Program	4	TN02970	03-31-17
Texas	NELAP	6	T104704412-15-6	07-31-17
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-17
Washington	State Program	10	C784	02-10-17
West Virginia DEP	State Program	3	252	09-30-16 *
Wisconsin	State Program	5	998310390	08-31-17

* Certification renewal pending - certification considered valid.

Method Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104993-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104993-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-104993-1	MW-217S-20160824-01	Water	08/24/16 10:25	08/25/16 02:00
480-104993-2	MW-217M-20160824-01	Water	08/24/16 10:35	08/25/16 02:00
480-104993-3	MW-217D-20160824-01	Water	08/24/16 10:40	08/25/16 02:00

Login Sample Receipt Checklist

Client: ERM-Northeast

Job Number: 480-104993-1

Login Number: 104993

List Source: TestAmerica Buffalo

List Number: 1

Creator: Conway, Curtis R

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	erm
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

360325-Boston

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Ellie LeBlanc	Lab PM: Mason, Becky C	Carrier Tracking No(s):	COC No: 480-86051-21030.1
Client Contact: Lyndsey Colburn	Phone: 2406821855	E-Mail: becky.mason@testamericainc.com		Page: Page 1 of 1
Company: ERM-Northeast				Job #: 0321744
Address: One Beacon Steet 5th Floor	Due Date Requested: Standard TAT			
City: Boston	TAT Requested (days): 7 days			
State, Zip: MA, 02108				
Phone: 617-646-7800	PO #: Purchase Order not required			
Email: lyndsey.colburn@erm.com, elise.leblanc@erm.com	WO #: 0321744			
Project Name: IDS Wayland	Project #: 48007117			
Site: IDS Wayland	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260MCP - VOC 8010 list	522_MOD - 1,4 Dioxane 522	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A		
MW-217S-20160824-01	8/24/16	1025	G	Water			3		3	
MW-217M-20160824-01	↓	1035	↓	Water			3		3	
MW-217D-20160824-01	↓	1040	↓	Water			3		3	
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

480-104993 COC

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: Date: Time: Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	8/24/16 1445	ERM	[signature]	8/24/16 14:45	TA
[signature]	8/24/16 15:15	TA	[signature]	8/25/16 0200	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 3.0 #1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-104995-1
Client Project/Site: IDS Wayland
Revision: 1

For:
ERM-Northeast
One Beacon Steet
5th Floor
Boston, Massachusetts 02108

Attn: Lyndsey Colburn

Authorized for release by:
10/6/2016 9:20:04 AM

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-104995-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-104995-1

Revised report: Per client request updated 8260 VOC compound list. We are now reporting full MCP list. The MCP cert page has also been updated, and case narrative adjusted due to changed in compound list.

Receipt
The samples were received on 8/25/2016 2:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

GC/MS VOA
Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-1017D-20160824-01 (480-104995-15). Elevated reporting limits (RLs) are provided.

Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples was received preserved with hydrochloric acid: MW-1005-20160824-01 (480-104995-5), MW-1006-20160824-01 (480-104995-6), MW-1008-20160824-01 (480-104995-7), MW-1009-20160824-01 (480-104995-8), MW-1010M-20160824-01 (480-104995-9), MW-1010D-20160824-01 (480-104995-10), MW-1013-20160824-01 (480-104995-11), MW-1014-20160824-01 (480-104995-12), MW-1015D-20160824-01 (480-104995-13), MW-1016D-20160824-01 (480-104995-14), MW-1017D-20160824-01 (480-104995-15), MW-1019B-20160824-01 (480-104995-16), MW-1022-20160824-01 (480-104995-17), MW-1023-20160824-01 (480-104995-18), MW-1024D-20160824-01 (480-104995-19), MW-1025M-20160824-01 (480-104995-20), MW-1025D-20160824-01 (480-104995-21), MW-1027-20160824-01 (480-104995-22) and MW-1028-20160824-01 (480-104995-23). The requested target analyte list includes 2-chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260C: The continuing calibration verification (CCV) for Dichlorodifluoromethane and Chloromethane associated with batch 480-317754 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples were affected : MW-1005-20160824-01 (480-104995-5), MW-1006-20160824-01 (480-104995-6), MW-1008-20160824-01 (480-104995-7), MW-1009-20160824-01 (480-104995-8), MW-1010M-20160824-01 (480-104995-9), MW-1010D-20160824-01 (480-104995-10), MW-1013-20160824-01 (480-104995-11), MW-1014-20160824-01 (480-104995-12), MW-1015D-20160824-01 (480-104995-13), MW-1016D-20160824-01 (480-104995-14), MW-1017D-20160824-01 (480-104995-15), MW-1019B-20160824-01 (480-104995-16), MW-1022-20160824-01 (480-104995-17), MW-1023-20160824-01 (480-104995-18), MW-1024D-20160824-01 (480-104995-19), MW-1025M-20160824-01 (480-104995-20), MW-1025D-20160824-01 (480-104995-21), MW-1027-20160824-01 (480-104995-22) and MW-1028-20160824-01 (480-104995-23).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-317754 exceeded control limits for the following analytes: Dichlorodifluoromethane, Chloromethane and Vinyl chloride. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-1005-20160824-01 (480-104995-5), MW-1006-20160824-01 (480-104995-6), MW-1008-20160824-01 (480-104995-7), MW-1009-20160824-01 (480-104995-8), MW-1010M-20160824-01 (480-104995-9), MW-1010D-20160824-01 (480-104995-10), MW-1013-20160824-01 (480-104995-11), MW-1014-20160824-01 (480-104995-12), MW-1015D-20160824-01 (480-104995-13), MW-1016D-20160824-01 (480-104995-14), MW-1017D-20160824-01 (480-104995-15), MW-1019B-20160824-01 (480-104995-16), MW-1022-20160824-01 (480-104995-17), MW-1023-20160824-01 (480-104995-18), MW-1024D-20160824-01 (480-104995-19), MW-1025M-20160824-01 (480-104995-20), MW-1025D-20160824-01 (480-104995-21), MW-1027-20160824-01 (480-104995-22) and MW-1028-20160824-01 (480-104995-23).

Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MW-1001M-20160824-01 (480-104995-1), MW-1002B-20160824-01 (480-104995-2), MW-1003-20160824-01 (480-104995-3) and (480-104990-A-9). The requested target analyte list includes 2-chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260C: The continuing calibration verification (CCV) for Carbon tetrachloride associated with batch 480-317749 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference.The following samples were affected : MW-1001M-20160824-01 (480-104995-1), MW-1002B-20160824-01 (480-104995-2), MW-1003-20160824-01 (480-104995-3) and (480-104990-A-9).

Job ID: 480-104995-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method 8260C: The laboratory control sample duplicate (LCSD) for batch 480-317749 exceeded control limits for the following analytes: Carbon tetrachloride. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-1001M-20160824-01 (480-104995-1), MW-1002B-20160824-01 (480-104995-2), MW-1003-20160824-01 (480-104995-3) and (480-104990-A-9).

Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MW-1004-20160824-01 (480-104995-4), MW-1030-20160824-01 (480-104995-24), MW-1031-20160824-01 (480-104995-25), MW-1033-20160824-01 (480-104995-26), MW-1034-20160824-01 (480-104995-27), DUP-001-20160824 (480-104995-28), DUP-002-20160824 (480-104995-29), DUP-003-20160824 (480-104995-30), DUP-004-20160824 (480-104995-31) and TB001-20160824-01 (480-104995-32). The requested target analyte list includes 2-chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260C: The continuing calibration verification (CCV) for 1,1,1-Trichloroethane, Carbon tetrachloride, and Dichlorodifluoromethane associated with batch 480-317839 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following samples were affected : MW-1004-20160824-01 (480-104995-4), MW-1030-20160824-01 (480-104995-24), MW-1031-20160824-01 (480-104995-25), MW-1033-20160824-01 (480-104995-26), MW-1034-20160824-01 (480-104995-27), DUP-001-20160824 (480-104995-28), DUP-002-20160824 (480-104995-29), DUP-003-20160824 (480-104995-30), DUP-004-20160824 (480-104995-31) and TB001-20160824-01 (480-104995-32).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-317839 exceeded control limits for the following analytes: Carbon tetrachloride. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-1004-20160824-01 (480-104995-4), MW-1030-20160824-01 (480-104995-24), MW-1031-20160824-01 (480-104995-25), MW-1033-20160824-01 (480-104995-26), MW-1034-20160824-01 (480-104995-27), DUP-001-20160824 (480-104995-28), DUP-002-20160824 (480-104995-29), DUP-003-20160824 (480-104995-30), DUP-004-20160824 (480-104995-31) and TB001-20160824-01 (480-104995-32).

Method 8260C: The laboratory control sample (LCS) for batch 480-317749 exceeded control limits for the following analytes: Carbon tetrachloride, Acetone and Tetrahydrofuran. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-1001M-20160824-01 (480-104995-1), MW-1002B-20160824-01 (480-104995-2) and MW-1003-20160824-01 (480-104995-3).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-317754 recovered above the upper control limit for Carbon Disulfide. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW-1005-20160824-01 (480-104995-5), MW-1006-20160824-01 (480-104995-6), MW-1008-20160824-01 (480-104995-7), MW-1009-20160824-01 (480-104995-8), MW-1010M-20160824-01 (480-104995-9), MW-1010D-20160824-01 (480-104995-10), MW-1013-20160824-01 (480-104995-11), MW-1014-20160824-01 (480-104995-12), MW-1015D-20160824-01 (480-104995-13), MW-1016D-20160824-01 (480-104995-14), MW-1017D-20160824-01 (480-104995-15), MW-1019B-20160824-01 (480-104995-16), MW-1022-20160824-01 (480-104995-17), MW-1023-20160824-01 (480-104995-18), MW-1024D-20160824-01 (480-104995-19), MW-1025M-20160824-01 (480-104995-20), MW-1025D-20160824-01 (480-104995-21), MW-1027-20160824-01 (480-104995-22) and MW-1028-20160824-01 (480-104995-23).

Method 8260C: The laboratory control sample (LCS) for batch 480-317754 exceeded control limits for the following analyte: Carbon Disulfide. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-1005-20160824-01 (480-104995-5), MW-1006-20160824-01 (480-104995-6), MW-1008-20160824-01 (480-104995-7), MW-1009-20160824-01 (480-104995-8), MW-1010M-20160824-01 (480-104995-9), MW-1010D-20160824-01 (480-104995-10), MW-1013-20160824-01 (480-104995-11), MW-1014-20160824-01 (480-104995-12), MW-1015D-20160824-01 (480-104995-13), MW-1016D-20160824-01 (480-104995-14), MW-1017D-20160824-01 (480-104995-15), MW-1019B-20160824-01 (480-104995-16), MW-1022-20160824-01 (480-104995-17), MW-1023-20160824-01 (480-104995-18), MW-1024D-20160824-01 (480-104995-19), MW-1025M-20160824-01 (480-104995-20), MW-1025D-20160824-01 (480-104995-21), MW-1027-20160824-01 (480-104995-22) and MW-1028-20160824-01 (480-104995-23).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-317839 recovered above the upper control limit for Acetone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The

Job ID: 480-104995-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

following samples are impacted: MW-1004-20160824-01 (480-104995-4), MW-1030-20160824-01 (480-104995-24), MW-1031-20160824-01 (480-104995-25), MW-1033-20160824-01 (480-104995-26), DUP-001-20160824 (480-104995-28), DUP-002-20160824 (480-104995-29), DUP-003-20160824 (480-104995-30) and TB001-20160824-01 (480-104995-32).

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 480-317839 was outside the method criteria for the following analyte: Acetone. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated. The following samples are impacted: MW-1034-20160824-01 (480-104995-27) and DUP-004-20160824 (480-104995-31).

Method 8260C: The laboratory control sample duplicate (LCSD) for batch 480-317839 exceeded control limits for the following analytes: Acetone and Tetrahydrofuran. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-1004-20160824-01 (480-104995-4), MW-1030-20160824-01 (480-104995-24), MW-1031-20160824-01 (480-104995-25), MW-1033-20160824-01 (480-104995-26), MW-1034-20160824-01 (480-104995-27), DUP-001-20160824 (480-104995-28), DUP-002-20160824 (480-104995-29), DUP-003-20160824 (480-104995-30), DUP-004-20160824 (480-104995-31) and TB001-20160824-01 (480-104995-32).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-104995-1**

Project Location: **IDS Wayland** RTN:

This form provides certifications for the data set for the following Laboratory Sample ID Number(s):

480-104995-1[1-32]

Matrices: ☒ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ☒	7470/7471 Hg CAM III B ☐	Mass DEP VPH CAM IV A ☐	8081 Pesticides CAM V B ☐	7196 Hex Cr CAM VI B ☐	Mass DEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	Mass DEP EPH CAM IV B ☐	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐	TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9012 / 9014/ 4500CN Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII B ☐	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	☒ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☒ Yes ☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☒ Yes ☐ No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ No ☐ Yes ☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☒ Yes ☐ No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ☐ No[1]

Data User Note: ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350***

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes ☒ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	☒ Yes ☐ No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: Position: Project Manager

Printed Name: Becky Mason Date: 10/6/16 9:19

This form has been electronically signed and approved

Detection Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1001M-20160824-01 — Lab Sample ID: 480-104995-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	16		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	7.0		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1002B-20160824-01 — Lab Sample ID: 480-104995-2

No Detections.

Client Sample ID: MW-1003-20160824-01 — Lab Sample ID: 480-104995-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.9		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	8.0		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1004-20160824-01 — Lab Sample ID: 480-104995-4

No Detections.

Client Sample ID: MW-1005-20160824-01 — Lab Sample ID: 480-104995-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5.5		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	6.5		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1006-20160824-01 — Lab Sample ID: 480-104995-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.5		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1008-20160824-01 — Lab Sample ID: 480-104995-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.3		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1009-20160824-01 — Lab Sample ID: 480-104995-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichlorofluoromethane	22		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1010M-20160824-01 — Lab Sample ID: 480-104995-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	7.7		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1010D-20160824-01 — Lab Sample ID: 480-104995-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.4		1.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	38		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	12		1.0		ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1013-20160824-01 — Lab Sample ID: 480-104995-11

No Detections.

Client Sample ID: MW-1014-20160824-01 — Lab Sample ID: 480-104995-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5.7		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	61		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1015D-20160824-01 — Lab Sample ID: 480-104995-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.6		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	10		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1016D-20160824-01 — Lab Sample ID: 480-104995-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	35		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1017D-20160824-01 — Lab Sample ID: 480-104995-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	68		2.0		ug/L	2		8260C	Total/NA
Trichloroethene	38		2.0		ug/L	2		8260C	Total/NA

Client Sample ID: MW-1019B-20160824-01 — Lab Sample ID: 480-104995-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.4		1.0		ug/L	1		8260C	Total/NA
Acetone	200		50		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1022-20160824-01 — Lab Sample ID: 480-104995-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.1		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1023-20160824-01 — Lab Sample ID: 480-104995-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	42		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	2.8		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1024D-20160824-01 — Lab Sample ID: 480-104995-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	12		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	1.1		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1025M-20160824-01 — Lab Sample ID: 480-104995-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.6		1.0		ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1025M-20160824-01 (Continued) — Lab Sample ID: 480-104995-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	4.5		1.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	48		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	21		1.0		ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	5.2		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1025D-20160824-01 — Lab Sample ID: 480-104995-21

No Detections.

Client Sample ID: MW-1027-20160824-01 — Lab Sample ID: 480-104995-22

No Detections.

Client Sample ID: MW-1028-20160824-01 — Lab Sample ID: 480-104995-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	5.6		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1030-20160824-01 — Lab Sample ID: 480-104995-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	4.0		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1031-20160824-01 — Lab Sample ID: 480-104995-25

No Detections.

Client Sample ID: MW-1033-20160824-01 — Lab Sample ID: 480-104995-26

No Detections.

Client Sample ID: MW-1034-20160824-01 — Lab Sample ID: 480-104995-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	14		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	46		1.0		ug/L	1		8260C	Total/NA
Acetone	61	*	50		ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	1.2		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: DUP-001-20160824 — Lab Sample ID: 480-104995-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	7.0		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	8.6		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: DUP-002-20160824 — Lab Sample ID: 480-104995-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.2		1.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	43		1.0		ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: DUP-003-20160824 — Lab Sample ID: 480-104995-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.8		1.0		ug/L	1		8260C	Total/NA
1,1-Dichloroethene	5.7		1.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	53		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	23		1.0		ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	6.1		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: DUP-004-20160824 — Lab Sample ID: 480-104995-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	14		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	46		1.0		ug/L	1		8260C	Total/NA
Acetone	64	*	50		ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	1.3		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: TB001-20160824-01 — Lab Sample ID: 480-104995-32

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-1001M-20160824-01
Date Collected: 08/24/16 08:55
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 05:30	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 05:30	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 05:30	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 05:30	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 05:30	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 05:30	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 05:30	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 05:30	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 05:30	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 05:30	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 05:30	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 05:30	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 05:30	1
Bromobenzene	ND		1.0		ug/L			08/26/16 05:30	1
Bromoform	ND		1.0		ug/L			08/26/16 05:30	1
Bromomethane	ND		2.0		ug/L			08/26/16 05:30	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 05:30	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 05:30	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 05:30	1
Chloroethane	ND		2.0		ug/L			08/26/16 05:30	1
Chloroform	ND		1.0		ug/L			08/26/16 05:30	1
Chloromethane	ND		2.0		ug/L			08/26/16 05:30	1
cis-1,2-Dichloroethene	**16**		1.0		ug/L			08/26/16 05:30	1
Dibromomethane	ND		1.0		ug/L			08/26/16 05:30	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 05:30	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 05:30	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 05:30	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 05:30	1
Trichloroethene	**7.0**		1.0		ug/L			08/26/16 05:30	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 05:30	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 05:30	1
Benzene	ND		1.0		ug/L			08/26/16 05:30	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 05:30	1
Carbon disulfide	ND		10		ug/L			08/26/16 05:30	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 05:30	1
Ethyl ether	ND		1.0		ug/L			08/26/16 05:30	1
Acetone	ND	*	50		ug/L			08/26/16 05:30	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 05:30	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 05:30	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 05:30	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 05:30	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 05:30	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 05:30	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 05:30	1
Toluene	ND		1.0		ug/L			08/26/16 05:30	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 05:30	1
o-Xylene	ND		1.0		ug/L			08/26/16 05:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 05:30	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 05:30	1

Client Sample ID: MW-1001M-20160824-01

Lab Sample ID: 480-104995-1

Date Collected: 08/24/16 08:55

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/26/16 05:30	1
Styrene	ND		1.0		ug/L			08/26/16 05:30	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 05:30	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 05:30	1
1,4-Dioxane	ND		50		ug/L			08/26/16 05:30	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 05:30	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 05:30	1
2-Hexanone	ND		10		ug/L			08/26/16 05:30	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 05:30	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 05:30	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 05:30	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 05:30	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 05:30	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 05:30	1
Isopropyl ether	ND		10		ug/L			08/26/16 05:30	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 05:30	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 05:30	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 05:30	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 05:30	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 05:30	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 05:30	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 05:30	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 05:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*08/26/16 05:30*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/26/16 05:30*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/26/16 05:30*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*08/26/16 05:30*	*1*

Client Sample ID: MW-1002B-20160824-01

Lab Sample ID: 480-104995-2

Date Collected: 08/24/16 09:30

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 05:54	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 05:54	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 05:54	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 05:54	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 05:54	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 05:54	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 05:54	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 05:54	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 05:54	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 05:54	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 05:54	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 05:54	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 05:54	1
Bromobenzene	ND		1.0		ug/L			08/26/16 05:54	1

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1002B-20160824-01
Date Collected: 08/24/16 09:30
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			08/26/16 05:54	1
Bromomethane	ND		2.0		ug/L			08/26/16 05:54	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 05:54	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 05:54	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 05:54	1
Chloroethane	ND		2.0		ug/L			08/26/16 05:54	1
Chloroform	ND		1.0		ug/L			08/26/16 05:54	1
Chloromethane	ND		2.0		ug/L			08/26/16 05:54	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 05:54	1
Dibromomethane	ND		1.0		ug/L			08/26/16 05:54	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 05:54	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 05:54	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 05:54	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 05:54	1
Trichloroethene	ND		1.0		ug/L			08/26/16 05:54	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 05:54	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 05:54	1
Benzene	ND		1.0		ug/L			08/26/16 05:54	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 05:54	1
Carbon disulfide	ND		10		ug/L			08/26/16 05:54	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 05:54	1
Ethyl ether	ND		1.0		ug/L			08/26/16 05:54	1
Acetone	ND	*	50		ug/L			08/26/16 05:54	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 05:54	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 05:54	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 05:54	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 05:54	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 05:54	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 05:54	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 05:54	1
Toluene	ND		1.0		ug/L			08/26/16 05:54	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 05:54	1
o-Xylene	ND		1.0		ug/L			08/26/16 05:54	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 05:54	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 05:54	1
Naphthalene	ND		5.0		ug/L			08/26/16 05:54	1
Styrene	ND		1.0		ug/L			08/26/16 05:54	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 05:54	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 05:54	1
1,4-Dioxane	ND		50		ug/L			08/26/16 05:54	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 05:54	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 05:54	1
2-Hexanone	ND		10		ug/L			08/26/16 05:54	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 05:54	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 05:54	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 05:54	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 05:54	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 05:54	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 05:54	1

Client Sample ID: MW-1002B-20160824-01

Lab Sample ID: 480-104995-2

Date Collected: 08/24/16 09:30
Matrix: Water
Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			08/26/16 05:54	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 05:54	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 05:54	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 05:54	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 05:54	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 05:54	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 05:54	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 05:54	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 05:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 130*		*08/26/16 05:54*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/26/16 05:54*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/26/16 05:54*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*08/26/16 05:54*	*1*

Client Sample ID: MW-1003-20160824-01

Lab Sample ID: 480-104995-3

Date Collected: 08/24/16 10:05
Matrix: Water
Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 06:18	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 06:18	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 06:18	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 06:18	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 06:18	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 06:18	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 06:18	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 06:18	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 06:18	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 06:18	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 06:18	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 06:18	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 06:18	1
Bromobenzene	ND		1.0		ug/L			08/26/16 06:18	1
Bromoform	ND		1.0		ug/L			08/26/16 06:18	1
Bromomethane	ND		2.0		ug/L			08/26/16 06:18	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 06:18	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 06:18	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 06:18	1
Chloroethane	ND		2.0		ug/L			08/26/16 06:18	1
Chloroform	ND		1.0		ug/L			08/26/16 06:18	1
Chloromethane	ND		2.0		ug/L			08/26/16 06:18	1
cis-1,2-Dichloroethene	**3.9**		1.0		ug/L			08/26/16 06:18	1
Dibromomethane	ND		1.0		ug/L			08/26/16 06:18	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 06:18	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 06:18	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 06:18	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 06:18	1

Client Sample ID: MW-1003-20160824-01

Lab Sample ID: 480-104995-3

Date Collected: 08/24/16 10:05

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**8.0**		1.0		ug/L			08/26/16 06:18	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 06:18	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 06:18	1
Benzene	ND		1.0		ug/L			08/26/16 06:18	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 06:18	1
Carbon disulfide	ND		10		ug/L			08/26/16 06:18	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 06:18	1
Ethyl ether	ND		1.0		ug/L			08/26/16 06:18	1
Acetone	ND	*	50		ug/L			08/26/16 06:18	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 06:18	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 06:18	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 06:18	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 06:18	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 06:18	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 06:18	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 06:18	1
Toluene	ND		1.0		ug/L			08/26/16 06:18	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 06:18	1
o-Xylene	ND		1.0		ug/L			08/26/16 06:18	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 06:18	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 06:18	1
Naphthalene	ND		5.0		ug/L			08/26/16 06:18	1
Styrene	ND		1.0		ug/L			08/26/16 06:18	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 06:18	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 06:18	1
1,4-Dioxane	ND		50		ug/L			08/26/16 06:18	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 06:18	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 06:18	1
2-Hexanone	ND		10		ug/L			08/26/16 06:18	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 06:18	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 06:18	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 06:18	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 06:18	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 06:18	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 06:18	1
Isopropyl ether	ND		10		ug/L			08/26/16 06:18	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 06:18	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 06:18	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 06:18	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 06:18	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 06:18	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 06:18	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 06:18	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 06:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*		*08/26/16 06:18*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/26/16 06:18*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/26/16 06:18*	*1*
Dibromofluoromethane (Surr)	*116*		*70 - 130*		*08/26/16 06:18*	*1*

Client Sample ID: MW-1004-20160824-01

Lab Sample ID: 480-104995-4

Date Collected: 08/24/16 10:30

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 19:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 19:23	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 19:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 19:23	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 19:23	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 19:23	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 19:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 19:23	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 19:23	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 19:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 19:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 19:23	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 19:23	1
Bromobenzene	ND		1.0		ug/L			08/26/16 19:23	1
Bromoform	ND		1.0		ug/L			08/26/16 19:23	1
Bromomethane	ND		2.0		ug/L			08/26/16 19:23	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 19:23	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 19:23	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 19:23	1
Chloroethane	ND		2.0		ug/L			08/26/16 19:23	1
Chloroform	ND		1.0		ug/L			08/26/16 19:23	1
Chloromethane	ND		2.0		ug/L			08/26/16 19:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 19:23	1
Dibromomethane	ND		1.0		ug/L			08/26/16 19:23	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 19:23	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 19:23	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 19:23	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 19:23	1
Trichloroethene	ND		1.0		ug/L			08/26/16 19:23	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 19:23	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 19:23	1
Benzene	ND		1.0		ug/L			08/26/16 19:23	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 19:23	1
Carbon disulfide	ND		10		ug/L			08/26/16 19:23	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 19:23	1
Ethyl ether	ND		1.0		ug/L			08/26/16 19:23	1
Acetone	ND	*	50		ug/L			08/26/16 19:23	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 19:23	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 19:23	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 19:23	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 19:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 19:23	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 19:23	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 19:23	1
Toluene	ND		1.0		ug/L			08/26/16 19:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 19:23	1
o-Xylene	ND		1.0		ug/L			08/26/16 19:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 19:23	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 19:23	1

Client Sample ID: MW-1004-20160824-01

Lab Sample ID: 480-104995-4

Date Collected: 08/24/16 10:30

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/26/16 19:23	1
Styrene	ND		1.0		ug/L			08/26/16 19:23	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 19:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 19:23	1
1,4-Dioxane	ND	*	50		ug/L			08/26/16 19:23	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 19:23	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 19:23	1
2-Hexanone	ND		10		ug/L			08/26/16 19:23	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 19:23	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 19:23	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 19:23	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 19:23	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 19:23	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 19:23	1
Isopropyl ether	ND		10		ug/L			08/26/16 19:23	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 19:23	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 19:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 19:23	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 19:23	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 19:23	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 19:23	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 19:23	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*08/26/16 19:23*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/26/16 19:23*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/26/16 19:23*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*		*08/26/16 19:23*	*1*

Client Sample ID: MW-1005-20160824-01

Lab Sample ID: 480-104995-5

Date Collected: 08/24/16 10:55

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 00:09	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 00:09	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 00:09	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 00:09	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 00:09	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 00:09	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 00:09	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 00:09	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 00:09	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 00:09	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 00:09	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 00:09	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 00:09	1
Bromobenzene	ND		1.0		ug/L			08/26/16 00:09	1

Client Sample ID: MW-1005-20160824-01
Date Collected: 08/24/16 10:55
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			08/26/16 00:09	1
Bromomethane	ND		2.0		ug/L			08/26/16 00:09	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 00:09	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 00:09	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 00:09	1
Chloroethane	ND		2.0		ug/L			08/26/16 00:09	1
Chloroform	ND		1.0		ug/L			08/26/16 00:09	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 00:09	1
cis-1,2-Dichloroethene	**5.5**		1.0		ug/L			08/26/16 00:09	1
Dibromomethane	ND		1.0		ug/L			08/26/16 00:09	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 00:09	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 00:09	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 00:09	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 00:09	1
Trichloroethene	**6.5**		1.0		ug/L			08/26/16 00:09	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 00:09	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 00:09	1
Benzene	ND		1.0		ug/L			08/26/16 00:09	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 00:09	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 00:09	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 00:09	1
Ethyl ether	ND		1.0		ug/L			08/26/16 00:09	1
Acetone	ND		50		ug/L			08/26/16 00:09	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 00:09	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 00:09	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 00:09	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 00:09	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 00:09	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 00:09	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 00:09	1
Toluene	ND		1.0		ug/L			08/26/16 00:09	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 00:09	1
o-Xylene	ND		1.0		ug/L			08/26/16 00:09	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 00:09	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 00:09	1
Naphthalene	ND		5.0		ug/L			08/26/16 00:09	1
Styrene	ND		1.0		ug/L			08/26/16 00:09	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 00:09	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 00:09	1
1,4-Dioxane	ND		50		ug/L			08/26/16 00:09	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 00:09	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 00:09	1
2-Hexanone	ND		10		ug/L			08/26/16 00:09	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 00:09	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 00:09	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 00:09	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 00:09	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 00:09	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 00:09	1

Client Sample ID: MW-1005-20160824-01

Lab Sample ID: 480-104995-5

Date Collected: 08/24/16 10:55

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			08/26/16 00:09	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 00:09	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 00:09	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 00:09	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 00:09	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 00:09	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 00:09	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 00:09	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 00:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/26/16 00:09*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/26/16 00:09*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/26/16 00:09*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/26/16 00:09*	*1*

Client Sample ID: MW-1006-20160824-01

Lab Sample ID: 480-104995-6

Date Collected: 08/24/16 12:20

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 00:35	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 00:35	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 00:35	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 00:35	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 00:35	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 00:35	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 00:35	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 00:35	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 00:35	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 00:35	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 00:35	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 00:35	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 00:35	1
Bromobenzene	ND		1.0		ug/L			08/26/16 00:35	1
Bromoform	ND		1.0		ug/L			08/26/16 00:35	1
Bromomethane	ND		2.0		ug/L			08/26/16 00:35	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 00:35	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 00:35	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 00:35	1
Chloroethane	ND		2.0		ug/L			08/26/16 00:35	1
Chloroform	ND		1.0		ug/L			08/26/16 00:35	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 00:35	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 00:35	1
Dibromomethane	ND		1.0		ug/L			08/26/16 00:35	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 00:35	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 00:35	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 00:35	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 00:35	1

Client Sample ID: MW-1006-20160824-01

Lab Sample ID: 480-104995-6

Date Collected: 08/24/16 12:20

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**3.5**		1.0		ug/L			08/26/16 00:35	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 00:35	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 00:35	1
Benzene	ND		1.0		ug/L			08/26/16 00:35	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 00:35	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 00:35	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 00:35	1
Ethyl ether	ND		1.0		ug/L			08/26/16 00:35	1
Acetone	ND		50		ug/L			08/26/16 00:35	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 00:35	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 00:35	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 00:35	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 00:35	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 00:35	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 00:35	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 00:35	1
Toluene	ND		1.0		ug/L			08/26/16 00:35	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 00:35	1
o-Xylene	ND		1.0		ug/L			08/26/16 00:35	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 00:35	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 00:35	1
Naphthalene	ND		5.0		ug/L			08/26/16 00:35	1
Styrene	ND		1.0		ug/L			08/26/16 00:35	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 00:35	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 00:35	1
1,4-Dioxane	ND		50		ug/L			08/26/16 00:35	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 00:35	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 00:35	1
2-Hexanone	ND		10		ug/L			08/26/16 00:35	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 00:35	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 00:35	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 00:35	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 00:35	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 00:35	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 00:35	1
Isopropyl ether	ND		10		ug/L			08/26/16 00:35	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 00:35	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 00:35	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 00:35	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 00:35	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 00:35	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 00:35	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 00:35	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 00:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/26/16 00:35*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/26/16 00:35*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/26/16 00:35*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/26/16 00:35*	*1*

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1008-20160824-01
Date Collected: 08/24/16 11:15
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 01:00	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 01:00	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 01:00	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 01:00	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 01:00	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 01:00	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 01:00	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 01:00	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 01:00	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 01:00	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 01:00	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 01:00	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 01:00	1
Bromobenzene	ND		1.0		ug/L			08/26/16 01:00	1
Bromoform	ND		1.0		ug/L			08/26/16 01:00	1
Bromomethane	ND		2.0		ug/L			08/26/16 01:00	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 01:00	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 01:00	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 01:00	1
Chloroethane	ND		2.0		ug/L			08/26/16 01:00	1
Chloroform	ND		1.0		ug/L			08/26/16 01:00	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 01:00	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 01:00	1
Dibromomethane	ND		1.0		ug/L			08/26/16 01:00	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 01:00	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 01:00	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 01:00	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 01:00	1
Trichloroethene	**3.3**		1.0		ug/L			08/26/16 01:00	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 01:00	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 01:00	1
Benzene	ND		1.0		ug/L			08/26/16 01:00	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 01:00	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 01:00	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 01:00	1
Ethyl ether	ND		1.0		ug/L			08/26/16 01:00	1
Acetone	ND		50		ug/L			08/26/16 01:00	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 01:00	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 01:00	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 01:00	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 01:00	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 01:00	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 01:00	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 01:00	1
Toluene	ND		1.0		ug/L			08/26/16 01:00	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 01:00	1
o-Xylene	ND		1.0		ug/L			08/26/16 01:00	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 01:00	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 01:00	1

Client Sample ID: MW-1008-20160824-01

Lab Sample ID: 480-104995-7

Date Collected: 08/24/16 11:15

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/26/16 01:00	1
Styrene	ND		1.0		ug/L			08/26/16 01:00	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 01:00	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 01:00	1
1,4-Dioxane	ND		50		ug/L			08/26/16 01:00	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 01:00	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 01:00	1
2-Hexanone	ND		10		ug/L			08/26/16 01:00	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 01:00	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 01:00	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 01:00	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 01:00	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 01:00	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 01:00	1
Isopropyl ether	ND		10		ug/L			08/26/16 01:00	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 01:00	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 01:00	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 01:00	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 01:00	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 01:00	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 01:00	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 01:00	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/26/16 01:00*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*08/26/16 01:00*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/26/16 01:00*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/26/16 01:00*	*1*

Client Sample ID: MW-1009-20160824-01

Lab Sample ID: 480-104995-8

Date Collected: 08/24/16 09:50

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 01:26	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 01:26	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 01:26	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 01:26	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 01:26	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 01:26	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 01:26	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 01:26	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 01:26	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 01:26	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 01:26	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 01:26	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 01:26	1
Bromobenzene	ND		1.0		ug/L			08/26/16 01:26	1

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1009-20160824-01
Date Collected: 08/24/16 09:50
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			08/26/16 01:26	1
Bromomethane	ND		2.0		ug/L			08/26/16 01:26	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 01:26	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 01:26	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 01:26	1
Chloroethane	ND		2.0		ug/L			08/26/16 01:26	1
Chloroform	ND		1.0		ug/L			08/26/16 01:26	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 01:26	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 01:26	1
Dibromomethane	ND		1.0		ug/L			08/26/16 01:26	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 01:26	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 01:26	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 01:26	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 01:26	1
Trichloroethene	ND		1.0		ug/L			08/26/16 01:26	1
Trichlorofluoromethane	**22**		1.0		ug/L			08/26/16 01:26	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 01:26	1
Benzene	ND		1.0		ug/L			08/26/16 01:26	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 01:26	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 01:26	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 01:26	1
Ethyl ether	ND		1.0		ug/L			08/26/16 01:26	1
Acetone	ND		50		ug/L			08/26/16 01:26	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 01:26	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 01:26	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 01:26	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 01:26	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 01:26	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 01:26	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 01:26	1
Toluene	ND		1.0		ug/L			08/26/16 01:26	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 01:26	1
o-Xylene	ND		1.0		ug/L			08/26/16 01:26	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 01:26	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 01:26	1
Naphthalene	ND		5.0		ug/L			08/26/16 01:26	1
Styrene	ND		1.0		ug/L			08/26/16 01:26	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 01:26	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 01:26	1
1,4-Dioxane	ND		50		ug/L			08/26/16 01:26	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 01:26	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 01:26	1
2-Hexanone	ND		10		ug/L			08/26/16 01:26	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 01:26	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 01:26	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 01:26	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 01:26	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 01:26	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 01:26	1

Client Sample ID: MW-1009-20160824-01

Lab Sample ID: 480-104995-8

Date Collected: 08/24/16 09:50
Matrix: Water
Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			08/26/16 01:26	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 01:26	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 01:26	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 01:26	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 01:26	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 01:26	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 01:26	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 01:26	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/26/16 01:26*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/26/16 01:26*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/26/16 01:26*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/26/16 01:26*	*1*

Client Sample ID: MW-1010M-20160824-01

Lab Sample ID: 480-104995-9

Date Collected: 08/24/16 12:45
Matrix: Water
Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 01:51	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 01:51	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 01:51	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 01:51	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 01:51	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 01:51	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 01:51	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 01:51	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 01:51	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 01:51	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 01:51	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 01:51	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 01:51	1
Bromobenzene	ND		1.0		ug/L			08/26/16 01:51	1
Bromoform	ND		1.0		ug/L			08/26/16 01:51	1
Bromomethane	ND		2.0		ug/L			08/26/16 01:51	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 01:51	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 01:51	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 01:51	1
Chloroethane	ND		2.0		ug/L			08/26/16 01:51	1
Chloroform	ND		1.0		ug/L			08/26/16 01:51	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 01:51	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 01:51	1
Dibromomethane	ND		1.0		ug/L			08/26/16 01:51	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 01:51	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 01:51	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 01:51	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 01:51	1

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1010M-20160824-01
Date Collected: 08/24/16 12:45
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**7.7**		1.0		ug/L			08/26/16 01:51	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 01:51	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 01:51	1
Benzene	ND		1.0		ug/L			08/26/16 01:51	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 01:51	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 01:51	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 01:51	1
Ethyl ether	ND		1.0		ug/L			08/26/16 01:51	1
Acetone	ND		50		ug/L			08/26/16 01:51	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 01:51	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 01:51	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 01:51	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 01:51	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 01:51	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 01:51	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 01:51	1
Toluene	ND		1.0		ug/L			08/26/16 01:51	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 01:51	1
o-Xylene	ND		1.0		ug/L			08/26/16 01:51	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 01:51	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 01:51	1
Naphthalene	ND		5.0		ug/L			08/26/16 01:51	1
Styrene	ND		1.0		ug/L			08/26/16 01:51	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 01:51	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 01:51	1
1,4-Dioxane	ND		50		ug/L			08/26/16 01:51	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 01:51	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 01:51	1
2-Hexanone	ND		10		ug/L			08/26/16 01:51	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 01:51	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 01:51	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 01:51	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 01:51	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 01:51	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 01:51	1
Isopropyl ether	ND		10		ug/L			08/26/16 01:51	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 01:51	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 01:51	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 01:51	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 01:51	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 01:51	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 01:51	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 01:51	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 01:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/26/16 01:51*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/26/16 01:51*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/26/16 01:51*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/26/16 01:51*	*1*

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1010D-20160824-01
Date Collected: 08/24/16 12:40
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 02:16	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 02:16	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 02:16	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 02:16	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 02:16	1
1,1-Dichloroethene	**1.4**		1.0		ug/L			08/26/16 02:16	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 02:16	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 02:16	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 02:16	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 02:16	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 02:16	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 02:16	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 02:16	1
Bromobenzene	ND		1.0		ug/L			08/26/16 02:16	1
Bromoform	ND		1.0		ug/L			08/26/16 02:16	1
Bromomethane	ND		2.0		ug/L			08/26/16 02:16	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 02:16	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 02:16	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 02:16	1
Chloroethane	ND		2.0		ug/L			08/26/16 02:16	1
Chloroform	ND		1.0		ug/L			08/26/16 02:16	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 02:16	1
cis-1,2-Dichloroethene	**38**		1.0		ug/L			08/26/16 02:16	1
Dibromomethane	ND		1.0		ug/L			08/26/16 02:16	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 02:16	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 02:16	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 02:16	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 02:16	1
Trichloroethene	**12**		1.0		ug/L			08/26/16 02:16	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 02:16	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 02:16	1
Benzene	ND		1.0		ug/L			08/26/16 02:16	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 02:16	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 02:16	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 02:16	1
Ethyl ether	ND		1.0		ug/L			08/26/16 02:16	1
Acetone	ND		50		ug/L			08/26/16 02:16	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 02:16	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 02:16	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 02:16	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 02:16	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 02:16	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 02:16	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 02:16	1
Toluene	ND		1.0		ug/L			08/26/16 02:16	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 02:16	1
o-Xylene	ND		1.0		ug/L			08/26/16 02:16	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 02:16	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 02:16	1

Client Sample ID: MW-1010D-20160824-01

Lab Sample ID: 480-104995-10

Date Collected: 08/24/16 12:40

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/26/16 02:16	1
Styrene	ND		1.0		ug/L			08/26/16 02:16	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 02:16	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 02:16	1
1,4-Dioxane	ND		50		ug/L			08/26/16 02:16	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 02:16	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 02:16	1
2-Hexanone	ND		10		ug/L			08/26/16 02:16	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 02:16	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 02:16	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 02:16	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 02:16	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 02:16	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 02:16	1
Isopropyl ether	ND		10		ug/L			08/26/16 02:16	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 02:16	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 02:16	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 02:16	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 02:16	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 02:16	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 02:16	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 02:16	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 02:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/26/16 02:16*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/26/16 02:16*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/26/16 02:16*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/26/16 02:16*	*1*

Client Sample ID: MW-1013-20160824-01

Lab Sample ID: 480-104995-11

Date Collected: 08/24/16 07:55

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 02:41	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 02:41	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 02:41	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 02:41	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 02:41	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 02:41	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 02:41	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 02:41	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 02:41	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 02:41	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 02:41	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 02:41	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 02:41	1
Bromobenzene	ND		1.0		ug/L			08/26/16 02:41	1

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1013-20160824-01
Date Collected: 08/24/16 07:55
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-11
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			08/26/16 02:41	1
Bromomethane	ND		2.0		ug/L			08/26/16 02:41	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 02:41	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 02:41	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 02:41	1
Chloroethane	ND		2.0		ug/L			08/26/16 02:41	1
Chloroform	ND		1.0		ug/L			08/26/16 02:41	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 02:41	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 02:41	1
Dibromomethane	ND		1.0		ug/L			08/26/16 02:41	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 02:41	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 02:41	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 02:41	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 02:41	1
Trichloroethene	ND		1.0		ug/L			08/26/16 02:41	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 02:41	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 02:41	1
Benzene	ND		1.0		ug/L			08/26/16 02:41	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 02:41	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 02:41	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 02:41	1
Ethyl ether	ND		1.0		ug/L			08/26/16 02:41	1
Acetone	ND		50		ug/L			08/26/16 02:41	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 02:41	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 02:41	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 02:41	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 02:41	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 02:41	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 02:41	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 02:41	1
Toluene	ND		1.0		ug/L			08/26/16 02:41	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 02:41	1
o-Xylene	ND		1.0		ug/L			08/26/16 02:41	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 02:41	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 02:41	1
Naphthalene	ND		5.0		ug/L			08/26/16 02:41	1
Styrene	ND		1.0		ug/L			08/26/16 02:41	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 02:41	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 02:41	1
1,4-Dioxane	ND		50		ug/L			08/26/16 02:41	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 02:41	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 02:41	1
2-Hexanone	ND		10		ug/L			08/26/16 02:41	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 02:41	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 02:41	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 02:41	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 02:41	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 02:41	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 02:41	1

Client Sample ID: MW-1013-20160824-01

Lab Sample ID: 480-104995-11

Date Collected: 08/24/16 07:55

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			08/26/16 02:41	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 02:41	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 02:41	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 02:41	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 02:41	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 02:41	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 02:41	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 02:41	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 02:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/26/16 02:41*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/26/16 02:41*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/26/16 02:41*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/26/16 02:41*	*1*

Client Sample ID: MW-1014-20160824-01

Lab Sample ID: 480-104995-12

Date Collected: 08/24/16 08:05

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 03:07	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 03:07	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 03:07	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 03:07	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 03:07	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 03:07	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 03:07	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 03:07	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 03:07	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 03:07	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 03:07	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 03:07	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 03:07	1
Bromobenzene	ND		1.0		ug/L			08/26/16 03:07	1
Bromoform	ND		1.0		ug/L			08/26/16 03:07	1
Bromomethane	ND		2.0		ug/L			08/26/16 03:07	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 03:07	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 03:07	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 03:07	1
Chloroethane	ND		2.0		ug/L			08/26/16 03:07	1
Chloroform	ND		1.0		ug/L			08/26/16 03:07	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 03:07	1
cis-1,2-Dichloroethene	**5.7**		1.0		ug/L			08/26/16 03:07	1
Dibromomethane	ND		1.0		ug/L			08/26/16 03:07	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 03:07	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 03:07	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 03:07	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 03:07	1

Client Sample ID: MW-1014-20160824-01
Date Collected: 08/24/16 08:05
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-12
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**61**		1.0		ug/L			08/26/16 03:07	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 03:07	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 03:07	1
Benzene	ND		1.0		ug/L			08/26/16 03:07	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 03:07	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 03:07	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 03:07	1
Ethyl ether	ND		1.0		ug/L			08/26/16 03:07	1
Acetone	ND		50		ug/L			08/26/16 03:07	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 03:07	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 03:07	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 03:07	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 03:07	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 03:07	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 03:07	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 03:07	1
Toluene	ND		1.0		ug/L			08/26/16 03:07	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 03:07	1
o-Xylene	ND		1.0		ug/L			08/26/16 03:07	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 03:07	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 03:07	1
Naphthalene	ND		5.0		ug/L			08/26/16 03:07	1
Styrene	ND		1.0		ug/L			08/26/16 03:07	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 03:07	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 03:07	1
1,4-Dioxane	ND		50		ug/L			08/26/16 03:07	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 03:07	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 03:07	1
2-Hexanone	ND		10		ug/L			08/26/16 03:07	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 03:07	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 03:07	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 03:07	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 03:07	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 03:07	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 03:07	1
Isopropyl ether	ND		10		ug/L			08/26/16 03:07	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 03:07	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 03:07	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 03:07	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 03:07	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 03:07	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 03:07	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 03:07	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 03:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/26/16 03:07*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/26/16 03:07*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/26/16 03:07*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*08/26/16 03:07*	*1*

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1015D-20160824-01
Date Collected: 08/24/16 08:15
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-13
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 03:32	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 03:32	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 03:32	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 03:32	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 03:32	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 03:32	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 03:32	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 03:32	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 03:32	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 03:32	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 03:32	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 03:32	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 03:32	1
Bromobenzene	ND		1.0		ug/L			08/26/16 03:32	1
Bromoform	ND		1.0		ug/L			08/26/16 03:32	1
Bromomethane	ND		2.0		ug/L			08/26/16 03:32	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 03:32	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 03:32	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 03:32	1
Chloroethane	ND		2.0		ug/L			08/26/16 03:32	1
Chloroform	ND		1.0		ug/L			08/26/16 03:32	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 03:32	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 03:32	1
Dibromomethane	ND		1.0		ug/L			08/26/16 03:32	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 03:32	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 03:32	1
Tetrachloroethene	**1.6**		1.0		ug/L			08/26/16 03:32	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 03:32	1
Trichloroethene	**10**		1.0		ug/L			08/26/16 03:32	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 03:32	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 03:32	1
Benzene	ND		1.0		ug/L			08/26/16 03:32	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 03:32	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 03:32	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 03:32	1
Ethyl ether	ND		1.0		ug/L			08/26/16 03:32	1
Acetone	ND		50		ug/L			08/26/16 03:32	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 03:32	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 03:32	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 03:32	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 03:32	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 03:32	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 03:32	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 03:32	1
Toluene	ND		1.0		ug/L			08/26/16 03:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 03:32	1
o-Xylene	ND		1.0		ug/L			08/26/16 03:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 03:32	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 03:32	1

Client Sample ID: MW-1015D-20160824-01

Lab Sample ID: 480-104995-13

Date Collected: 08/24/16 08:15

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/26/16 03:32	1
Styrene	ND		1.0		ug/L			08/26/16 03:32	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 03:32	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 03:32	1
1,4-Dioxane	ND		50		ug/L			08/26/16 03:32	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 03:32	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 03:32	1
2-Hexanone	ND		10		ug/L			08/26/16 03:32	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 03:32	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 03:32	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 03:32	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 03:32	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 03:32	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 03:32	1
Isopropyl ether	ND		10		ug/L			08/26/16 03:32	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 03:32	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 03:32	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 03:32	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 03:32	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 03:32	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 03:32	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 03:32	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 03:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/26/16 03:32*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/26/16 03:32*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/26/16 03:32*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/26/16 03:32*	*1*

Client Sample ID: MW-1016D-20160824-01

Lab Sample ID: 480-104995-14

Date Collected: 08/24/16 11:50

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 03:57	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 03:57	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 03:57	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 03:57	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 03:57	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 03:57	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 03:57	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 03:57	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 03:57	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 03:57	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 03:57	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 03:57	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 03:57	1
Bromobenzene	ND		1.0		ug/L			08/26/16 03:57	1

Client Sample ID: MW-1016D-20160824-01 **Lab Sample ID: 480-104995-14**

Date Collected: 08/24/16 11:50 **Matrix: Water**

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			08/26/16 03:57	1
Bromomethane	ND		2.0		ug/L			08/26/16 03:57	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 03:57	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 03:57	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 03:57	1
Chloroethane	ND		2.0		ug/L			08/26/16 03:57	1
Chloroform	ND		1.0		ug/L			08/26/16 03:57	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 03:57	1
cis-1,2-Dichloroethene	**35**		1.0		ug/L			08/26/16 03:57	1
Dibromomethane	ND		1.0		ug/L			08/26/16 03:57	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 03:57	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 03:57	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 03:57	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 03:57	1
Trichloroethene	ND		1.0		ug/L			08/26/16 03:57	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 03:57	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 03:57	1
Benzene	ND		1.0		ug/L			08/26/16 03:57	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 03:57	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 03:57	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 03:57	1
Ethyl ether	ND		1.0		ug/L			08/26/16 03:57	1
Acetone	ND		50		ug/L			08/26/16 03:57	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 03:57	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 03:57	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 03:57	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 03:57	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 03:57	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 03:57	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 03:57	1
Toluene	ND		1.0		ug/L			08/26/16 03:57	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 03:57	1
o-Xylene	ND		1.0		ug/L			08/26/16 03:57	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 03:57	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 03:57	1
Naphthalene	ND		5.0		ug/L			08/26/16 03:57	1
Styrene	ND		1.0		ug/L			08/26/16 03:57	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 03:57	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 03:57	1
1,4-Dioxane	ND		50		ug/L			08/26/16 03:57	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 03:57	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 03:57	1
2-Hexanone	ND		10		ug/L			08/26/16 03:57	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 03:57	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 03:57	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 03:57	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 03:57	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 03:57	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 03:57	1

Client Sample ID: MW-1016D-20160824-01

Lab Sample ID: 480-104995-14

Date Collected: 08/24/16 11:50

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			08/26/16 03:57	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 03:57	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 03:57	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 03:57	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 03:57	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 03:57	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 03:57	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 03:57	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 03:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/26/16 03:57*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/26/16 03:57*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/26/16 03:57*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*08/26/16 03:57*	*1*

Client Sample ID: MW-1017D-20160824-01

Lab Sample ID: 480-104995-15

Date Collected: 08/24/16 11:35

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			08/26/16 04:22	2
1,1,1-Trichloroethane	ND		2.0		ug/L			08/26/16 04:22	2
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 04:22	2
1,1,2-Trichloroethane	ND		2.0		ug/L			08/26/16 04:22	2
1,1-Dichloroethane	ND		2.0		ug/L			08/26/16 04:22	2
1,1-Dichloroethene	ND		2.0		ug/L			08/26/16 04:22	2
1,2,3-Trichloropropane	ND		2.0		ug/L			08/26/16 04:22	2
1,2-Dichlorobenzene	ND		2.0		ug/L			08/26/16 04:22	2
1,2-Dichloroethane	ND		2.0		ug/L			08/26/16 04:22	2
1,2-Dichloropropane	ND		2.0		ug/L			08/26/16 04:22	2
1,3-Dichlorobenzene	ND		2.0		ug/L			08/26/16 04:22	2
1,4-Dichlorobenzene	ND		2.0		ug/L			08/26/16 04:22	2
2-Chloroethyl vinyl ether	ND		20		ug/L			08/26/16 04:22	2
Bromobenzene	ND		2.0		ug/L			08/26/16 04:22	2
Bromoform	ND		2.0		ug/L			08/26/16 04:22	2
Bromomethane	ND		4.0		ug/L			08/26/16 04:22	2
Carbon tetrachloride	ND		2.0		ug/L			08/26/16 04:22	2
Chlorobenzene	ND		2.0		ug/L			08/26/16 04:22	2
Chlorodibromomethane	ND		1.0		ug/L			08/26/16 04:22	2
Chloroethane	ND		4.0		ug/L			08/26/16 04:22	2
Chloroform	ND		2.0		ug/L			08/26/16 04:22	2
Chloromethane	ND	*	4.0		ug/L			08/26/16 04:22	2
cis-1,2-Dichloroethene	**68**		2.0		ug/L			08/26/16 04:22	2
Dibromomethane	ND		2.0		ug/L			08/26/16 04:22	2
Dichlorodifluoromethane	ND	*	2.0		ug/L			08/26/16 04:22	2
Methylene Chloride	ND		2.0		ug/L			08/26/16 04:22	2
Tetrachloroethene	ND		2.0		ug/L			08/26/16 04:22	2
trans-1,3-Dichloropropene	ND		0.80		ug/L			08/26/16 04:22	2

Client Sample ID: MW-1017D-20160824-01

Lab Sample ID: 480-104995-15

Date Collected: 08/24/16 11:35

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	38		2.0		ug/L			08/26/16 04:22	2
Trichlorofluoromethane	ND		2.0		ug/L			08/26/16 04:22	2
Vinyl chloride	ND	*	2.0		ug/L			08/26/16 04:22	2
Benzene	ND		2.0		ug/L			08/26/16 04:22	2
cis-1,3-Dichloropropene	ND		0.80		ug/L			08/26/16 04:22	2
Carbon disulfide	ND	*	20		ug/L			08/26/16 04:22	2
Chlorobromomethane	ND		2.0		ug/L			08/26/16 04:22	2
Ethyl ether	ND		2.0		ug/L			08/26/16 04:22	2
Acetone	ND		100		ug/L			08/26/16 04:22	2
Tetrahydrofuran	ND		20		ug/L			08/26/16 04:22	2
4-Methyl-2-pentanone (MIBK)	ND		20		ug/L			08/26/16 04:22	2
Hexachlorobutadiene	ND		0.80		ug/L			08/26/16 04:22	2
n-Butylbenzene	ND		2.0		ug/L			08/26/16 04:22	2
1,2,4-Trimethylbenzene	ND		2.0		ug/L			08/26/16 04:22	2
2-Chlorotoluene	ND		2.0		ug/L			08/26/16 04:22	2
1,1-Dichloropropene	ND		2.0		ug/L			08/26/16 04:22	2
Toluene	ND		2.0		ug/L			08/26/16 04:22	2
1,2,4-Trichlorobenzene	ND		2.0		ug/L			08/26/16 04:22	2
o-Xylene	ND		2.0		ug/L			08/26/16 04:22	2
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			08/26/16 04:22	2
Methyl tert-butyl ether	ND		2.0		ug/L			08/26/16 04:22	2
Naphthalene	ND		10		ug/L			08/26/16 04:22	2
Styrene	ND		2.0		ug/L			08/26/16 04:22	2
4-Chlorotoluene	ND		2.0		ug/L			08/26/16 04:22	2
trans-1,2-Dichloroethene	ND		2.0		ug/L			08/26/16 04:22	2
1,4-Dioxane	ND		100		ug/L			08/26/16 04:22	2
1,2,3-Trichlorobenzene	ND		2.0		ug/L			08/26/16 04:22	2
sec-Butylbenzene	ND		2.0		ug/L			08/26/16 04:22	2
2-Hexanone	ND		20		ug/L			08/26/16 04:22	2
2-Butanone (MEK)	ND		20		ug/L			08/26/16 04:22	2
Ethylbenzene	ND		2.0		ug/L			08/26/16 04:22	2
Isopropylbenzene	ND		2.0		ug/L			08/26/16 04:22	2
2,2-Dichloropropane	ND		2.0		ug/L			08/26/16 04:22	2
N-Propylbenzene	ND		2.0		ug/L			08/26/16 04:22	2
Tert-butyl ethyl ether	ND		10		ug/L			08/26/16 04:22	2
Isopropyl ether	ND		20		ug/L			08/26/16 04:22	2
4-Isopropyltoluene	ND		2.0		ug/L			08/26/16 04:22	2
Tert-amyl methyl ether	ND		10		ug/L			08/26/16 04:22	2
1,3,5-Trimethylbenzene	ND		2.0		ug/L			08/26/16 04:22	2
m-Xylene & p-Xylene	ND		4.0		ug/L			08/26/16 04:22	2
Ethylene Dibromide	ND		2.0		ug/L			08/26/16 04:22	2
tert-Butylbenzene	ND		2.0		ug/L			08/26/16 04:22	2
1,3-Dichloropropane	ND		2.0		ug/L			08/26/16 04:22	2
Dichlorobromomethane	ND		1.0		ug/L			08/26/16 04:22	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/26/16 04:22*	*2*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/26/16 04:22*	*2*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/26/16 04:22*	*2*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/26/16 04:22*	*2*

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1019B-20160824-01
Date Collected: 08/24/16 07:30
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-16
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 04:47	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 04:47	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 04:47	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 04:47	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 04:47	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 04:47	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 04:47	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 04:47	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 04:47	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 04:47	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 04:47	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 04:47	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 04:47	1
Bromobenzene	ND		1.0		ug/L			08/26/16 04:47	1
Bromoform	ND		1.0		ug/L			08/26/16 04:47	1
Bromomethane	ND		2.0		ug/L			08/26/16 04:47	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 04:47	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 04:47	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 04:47	1
Chloroethane	ND		2.0		ug/L			08/26/16 04:47	1
Chloroform	ND		1.0		ug/L			08/26/16 04:47	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 04:47	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 04:47	1
Dibromomethane	ND		1.0		ug/L			08/26/16 04:47	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 04:47	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 04:47	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 04:47	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 04:47	1
Trichloroethene	**1.4**		1.0		ug/L			08/26/16 04:47	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 04:47	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 04:47	1
Benzene	ND		1.0		ug/L			08/26/16 04:47	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 04:47	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 04:47	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 04:47	1
Ethyl ether	ND		1.0		ug/L			08/26/16 04:47	1
Acetone	**200**		50		ug/L			08/26/16 04:47	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 04:47	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 04:47	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 04:47	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 04:47	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 04:47	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 04:47	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 04:47	1
Toluene	ND		1.0		ug/L			08/26/16 04:47	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 04:47	1
o-Xylene	ND		1.0		ug/L			08/26/16 04:47	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 04:47	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 04:47	1

Client Sample ID: MW-1019B-20160824-01

Lab Sample ID: 480-104995-16

Date Collected: 08/24/16 07:30

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/26/16 04:47	1
Styrene	ND		1.0		ug/L			08/26/16 04:47	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 04:47	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 04:47	1
1,4-Dioxane	ND		50		ug/L			08/26/16 04:47	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 04:47	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 04:47	1
2-Hexanone	ND		10		ug/L			08/26/16 04:47	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 04:47	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 04:47	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 04:47	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 04:47	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 04:47	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 04:47	1
Isopropyl ether	ND		10		ug/L			08/26/16 04:47	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 04:47	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 04:47	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 04:47	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 04:47	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 04:47	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 04:47	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 04:47	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 04:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*08/26/16 04:47*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/26/16 04:47*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/26/16 04:47*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/26/16 04:47*	*1*

Client Sample ID: MW-1022-20160824-01

Lab Sample ID: 480-104995-17

Date Collected: 08/24/16 08:25

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 05:13	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 05:13	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 05:13	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 05:13	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 05:13	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 05:13	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 05:13	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 05:13	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 05:13	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 05:13	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 05:13	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 05:13	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 05:13	1
Bromobenzene	ND		1.0		ug/L			08/26/16 05:13	1

Client Sample ID: MW-1022-20160824-01
Date Collected: 08/24/16 08:25
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-17
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			08/26/16 05:13	1
Bromomethane	ND		2.0		ug/L			08/26/16 05:13	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 05:13	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 05:13	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 05:13	1
Chloroethane	ND		2.0		ug/L			08/26/16 05:13	1
Chloroform	ND		1.0		ug/L			08/26/16 05:13	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 05:13	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 05:13	1
Dibromomethane	ND		1.0		ug/L			08/26/16 05:13	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 05:13	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 05:13	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 05:13	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 05:13	1
Trichloroethene	**3.1**		1.0		ug/L			08/26/16 05:13	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 05:13	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 05:13	1
Benzene	ND		1.0		ug/L			08/26/16 05:13	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 05:13	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 05:13	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 05:13	1
Ethyl ether	ND		1.0		ug/L			08/26/16 05:13	1
Acetone	ND		50		ug/L			08/26/16 05:13	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 05:13	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 05:13	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 05:13	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 05:13	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 05:13	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 05:13	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 05:13	1
Toluene	ND		1.0		ug/L			08/26/16 05:13	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 05:13	1
o-Xylene	ND		1.0		ug/L			08/26/16 05:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 05:13	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 05:13	1
Naphthalene	ND		5.0		ug/L			08/26/16 05:13	1
Styrene	ND		1.0		ug/L			08/26/16 05:13	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 05:13	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 05:13	1
1,4-Dioxane	ND		50		ug/L			08/26/16 05:13	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 05:13	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 05:13	1
2-Hexanone	ND		10		ug/L			08/26/16 05:13	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 05:13	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 05:13	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 05:13	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 05:13	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 05:13	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 05:13	1

Client Sample ID: MW-1022-20160824-01

Lab Sample ID: 480-104995-17

Date Collected: 08/24/16 08:25

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			08/26/16 05:13	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 05:13	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 05:13	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 05:13	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 05:13	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 05:13	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 05:13	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 05:13	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 05:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*08/26/16 05:13*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/26/16 05:13*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/26/16 05:13*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/26/16 05:13*	*1*

Client Sample ID: MW-1023-20160824-01

Lab Sample ID: 480-104995-18

Date Collected: 08/24/16 09:25

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 05:38	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 05:38	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 05:38	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 05:38	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 05:38	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 05:38	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 05:38	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 05:38	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 05:38	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 05:38	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 05:38	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 05:38	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 05:38	1
Bromobenzene	ND		1.0		ug/L			08/26/16 05:38	1
Bromoform	ND		1.0		ug/L			08/26/16 05:38	1
Bromomethane	ND		2.0		ug/L			08/26/16 05:38	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 05:38	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 05:38	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 05:38	1
Chloroethane	ND		2.0		ug/L			08/26/16 05:38	1
Chloroform	ND		1.0		ug/L			08/26/16 05:38	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 05:38	1
cis-1,2-Dichloroethene	**42**		1.0		ug/L			08/26/16 05:38	1
Dibromomethane	ND		1.0		ug/L			08/26/16 05:38	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 05:38	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 05:38	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 05:38	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 05:38	1

Client Sample ID: MW-1023-20160824-01

Lab Sample ID: 480-104995-18

Date Collected: 08/24/16 09:25

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**2.8**		1.0		ug/L			08/26/16 05:38	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 05:38	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 05:38	1
Benzene	ND		1.0		ug/L			08/26/16 05:38	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 05:38	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 05:38	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 05:38	1
Ethyl ether	ND		1.0		ug/L			08/26/16 05:38	1
Acetone	ND		50		ug/L			08/26/16 05:38	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 05:38	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 05:38	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 05:38	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 05:38	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 05:38	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 05:38	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 05:38	1
Toluene	ND		1.0		ug/L			08/26/16 05:38	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 05:38	1
o-Xylene	ND		1.0		ug/L			08/26/16 05:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 05:38	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 05:38	1
Naphthalene	ND		5.0		ug/L			08/26/16 05:38	1
Styrene	ND		1.0		ug/L			08/26/16 05:38	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 05:38	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 05:38	1
1,4-Dioxane	ND		50		ug/L			08/26/16 05:38	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 05:38	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 05:38	1
2-Hexanone	ND		10		ug/L			08/26/16 05:38	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 05:38	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 05:38	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 05:38	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 05:38	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 05:38	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 05:38	1
Isopropyl ether	ND		10		ug/L			08/26/16 05:38	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 05:38	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 05:38	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 05:38	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 05:38	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 05:38	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 05:38	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 05:38	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 05:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/26/16 05:38*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/26/16 05:38*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/26/16 05:38*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/26/16 05:38*	*1*

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1024D-20160824-01
Date Collected: 08/24/16 09:00
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-19
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 06:04	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 06:04	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 06:04	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 06:04	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 06:04	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 06:04	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 06:04	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 06:04	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 06:04	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 06:04	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 06:04	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 06:04	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 06:04	1
Bromobenzene	ND		1.0		ug/L			08/26/16 06:04	1
Bromoform	ND		1.0		ug/L			08/26/16 06:04	1
Bromomethane	ND		2.0		ug/L			08/26/16 06:04	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 06:04	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 06:04	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 06:04	1
Chloroethane	ND		2.0		ug/L			08/26/16 06:04	1
Chloroform	ND		1.0		ug/L			08/26/16 06:04	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 06:04	1
cis-1,2-Dichloroethene	**12**		1.0		ug/L			08/26/16 06:04	1
Dibromomethane	ND		1.0		ug/L			08/26/16 06:04	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 06:04	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 06:04	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 06:04	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 06:04	1
Trichloroethene	**1.1**		1.0		ug/L			08/26/16 06:04	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 06:04	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 06:04	1
Benzene	ND		1.0		ug/L			08/26/16 06:04	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 06:04	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 06:04	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 06:04	1
Ethyl ether	ND		1.0		ug/L			08/26/16 06:04	1
Acetone	ND		50		ug/L			08/26/16 06:04	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 06:04	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 06:04	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 06:04	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 06:04	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 06:04	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 06:04	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 06:04	1
Toluene	ND		1.0		ug/L			08/26/16 06:04	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 06:04	1
o-Xylene	ND		1.0		ug/L			08/26/16 06:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 06:04	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 06:04	1

Client Sample ID: MW-1024D-20160824-01

Lab Sample ID: 480-104995-19

Date Collected: 08/24/16 09:00

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/26/16 06:04	1
Styrene	ND		1.0		ug/L			08/26/16 06:04	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 06:04	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 06:04	1
1,4-Dioxane	ND		50		ug/L			08/26/16 06:04	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 06:04	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 06:04	1
2-Hexanone	ND		10		ug/L			08/26/16 06:04	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 06:04	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 06:04	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 06:04	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 06:04	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 06:04	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 06:04	1
Isopropyl ether	ND		10		ug/L			08/26/16 06:04	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 06:04	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 06:04	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 06:04	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 06:04	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 06:04	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 06:04	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 06:04	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 06:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*08/26/16 06:04*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/26/16 06:04*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/26/16 06:04*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/26/16 06:04*	*1*

Client Sample ID: MW-1025M-20160824-01

Lab Sample ID: 480-104995-20

Date Collected: 08/24/16 08:10

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 06:29	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 06:29	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 06:29	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 06:29	1
1,1-Dichloroethane	**1.6**		1.0		ug/L			08/26/16 06:29	1
1,1-Dichloroethene	**4.5**		1.0		ug/L			08/26/16 06:29	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 06:29	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 06:29	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 06:29	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 06:29	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 06:29	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 06:29	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 06:29	1
Bromobenzene	ND		1.0		ug/L			08/26/16 06:29	1

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1025M-20160824-01
Date Collected: 08/24/16 08:10
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-20
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			08/26/16 06:29	1
Bromomethane	ND		2.0		ug/L			08/26/16 06:29	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 06:29	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 06:29	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 06:29	1
Chloroethane	ND		2.0		ug/L			08/26/16 06:29	1
Chloroform	ND		1.0		ug/L			08/26/16 06:29	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 06:29	1
cis-1,2-Dichloroethene	**48**		1.0		ug/L			08/26/16 06:29	1
Dibromomethane	ND		1.0		ug/L			08/26/16 06:29	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 06:29	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 06:29	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 06:29	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 06:29	1
Trichloroethene	**21**		1.0		ug/L			08/26/16 06:29	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 06:29	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 06:29	1
Benzene	ND		1.0		ug/L			08/26/16 06:29	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 06:29	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 06:29	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 06:29	1
Ethyl ether	ND		1.0		ug/L			08/26/16 06:29	1
Acetone	ND		50		ug/L			08/26/16 06:29	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 06:29	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 06:29	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 06:29	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 06:29	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 06:29	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 06:29	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 06:29	1
Toluene	ND		1.0		ug/L			08/26/16 06:29	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 06:29	1
o-Xylene	ND		1.0		ug/L			08/26/16 06:29	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 06:29	1
Methyl tert-butyl ether	**5.2**		1.0		ug/L			08/26/16 06:29	1
Naphthalene	ND		5.0		ug/L			08/26/16 06:29	1
Styrene	ND		1.0		ug/L			08/26/16 06:29	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 06:29	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 06:29	1
1,4-Dioxane	ND		50		ug/L			08/26/16 06:29	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 06:29	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 06:29	1
2-Hexanone	ND		10		ug/L			08/26/16 06:29	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 06:29	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 06:29	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 06:29	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 06:29	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 06:29	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 06:29	1

Client Sample ID: MW-1025M-20160824-01

Lab Sample ID: 480-104995-20

Date Collected: 08/24/16 08:10

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			08/26/16 06:29	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 06:29	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 06:29	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 06:29	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 06:29	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 06:29	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 06:29	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 06:29	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 06:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*08/26/16 06:29*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/26/16 06:29*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/26/16 06:29*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/26/16 06:29*	*1*

Client Sample ID: MW-1025D-20160824-01

Lab Sample ID: 480-104995-21

Date Collected: 08/24/16 08:00

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 06:54	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 06:54	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 06:54	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 06:54	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 06:54	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 06:54	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 06:54	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 06:54	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 06:54	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 06:54	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 06:54	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 06:54	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 06:54	1
Bromobenzene	ND		1.0		ug/L			08/26/16 06:54	1
Bromoform	ND		1.0		ug/L			08/26/16 06:54	1
Bromomethane	ND		2.0		ug/L			08/26/16 06:54	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 06:54	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 06:54	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 06:54	1
Chloroethane	ND		2.0		ug/L			08/26/16 06:54	1
Chloroform	ND		1.0		ug/L			08/26/16 06:54	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 06:54	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 06:54	1
Dibromomethane	ND		1.0		ug/L			08/26/16 06:54	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 06:54	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 06:54	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 06:54	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 06:54	1

Client Sample ID: MW-1025D-20160824-01
Date Collected: 08/24/16 08:00
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-21
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.0		ug/L			08/26/16 06:54	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 06:54	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 06:54	1
Benzene	ND		1.0		ug/L			08/26/16 06:54	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 06:54	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 06:54	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 06:54	1
Ethyl ether	ND		1.0		ug/L			08/26/16 06:54	1
Acetone	ND		50		ug/L			08/26/16 06:54	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 06:54	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 06:54	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 06:54	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 06:54	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 06:54	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 06:54	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 06:54	1
Toluene	ND		1.0		ug/L			08/26/16 06:54	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 06:54	1
o-Xylene	ND		1.0		ug/L			08/26/16 06:54	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 06:54	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 06:54	1
Naphthalene	ND		5.0		ug/L			08/26/16 06:54	1
Styrene	ND		1.0		ug/L			08/26/16 06:54	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 06:54	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 06:54	1
1,4-Dioxane	ND		50		ug/L			08/26/16 06:54	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 06:54	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 06:54	1
2-Hexanone	ND		10		ug/L			08/26/16 06:54	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 06:54	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 06:54	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 06:54	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 06:54	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 06:54	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 06:54	1
Isopropyl ether	ND		10		ug/L			08/26/16 06:54	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 06:54	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 06:54	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 06:54	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 06:54	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 06:54	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 06:54	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 06:54	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 06:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*08/26/16 06:54*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/26/16 06:54*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/26/16 06:54*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/26/16 06:54*	*1*

Client Sample ID: MW-1027-20160824-01
Date Collected: 08/24/16 10:30
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-22
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 07:20	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 07:20	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 07:20	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 07:20	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 07:20	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 07:20	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 07:20	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 07:20	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 07:20	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 07:20	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 07:20	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 07:20	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 07:20	1
Bromobenzene	ND		1.0		ug/L			08/26/16 07:20	1
Bromoform	ND		1.0		ug/L			08/26/16 07:20	1
Bromomethane	ND		2.0		ug/L			08/26/16 07:20	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 07:20	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 07:20	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 07:20	1
Chloroethane	ND		2.0		ug/L			08/26/16 07:20	1
Chloroform	ND		1.0		ug/L			08/26/16 07:20	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 07:20	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 07:20	1
Dibromomethane	ND		1.0		ug/L			08/26/16 07:20	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 07:20	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 07:20	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 07:20	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 07:20	1
Trichloroethene	ND		1.0		ug/L			08/26/16 07:20	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 07:20	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 07:20	1
Benzene	ND		1.0		ug/L			08/26/16 07:20	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 07:20	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 07:20	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 07:20	1
Ethyl ether	ND		1.0		ug/L			08/26/16 07:20	1
Acetone	ND		50		ug/L			08/26/16 07:20	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 07:20	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 07:20	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 07:20	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 07:20	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 07:20	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 07:20	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 07:20	1
Toluene	ND		1.0		ug/L			08/26/16 07:20	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 07:20	1
o-Xylene	ND		1.0		ug/L			08/26/16 07:20	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 07:20	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 07:20	1

Client Sample ID: MW-1027-20160824-01

Lab Sample ID: 480-104995-22

Date Collected: 08/24/16 10:30

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/26/16 07:20	1
Styrene	ND		1.0		ug/L			08/26/16 07:20	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 07:20	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 07:20	1
1,4-Dioxane	ND		50		ug/L			08/26/16 07:20	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 07:20	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 07:20	1
2-Hexanone	ND		10		ug/L			08/26/16 07:20	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 07:20	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 07:20	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 07:20	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 07:20	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 07:20	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 07:20	1
Isopropyl ether	ND		10		ug/L			08/26/16 07:20	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 07:20	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 07:20	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 07:20	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 07:20	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 07:20	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 07:20	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 07:20	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 07:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*08/26/16 07:20*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/26/16 07:20*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/26/16 07:20*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/26/16 07:20*	*1*

Client Sample ID: MW-1028-20160824-01

Lab Sample ID: 480-104995-23

Date Collected: 08/24/16 10:50

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 07:45	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 07:45	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 07:45	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 07:45	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 07:45	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 07:45	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 07:45	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 07:45	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 07:45	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 07:45	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 07:45	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 07:45	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 07:45	1
Bromobenzene	ND		1.0		ug/L			08/26/16 07:45	1

Client Sample ID: MW-1028-20160824-01
Date Collected: 08/24/16 10:50
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-23
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			08/26/16 07:45	1
Bromomethane	ND		2.0		ug/L			08/26/16 07:45	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 07:45	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 07:45	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 07:45	1
Chloroethane	ND		2.0		ug/L			08/26/16 07:45	1
Chloroform	ND		1.0		ug/L			08/26/16 07:45	1
Chloromethane	ND	*	2.0		ug/L			08/26/16 07:45	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 07:45	1
Dibromomethane	ND		1.0		ug/L			08/26/16 07:45	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			08/26/16 07:45	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 07:45	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 07:45	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 07:45	1
Trichloroethene	**5.6**		1.0		ug/L			08/26/16 07:45	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 07:45	1
Vinyl chloride	ND	*	1.0		ug/L			08/26/16 07:45	1
Benzene	ND		1.0		ug/L			08/26/16 07:45	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 07:45	1
Carbon disulfide	ND	*	10		ug/L			08/26/16 07:45	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 07:45	1
Ethyl ether	ND		1.0		ug/L			08/26/16 07:45	1
Acetone	ND		50		ug/L			08/26/16 07:45	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 07:45	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 07:45	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 07:45	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 07:45	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 07:45	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 07:45	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 07:45	1
Toluene	ND		1.0		ug/L			08/26/16 07:45	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 07:45	1
o-Xylene	ND		1.0		ug/L			08/26/16 07:45	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 07:45	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 07:45	1
Naphthalene	ND		5.0		ug/L			08/26/16 07:45	1
Styrene	ND		1.0		ug/L			08/26/16 07:45	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 07:45	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 07:45	1
1,4-Dioxane	ND		50		ug/L			08/26/16 07:45	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 07:45	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 07:45	1
2-Hexanone	ND		10		ug/L			08/26/16 07:45	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 07:45	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 07:45	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 07:45	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 07:45	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 07:45	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 07:45	1

Client Sample ID: MW-1028-20160824-01

Lab Sample ID: 480-104995-23

Date Collected: 08/24/16 10:50

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			08/26/16 07:45	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 07:45	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 07:45	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 07:45	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 07:45	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 07:45	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 07:45	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 07:45	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 07:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*08/26/16 07:45*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/26/16 07:45*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/26/16 07:45*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/26/16 07:45*	*1*

Client Sample ID: MW-1030-20160824-01

Lab Sample ID: 480-104995-24

Date Collected: 08/24/16 08:50

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 15:47	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 15:47	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 15:47	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 15:47	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 15:47	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 15:47	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 15:47	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 15:47	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 15:47	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 15:47	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 15:47	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 15:47	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 15:47	1
Bromobenzene	ND		1.0		ug/L			08/26/16 15:47	1
Bromoform	ND		1.0		ug/L			08/26/16 15:47	1
Bromomethane	ND		2.0		ug/L			08/26/16 15:47	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 15:47	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 15:47	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 15:47	1
Chloroethane	ND		2.0		ug/L			08/26/16 15:47	1
Chloroform	ND		1.0		ug/L			08/26/16 15:47	1
Chloromethane	ND		2.0		ug/L			08/26/16 15:47	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 15:47	1
Dibromomethane	ND		1.0		ug/L			08/26/16 15:47	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 15:47	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 15:47	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 15:47	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 15:47	1

Client Sample ID: MW-1030-20160824-01

Lab Sample ID: 480-104995-24

Date Collected: 08/24/16 08:50

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**4.0**		1.0		ug/L			08/26/16 15:47	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 15:47	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 15:47	1
Benzene	ND		1.0		ug/L			08/26/16 15:47	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 15:47	1
Carbon disulfide	ND		10		ug/L			08/26/16 15:47	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 15:47	1
Ethyl ether	ND		1.0		ug/L			08/26/16 15:47	1
Acetone	ND	*	50		ug/L			08/26/16 15:47	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 15:47	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 15:47	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 15:47	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 15:47	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 15:47	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 15:47	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 15:47	1
Toluene	ND		1.0		ug/L			08/26/16 15:47	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 15:47	1
o-Xylene	ND		1.0		ug/L			08/26/16 15:47	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 15:47	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 15:47	1
Naphthalene	ND		5.0		ug/L			08/26/16 15:47	1
Styrene	ND		1.0		ug/L			08/26/16 15:47	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 15:47	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 15:47	1
1,4-Dioxane	ND	*	50		ug/L			08/26/16 15:47	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 15:47	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 15:47	1
2-Hexanone	ND		10		ug/L			08/26/16 15:47	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 15:47	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 15:47	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 15:47	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 15:47	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 15:47	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 15:47	1
Isopropyl ether	ND		10		ug/L			08/26/16 15:47	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 15:47	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 15:47	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 15:47	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 15:47	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 15:47	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 15:47	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 15:47	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*08/26/16 15:47*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*08/26/16 15:47*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/26/16 15:47*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*08/26/16 15:47*	*1*

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1031-20160824-01
Date Collected: 08/24/16 09:00
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-25
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 16:12	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 16:12	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 16:12	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 16:12	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 16:12	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 16:12	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 16:12	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 16:12	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 16:12	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 16:12	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 16:12	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 16:12	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 16:12	1
Bromobenzene	ND		1.0		ug/L			08/26/16 16:12	1
Bromoform	ND		1.0		ug/L			08/26/16 16:12	1
Bromomethane	ND		2.0		ug/L			08/26/16 16:12	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 16:12	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 16:12	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 16:12	1
Chloroethane	ND		2.0		ug/L			08/26/16 16:12	1
Chloroform	ND		1.0		ug/L			08/26/16 16:12	1
Chloromethane	ND		2.0		ug/L			08/26/16 16:12	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 16:12	1
Dibromomethane	ND		1.0		ug/L			08/26/16 16:12	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 16:12	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 16:12	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 16:12	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 16:12	1
Trichloroethene	ND		1.0		ug/L			08/26/16 16:12	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 16:12	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 16:12	1
Benzene	ND		1.0		ug/L			08/26/16 16:12	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 16:12	1
Carbon disulfide	ND		10		ug/L			08/26/16 16:12	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 16:12	1
Ethyl ether	ND		1.0		ug/L			08/26/16 16:12	1
Acetone	ND	*	50		ug/L			08/26/16 16:12	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 16:12	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 16:12	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 16:12	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 16:12	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 16:12	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 16:12	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 16:12	1
Toluene	ND		1.0		ug/L			08/26/16 16:12	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 16:12	1
o-Xylene	ND		1.0		ug/L			08/26/16 16:12	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 16:12	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 16:12	1

Client Sample ID: MW-1031-20160824-01

Lab Sample ID: 480-104995-25

Date Collected: 08/24/16 09:00

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/26/16 16:12	1
Styrene	ND		1.0		ug/L			08/26/16 16:12	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 16:12	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 16:12	1
1,4-Dioxane	ND	*	50		ug/L			08/26/16 16:12	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 16:12	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 16:12	1
2-Hexanone	ND		10		ug/L			08/26/16 16:12	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 16:12	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 16:12	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 16:12	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 16:12	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 16:12	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 16:12	1
Isopropyl ether	ND		10		ug/L			08/26/16 16:12	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 16:12	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 16:12	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 16:12	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 16:12	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 16:12	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 16:12	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 16:12	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 130*		*08/26/16 16:12*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*08/26/16 16:12*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/26/16 16:12*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*08/26/16 16:12*	*1*

Client Sample ID: MW-1033-20160824-01

Lab Sample ID: 480-104995-26

Date Collected: 08/24/16 11:20

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 16:35	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 16:35	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 16:35	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 16:35	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 16:35	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 16:35	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 16:35	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 16:35	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 16:35	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 16:35	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 16:35	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 16:35	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 16:35	1
Bromobenzene	ND		1.0		ug/L			08/26/16 16:35	1

Client Sample ID: MW-1033-20160824-01
Date Collected: 08/24/16 11:20
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-26
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			08/26/16 16:35	1
Bromomethane	ND		2.0		ug/L			08/26/16 16:35	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 16:35	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 16:35	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 16:35	1
Chloroethane	ND		2.0		ug/L			08/26/16 16:35	1
Chloroform	ND		1.0		ug/L			08/26/16 16:35	1
Chloromethane	ND		2.0		ug/L			08/26/16 16:35	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 16:35	1
Dibromomethane	ND		1.0		ug/L			08/26/16 16:35	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 16:35	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 16:35	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 16:35	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 16:35	1
Trichloroethene	ND		1.0		ug/L			08/26/16 16:35	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 16:35	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 16:35	1
Benzene	ND		1.0		ug/L			08/26/16 16:35	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 16:35	1
Carbon disulfide	ND		10		ug/L			08/26/16 16:35	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 16:35	1
Ethyl ether	ND		1.0		ug/L			08/26/16 16:35	1
Acetone	ND	*	50		ug/L			08/26/16 16:35	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 16:35	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 16:35	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 16:35	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 16:35	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 16:35	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 16:35	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 16:35	1
Toluene	ND		1.0		ug/L			08/26/16 16:35	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 16:35	1
o-Xylene	ND		1.0		ug/L			08/26/16 16:35	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 16:35	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 16:35	1
Naphthalene	ND		5.0		ug/L			08/26/16 16:35	1
Styrene	ND		1.0		ug/L			08/26/16 16:35	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 16:35	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 16:35	1
1,4-Dioxane	ND	*	50		ug/L			08/26/16 16:35	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 16:35	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 16:35	1
2-Hexanone	ND		10		ug/L			08/26/16 16:35	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 16:35	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 16:35	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 16:35	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 16:35	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 16:35	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 16:35	1

Client Sample ID: MW-1033-20160824-01

Lab Sample ID: 480-104995-26

Date Collected: 08/24/16 11:20

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			08/26/16 16:35	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 16:35	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 16:35	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 16:35	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 16:35	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 16:35	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 16:35	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 16:35	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*08/26/16 16:35*	*1*
Toluene-d8 (Surr)	*88*		*70 - 130*		*08/26/16 16:35*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/26/16 16:35*	*1*
Dibromofluoromethane (Surr)	*116*		*70 - 130*		*08/26/16 16:35*	*1*

Client Sample ID: MW-1034-20160824-01

Lab Sample ID: 480-104995-27

Date Collected: 08/24/16 11:30

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 16:59	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 16:59	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 16:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 16:59	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 16:59	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 16:59	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 16:59	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 16:59	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 16:59	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 16:59	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 16:59	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 16:59	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 16:59	1
Bromobenzene	ND		1.0		ug/L			08/26/16 16:59	1
Bromoform	ND		1.0		ug/L			08/26/16 16:59	1
Bromomethane	ND		2.0		ug/L			08/26/16 16:59	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 16:59	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 16:59	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 16:59	1
Chloroethane	ND		2.0		ug/L			08/26/16 16:59	1
Chloroform	ND		1.0		ug/L			08/26/16 16:59	1
Chloromethane	ND		2.0		ug/L			08/26/16 16:59	1
cis-1,2-Dichloroethene	**14**		1.0		ug/L			08/26/16 16:59	1
Dibromomethane	ND		1.0		ug/L			08/26/16 16:59	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 16:59	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 16:59	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 16:59	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 16:59	1

Client Sample ID: MW-1034-20160824-01

Lab Sample ID: 480-104995-27

Date Collected: 08/24/16 11:30

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**46**		1.0		ug/L			08/26/16 16:59	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 16:59	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 16:59	1
Benzene	ND		1.0		ug/L			08/26/16 16:59	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 16:59	1
Carbon disulfide	ND		10		ug/L			08/26/16 16:59	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 16:59	1
Ethyl ether	ND		1.0		ug/L			08/26/16 16:59	1
Acetone	**61**	*	50		ug/L			08/26/16 16:59	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 16:59	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 16:59	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 16:59	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 16:59	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 16:59	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 16:59	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 16:59	1
Toluene	ND		1.0		ug/L			08/26/16 16:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 16:59	1
o-Xylene	ND		1.0		ug/L			08/26/16 16:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 16:59	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 16:59	1
Naphthalene	ND		5.0		ug/L			08/26/16 16:59	1
Styrene	ND		1.0		ug/L			08/26/16 16:59	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 16:59	1
trans-1,2-Dichloroethene	**1.2**		1.0		ug/L			08/26/16 16:59	1
1,4-Dioxane	ND	*	50		ug/L			08/26/16 16:59	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 16:59	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 16:59	1
2-Hexanone	ND		10		ug/L			08/26/16 16:59	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 16:59	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 16:59	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 16:59	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 16:59	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 16:59	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 16:59	1
Isopropyl ether	ND		10		ug/L			08/26/16 16:59	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 16:59	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 16:59	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 16:59	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 16:59	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 16:59	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 16:59	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 16:59	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*08/26/16 16:59*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*08/26/16 16:59*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/26/16 16:59*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/26/16 16:59*	*1*

Client Sample ID: DUP-001-20160824

Lab Sample ID: 480-104995-28

Date Collected: 08/24/16 00:00

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 17:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 17:23	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 17:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 17:23	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 17:23	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 17:23	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 17:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 17:23	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 17:23	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 17:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 17:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 17:23	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 17:23	1
Bromobenzene	ND		1.0		ug/L			08/26/16 17:23	1
Bromoform	ND		1.0		ug/L			08/26/16 17:23	1
Bromomethane	ND		2.0		ug/L			08/26/16 17:23	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 17:23	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 17:23	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 17:23	1
Chloroethane	ND		2.0		ug/L			08/26/16 17:23	1
Chloroform	ND		1.0		ug/L			08/26/16 17:23	1
Chloromethane	ND		2.0		ug/L			08/26/16 17:23	1
cis-1,2-Dichloroethene	**7.0**		1.0		ug/L			08/26/16 17:23	1
Dibromomethane	ND		1.0		ug/L			08/26/16 17:23	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 17:23	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 17:23	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 17:23	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 17:23	1
Trichloroethene	**8.6**		1.0		ug/L			08/26/16 17:23	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 17:23	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 17:23	1
Benzene	ND		1.0		ug/L			08/26/16 17:23	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 17:23	1
Carbon disulfide	ND		10		ug/L			08/26/16 17:23	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 17:23	1
Ethyl ether	ND		1.0		ug/L			08/26/16 17:23	1
Acetone	ND	*	50		ug/L			08/26/16 17:23	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 17:23	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 17:23	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 17:23	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 17:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 17:23	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 17:23	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 17:23	1
Toluene	ND		1.0		ug/L			08/26/16 17:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 17:23	1
o-Xylene	ND		1.0		ug/L			08/26/16 17:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 17:23	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 17:23	1

Client Sample ID: DUP-001-20160824

Lab Sample ID: 480-104995-28

Date Collected: 08/24/16 00:00

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/26/16 17:23	1
Styrene	ND		1.0		ug/L			08/26/16 17:23	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 17:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 17:23	1
1,4-Dioxane	ND	*	50		ug/L			08/26/16 17:23	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 17:23	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 17:23	1
2-Hexanone	ND		10		ug/L			08/26/16 17:23	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 17:23	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 17:23	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 17:23	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 17:23	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 17:23	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 17:23	1
Isopropyl ether	ND		10		ug/L			08/26/16 17:23	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 17:23	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 17:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 17:23	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 17:23	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 17:23	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 17:23	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 17:23	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*08/26/16 17:23*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*08/26/16 17:23*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/26/16 17:23*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 130*		*08/26/16 17:23*	*1*

Client Sample ID: DUP-002-20160824

Lab Sample ID: 480-104995-29

Date Collected: 08/24/16 00:02

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 17:47	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 17:47	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 17:47	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 17:47	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 17:47	1
1,1-Dichloroethene	**1.2**		1.0		ug/L			08/26/16 17:47	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 17:47	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 17:47	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 17:47	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 17:47	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 17:47	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 17:47	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 17:47	1
Bromobenzene	ND		1.0		ug/L			08/26/16 17:47	1

Client Sample ID: DUP-002-20160824
Date Collected: 08/24/16 00:02
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-29
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			08/26/16 17:47	1
Bromomethane	ND		2.0		ug/L			08/26/16 17:47	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 17:47	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 17:47	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 17:47	1
Chloroethane	ND		2.0		ug/L			08/26/16 17:47	1
Chloroform	ND		1.0		ug/L			08/26/16 17:47	1
Chloromethane	ND		2.0		ug/L			08/26/16 17:47	1
cis-1,2-Dichloroethene	**43**		1.0		ug/L			08/26/16 17:47	1
Dibromomethane	ND		1.0		ug/L			08/26/16 17:47	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 17:47	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 17:47	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 17:47	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 17:47	1
Trichloroethene	ND		1.0		ug/L			08/26/16 17:47	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 17:47	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 17:47	1
Benzene	ND		1.0		ug/L			08/26/16 17:47	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 17:47	1
Carbon disulfide	ND		10		ug/L			08/26/16 17:47	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 17:47	1
Ethyl ether	ND		1.0		ug/L			08/26/16 17:47	1
Acetone	ND	*	50		ug/L			08/26/16 17:47	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 17:47	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 17:47	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 17:47	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 17:47	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 17:47	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 17:47	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 17:47	1
Toluene	ND		1.0		ug/L			08/26/16 17:47	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 17:47	1
o-Xylene	ND		1.0		ug/L			08/26/16 17:47	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 17:47	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 17:47	1
Naphthalene	ND		5.0		ug/L			08/26/16 17:47	1
Styrene	ND		1.0		ug/L			08/26/16 17:47	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 17:47	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 17:47	1
1,4-Dioxane	ND	*	50		ug/L			08/26/16 17:47	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 17:47	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 17:47	1
2-Hexanone	ND		10		ug/L			08/26/16 17:47	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 17:47	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 17:47	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 17:47	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 17:47	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 17:47	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 17:47	1

Client Sample ID: DUP-002-20160824

Lab Sample ID: 480-104995-29

Date Collected: 08/24/16 00:02

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			08/26/16 17:47	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 17:47	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 17:47	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 17:47	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 17:47	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 17:47	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 17:47	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 17:47	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*08/26/16 17:47*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/26/16 17:47*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/26/16 17:47*	*1*
Dibromofluoromethane (Surr)	*116*		*70 - 130*		*08/26/16 17:47*	*1*

Client Sample ID: DUP-003-20160824

Lab Sample ID: 480-104995-30

Date Collected: 08/24/16 08:08

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 18:11	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 18:11	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 18:11	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 18:11	1
1,1-Dichloroethane	**1.8**		1.0		ug/L			08/26/16 18:11	1
1,1-Dichloroethene	**5.7**		1.0		ug/L			08/26/16 18:11	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 18:11	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 18:11	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 18:11	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 18:11	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 18:11	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 18:11	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 18:11	1
Bromobenzene	ND		1.0		ug/L			08/26/16 18:11	1
Bromoform	ND		1.0		ug/L			08/26/16 18:11	1
Bromomethane	ND		2.0		ug/L			08/26/16 18:11	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 18:11	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 18:11	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 18:11	1
Chloroethane	ND		2.0		ug/L			08/26/16 18:11	1
Chloroform	ND		1.0		ug/L			08/26/16 18:11	1
Chloromethane	ND		2.0		ug/L			08/26/16 18:11	1
cis-1,2-Dichloroethene	**53**		1.0		ug/L			08/26/16 18:11	1
Dibromomethane	ND		1.0		ug/L			08/26/16 18:11	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 18:11	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 18:11	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 18:11	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 18:11	1

Client Sample ID: DUP-003-20160824

Lab Sample ID: 480-104995-30

Date Collected: 08/24/16 08:08

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**23**		1.0		ug/L			08/26/16 18:11	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 18:11	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 18:11	1
Benzene	ND		1.0		ug/L			08/26/16 18:11	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 18:11	1
Carbon disulfide	ND		10		ug/L			08/26/16 18:11	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 18:11	1
Ethyl ether	ND		1.0		ug/L			08/26/16 18:11	1
Acetone	ND	*	50		ug/L			08/26/16 18:11	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 18:11	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 18:11	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 18:11	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 18:11	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 18:11	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 18:11	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 18:11	1
Toluene	ND		1.0		ug/L			08/26/16 18:11	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 18:11	1
o-Xylene	ND		1.0		ug/L			08/26/16 18:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 18:11	1
Methyl tert-butyl ether	**6.1**		1.0		ug/L			08/26/16 18:11	1
Naphthalene	ND		5.0		ug/L			08/26/16 18:11	1
Styrene	ND		1.0		ug/L			08/26/16 18:11	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 18:11	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 18:11	1
1,4-Dioxane	ND	*	50		ug/L			08/26/16 18:11	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 18:11	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 18:11	1
2-Hexanone	ND		10		ug/L			08/26/16 18:11	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 18:11	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 18:11	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 18:11	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 18:11	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 18:11	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 18:11	1
Isopropyl ether	ND		10		ug/L			08/26/16 18:11	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 18:11	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 18:11	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 18:11	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 18:11	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 18:11	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 18:11	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 18:11	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*08/26/16 18:11*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*08/26/16 18:11*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/26/16 18:11*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/26/16 18:11*	*1*

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: DUP-004-20160824
Date Collected: 08/24/16 11:11
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-31
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 18:36	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 18:36	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 18:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 18:36	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 18:36	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 18:36	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 18:36	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 18:36	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 18:36	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 18:36	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 18:36	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 18:36	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 18:36	1
Bromobenzene	ND		1.0		ug/L			08/26/16 18:36	1
Bromoform	ND		1.0		ug/L			08/26/16 18:36	1
Bromomethane	ND		2.0		ug/L			08/26/16 18:36	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 18:36	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 18:36	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 18:36	1
Chloroethane	ND		2.0		ug/L			08/26/16 18:36	1
Chloroform	ND		1.0		ug/L			08/26/16 18:36	1
Chloromethane	ND		2.0		ug/L			08/26/16 18:36	1
cis-1,2-Dichloroethene	**14**		1.0		ug/L			08/26/16 18:36	1
Dibromomethane	ND		1.0		ug/L			08/26/16 18:36	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 18:36	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 18:36	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 18:36	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 18:36	1
Trichloroethene	**46**		1.0		ug/L			08/26/16 18:36	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 18:36	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 18:36	1
Benzene	ND		1.0		ug/L			08/26/16 18:36	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 18:36	1
Carbon disulfide	ND		10		ug/L			08/26/16 18:36	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 18:36	1
Ethyl ether	ND		1.0		ug/L			08/26/16 18:36	1
Acetone	**64**	*	50		ug/L			08/26/16 18:36	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 18:36	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 18:36	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 18:36	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 18:36	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 18:36	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 18:36	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 18:36	1
Toluene	ND		1.0		ug/L			08/26/16 18:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 18:36	1
o-Xylene	ND		1.0		ug/L			08/26/16 18:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 18:36	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 18:36	1

Client Sample ID: DUP-004-20160824

Lab Sample ID: 480-104995-31

Date Collected: 08/24/16 11:11

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/L			08/26/16 18:36	1
Styrene	ND		1.0		ug/L			08/26/16 18:36	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 18:36	1
trans-1,2-Dichloroethene	**1.3**		1.0		ug/L			08/26/16 18:36	1
1,4-Dioxane	ND	*	50		ug/L			08/26/16 18:36	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 18:36	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 18:36	1
2-Hexanone	ND		10		ug/L			08/26/16 18:36	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 18:36	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 18:36	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 18:36	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 18:36	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 18:36	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 18:36	1
Isopropyl ether	ND		10		ug/L			08/26/16 18:36	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 18:36	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 18:36	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 18:36	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 18:36	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 18:36	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 18:36	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 18:36	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*08/26/16 18:36*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/26/16 18:36*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/26/16 18:36*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*08/26/16 18:36*	*1*

Client Sample ID: TB001-20160824-01

Lab Sample ID: 480-104995-32

Date Collected: 08/24/16 12:00

Matrix: Water

Date Received: 08/25/16 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 18:59	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 18:59	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 18:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 18:59	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 18:59	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 18:59	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 18:59	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 18:59	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 18:59	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 18:59	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 18:59	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 18:59	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 18:59	1
Bromobenzene	ND		1.0		ug/L			08/26/16 18:59	1

Client Sample ID: TB001-20160824-01
Date Collected: 08/24/16 12:00
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-32
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			08/26/16 18:59	1
Bromomethane	ND		2.0		ug/L			08/26/16 18:59	1
Carbon tetrachloride	ND	*	1.0		ug/L			08/26/16 18:59	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 18:59	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 18:59	1
Chloroethane	ND		2.0		ug/L			08/26/16 18:59	1
Chloroform	ND		1.0		ug/L			08/26/16 18:59	1
Chloromethane	ND		2.0		ug/L			08/26/16 18:59	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 18:59	1
Dibromomethane	ND		1.0		ug/L			08/26/16 18:59	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 18:59	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 18:59	1
Tetrachloroethene	ND		1.0		ug/L			08/26/16 18:59	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 18:59	1
Trichloroethene	ND		1.0		ug/L			08/26/16 18:59	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 18:59	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 18:59	1
Benzene	ND		1.0		ug/L			08/26/16 18:59	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 18:59	1
Carbon disulfide	ND		10		ug/L			08/26/16 18:59	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 18:59	1
Ethyl ether	ND		1.0		ug/L			08/26/16 18:59	1
Acetone	ND	*	50		ug/L			08/26/16 18:59	1
Tetrahydrofuran	ND	*	10		ug/L			08/26/16 18:59	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 18:59	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 18:59	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 18:59	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 18:59	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 18:59	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 18:59	1
Toluene	ND		1.0		ug/L			08/26/16 18:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 18:59	1
o-Xylene	ND		1.0		ug/L			08/26/16 18:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 18:59	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 18:59	1
Naphthalene	ND		5.0		ug/L			08/26/16 18:59	1
Styrene	ND		1.0		ug/L			08/26/16 18:59	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 18:59	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 18:59	1
1,4-Dioxane	ND	*	50		ug/L			08/26/16 18:59	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 18:59	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 18:59	1
2-Hexanone	ND		10		ug/L			08/26/16 18:59	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 18:59	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 18:59	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 18:59	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 18:59	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 18:59	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 18:59	1

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: TB001-20160824-01
Date Collected: 08/24/16 12:00
Date Received: 08/25/16 02:00

Lab Sample ID: 480-104995-32
Matrix: Water

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			08/26/16 18:59	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 18:59	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 18:59	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 18:59	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 18:59	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 18:59	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 18:59	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 18:59	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*		*08/26/16 18:59*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*08/26/16 18:59*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/26/16 18:59*	*1*
Dibromofluoromethane (Surr)	*116*		*70 - 130*		*08/26/16 18:59*	*1*

Surrogate Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-104995-1	MW-1001M-20160824-01	115	93	101	113
480-104995-2	MW-1002B-20160824-01	120	91	97	114
480-104995-3	MW-1003-20160824-01	122	92	98	116
480-104995-4	MW-1004-20160824-01	117	91	98	115
480-104995-5	MW-1005-20160824-01	98	98	100	102
480-104995-6	MW-1006-20160824-01	98	96	100	103
480-104995-7	MW-1008-20160824-01	102	98	100	107
480-104995-8	MW-1009-20160824-01	98	95	101	104
480-104995-9	MW-1010M-20160824-01	99	95	98	103
480-104995-10	MW-1010D-20160824-01	97	96	99	104
480-104995-11	MW-1013-20160824-01	102	97	100	104
480-104995-12	MW-1014-20160824-01	101	95	97	106
480-104995-13	MW-1015D-20160824-01	98	97	100	103
480-104995-14	MW-1016D-20160824-01	101	94	97	106
480-104995-15	MW-1017D-20160824-01	98	95	97	103
480-104995-16	MW-1019B-20160824-01	104	94	99	103
480-104995-17	MW-1022-20160824-01	105	95	97	105
480-104995-18	MW-1023-20160824-01	100	96	97	103
480-104995-19	MW-1024D-20160824-01	104	96	98	107
480-104995-20	MW-1025M-20160824-01	104	99	98	112
480-104995-21	MW-1025D-20160824-01	105	95	96	110
480-104995-22	MW-1027-20160824-01	106	96	98	110
480-104995-23	MW-1028-20160824-01	103	95	97	110
480-104995-24	MW-1030-20160824-01	115	89	99	114
480-104995-25	MW-1031-20160824-01	120	89	97	111
480-104995-26	MW-1033-20160824-01	117	88	97	116
480-104995-27	MW-1034-20160824-01	114	90	97	110
480-104995-28	DUP-001-20160824	115	89	97	114
480-104995-29	DUP-002-20160824	117	93	103	116
480-104995-30	DUP-003-20160824	115	90	99	112
480-104995-31	DUP-004-20160824	114	92	98	109
480-104995-32	TB001-20160824-01	123	90	97	116
LCS 480-317749/5	Lab Control Sample	116	93	100	113
LCS 480-317754/5	Lab Control Sample	90	99	105	88
LCS 480-317839/4	Lab Control Sample	112	94	102	110
LCSD 480-317749/26	Lab Control Sample Dup	113	94	105	114
LCSD 480-317754/27	Lab Control Sample Dup	90	96	101	85
LCSD 480-317839/5	Lab Control Sample Dup	110	93	104	109
MB 480-317749/7	Method Blank	114	91	99	110
MB 480-317754/7	Method Blank	96	97	99	101
MB 480-317839/7	Method Blank	115	91	101	107

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-317749/7
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/25/16 22:58	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/25/16 22:58	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 22:58	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/25/16 22:58	1
1,1-Dichloroethane	ND		1.0		ug/L			08/25/16 22:58	1
1,1-Dichloroethene	ND		1.0		ug/L			08/25/16 22:58	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/25/16 22:58	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
1,2-Dichloroethane	ND		1.0		ug/L			08/25/16 22:58	1
1,2-Dichloropropane	ND		1.0		ug/L			08/25/16 22:58	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/25/16 22:58	1
Bromobenzene	ND		1.0		ug/L			08/25/16 22:58	1
Bromoform	ND		1.0		ug/L			08/25/16 22:58	1
Bromomethane	ND		2.0		ug/L			08/25/16 22:58	1
Carbon tetrachloride	ND		1.0		ug/L			08/25/16 22:58	1
Chlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
Chlorodibromomethane	ND		0.50		ug/L			08/25/16 22:58	1
Chloroethane	ND		2.0		ug/L			08/25/16 22:58	1
Chloroform	ND		1.0		ug/L			08/25/16 22:58	1
Chloromethane	ND		2.0		ug/L			08/25/16 22:58	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/25/16 22:58	1
Dibromomethane	ND		1.0		ug/L			08/25/16 22:58	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/25/16 22:58	1
Methylene Chloride	ND		1.0		ug/L			08/25/16 22:58	1
Tetrachloroethene	ND		1.0		ug/L			08/25/16 22:58	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/25/16 22:58	1
Trichloroethene	ND		1.0		ug/L			08/25/16 22:58	1
Trichlorofluoromethane	ND		1.0		ug/L			08/25/16 22:58	1
Vinyl chloride	ND		1.0		ug/L			08/25/16 22:58	1
Benzene	ND		1.0		ug/L			08/25/16 22:58	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/25/16 22:58	1
Carbon disulfide	ND		10		ug/L			08/25/16 22:58	1
Chlorobromomethane	ND		1.0		ug/L			08/25/16 22:58	1
Ethyl ether	ND		1.0		ug/L			08/25/16 22:58	1
Acetone	ND		50		ug/L			08/25/16 22:58	1
Tetrahydrofuran	ND		10		ug/L			08/25/16 22:58	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/25/16 22:58	1
Hexachlorobutadiene	ND		0.40		ug/L			08/25/16 22:58	1
n-Butylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
2-Chlorotoluene	ND		1.0		ug/L			08/25/16 22:58	1
1,1-Dichloropropene	ND		1.0		ug/L			08/25/16 22:58	1
Toluene	ND		1.0		ug/L			08/25/16 22:58	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
o-Xylene	ND		1.0		ug/L			08/25/16 22:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/25/16 22:58	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-317749/7
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			08/25/16 22:58	1
Naphthalene	ND		5.0		ug/L			08/25/16 22:58	1
Styrene	ND		1.0		ug/L			08/25/16 22:58	1
4-Chlorotoluene	ND		1.0		ug/L			08/25/16 22:58	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/25/16 22:58	1
1,4-Dioxane	ND		50		ug/L			08/25/16 22:58	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/25/16 22:58	1
sec-Butylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
2-Hexanone	ND		10		ug/L			08/25/16 22:58	1
2-Butanone (MEK)	ND		10		ug/L			08/25/16 22:58	1
Ethylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
Isopropylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
2,2-Dichloropropane	ND		1.0		ug/L			08/25/16 22:58	1
N-Propylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/25/16 22:58	1
Isopropyl ether	ND		10		ug/L			08/25/16 22:58	1
4-Isopropyltoluene	ND		1.0		ug/L			08/25/16 22:58	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/25/16 22:58	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/25/16 22:58	1
Ethylene Dibromide	ND		1.0		ug/L			08/25/16 22:58	1
tert-Butylbenzene	ND		1.0		ug/L			08/25/16 22:58	1
1,3-Dichloropropane	ND		1.0		ug/L			08/25/16 22:58	1
Dichlorobromomethane	ND		0.50		ug/L			08/25/16 22:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*08/25/16 22:58*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*08/25/16 22:58*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/25/16 22:58*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*08/25/16 22:58*	*1*

Lab Sample ID: LCS 480-317749/5
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.7		ug/L		103	70 - 130
1,1,1-Trichloroethane	25.0	29.0		ug/L		116	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	70 - 130
1,1,2-Trichloroethane	25.0	23.2		ug/L		93	70 - 130
1,1-Dichloroethane	25.0	26.9		ug/L		108	70 - 130
1,1-Dichloroethene	25.0	25.3		ug/L		101	70 - 130
1,2,3-Trichloropropane	25.0	24.1		ug/L		96	70 - 130
1,2-Dichlorobenzene	25.0	23.8		ug/L		95	70 - 130
1,2-Dichloroethane	25.0	28.7		ug/L		115	70 - 130
1,2-Dichloropropane	25.0	24.9		ug/L		100	70 - 130
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130
1,4-Dichlorobenzene	25.0	24.6		ug/L		98	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-317749/5
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	25.0	25.3		ug/L		101	70 - 130
Bromobenzene	25.0	23.8		ug/L		95	70 - 130
Bromoform	25.0	27.7		ug/L		111	70 - 130
Bromomethane	25.0	23.6		ug/L		94	70 - 130
Carbon tetrachloride	25.0	31.3		ug/L		125	70 - 130
Chlorobenzene	25.0	22.5		ug/L		90	70 - 130
Chlorodibromomethane	25.0	27.4		ug/L		110	70 - 130
Chloroethane	25.0	23.7		ug/L		95	70 - 130
Chloroform	25.0	26.0		ug/L		104	70 - 130
Chloromethane	25.0	22.7		ug/L		91	70 - 130
cis-1,2-Dichloroethene	25.0	26.6		ug/L		106	70 - 130
Dibromomethane	25.0	27.2		ug/L		109	70 - 130
Dichlorodifluoromethane	25.0	21.1		ug/L		84	70 - 130
Methylene Chloride	25.0	24.5		ug/L		98	70 - 130
Tetrachloroethene	25.0	22.9		ug/L		92	70 - 130
trans-1,3-Dichloropropene	25.0	24.1		ug/L		96	70 - 130
Trichloroethene	25.0	27.2		ug/L		109	70 - 130
Trichlorofluoromethane	25.0	25.0		ug/L		100	70 - 130
Vinyl chloride	25.0	22.1		ug/L		88	70 - 130
Benzene	25.0	24.6		ug/L		98	70 - 130
cis-1,3-Dichloropropene	25.0	25.7		ug/L		103	70 - 130
Carbon disulfide	25.0	24.1		ug/L		97	70 - 130
Chlorobromomethane	25.0	28.0		ug/L		112	70 - 130
Ethyl ether	25.0	25.3		ug/L		101	70 - 130
Acetone	125	180	*	ug/L		144	70 - 130
Tetrahydrofuran	50.0	72.4	*	ug/L		145	70 - 130
4-Methyl-2-pentanone (MIBK)	125	132		ug/L		105	70 - 130
Hexachlorobutadiene	25.0	23.9		ug/L		96	70 - 130
n-Butylbenzene	25.0	24.1		ug/L		97	70 - 130
1,2,4-Trimethylbenzene	25.0	24.3		ug/L		97	70 - 130
2-Chlorotoluene	25.0	23.3		ug/L		93	70 - 130
1,1-Dichloropropene	25.0	25.9		ug/L		103	70 - 130
Toluene	25.0	21.5		ug/L		86	70 - 130
1,2,4-Trichlorobenzene	25.0	24.6		ug/L		98	70 - 130
o-Xylene	25.0	22.7		ug/L		91	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	28.0		ug/L		112	70 - 130
Methyl tert-butyl ether	25.0	25.5		ug/L		102	70 - 130
Naphthalene	25.0	24.8		ug/L		99	70 - 130
Styrene	25.0	22.5		ug/L		90	70 - 130
4-Chlorotoluene	25.0	25.6		ug/L		103	70 - 130
trans-1,2-Dichloroethene	25.0	25.4		ug/L		102	70 - 130
1,4-Dioxane	500	433		ug/L		87	70 - 130
1,2,3-Trichlorobenzene	25.0	24.1		ug/L		96	70 - 130
sec-Butylbenzene	25.0	23.8		ug/L		95	70 - 130
2-Hexanone	125	134		ug/L		107	70 - 130
2-Butanone (MEK)	125	146		ug/L		117	70 - 130
Ethylbenzene	25.0	22.8		ug/L		91	70 - 130
Isopropylbenzene	25.0	23.8		ug/L		95	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-317749/5
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	25.0	25.5		ug/L		102	70 - 130
N-Propylbenzene	25.0	23.0		ug/L		92	70 - 130
Tert-butyl ethyl ether	25.0	24.4		ug/L		98	70 - 130
Isopropyl ether	25.0	27.0		ug/L		108	70 - 130
4-Isopropyltoluene	25.0	23.9		ug/L		96	70 - 130
Tert-amyl methyl ether	25.0	24.5		ug/L		98	70 - 130
1,3,5-Trimethylbenzene	25.0	24.0		ug/L		96	70 - 130
m-Xylene & p-Xylene	25.0	22.6		ug/L		90	70 - 130
Ethylene Dibromide	25.0	24.5		ug/L		98	70 - 130
tert-Butylbenzene	25.0	24.1		ug/L		97	70 - 130
1,3-Dichloropropane	25.0	21.7		ug/L		87	70 - 130
Dichlorobromomethane	25.0	28.5		ug/L		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*113*		*70 - 130*

Lab Sample ID: LCSD 480-317749/26
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	27.8		ug/L		111	70 - 130	8	20
1,1,1-Trichloroethane	25.0	30.4		ug/L		121	70 - 130	4	20
1,1,2,2-Tetrachloroethane	25.0	22.1		ug/L		88	70 - 130	5	20
1,1,2-Trichloroethane	25.0	24.8		ug/L		99	70 - 130	7	20
1,1-Dichloroethane	25.0	28.3		ug/L		113	70 - 130	5	20
1,1-Dichloroethene	25.0	27.3		ug/L		109	70 - 130	8	20
1,2,3-Trichloropropane	25.0	24.2		ug/L		97	70 - 130	1	20
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	70 - 130	4	20
1,2-Dichloroethane	25.0	28.1		ug/L		113	70 - 130	2	20
1,2-Dichloropropane	25.0	26.8		ug/L		107	70 - 130	8	20
1,3-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130	3	20
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130	3	20
2-Chloroethyl vinyl ether	25.0	24.1		ug/L		97	70 - 130	5	20
Bromobenzene	25.0	24.7		ug/L		99	70 - 130	4	20
Bromoform	25.0	26.8		ug/L		107	70 - 130	3	20
Bromomethane	25.0	23.7		ug/L		95	70 - 130	0	20
Carbon tetrachloride	25.0	32.7	*	ug/L		131	70 - 130	5	20
Chlorobenzene	25.0	25.0		ug/L		100	70 - 130	10	20
Chlorodibromomethane	25.0	29.2		ug/L		117	70 - 130	6	20
Chloroethane	25.0	25.0		ug/L		100	70 - 130	5	20
Chloroform	25.0	27.0		ug/L		108	70 - 130	4	20
Chloromethane	25.0	23.9		ug/L		96	70 - 130	5	20
cis-1,2-Dichloroethene	25.0	27.5		ug/L		110	70 - 130	3	20
Dibromomethane	25.0	28.0		ug/L		112	70 - 130	3	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-317749/26
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane	25.0	22.5		ug/L		90	70 - 130	6	20
Methylene Chloride	25.0	24.6		ug/L		98	70 - 130	0	20
Tetrachloroethene	25.0	25.5		ug/L		102	70 - 130	11	20
trans-1,3-Dichloropropene	25.0	25.1		ug/L		100	70 - 130	4	20
Trichloroethene	25.0	27.9		ug/L		112	70 - 130	3	20
Trichlorofluoromethane	25.0	26.3		ug/L		105	70 - 130	5	20
Vinyl chloride	25.0	24.1		ug/L		97	70 - 130	9	20
Benzene	25.0	25.7		ug/L		103	70 - 130	4	20
cis-1,3-Dichloropropene	25.0	26.4		ug/L		106	70 - 130	3	20
Carbon disulfide	25.0	26.0		ug/L		104	70 - 130	8	20
Chlorobromomethane	25.0	27.3		ug/L		109	70 - 130	2	20
Ethyl ether	25.0	24.7		ug/L		99	70 - 130	3	20
Acetone	125	171	*	ug/L		137	70 - 130	5	20
Tetrahydrofuran	50.0	70.2	*	ug/L		140	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	125	133		ug/L		106	70 - 130	1	20
Hexachlorobutadiene	25.0	25.6		ug/L		102	70 - 130	7	20
n-Butylbenzene	25.0	25.9		ug/L		104	70 - 130	7	20
1,2,4-Trimethylbenzene	25.0	25.3		ug/L		101	70 - 130	4	20
2-Chlorotoluene	25.0	24.2		ug/L		97	70 - 130	4	20
1,1-Dichloropropene	25.0	27.8		ug/L		111	70 - 130	7	20
Toluene	25.0	24.0		ug/L		96	70 - 130	11	20
1,2,4-Trichlorobenzene	25.0	24.1		ug/L		96	70 - 130	2	20
o-Xylene	25.0	24.1		ug/L		96	70 - 130	6	20
1,2-Dibromo-3-Chloropropane	25.0	26.2		ug/L		105	70 - 130	7	20
Methyl tert-butyl ether	25.0	25.0		ug/L		100	70 - 130	2	20
Naphthalene	25.0	25.0		ug/L		100	70 - 130	1	20
Styrene	25.0	24.2		ug/L		97	70 - 130	7	20
4-Chlorotoluene	25.0	26.2		ug/L		105	70 - 130	2	20
trans-1,2-Dichloroethene	25.0	26.6		ug/L		106	70 - 130	5	20
1,4-Dioxane	500	392		ug/L		78	70 - 130	10	20
1,2,3-Trichlorobenzene	25.0	24.0		ug/L		96	70 - 130	1	20
sec-Butylbenzene	25.0	25.5		ug/L		102	70 - 130	7	20
2-Hexanone	125	133		ug/L		106	70 - 130	1	20
2-Butanone (MEK)	125	138		ug/L		111	70 - 130	6	20
Ethylbenzene	25.0	24.7		ug/L		99	70 - 130	8	20
Isopropylbenzene	25.0	24.8		ug/L		99	70 - 130	4	20
2,2-Dichloropropane	25.0	26.5		ug/L		106	70 - 130	4	20
N-Propylbenzene	25.0	24.0		ug/L		96	70 - 130	4	20
Tert-butyl ethyl ether	25.0	25.1		ug/L		100	70 - 130	3	20
Isopropyl ether	25.0	27.3		ug/L		109	70 - 130	1	20
4-Isopropyltoluene	25.0	25.5		ug/L		102	70 - 130	6	20
Tert-amyl methyl ether	25.0	24.2		ug/L		97	70 - 130	1	20
1,3,5-Trimethylbenzene	25.0	25.2		ug/L		101	70 - 130	5	20
m-Xylene & p-Xylene	25.0	24.5		ug/L		98	70 - 130	8	20
Ethylene Dibromide	25.0	24.8		ug/L		99	70 - 130	1	20
tert-Butylbenzene	25.0	24.9		ug/L		100	70 - 130	3	20
1,3-Dichloropropane	25.0	23.1		ug/L		92	70 - 130	6	20
Dichlorobromomethane	25.0	29.0		ug/L		116	70 - 130	2	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-317749/26
Matrix: Water
Analysis Batch: 317749

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	113		70 - 130
Toluene-d8 (Surr)	94		70 - 130
4-Bromofluorobenzene (Surr)	105		70 - 130
Dibromofluoromethane (Surr)	114		70 - 130

Lab Sample ID: MB 480-317754/7
Matrix: Water
Analysis Batch: 317754

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/25/16 23:18	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/25/16 23:18	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 23:18	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/25/16 23:18	1
1,1-Dichloroethane	ND		1.0		ug/L			08/25/16 23:18	1
1,1-Dichloroethene	ND		1.0		ug/L			08/25/16 23:18	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/25/16 23:18	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/25/16 23:18	1
1,2-Dichloroethane	ND		1.0		ug/L			08/25/16 23:18	1
1,2-Dichloropropane	ND		1.0		ug/L			08/25/16 23:18	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/25/16 23:18	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/25/16 23:18	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/25/16 23:18	1
Bromobenzene	ND		1.0		ug/L			08/25/16 23:18	1
Bromoform	ND		1.0		ug/L			08/25/16 23:18	1
Bromomethane	ND		2.0		ug/L			08/25/16 23:18	1
Carbon tetrachloride	ND		1.0		ug/L			08/25/16 23:18	1
Chlorobenzene	ND		1.0		ug/L			08/25/16 23:18	1
Chlorodibromomethane	ND		0.50		ug/L			08/25/16 23:18	1
Chloroethane	ND		2.0		ug/L			08/25/16 23:18	1
Chloroform	ND		1.0		ug/L			08/25/16 23:18	1
Chloromethane	ND		2.0		ug/L			08/25/16 23:18	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/25/16 23:18	1
Dibromomethane	ND		1.0		ug/L			08/25/16 23:18	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/25/16 23:18	1
Methylene Chloride	ND		1.0		ug/L			08/25/16 23:18	1
Tetrachloroethene	ND		1.0		ug/L			08/25/16 23:18	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/25/16 23:18	1
Trichloroethene	ND		1.0		ug/L			08/25/16 23:18	1
Trichlorofluoromethane	ND		1.0		ug/L			08/25/16 23:18	1
Vinyl chloride	ND		1.0		ug/L			08/25/16 23:18	1
Benzene	ND		1.0		ug/L			08/25/16 23:18	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/25/16 23:18	1
Carbon disulfide	ND		10		ug/L			08/25/16 23:18	1
Chlorobromomethane	ND		1.0		ug/L			08/25/16 23:18	1
Ethyl ether	ND		1.0		ug/L			08/25/16 23:18	1
Acetone	ND		50		ug/L			08/25/16 23:18	1
Tetrahydrofuran	ND		10		ug/L			08/25/16 23:18	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-317754/7
Matrix: Water
Analysis Batch: 317754

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/25/16 23:18	1
Hexachlorobutadiene	ND		0.40		ug/L			08/25/16 23:18	1
n-Butylbenzene	ND		1.0		ug/L			08/25/16 23:18	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/25/16 23:18	1
2-Chlorotoluene	ND		1.0		ug/L			08/25/16 23:18	1
1,1-Dichloropropene	ND		1.0		ug/L			08/25/16 23:18	1
Toluene	ND		1.0		ug/L			08/25/16 23:18	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/25/16 23:18	1
o-Xylene	ND		1.0		ug/L			08/25/16 23:18	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/25/16 23:18	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/25/16 23:18	1
Naphthalene	ND		5.0		ug/L			08/25/16 23:18	1
Styrene	ND		1.0		ug/L			08/25/16 23:18	1
4-Chlorotoluene	ND		1.0		ug/L			08/25/16 23:18	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/25/16 23:18	1
1,4-Dioxane	ND		50		ug/L			08/25/16 23:18	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/25/16 23:18	1
sec-Butylbenzene	ND		1.0		ug/L			08/25/16 23:18	1
2-Hexanone	ND		10		ug/L			08/25/16 23:18	1
2-Butanone (MEK)	ND		10		ug/L			08/25/16 23:18	1
Ethylbenzene	ND		1.0		ug/L			08/25/16 23:18	1
Isopropylbenzene	ND		1.0		ug/L			08/25/16 23:18	1
2,2-Dichloropropane	ND		1.0		ug/L			08/25/16 23:18	1
N-Propylbenzene	ND		1.0		ug/L			08/25/16 23:18	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/25/16 23:18	1
Isopropyl ether	ND		10		ug/L			08/25/16 23:18	1
4-Isopropyltoluene	ND		1.0		ug/L			08/25/16 23:18	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/25/16 23:18	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/25/16 23:18	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/25/16 23:18	1
Ethylene Dibromide	ND		1.0		ug/L			08/25/16 23:18	1
tert-Butylbenzene	ND		1.0		ug/L			08/25/16 23:18	1
1,3-Dichloropropane	ND		1.0		ug/L			08/25/16 23:18	1
Dichlorobromomethane	ND		0.50		ug/L			08/25/16 23:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/25/16 23:18*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/25/16 23:18*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/25/16 23:18*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/25/16 23:18*	*1*

Lab Sample ID: LCS 480-317754/5
Matrix: Water
Analysis Batch: 317754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	23.0		ug/L		92	70 - 130
1,1,1-Trichloroethane	25.0	19.3		ug/L		77	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-317754/5
Matrix: Water
Analysis Batch: 317754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	25.0	22.1		ug/L		89	70 - 130
1,1,2-Trichloroethane	25.0	22.9		ug/L		92	70 - 130
1,1-Dichloroethane	25.0	19.4		ug/L		78	70 - 130
1,1-Dichloroethene	25.0	19.3		ug/L		77	70 - 130
1,2,3-Trichloropropane	25.0	21.6		ug/L		86	70 - 130
1,2-Dichlorobenzene	25.0	22.1		ug/L		88	70 - 130
1,2-Dichloroethane	25.0	19.1		ug/L		76	70 - 130
1,2-Dichloropropane	25.0	19.8		ug/L		79	70 - 130
1,3-Dichlorobenzene	25.0	22.6		ug/L		91	70 - 130
1,4-Dichlorobenzene	25.0	21.6		ug/L		86	70 - 130
2-Chloroethyl vinyl ether	25.0	21.9		ug/L		88	70 - 130
Bromobenzene	25.0	21.8		ug/L		87	70 - 130
Bromoform	25.0	23.4		ug/L		94	70 - 130
Bromomethane	25.0	17.5		ug/L		70	70 - 130
Carbon tetrachloride	25.0	20.3		ug/L		81	70 - 130
Chlorobenzene	25.0	22.8		ug/L		91	70 - 130
Chlorodibromomethane	25.0	22.6		ug/L		91	70 - 130
Chloroethane	25.0	17.5		ug/L		70	70 - 130
Chloroform	25.0	19.1		ug/L		76	70 - 130
Chloromethane	25.0	13.6	*	ug/L		55	70 - 130
cis-1,2-Dichloroethene	25.0	18.9		ug/L		76	70 - 130
Dibromomethane	25.0	20.0		ug/L		80	70 - 130
Dichlorodifluoromethane	25.0	14.8	*	ug/L		59	70 - 130
Methylene Chloride	25.0	19.1		ug/L		76	70 - 130
Tetrachloroethene	25.0	24.0		ug/L		96	70 - 130
trans-1,3-Dichloropropene	25.0	22.9		ug/L		92	70 - 130
Trichloroethene	25.0	20.6		ug/L		83	70 - 130
Trichlorofluoromethane	25.0	19.1		ug/L		76	70 - 130
Vinyl chloride	25.0	14.6	*	ug/L		58	70 - 130
Benzene	25.0	19.3		ug/L		77	70 - 130
cis-1,3-Dichloropropene	25.0	20.3		ug/L		81	70 - 130
Carbon disulfide	25.0	17.2	*	ug/L		69	70 - 130
Chlorobromomethane	25.0	20.0		ug/L		80	70 - 130
Ethyl ether	25.0	19.8		ug/L		79	70 - 130
Acetone	125	100		ug/L		80	70 - 130
Tetrahydrofuran	50.0	36.4		ug/L		73	70 - 130
4-Methyl-2-pentanone (MIBK)	125	104		ug/L		83	70 - 130
Hexachlorobutadiene	25.0	22.6		ug/L		90	70 - 130
n-Butylbenzene	25.0	22.3		ug/L		89	70 - 130
1,2,4-Trimethylbenzene	25.0	22.2		ug/L		89	70 - 130
2-Chlorotoluene	25.0	24.9		ug/L		100	70 - 130
1,1-Dichloropropene	25.0	19.3		ug/L		77	70 - 130
Toluene	25.0	21.7		ug/L		87	70 - 130
1,2,4-Trichlorobenzene	25.0	23.2		ug/L		93	70 - 130
o-Xylene	25.0	22.8		ug/L		91	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	19.5		ug/L		78	70 - 130
Methyl tert-butyl ether	25.0	18.5		ug/L		74	70 - 130
Naphthalene	25.0	22.9		ug/L		92	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-317754/5
Matrix: Water
Analysis Batch: 317754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Styrene	25.0	22.9		ug/L		92	70 - 130
4-Chlorotoluene	25.0	26.6		ug/L		107	70 - 130
trans-1,2-Dichloroethene	25.0	18.9		ug/L		75	70 - 130
1,4-Dioxane	500	418		ug/L		84	70 - 130
1,2,3-Trichlorobenzene	25.0	23.1		ug/L		92	70 - 130
sec-Butylbenzene	25.0	21.8		ug/L		87	70 - 130
2-Hexanone	125	154		ug/L		123	70 - 130
2-Butanone (MEK)	125	127		ug/L		101	70 - 130
Ethylbenzene	25.0	22.1		ug/L		89	70 - 130
Isopropylbenzene	25.0	22.1		ug/L		88	70 - 130
2,2-Dichloropropane	25.0	18.1		ug/L		73	70 - 130
N-Propylbenzene	25.0	21.5		ug/L		86	70 - 130
Tert-butyl ethyl ether	25.0	21.5		ug/L		86	70 - 130
Isopropyl ether	25.0	21.3		ug/L		85	70 - 130
4-Isopropyltoluene	25.0	22.3		ug/L		89	70 - 130
Tert-amyl methyl ether	25.0	22.3		ug/L		89	70 - 130
1,3,5-Trimethylbenzene	25.0	22.1		ug/L		88	70 - 130
m-Xylene & p-Xylene	25.0	22.5		ug/L		90	70 - 130
Ethylene Dibromide	25.0	22.4		ug/L		90	70 - 130
tert-Butylbenzene	25.0	22.4		ug/L		90	70 - 130
1,3-Dichloropropane	25.0	22.2		ug/L		89	70 - 130
Dichlorobromomethane	25.0	20.0		ug/L		80	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*88*		*70 - 130*

Lab Sample ID: LCSD 480-317754/27
Matrix: Water
Analysis Batch: 317754

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	22.7		ug/L		91	70 - 130	1	20
1,1,1-Trichloroethane	25.0	19.9		ug/L		80	70 - 130	3	20
1,1,2,2-Tetrachloroethane	25.0	22.0		ug/L		88	70 - 130	1	20
1,1,2-Trichloroethane	25.0	22.4		ug/L		90	70 - 130	2	20
1,1-Dichloroethane	25.0	20.0		ug/L		80	70 - 130	3	20
1,1-Dichloroethene	25.0	20.0		ug/L		80	70 - 130	4	20
1,2,3-Trichloropropane	25.0	21.4		ug/L		86	70 - 130	1	20
1,2-Dichlorobenzene	25.0	22.9		ug/L		91	70 - 130	4	20
1,2-Dichloroethane	25.0	18.7		ug/L		75	70 - 130	2	20
1,2-Dichloropropane	25.0	20.0		ug/L		80	70 - 130	1	20
1,3-Dichlorobenzene	25.0	23.4		ug/L		94	70 - 130	3	20
1,4-Dichlorobenzene	25.0	22.7		ug/L		91	70 - 130	5	20
2-Chloroethyl vinyl ether	25.0	21.6		ug/L		87	70 - 130	1	20
Bromobenzene	25.0	22.7		ug/L		91	70 - 130	4	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-317754/27
Matrix: Water
Analysis Batch: 317754

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	25.0	22.8		ug/L		91	70 - 130	2	20
Bromomethane	25.0	18.5		ug/L		74	70 - 130	6	20
Carbon tetrachloride	25.0	20.9		ug/L		84	70 - 130	3	20
Chlorobenzene	25.0	22.8		ug/L		91	70 - 130	0	20
Chlorodibromomethane	25.0	22.3		ug/L		89	70 - 130	1	20
Chloroethane	25.0	18.1		ug/L		72	70 - 130	3	20
Chloroform	25.0	19.2		ug/L		77	70 - 130	1	20
Chloromethane	25.0	14.0	*	ug/L		56	70 - 130	3	20
cis-1,2-Dichloroethene	25.0	19.4		ug/L		78	70 - 130	3	20
Dibromomethane	25.0	20.0		ug/L		80	70 - 130	0	20
Dichlorodifluoromethane	25.0	15.5	*	ug/L		62	70 - 130	4	20
Methylene Chloride	25.0	19.5		ug/L		78	70 - 130	2	20
Tetrachloroethene	25.0	24.5		ug/L		98	70 - 130	2	20
trans-1,3-Dichloropropene	25.0	22.2		ug/L		89	70 - 130	3	20
Trichloroethene	25.0	21.2		ug/L		85	70 - 130	3	20
Trichlorofluoromethane	25.0	20.1		ug/L		80	70 - 130	5	20
Vinyl chloride	25.0	15.5	*	ug/L		62	70 - 130	6	20
Benzene	25.0	19.9		ug/L		80	70 - 130	3	20
cis-1,3-Dichloropropene	25.0	20.7		ug/L		83	70 - 130	2	20
Carbon disulfide	25.0	19.1		ug/L		76	70 - 130	10	20
Chlorobromomethane	25.0	20.1		ug/L		81	70 - 130	1	20
Ethyl ether	25.0	19.7		ug/L		79	70 - 130	0	20
Acetone	125	96.2		ug/L		77	70 - 130	4	20
Tetrahydrofuran	50.0	35.9		ug/L		72	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	125	99.6		ug/L		80	70 - 130	4	20
Hexachlorobutadiene	25.0	24.2		ug/L		97	70 - 130	7	20
n-Butylbenzene	25.0	23.4		ug/L		93	70 - 130	5	20
1,2,4-Trimethylbenzene	25.0	23.0		ug/L		92	70 - 130	3	20
2-Chlorotoluene	25.0	26.0		ug/L		104	70 - 130	4	20
1,1-Dichloropropene	25.0	20.4		ug/L		82	70 - 130	6	20
Toluene	25.0	22.1		ug/L		89	70 - 130	2	20
1,2,4-Trichlorobenzene	25.0	24.1		ug/L		96	70 - 130	4	20
o-Xylene	25.0	22.9		ug/L		92	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	25.0	19.9		ug/L		80	70 - 130	2	20
Methyl tert-butyl ether	25.0	18.4		ug/L		74	70 - 130	1	20
Naphthalene	25.0	23.4		ug/L		94	70 - 130	2	20
Styrene	25.0	22.9		ug/L		91	70 - 130	0	20
4-Chlorotoluene	25.0	27.2		ug/L		109	70 - 130	2	20
trans-1,2-Dichloroethene	25.0	19.5		ug/L		78	70 - 130	3	20
1,4-Dioxane	500	429		ug/L		86	70 - 130	3	20
1,2,3-Trichlorobenzene	25.0	23.6		ug/L		94	70 - 130	2	20
sec-Butylbenzene	25.0	23.3		ug/L		93	70 - 130	7	20
2-Hexanone	125	149		ug/L		119	70 - 130	3	20
2-Butanone (MEK)	125	120		ug/L		96	70 - 130	6	20
Ethylbenzene	25.0	22.8		ug/L		91	70 - 130	3	20
Isopropylbenzene	25.0	23.3		ug/L		93	70 - 130	5	20
2,2-Dichloropropane	25.0	18.9		ug/L		76	70 - 130	4	20
N-Propylbenzene	25.0	23.2		ug/L		93	70 - 130	7	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-317754/27
Matrix: Water
Analysis Batch: 317754

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tert-butyl ethyl ether	25.0	21.5		ug/L		86	70 - 130	0	20
Isopropyl ether	25.0	21.3		ug/L		85	70 - 130	0	20
4-Isopropyltoluene	25.0	23.3		ug/L		93	70 - 130	4	20
Tert-amyl methyl ether	25.0	22.1		ug/L		88	70 - 130	1	20
1,3,5-Trimethylbenzene	25.0	23.3		ug/L		93	70 - 130	5	20
m-Xylene & p-Xylene	25.0	22.8		ug/L		91	70 - 130	1	20
Ethylene Dibromide	25.0	21.9		ug/L		88	70 - 130	2	20
tert-Butylbenzene	25.0	23.0		ug/L		92	70 - 130	3	20
1,3-Dichloropropane	25.0	21.8		ug/L		87	70 - 130	2	20
Dichlorobromomethane	25.0	19.9		ug/L		80	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*85*		*70 - 130*

Lab Sample ID: MB 480-317839/7
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/26/16 11:19	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/26/16 11:19	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/26/16 11:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/26/16 11:19	1
1,1-Dichloroethane	ND		1.0		ug/L			08/26/16 11:19	1
1,1-Dichloroethene	ND		1.0		ug/L			08/26/16 11:19	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/26/16 11:19	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/26/16 11:19	1
1,2-Dichloroethane	ND		1.0		ug/L			08/26/16 11:19	1
1,2-Dichloropropane	ND		1.0		ug/L			08/26/16 11:19	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/26/16 11:19	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/26/16 11:19	1
2-Chloroethyl vinyl ether	ND		10		ug/L			08/26/16 11:19	1
Bromobenzene	ND		1.0		ug/L			08/26/16 11:19	1
Bromoform	ND		1.0		ug/L			08/26/16 11:19	1
Bromomethane	ND		2.0		ug/L			08/26/16 11:19	1
Carbon tetrachloride	ND		1.0		ug/L			08/26/16 11:19	1
Chlorobenzene	ND		1.0		ug/L			08/26/16 11:19	1
Chlorodibromomethane	ND		0.50		ug/L			08/26/16 11:19	1
Chloroethane	ND		2.0		ug/L			08/26/16 11:19	1
Chloroform	ND		1.0		ug/L			08/26/16 11:19	1
Chloromethane	ND		2.0		ug/L			08/26/16 11:19	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 11:19	1
Dibromomethane	ND		1.0		ug/L			08/26/16 11:19	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/26/16 11:19	1
Methylene Chloride	ND		1.0		ug/L			08/26/16 11:19	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-317839/7
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0		ug/L			08/26/16 11:19	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 11:19	1
Trichloroethene	ND		1.0		ug/L			08/26/16 11:19	1
Trichlorofluoromethane	ND		1.0		ug/L			08/26/16 11:19	1
Vinyl chloride	ND		1.0		ug/L			08/26/16 11:19	1
Benzene	ND		1.0		ug/L			08/26/16 11:19	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			08/26/16 11:19	1
Carbon disulfide	ND		10		ug/L			08/26/16 11:19	1
Chlorobromomethane	ND		1.0		ug/L			08/26/16 11:19	1
Ethyl ether	ND		1.0		ug/L			08/26/16 11:19	1
Acetone	ND		50		ug/L			08/26/16 11:19	1
Tetrahydrofuran	ND		10		ug/L			08/26/16 11:19	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			08/26/16 11:19	1
Hexachlorobutadiene	ND		0.40		ug/L			08/26/16 11:19	1
n-Butylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
2-Chlorotoluene	ND		1.0		ug/L			08/26/16 11:19	1
1,1-Dichloropropene	ND		1.0		ug/L			08/26/16 11:19	1
Toluene	ND		1.0		ug/L			08/26/16 11:19	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/26/16 11:19	1
o-Xylene	ND		1.0		ug/L			08/26/16 11:19	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/26/16 11:19	1
Methyl tert-butyl ether	ND		1.0		ug/L			08/26/16 11:19	1
Naphthalene	ND		5.0		ug/L			08/26/16 11:19	1
Styrene	ND		1.0		ug/L			08/26/16 11:19	1
4-Chlorotoluene	ND		1.0		ug/L			08/26/16 11:19	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/26/16 11:19	1
1,4-Dioxane	ND		50		ug/L			08/26/16 11:19	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/26/16 11:19	1
sec-Butylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
2-Hexanone	ND		10		ug/L			08/26/16 11:19	1
2-Butanone (MEK)	ND		10		ug/L			08/26/16 11:19	1
Ethylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
Isopropylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
2,2-Dichloropropane	ND		1.0		ug/L			08/26/16 11:19	1
N-Propylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
Tert-butyl ethyl ether	ND		5.0		ug/L			08/26/16 11:19	1
Isopropyl ether	ND		10		ug/L			08/26/16 11:19	1
4-Isopropyltoluene	ND		1.0		ug/L			08/26/16 11:19	1
Tert-amyl methyl ether	ND		5.0		ug/L			08/26/16 11:19	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/26/16 11:19	1
Ethylene Dibromide	ND		1.0		ug/L			08/26/16 11:19	1
tert-Butylbenzene	ND		1.0		ug/L			08/26/16 11:19	1
1,3-Dichloropropane	ND		1.0		ug/L			08/26/16 11:19	1
Dichlorobromomethane	ND		0.50		ug/L			08/26/16 11:19	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-317839/7
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		70 - 130		08/26/16 11:19	1
Toluene-d8 (Surr)	91		70 - 130		08/26/16 11:19	1
4-Bromofluorobenzene (Surr)	101		70 - 130		08/26/16 11:19	1
Dibromofluoromethane (Surr)	107		70 - 130		08/26/16 11:19	1

Lab Sample ID: LCS 480-317839/4
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	26.8		ug/L		107	70 - 130
1,1,1-Trichloroethane	25.0	30.8		ug/L		123	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	70 - 130
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	70 - 130
1,1-Dichloroethane	25.0	27.7		ug/L		111	70 - 130
1,1-Dichloroethene	25.0	27.2		ug/L		109	70 - 130
1,2,3-Trichloropropane	25.0	24.1		ug/L		97	70 - 130
1,2-Dichlorobenzene	25.0	25.0		ug/L		100	70 - 130
1,2-Dichloroethane	25.0	28.2		ug/L		113	70 - 130
1,2-Dichloropropane	25.0	26.6		ug/L		106	70 - 130
1,3-Dichlorobenzene	25.0	26.3		ug/L		105	70 - 130
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130
2-Chloroethyl vinyl ether	25.0	24.4		ug/L		98	70 - 130
Bromobenzene	25.0	24.4		ug/L		97	70 - 130
Bromoform	25.0	28.1		ug/L		112	70 - 130
Bromomethane	25.0	24.5		ug/L		98	70 - 130
Carbon tetrachloride	25.0	33.3	*	ug/L		133	70 - 130
Chlorobenzene	25.0	24.5		ug/L		98	70 - 130
Chlorodibromomethane	25.0	28.0		ug/L		112	70 - 130
Chloroethane	25.0	25.1		ug/L		101	70 - 130
Chloroform	25.0	27.1		ug/L		108	70 - 130
Chloromethane	25.0	22.8		ug/L		91	70 - 130
cis-1,2-Dichloroethene	25.0	27.1		ug/L		109	70 - 130
Dibromomethane	25.0	27.0		ug/L		108	70 - 130
Dichlorodifluoromethane	25.0	19.7		ug/L		79	70 - 130
Methylene Chloride	25.0	25.3		ug/L		101	70 - 130
Tetrachloroethene	25.0	25.8		ug/L		103	70 - 130
trans-1,3-Dichloropropene	25.0	24.5		ug/L		98	70 - 130
Trichloroethene	25.0	27.5		ug/L		110	70 - 130
Trichlorofluoromethane	25.0	26.7		ug/L		107	70 - 130
Vinyl chloride	25.0	23.2		ug/L		93	70 - 130
Benzene	25.0	25.8		ug/L		103	70 - 130
cis-1,3-Dichloropropene	25.0	26.6		ug/L		106	70 - 130
Carbon disulfide	25.0	24.9		ug/L		100	70 - 130
Chlorobromomethane	25.0	27.3		ug/L		109	70 - 130
Ethyl ether	25.0	26.5		ug/L		106	70 - 130
Acetone	125	199	*	ug/L		159	70 - 130
Tetrahydrofuran	50.0	68.6	*	ug/L		137	70 - 130

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-317839/4
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Methyl-2-pentanone (MIBK)	125	131		ug/L		105	70 - 130
Hexachlorobutadiene	25.0	26.1		ug/L		105	70 - 130
n-Butylbenzene	25.0	26.5		ug/L		106	70 - 130
1,2,4-Trimethylbenzene	25.0	25.7		ug/L		103	70 - 130
2-Chlorotoluene	25.0	24.2		ug/L		97	70 - 130
1,1-Dichloropropene	25.0	27.6		ug/L		110	70 - 130
Toluene	25.0	23.9		ug/L		96	70 - 130
1,2,4-Trichlorobenzene	25.0	25.1		ug/L		100	70 - 130
o-Xylene	25.0	24.0		ug/L		96	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	27.0		ug/L		108	70 - 130
Methyl tert-butyl ether	25.0	25.1		ug/L		101	70 - 130
Naphthalene	25.0	25.1		ug/L		100	70 - 130
Styrene	25.0	23.4		ug/L		94	70 - 130
4-Chlorotoluene	25.0	27.3		ug/L		109	70 - 130
trans-1,2-Dichloroethene	25.0	26.0		ug/L		104	70 - 130
1,4-Dioxane	500	317	*	ug/L		63	70 - 130
1,2,3-Trichlorobenzene	25.0	24.8		ug/L		99	70 - 130
sec-Butylbenzene	25.0	25.6		ug/L		102	70 - 130
2-Hexanone	125	136		ug/L		108	70 - 130
2-Butanone (MEK)	125	144		ug/L		115	70 - 130
Ethylbenzene	25.0	24.4		ug/L		98	70 - 130
Isopropylbenzene	25.0	24.8		ug/L		99	70 - 130
2,2-Dichloropropane	25.0	26.7		ug/L		107	70 - 130
N-Propylbenzene	25.0	24.7		ug/L		99	70 - 130
Tert-butyl ethyl ether	25.0	25.3		ug/L		101	70 - 130
Isopropyl ether	25.0	27.4		ug/L		110	70 - 130
4-Isopropyltoluene	25.0	26.1		ug/L		104	70 - 130
Tert-amyl methyl ether	25.0	23.7		ug/L		95	70 - 130
1,3,5-Trimethylbenzene	25.0	25.5		ug/L		102	70 - 130
m-Xylene & p-Xylene	25.0	24.0		ug/L		96	70 - 130
Ethylene Dibromide	25.0	25.1		ug/L		100	70 - 130
tert-Butylbenzene	25.0	26.3		ug/L		105	70 - 130
1,3-Dichloropropane	25.0	22.4		ug/L		90	70 - 130
Dichlorobromomethane	25.0	27.9		ug/L		111	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*110*		*70 - 130*

Lab Sample ID: LCSD 480-317839/5
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	26.2		ug/L		105	70 - 130	2	20
1,1,1-Trichloroethane	25.0	29.6		ug/L		119	70 - 130	4	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-317839/5
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	25.0	22.7		ug/L		91	70 - 130	2	20
1,1,2-Trichloroethane	25.0	23.9		ug/L		96	70 - 130	1	20
1,1-Dichloroethane	25.0	27.1		ug/L		108	70 - 130	2	20
1,1-Dichloroethene	25.0	24.6		ug/L		99	70 - 130	10	20
1,2,3-Trichloropropane	25.0	22.9		ug/L		91	70 - 130	5	20
1,2-Dichlorobenzene	25.0	23.8		ug/L		95	70 - 130	5	20
1,2-Dichloroethane	25.0	28.4		ug/L		113	70 - 130	1	20
1,2-Dichloropropane	25.0	25.6		ug/L		102	70 - 130	4	20
1,3-Dichlorobenzene	25.0	24.4		ug/L		98	70 - 130	7	20
1,4-Dichlorobenzene	25.0	23.9		ug/L		96	70 - 130	6	20
2-Chloroethyl vinyl ether	25.0	24.4		ug/L		97	70 - 130	0	20
Bromobenzene	25.0	23.5		ug/L		94	70 - 130	3	20
Bromoform	25.0	28.7		ug/L		115	70 - 130	2	20
Bromomethane	25.0	22.6		ug/L		91	70 - 130	8	20
Carbon tetrachloride	25.0	31.2		ug/L		125	70 - 130	6	20
Chlorobenzene	25.0	24.0		ug/L		96	70 - 130	2	20
Chlorodibromomethane	25.0	27.6		ug/L		110	70 - 130	2	20
Chloroethane	25.0	23.7		ug/L		95	70 - 130	6	20
Chloroform	25.0	26.1		ug/L		104	70 - 130	4	20
Chloromethane	25.0	21.3		ug/L		85	70 - 130	7	20
cis-1,2-Dichloroethene	25.0	26.2		ug/L		105	70 - 130	3	20
Dibromomethane	25.0	27.0		ug/L		108	70 - 130	0	20
Dichlorodifluoromethane	25.0	17.9		ug/L		72	70 - 130	9	20
Methylene Chloride	25.0	24.2		ug/L		97	70 - 130	5	20
Tetrachloroethene	25.0	24.5		ug/L		98	70 - 130	5	20
trans-1,3-Dichloropropene	25.0	24.2		ug/L		97	70 - 130	1	20
Trichloroethene	25.0	27.5		ug/L		110	70 - 130	0	20
Trichlorofluoromethane	25.0	24.5		ug/L		98	70 - 130	9	20
Vinyl chloride	25.0	21.1		ug/L		84	70 - 130	9	20
Benzene	25.0	24.5		ug/L		98	70 - 130	5	20
cis-1,3-Dichloropropene	25.0	25.5		ug/L		102	70 - 130	4	20
Carbon disulfide	25.0	23.3		ug/L		93	70 - 130	7	20
Chlorobromomethane	25.0	27.2		ug/L		109	70 - 130	0	20
Ethyl ether	25.0	25.3		ug/L		101	70 - 130	4	20
Acetone	125	196	*	ug/L		157	70 - 130	2	20
Tetrahydrofuran	50.0	69.0	*	ug/L		138	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	125	129		ug/L		103	70 - 130	2	20
Hexachlorobutadiene	25.0	23.8		ug/L		95	70 - 130	9	20
n-Butylbenzene	25.0	24.5		ug/L		98	70 - 130	8	20
1,2,4-Trimethylbenzene	25.0	23.6		ug/L		94	70 - 130	9	20
2-Chlorotoluene	25.0	22.5		ug/L		90	70 - 130	7	20
1,1-Dichloropropene	25.0	26.7		ug/L		107	70 - 130	3	20
Toluene	25.0	22.7		ug/L		91	70 - 130	5	20
1,2,4-Trichlorobenzene	25.0	24.3		ug/L		97	70 - 130	3	20
o-Xylene	25.0	23.3		ug/L		93	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	25.0	25.0		ug/L		100	70 - 130	8	20
Methyl tert-butyl ether	25.0	25.3		ug/L		101	70 - 130	1	20
Naphthalene	25.0	24.1		ug/L		96	70 - 130	4	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-317839/5
Matrix: Water
Analysis Batch: 317839

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Styrene	25.0	23.0		ug/L		92	70 - 130	2	20
4-Chlorotoluene	25.0	25.3		ug/L		101	70 - 130	7	20
trans-1,2-Dichloroethene	25.0	24.0		ug/L		96	70 - 130	8	20
1,4-Dioxane	500	368		ug/L		74	70 - 130	15	20
1,2,3-Trichlorobenzene	25.0	24.1		ug/L		96	70 - 130	3	20
sec-Butylbenzene	25.0	23.9		ug/L		95	70 - 130	7	20
2-Hexanone	125	134		ug/L		107	70 - 130	1	20
2-Butanone (MEK)	125	151		ug/L		121	70 - 130	5	20
Ethylbenzene	25.0	23.8		ug/L		95	70 - 130	3	20
Isopropylbenzene	25.0	23.1		ug/L		92	70 - 130	7	20
2,2-Dichloropropane	25.0	25.3		ug/L		101	70 - 130	5	20
N-Propylbenzene	25.0	22.6		ug/L		90	70 - 130	9	20
Tert-butyl ethyl ether	25.0	25.2		ug/L		101	70 - 130	0	20
Isopropyl ether	25.0	27.0		ug/L		108	70 - 130	1	20
4-Isopropyltoluene	25.0	23.7		ug/L		95	70 - 130	10	20
Tert-amyl methyl ether	25.0	23.9		ug/L		96	70 - 130	1	20
1,3,5-Trimethylbenzene	25.0	23.4		ug/L		94	70 - 130	9	20
m-Xylene & p-Xylene	25.0	23.1		ug/L		92	70 - 130	4	20
Ethylene Dibromide	25.0	24.5		ug/L		98	70 - 130	2	20
tert-Butylbenzene	25.0	23.9		ug/L		96	70 - 130	10	20
1,3-Dichloropropane	25.0	21.9		ug/L		88	70 - 130	2	20
Dichlorobromomethane	25.0	28.2		ug/L		113	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*109*		*70 - 130*

QC Association Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

GC/MS VOA

Analysis Batch: 317749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-104995-1	MW-1001M-20160824-01	Total/NA	Water	8260C	
480-104995-2	MW-1002B-20160824-01	Total/NA	Water	8260C	
480-104995-3	MW-1003-20160824-01	Total/NA	Water	8260C	
MB 480-317749/7	Method Blank	Total/NA	Water	8260C	
LCS 480-317749/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-317749/26	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 317754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-104995-5	MW-1005-20160824-01	Total/NA	Water	8260C	
480-104995-6	MW-1006-20160824-01	Total/NA	Water	8260C	
480-104995-7	MW-1008-20160824-01	Total/NA	Water	8260C	
480-104995-8	MW-1009-20160824-01	Total/NA	Water	8260C	
480-104995-9	MW-1010M-20160824-01	Total/NA	Water	8260C	
480-104995-10	MW-1010D-20160824-01	Total/NA	Water	8260C	
480-104995-11	MW-1013-20160824-01	Total/NA	Water	8260C	
480-104995-12	MW-1014-20160824-01	Total/NA	Water	8260C	
480-104995-13	MW-1015D-20160824-01	Total/NA	Water	8260C	
480-104995-14	MW-1016D-20160824-01	Total/NA	Water	8260C	
480-104995-15	MW-1017D-20160824-01	Total/NA	Water	8260C	
480-104995-16	MW-1019B-20160824-01	Total/NA	Water	8260C	
480-104995-17	MW-1022-20160824-01	Total/NA	Water	8260C	
480-104995-18	MW-1023-20160824-01	Total/NA	Water	8260C	
480-104995-19	MW-1024D-20160824-01	Total/NA	Water	8260C	
480-104995-20	MW-1025M-20160824-01	Total/NA	Water	8260C	
480-104995-21	MW-1025D-20160824-01	Total/NA	Water	8260C	
480-104995-22	MW-1027-20160824-01	Total/NA	Water	8260C	
480-104995-23	MW-1028-20160824-01	Total/NA	Water	8260C	
MB 480-317754/7	Method Blank	Total/NA	Water	8260C	
LCS 480-317754/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-317754/27	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 317839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-104995-4	MW-1004-20160824-01	Total/NA	Water	8260C	
480-104995-24	MW-1030-20160824-01	Total/NA	Water	8260C	
480-104995-25	MW-1031-20160824-01	Total/NA	Water	8260C	
480-104995-26	MW-1033-20160824-01	Total/NA	Water	8260C	
480-104995-27	MW-1034-20160824-01	Total/NA	Water	8260C	
480-104995-28	DUP-001-20160824	Total/NA	Water	8260C	
480-104995-29	DUP-002-20160824	Total/NA	Water	8260C	
480-104995-30	DUP-003-20160824	Total/NA	Water	8260C	
480-104995-31	DUP-004-20160824	Total/NA	Water	8260C	
480-104995-32	TB001-20160824-01	Total/NA	Water	8260C	
MB 480-317839/7	Method Blank	Total/NA	Water	8260C	
LCS 480-317839/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-317839/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1001M-20160824-01 — Lab Sample ID: 480-104995-1

Date Collected: 08/24/16 08:55 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317749	08/26/16 05:30	GTG	TAL BUF

Client Sample ID: MW-1002B-20160824-01 — Lab Sample ID: 480-104995-2

Date Collected: 08/24/16 09:30 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317749	08/26/16 05:54	GTG	TAL BUF

Client Sample ID: MW-1003-20160824-01 — Lab Sample ID: 480-104995-3

Date Collected: 08/24/16 10:05 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317749	08/26/16 06:18	GTG	TAL BUF

Client Sample ID: MW-1004-20160824-01 — Lab Sample ID: 480-104995-4

Date Collected: 08/24/16 10:30 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317839	08/26/16 19:23	RRS	TAL BUF

Client Sample ID: MW-1005-20160824-01 — Lab Sample ID: 480-104995-5

Date Collected: 08/24/16 10:55 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 00:09	GTG	TAL BUF

Client Sample ID: MW-1006-20160824-01 — Lab Sample ID: 480-104995-6

Date Collected: 08/24/16 12:20 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 00:35	GTG	TAL BUF

Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1008-20160824-01 — Lab Sample ID: 480-104995-7

Date Collected: 08/24/16 11:15 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 01:00	GTG	TAL BUF

Client Sample ID: MW-1009-20160824-01 — Lab Sample ID: 480-104995-8

Date Collected: 08/24/16 09:50 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 01:26	GTG	TAL BUF

Client Sample ID: MW-1010M-20160824-01 — Lab Sample ID: 480-104995-9

Date Collected: 08/24/16 12:45 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 01:51	GTG	TAL BUF

Client Sample ID: MW-1010D-20160824-01 — Lab Sample ID: 480-104995-10

Date Collected: 08/24/16 12:40 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 02:16	GTG	TAL BUF

Client Sample ID: MW-1013-20160824-01 — Lab Sample ID: 480-104995-11

Date Collected: 08/24/16 07:55 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 02:41	GTG	TAL BUF

Client Sample ID: MW-1014-20160824-01 — Lab Sample ID: 480-104995-12

Date Collected: 08/24/16 08:05 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 03:07	GTG	TAL BUF

Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1015D-20160824-01 — Lab Sample ID: 480-104995-13

Date Collected: 08/24/16 08:15 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 03:32	GTG	TAL BUF

Client Sample ID: MW-1016D-20160824-01 — Lab Sample ID: 480-104995-14

Date Collected: 08/24/16 11:50 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 03:57	GTG	TAL BUF

Client Sample ID: MW-1017D-20160824-01 — Lab Sample ID: 480-104995-15

Date Collected: 08/24/16 11:35 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	317754	08/26/16 04:22	GTG	TAL BUF

Client Sample ID: MW-1019B-20160824-01 — Lab Sample ID: 480-104995-16

Date Collected: 08/24/16 07:30 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 04:47	GTG	TAL BUF

Client Sample ID: MW-1022-20160824-01 — Lab Sample ID: 480-104995-17

Date Collected: 08/24/16 08:25 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 05:13	GTG	TAL BUF

Client Sample ID: MW-1023-20160824-01 — Lab Sample ID: 480-104995-18

Date Collected: 08/24/16 09:25 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 05:38	GTG	TAL BUF

Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1024D-20160824-01 — Lab Sample ID: 480-104995-19

Date Collected: 08/24/16 09:00 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 06:04	GTG	TAL BUF

Client Sample ID: MW-1025M-20160824-01 — Lab Sample ID: 480-104995-20

Date Collected: 08/24/16 08:10 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 06:29	GTG	TAL BUF

Client Sample ID: MW-1025D-20160824-01 — Lab Sample ID: 480-104995-21

Date Collected: 08/24/16 08:00 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 06:54	GTG	TAL BUF

Client Sample ID: MW-1027-20160824-01 — Lab Sample ID: 480-104995-22

Date Collected: 08/24/16 10:30 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 07:20	GTG	TAL BUF

Client Sample ID: MW-1028-20160824-01 — Lab Sample ID: 480-104995-23

Date Collected: 08/24/16 10:50 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317754	08/26/16 07:45	GTG	TAL BUF

Client Sample ID: MW-1030-20160824-01 — Lab Sample ID: 480-104995-24

Date Collected: 08/24/16 08:50 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317839	08/26/16 15:47	RRS	TAL BUF

Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: MW-1031-20160824-01 — Lab Sample ID: 480-104995-25

Date Collected: 08/24/16 09:00 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317839	08/26/16 16:12	RRS	TAL BUF

Client Sample ID: MW-1033-20160824-01 — Lab Sample ID: 480-104995-26

Date Collected: 08/24/16 11:20 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317839	08/26/16 16:35	RRS	TAL BUF

Client Sample ID: MW-1034-20160824-01 — Lab Sample ID: 480-104995-27

Date Collected: 08/24/16 11:30 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317839	08/26/16 16:59	RRS	TAL BUF

Client Sample ID: DUP-001-20160824 — Lab Sample ID: 480-104995-28

Date Collected: 08/24/16 00:00 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317839	08/26/16 17:23	RRS	TAL BUF

Client Sample ID: DUP-002-20160824 — Lab Sample ID: 480-104995-29

Date Collected: 08/24/16 00:02 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317839	08/26/16 17:47	RRS	TAL BUF

Client Sample ID: DUP-003-20160824 — Lab Sample ID: 480-104995-30

Date Collected: 08/24/16 08:08 — **Matrix: Water**
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317839	08/26/16 18:11	RRS	TAL BUF

Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Client Sample ID: DUP-004-20160824

Lab Sample ID: 480-104995-31

Date Collected: 08/24/16 11:11
Matrix: Water
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317839	08/26/16 18:36	RRS	TAL BUF

Client Sample ID: TB001-20160824-01

Lab Sample ID: 480-104995-32

Date Collected: 08/24/16 12:00
Matrix: Water
Date Received: 08/25/16 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317839	08/26/16 18:59	RRS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-17
California	State Program	9	1169CA	09-30-17
Connecticut	State Program	1	PH-0568	09-30-18
Florida	NELAP	4	E87672	06-30-17
Georgia	State Program	4	N/A	03-31-17
Georgia	State Program	4	956	03-31-17
Illinois	NELAP	5	200003	09-30-16 *
Iowa	State Program	7	374	03-01-17
Kansas	NELAP	7	E-10187	10-31-16
Kentucky (DW)	State Program	4	90029	12-31-16
Kentucky (UST)	State Program	4	30	03-31-17
Kentucky (WW)	State Program	4	90029	12-31-16
Louisiana	NELAP	6	02031	06-30-17
Maine	State Program	1	NY00044	12-04-16
Maryland	State Program	3	294	03-31-17
Massachusetts	State Program	1	M-NY044	06-30-17
Michigan	State Program	5	9937	03-31-17
Minnesota	NELAP	5	036-999-337	12-31-16
New Hampshire	NELAP Primary AB	1	2973	09-11-17
New Hampshire	NELAP Secondary AB	1	2337	11-17-16
New Jersey	NELAP	2	NY455	06-30-17
New York	NELAP	2	10026	03-31-17
North Dakota	State Program	8	R-176	03-31-17
Oklahoma	State Program	6	9421	08-31-17
Oregon	NELAP	10	NY200003	06-09-17
Pennsylvania	NELAP	3	68-00281	07-31-17
Rhode Island	State Program	1	LAO00328	12-30-16
Tennessee	State Program	4	TN02970	03-31-17
Texas	NELAP	6	T104704412-15-6	07-31-17
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-17
Washington	State Program	10	C784	02-10-17
West Virginia DEP	State Program	3	252	09-30-16 *
Wisconsin	State Program	5	998310390	08-31-17

* Certification renewal pending - certification considered valid.

Method Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-104995-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-104995-1	MW-1001M-20160824-01	Water	08/24/16 08:55	08/25/16 02:00
480-104995-2	MW-1002B-20160824-01	Water	08/24/16 09:30	08/25/16 02:00
480-104995-3	MW-1003-20160824-01	Water	08/24/16 10:05	08/25/16 02:00
480-104995-4	MW-1004-20160824-01	Water	08/24/16 10:30	08/25/16 02:00
480-104995-5	MW-1005-20160824-01	Water	08/24/16 10:55	08/25/16 02:00
480-104995-6	MW-1006-20160824-01	Water	08/24/16 12:20	08/25/16 02:00
480-104995-7	MW-1008-20160824-01	Water	08/24/16 11:15	08/25/16 02:00
480-104995-8	MW-1009-20160824-01	Water	08/24/16 09:50	08/25/16 02:00
480-104995-9	MW-1010M-20160824-01	Water	08/24/16 12:45	08/25/16 02:00
480-104995-10	MW-1010D-20160824-01	Water	08/24/16 12:40	08/25/16 02:00
480-104995-11	MW-1013-20160824-01	Water	08/24/16 07:55	08/25/16 02:00
480-104995-12	MW-1014-20160824-01	Water	08/24/16 08:05	08/25/16 02:00
480-104995-13	MW-1015D-20160824-01	Water	08/24/16 08:15	08/25/16 02:00
480-104995-14	MW-1016D-20160824-01	Water	08/24/16 11:50	08/25/16 02:00
480-104995-15	MW-1017D-20160824-01	Water	08/24/16 11:35	08/25/16 02:00
480-104995-16	MW-1019B-20160824-01	Water	08/24/16 07:30	08/25/16 02:00
480-104995-17	MW-1022-20160824-01	Water	08/24/16 08:25	08/25/16 02:00
480-104995-18	MW-1023-20160824-01	Water	08/24/16 09:25	08/25/16 02:00
480-104995-19	MW-1024D-20160824-01	Water	08/24/16 09:00	08/25/16 02:00
480-104995-20	MW-1025M-20160824-01	Water	08/24/16 08:10	08/25/16 02:00
480-104995-21	MW-1025D-20160824-01	Water	08/24/16 08:00	08/25/16 02:00
480-104995-22	MW-1027-20160824-01	Water	08/24/16 10:30	08/25/16 02:00
480-104995-23	MW-1028-20160824-01	Water	08/24/16 10:50	08/25/16 02:00
480-104995-24	MW-1030-20160824-01	Water	08/24/16 08:50	08/25/16 02:00
480-104995-25	MW-1031-20160824-01	Water	08/24/16 09:00	08/25/16 02:00
480-104995-26	MW-1033-20160824-01	Water	08/24/16 11:20	08/25/16 02:00
480-104995-27	MW-1034-20160824-01	Water	08/24/16 11:30	08/25/16 02:00
480-104995-28	DUP-001-20160824	Water	08/24/16 00:00	08/25/16 02:00
480-104995-29	DUP-002-20160824	Water	08/24/16 00:02	08/25/16 02:00
480-104995-30	DUP-003-20160824	Water	08/24/16 08:08	08/25/16 02:00
480-104995-31	DUP-004-20160824	Water	08/24/16 11:11	08/25/16 02:00
480-104995-32	TB001-20160824-01	Water	08/24/16 12:00	08/25/16 02:00

Login Sample Receipt Checklist

Client: ERM-Northeast

Job Number: 480-104995-1

Login Number: 104995

List Source: TestAmerica Buffalo

List Number: 1

Creator: Conway, Curtis R

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	erm
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

360325-Boston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Elise LeBlanc	Lab PM: Mason, Becky C	Carrier Tracking No(s):	COC No: 480-86051-21030.3
Client Contact: Lyndsey Colburn	Phone: 240 682 1855	E-Mail: becky.mason@testamericainc.com		Page: Page 1 of 3
Company: ERM-Northeast				Job #: 0321744
Address: One Beacon Steet 5th Floor	Due Date Requested: standard			
City: Boston	TAT Requested (days): 7 days			
State, Zip: MA, 02108				
Phone: 617-646-7800	PO #: Purchase Order not required			
Email: lyndsey.colburn@erm.com, elise.leblanc@erm.com	WO #: 0321744			
Project Name: IDS Wayland	Project #: 48007117			
Site: IDS Wayland	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260MCP - VOC 8010 list	522_MOD - 1,4 Dioxane 522	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A		
MW-1001M-20160824-01	8/24/16	0855	G	Water			3		3	
MW-1002B-20160824-01		0930		Water			3		3	
MW-1003-20160824-01		1005		Water			3		3	
MW-1004-20160824-01		1030		Water			3		3	
MW-1005-20160824-01		1055		Water			3		3	
MW-1006-20160824-01		1220		Water			3		3	
MW-1008-20160824-01		1115		Water			3		3	
MW-1009-20160824-01		0950		Water			3		3	
MW-1010M-20160824-01		1245		Water			3		3	
MW-1010D-20160824-01		1240		Water			3		3	
MW-1013-20160824-01		0755		Water			3		3	

480-104995 COC

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	8/24/16 1445			8/24/16 1445	TA
	8/24/16 1515	TA		8/25/16 0700	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 3.6 EJ

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

360325-Boston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Ellie LeBlanc	Lab PM: Mason, Becky C	Carrier Tracking No(s):	COC No: 480-86051-21030.4
Client Contact: Lyndsey Colburn	Phone: 240-682-1855	E-Mail: becky.mason@testamericainc.com		Page: Page 23 of 3 EW
Company: ERM-Northeast				Job #:
Address: One Beacon Steet 5th Floor	Due Date Requested: Standard			
City: Boston	TAT Requested (days): 7 days			
State, Zip: MA, 02108				
Phone: 617-646-7800	PO #: Purchase Order not required			
Email: lyndsey.colburn@erm.com, elise.leblanc@erm.com	WO #: 0321744			
Project Name: IDS Wayland	Project #: 48007117			
Site: IDS Wayland	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260MCP - VOC 8010 list	522_MOD - 1,4 Dioxane 522	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A		
MW-1014-20160824-01	8/24/16	0805	G	Water			3		3	
MW-1015D-20160824-01		0815		Water			3		3	
MW-1016D-20160824-01		1150		Water			3		3	
MW-1017D-20160824-01		1135		Water			3		3	
MW-1019B-20160824-01		0730		Water			3		3	
MW-1022-20160824-01		0825		Water			3		3	
MW-1023-20160824-01		0925		Water			3		3	
MW-1024D-20160824-01		0900		Water			3		3	
MW-1025M-20160824-01		0810		Water			3		3	
MW-1025D-20160824-01		0800		Water			3		3	
MW-1027-20160824-01		1030		Water			3		3	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 8/24/16 1445	Company	Received by:	Date/Time: 8/24/16 1445	Company TA
Relinquished by:	Date/Time: 8/24/16 1515	Company TA	Received by:	Date/Time: 8/25/16 0200	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0 #1

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

360325-Boston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Ellie LeBlanc	Lab PM: Mason, Becky C	Carrier Tracking No(s):	COC No: 480-86051-21030.5
Client Contact: Lyndsey Colburn	Phone: 240-682-1855	E-Mail: becky.mason@testamericainc.com		Page: Page 3 of 3 EM
Company: ERM-Northeast				Job #:
Address: One Beacon Steet 5th Floor	Due Date Requested: standard			
City: Boston	TAT Requested (days): 7 days			
State, Zip: MA, 02108				
Phone: 617-646-7800	PO #: Purchase Order not required			
Email: lyndsey.colburn@erm.com, elise.leblanc@erm.com	WO #: 0321744			
Project Name: IDS Wayland	Project #: 48007117			
Site: IDS Wayland	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260MCP - VOC 8010 list	522_MOD - 1,4 Dioxane 522	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A		
MW-1028-20160824-01		1050		Water			3	3 EM	6	
MW-1030-20160824-01		0850		Water			3		3	
MW-1031-20160824-01		0900		Water			3	3 EM	6	
MW-1033-20160824-01		1120		Water			3		3	
MW-1034-20160824-01		1130		Water			3		3	
DUP-001-20160824-01		0000		Water			3		3	
DUP-002-20160824-01		0002		Water			3		3	
DUP-003-20160824-01		0808		Water			3		3	
DUP-004-20160824-01		1111		Water			3		3	
TB-001-20160824-01		1200		Water			2		2	
				Water						

EM

EM

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☒ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 8/24/16 1445	Company	Received by:	Date/Time: 8/24/16 14:45	Company TA
Relinquished by:	Date/Time: 8/24/16 15:15	Company TA	Received by:	Date/Time: 8/25/16 0200	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0 #1

Appendix C
BWSC Transmittal Forms