Environmental
Resources
Management

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17 May 2007
Reference: 0061882

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

RE: Remedy Operation Status Report
November 2006 through May 2007
Former Raytheon Facility
Wayland, Massachusetts
Release Tracking Number 3-13302, Tier IB Permit No. 133939

To Whom It May Concern:

On behalf of Raytheon Company (Raytheon), Environmental Resources Management (ERM) is pleased to submit this Remedy Operation Status (ROS) report for the Former Raytheon Facility located at 430 Boston Post Road in Wayland, Massachusetts (Figure 1). This ROS report was prepared for the period from November 2006 through May 2007 to satisfy the requirements of the Massachusetts Contingency Plan (MCP) 310 CMR 40.0893. The original Massachusetts Department of Environmental Protection (Department) ROS transmittal form (BWSC 108) and remedial monitoring report (RMR) are attached to this report. Copies are included in Appendix A.

BACKGROUND

A Phase IV Completion Report was submitted on 24 November 2004 to the Department for portions of the approximately 83-acre property (Figure 2). For purposes of this document, the "Site" is defined as the portion of the Former Raytheon Property covered under release tracking number (RTN) 3-13302 and Tier IB Permit Number 133939. 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 the Phase IV, ROS reports were submitted to the Department summarizing the following periods:

- ROS Status Report – December 2004 through April 2005, dated 20 May 2005;
- ROS Status Report – May 2005 through November 2005, dated 14 November 2005;
- ROS Status Report – November 2005 through May 2006, dated 19 May 2006; and
- ROS Status Report – May 2006 through November 2006, dated 20 November 2006.

Since remedial activities did not include the installation of an active treatment system, this ROS will only discuss wetland and groundwater monitoring activities that have been conducted since the submission of the last ROS report.

MONITORING DATA

Wetlands Monitoring Activities

No additional wetland monitoring has been conducted since submittal of the 2006 Wetland Restoration Monitoring Report (ERM, 15 December 2006). A copy of the report was submitted under separate cover to the Massachusetts Department of Protection, U.S. Army Corps of Engineers, and Town of Wayland Conservation Commission (Appendix C). The findings of that report were discussed in the previous ROS submittal.

Groundwater Monitoring Activities

Groundwater monitoring was conducted in accordance with the Phase IV Completion Report, with modifications presented in the ROS Report dated 14 November 2005, to evaluate the efficacy of the in situ chemical oxidation (ISCO) treatment program over time. Monitoring activities were conducted 27 and 28 February 2007 and 23 to 27 April 2007. The groundwater monitoring program will continue until such time as sodium permanganate (permanganate) concentrations have significantly decreased in Site monitoring wells, concentrations of compounds of concern (COCs) approach background, or applicable standards are achieved.

The monitoring program includes the following wells (Figure 3):

- MW-102 Area (18 wells): MW-47S, MW-47M, MW-47D, MW-101, MW-102, MW-103, MW-201S, MW-201M, MW-201D, MW-203S, MW-203M, MW-203D, MW-204S, MW-204M, MW-204D, MW-213, MW-214 and MW-403;
- MW-33 Area (11 wells): MW-33S, MW-33M, MW-107, MW-109, MW-111, MW-113, MW-115, MW-202S, MW-202M, MW-208S and MW-208M;
- MW-43 Area (11 wells): MW-43S, MW-104, MW-105, MW-105M, MW-106, MW-106M, MW-209, MW-210, MW-211, MW-212 and MW-212M;
- MW-40 Area (two wells): MW-40 and MW-40S; and
- Main Building Area (seven wells): MW-117, MW-118, MW-404, MW-405S, IP-16S, IP-16D and IP-17D.

Monitoring activities include:

- Measurement of groundwater elevations;
- Visual determination of groundwater color (indicative of the presence of permanganate);
- Collection of groundwater samples for analysis of permanganate concentration;
- Measurement of groundwater geochemical field parameters, including temperature, conductivity, pH, dissolved oxygen (DO), and oxidation-reduction potential (ORP); and
- Collection of groundwater samples for laboratory analyses.

Geochemical parameters were only recorded for groundwater samples showing no visible permanganate color, because exposure of the water-quality instrumentation to permanganate would cause physical damage to the device. Table 1 summarizes the groundwater monitoring schedule for monitoring wells applicable to RTN 3-13302 for calendar year (CY) 2007.

Groundwater Gauging

ERM conducted groundwater gauging at all accessible Site monitoring wells on 23 April 2007 (Table 2). ERM calculated vertical hydraulic gradients from this data for the Site monitoring wells (Table 3). The upper and lower potentiometric surface maps for the April 2007 gauging event are presented in Figures 4 and 5, respectively.

Groundwater Monitoring – Physical Parameters, Color and Permanganate

Groundwater field parameters were collected during the April event. The results of the field parameter monitoring for monitoring wells applicable to RTN 3-13302 are summarized on Table 4.

Color and permanganate data collected for monitoring wells applicable to RTN 3-13302 are presented in Table 5. Samples were collected for analysis of permanganate concentration in February and April. Color was employed as a tracer to monitor the presence, approximate concentration, and distribution of permanganate over time. Color observations confirmed the presence and persistence of residual permanganate in the application areas at varying, but generally decreasing, concentrations over time in each injection area.

Groundwater Monitoring – Laboratory Analyses

Groundwater samples were collected from those wells listed above for laboratory analyses of volatile organic compounds (VOCs) by EPA Method 8260B and dissolved sodium by EPA Method 6010B.

VOC and dissolved sodium analytical results for monitoring wells applicable to RTN 3-13302 are presented in Table 6. The April 2007 trichloroethene (TCE) concentrations are shown on Figure 6. The laboratory analytical reports are presented in Appendix B.

In response to detections of chloroform, bromodichloromethane, and dibromochloromethane in wells MW-40 and MW-40S in exceedance of the Method 1 GW-1 criteria, ERM collected three additional samples from each well. The samples collected on 15 November and 29 December 2006, and 15 January 2007 confirmed the presence of the COCs. ERM personnel documented two leaking fire suppression system standpipes running into the building approximately 20 feet from the wells. A sample of the leaking water confirmed the presence of all three

compounds in the same relative ratios as detected in the wells. ERM concluded that the elevated levels of these compounds were due to the leaking standpipes and that, in accordance with the MCP at 310 CMR 40.0317(20), filing a Release Notification Form on behalf of Raytheon was not necessary. A memorandum detailing the investigation and conclusions is attached as Appendix D.

Analyses for benzene and methyl tertiary butyl ether (MTBE) were also included for some wells during this round. The MTBE detections are covered by RTN 3-22408 and will be discussed under separate cover.

REMEDY OPERATING STATUS OPINION

See BWSC Form 108 in Appendix A.

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

Jeremy J. Picard, P.G.
Project Manager

enclosures:

Table 1	Groundwater Monitoring Schedule for RTN 3-13302
Table 2	Summary of Groundwater Gauging Data
Table 3	Summary of Vertical Hydraulic Gradient Data
Table 4	Summary of Groundwater Field Parameter Measurements
Table 5	Summary of Groundwater Permanganate Concentration and Color
Table 6	Summary of Groundwater Analytical Results

Figure 1 Site Locus Map
Figure 2 Remediation Site Plan
Figure 3 ISCO Treatment Areas
Figure 4 Upper Potentiometric Surface Map - April 2007
Figure 5 Lower Potentiometric Surface Map - April 2007
Figure 6 April 2007 TCE Concentration Map

Appendix A BWSC 108 Form and Remedial Monitoring Report (copies)
Appendix B Laboratory Analytical Data Reports
Appendix C 2006 Wetland Restoration Monitoring Report
Appendix D MW-40 Chloroform Sampling Memorandum

cc: Louis Burkhardt, Raytheon
Benson Gould, CMG
Brian Monahan, Town of Wayland Conservation Commission
Public Repositories (2)
Paula Phillips, Congress Group

Tables

Table 1
VOC Groundwater Monitoring Schedule for RTN 3-13302
Former Raytheon Facility
Wayland, Massachusetts

Well Designation	Area of Concern	Laboratory Sampling Schedule			
		February	April	July	October
IP-16S	Southern Area	-	S	X/C	X
IP-16D	Southern Area	S	O	X/C	X
IP-17D	Southern Area	S	S	X/C	X
MW-33S	Southern Area	S	S	X/C	X
MW-33M	Southern Area	S	S	X/C	X
MW-40	Eastern Area	S	S	X/C	X
MW-40S	Eastern Area	S	S	X/C	X
MW-43S	Southern Area	S	S	X/C	X
MW-47S	Southern Area	I	S	X/C	X
MW-47M	Southern Area	I	S	X/C	X
MW-47D	Southern Area	I	S	X/C	X
MW-101	Southern Area	I	S	X/C	X
MW-102	Southern Area	I	S	X/C	X
MW-103	Southern Area	I	S	X/C	X
MW-104	Southern Area	I	S	X/C	X
MW-105	Southern Area	I	S	X/C	X
MW-105M	Southern Area	S	S	X/C	X
MW-106	Southern Area	S	S	X/C	X
MW-106M	Southern Area	S	S	X/C	X
MW-107	Southern Area	I	S	X/C	X
MW-109	Southern Area	I	S	X/C	X
MW-111	Southern Area	I	S	X/C	X
MW-113	Southern Area	I	S	X/C	X
MW-115	Southern Area	I	S	X/C	X
MW-117	Southern Area	S	S	X/C	X
MW-118	Southern Area	S	S	X/C	X
MW-201S	Southern Area	S	S	X/C	X
MW-201M	Southern Area	S	S	X/C	X
MW-201D	Southern Area	S	S	X/C	X
MW-202S	Southern Area	S	S	X/C	X
MW-202M	Southern Area	S	S	X/C	X
MW-203S	Southern Area	S	S	X/C	X
MW-203M	Southern Area	S	S	X/C	X
MW-203D	Southern Area	S	S	X/C	X
MW-204S	Southern Area	S	S	X/C	X
MW-204M	Southern Area	S	S	X/C	X
MW-204D	Southern Area	S	S	X/C	X
MW-208S	Southern Area	I	S	X/C	X
MW-208M	Southern Area	I	S	X/C	X
MW-209	Southern Area	S	S	X/C	X
MW-210	Southern Area	I	S	X/C	X
MW-211	Southern Area	I	S	X/C	X
MW-212	Southern Area	S	S	X/C	X
MW-212M	Southern Area	S	S	X/C	X
MW-213	Southern Area	I	S	X/C	X
MW-214	Southern Area	I	S	X/C	X
MW-403	Southern Area	I	S	X/C	X
MW-404	Southern Area	S	S	X/C	X
MW-405S	Southern Area	S	S	X/C	X

Notes:
X = Sampling proposed for colorimetry and VOCs analyses.
X/C = Sampling proposed for colorimetry analysis only.
S = Sample collected for colorimetry and VOC analyses..
S/C = Sample collected for colorimetry analysis only.
- = Not sampled.
I = Not sampled due to snow and ice accumulation.
O = Not sampled, obstruction in well.

Table 2
Summary of Groundwater Gauging Data
Former Raytheon Facility
Wayland, Massachusetts

Well Designation	Measuring Point Elevation (ft. ASL)	23 April 2007	
		Depth to Water (ft. below measuring point)	**Potentiometric Surface Elevation** (ft. ASL)
DEP-19S	120.79	2.85	117.94
DEP-19M	120.62	2.92	117.70
DEP-19D	120.78	0.00[A]	120.78
DEP-20	119.98	0.00[A]	119.98
DEP-21	119.18	0.00	119.18
HA-101	127.27	3.61	123.66
HA-102	128.14	9.50	118.64
HA-103	131.54	11.51	120.03
HA-104	132.39	14.20	118.19
IP-16S	134.77	15.74	119.03
IP-16D	134.74	*	*
IP-17S	134.80	-	-
IP-17D	134.83	16.06	118.77
MW-1S	133.79	7.85	125.94
MW-1M	133.78	11.27	122.51
MW-1D	133.74	12.61	121.13
MW-10	130.86	3.59	127.27
MW-32	124.41	0.50	123.91
MW-33S	133.58	14.73	118.85
MW-33M	133.77	14.34	119.43
MW-33D	133.57	14.24	119.33
MW-33B	133.67	14.32	119.35
MW-34	136.67	7.19	129.48
MW-37	134.43	13.77	120.66
MW-37M	134.40	14.41	119.99
MW-38	134.42	13.36	121.06
MW-40	134.84	13.79	121.05
MW-40S	134.82	13.72	121.10
MW-41	127.46	8.25	119.21
MW-42S	134.44	13.36	121.08
MW-43S	133.82	12.31	121.51
MW-43D	134.31	13.52	120.79
MW-44S	134.73	13.35	121.38
MW-44M	134.57	13.35	121.22
MW-44D	134.66	13.52	121.14
MW-45S	132.07	13.57	118.50
MW-45M	132.28	13.77	118.51
MW-45D	131.88	14.70	117.18
MW-45B	131.59	12.54	119.05
MW-46S	131.44	11.59	119.85
MW-46M	131.52	12.91	118.61
MW-47S	132.30	13.86	118.44
MW-47M	131.99	12.92	119.07
MW-47D	132.29	12.90	119.39
MW-101	134.60	16.04	118.56
MW-102	134.50	16.07	118.43
MW-103	134.50	14.25	120.25

Table 2
Summary of Groundwater Gauging Data
Former Raytheon Facility
Wayland, Massachusetts

Well Designation	Measuring Point Elevation (ft. ASL)	23 April 2007	
		Depth to Water (ft. below measuring point)	**Potentiometric Surface Elevation** (ft. ASL)
MW-104	134.22	12.38	121.84
MW-105	134.58	12.79	121.79
MW-105M	134.22	13.65	120.57
MW-106	134.63	13.25	121.38
MW-106M	134.63	13.81	120.82
MW-107	134.65	15.70	118.95
MW-108	134.69	15.97	118.72
MW-109	134.12	15.22	118.90
MW-110	134.04	14.61	119.43
MW-111	133.88	14.91	118.97
MW-112	133.68	14.21	119.47
MW-113	133.60	14.79	118.81
MW-114	133.48	14.55	118.93
MW-115	133.56	14.85	118.71
MW-116	133.72	14.15	119.57
MW-117	134.84	15.30	119.54
MW-118	134.88	15.88	119.00
MW-201S	132.38	14.00	118.38
MW-201M	132.19	13.66	118.53
MW-201D	132.10	12.65	119.45
MW-202S	132.74	13.84	118.90
MW-202M	132.98	14.41	118.57
MW-202D	132.72	13.35	119.37
MW-203S	132.50	13.99	118.51
MW-203M	132.39	13.90	118.49
MW-203D	132.14	12.82	119.32
MW-204S	132.98	14.70	118.28
MW-204M	132.02	13.50	118.52
MW-204D	132.30	12.95	119.35
MW-205S	131.98	13.45	118.53
MW-205M	132.12	13.61	118.51
MW-205D	131.98	12.82	119.16
MW-206S	130.82	12.35	118.47
MW-206M	130.75	12.27	118.48
MW-206D	130.66	11.60	119.06
MW-207S	129.16	10.71	118.45
MW-207M	129.29	10.81	118.48
MW-207D	129.10	10.35	118.75
MW-208S	132.14	14.21	117.93
MW-208M	132.38	13.97	118.41
MW-208D	132.38	13.05	119.33
MW-209	134.56	13.04	121.52
MW-210	134.48	13.49	120.99
MW-211	135.26	13.48	121.78
MW-212	134.39	12.75	121.64
MW-212M	133.84	13.45	120.39
MW-213	134.84	15.11	119.73

Table 2
Summary of Groundwater Gauging Data
Former Raytheon Facility
Wayland, Massachusetts

Well Designation	Measuring Point Elevation (ft. ASL)	23 April 2007	
		Depth to Water (ft. below measuring point)	**Potentiometric Surface Elevation** (ft. ASL)
MW-214	134.60	16.05	118.55
MW-215S	133.42	12.39	121.03
MW-215M	133.48	12.46	121.02
MW-215D	133.44	12.61	120.83
MW-216S	134.54	13.44	121.10
MW-216M	134.59	13.51	121.08
MW-216D	134.59	13.52	121.07
MW-217S	130.06	10.32	119.74
MW-217M	130.44	10.90	119.54
MW-217D	130.20	10.05	120.15
MW-218S	130.24	10.93	119.31
MW-218M	130.16	10.76	119.40
MW-218D	130.02	9.97	120.05
MW-219S	118.12	-	-
MW-219M	118.09	-	-
MW-219D	117.95	-	-
MW-220S	117.09	-	-
MW-220M	117.29	-	-
MW-220D	116.99	-	-
MW-221M	120.07	0.58	119.49
MW-221D	120.22	0.00[A]	120.22
MW-261S	131.28	8.64	122.64
MW-262S	129.60	6.62	122.98
MW-262M	130.52	10.65	119.87
MW-262D	129.73	9.30	120.43
MW-263S	127.96	6.62	121.34
MW-263M	127.77	6.72	121.05
MW-264S	126.32	4.33	121.99
MW-264M	126.28	5.10	121.18
MW-264D	126.63	6.72	119.91
MW-265S	130.06	6.15	123.91
MW-265M	129.89	8.56	121.33
MW-265D	130.07	10.10	119.97
MW-266S	126.79	5.71	121.08
MW-266Ma	127.72	7.22	120.50
MW-266Mb	126.88	6.41	120.47
MW-266D	127.70	7.80	119.90
MW-266B	128.14	8.09	120.05
MW-267S	125.30	5.61	119.69
MW-267M	125.40	5.81	119.59
MW-267D	125.88	6.17	119.71
MW-267B	124.02	5.00	119.02
MW-268S	123.66	4.20	119.46
MW-268M	123.41	4.30	119.11
MW-268D	124.86	6.57	118.29
MW-268B	122.34	3.46	118.88
MW-269S	125.54	6.12	119.42

Table 2
Summary of Groundwater Gauging Data
Former Raytheon Facility
Wayland, Massachusetts

Well Designation	**Measuring Point Elevation** (ft. ASL)	**23 April 2007**	
		Depth to Water (ft. below measuring point)	**Potentiometric Surface Elevation** (ft. ASL)
MW-269Ma	124.96	5.24	119.72
MW-269Mb	125.42	6.25	119.17
MW-269D	125.34	6.95	118.39
MW-307	124.86	6.24	118.62
MW-313S	114.61	-	-
MW-313D	114.37	-	-
MW-314S	114.10	*	*
MW-314D	114.09	*	*
MW-315S	114.07	+	+
MW-315D	113.79	*	*
MW-403	134.39	15.71	118.68
MW-404	134.94	16.12	118.82
MW-405S	134.90	16.00	118.90
MW-551	129.30	6.45	122.85
MW-552	130.09	7.51	122.58
MW-553	130.33	7.36	122.97
MW-554S	120.93	2.44	118.49
MW-554Ma	120.82	2.44	118.38
MW-554Mb	120.96	2.23	118.73
MW-554D	120.96	2.70	118.26
MW-555S	121.10	3.22	117.88
MW-555Ma	121.25	2.52	118.73
MW-555Mb	121.26	2.92	118.34
MW-555D	121.19	2.91	118.28
MW-556S	120.93	2.72	118.21
MW-556M	121.00	2.62	118.38
MW-556D	120.92	3.29	117.63
MW-TP-3	131.08	6.47	124.61

Notes:

- = Not measured / not accessible.
* = Well damaged, water level not recorded.
** = Not measured, obstruction in well.
+ = Well destroyed, water level not recorded.
Dry = Not measured, well dry.
^ = Well artesian.

Table 3
Summary of Vertical Hydraulic Gradient Data
Former Raytheon Facility
Wayland, Massachusetts

	23 April 2007		
Well Designation	**Head Elevation** (ft)	**Vertical Hydraulic Gradient** (ft/ft)	**Direction**
MW-33S	118.85	-0.02900	Up
MW-33M	119.43		
MW-33M	119.43	0.01000	Down
MW-33D	119.33		
MW-33D	119.33	-0.00095	Up
MW-33B	119.35		
MW-37	120.66	0.02197	Down
MW-37M	119.99		
MW-40	121.05	-0.00476	Up
MW-40S	121.10		
MW-43S	121.51	0.02057	Down
MW-43D	120.79		
MW-44S	121.38	0.01000	Down
MW-44M	121.22		
MW-44M	121.22	0.00400	Down
MW-44D	121.14		
MW-45S	118.50	-0.00091	Up
MW-45M	118.51		
MW-45M	118.51	0.04433	Down
MW-45D	117.18		
MW-45D	117.18	-0.09740	Up
MW-45B	119.05		
MW-46S	119.85	0.04960	Up
MW-46M	118.61		
MW-47S	118.44	-0.04500	Up
MW-47M	119.07		
MW-47M	119.07	-0.01524	Up
MW-47D	119.39		
MW-105	121.79	-15.25000	Up
MW-105M	120.57		
MW-106	121.38	9.33333	Down
MW-106M	120.82		

Table 3
Summary of Vertical Hydraulic Gradient Data
Former Raytheon Facility
Wayland, Massachusetts

	23 April 2007		
Well Designation	**Head Elevation** (ft)	**Vertical Hydraulic Gradient** (ft/ft)	**Direction**
MW-201S	118.38	-0.02000	Up
MW-201M	118.53		
MW-201M	118.53	-0.02421	Up
MW-201D	119.45		
MW-202S	118.90	0.02444	Down
MW-202M	118.57		
MW-202M	118.57	-0.03478	Up
MW-202D	119.37		
MW-203S	118.51	0.00085	Down
MW-203M	118.49		
MW-203M	118.49	-0.04150	Up
MW-203D	119.32		
MW-204S	118.28	-0.00906	Up
MW-204M	118.52		
MW-204M	118.52	-0.03192	Up
MW-204D	119.35		
MW-205S	118.53	0.00073	Down
MW-205M	118.51		
MW-205M	118.51	-0.02826	Up
MW-205D	119.16		
MW-206S	118.47	-0.00028	Up
MW-206M	118.48		
MW-206M	118.48	-0.02522	Up
MW-206D	119.06		
MW-207S	118.45	-0.00066	Up
MW-207M	118.48		
MW-207M	118.48	-0.01588	Up
MW-207D	118.75		
MW-208S	117.93	-0.01745	Up
MW-208M	118.41		
MW-208M	118.41	-0.04842	Up
MW-208D	119.33		
MW-212	121.64	0.15944	Down
MW-212M	120.39		

Table 3
Summary of Vertical Hydraulic Gradient Data
Former Raytheon Facility
Wayland, Massachusetts

	23 April 2007		
Well Designation	**Head Elevation** (ft)	**Vertical Hydraulic Gradient** (ft/ft)	**Direction**
MW-215S	121.03	0.00133	Down
MW-215M	121.02		
MW-215M	121.02	0.00974	Down
MW-215D	120.83		
MW-216S	121.10	0.00174	Down
MW-216M	121.08		
MW-216M	121.08	0.00038	Down
MW-216D	121.07		
MW-217S	119.74	0.00889	Down
MW-217M	119.54		
MW-217M	119.54	-0.02976	Up
MW-217D	120.15		
MW-218S	119.31	-0.00295	Up
MW-218M	119.40		
MW-218M	119.40	-0.01806	Up
MW-218D	120.05		
MW-219S	*	*	*
MW-219M	*	*	*
MW-219M	*	*	*
MW-219D	*	*	*
MW-220S	*	*	*
MW-220M	*	*	*
MW-220M	*	*	*
MW-220D	*	*	*
MW-221M	119.49		
MW-221D	Artesian	*	*
MW-405S	118.90	0.02519	Down
IP-17D	118.77		
IP-16S	119.03		
IP-16D	*	*	*

Notes:
* = Well not measured/inaccessible

Table 4
Summary of Groundwater Field Parameter Measurements
Former Raytheon Facility
Wayland, Massachusetts

Well Designation	April 2007				
	Temperature (°C)	pH (standard units)	ORP (mV)	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)
IP-16S	NMP	NMP	NMP	NMP	NMP
IP-16D	-	-	-	-	-
IP-17D	NMP	NMP	NMP	NMP	NMP
MW-33S	9.95	5.73	152.1	3.45	86
MW-33M	11.88	7.52	-43.3	2.23	375
MW-40	10.49	7.09	186.2	10.23	326
MW-40S	NMP	NMP	NMP	NMP	NMP
MW-43S	9.47	7.24	140.3	8.48	352
MW-47S	NMP	NMP	NMP	NMP	NMP
MW-47M	13.92	7.15	-74.5	0.56	523
MW-47D	14.30	6.88	-29.9	0.35	915
MW-101	NMP	NMP	NMP	NMP	NMP
MW-102	NMP	NMP	NMP	NMP	NMP
MW-103	14.30	7.25	87.9	5.47	513
MW-104	10.04	7.24	161.1	9.16	299
MW-105	NMH	NMH	NMH	NMH	NMH
MW-105M	13.17	6.89	115.8	0.26	971
MW-106	10.38	6.88	194.8	7.36	321
MW-106M	11.45	7.17	142.8	3.04	762
MW-107	NMP	NMP	NMP	NMP	NMP
MW-109	14.53	6.47	42.5	0.30	418
MW-111	14.38	5.92	65.4	0.45	508
MW-113	11.85	6.85	59.5	1.71	464
MW-115	12.60	6.48	-29.9	0.20	580
MW-117	13.50	6.63	146.4	6.67	604
MW-118	NMP	NMP	NMP	NMP	NMP
MW-201S	NMP	NMP	NMP	NMP	NMP
MW-201M	NMH	NMH	NMH	NMH	NMH
MW-201D	NMH	NMH	NMH	NMH	NMH
MW-202S	11.02	6.89	-85.6	10.51	406
MW-202M	12.63	5.71	-80.9	1.03	219
MW-203S	14.24	7.21	209.3	11.10	206
MW-203M	NMP	NMP	NMP	NMP	NMP
MW-203D	16.37	6.45	29.8	0.32	753
MW-204S	15.91	7.11	-38.5	9.04	151
MW-204M	16.40	6.05	-54.5	0.52	298
MW-204D	17.76	7.21	-70.6	1.16	360
MW-208S	11.18	7.15	127.0	10.19	187
MW-208M	NMH	NMH	NMH	NMH	NMH
MW-209	11.75	6.88	104.7	12.45	219
MW-210	11.02	7.19	88.6	0.49	980
MW-211	11.03	7.39	-45.4	5.08	754
MW-212	11.66	7.11	205.5	7.92	437
MW-212M	13.24	6.73	183.5	0.30	826
MW-213	15.33	6.78	181.9	5.49	962
MW-214	14.97	6.44	-45.3	0.53	596
MW-403	NMH	NMH	NMH	NMH	NMH
MW-404	NMP	NMP	NMP	NMP	NMP
MW-405S	NMP	NMP	NMP	NMP	NMP

Notes:
- = Obstruction in well, parameters not measured.
NMP = Not measured due to visual presence of permanganate.
NMH = Not measured due to conductivity over 1,000 µS/cm or ORP over 400 mV.
ORP = Oxidation Reduction Potential
mg/L = milligrams per liter (parts per million)
µS/cm = microsiemens per centimeter
mV = millivolt

Table 5
Summary of Groundwater Permanganate Concentration and Color
Former Raytheon Facility
430 Boston Post Road
Wayland, Massachusetts

Well Designation	Visual Permanganate Presence										Sodium Permanganate Concentration (ppm)									
	Apr-2004	Jul-2004	Sep-2004	Dec-2004	Apr-2005	Oct-2005	Apr-2006	Sep-2006	Feb-2007	Apr-2007	Apr-2004	Jul-2004	Sep-2004	Dec-2004	Apr-2005	Oct-2005	Apr-2006	Sep-2006	Feb-2007	Apr-2007
IP-16S		Dark Purple		Purple	Dark Purple	Purple	Purple	Purple		Dark Purple		3,560		2,200	5,140	1,130	670	907		380
IP-16D		Purple	Pink	Dark Purple	Dark Purple		Magenta		Clear			165	76	5,330	6,850		225		-	
IP-17S		Dark Purple	Dark Purple	Purple		Light Pink						5,310	1,010	397		110				
IP-17D		Dark Purple	Purple	Dark Purple	Dark Purple	Pink	Light Pink	Clear	Clear	Dark Purple		8,770	230	3,400	5,140	99	24.5	-	-	480
MW-33S	Clear			Clear	Clear	Clear	Clear	Clear	Clear	Clear				-	-	-	-	-	-	-
MW-33M	Clear			Clear	Clear	Clear	Clear	Clear	Clear	Clear				-	-	-	-	-	-	-
MW-33D			Clear	Clear									-	-						
MW-33B			Clear	Clear									-	-						
MW-40	Clear	Clear		Clear	Clear		Clear	Clear	Clear	Clear		-		-	0.6		-	-	-	-
MW-40S		Light Pink		Pink	Light Pink	Light Pink	Light Pink	Light Pink	Clear	Light Pink		9.2		86	7.8	55	20.6	3.4	-	5.3
MW-42S			Clear	Clear									-	-						
MW-43S	Clear	Light Pink		Dark Purple	Light Pink	Clear	Clear	Clear	Clear	Clear		13.0		1500	60	0.9	-	-	-	-
MW-43D		Clear		Clear								-		-						
MW-45B										Clear										-
MW-45S	Clear			Clear						Clear				-						-
MW-45M	Clear			Clear						Clear				-						-
MW-45D	Clear			Clear						Clear				-						-
MW-46M										Clear										-
MW-47S	Clear	Clear		Clear	Light Purple	Pink	Light Pink	Light Pink		Light Pink		-		-	37	10.9	19.5	3.9		-
MW-47M	Clear	Clear		Clear	Clear	Clear	Clear	Clear		Clear		-		-	1.4	-	1.6	-		-
MW-47D	Clear	Clear		Clear	Clear	Light Pink	Clear	Clear		Clear		-		-	-	1.0	-	-		-
MW-101	Clear	Light Pink		Dark Purple	Dark Pink	Pink	Light Pink	Clear		Light Pink		6.0		1,700	240	65.7	9.6	-		5.1
MW-102	Clear	Dark Purple		Magenta	Light Pink	Clear	Clear	Purple		Purple		830		78.8	5.8	1.0	-	243		228
MW-103	Clear	Clear		Clear	Clear	Light Pink	Clear	Clear		Clear		-		-	-	1.0	2.2	-		-
MW-104	Clear	Dark Purple		Light Pink	Clear	Dark Pink	Clear	Clear		Clear		4,770		43.1	-	47.1	-	-		-
MW-105	Clear	Dark Purple		Dark Purple	Pink	Dark Pink	Clear	Pink		Clear		1,140		1,710	106	131	-	11.4		-
MW-105M	Pink	Dark Purple		Dark Purple	Dark Purple	Pink	Pink	Clear	Black, Cloudy	Clear		961		1,300	510	34.7	29.6	-	-	-
MW-106	Pink	Dark Purple		Dark Purple	Light Pink	Clear	Clear	Clear	Clear	Clear		3,390		16,200	8.8	-	-	-	-	-
MW-106M	Purple	Dark Purple		Purple	Pink	Light Pink	Clear	Clear	Clear	Clear		666		400	99	4.7	1.3	-	-	-
MW-107	Clear	Clear		Clear	Clear	Clear	Clear	Clear		Clear		-		-	-	-	-	-		-
MW-108			Clear	Clear									-	1.3						
MW-109	Clear	Clear		Clear	Clear	Clear	Clear	Clear		Clear		-		-	16	1.1	-	-		-
MW-110			Pink	Clear									76.4	-						
MW-111	Clear	Clear		Clear	Clear	Clear	Clear	Clear		Clear		-		-	4.2	-	-	-		-
MW-112	Clear		Clear	Clear									-	1.4						
MW-113	Clear	Clear		Clear	Clear	Clear	Clear	Clear		Clear		-		-	-	-	4.0	-		-
MW-114	Clear		Clear	Clear									-	-						
MW-115	Clear	Clear		Clear	Clear	Clear	Clear	Clear		Clear		-		-	2.3	-	-	-		-
MW-116	Clear		Clear	Clear									-	-						
MW-117	Clear	Clear		Clear	Clear			Clear	Clear	Clear		-		-	3.3			-	-	-
MW-118	Clear	Clear		Clear	Light Pink	Pink	Light Pink	Clear	Clear	Purple		-		-	12.4	260	22.9	-	-	323
MW-201S	Clear	Purple		Pink	Clear	Purple	Clear	Magenta	Pink	Light Pink		790		78.8	3.8	240	-	49.7	30.2	2.2
MW-201M	Clear	Purple		Pink	Clear	Clear	Clear	Clear	Clear	Clear		21,000		21.4	-	-	-	-	-	-
MW-201D	Clear	Clear		Clear	Clear	Clear	Clear	Clear	Clear			-		-	-	1.2	1.5	-	-	

Table 5
Summary of Groundwater Permanganate Concentration and Color
Former Raytheon Facility
430 Boston Post Road
Wayland, Massachusetts

Well Designation	Visual Permanganate Presence										Sodium Permanganate Concentration (ppm)									
	Apr-2004	Jul-2004	Sep-2004	Dec-2004	Apr-2005	Oct-2005	Apr-2006	Sep-2006	Feb-2007	Apr-2007	Apr-2004	Jul-2004	Sep-2004	Dec-2004	Apr-2005	Oct-2005	Apr-2006	Sep-2006	Feb-2007	Apr-2007
MW-202S	Clear	Clear		Clear	Clear	Clear	Clear	Clear	Clear	Clear		-		-	-	1.1	-	-	-	-
MW-202M	Clear	Clear		Clear	Clear	Clear	Clear	Clear	Clear	Clear		-		-	-	-	-	-	-	-
MW-202D	Clear	Clear		Clear						Clear		-		-						-
MW-203S	Clear	Clear		Clear	Clear	Clear	Clear	Clear	Clear	Clear		-		-	-	1.2	-	-	-	-
MW-203M	Clear	Clear		Clear	Clear	Clear	Clear	Clear	Clear	Light Pink		-		-	-	1.3	6.6	-	-	3.3
MW-203D	Clear	Clear		Clear	Clear	Clear	Clear	Clear	Clear	Clear		-		-	4.9	1.0	-	-	-	-
MW-204S	Clear	Clear		Clear	Clear	Clear	Clear	Clear	Clear	Clear		-		-	-	1.3	-	-	-	-
MW-204M	Clear	Clear		Clear	Clear	Clear	Clear	Clear	Clear	Clear		-		-	2.5	-	-	-	-	-
MW-204D	Clear	Clear		Clear	Clear	Clear	Clear	Clear	Clear	Clear		-		-	2.3	-	-	-	-	-
MW-205S	Clear			Clear						Clear				-						-
MW-205M	Clear			Clear						Clear				-						-
MW-205D	Clear			Clear						Clear				-						-
MW-206S										Clear										-
MW-206M										Clear										-
MW-206D										Clear										-
MW-207S										Clear										-
Mw-207M										Clear										-
MW-207D										Clear										-
MW-208S	Clear	Clear		Clear	Clear	Clear	Clear	Clear		Clear		-		-	-	-	-	-		-
MW-208M	Clear	Clear		Clear	Clear	Clear	Clear	Clear		Clear		-		-	-	0.9	4.7	-		-
MW-208D	Clear			Clear						Clear				-						-
MW-209	Clear	Clear		Clear	Clear	Clear	Clear	Clear	Clear	Clear		-		-	1.5	-	10.5	-	-	-
MW-210	Purple/Pink	Dark Purple		Dark Purple	Dark Purple	Light Purple	Light Pink	Clear		Clear		360		2,570	1,010	220	15.7	-		-
MW-210D										Clear										-
MW-211	Clear	Clear		Clear	Clear	Clear	Clear	Clear		Clear		-		-	-	-	-	-		-
MW-212	Clear	Clear		Clear	Clear	Clear	Clear	Clear	Clear	Clear		-		-	-	-	-	-	-	-
MW-212M	Pink	Pink		Clear	Clear	Clear	Clear	Clear	Light Yellow	Clear		24.0		-	1.6	-	-	-	1.0	-
MW-212D										Clear										-
MW-213	Clear	Clear		Light Pink	Clear	Light Pink	Clear	Trace Pink		Clear		-		10.9	1.0	-	-	-		-
MW-214	Clear	Dark Purple		Clear	Clear	Clear	Clear	Clear		Clear		720		-	3.8	2.1	-	-		-
MW-216S			Clear	Clear									1.3	1.0						
MW-216M			Clear	Clear									-	-						
MW-216D			Clear	Clear			Clear	Clear					-	-			-	-		
MW-217S										Clear										-
MW-217M										Clear										-
MW-217D										Clear										-
MW-218S										Clear										-
MW-218M										Clear										-
MW-218D										Clear										-
MW-221M										Clear										-
MW-403	Clear	Clear		Clear	Clear	Clear	Clear	Clear		Clear		-		-	5.6	1.2	-	-		-
MW-404	Clear	Dark Purple		Dark Purple	Dark Purple	Dark Purple	Dark Purple	Purple	Purple	Dark Purple		22,500		14,400	9,520	8,490	2,830	1,160	311	510
MW-405S	Clear	Dark Purple		Dark Purple	Dark Purple	Purple	Purple	Purple	Purple	Dark Purple		3,570		3,390	2,860	2,000	810	1,550	1,390	1,070
MW-405D		Dark Purple										8,720								

Notes:
Blank cells indicate a sample that was not analyzed.
- = Not detected.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**IP-16S**	**IP-16S**	**IP-16S**	**IP-16S**	**IP-16S**	**IP-16S**	**IP-16S**	**IP-16S**	**IP-16S**
Date Sampled	**Method 1**	**20-Jul-04**	**22-Jul-04**	**8-Dec-04**	**14-Apr-05**	**14-Oct-05**	**3-Apr-06**	**27-Sep-06**	**26-Apr-07**	**26-Apr-07**
Comments	**GW 1**									**DUP**
Volatile Organic Compounds (VOCs) (µg/L)			NM	NM	NM	NM	NM			
Tetrachloroethene	5	-						-	-	-
Trichloroethene	5	-						-	-	-
cis-1,2-Dichloroethene	70	-						-	-	-
1,1,1-Trichloroethane	200	-						-	-	-
1,1-Dichloroethene	7	-						-	-	-
1,1-Dichloroethane	70	-						-	-	-
Chlorobenzene	100	-						-	-	-
Chloroform	5	-						-	0.88	1.0
Bromodichloromethane	3	-						-	-	-
Didbromochloromethane	2	-						-	-	-
Metals (mg/L)										
Sodium	NS							310	NM	

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. **Date Sampled** **Comments**	**MCP Std** **Method 1** **GW 1**	**IP-16D** **22-Jul-04**	**IP-16D** **8-Dec-04**	**IP-16D** **14-Apr-05**	**IP-16D** **3-Apr-06**	**IP-16D** **27-Sep-06**	**IP-16D** **26-Apr-07**
Volatile Organic Compounds (VOCs) (µg/L)		NM	NM	NM	NM	NM-O	NM-O
Tetrachloroethene	5						
Trichloroethene	5						
cis-1,2-Dichloroethene	70						
1,1,1-Trichloroethane	200						
1,1-Dichloroethene	7						
1,1-Dichloroethane	70						
Chlorobenzene	100						
Chloroform	5						
Bromodichloromethane	3						
Didbromochloromethane	2						
Metals (mg/L)							
Sodium	NS						

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. Date Sampled Comments	MCP Std Method 1 GW 1	IP-17D 22-Jul-04	IP-17D 8-Dec-04	IP-17D 14-Apr-05	IP-17D 14-Oct-05	IP-17D 3-Apr-06	IP-17D 27-Sep-06	IP-17D 26-Apr-07
Volatile Organic Compounds (VOCs) (µg/L)		NM	NM	NM	NM	NM		
Tetrachloroethene	5						-	-
Trichloroethene	5						**98**	0.53
cis-1,2-Dichloroethene	70						1.5	-
1,1,1-Trichloroethane	200						-	-
1,1-Dichloroethene	7						-	-
1,1-Dichloroethane	70						0.77	-
Chlorobenzene	100						-	-
Chloroform	5						1.1	1.2
Bromodichloromethane	3						-	-
Didbromochloromethane	2						-	-
Metals (mg/L)								
Sodium	NS						280	NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-33S**	**MW-33S**	**MW-33S**	**MW-33S**	**MW-33S**	**MW-33S**	**MW-33S**	**MW-33S**
Date Sampled	**Method 1**	**29-Apr-04**	**10-Dec-04**	**10-Dec-04**	**12-Apr-05**	**11-Oct-05**	**3-Apr-06**	**28-Sep-06**	**26-Apr-07**
Comments	**GW 1**			**DUP**					
Volatile Organic Compounds (VOCs) (µg/L)									
Tetrachloroethene	5	-	-	-	-	-	-	-	-
Trichloroethene	5	**100**	**560**	**590**	**73**	**180**	**190**	**140**	**40**
cis-1,2-Dichloroethene	70	-	1.6	-	-	-	-	-	-
1,1,1-Trichloroethane	200	28	150	170	22	51	57	34	14
1,1-Dichloroethene	7	-	4.6	-	1.1	6.1	-	-	-
1,1-Dichloroethane	70	-	1.6	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-
Metals (mg/L)									
Sodium	NS	7.0	8.9	8.8	6.8	6.2	7.2	5.3	5.2

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	MCP Std	MW-33M	MW-33M	MW-33M	MW-33M	MW-33M	MW-33M	MW-33M	MW-33M	MW-33M
Date Sampled	Method 1	29-Apr-04	29-Apr-04	9-Dec-04	12-Apr-05	11-Oct-05	4-Apr-06	28-Sep-06	25-Apr-07	25-Apr-07
Comments	GW 1		DUP							DUP
Volatile Organic Compounds (VOCs) (µg/L)										
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-
Trichloroethene	5	**10**	**8.2**	**9.3**	**11**	**12**	**14**	**10**	**8.2**	**8.7**
cis-1,2-Dichloroethene	70	1.1	1.2	1.7	1.8	2.3	2.1	2.2	1.6	1.6
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-	-
Metals (mg/L)										
Sodium	NS	16	16	14	18	15	15	13	12	

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-40**	**MW-40**	**MW-40**	**MW-40**	**MW-40**	**MW-40**	**MW-40**	**MW-40**	**MW-40**	**MW-40**	**MW-40**	**MW-40**	**MW-40**	**MW-40**
Date Sampled	**Method 1**	**28-Apr-04**	**28-Apr-04**	**10-Dec-04**	**11-Apr-05**	**11-Apr-05**	**12-Oct-05**	**4-Apr-06**	**4-Apr-06**	**26-Sep-06**	**26-Sep-06**	**15-Nov-06**	**29-Dec-06**	**15-Jan-07**	**25-Apr-07**
Comments	**GW 1**		**DUP**			**DUP**			**DUP**		**DUP**				
Volatile Organic Compounds (VOCs) (µg/L)															
Tetrachloroethene	5	1.4	1.3	0.88	1.4	1.5	1.6	0.67	0.80	0.52	0.59	-	1.8	1.0	1.2
Trichloroethene	5	**6.8**	**5.5**	4.1	**6.5**	**6.3**	5.3	4.0	4.5	2.9	3.3	2.7	**6.2**	2.9	**5.4**
cis-1,2-Dichloroethene	70	-	-	-	-	-	-	-	-	-	-	-		-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-	-	-		-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-	-	-	-	-		-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-	-	-	-	-		-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-	-	-	-		-	-
Chloroform	5	-	-	-	-	-	2.8	**7.1**	**5.8**	**8.2**	**9.1**	**7.8**	**5.2**	**7.4**	**5.8**
Bromodichloromethane	3	-	-	-	-	-	0.87	2.4	2.2	**4.2**	**5.0**	**4.6**	2.3	**3.6**	2.4
Didbromochloromethane	2	-	-	-	-	-	-	0.72	0.74	**3.2**	**3.5**	**3.0**	1.0	0.87	0.80
Metals (mg/L)															
Sodium	NS	44	43	78	55	56	89	79	76	74	73				30

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-40S**	**MW-40S**	**MW-40S**	**MW-40S**	**MW-40S**	**MW-40S**	**MW-40S**	**MW-40S**	**MW-40S**	**MW-40S**	**MW-40S**	**MW-40S**	**MW-40S**
Date Sampled	**Method 1**	**28-Apr-04**	**20-Jul-04**	**10-Dec-04**	**11-Apr-05**	**12-Oct-05**	**4-Apr-06**	**26-Sep-06**	**15-Nov-06**	**29-Dec-06**	**29-Dec-06**	**15-Jan-07**	**15-Jan-07**	**26-Apr-07**
Comments	**GW 1**										**DUP**		**DUP**	
Volatile Organic Compounds (VOCs) (µg/L)			NM											
Tetrachloroethene	5	-		-	-	-	-	-		-	-	-	-	-
Trichloroethene	5	2.6		1.7	4.5	1.5	2.5	1.4	0.82	0.57	0.53	0.60	0.60	1.3
cis-1,2-Dichloroethene	70	-		-	-	-	-	-		-	-	-	-	-
1,1,1-Trichloroethane	200	-		-	-	-	-	-		-	-	-	-	-
1,1-Dichloroethene	7	-		-	-	-	-	-		-	-	-	-	-
1,1-Dichloroethane	70	-		-	-	-	-	-		-	-	-	-	-
Chlorobenzene	100	-		-	-	-	-	-		-	-	-	-	-
Chloroform	5	-		-	-	-	-	1.0	2.1	1.6	1.8	2.4	2.4	3.7
Bromodichloromethane	3	-		-	-	-	-	0.80	1.1	0.71	0.84	1.1	1.0	1.7
Didbromochloromethane	2	-		-	-	-	-	-	0.82	-	-	0.69	0.64	1.3
Metals (mg/L)														
Sodium	NS	140						100						NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-43S**	**MW-43S**	**MW-43S**	**MW-43S**	**MW-43S**	**MW-43S**	**MW-43S**	**MW-43S**
Date Sampled	**Method 1**	**27-Apr-04**	**8-Dec-04**	**13-Apr-05**	**12-Oct-05**	**4-Apr-06**	**28-Sep-06**	**25-Apr-07**	**25-Apr-07**
Comments	**GW 1**								**DUP**
Volatile Organic Compounds (VOCs) (µg/L)			NM						
Tetrachloroethene	5	3.9		1.2	0.58	3.4	2.0	2.7	2.7
Trichloroethene	5	**92**		**49**	3.4	**51**	**28**	**45**	**44**
cis-1,2-Dichloroethene	70	-		-	-	-	-	-	-
1,1,1-Trichloroethane	200	-		-	-	-	-	-	-
1,1-Dichloroethene	7	-		-	-	-	-	-	-
1,1-Dichloroethane	70	-		-	-	-	-	-	-
Chlorobenzene	100	-		-	-	-	-	-	-
Chloroform	5	-		-	-	-	-	-	-
Bromodichloromethane	3	-		-	-	-	-	-	-
Didbromochloromethane	2	-		-	-	-	-	-	-
Metals (mg/L)									
Sodium	NS	210				120	200	75	

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-47S**	**MW-47S**	**MW-47S**	**MW-47S**	**MW-47S**	**MW-47S**	**MW-47S**	**MW-47S**	**MW-47S**
Date Sampled	**Method 1**	**28-Apr-04**	**23-Jul-04**	**9-Dec-04**	**12-Apr-05**	**12-Oct-05**	**5-Apr-06**	**26-Sep-06**	**26-Sep-06**	**26-Apr-07**
Comments	**GW 1**								**DUP**	
Volatile Organic Compounds (VOCs) (µg/L)					NM					
Tetrachloroethene	5	0.66	-	1.7		1.5	1.3	-	-	0.80
Trichloroethene	5	**25**	**11**	1.6		-	-	-	-	0.94
cis-1,2-Dichloroethene	70	-	-	-		-	-	-	-	-
1,1,1-Trichloroethane	200	6.4	3.1	0.66		-	0.92	0.87	1.4	4.4
1,1-Dichloroethene	7	-	-	-		-	-	-	-	-
1,1-Dichloroethane	70	-	-	-		-	-	-	-	-
Chlorobenzene	100	-	-	-		-	-	-	-	-
Chloroform	5	-	-	-		-	-	-	-	-
Bromodichloromethane	3	-	-	-		-	-	-	-	-
Didbromochloromethane	2	-	-	-		-	-	-	-	-
Metals (mg/L)										
Sodium	NS	5.3					12	46	47	NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	MCP Std	MW-47M	MW-47M	MW-47M	MW-47M	MW-47M	MW-47M	MW-47M	MW-47M	MW-47M
Date Sampled	Method 1	28-Apr-04	23-Jul-04	9-Dec-04	11-Apr-05	10-Oct-05	5-Apr-06	5-Apr-06	27-Sep-06	25-Apr-07
Comments	GW 1							DUP		
Volatile Organic Compounds (VOCs) (µg/L)										
Tetrachloroethene	5	-	1.4	0.57	-	-	-	-	-	-
Trichloroethene	5	**150**	**47**	**100**	**120**	**82**	**14**	**14**	**64**	**71**
cis-1,2-Dichloroethene	70	6.3	3.9	7.6	7.1	5.7	1.7	1.4	4.7	8.0
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-	-
Metals (mg/L)										
Sodium	NS	27			27	23	12		20	23

Notes:

- = Analytical result below the method detection limit, (ND).

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NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	MCP Std	MW-47D	MW-47D	MW-47D	MW-47D	MW-47D	MW-47D	MW-47D	MW-47D	MW-47D
Date Sampled	Method 1	28-Apr-04	23-Jul-04	9-Dec-04	11-Apr-05	10-Oct-05	10-Oct-05	5-Apr-06	27-Sep-06	25-Apr-07
Comments	GW 1						DUP			
Volatile Organic Compounds (VOCs) (µg/L)										
Tetrachloroethene	5	0.62	1.5	1.3	1.1	1.1	1.2	2.2	1.6	1.0
Trichloroethene	5	**18**	**24**	**16**	**23**	**30**	**30**	**56**	**9.8**	**14**
cis-1,2-Dichloroethene	70	1.3	3.3	2.5	3.7	5.4	5.3	5.2	1.1	2.0
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	0.52	0.82	0.54	0.75	1.4	1.3	0.99	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-	-
Metals (mg/L)										
Sodium	NS	25			68	52	52	79	99	120

Notes:

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Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. Date Sampled Comments	MCP Std Method 1 GW 1	MW-101 28-Apr-04	MW-101 9-Dec-04	MW-101 11-Apr-05	MW-101 12-Oct-05	MW-101 3-Apr-06	MW-101 25-Sep-06	MW-101 26-Apr-07
Volatile Organic Compounds (VOCs) (µg/L)			NM	NM	NM			
Tetrachloroethene	5	-				-	-	-
Trichloroethene	5	**9.9**				-	1.4	2.7
cis-1,2-Dichloroethene	70	-				-	-	-
1,1,1-Trichloroethane	200	2.3				-	-	1.8
1,1-Dichloroethene	7	-				-	-	-
1,1-Dichloroethane	70	-				-	-	-
Chlorobenzene	100	-				-	-	-
Chloroform	5	-				-	-	-
Bromodichloromethane	3	-				-	-	-
Didbromochloromethane	2	-				-	-	-
Metals (mg/L)								
Sodium	NS	98					160	NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	MCP Std	MW-102	MW-102	MW-102	MW-102	MW-102	MW-102	MW-102	MW-102
Date Sampled	Method 1	27-Apr-04	27-Apr-04	9-Dec-04	11-Apr-05	12-Oct-05	4-Apr-06	25-Sep-06	26-Apr-07
Comments	GW 1		DUP						
Volatile Organic Compounds (VOCs) (µg/L)									
Tetrachloroethene	5	-	-	-	-	-	-	-	-
Trichloroethene	5	**240**	**270**	**230**	**240**	**590**	**450**	**79**	**9.5**
cis-1,2-Dichloroethene	70	6.2	6.6	3.4	3.6	13	6.6	1.2	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	**7.3**	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	1.8	1.9
Chlorobenzene	100	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-
Metals (mg/L)									
Sodium	NS	66	66			92	90	130	NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. Date Sampled Comments	MCP Std Method 1 GW 1	MW-103 27-Apr-04	MW-103 9-Dec-04	MW-103 13-Apr-05	MW-103 11-Oct-05	MW-103 4-Apr-06	MW-103 25-Sep-06	MW-103 26-Apr-07
Volatile Organic Compounds (VOCs) (µg/L)								
Tetrachloroethene	5	0.56	0.50	-	-	-	-	-
Trichloroethene	5	2.2	2.0	1.0	1.4	1.2	1.3	0.79
cis-1,2-Dichloroethene	70	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-
Metals (mg/L)								
Sodium	NS	180	230	240	220	210	140	100

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. **Date Sampled** **Comments**	**MCP Std** **Method 1** **GW 1**	**MW-104** **28-Apr-04**	**MW-104** **9-Dec-04**	**MW-104** **13-Apr-05**	**MW-104** **12-Oct-05**	**MW-104** **4-Apr-06**	**MW-104** **28-Sep-06**	**MW-104** **25-Apr-07**
Volatile Organic Compounds (VOCs) (µg/L)								
Tetrachloroethene	5	3.2	-	1.3	-	2.0	2.8	1.6
Trichloroethene	5	**110**	**-**	**15**	0.61	**23**	**38**	**17**
cis-1,2-Dichloroethene	70	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-
Metals (mg/L)								
Sodium	NS	150					120	56

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-105**	**MW-105**	**MW-105**	**MW-105**	**MW-105**	**MW-105**	**MW-105**	**MW-105**
Date Sampled	**Method 1**	**27-Apr-04**	**9-Dec-04**	**13-Apr-05**	**11-Oct-05**	**11-Oct-05**	**4-Apr-06**	**28-Sep-06**	**24-Apr-07**
Comments	**GW 1**					**DUP**			
Volatile Organic Compounds (VOCs) (µg/L)			NM						
Tetrachloroethene	5	2.0		-	-	-	1.2	-	1.0
Trichloroethene	5	**43**		**-**	**-**	**-**	**15**	0.86	**7.1**
cis-1,2-Dichloroethene	70	-		-	-	-	-	1.8	1.6
1,1,1-Trichloroethane	200	-		-	-	-	-	-	-
1,1-Dichloroethene	7	-		-	-	-	-	-	-
1,1-Dichloroethane	70	-		-	-	-	-	-	-
Chlorobenzene	100	-		-	-	-	-	-	-
Chloroform	5	-		-	-	-	-	-	0.84
Bromodichloromethane	3	-		-	-	-	-	-	-
Didbromochloromethane	2	-		-	-	-	-	-	-
Metals (mg/L)									
Sodium	NS	300						340	NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. Date Sampled Comments	MCP Std Method 1 GW 1	MW-105M 27-Apr-04	MW-105M 14-Apr-05	MW-105M 11-Oct-05	MW-105M 4-Apr-06	MW-105M 28-Sep-06	MW-105M 24-Apr-07
Volatile Organic Compounds (VOCs) (µg/L)							
Tetrachloroethene	5	0.80	-	-	0.50	-	-
Trichloroethene	5	**13**	-	0.83	3.4	3.2	2.9
cis-1,2-Dichloroethene	70	0.70	-	1.5	1.9	2.1	1.3
1,1,1-Trichloroethane	200	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	1.8
Bromodichloromethane	3	-	-	-	-	-	0.60
Didbromochloromethane	2	-	-	-	-	-	-
Metals (mg/L)							
Sodium	NS					300	190

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-106**	**MW-106**	**MW-106**	**MW-106**	**MW-106**	**MW-106**	**MW-106**
Date Sampled	**Method 1**	**27-Apr-04**	**8-Dec-04**	**13-Apr-05**	**12-Oct-05**	**5-Apr-06**	**27-Sep-06**	**25-Apr-07**
Comments	**GW 1**							
Volatile Organic Compounds (VOCs) (µg/L)								
Tetrachloroethene	5	2.6	-	3.5	-	2.3	1.6	2.0
Trichloroethene	5	**40**	**-**	**36**	3.2	**25**	**14**	**20**
cis-1,2-Dichloroethene	70	-	-	-	1.2	-	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	1.5
Bromodichloromethane	3	-	-	-	-	-	-	0.58
Didbromochloromethane	2	-	-	-	-	-	-	-
Metals (mg/L)								
Sodium	NS					130	130	73

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-106M**	**MW-106M**	**MW-106M**	**MW-106M**	**MW-106M**	**MW-106M**	**MW-106M**	**MW-106M**
Date Sampled	**Method 1**	**27-Apr-04**	**8-Dec-04**	**8-Dec-04**	**13-Apr-05**	**11-Oct-05**	**5-Apr-06**	**27-Sep-06**	**25-Apr-07**
Comments	**GW 1**			**DUP**					
Volatile Organic Compounds (VOCs) (µg/L)					NM				
Tetrachloroethene	5	0.94	-	-		-	1.1	1.1	1.3
Trichloroethene	5	**5.7**	**-**	**-**		3.4	**11**	**11**	**11**
cis-1,2-Dichloroethene	70	-	-	-		-	1.4	2.1	0.76
1,1,1-Trichloroethane	200	-	-	-		-	-	-	-
1,1-Dichloroethene	7	-	-	-		-	-	-	-
1,1-Dichloroethane	70	-	-	-		-	-	-	-
Chlorobenzene	100	-	-	-		-	-	-	-
Chloroform	5	-	-	-		-	-	-	1.5
Bromodichloromethane	3	-	-	-		-	-	-	0.60
Didbromochloromethane	2	-	-	-		-	-	-	-
Metals (mg/L)									
Sodium	NS							260	170

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. Date Sampled Comments	MCP Std Method 1 GW 1	MW-107 28-Apr-04	MW-107 7-Dec-04	MW-107 12-Apr-05	MW-107 12-Oct-05	MW-107 6-Apr-06	MW-107 27-Sep-06	MW-107 26-Apr-07
Volatile Organic Compounds (VOCs) (µg/L)								
Tetrachloroethene	5	-	-	-	-	-	-	-
Trichloroethene	5	**73**	**74**	**66**	**47**	**83**	**61**	**71**
cis-1,2-Dichloroethene	70	3.4	8.2	11	11	9.8	7.1	6.8
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	0.58	-	0.59
1,1-Dichloroethane	70	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-
Metals (mg/L)								
Sodium	NS	40		64	65	58	46	NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-109**	**MW-109**	**MW-109**	**MW-109**	**MW-109**	**MW-109**	**MW-109**	**MW-109**	**MW-109**
Date Sampled	**Method 1**	**28-Apr-04**	**7-Dec-04**	**12-Apr-05**	**12-Oct-05**	**12-Oct-05**	**4-Apr-06**	**27-Sep-06**	**26-Apr-07**	**26-Apr-07**
Comments	**GW 1**					**DUP**				**DUP**
Volatile Organic Compounds (VOCs) (µg/L)										
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-
Trichloroethene	5	2.0	**41**	**34**	**37**	**34**	**33**	**28**	**16**	**17**
cis-1,2-Dichloroethene	70	-	4.8	4.3	5.9	5.4	4.7	5.0	3.1	3.2
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-	-
Metals (mg/L)										
Sodium	NS	-	15	21	16	16	18	16	15	

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	MCP Std	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111
Date Sampled	Method 1	28-Apr-04	7-Dec-04	12-Apr-05	11-Oct-05	4-Apr-06	27-Sep-06	26-Apr-07
Comments	GW 1							
Volatile Organic Compounds (VOCs) (µg/L)								
Tetrachloroethene	5	-	-	-	-	-	-	-
Trichloroethene	5	**26**	**18**	**860**	**15**	**100**	**40**	**240**
cis-1,2-Dichloroethene	70	0.87	-	4.9	0.68	0.68	-	1.6
1,1,1-Trichloroethane	200	5.2	4.6	**280**	1.7	25	8.4	77
1,1-Dichloroethene	7	-	-	**32**	-	0.94	-	2.6
1,1-Dichloroethane	70	-	-	3.3	-	1.3	0.80	1.4
Chlorobenzene	100	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-
Metals (mg/L)								
Sodium	NS	32	38	53	21	65	46	53

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. Date Sampled Comments	MCP Std Method 1 GW 1	MW-113 29-Apr-04	MW-113 7-Dec-04	MW-113 12-Apr-05	MW-113 11-Oct-05	MW-113 3-Apr-06	MW-113 27-Sep-06	MW-113 26-Apr-07
Volatile Organic Compounds (VOCs) (µg/L)								
Tetrachloroethene	5	-	-	-	-	-	-	-
Trichloroethene	5	3.2	**12**	**6.4**	**35**	**120**	**41**	**21**
cis-1,2-Dichloroethene	70	-	0.98	-	1.4	0.81	1.0	1.2
1,1,1-Trichloroethane	200	-	0.51	2.3	2.5	32	6.1	2.6
1,1-Dichloroethene	7	-	-	-	0.91	1.5	-	-
1,1-Dichloroethane	70	-	-	-	2.6	0.76	0.79	-
Chlorobenzene	100	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-
Metals (mg/L)								
Sodium	NS	69	39	100	22	78	34	38

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. Date Sampled Comments	MCP Std Method 1 GW 1	MW-115 29-Apr-04	MW-115 8-Dec-04	MW-115 12-Apr-05	MW-115 12-Oct-05	MW-115 4-Apr-06	MW-115 27-Sep-06	MW-115 26-Apr-07
Volatile Organic Compounds (VOCs) (µg/L)								
Tetrachloroethene	5	-	-	-	-	-	-	-
Trichloroethene	5	**17**	**14**	**270**	**34**	**220**	**120**	**230**
cis-1,2-Dichloroethene	70	1.4	0.93	1.3	0.95	1.2	-	5.9
1,1,1-Trichloroethane	200	-	16	190	7.4	81	31	72
1,1-Dichloroethene	7	-	-	**7.2**	-	2.6	1.2	2.6
1,1-Dichloroethane	70	-	-	2.5	-	1.6	-	-
Chlorobenzene	100	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-
Metals (mg/L)								
Sodium	NS	28	39		51	77	58	59

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	MCP Std	MW-117	MW-117	MW-117	MW-117	MW-117	MW-117
Date Sampled	Method 1	29-Apr-04	9-Dec-04	14-Apr-05	14-Apr-05	28-Sep-06	26-Apr-07
Comments	GW 1				DUP		
Volatile Organic Compounds (VOCs) (µg/L)							
Tetrachloroethene	5	-	1.0	1.1	1.1	1.1	0.87
Trichloroethene	5	3.4	**11**	**10**	**10**	**9.6**	**6.1**
cis-1,2-Dichloroethene	70	-	1.0	0.74	0.85	0.65	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-
Chloroform	5	4.2	2.8	2.6	2.6	-	0.92
Bromodichloromethane	3	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-
Metals (mg/L)							
Sodium	NS	72	93	94	94	98	89

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-118**	**MW-118**	**MW-118**	**MW-118**	**MW-118**	**MW-118**	**MW-118**	**MW-118**	**MW-118**
Date Sampled	**Method 1**	**29-Apr-04**	**7-Dec-04**	**14-Apr-05**	**13-Oct-05**	**13-Oct-05**	**3-Apr-06**	**28-Sep-06**	**28-Sep-06**	**26-Apr-07**
Comments	**GW 1**					**DUP**			**DUP**	
Volatile Organic Compounds (VOCs) (µg/L)										
Tetrachloroethene	5	1.5	-	-	-	-	1.0	0.81	1.1	-
Trichloroethene	5	**150**	**120**	**80**	**55**	**53**	**65**	**51**	**62**	**5.0**
cis-1,2-Dichloroethene	70	1.7	-	-		0.61	0.50	-	0.56	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-	-
Metals (mg/L)										
Sodium	NS	99	120					120	120	NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-201S**	**MW-201S**	**MW-201S**	**MW-201S**	**MW-201S**	**MW-201S**	**MW-201S**	**MW-201S**
Date Sampled	**Method 1**	**28-Apr-04**	**20-Jul-04**	**6-Dec-04**	**13-Apr-05**	**12-Oct-05**	**4-Apr-06**	**25-Sep-06**	**23-Apr-07**
Comments	**GW 1**								
Volatile Organic Compounds (VOCs) (µg/L)			NM			NM			
Tetrachloroethene	5	3.6		0.88	1.0		0.78	0.69	1.5
Trichloroethene	5	**22**		**5.2**	**7.4**		**11**	3.6	**12**
cis-1,2-Dichloroethene	70	-		-	-		-	-	0.85
1,1,1-Trichloroethane	200	-		-	-		-	-	-
1,1-Dichloroethene	7	-		-	-		-	-	-
1,1-Dichloroethane	70	-		-	-		-	-	-
Chlorobenzene	100	-		-	-		-	-	-
Chloroform	5	-		-	-		-	-	-
Bromodichloromethane	3	-		-	-		-	-	-
Didbromochloromethane	2	-		-	-		-	-	-
Metals (mg/L)									
Sodium	NS	73						64	NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	MCP Std	MW-201M	MW-201M	MW-201M	MW-201M	MW-201M	MW-201M	MW-201M	MW-201M
Date Sampled	Method 1	28-Apr-04	20-Jul-04	8-Dec-04	13-Apr-05	10-Oct-05	4-Apr-06	25-Sep-06	23-Apr-07
Comments	GW 1								
Volatile Organic Compounds (VOCs) (µg/L)			NM	NM					
Tetrachloroethene	5	-			-	-	-	-	-
Trichloroethene	5	**28**			**100**	**150**	**270**	**170**	**84**
cis-1,2-Dichloroethene	70	2.7			6.9	12	12	11	17
1,1,1-Trichloroethane	200	-			-	-	-	-	-
1,1-Dichloroethene	7	-			-	3.6	2.8	3.0	2.6
1,1-Dichloroethane	70	-			-	-	-	-	1.4
Chlorobenzene	100	-			-	-	-	-	-
Chloroform	5	-			-	-	-	-	-
Bromodichloromethane	3	-			-	-	-	-	-
Didbromochloromethane	2	-			-	-	-	-	-
Metals (mg/L)									
Sodium	NS	22			110	58	56	46	NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. Date Sampled Comments	MCP Std Method 1 GW 1	MW-201D 28-Apr-04	MW-201D 9-Dec-04	MW-201D 13-Apr-05	MW-201D 10-Oct-05	MW-201D 4-Apr-06	MW-201D 25-Sep-06	MW-201D 23-Apr-07
Volatile Organic Compounds (VOCs) (µg/L)								
Tetrachloroethene	5	2.6	-	-	-	-	-	1.3
Trichloroethene	5	**64**	**7.1**	2.4	-	1.6	2.5	**26**
cis-1,2-Dichloroethene	70	8.1	-	-	-	-	-	2.0
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-
Metals (mg/L)								
Sodium	NS	39	47	180	140	110	92	NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. **Date Sampled** **Comments**	**MCP Std** **Method 1** **GW 1**	**MW-202S** **28-Apr-04**	**MW-202S** **23-Jul-04**	**MW-202S** **7-Dec-04**	**MW-202S** **12-Apr-05**	**MW-202S** **11-Oct-05**	**MW-202S** **4-Apr-06**	**MW-202S** **25-Sep-06**	**MW-202S** **25-Apr-07**
Volatile Organic Compounds (VOCs) (µg/L)									
Tetrachloroethene	5	1.4	-	-	1.7	-	-	-	1.4
Trichloroethene	5	2.7	0.97	-	2.4	-	0.75	-	1.5
cis-1,2-Dichloroethene	70	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-
Metals (mg/L)									
Sodium	NS	140			160	56	15	32	79

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	MCP Std	MW-202M	MW-202M	MW-202M	MW-202M	MW-202M	MW-202M	MW-202M	MW-202M	MW-202M	MW-202M
Date Sampled	Method 1	28-Apr-04	28-Apr-04	23-Jul-04	10-Dec-04	12-Apr-05	12-Apr-05	11-Oct-05	4-Apr-06	25-Sep-06	25-Apr-07
Comments	GW 1		DUP				DUP				
Volatile Organic Compounds (VOCs) (µg/L)											
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	**59**	**63**	**70**	**37**	**61**	**63**	**31**	**100**	**53**	**120**
cis-1,2-Dichloroethene	70	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	13	13	19	9.8	15	16	15	30	16	45
1,1-Dichloroethene	7	1.3	1.4	2.4	-	-	2.1	1.3	1.6	1.7	2.5
1,1-Dichloroethane	70	-	-	-	-	-	-	-	-	-	0.93
Chlorobenzene	100	-	-	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-	-	-
Metals (mg/L)											
Sodium	NS	20	20			24	24	23	28	18	18

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-203S**	**MW-203S**	**MW-203S**	**MW-203S**	**MW-203S**	**MW-203S**	**MW-203S**	**MW-203S**
Date Sampled	**Method 1**	**27-Apr-04**	**22-Jul-04**	**8-Dec-04**	**11-Apr-05**	**10-Oct-05**	**4-Apr-06**	**26-Sep-06**	**24-Apr-07**
Comments	**GW 1**								
Volatile Organic Compounds (VOCs) (µg/L)									
Tetrachloroethene	5	2.4	**21**	**13**	**5.9**	**8.1**	**8.2**	**8.2**	0.90
Trichloroethene	5	0.68	**10**	2.8	2.3	1.2	3.4	1.9	-
cis-1,2-Dichloroethene	70	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-
Metals (mg/L)									
Sodium	NS	61			77	120	100	60	42

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	MCP Std	MW-203M	MW-203M	MW-203M	MW-203M	MW-203M	MW-203M	MW-203M	MW-203M	MW-203M
Date Sampled	Method 1	27-Apr-04	27-Apr-04	22-Jul-04	7-Dec-04	11-Apr-05	10-Oct-05	4-Apr-06	27-Sep-06	24-Apr-07
Comments	GW 1		DUP							
Volatile Organic Compounds (VOCs) (µg/L)										
Tetrachloroethene	5	0.59	0.60	0.65	2.4	0.54	2.2	0.66	0.87	-
Trichloroethene	5	**130**	**150**	**14**	**12**	**93**	3.8	1.8	1.6	0.56
cis-1,2-Dichloroethene	70	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	37	36	3.3	2.6	25	1.6	0.60	0.59	25
1,1-Dichloroethene	7	2.2	2.2	-	-	1.7	-	-	-	-
1,1-Dichloroethane	70	0.75	-	-	-	1.0	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-	-
Metals (mg/L)										
Sodium	NS	67	69			99	180	160	140	NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-203D**	**MW-203D**	**MW-203D**	**MW-203D**	**MW-203D**	**MW-203D**	**MW-203D**	**MW-203D**	**MW-203D**
Date Sampled	**Method 1**	**27-Apr-04**	**22-Jul-04**	**22-Jul-04**	**7-Dec-04**	**11-Apr-05**	**10-Oct-05**	**4-Apr-06**	**27-Sep-06**	**24-Apr-07**
Comments	**GW 1**			**DUP**						
Volatile Organic Compounds (VOCs) (µg/L)										
Tetrachloroethene	5	2.5	1.8	1.9	2.6	3.1	2.8	2.9	2.3	2.8
Trichloroethene	5	**92**	**75**	**74**	**80**	**80**	**82**	**76**	**80**	**73**
cis-1,2-Dichloroethene	70	4.6	5.8	5.7	6.0	6.4	7.0	5.6	6.9	7.0
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-	-
Metals (mg/L)										
Sodium	NS	53				58	64	73	67	73

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-204S**	**MW-204S**	**MW-204S**	**MW-204S**	**MW-204S**	**MW-204S**	**MW-204S**	**MW-204S**	**MW-204S**
Date Sampled	**Method 1**	**27-Apr-04**	**21-Jul-04**	**8-Dec-04**	**13-Apr-05**	**13-Apr-05**	**10-Oct-05**	**4-Apr-06**	**25-Sep-06**	**24-Apr-07**
Comments	**GW 1**					**DUP**				
Volatile Organic Compounds (VOCs) (µg/L)										
Tetrachloroethene	5	**8.2**	**16**	**8.7**	**8.2**	**8.4**	**13**	**9.4**	**11**	**8.8**
Trichloroethene	5	2.0	3.5	2.4	2.0	1.9	1.6	1.1	0.77	3.3
cis-1,2-Dichloroethene	70	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-	-
Chloroform	5	-	-	1.0	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-	-
Metals (mg/L)										
Sodium	NS	62					36	41	28	30

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. Date Sampled Comments	MCP Std Method 1 GW 1	MW-204M 27-Apr-04	MW-204M 21-Jul-04	MW-204M 8-Dec-04	MW-204M 13-Apr-05	MW-204M 10-Oct-05	MW-204M 4-Apr-06	MW-204M 25-Sep-06	MW-204M 24-Apr-07
Volatile Organic Compounds (VOCs) (µg/L)									
Tetrachloroethene	5	-	-	-	-	-	-	-	-
Trichloroethene	5	**130**	**170**	**160**	**150**	**76**	**74**	**56**	**77**
cis-1,2-Dichloroethene	70	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	21	49	34	28	27	26	16	22
1,1-Dichloroethene	7	3.5	4.0	3.6	5.9	5.3	2.1	2.4	4.0
1,1-Dichloroethane	70	-	-	-	-	-	2.0	-	0.96
Chlorobenzene	100	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-
Metals (mg/L)									
Sodium	NS	30			32	26	35	31	40

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	MCP Std	MW-204D	MW-204D	MW-204D	MW-204D	MW-204D	MW-204D	MW-204D	MW-204D	MW-204D	MW-204D
Date Sampled	Method 1	28-Apr-04	21-Jul-04	8-Dec-04	13-Apr-05	10-Oct-05	5-Apr-06	5-Apr-06	25-Sep-06	24-Apr-07	24-Apr-07
Comments	GW 1							DUP			DUP
Volatile Organic Compounds (VOCs) (µg/L)											
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	**30**	**27**	2.5	0.95	**6.2**	**12**	**11**	**9.3**	3.1	3.1
cis-1,2-Dichloroethene	70	1.9	2.7	-	-	6.9	25	25	13	3.2	3.2
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-	-	-
Metals (mg/L)											
Sodium	NS	30			4.2	66	210	210	63	43	

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-208S**	**MW-208S**	**MW-208S**	**MW-208S**	**MW-208S**	**MW-208S**	**MW-208S**	**MW-208S**
Date Sampled	**Method 1**	**30-Apr-04**	**22-Jul-04**	**8-Dec-04**	**14-Apr-05**	**12-Oct-05**	**4-Apr-06**	**25-Sep-06**	**25-Apr-07**
Comments	**GW 1**								
Volatile Organic Compounds (VOCs) (µg/L)									
Tetrachloroethene	5	**7.7**	**6.2**	**8.1**	**5.8**	3.1	**5.0**	**5.4**	**7.0**
Trichloroethene	5	**5.7**	**6.6**	**6.4**	4.9	3.4	**5.5**	**5.1**	2.1
cis-1,2-Dichloroethene	70	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-
Metals (mg/L)									
Sodium	NS	81			93	94	78	49	35

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	MCP Std	MW-208M	MW-208M	MW-208M	MW-208M	MW-208M	MW-208M	MW-208M	MW-208M	MW-208M	MW-208M	MW-208M
Date Sampled	Method 1	30-Apr-04	30-Apr-04	23-Jul-04	23-Jul-04	8-Dec-04	14-Apr-05	14-Apr-05	12-Oct-05	4-Apr-06	25-Sep-06	25-Apr-07
Comments	GW 1		DUP		DUP			DUP				
Volatile Organic Compounds (VOCs) (µg/L)												
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	**6.9**	**7.1**	**7.4**	**6.5**	**7.5**	**10**	**9.1**	**8.0**	**6.0**	**9.7**	**12**
cis-1,2-Dichloroethene	70	0.62	0.56	0.81	0.77	0.84	0.92	0.73	0.81	0.50	0.93	1.3
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	0.54	0.53	0.56	0.53	0.62	0.79	0.73	0.67	-	0.67	1.1
1,1-Dichloroethane	70	1.4	1.5	1.5	1.4	1.6	1.9	1.8	1.6	1.1	1.7	2.5
Chlorobenzene	100	-	-	-	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-	-	-	-
Metals (mg/L)												
Sodium	NS	84					73	71	64	68	56	NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-209**	**MW-209**	**MW-209**	**MW-209**	**MW-209**	**MW-209**	**MW-209**	**MW-209**	**MW-209**	**MW-209**
Date Sampled	**Method 1**	**27-Apr-04**	**13-Apr-05**	**6-Dec-04**	**13-Apr-05**	**13-Apr-05**	**13-Oct-05**	**13-Oct-05**	**5-Apr-06**	**27-Sep-06**	**26-Apr-07**
Comments	**GW 1**					**DUP**		**DUP**			
Volatile Organic Compounds (VOCs) (µg/L)			NM								
Tetrachloroethene	5	-		-	-	-	-	-	-	-	-
Trichloroethene	5	1.6		1.8	1.7	1.5	0.97	0.97	1.2	2.0	0.84
cis-1,2-Dichloroethene	70	-		-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	-		-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-		-	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-		-	-	-	-	-	-	-	-
Chlorobenzene	100	-		-	-	-	-	-	-	-	-
Chloroform	5	-		-	-	-	-	-	-	-	-
Bromodichloromethane	3	-		-	-	-	-	-	-	-	-
Didbromochloromethane	2	-		-	-	-	-	-	-	-	-
Metals (mg/L)											
Sodium	NS	94		100	53	52			51	60	33

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. **Date Sampled** **Comments**	**MCP Std** **Method 1** **GW 1**	**MW-210** **28-Apr-04**	**MW-210** **9-Dec-04**	**MW-210** **13-Apr-05**	**MW-210** **4-Apr-06**	**MW-210** **28-Sep-06**	**MW-210** **25-Apr-07**
Volatile Organic Compounds (VOCs) (µg/L)			NM	NM			
Tetrachloroethene	5	1.3			1.1	1.5	1.5
Trichloroethene	5	**45**			**10**	**17**	**16**
cis-1,2-Dichloroethene	70	-			0.85	1.5	1.2
1,1,1-Trichloroethane	200	-			-	-	-
1,1-Dichloroethene	7	-			-	-	-
1,1-Dichloroethane	70	-			-	-	-
Chlorobenzene	100	-			-	-	-
Chloroform	5	-			-	-	-
Bromodichloromethane	3	-			-	-	-
Didbromochloromethane	2	-			-	-	-
Metals (mg/L)							
Sodium	NS					250	220

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	**MCP Std**	**MW-211**	**MW-211**	**MW-211**	**MW-211**	**MW-211**	**MW-211**	**MW-211**	**MW-211**	**MW-211**
Date Sampled	**Method 1**	**28-Apr-04**	**9-Dec-04**	**13-Apr-05**	**12-Oct-05**	**12-Oct-05**	**4-Apr-06**	**4-Apr-06**	**28-Sep-06**	**25-Apr-07**
Comments	**GW 1**					**DUP**		**DUP**		
Volatile Organic Compounds (VOCs) (µg/L)										
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-
Trichloroethene	5	1.3	-	-	-	-	-	-	-	0.54
cis-1,2-Dichloroethene	70	-	-	0.80	-	-	-	-	-	0.91
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-	-
Metals (mg/L)										
Sodium	NS	52	15	53	17	18	44	45	32	66

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. **Date Sampled** **Comments**	**MCP Std** **Method 1** **GW 1**	**MW-212** **28-Apr-04**	**MW-212** **8-Dec-04**	**MW-212** **13-Apr-05**	**MW-212** **13-Oct-05**	**MW-212** **5-Apr-06**	**MW-212** **28-Sep-06**	**MW-212** **24-Apr-07**
Volatile Organic Compounds (VOCs) (µg/L)								
Tetrachloroethene	5	-	-	-	-	-	-	-
Trichloroethene	5	1.5	0.89	1.4	2.4	1.7	2.6	1.5
cis-1,2-Dichloroethene	70	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-
Metals (mg/L)								
Sodium	NS	120	120			68	49	60

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. **Date Sampled** **Comments**	**MCP Std** **Method 1** **GW 1**	**MW-212M** **28-Apr-04**	**MW-212M** **8-Dec-04**	**MW-212M** **13-Apr-05**	**MW-212M** **12-Oct-05**	**MW-212M** **5-Apr-06**	**MW-212M** **27-Sep-06**	**MW-212M** **24-Apr-07**
Volatile Organic Compounds (VOCs) (µg/L)								
Tetrachloroethene	5	-	-	-	0.75	0.51	0.69	0.73
Trichloroethene	5	-	2.7	2.2	2.0	4.1	**6.3**	3.7
cis-1,2-Dichloroethene	70	-	-	-	2.2	-	-	3.6
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-
1,1-Dichloroethene	7	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	1.4
Chloroform	5	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-
Metals (mg/L)								
Sodium	NS		320		340		470	150

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. Date Sampled Comments	MCP Std Method 1 GW 1	MW-213 27-Apr-04	MW-213 9-Dec-04	MW-213 13-Apr-05	MW-213 11-Oct-05	MW-213 4-Apr-06	MW-213 25-Sep-06	MW-213 26-Apr-07
Volatile Organic Compounds (VOCs) (µg/L)						NM		
Tetrachloroethene	5	1.2	-	0.51	0.73		0.51	0.51
Trichloroethene	5	**5.1**	1.7	1.8	3.2		1.7	1.3
cis-1,2-Dichloroethene	70	-	-	-	-		-	-
1,1,1-Trichloroethane	200	-	-	-	-		-	-
1,1-Dichloroethene	7	-	-	-	-		-	-
1,1-Dichloroethane	70	-	-	-	-		-	-
Chlorobenzene	100	-	-	-	-		-	-
Chloroform	5	-	-	-	-		-	-
Bromodichloromethane	3	-	-	-	-		-	-
Didbromochloromethane	2	-	-	-	-		-	-
Metals (mg/L)								
Sodium	NS	200					180	140

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	MCP Std	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214
Date Sampled	Method 1	27-Apr-04	9-Dec-04	9-Dec-04	11-Apr-05	12-Oct-05	4-Apr-06	25-Sep-06	26-Apr-07
Comments	GW 1			DUP					
Volatile Organic Compounds (VOCs) (µg/L)						NM			
Tetrachloroethene	5	-	-	-	0.62		-	-	0.50
Trichloroethene	5	**110**	**52**	**53**	**57**		**66**	**46**	**53**
cis-1,2-Dichloroethene	70	5.5	2.6	2.7	3.1		3.1	2.8	3.7
1,1,1-Trichloroethane	200	-	-	-	-		-	-	-
1,1-Dichloroethene	7	4.6	0.85	0.99	2.3		2.5	1.9	2.7
1,1-Dichloroethane	70	-	-	-	-		-	-	-
Chlorobenzene	100	-	-	-	-		-	-	-
Chloroform	5	-	-	-	-		-	-	-
Bromodichloromethane	3	-	-	-	-		-	-	-
Didbromochloromethane	2	-	-	-	-		-	-	-
Metals (mg/L)									
Sodium	NS	36	45	45	51			35	41

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. **Date Sampled** **Comments**	**MCP Std** **Method 1** **GW 1**	**MW-403** **28-Apr-04**	**MW-403** **23-Jul-04**	**MW-403** **9-Dec-04**	**MW-403** **11-Apr-05**	**MW-403** **12-Oct-05**	**MW-403** **4-Apr-06**	**MW-403** **28-Sep-06**	**MW-403** **26-Apr-07**
Volatile Organic Compounds (VOCs) (µg/L)									
Tetrachloroethene	5	**12**	**7.0**	**9.7**	**12**	**9.4**	**7.4**	**10**	**6.3**
Trichloroethene	5	**230**	**220**	**280**	**320**	**340**	**350**	**340**	**190**
cis-1,2-Dichloroethene	70	14	7.7	10	12	12	9.1	11	8.4
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-
1,1-Dichloroethene	7	2.9	-	-	-	-	-	-	-
1,1-Dichloroethane	70	-	-	-	-	-	-	-	-
Chlorobenzene	100	-	-	-	-	-	-	-	-
Chloroform	5	-	-	-	-	-	-	-	-
Bromodichloromethane	3	-	-	-	-	-	-	-	-
Didbromochloromethane	2	-	-	-	-	-	-	-	-
Metals (mg/L)									
Sodium	NS	190		170	200	170	200	180	NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D.	MCP Std	MW-404	MW-404	MW-404	MW-404	MW-404	MW-404	MW-404	MW-404
Date Sampled	Method 1	30-Apr-04	30-Apr-04	7-Dec-04	14-Apr-05	14-Oct-05	3-Apr-06	27-Sep-06	26-Apr-07
Comments	GW 1		DUP						
Volatile Organic Compounds (VOCs) (µg/L)				NM	NM	NM	NM		
Tetrachloroethene	5	-	-					-	-
Trichloroethene	5	**730**	**680**					**-**	1.6
cis-1,2-Dichloroethene	70	10	11					-	-
1,1,1-Trichloroethane	200	-	-					-	-
1,1-Dichloroethene	7	-	2.6					-	-
1,1-Dichloroethane	70	-	-					-	0.80
Chlorobenzene	100	-	-					-	-
Chloroform	5	-	-					-	1.6
Bromodichloromethane	3	-	-					-	-
Didbromochloromethane	2	-	-					-	-
Metals (mg/L)									
Sodium	NS	55						440	NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Table 6

Summary of Groundwater Analytical Results

Former Raytheon Facility

Wayland, Massachusetts

Sample I.D. **Date Sampled** **Comments**	**MCP Std** **Method 1** **GW 1**	**MW-405S** **29-Apr-04**	**MW-405S** **8-Dec-04**	**MW-405S** **14-Apr-05**	**MW-405S** **14-Oct-05**	**MW-405S** **3-Apr-06**	**MW-405S** **27-Sep-06**	**MW-405S** **26-Apr-07**
Volatile Organic Compounds (VOCs) (µg/L)			NM	NM	NM	NM		
Tetrachloroethene	5	-					-	-
Trichloroethene	5	**260**					-	-
cis-1,2-Dichloroethene	70	2.7					-	-
1,1,1-Trichloroethane	200	-					-	-
1,1-Dichloroethene	7	-					-	-
1,1-Dichloroethane	70	-					-	-
Chlorobenzene	100	-					-	-
Chloroform	5	-					-	-
Bromodichloromethane	3	-					-	-
Didbromochloromethane	2	-					-	-
Metals (mg/L)								
Sodium	NS	61					350	NM

Notes:

- = Analytical result below the method detection limit, (ND).

Blank cells indicate a sample was not analyzed for that compound.

NM = Sample not analyzed due to presence of permanganate.

NM-O = Obstruction in well, no sample collected.

Bold and shaded cells indicate exceedance of MCP standard.

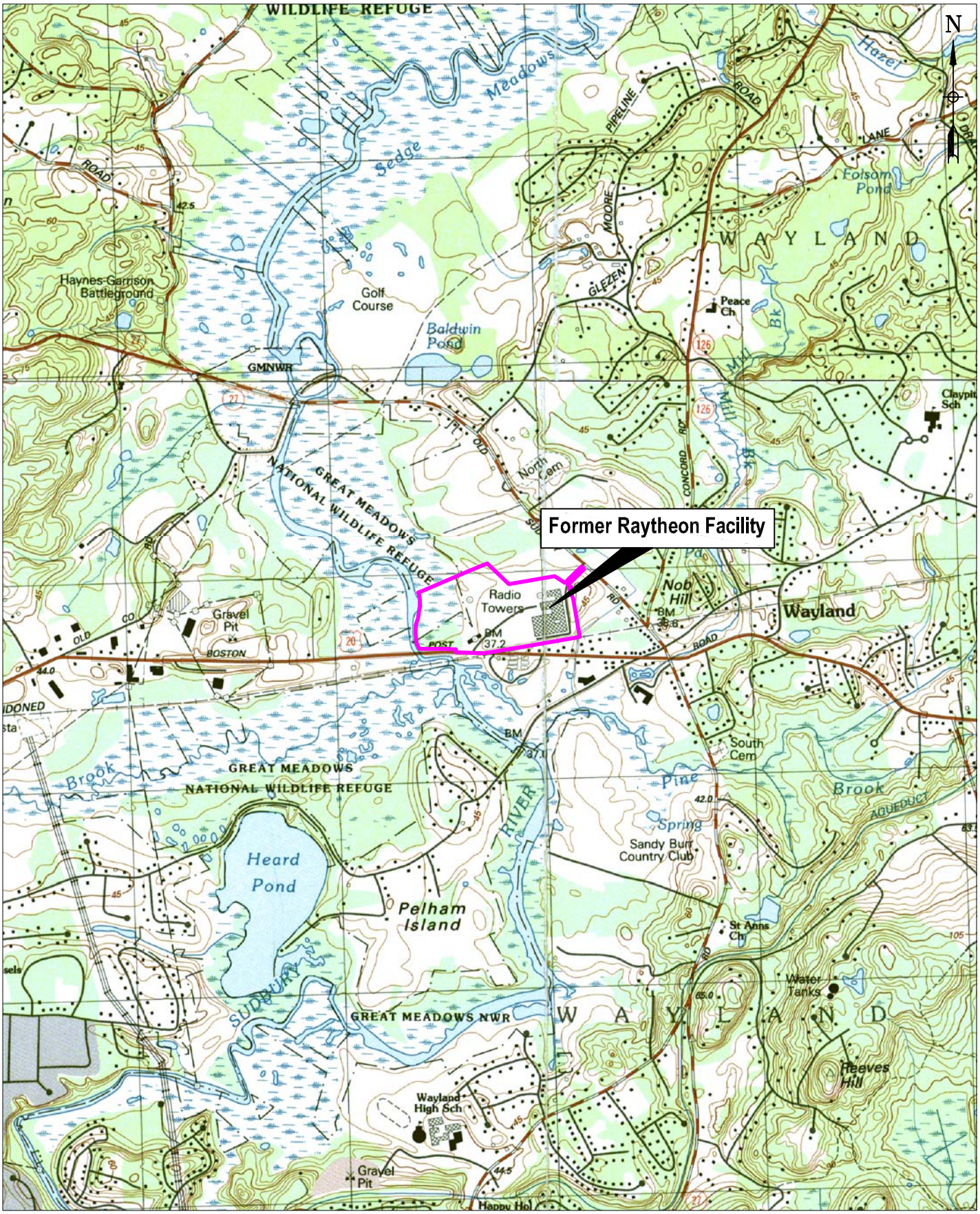
DUP = Field duplicate.

µg/L = Micrograms per liter, (parts per billion [ppb]).

mg/L = Milligrams per liter, (parts per million [ppm]).

NS = No MCP Standard.

Figures



Legend

Former Raytheon Facility Property Boundary

Scale = 1:25,000

Figure 1 - Site Locus Map
Former Raytheon Facility
and Former Hamlen Parcel - Wayland, MA

ERM

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

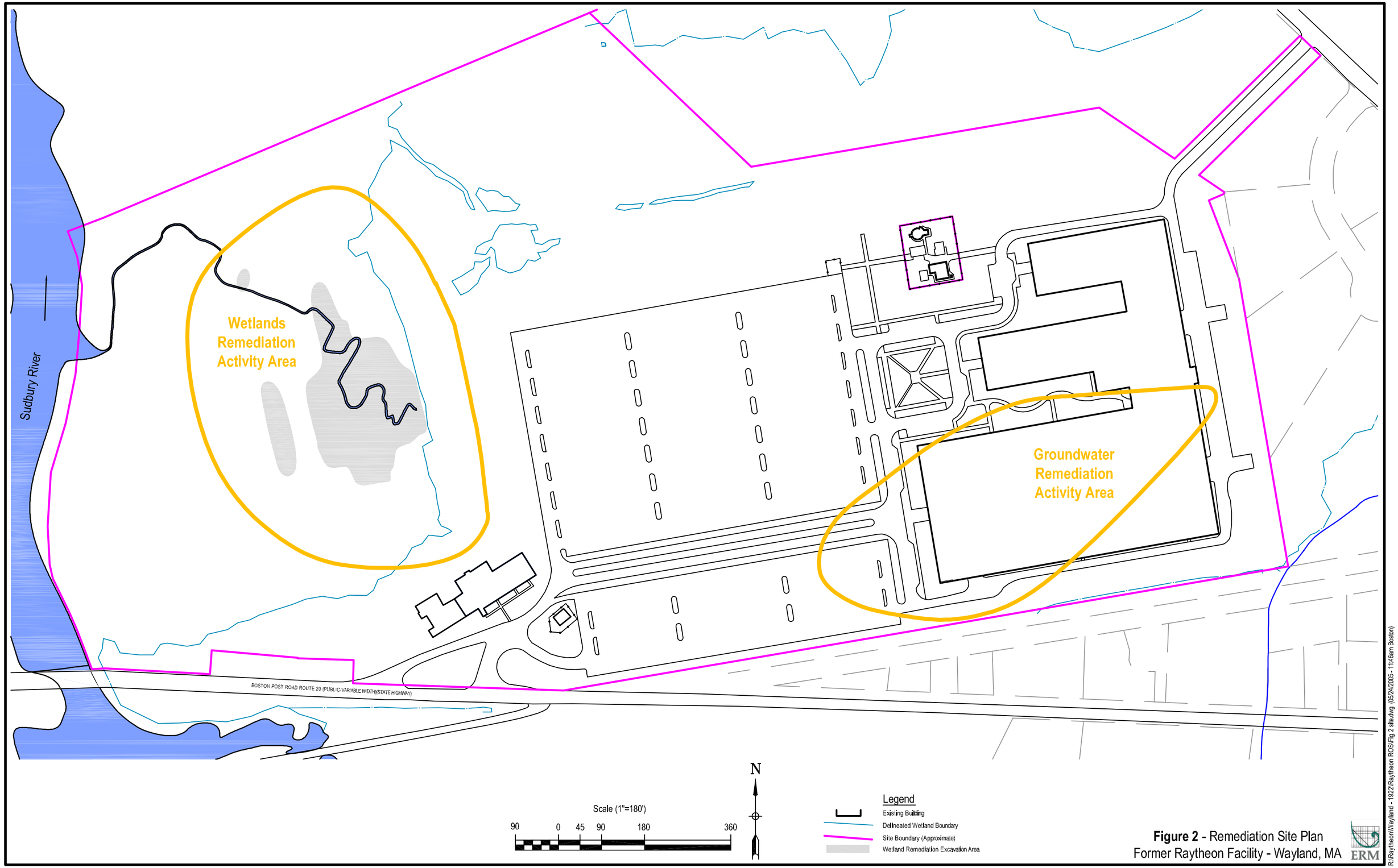


Figure 2 - Remediation Site Plan
Former Raytheon Facility - Wayland, MA

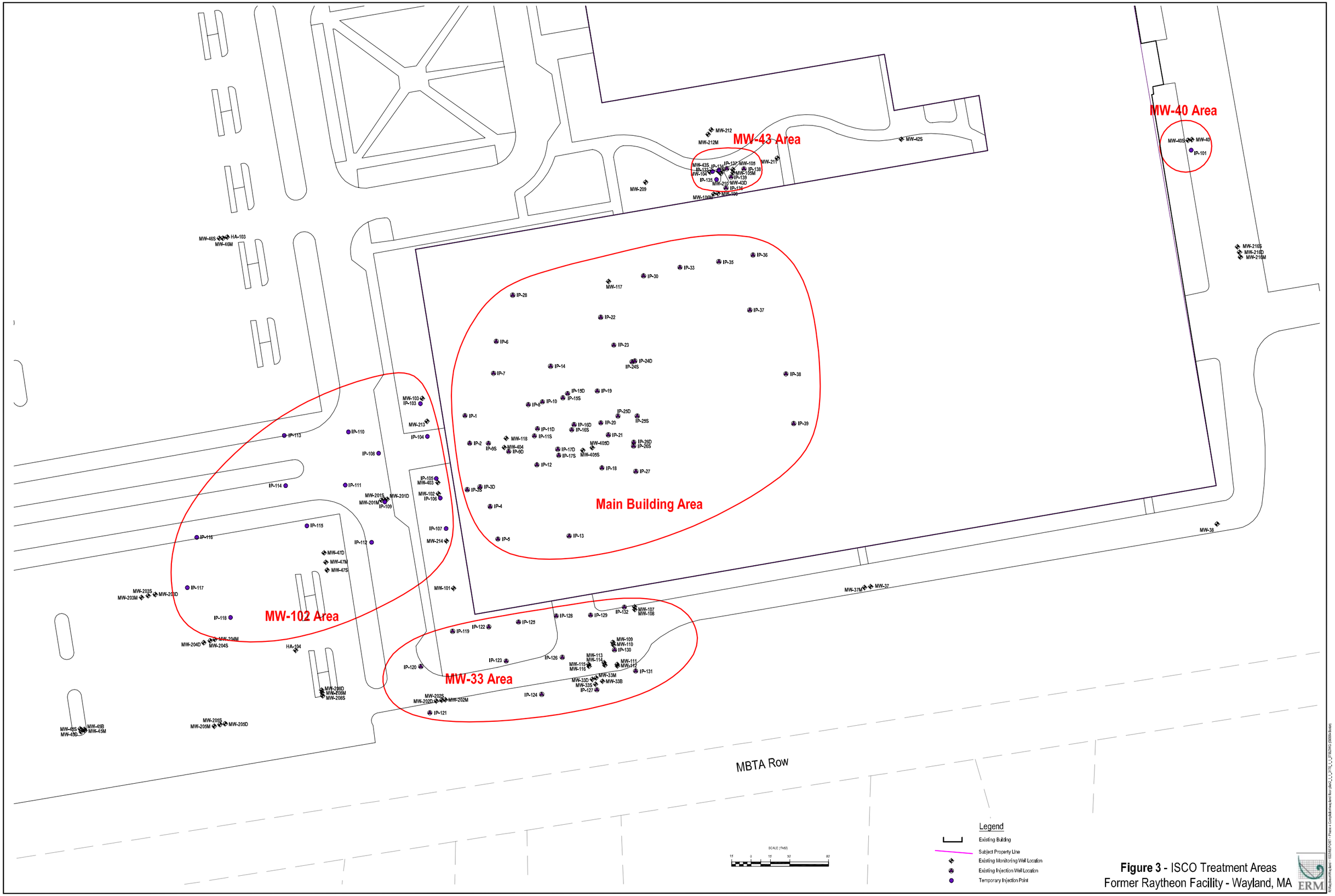


Figure 3 - ISCO Treatment Areas
Former Raytheon Facility - Wayland, MA

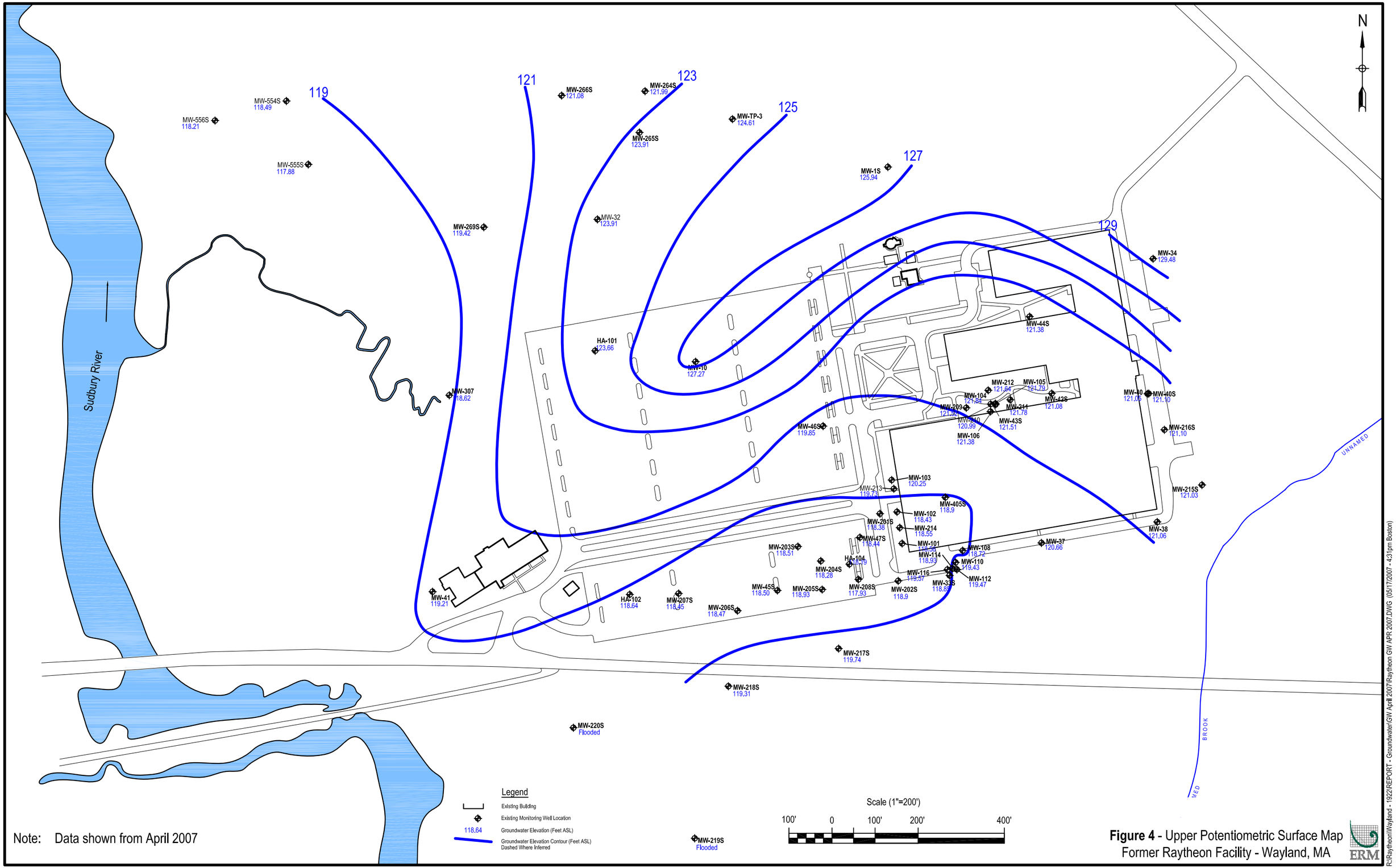


Figure 4 - Upper Potentiometric Surface Map
Former Raytheon Facility - Wayland, MA

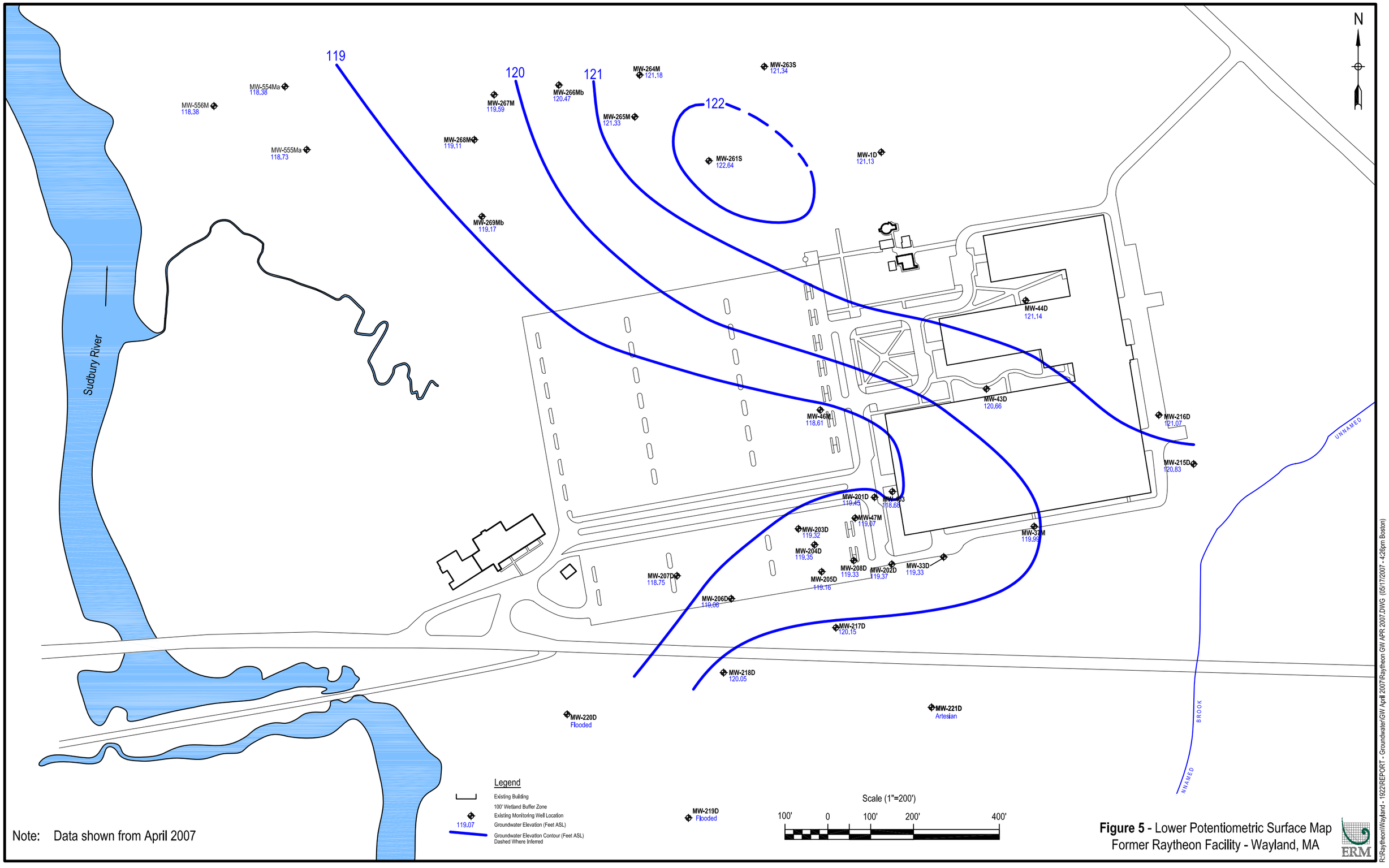


Figure 5 - Lower Potentiometric Surface Map
Former Raytheon Facility - Wayland, MA

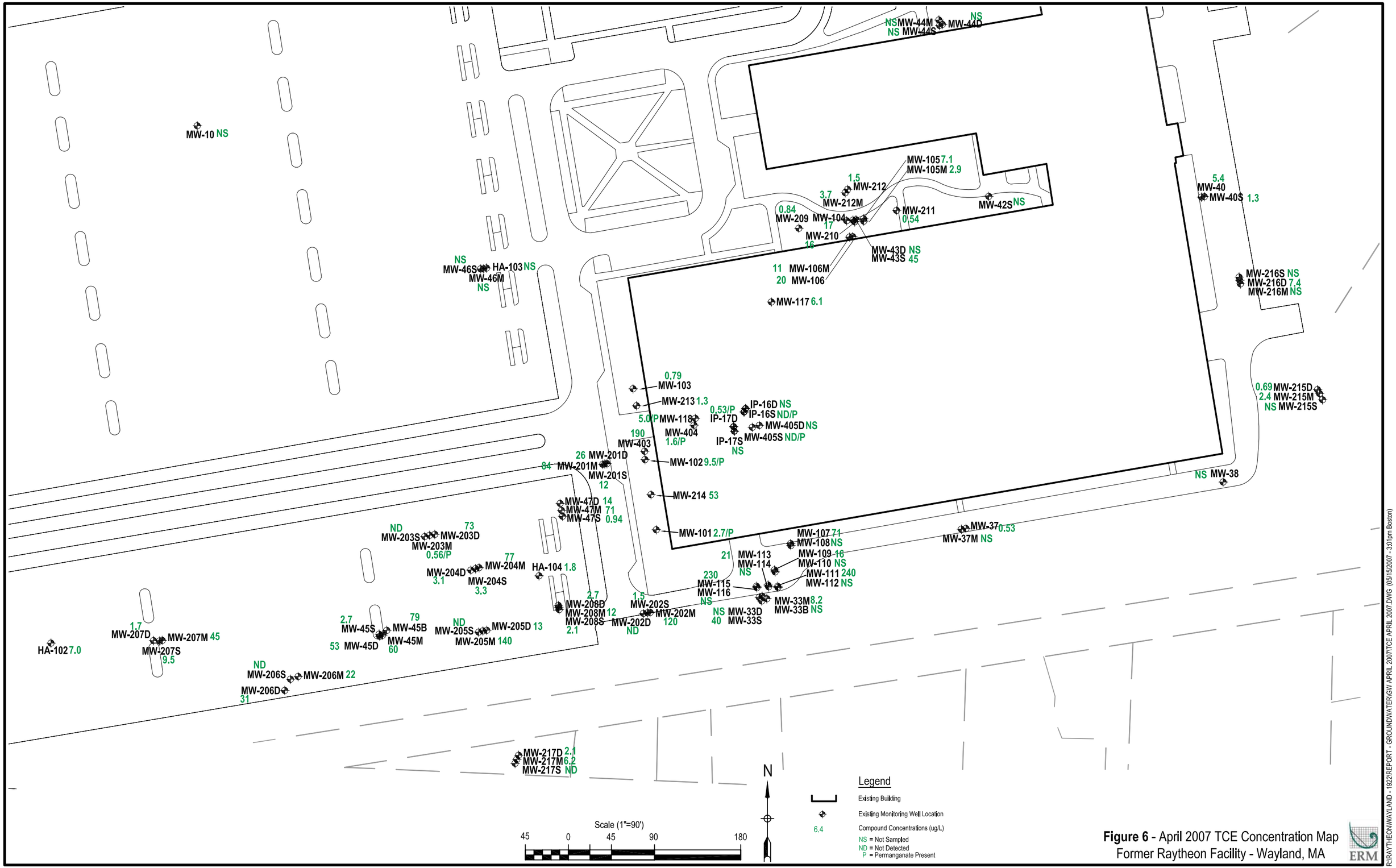


Figure 6 - April 2007 TCE Concentration Map
Former Raytheon Facility - Wayland, MA

Appendix A
BWSC Form

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC108

COMPREHENSIVE RESPONSE ACTION TRANSMITTAL FORM & PHASE I COMPLETION STATEMENT

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

Release Tracking Number
3 - 13302

A. SITE LOCATION:

1. Site Name: RAYTHEON COMPANY
2. Street Address: 430 BOSTON POST RD
3. City/Town: WAYLAND 4. ZIP Code: 01778-0000
5. UTM Coordinates: a. UTM N: 4692911 b. UTM E: 304923
6. ☑ Check here if a Tier Classification Submittal has been provided to DEP for this disposal site.
   ☐ a. Tier IA ☑ b. Tier IB ☐ c. Tier IC ☐ d. Tier II
7. If applicable, provide the Permit Number: 133939

B. THIS FORM IS BEING USED TO: (check all that apply)

☐ 1. Submit a **Phase I Completion Statement**, pursuant to 310 CMR 40.0484.

☐ 2. Submit a **Revised Phase I Completion Statement**, pursuant to 310 CMR 40.0484.

☐ 3. Submit a **Phase II Scope of Work**, pursuant to 310 CMR 40.0834.

☐ 4. Submit an **interim Phase II Report**. This report does not satisfy the response action deadline requirements in 310 CMR 40.0500.

☐ 5. Submit a **final Phase II Report and Completion Statement**, pursuant to 310 CMR 40.0836.

☐ 6. Submit a **Revised Phase II Report and Completion Statement**, pursuant to 310 CMR 40.0836.

☐ 7. Submit a **Phase III Remedial Action Plan and Completion Statement**, pursuant to 310 CMR 40.0862.

☐ 8. Submit a **Revised Phase III Remedial Action Plan and Completion Statement**, pursuant to 310 CMR 40.0862.

☐ 9. Submit a **Phase IV Remedy Implementation Plan**, pursuant to 310 CMR 40.0874.

☐ 10. Submit a **Modified Phase IV Remedy Implementation Plan**, pursuant to 310 CMR 40.0874.

☐ 11. Submit an **As-Built Construction Report**, pursuant to 310 CMR 40.0875.

☐ 12. Submit a **Phase IV Status Report**, pursuant to 310 CMR 40.0877.

☐ 13. Submit a **Phase IV Completion Statement**, pursuant to 310 CMR 40.0878 and 40.0879.

Specify the outcome of Phase IV activities: (check one)

☐ a. Phase V Operation, Maintenance or Monitoring of the Comprehensive Remedial Action is necessary to achieve a Response Action Outcome.

☐ b. The requirements of a Class A Response Action Outcome have been met. No additional Operation, Maintenance or Monitoring is necessary to ensure the integrity of the Response Action Outcome. A completed Response Action Outcome Statement and Report (BWSC104) will be submitted to DEP.

☐ c. The requirements of a Class C Response Action Outcome have been met. No additional Operation, Maintenance or Monitoring is necessary to ensure the integrity of the Response Action Outcome. A completed Response Action Outcome Statement and Report (BWSC104) will be submitted to DEP.

☐ d. The requirements of a Class C Response Action Outcome have been met. Further Operation, Maintenance or Monitoring of the remedial action is necessary to ensure that conditions are maintained and that further progress is made toward a Permanent Solution. A completed Response Action Outcome Statement and Report (BWSC104) will be submitted to DEP.

(All sections of this transmittal form must be filled out unless otherwise noted above)

B. THIS FORM IS BEING USED TO (cont.): (check all that apply)

☐ 14. Submit a **Revised Phase IV Completion Statement**, pursuant to 310 CMR 40.0878 and 40.0879.

☐ 15. Submit a **Phase V Status Report**, pursuant to 310 CMR 40.0892.

☑ 16. Submit a **Remedial Monitoring Report**. (This report can only be submitted through eDEP.)

a. Type of Report: (check one) ☐ i. Initial Report ☑ ii. Interim Report ☐ iii. Final Report

b. Frequency of Submittal: (check all that apply)

☐ i. A Remedial Monitoring Report(s) submitted monthly to address an Imminent Hazard.

☐ ii. A Remedial Monitoring Report(s) submitted monthly to address a Condition of Substantial Release Migration.

☑ iii. A Remedial Monitoring Report(s) submitted concurrent with a Status Report.

c. Status of Site: (check one) ☐ i. Phase V ☑ ii. Remedy Operation Status ☐ iii. Class C RAO

d. Number of Remedial Systems and/or Monitoring Programs: 1

A separate BWSC108A, CRA Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.

☑ 17. Submit a **Remedy Operation Status**, pursuant to 310 CMR 40.0893.

☐ 18. Submit a **Status Report to maintain a Remedy Operation Status**, pursuant to 310 CMR 40.0893(2).

☐ 19. Submit a **Modification of a Remedy Operation Status**, pursuant to 310 CMR 40.0893(5).

☐ 20. Submit a **Termination of a Remedy Operation Status**, pursuant to 310 CMR 40.0893(6).

☐ 21. Submit a **Phase V Completion Statement**, pursuant to 310 CMR 40.0894.

Specify the outcome of Phase V activities: (check one)

☐ a. The requirements of a Class A Response Action Outcome have been met. No additional Operation, Maintenance or Monitoring is necessary to ensure the integrity of the Response Action Outcome. A completed Response Action Outcome Statement (BWSC104) will be submitted to DEP.

☐ b. The requirements of a Class C Response Action Outcome have been met. No additional Operation, Maintenance or Monitoring is necessary to ensure the integrity of the Response Action Outcome. A completed Response Action Outcome Statement and Report (BWSC104) will be submitted to DEP.

☐ c. The requirements of a Class C Response Action Outcome have been met. Further Operation, Maintenance or Monitoring of the remedial action is necessary to ensure that conditions are maintained and/or that further progress is made toward a Permanent Solution. A completed Response Action Outcome Statement and Report (BWSC104) will be submitted to DEP.

☐ 22. Submit a **Revised Phase V Completion Statement**, pursuant to 310 CMR 40.0894.

☐ 23. Submit a **Post-Class C Response Action Outcome Status Report**, pursuant to 310 CMR 40.0898.

(All sections of this transmittal form must be filled out unless otherwise noted above)

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC108

COMPREHENSIVE RESPONSE ACTION TRANSMITTAL FORM & PHASE I COMPLETION STATEMENT

Release Tracking Number
3 - 13302

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

C. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> *if Section B indicates that a* ***Phase I, Phase II, Phase III, Phase IV or Phase V Completion Statement*** *is being submitted*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B indicates that a* ***Phase II Scope of Work*** *or a* ***Phase IV Remedy Implementation Plan*** *is being submitted*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B indicates that an* ***As-Built Construction Report****,* ***a Remedy Operation Status****,a* ***Phase IV, Phase V or Post-Class C RAO Status Report,*** *a* ***Status Report to Maintain a Remedy Operation Status*** *and/or a* ***Remedial Monitoring Report*** *is being submitted*, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 2196
2. First Name: JOHN C
3. Last Name: DROBINSKI
4. Telephone: (617) 267-8377
5. Ext.:
6. FAX:
7. Signature: JOHN C DROBINSKI
8. Date: 05/21/2007 (mm/dd/yyyy)
9. LSP Stamp:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC108

Release Tracking Number

3 - 13302

COMPREHENSIVE RESPONSE ACTION TRANSMITTAL FORM & PHASE I COMPLETION STATEMENT

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

D. PERSON UNDERTAKING RESPONSE ACTIONS:

1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions

2. Name of Organization: RAYTHEON COMPANY

3. Contact First Name: LOUIS 4. Last Name: BURKHARDT

5. Street: 880 TECHNOLOGY PARK DR MS 2-21 6. Title:

7. City/Town: BILLERICA 8. State: MA 9. ZIP Code: 01821-0000

10. Telephone: (978) 436-8238 11. Ext.: 12. FAX:

E. RELATIONSHIP TO SITE OF PERSON UNDERTAKING RESPONSE ACTIONS:

☑ 1. RP or PRP ☐ a. Owner ☑ b. Operator ☐ c. Generator ☐ d. Transporter

☐ e. Other RP or PRP Specify:

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ 4. Any Other Person Undertaking Response Actions Specify Relationship:

F. REQUIRED ATTACHMENT AND SUBMITTALS:

☐ 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

☐ 2. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the submittal of any Phase Reports to DEP.

☐ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the availability of a Phase III Remedial Action Plan.

☐ 4. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the availability of a Phase IV Remedy Implementation Plan.

☐ 5. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of any field work involving the implementation of a Phase IV Remedial Action.

☐ 6. If submitting a Modification of a Remedy Operation Status, check here to certify that a statement detailing the compliance history, as per 310 CMR 40.0893(5), for the person making this submittal is attached.

☐ 7. If submitting a Modification of a Remedy Operation Status, check here to certify that written consent of the person who submitted the Remedy Operation Status submittal, as per 310 CMR 40.0893(5), is attached.

☑ 8. Check here if any non-updatable information provided on this form is incorrect, e.g. Site Name. Send corrections to the DEP Regional Office.

☑ 9. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC108

COMPREHENSIVE RESPONSE ACTION TRANSMITTAL FORM & PHASE I COMPLETION STATEMENT

Release Tracking Number
3 - 13302

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

G. CERTIFICATION OF PERSON UNDERTAKING RESPONSE ACTIONS:

1. I, **LOUIS BURKHARDT**, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: **LOUIS BURKHARDT** (Signature) 3. Title:

4. For: **RAYTHEON COMPANY** (Name of person or entity recorded in Section D) 5. Date: **05/18/2007** (mm/dd/yyyy)

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section D.

7. Street:

8. City/Town: 9. State: 10. ZIP Code:

11. Telephone: 12. Ext.: 13. FAX:

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)

Received by DEP on

5/21/2007 4:12:36 PM

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC108A

CRA REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program: 1 of: 1

Release Tracking Number 3 - 13302

A. DESCRIPTION OF ACTIVE REMEDIAL SYSTEM OR ACTIVE REMEDIAL MONITORING PROGRAM:

1. Type of Active Remedial System or Active Remedial Monitoring Program: (check all that apply)

☐ a. Active Remedial System: (check all that apply)

☐ i. NAPL Recovery ☐ ii. Soil Vapor Extraction/Bioventing ☐ iii. Vapor-phase Carbon Adsorption
☐ iv. Groundwater Recovery ☐ v. Dual/Multi-phase Extraction ☐ vi. Aqueous-phase Carbon Adsorption
☐ vii. Air Stripping ☐ viii. Sparging/Biosparging ☐ ix. Cat/Thermal Oxidation
☐ x. Other Describe:

☑ b. Application of Remedial Additives: (check all that apply)

☐ i. To the Subsurface ☑ ii. To Groundwater (Injection) ☐ iii. To the Surface

☐ c. Active Remedial Monitoring Program Without the Application of Remedial Additives: (check all that apply; Sections C, D and E are not required; attach supporting information, data, maps and/or sketches needed by checking Section E5)

☐ i. Reactive Wall ☐ ii. Natural Attenuation ☐ iii. Other Describe:

2. Mode of Operation: (check one)

☐ a. Continuous ☐ b. Intermittent ☐ c. Pulsed ☑ d. One-time Event Only ☐ e. Other:

3. System Effluent/Discharge: (check all that apply)

☐ a. Sanitary Sewer/POTW
☐ b. Groundwater Re-infiltration/Re-injection: (check one) ☐ i. Downgradient ☐ ii. Upgradient
☐ c. Vapor-phase Discharge to Ambient Air: (check one) ☐ i. Off-gas Controls ☐ ii. No Off-gas Controls
☐ d. Drinking Water Supply
☐ e. Surface Water (including Storm Drains)
☑ f. Other Describe: NO DISCHARGE

B. MONITORING FREQUENCY:

1. Reporting period that is the subject of this submittal: From: 11/01/2006 (mm/dd/yyyy) To: 05/01/2007 (mm/dd/yyyy)

2. Number of monitoring events during the reporting period: (check one)

☐ a. System Startup: (if applicable)

☐ i. Days 1, 3, 6, and then weekly thereafter, for the first month.
☐ ii. Other Describe:

☑ b. Post-system Startup (after first month) or Monitoring Program:

☐ i. Monthly
☑ ii. Quarterly
☐ iii. Other Describe:

☑ 3. Check here to certify that the number of required monitoring events were conducted during the reporting period.

C. EFFLUENT/DISCHARGE REGULATION: (check one to indicate how the effluent/discharge limits were established)

☐ 1. NPDES: (check one) ☐ a. Remediation General Permit ☐ b. Individual Permit
☐ c. Emergency Exclusion Effective Date of Permit: (mm/dd/yyyy)

☐ 2. MCP Performance Standard MCP Citations(s):

☐ 3. DEP Approval Letter Date of Letter: (mm/dd/yyyy)

☑ 4. Other Describe: NO DISCHARGE

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC108A

CRA REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program: 1 of: 1

Release Tracking Number

3 - 13302

D. WASTEWATER TREATMENT PLANT OPERATOR: (check one)

☐ 1. Required due to Remedial Wastewater Treatment Plant in place for more than 30 days.

a. Name: _____ b. Grade: _____

c. License No.: _____ d. License Exp. Date: _____ (mm/dd/yyyy)

☐ 2. Not Required

☑ 3. Not Applicable

E. STATUS OF ACTIVE REMEDIAL SYSTEM OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD: (check all that apply)

☐ 1. The Active Remedial System was functional one or more days during the Reporting Period.

a. Days System was Fully Functional: _____ b. GW Recovered (gals): _____

c. NAPL Recovered (gals): _____ d. GW Discharged (gals): _____

e. Avg. Soil Gas Recovery Rate (scfm): _____ f. Avg. Sparging Rate (scfm) : _____

☑ 2. Remedial Additives: (check all that apply)

☑ a. No Remedial Additives applied during the Reporting Period.

☐ b. Enhanced Bioremediation Additives applied: (total quantity applied at the site for the current reporting period)

☐ i. Nitrogen/Phosphorus:

Name of Additive	Date	Quantity	Units

☐ ii. Peroxides:

Name of Additive	Date	Quantity	Units

☐ iii. Microorganisms:

Name of Additive	Date	Quantity	Units

☐ iv. Other:

Name of Additive	Date	Quantity	Units

☐ c. Chemical oxidation/reduction additives applied: (total quantity applied at the site for the current reporting period)

☐ i. Permanganates:

Name of Additive	Date	Quantity	Units

☐ ii. Peroxides:

Name of Additive	Date	Quantity	Units

☐ iii. Persulfates:

Name of Additive	Date	Quantity	Units

☐ iv. Other:

Name of Additive	Date	Quantity	Units

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC108A

CRA REMEDIAL MONITORING REPORT

Pursuant to 310 CMR 40.0800 (SUBPART H)

Remedial System or Monitoring Program: 1 of: 1

Release Tracking Number

3 - 13302

E. STATUS OF ACTIVE REMEDIAL SYSTEM OR ACTIVE REMEDIAL MONITORING PROGRAM DURING REPORTING PERIOD: (cont.) (check all that apply)

☐ d. Other additives applied: (total quantity applied at the site for the current reporting period)

Name of Additive	Date	Quantity	Units

Name of Additive	Date	Quantity	Units

☐ e. Check here if any additional Remedial Additives were applied. Attach list of additional additives and include Name of Additive, Date Applied, Quantity Applied and Units (in gals. or lbs.)

F. SHUTDOWNS OF ACTIVE REMEDIAL SYSTEM OR ACTIVE REMEDIAL MONITORING PROGRAM: (check all that apply)

☐ 1. The Active Remedial System had unscheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Unscheduled Shutdowns: b. Total Number of Days of Unscheduled Shutdowns:

c. Reason(s) for Unscheduled Shutdowns:

☐ 2. The Active Remedial System had scheduled shutdowns on one or more occasions during the Reporting Period.

a. Number of Scheduled Shutdowns: b. Total Number of Days of Scheduled Shutdowns:

c. Reason(s) for Scheduled Shutdowns:

☐ 3. The Active Remedial System or Active Remedial Monitoring Program was permanently shutdown/discontinued during the Reporting Period.

a. Date of Final System or Monitoring Program Shutdown: (mm/dd/yyyy)

☐ b. No Further Effluent Discharges.

☐ c. No Further Application of Remedial Additives planned; sufficient monitoring completed to demonstrate compliance with 310 CMR 40.0046.

☐ d. No Further Submittals Planned.

☐ e. Other: Describe:

G. SUMMARY STATEMENTS: (check all that apply for the current reporting period)

☐ 1. All Active Remedial System checks and effluent analyses required by the approved plan and/or permit were performed when applicable.

☐ 2. There were no significant problems or prolonged (>25% of reporting period) unscheduled shutdowns of the Active Remedial System.

☑ 3. The Active Remedial System or Active Remedial Monitoring Program operated in conformance with the MCP, and all applicable approval conditions and/or permits.

4. Indicate any Operational Problems or Notes:

☑ 5. Check here if additional/supporting Information, data, maps, and/or sketches are attached to the form.

Submittal Summary & Receipt

Your submission is complete. Thank you for using DEP's online reporting system. You can select "My Homepage" to review your status.

DEP Transaction ID: 128283
Date and Time Submitted: 5/21/2007 4:12:36 PM
User Email : John.drobinski@erm.com

BWSC Remedial Monitoring Report A( )
Form Name: BWSC 108 CRA Transmittal Form & Phase I CS

RTN: 3-13302
Location: RAYTHEON COMPANY
Address: 430 BOSTON POST RD, WAYLAND, 017780000

Person Making Submittal
RAYTHEON COMPANY
LOUIS BURKHARDT
880 TECHNOLOGY PARK DR MS 2-21
BILLERICA, MA 018210000

LSP
LSP #: 2196
LSP Name: JOHN C DROBINSKI

Person Making Certification
RAYTHEON COMPANY
LOUIS BURKHARDT
RAYTHEON COMPANY
LOUIS BURKHARDT

,

Ancillary Document Uploaded/Mailed
BWSC-108 Ques.B17 - Remedy Operation Status - Uploaded (BWSC-108 Ques.B17 - Remedy Operation Status.pdf)
Supporting Documents - Uploaded (Supporting Documents.pdf)

print receipt cancel

Appendix B
Laboratory Analytical Reports

ALPHA WOODS HOLE LABS

ANALYTICAL REPORT

Lab Number:	L0705740
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jeremy Picard
Project Name:	RAYTHEON WAYLAND
Project Number:	0061882
Report Date:	05/02/07

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (200305), NJ (MA935), RI (LAO00065), ME (2006012), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705740
Report Date: 05/02/07

Alpha Sample ID	Client ID	Sample Location
L0705740-01	MW-201S-20070423-01	WAYLAND, MA
L0705740-02	MW-201M-20070423-01	WAYLAND, MA
L0705740-03	MW-201D-20070423-01	WAYLAND, MA
L0705740-04	TB-001-20070423-01	WAYLAND, MA

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705740
Project Number:	0061882	**Report Date:**	05/02/07

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, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	YES
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

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:** L0705740
Project Number: 0061882 **Report Date:** 05/02/07

Case Narrative

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

MCP Related Narratives:

Volatile Organics

It should be noted that sample L0705740-01 through -03 were received in the Laboratory at a pH of greater than two.

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

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:

Title: Technical Director Date: 05/02/07

ORGANICS

VOLATILES

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705740

Project Number: 0061882 **Report Date:** 05/02/07

SAMPLE RESULTS

Lab ID:	L0705740-01	Date Collected:	04/23/07 14:55
Client ID:	MW-201S-20070423-01	Date Received:	04/24/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/01/07 18:43		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.5		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	12		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	0.85		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705740

Project Number: 0061882 **Report Date:** 05/02/07

SAMPLE RESULTS

Lab ID:	L0705740-01	Date Collected:	04/23/07 14:55
Client ID:	MW-201S-20070423-01	Date Received:	04/24/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705740

Project Number: 0061882 **Report Date:** 05/02/07

SAMPLE RESULTS

Lab ID:	L0705740-02	Date Collected:	04/23/07 16:10
Client ID:	MW-201M-20070423-01	Date Received:	04/24/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/01/07 19:14		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	1.4		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	2.6		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	84		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	17		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705740

Project Number: 0061882 **Report Date:** 05/02/07

SAMPLE RESULTS

Lab ID:	L0705740-02	Date Collected:	04/23/07 16:10
Client ID:	MW-201M-20070423-01	Date Received:	04/24/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	105		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705740

Project Number: 0061882 **Report Date:** 05/02/07

SAMPLE RESULTS

Lab ID:	L0705740-03	Date Collected:	04/23/07 16:00
Client ID:	MW-201D-20070423-01	Date Received:	04/24/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/01/07 19:45		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.3		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	26		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	2.0		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705740

Project Number: 0061882 **Report Date:** 05/02/07

SAMPLE RESULTS

Lab ID:	L0705740-03	Date Collected:	04/23/07 16:00
Client ID:	MW-201D-20070423-01	Date Received:	04/24/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	105		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705740

Project Number: 0061882 **Report Date:** 05/02/07

SAMPLE RESULTS

Lab ID:	L0705740-04	Date Collected:	04/18/07 21:21
Client ID:	TB-001-20070423-01	Date Received:	04/24/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/01/07 20:16		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705740

Project Number: 0061882 **Report Date:** 05/02/07

SAMPLE RESULTS

Lab ID:	L0705740-04	Date Collected:	04/18/07 21:21
Client ID:	TB-001-20070423-01	Date Received:	04/24/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	105		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705740

Project Number: 0061882 **Report Date:** 05/02/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/01/07 17:42
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG278721-6				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705740

Project Number: 0061882 **Report Date:** 05/02/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/01/07 17:42
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG278721-6				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705740

Project Number: 0061882 **Report Date:** 05/02/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/01/07 17:42
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG278721-6				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	98		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705740
Report Date: 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG278721-4 WG278721-5					
Methylene chloride	104	107	70-130	3	25
1,1-Dichloroethane	100	108	70-130	8	25
Chloroform	101	105	70-130	4	25
Carbon tetrachloride	106	108	70-130	2	25
1,2-Dichloropropane	93	92	70-130	1	25
Dibromochloromethane	98	102	70-130	4	25
1,1,2-Trichloroethane	97	95	70-130	2	25
Tetrachloroethene	104	109	70-130	5	25
Chlorobenzene	101	104	70-130	3	25
Trichlorofluoromethane	129	129	70-130	0	25
1,2-Dichloroethane	109	108	70-130	1	25
1,1,1-Trichloroethane	104	109	70-130	5	25
Bromodichloromethane	102	101	70-130	1	25
trans-1,3-Dichloropropene	91	92	70-130	1	25
cis-1,3-Dichloropropene	88	94	70-130	7	25
1,1-Dichloropropene	97	100	70-130	3	25
Bromoform	104	102	70-130	2	50
1,1,2,2-Tetrachloroethane	117	116	70-130	1	25
Benzene	90	94	70-130	4	25
Toluene	97	102	70-130	5	25
Ethylbenzene	102	104	70-130	2	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705740
Report Date: 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG278721-4 WG278721-5					
Chloromethane	92	101	70-130	9	50
Bromomethane	74	90	70-130	20	50
Vinyl chloride	86	100	70-130	15	25
Chloroethane	89	100	70-130	12	25
1,1-Dichloroethene	105	110	70-130	5	25
trans-1,2-Dichloroethene	95	102	70-130	7	25
Trichloroethene	102	99	70-130	3	25
1,2-Dichlorobenzene	106	108	70-130	2	25
1,3-Dichlorobenzene	105	108	70-130	3	25
1,4-Dichlorobenzene	106	107	70-130	1	25
Methyl tert butyl ether	92	93	70-130	1	25
p/m-Xylene	102	104	70-130	2	25
o-Xylene	101	100	70-130	1	25
cis-1,2-Dichloroethene	98	103	70-130	5	25
Dibromomethane	97	97	70-130	0	25
1,2,3-Trichloropropane	123	120	70-130	2	25
Styrene	101	101	70-130	0	25
Dichlorodifluoromethane	99	107	70-130	8	50
Acetone	114	116	70-130	2	50
Carbon disulfide	70	77	70-130	10	25
2-Butanone	119	122	70-130	2	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705740
Report Date: 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG278721-4 WG278721-5					
4-Methyl-2-pentanone	85	86	70-130	1	50
2-Hexanone	95	91	70-130	4	50
Bromochloromethane	96	100	70-130	4	25
Tetrahydrofuran	93	95	70-130	2	25
2,2-Dichloropropane	96	97	70-130	1	50
1,2-Dibromoethane	98	96	70-130	2	25
1,3-Dichloropropane	100	98	70-130	2	25
1,1,1,2-Tetrachloroethane	107	106	70-130	1	25
Bromobenzene	105	110	70-130	5	25
n-Butylbenzene	106	110	70-130	4	25
sec-Butylbenzene	103	110	70-130	7	25
tert-Butylbenzene	107	112	70-130	5	25
o-Chlorotoluene	103	109	70-130	6	25
p-Chlorotoluene	109	113	70-130	4	25
1,2-Dibromo-3-chloropropane	109	106	70-130	3	50
Hexachlorobutadiene	96	99	70-130	3	25
Isopropylbenzene	112	113	70-130	1	25
p-Isopropyltoluene	111	118	70-130	6	25
Naphthalene	95	95	70-130	0	25
n-Propylbenzene	105	110	70-130	5	25
1,2,3-Trichlorobenzene	99	100	70-130	1	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0705740
Report Date: 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG278721-4 WG278721-5					
1,2,4-Trichlorobenzene	95	99	70-130	4	25
1,3,5-Trimethylbenzene	109	113	70-130	4	25
1,2,4-Trimethylbenzene	108	115	70-130	6	25
Ethyl ether	95	94	70-130	1	25
Isopropyl Ether	95	95	70-130	0	25
Ethyl-Tert-Butyl-Ether	100	98	70-130	2	25
Tertiary-Amyl Methyl Ether	102	103	70-130	1	25
1,4-Dioxane	97	93	70-130	4	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		110		70-130
Toluene-d8	105		103		70-130
4-Bromofluorobenzene	101		97		70-130
Dibromofluoromethane	104		101		70-130

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705740
Report Date: 05/02/07

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0705740-01A	Vial HCl preserved	A	N/A	6.0C	Y	Absent	MCP-8260-04
L0705740-01B	Vial HCl preserved	A	N/A	6.0C	Y	Absent	MCP-8260-04
L0705740-02A	Vial HCl preserved	A	N/A	6.0C	Y	Absent	MCP-8260-04
L0705740-02B	Vial HCl preserved	A	N/A	6.0C	Y	Absent	MCP-8260-04
L0705740-03A	Vial HCl preserved	A	N/A	6.0C	Y	Absent	MCP-8260-04
L0705740-03B	Vial HCl preserved	A	N/A	6.0C	Y	Absent	MCP-8260-04
L0705740-04A	Vial HCl preserved	A	N/A	6.0C	Y	Absent	MCP-8260-04

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705740
Project Number:	0061882	**Report Date:**	05/02/07

GLOSSARY

Acronyms

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.

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.

ND - Not detected at the reported detection limit for the sample.

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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.

Terms

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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Report Format: Not Specified

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705740
Project Number:	0061882	**Report Date:**	05/02/07

REFERENCES

60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

LIMITATION OF LIABILITIES

Alpha Woods Hole Labs 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 Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods Hole Labs 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 Woods Hole Labs.

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.

05020713:32

CHAIN OF CUSTODY

PAGE ____ OF ____

ALPHA WOODS HOLE LABS

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

RAYNHAM, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 4/24

ALPHA Job #: L0705740

Client Information

Client: ERM

Address: 344 Boylston St. 4th Floor Boston MA 02116

Phone: 617-646-7800

Fax: 617-267-6447

Email:

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon Wayland

Project Location: Wayland MA

Project #: 0061882

Project Manager: V. Picard

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 5/01 Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☒ ADEx ☒ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits

ANALYSIS 8021C + 8260B

SAMPLE HANDLING

Filtration
☐ Done
☒ Not needed
☐ Lab to do

Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	8021C + 8260B	Sample Specific Comments	TOTAL # BOTTLES
05740-01	MW-201S-20070423-01	4/23/07	14:55	GW	BH	X		2
-02	MW-201M-20070423-01	4/23/07	16:10	GW	FP	X		2
-03	MW-201D-20070423-01	4/23/07	16:00	GW	TD	X		2
-04	TB-001-20070423-01	4/18/07	21:21	GW	ZP	X		2

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Container Type: V

Preservative: H

Relinquished By:	Date/Time	Received By	Date/Time
Emy	4/24/07 16:45	[illegible]	4/24/07 16:45
MAM 12	4/24/07 18:30	John DeCollis	4/24/07 18:30

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01 (rev. 10-OCT-05)

ANALYTICAL REPORT

Lab Number:	L0705864
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jeremy Picard
Project Name:	RAYTHEON WAYLAND
Project Number:	0061882
Report Date:	05/04/07

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (200305), NJ (MA935), RI (LAO00065), ME (2006012), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705864
Report Date: 05/04/07

Alpha Sample ID	Client ID	Sample Location
L0705864-01	MW204M-20070424	WAYLAND, MA

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705864
Project Number:	0061882	**Report Date:**	05/04/07

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, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	YES
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

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:** L0705864
Project Number: 0061882 **Report Date:** 05/04/07

Case Narrative

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

MCP Related Narratives:

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Volatile Organics

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

Metals

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

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:

Title: Technical Director Date: 05/04/07

ORGANICS

VOLATILES

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705864

Project Number: 0061882 **Report Date:** 05/04/07

SAMPLE RESULTS

Lab ID:	L0705864-01	Date Collected:	04/24/07 12:55
Client ID:	MW204M-20070424	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/02/07 01:25		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	0.96		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	22		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	4.0		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	77		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	56		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705864

Project Number: 0061882 **Report Date:** 05/04/07

SAMPLE RESULTS

Lab ID:	L0705864-01	Date Collected:	04/24/07 12:55
Client ID:	MW204M-20070424	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	109		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705864

Project Number: 0061882 **Report Date:** 05/04/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/01/07 17:42
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG278841-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705864

Project Number: 0061882 **Report Date:** 05/04/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/01/07 17:42
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG278841-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705864

Project Number: 0061882 **Report Date:** 05/04/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/01/07 17:42
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG278841-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	98		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705864
Report Date: 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-1 WG278841-2					
Methylene chloride	104	107	70-130	3	25
1,1-Dichloroethane	100	108	70-130	8	25
Chloroform	101	105	70-130	4	25
Carbon tetrachloride	106	108	70-130	2	25
1,2-Dichloropropane	93	92	70-130	1	25
Dibromochloromethane	98	102	70-130	4	25
1,1,2-Trichloroethane	97	95	70-130	2	25
Tetrachloroethene	104	109	70-130	5	25
Chlorobenzene	101	104	70-130	3	25
Trichlorofluoromethane	129	129	70-130	0	25
1,2-Dichloroethane	109	108	70-130	1	25
1,1,1-Trichloroethane	104	109	70-130	5	25
Bromodichloromethane	102	101	70-130	1	25
trans-1,3-Dichloropropene	91	92	70-130	1	25
cis-1,3-Dichloropropene	88	94	70-130	7	25
1,1-Dichloropropene	97	100	70-130	3	25
Bromoform	104	102	70-130	2	50
1,1,2,2-Tetrachloroethane	117	116	70-130	1	25
Benzene	90	94	70-130	4	25
Toluene	97	102	70-130	5	25
Ethylbenzene	102	104	70-130	2	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705864
Report Date: 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-1 WG278841-2					
Chloromethane	92	101	70-130	9	50
Bromomethane	74	90	70-130	20	50
Vinyl chloride	86	100	70-130	15	25
Chloroethane	89	100	70-130	12	25
1,1-Dichloroethene	105	110	70-130	5	25
trans-1,2-Dichloroethene	95	102	70-130	7	25
Trichloroethene	102	99	70-130	3	25
1,2-Dichlorobenzene	106	108	70-130	2	25
1,3-Dichlorobenzene	105	108	70-130	3	25
1,4-Dichlorobenzene	106	107	70-130	1	25
Methyl tert butyl ether	92	93	70-130	1	25
p/m-Xylene	102	104	70-130	2	25
o-Xylene	101	100	70-130	1	25
cis-1,2-Dichloroethene	98	103	70-130	5	25
Dibromomethane	97	97	70-130	0	25
1,2,3-Trichloropropane	123	120	70-130	2	25
Styrene	101	101	70-130	0	25
Dichlorodifluoromethane	99	107	70-130	8	50
Acetone	114	116	70-130	2	50
Carbon disulfide	70	77	70-130	10	25
2-Butanone	119	122	70-130	2	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705864
Report Date: 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-1 WG278841-2					
4-Methyl-2-pentanone	85	86	70-130	1	50
2-Hexanone	95	91	70-130	4	50
Bromochloromethane	96	100	70-130	4	25
Tetrahydrofuran	93	95	70-130	2	25
2,2-Dichloropropane	96	97	70-130	1	50
1,2-Dibromoethane	98	96	70-130	2	25
1,3-Dichloropropane	100	98	70-130	2	25
1,1,1,2-Tetrachloroethane	107	106	70-130	1	25
Bromobenzene	105	110	70-130	5	25
n-Butylbenzene	106	110	70-130	4	25
sec-Butylbenzene	103	110	70-130	7	25
tert-Butylbenzene	107	112	70-130	5	25
o-Chlorotoluene	103	109	70-130	6	25
p-Chlorotoluene	109	113	70-130	4	25
1,2-Dibromo-3-chloropropane	109	106	70-130	3	50
Hexachlorobutadiene	96	99	70-130	3	25
Isopropylbenzene	112	113	70-130	1	25
p-Isopropyltoluene	111	118	70-130	6	25
Naphthalene	95	95	70-130	0	25
n-Propylbenzene	105	110	70-130	5	25
1,2,3-Trichlorobenzene	99	100	70-130	1	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0705864
Report Date: 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-1 WG278841-2					
1,2,4-Trichlorobenzene	95	99	70-130	4	25
1,3,5-Trimethylbenzene	109	113	70-130	4	25
1,2,4-Trimethylbenzene	108	115	70-130	6	25
Ethyl ether	95	94	70-130	1	25
Isopropyl Ether	95	95	70-130	0	25
Ethyl-Tert-Butyl-Ether	100	98	70-130	2	25
Tertiary-Amyl Methyl Ether	102	103	70-130	1	25
1,4-Dioxane	97	93	70-130	4	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		110		70-130
Toluene-d8	105		103		70-130
4-Bromofluorobenzene	101		97		70-130
Dibromofluoromethane	104		101		70-130

METALS

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705864
Project Number:	0061882	**Report Date:**	05/04/07

SAMPLE RESULTS

Lab ID:	L0705864-01	Date Collected:	04/24/07 12:55
Client ID:	MW204M-20070424	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	40		mg/l	2.0	1	04/26/07 16:40	05/03/07 16:17	EPA 3005A	60,6010B	AI

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705864

Project Number: 0061882 **Report Date:** 05/04/07

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series for sample(s): 01 Batch: WG278269-1									
Sodium, Dissolved	ND		mg/l	2.0	1	04/26/07 16:40	05/01/07 11:26	60,6010B	AI

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0705864

Report Date: 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01 Batch: WG278269-2 WG278269-3					
Sodium, Dissolved	93	93	80-120	0	20

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705864
Report Date: 05/04/07

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0705864-01A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705864-01B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705864-01C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705864
Project Number:	0061882	**Report Date:**	05/04/07

GLOSSARY

Acronyms

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.

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.

ND - Not detected at the reported detection limit for the sample.

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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.

Terms

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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705864
Project Number: 0061882 **Report Date:** 05/04/07

REFERENCES

60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

LIMITATION OF LIABILITIES

Alpha Woods Hole Labs 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 Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods Hole Labs 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 Woods Hole Labs.

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.

05040712:17

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA WOODS HOLE LABS

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

RAYNHAM, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 4/25

ALPHA Job #: L0705864

Client Information

Client: ERM

Address: 399 Boylston St. 6th Fl., Boston MA 02116

Phone: 617-646-7800

Fax: 617-267-6447

Email: jeremy.picard@erm.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon, Wayland

Project Location: Wayland, MA

Project #: 0061882

Project Manager: J. Picard

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 05/02 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL

☒ ADEx ☒ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
MA / MCP	GW-1

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: VOC 8021 + MTBE + Benzene Solvent Dissolved (FP & Cl)	SAMPLE HANDLING: Filtration ☒ Done ☐ Not needed ☐ Lab to do; Preservation ☐ Lab to do (Please specify below)	Sample Specific Comments	TOTAL # BOTTLES
05864-01	MW204M-20070424-01	4/24/07	1255	GW	FP	X	X		3

Container Type: AP

Preservative: BC

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
Paul Gillhut	4/25/07 1225	Paul Gillhut	4/25/07 12:25
	4/25/07 1525		4/25 13:27

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01 (rev. 10-OCT-05)

ANALYTICAL REPORT

Lab Number:	L0705906
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jeremy Picard
Project Name:	RAYTHEON WAYLAND
Project Number:	0061882
Report Date:	05/02/07

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (200305), NJ (MA935), RI (LAO00065), ME (2006012), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705906
Report Date: 05/02/07

Alpha Sample ID	Client ID	Sample Location
L0705906-01	MW-203M-20070424-01	WAYLAND, MA

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705906
Project Number:	0061882	**Report Date:**	05/02/07

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, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	YES
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

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:** L0705906
Project Number: 0061882 **Report Date:** 05/02/07

Case Narrative

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

MCP Related Narratives:

Volatile Organics

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

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:

Title: Technical Director Date: 05/02/07

ORGANICS

VOLATILES

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705906

Project Number: 0061882 **Report Date:** 05/02/07

SAMPLE RESULTS

Lab ID:	L0705906-01	Date Collected:	04/24/07 13:50
Client ID:	MW-203M-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/02/07 15:13		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	25		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.56		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	1.8		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705906

Project Number: 0061882 **Report Date:** 05/02/07

SAMPLE RESULTS

Lab ID:	L0705906-01	Date Collected:	04/24/07 13:50
Client ID:	MW-203M-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	114		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705906

Project Number: 0061882 **Report Date:** 05/02/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/02/07 10:34
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG278841-6				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705906

Project Number: 0061882 **Report Date:** 05/02/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/02/07 10:34
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG278841-6				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705906

Project Number: 0061882 **Report Date:** 05/02/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/02/07 10:34
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG278841-6				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	105		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705906
Report Date: 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-4 WG278841-5					
Methylene chloride	102	104	70-130	2	25
1,1-Dichloroethane	101	108	70-130	7	25
Chloroform	98	108	70-130	10	25
Carbon tetrachloride	97	107	70-130	10	25
1,2-Dichloropropane	89	94	70-130	5	25
Dibromochloromethane	97	104	70-130	7	25
1,1,2-Trichloroethane	96	100	70-130	4	25
Tetrachloroethene	100	108	70-130	8	25
Chlorobenzene	96	104	70-130	8	25
Trichlorofluoromethane	119	130	70-130	9	25
1,2-Dichloroethane	104	113	70-130	8	25
1,1,1-Trichloroethane	105	116	70-130	10	25
Bromodichloromethane	99	105	70-130	6	25
trans-1,3-Dichloropropene	87	94	70-130	8	25
cis-1,3-Dichloropropene	86	94	70-130	9	25
1,1-Dichloropropene	92	104	70-130	12	25
Bromoform	91	101	70-130	10	50
1,1,2,2-Tetrachloroethane	108	111	70-130	3	25
Benzene	91	89	70-130	2	25
Toluene	96	103	70-130	7	25
Ethylbenzene	100	107	70-130	7	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705906
Report Date: 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-4 WG278841-5					
Chloromethane	94	104	70-130	10	50
Bromomethane	75	89	70-130	17	50
Vinyl chloride	86	101	70-130	16	25
Chloroethane	86	99	70-130	14	25
1,1-Dichloroethene	105	110	70-130	5	25
trans-1,2-Dichloroethene	92	106	70-130	14	25
Trichloroethene	98	99	70-130	1	25
1,2-Dichlorobenzene	98	105	70-130	7	25
1,3-Dichlorobenzene	99	102	70-130	3	25
1,4-Dichlorobenzene	97	103	70-130	6	25
Methyl tert butyl ether	92	103	70-130	11	25
p/m-Xylene	99	106	70-130	7	25
o-Xylene	96	104	70-130	8	25
cis-1,2-Dichloroethene	97	109	70-130	12	25
Dibromomethane	98	102	70-130	4	25
1,2,3-Trichloropropane	116	116	70-130	0	25
Styrene	98	102	70-130	4	25
Dichlorodifluoromethane	91	102	70-130	11	50
Acetone	101	124	70-130	20	50
Carbon disulfide	82	95	70-130	15	25
2-Butanone	123	123	70-130	0	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705906
Report Date: 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-4 WG278841-5					
4-Methyl-2-pentanone	79	**60**	70-130	27	50
2-Hexanone	100	110	70-130	10	50
Bromochloromethane	99	106	70-130	7	25
Tetrahydrofuran	92	95	70-130	3	25
2,2-Dichloropropane	89	106	70-130	17	50
1,2-Dibromoethane	97	102	70-130	5	25
1,3-Dichloropropane	95	104	70-130	9	25
1,1,1,2-Tetrachloroethane	98	105	70-130	7	25
Bromobenzene	99	101	70-130	2	25
n-Butylbenzene	98	104	70-130	6	25
sec-Butylbenzene	98	105	70-130	7	25
tert-Butylbenzene	100	105	70-130	5	25
o-Chlorotoluene	99	102	70-130	3	25
p-Chlorotoluene	103	106	70-130	3	25
1,2-Dibromo-3-chloropropane	106	113	70-130	6	50
Hexachlorobutadiene	88	97	70-130	10	25
Isopropylbenzene	108	116	70-130	7	25
p-Isopropyltoluene	106	110	70-130	4	25
Naphthalene	97	99	70-130	2	25
n-Propylbenzene	100	103	70-130	3	25
1,2,3-Trichlorobenzene	98	100	70-130	2	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705906
Report Date: 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-4 WG278841-5					
1,2,4-Trichlorobenzene	94	96	70-130	2	25
1,3,5-Trimethylbenzene	102	105	70-130	3	25
1,2,4-Trimethylbenzene	102	108	70-130	6	25
Ethyl ether	103	105	70-130	2	25
Isopropyl Ether	96	105	70-130	9	25
Ethyl-Tert-Butyl-Ether	96	100	70-130	4	25
Tertiary-Amyl Methyl Ether	104	103	70-130	1	25
1,4-Dioxane	87	92	70-130	6	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		117		70-130
Toluene-d8	106		106		70-130
4-Bromofluorobenzene	95		95		70-130
Dibromofluoromethane	100		113		70-130

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705906
Report Date: 05/02/07

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0705906-01A	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705906-01B	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705906
Project Number:	0061882	**Report Date:**	05/02/07

GLOSSARY

Acronyms

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.
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.
ND - Not detected at the reported detection limit for the sample.
RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
- 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.

Terms

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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Report Format: Not Specified

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705906
Project Number: 0061882 **Report Date:** 05/02/07

REFERENCES

60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

LIMITATION OF LIABILITIES

Alpha Woods Hole Labs 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 Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods Hole Labs 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 Woods Hole Labs.

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.

05020717:42

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA WOODS HOLE LABS

WESTEORO, MA TEL: 508-898-9220 FAX: 508-898-9193

RAYNHAM, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 04/25

ALPHA Job #: L0705906

Client Information

Client: ERM

Address: 399 Boylston St 6th Floor Boston MA 02116

Phone: 617-646-7800

Fax: 617-267-6447

Email: jeremy.picard@erm.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon Wayland

Project Location: Wayland MA

Project #: 0061882

Project Manager: J Picard

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 05/02 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL

☒ ADEx ☒ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
MA / MCP	GW-1

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: 8021c + MTBE + Benzene (LED)	~~CT Dissolved Solids~~	Sample Specific Comments	TOTAL # BOTTLES
05906-01	MW-203M-20070424-01	4/24/07	13:50	GW	LF	X	~~X~~		2

SAMPLE HANDLING

Filtration: ☒ Done ☐ Not needed ☐ Lab to do

Preservation: ☐ Lab to do (Please specify below)

Container Type	V	~~P~~
Preservative	HCL	

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
Paul Gilbert	4/25/07 12:25	Paul Gilbert	4/25/07 12:25
Paul Gilbert	4/25/07 13:05	Kadia Jand	4/25 13:25

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01 (rev. 10-OCT-05)

ANALYTICAL REPORT

Lab Number:	L0705907
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jeremy Picard
Project Name:	RAYTHEON WAYLAND
Project Number:	0061882
Report Date:	05/04/07

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (200305), NJ (MA935), RI (LAO00065), ME (2006012), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705907
Report Date: 05/04/07

Alpha Sample ID	Client ID	Sample Location
L0705907-01	MW-212M-20070424-01	WAYLAND, MA
L0705907-02	MW-212-20070424-01	WAYLAND, MA
L0705907-03	MW-105M-20070424-01	WAYLAND, MA
L0705907-04	MW-105-20070424-01	WAYLAND, MA

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705907
Project Number:	0061882	**Report Date:**	05/04/07

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, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	NO
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

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:** L0705907
Project Number: 0061882 **Report Date:** 05/04/07

Case Narrative

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

MCP Related Narratives:

Volatile Organics

In reference to question E:

The WG279032-2 LCSD has a high recovery for Acetone and 2-Butanone.

The279214-1/2 MS/MSD has a high recovery for Dichlorodifluoromethane.

The WG279214-3 LCS has a low recovery for Dichlorodifluoromethane.

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

Metals

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

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:

Title: Technical Director Date: 05/04/07

ORGANICS

VOLATILES

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705907

Project Number: 0061882 **Report Date:** 05/04/07

SAMPLE RESULTS

Lab ID:	L0705907-01	Date Collected:	04/24/07 10:15
Client ID:	MW-212M-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/04/07 11:13		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.73		ug/l	0.50	1
Chlorobenzene	1.4		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	1.7		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	3.7		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	3.6		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705907

Project Number: 0061882 **Report Date:** 05/04/07

SAMPLE RESULTS

Lab ID:	L0705907-01	Date Collected:	04/24/07 10:15
Client ID:	MW-212M-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	109		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705907

Project Number: 0061882 **Report Date:** 05/04/07

SAMPLE RESULTS

Lab ID:	L0705907-02	Date Collected:	04/24/07 12:40
Client ID:	MW-212-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/04/07 11:44		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.5		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705907

Project Number: 0061882 **Report Date:** 05/04/07

SAMPLE RESULTS

Lab ID:	L0705907-02	Date Collected:	04/24/07 12:40
Client ID:	MW-212-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	115		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	105		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705907

Project Number: 0061882 **Report Date:** 05/04/07

SAMPLE RESULTS

Lab ID:	L0705907-03	Date Collected:	04/24/07 15:50
Client ID:	MW-105M-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/04/07 12:15		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	1.8		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	0.60		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	2.9		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	1.3		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705907

Project Number: 0061882 **Report Date:** 05/04/07

SAMPLE RESULTS

Lab ID:	L0705907-03	Date Collected:	04/24/07 15:50
Client ID:	MW-105M-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	108		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705907

Project Number: 0061882 **Report Date:** 05/04/07

SAMPLE RESULTS

Lab ID:	L0705907-04	Date Collected:	04/24/07 16:35
Client ID:	MW-105-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/03/07 04:55		
Analyst:	RY		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	0.84		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.0		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	7.1		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	1.6		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705907

Project Number: 0061882 **Report Date:** 05/04/07

SAMPLE RESULTS

Lab ID:	L0705907-04	Date Collected:	04/24/07 16:35
Client ID:	MW-105-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	112		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705907

Project Number: 0061882 **Report Date:** 05/04/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/02/07 18:38
Analyst: RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 04 Batch: WG279032-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705907

Project Number: 0061882 **Report Date:** 05/04/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/02/07 18:38
Analyst: RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 04 Batch: WG279032-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705907

Project Number: 0061882 **Report Date:** 05/04/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/02/07 18:38
Analyst: RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 04 Batch: WG279032-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	100		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705907

Project Number: 0061882 **Report Date:** 05/04/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/04/07 10:43
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03 Batch: WG279214-5				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5
Methyl tert butyl ether	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dichlorodifluoromethane	ND		ug/l	5.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705907

Project Number: 0061882 **Report Date:** 05/04/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/04/07 10:43
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03 Batch: WG279214-5				
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	**135**		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	116		70-130
Dibromofluoromethane	114		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705907
Report Date: 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04 Batch: WG279032-1 WG279032-2					
Methylene chloride	101	100	70-130	1	25
1,1-Dichloroethane	105	101	70-130	4	25
Chloroform	103	98	70-130	5	25
Carbon tetrachloride	106	103	70-130	3	25
1,2-Dichloropropane	94	91	70-130	3	25
Dibromochloromethane	93	102	70-130	9	25
1,1,2-Trichloroethane	97	102	70-130	5	25
Tetrachloroethene	106	106	70-130	0	25
Chlorobenzene	103	101	70-130	2	25
Trichlorofluoromethane	129	127	70-130	2	25
1,2-Dichloroethane	111	110	70-130	1	25
1,1,1-Trichloroethane	111	104	70-130	7	25
Bromodichloromethane	98	100	70-130	2	25
trans-1,3-Dichloropropene	90	95	70-130	5	25
cis-1,3-Dichloropropene	91	90	70-130	1	25
1,1-Dichloropropene	99	96	70-130	3	25
Bromoform	95	98	70-130	3	50
1,1,2,2-Tetrachloroethane	114	115	70-130	1	25
Benzene	93	90	70-130	3	25
Toluene	98	99	70-130	1	25
Ethylbenzene	103	102	70-130	1	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705907
Report Date: 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04 Batch: WG279032-1 WG279032-2					
Chloromethane	98	98	70-130	0	50
Bromomethane	88	84	70-130	5	50
Vinyl chloride	92	91	70-130	1	25
Chloroethane	98	98	70-130	0	25
1,1-Dichloroethene	111	107	70-130	4	25
trans-1,2-Dichloroethene	97	97	70-130	0	25
Trichloroethene	103	99	70-130	4	25
1,2-Dichlorobenzene	100	97	70-130	3	25
1,3-Dichlorobenzene	103	98	70-130	5	25
1,4-Dichlorobenzene	102	99	70-130	3	25
Methyl tert butyl ether	96	101	70-130	5	25
p/m-Xylene	102	102	70-130	0	25
o-Xylene	99	101	70-130	2	25
cis-1,2-Dichloroethene	104	98	70-130	6	25
Dibromomethane	103	100	70-130	3	25
1,2,3-Trichloropropane	111	116	70-130	4	25
Styrene	99	101	70-130	2	25
Dichlorodifluoromethane	92	90	70-130	2	50
Acetone	127	**140**	70-130	10	50
Carbon disulfide	86	88	70-130	2	25
2-Butanone	129	**136**	70-130	5	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705907
Report Date: 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04 Batch: WG279032-1 WG279032-2					
4-Methyl-2-pentanone	95	92	70-130	3	50
2-Hexanone	100	116	70-130	15	50
Bromochloromethane	104	104	70-130	0	25
Tetrahydrofuran	98	102	70-130	4	25
2,2-Dichloropropane	98	99	70-130	1	50
1,2-Dibromoethane	100	100	70-130	0	25
1,3-Dichloropropane	95	103	70-130	8	25
1,1,1,2-Tetrachloroethane	102	104	70-130	2	25
Bromobenzene	102	98	70-130	4	25
n-Butylbenzene	105	97	70-130	8	25
sec-Butylbenzene	103	97	70-130	6	25
tert-Butylbenzene	103	100	70-130	3	25
o-Chlorotoluene	102	97	70-130	5	25
p-Chlorotoluene	104	100	70-130	4	25
1,2-Dibromo-3-chloropropane	104	114	70-130	9	50
Hexachlorobutadiene	92	87	70-130	6	25
Isopropylbenzene	109	110	70-130	1	25
p-Isopropyltoluene	109	103	70-130	6	25
Naphthalene	105	102	70-130	3	25
n-Propylbenzene	104	98	70-130	6	25
1,2,3-Trichlorobenzene	101	95	70-130	6	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0705907
Report Date: 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04 Batch: WG279032-1 WG279032-2					
1,2,4-Trichlorobenzene	97	93	70-130	4	25
1,3,5-Trimethylbenzene	106	100	70-130	6	25
1,2,4-Trimethylbenzene	107	99	70-130	8	25
Ethyl ether	102	105	70-130	3	25
Isopropyl Ether	100	99	70-130	1	25
Ethyl-Tert-Butyl-Ether	76	86	70-130	12	25
Tertiary-Amyl Methyl Ether	106	97	70-130	9	25
1,4-Dioxane	95	106	70-130	11	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		115		70-130
Toluene-d8	103		106		70-130
4-Bromofluorobenzene	98		95		70-130
Dibromofluoromethane	106		103		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0705907
Report Date: 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279214-3 WG279214-4					
Methylene chloride	95	92	70-130	3	25
1,1-Dichloroethane	94	96	70-130	2	25
Chloroform	93	98	70-130	5	25
Carbon tetrachloride	95	98	70-130	3	25
1,2-Dichloropropane	83	84	70-130	1	25
Dibromochloromethane	95	88	70-130	8	25
1,1,2-Trichloroethane	97	84	70-130	14	25
Tetrachloroethene	94	97	70-130	3	25
Chlorobenzene	90	91	70-130	1	25
1,2-Dichloroethane	103	93	70-130	10	25
1,1,1-Trichloroethane	99	105	70-130	6	25
Bromodichloromethane	90	90	70-130	0	25
trans-1,3-Dichloropropene	88	77	70-130	13	25
cis-1,3-Dichloropropene	80	75	70-130	6	25
Bromoform	98	82	70-130	18	50
1,1,2,2-Tetrachloroethane	113	94	70-130	18	25
Benzene	78	83	70-130	6	25
Chloromethane	80	81	70-130	1	50
Vinyl chloride	80	74	70-130	8	25
Chloroethane	87	80	70-130	8	25
1,1-Dichloroethene	97	98	70-130	1	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705907
Report Date: 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279214-3 WG279214-4					
trans-1,2-Dichloroethene	85	85	70-130	0	25
Trichloroethene	87	94	70-130	8	25
1,2-Dichlorobenzene	94	94	70-130	0	25
1,3-Dichlorobenzene	93	94	70-130	1	25
1,4-Dichlorobenzene	93	92	70-130	1	25
Methyl tert butyl ether	92	78	70-130	16	25
cis-1,2-Dichloroethene	90	88	70-130	2	25
Dichlorodifluoromethane	**68**	70	70-130	3	50
1,2-Dibromoethane	95	82	70-130	15	25
1,3-Dichloropropane	96	85	70-130	12	25
1,1,1,2-Tetrachloroethane	99	93	70-130	6	25
o-Chlorotoluene	93	98	70-130	5	25
p-Chlorotoluene	97	101	70-130	4	25
Hexachlorobutadiene	85	90	70-130	6	25
1,2,4-Trichlorobenzene	83	77	70-130	8	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0705907

Report Date: 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279214-3 WG279214-4					

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		117		70-130
Toluene-d8	108		109		70-130
4-Bromofluorobenzene	101		100		70-130
Dibromofluoromethane	113		112		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705907
Report Date: 05/04/07

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 QC Batch ID: WG279214-1 WG279214-2 QC Sample: L0705907-01 Client ID: MW-212M-20070424-01									
Methylene chloride	ND	10	10	101	11	107	70-130	6	30
1,1-Dichloroethane	ND	10	11	115	11	107	70-130	7	30
Chloroform	ND	10	11	108	9.9	99	70-130	9	30
Carbon tetrachloride	ND	10	12	121	11	110	70-130	10	30
1,2-Dichloropropane	ND	10	9.6	96	9.3	93	70-130	3	30
Dibromochloromethane	ND	10	11	108	11	111	70-130	3	30
1,1,2-Trichloroethane	ND	10	10	101	10	103	70-130	2	30
Tetrachloroethene	0.73	10	12	116	11	101	70-130	14	30
Chlorobenzene	1.4	10	12	111	11	100	70-130	10	30
1,2-Dichloroethane	ND	10	10	105	10	105	70-130	0	30
1,1,1-Trichloroethane	ND	10	12	120	11	108	70-130	11	30
Bromodichloromethane	ND	10	10	105	9.9	99	70-130	6	30
trans-1,3-Dichloropropene	ND	10	10	103	10	101	70-130	2	30
cis-1,3-Dichloropropene	ND	10	9.3	93	9.0	90	70-130	3	30
Bromoform	ND	10	11	110	11	115	70-130	4	30
1,1,2,2-Tetrachloroethane	ND	10	11	114	12	124	70-130	8	30
Benzene	1.7	10	11	93	10	86	70-130	8	30
Chloromethane	ND	10	13	128	11	114	70-130	12	30
Vinyl chloride	ND	10	12	123	12	120	70-130	2	30
Chloroethane	ND	10	11	113	11	109	70-130	4	30
1,1-Dichloroethene	ND	10	12	125	12	117	70-130	7	30

Matrix Spike Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705907
Report Date: 05/04/07

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 QC Batch ID: WG279214-1 WG279214-2 QC Sample: L0705907-01 Client ID: MW-212M-20070424-01									
trans-1,2-Dichloroethene	ND	10	10	104	10	101	70-130	3	30
Trichloroethene	3.7	10	14	109	13	94	70-130	15	30
1,2-Dichlorobenzene	0.7J	10	12	116	12	118	70-130	2	30
1,3-Dichlorobenzene	ND	10	11	112	11	107	70-130	5	30
1,4-Dichlorobenzene	0.6J	10	11	114	11	111	70-130	3	30
Methyl tert butyl ether	ND	10	8.9	89	9.9	99	70-130	11	30
cis-1,2-Dichloroethene	3.6	10	14	107	14	101	70-130	6	30
Dichlorodifluoromethane	ND	10	15	**148**	14	**137**	70-130	8	30
1,2-Dibromoethane	ND	10	10	102	10	103	70-130	1	30
1,3-Dichloropropane	ND	10	10	102	10	106	70-130	4	30
1,1,1,2-Tetrachloroethane	ND	10	11	114	11	107	70-130	6	30
o-Chlorotoluene	ND	10	11	112	10	106	70-130	6	30
p-Chlorotoluene	ND	10	11	115	11	108	70-130	6	30
Hexachlorobutadiene	ND	10	11	107	11	115	70-130	7	30
1,2,4-Trichlorobenzene	ND	10	11	109	12	116	70-130	6	30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		111		70-130
4-Bromofluorobenzene	99		99		70-130
Dibromofluoromethane	108		106		70-130
Toluene-d8	107		108		70-130

METALS

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705907
Project Number:	0061882	**Report Date:**	05/04/07

SAMPLE RESULTS

Lab ID:	L0705907-01	Date Collected:	04/24/07 10:15
Client ID:	MW-212M-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	150		mg/l	2.0	1		05/02/07 21:43	EPA 3005A	60,6010B	AI

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705907
Project Number:	0061882	**Report Date:**	05/04/07

SAMPLE RESULTS

Lab ID:	L0705907-02	Date Collected:	04/24/07 12:40
Client ID:	MW-212-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	60		mg/l	2.0	1		05/02/07 21:58	EPA 3005A	60,6010B	AI

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705907
Project Number:	0061882	**Report Date:**	05/04/07

SAMPLE RESULTS

Lab ID:	L0705907-03	Date Collected:	04/24/07 15:50
Client ID:	MW-105M-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	190		mg/l	2.0	1		05/02/07 22:02	EPA 3005A	60,6010B	AI

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705907

Project Number: 0061882 **Report Date:** 05/04/07

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series for sample(s): 01-03 Batch: WG278603-1									
Sodium, Dissolved	ND		mg/l	2.0	1		05/02/07 21:06	60,6010B	AI

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0705907

Report Date: 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01-03 Batch: WG278603-2 WG278603-3					
Sodium, Dissolved	90	93	80-120	3	20

Matrix Spike Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705907
Report Date: 05/04/07

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01-03 QC Batch ID: WG278603-4 WG278603-5 QC Sample: L0705907-01 Client ID: MW-212M-20070424-01									
Sodium, Dissolved	150	10	160	100	160	100	75-125	0	20

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705907
Report Date: 05/04/07

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0705907-01A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-01B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-01C	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-01D	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-01E	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-01F	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-01N	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0705907-02A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-02B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-02C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0705907-03A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-03B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-03C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0705907-04A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-04B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705907
Project Number:	0061882	**Report Date:**	05/04/07

GLOSSARY

Acronyms

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.

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.

ND - Not detected at the reported detection limit for the sample.

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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.

Terms

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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Report Format: Not Specified

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705907
Project Number: 0061882 **Report Date:** 05/04/07

REFERENCES

60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

LIMITATION OF LIABILITIES

Alpha Woods Hole Labs 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 Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods Hole Labs 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 Woods Hole Labs.

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.

05040720:11

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/25

ALPHA Job #: L0705907

ALPHA WOODS HOLE LABS

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

RAYNHAM, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: ERM

Address: 399 Boylston St 6th Fl Boston, MA 02116

Phone: 617-646-7800

Fax: 617-267-6447

Email: jeremy.picard@erm.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon Wayland

Project Location: Wayland, MA

Project #: 0061882

Project Manager: Jeremy Picard

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 05/02 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL

☒ ADEx ☒ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
MA MCP	GW-1

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs by 8021c called by 8260B	DISS Sodium (FF, 6010B)	VHCS by 8021c called by 8260B	Sample Specific Comments	TOTAL # BOTTLES
05907-01	MW-212M-20070424-01	4-24-07	10:15	GW	TD	2	1			3
-01	MW-212M-20070424-MS	4-24-07	10:15	GW	TD	2			20070424-01-MS	2
-01	MW-212M-20070424-MSD	4-24-07	10:15	GW	TD	2			20070424-01-MSD	2
-02	MW-212-20070424-01	4-24-07	12:40	GW	TD	2	1			3
-03	MW-105M-20070424-01	4-24-07	15:50	GW	TD	2	1			3
-04	MW-105-20070424-01	4-24-07	16:35	GW	TD			2		2

SAMPLE HANDLING

Filtration: ☒ Done ☐ Not needed ☐ Lab to do

Preservation: ☐ Lab to do

(Please specify below)

Container Type	V	P	V
Preservative	B	C	H

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
E. Berry 12:25	4/25/07	Paul Gillett	4/25/07 12:25
Paul Gillett	4/25/07 1305	Caroline Jaul	4/25 13:25

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01 (rev. 10-OCT-05)

ANALYTICAL REPORT

Lab Number:	L0706009
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jeremy Picard
Project Name:	RAYTHEON WAYLAND
Project Number:	0061882
Report Date:	05/07/07

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (200305), NJ (MA935), RI (LAO00065), ME (2006012), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706009
Report Date: 05/07/07

Alpha Sample ID	Client ID	Sample Location
L0706009-01	MW-33M-20070425-01	WAYLAND, MA
L0706009-02	DUP-005-20070425-01	WAYLAND, MA
L0706009-03	MW-47D-20070425-01	WAYLAND, MA
L0706009-04	MW-47M-20070425-01	WAYLAND, MA

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706009
Project Number:	0061882	**Report Date:**	05/07/07

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, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	NO
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

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:** L0706009
Project Number: 0061882 **Report Date:** 05/07/07

Case Narrative

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

MCP Related Narratives:

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Volatile Organics

In reference to question E:

The WG279326-4 LCS has low recovery for Bromoform, a known difficult analyte.

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

Metals

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

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:

Title: Technical Director Date: 05/07/07

ORGANICS

VOLATILES

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706009-01	Date Collected:	04/24/07 15:25
Client ID:	MW-33M-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 20:18		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	8.2		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.6		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706009-01	Date Collected:	04/24/07 15:25
Client ID:	MW-33M-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	100		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706009-02	Date Collected:	04/24/07 00:00
Client ID:	DUP-005-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/06/07 12:55		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	8.7		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.6		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706009-02	Date Collected:	04/24/07 00:00
Client ID:	DUP-005-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	104		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706009-03	Date Collected:	04/25/07 14:05
Client ID:	MW-47D-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 20:50		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.0		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	14		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	2.0		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706009-03	Date Collected:	04/25/07 14:05
Client ID:	MW-47D-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	105		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706009-04	Date Collected:	04/25/07 15:25
Client ID:	MW-47M-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 21:23		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	71		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	8.0		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706009-04	Date Collected:	04/25/07 15:25
Client ID:	MW-47M-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/05/07 16:33
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01,03-04 Batch: WG279326-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/05/07 16:33
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01,03-04 Batch: WG279326-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/05/07 16:33
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01,03-04 Batch: WG279326-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/06/07 11:19
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 02 Batch: WG279326-6				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/06/07 11:19
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 02 Batch: WG279326-6				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/06/07 11:19
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 02 Batch: WG279326-6				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706009
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,03-04 Batch: WG279326-1 WG279326-2					
Methylene chloride	105	102	70-130	3	25
1,1-Dichloroethane	104	105	70-130	1	25
Chloroform	106	104	70-130	2	25
Carbon tetrachloride	89	90	70-130	1	25
1,2-Dichloropropane	100	100	70-130	0	25
Dibromochloromethane	81	88	70-130	8	25
1,1,2-Trichloroethane	101	106	70-130	5	25
Tetrachloroethene	100	100	70-130	0	25
Chlorobenzene	98	100	70-130	2	25
Trichlorofluoromethane	106	110	70-130	4	25
1,2-Dichloroethane	106	109	70-130	3	25
1,1,1-Trichloroethane	100	98	70-130	2	25
Bromodichloromethane	89	93	70-130	4	25
trans-1,3-Dichloropropene	88	94	70-130	7	25
cis-1,3-Dichloropropene	89	92	70-130	3	25
1,1-Dichloropropene	100	97	70-130	3	25
Bromoform	81	87	70-130	7	50
1,1,2,2-Tetrachloroethane	101	100	70-130	1	25
Benzene	100	103	70-130	3	25
Toluene	97	102	70-130	5	25
Ethylbenzene	100	104	70-130	4	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706009
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,03-04 Batch: WG279326-1 WG279326-2					
Chloromethane	94	92	70-130	2	50
Bromomethane	102	106	70-130	4	50
Vinyl chloride	104	103	70-130	1	25
Chloroethane	104	103	70-130	1	25
1,1-Dichloroethene	102	101	70-130	1	25
trans-1,2-Dichloroethene	98	99	70-130	1	25
Trichloroethene	99	98	70-130	1	25
1,2-Dichlorobenzene	98	96	70-130	2	25
1,3-Dichlorobenzene	99	96	70-130	3	25
1,4-Dichlorobenzene	99	96	70-130	3	25
Methyl tert butyl ether	91	96	70-130	5	25
p/m-Xylene	103	105	70-130	2	25
o-Xylene	99	102	70-130	3	25
cis-1,2-Dichloroethene	108	102	70-130	6	25
Dibromomethane	94	101	70-130	7	25
1,2,3-Trichloropropane	113	108	70-130	5	25
Styrene	99	105	70-130	6	25
Dichlorodifluoromethane	112	111	70-130	1	50
Acetone	99	106	70-130	7	50
Carbon disulfide	82	78	70-130	5	25
2-Butanone	94	102	70-130	8	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706009
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,03-04 Batch: WG279326-1 WG279326-2					
4-Methyl-2-pentanone	89	100	70-130	12	50
2-Hexanone	100	112	70-130	11	50
Bromochloromethane	100	101	70-130	1	25
Tetrahydrofuran	85	91	70-130	7	25
2,2-Dichloropropane	94	93	70-130	1	50
1,2-Dibromoethane	103	106	70-130	3	25
1,3-Dichloropropane	100	103	70-130	3	25
1,1,1,2-Tetrachloroethane	93	92	70-130	1	25
Bromobenzene	98	92	70-130	6	25
n-Butylbenzene	102	95	70-130	7	25
sec-Butylbenzene	105	98	70-130	7	25
tert-Butylbenzene	102	95	70-130	7	25
o-Chlorotoluene	102	96	70-130	6	25
p-Chlorotoluene	104	97	70-130	7	25
1,2-Dibromo-3-chloropropane	89	90	70-130	1	50
Hexachlorobutadiene	95	85	70-130	11	25
Isopropylbenzene	109	113	70-130	4	25
p-Isopropyltoluene	108	99	70-130	9	25
Naphthalene	82	83	70-130	1	25
n-Propylbenzene	104	98	70-130	6	25
1,2,3-Trichlorobenzene	86	86	70-130	0	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706009
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,03-04 Batch: WG279326-1 WG279326-2					
1,2,4-Trichlorobenzene	89	86	70-130	3	25
1,3,5-Trimethylbenzene	105	97	70-130	8	25
1,2,4-Trimethylbenzene	105	98	70-130	7	25
Ethyl ether	90	89	70-130	1	25
Isopropyl Ether	96	97	70-130	1	25
Ethyl-Tert-Butyl-Ether	96	100	70-130	4	25
Tertiary-Amyl Methyl Ether	92	97	70-130	5	25
1,4-Dioxane	88	105	70-130	18	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		105		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	103		96		70-130
Dibromofluoromethane	101		99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706009
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02 Batch: WG279326-4 WG279326-5					
Methylene chloride	102	97	70-130	5	25
1,1-Dichloroethane	99	95	70-130	4	25
Chloroform	102	96	70-130	6	25
Carbon tetrachloride	83	82	70-130	1	25
1,2-Dichloropropane	95	91	70-130	4	25
Dibromochloromethane	70	77	70-130	10	25
1,1,2-Trichloroethane	96	92	70-130	4	25
Tetrachloroethene	92	90	70-130	2	25
Chlorobenzene	92	89	70-130	3	25
Trichlorofluoromethane	115	104	70-130	10	25
1,2-Dichloroethane	103	102	70-130	1	25
1,1,1-Trichloroethane	97	92	70-130	5	25
Bromodichloromethane	80	86	70-130	7	25
trans-1,3-Dichloropropene	76	80	70-130	5	25
cis-1,3-Dichloropropene	81	78	70-130	4	25
1,1-Dichloropropene	95	92	70-130	3	25
Bromoform	**69**	80	70-130	15	50
1,1,2,2-Tetrachloroethane	91	98	70-130	7	25
Benzene	98	91	70-130	7	25
Toluene	93	90	70-130	3	25
Ethylbenzene	95	92	70-130	3	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706009
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02 Batch: WG279326-4 WG279326-5					
Chloromethane	93	91	70-130	2	50
Bromomethane	84	80	70-130	5	50
Vinyl chloride	107	92	70-130	15	25
Chloroethane	106	96	70-130	10	25
1,1-Dichloroethene	100	90	70-130	11	25
trans-1,2-Dichloroethene	96	89	70-130	8	25
Trichloroethene	95	93	70-130	2	25
1,2-Dichlorobenzene	88	92	70-130	4	25
1,3-Dichlorobenzene	93	92	70-130	1	25
1,4-Dichlorobenzene	88	92	70-130	4	25
Methyl tert butyl ether	88	86	70-130	2	25
p/m-Xylene	97	94	70-130	3	25
o-Xylene	94	90	70-130	4	25
cis-1,2-Dichloroethene	98	94	70-130	4	25
Dibromomethane	94	93	70-130	1	25
1,2,3-Trichloropropane	100	110	70-130	10	25
Styrene	94	93	70-130	1	25
Dichlorodifluoromethane	116	103	70-130	12	50
Acetone	107	102	70-130	5	50
Carbon disulfide	80	71	70-130	12	25
2-Butanone	95	98	70-130	3	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706009
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02 Batch: WG279326-4 WG279326-5					
4-Methyl-2-pentanone	92	86	70-130	7	50
2-Hexanone	98	101	70-130	3	50
Bromochloromethane	95	93	70-130	2	25
Tetrahydrofuran	80	82	70-130	2	25
2,2-Dichloropropane	94	86	70-130	9	50
1,2-Dibromoethane	88	94	70-130	7	25
1,3-Dichloropropane	92	94	70-130	2	25
1,1,1,2-Tetrachloroethane	78	81	70-130	4	25
Bromobenzene	91	88	70-130	3	25
n-Butylbenzene	93	91	70-130	2	25
sec-Butylbenzene	95	93	70-130	2	25
tert-Butylbenzene	94	91	70-130	3	25
o-Chlorotoluene	93	94	70-130	1	25
p-Chlorotoluene	96	93	70-130	3	25
1,2-Dibromo-3-chloropropane	72	80	70-130	11	50
Hexachlorobutadiene	85	84	70-130	1	25
Isopropylbenzene	101	98	70-130	3	25
p-Isopropyltoluene	99	97	70-130	2	25
Naphthalene	70	83	70-130	17	25
n-Propylbenzene	95	95	70-130	0	25
1,2,3-Trichlorobenzene	75	85	70-130	13	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706009
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02 Batch: WG279326-4 WG279326-5					
1,2,4-Trichlorobenzene	75	84	70-130	11	25
1,3,5-Trimethylbenzene	93	93	70-130	0	25
1,2,4-Trimethylbenzene	95	94	70-130	1	25
Ethyl ether	86	83	70-130	4	25
Isopropyl Ether	95	90	70-130	5	25
Ethyl-Tert-Butyl-Ether	95	90	70-130	5	25
Tertiary-Amyl Methyl Ether	87	88	70-130	1	25
1,4-Dioxane	81	91	70-130	12	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		107		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	99		101		70-130
Dibromofluoromethane	101		97		70-130

METALS

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706009
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0706009-01	Date Collected:	04/24/07 15:25
Client ID:	MW-33M-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	12		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:09	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706009
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0706009-03	Date Collected:	04/25/07 14:05
Client ID:	MW-47D-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	120		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:12	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706009
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0706009-04	Date Collected:	04/25/07 15:25
Client ID:	MW-47M-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	23		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:14	EPA 3005A	60,6010B	MG

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series for sample(s): 01,03-04 Batch: WG278801-1									
Sodium, Dissolved	ND		mg/l	2.0	1	05/01/07 16:00	05/03/07 13:41	60,6010B	MG

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0706009

Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01,03-04 Batch: WG278801-2 WG278801-3					
Sodium, Dissolved	99	99	80-120	0	20

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706009
Report Date: 05/07/07

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0706009-01A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-01B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-01C	Plastic 250ml HNO3 preserved	A	<2	2.9C	Y	Absent	MCP-NA-6010S
L0706009-02A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-02B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-03A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-03B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-03C	Plastic 250ml HNO3 preserved	A	<2	2.9C	Y	Absent	MCP-NA-6010S
L0706009-04A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-04B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-04C	Plastic 250ml HNO3 preserved	A	<2	2.9C	Y	Absent	MCP-NA-6010S

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706009
Project Number:	0061882	**Report Date:**	05/07/07

GLOSSARY

Acronyms

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.

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.

ND - Not detected at the reported detection limit for the sample.

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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.

Terms

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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706009
Project Number: 0061882 **Report Date:** 05/07/07

REFERENCES

60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

LIMITATION OF LIABILITIES

Alpha Woods Hole Labs 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 Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods Hole Labs 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 Woods Hole Labs.

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.

05070713:21

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/26

ALPHA Job #: L0706409 (F)

ALPHA WOODS HOLE LABS

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

RAYNHAM, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: ERM

Address: 399 BOYLSTON ST. BOSTON MA 02116

Phone: 617-646-7800

Fax: 617-267-6447

Email: jeremy.picard@erm.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: RAYTHEON WAYLAND

Project Location: WAYLAND, MA

Project #: 0061882

Project Manager: JEREMY PICARD

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RJSH (only confirmed if pre-approved!)

Date Due: 5/03 Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☒ ADEx ☒ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program: MCP Criteria: GW-1

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS 8021C	ANALYSIS 6010B Dissolved Sodium (FP)	SAMPLE HANDLING Filtration ☒ Done ☐ Not needed ☐ Lab to do	Preservation ☐ Lab to do (Please specify below)	Sample Specific Comments	TOTAL # BOTTLES
06009-01	MW-33M-20070425-01	4/24/07	15:25	GW	JM	2	1				3
-02	DUP-005-20070425-01	4/24/07	00:00	GW	JM	2					2
-03	MW-47D-20070425-01	4/25/07	14:05	GW	BH	X	X				3
-04	MW-47M-20070425-01	4/25/07	15:25	GW	BH	X	X				3

Container Type: VP

Preservative: BC

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	4/26/07 1405	[illegible]	4/26/07 1405
[illegible]	4/26 @ 18:40	[illegible]	4/26 1640

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01 (rev. 10-OCT-05)

ANALYTICAL REPORT

Lab Number:	L0706011
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jeremy Picard
Project Name:	RAYTHEON WAYLAND
Project Number:	0061882
Report Date:	05/07/07

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (200305), NJ (MA935), RI (LAO00065), ME (2006012), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706011
Report Date: 05/07/07

Alpha Sample ID	Client ID	Sample Location
L0706011-01	MW-202M-20070425-01	WAYLAND, MA
L0706011-02	MW-202S-20070425-01	WAYLAND, MA
L0706011-03	MW-208M-20070425-01	WAYLAND, MA
L0706011-04	MW-208S-20070425-01	WAYLAND, MA
L0706011-05	TB-003-20070425-01	WAYLAND, MA

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706011
Project Number:	0061882	**Report Date:**	05/07/07

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, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	YES
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

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:** L0706011
Project Number: 0061882 **Report Date:** 05/07/07

Case Narrative

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

MCP Related Narratives:

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Volatile Organics

L0706011-01 required re-analysis on dilution in order to quantitate sample within the range of the calibration. The result is reported as a greater than value for the compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound which exceeded the range of the calibration.

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

Metals

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

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:

Title: Technical Director Date: 05/07/07

ORGANICS

VOLATILES

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706011-01	Date Collected:	04/25/07 09:10
Client ID:	MW-202M-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 20:27		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	0.93		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	45		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	2.5		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	>100		ug/l	.5	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	>100		ug/l	1	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706011-01	Date Collected:	04/25/07 09:10
Client ID:	MW-202M-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	114		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706011-01 R	Date Collected:	04/25/07 09:10
Client ID:	MW-202M-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/07/07 13:50		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Trichloroethene	120		ug/l	2.5	5
Methyl tert butyl ether	160		ug/l	5.0	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	114		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	111		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706011-02	Date Collected:	04/25/07 10:10
Client ID:	MW-202S-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 21:05		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.4		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.5		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706011-02	Date Collected:	04/25/07 10:10
Client ID:	MW-202S-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	116		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706011-03	Date Collected:	04/25/07 10:05
Client ID:	MW-208M-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 21:44		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	2.5		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	1.1		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	12		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	16		ug/l	1.0	1
cis-1,2-Dichloroethene	1.3		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706011-03	Date Collected:	04/25/07 10:05
Client ID:	MW-208M-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	97		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706011-04	Date Collected:	04/25/07 11:20
Client ID:	MW-208S-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 22:23		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	7.0		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	2.1		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706011-04	Date Collected:	04/25/07 11:20
Client ID:	MW-208S-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	114		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706011-05	Date Collected:	04/25/07 02:10
Client ID:	TB-003-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 23:02		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706011-05	Date Collected:	04/25/07 02:10
Client ID:	TB-003-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	110		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/05/07 13:18
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-05 Batch: WG279309-6				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/05/07 13:18
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-05 Batch: WG279309-6				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/05/07 13:18
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-05 Batch: WG279309-6				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	116		70-130
Dibromofluoromethane	113		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/07/07 09:42
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG279309-9				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/07/07 09:42
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG279309-9				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/07/07 09:42
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG279309-9				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	10

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	112		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706011
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-4 WG279309-5					
Methylene chloride	104	101	70-130	3	25
1,1-Dichloroethane	110	105	70-130	5	25
Chloroform	109	103	70-130	6	25
Carbon tetrachloride	115	111	70-130	4	25
1,2-Dichloropropane	95	87	70-130	9	25
Dibromochloromethane	99	104	70-130	5	25
1,1,2-Trichloroethane	92	98	70-130	6	25
Tetrachloroethene	102	99	70-130	3	25
Chlorobenzene	98	99	70-130	1	25
Trichlorofluoromethane	**138**	129	70-130	7	25
1,2-Dichloroethane	115	105	70-130	9	25
1,1,1-Trichloroethane	120	113	70-130	6	25
Bromodichloromethane	101	99	70-130	2	25
trans-1,3-Dichloropropene	93	97	70-130	4	25
cis-1,3-Dichloropropene	89	88	70-130	1	25
1,1-Dichloropropene	99	96	70-130	3	25
Bromoform	99	100	70-130	1	50
1,1,2,2-Tetrachloroethane	104	107	70-130	3	25
Benzene	91	88	70-130	3	25
Toluene	98	97	70-130	1	25
Ethylbenzene	101	101	70-130	0	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706011
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-4 WG279309-5					
Chloromethane	112	104	70-130	7	50
Bromomethane	80	71	70-130	12	50
Vinyl chloride	95	94	70-130	1	25
Chloroethane	101	84	70-130	18	25
1,1-Dichloroethene	110	105	70-130	5	25
trans-1,2-Dichloroethene	100	95	70-130	5	25
Trichloroethene	102	90	70-130	13	25
1,2-Dichlorobenzene	98	99	70-130	1	25
1,3-Dichlorobenzene	100	98	70-130	2	25
1,4-Dichlorobenzene	98	96	70-130	2	25
Methyl tert butyl ether	88	87	70-130	1	25
p/m-Xylene	100	100	70-130	0	25
o-Xylene	98	98	70-130	0	25
cis-1,2-Dichloroethene	101	102	70-130	1	25
Dibromomethane	88	89	70-130	1	25
1,2,3-Trichloropropane	105	114	70-130	8	25
Styrene	98	100	70-130	2	25
Dichlorodifluoromethane	125	112	70-130	11	50
Acetone	**135**	113	70-130	18	50
Carbon disulfide	82	80	70-130	2	25
2-Butanone	107	94	70-130	13	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706011
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-4 WG279309-5					
4-Methyl-2-pentanone	82	77	70-130	6	50
2-Hexanone	95	102	70-130	7	50
Bromochloromethane	101	93	70-130	8	25
Tetrahydrofuran	86	92	70-130	7	25
2,2-Dichloropropane	109	105	70-130	4	50
1,2-Dibromoethane	90	97	70-130	7	25
1,3-Dichloropropane	93	100	70-130	7	25
1,1,1,2-Tetrachloroethane	107	108	70-130	1	25
Bromobenzene	97	95	70-130	2	25
n-Butylbenzene	103	99	70-130	4	25
sec-Butylbenzene	102	99	70-130	3	25
tert-Butylbenzene	102	99	70-130	3	25
o-Chlorotoluene	100	98	70-130	2	25
p-Chlorotoluene	104	101	70-130	3	25
1,2-Dibromo-3-chloropropane	100	95	70-130	5	50
Hexachlorobutadiene	88	86	70-130	2	25
Isopropylbenzene	111	110	70-130	1	25
p-Isopropyltoluene	109	104	70-130	5	25
Naphthalene	84	85	70-130	1	25
n-Propylbenzene	100	98	70-130	2	25
1,2,3-Trichlorobenzene	88	90	70-130	2	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706011
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-4 WG279309-5					
1,2,4-Trichlorobenzene	86	83	70-130	4	25
1,3,5-Trimethylbenzene	103	102	70-130	1	25
1,2,4-Trimethylbenzene	106	102	70-130	4	25
Ethyl ether	91	91	70-130	0	25
Isopropyl Ether	99	95	70-130	4	25
Ethyl-Tert-Butyl-Ether	72	70	70-130	3	25
Tertiary-Amyl Methyl Ether	106	102	70-130	4	25
1,4-Dioxane	78	**66**	70-130	17	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125		122		70-130
Toluene-d8	107		109		70-130
4-Bromofluorobenzene	97		92		70-130
Dibromofluoromethane	115		110		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706011
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279309-7 WG279309-8					
Methylene chloride	98	98	70-130	0	25
1,1-Dichloroethane	105	99	70-130	6	25
Chloroform	101	95	70-130	6	25
Carbon tetrachloride	108	99	70-130	9	25
1,2-Dichloropropane	88	86	70-130	2	25
Dibromochloromethane	101	98	70-130	3	25
1,1,2-Trichloroethane	96	94	70-130	2	25
Tetrachloroethene	94	88	70-130	7	25
Chlorobenzene	93	89	70-130	4	25
Trichlorofluoromethane	122	117	70-130	4	25
1,2-Dichloroethane	105	98	70-130	7	25
1,1,1-Trichloroethane	109	102	70-130	7	25
Bromodichloromethane	100	90	70-130	11	25
trans-1,3-Dichloropropene	99	98	70-130	1	25
cis-1,3-Dichloropropene	85	83	70-130	2	25
1,1-Dichloropropene	96	87	70-130	10	25
Bromoform	100	106	70-130	6	50
1,1,2,2-Tetrachloroethane	113	112	70-130	1	25
Benzene	84	79	70-130	6	25
Toluene	96	89	70-130	8	25
Ethylbenzene	98	94	70-130	4	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706011
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279309-7 WG279309-8					
Chloromethane	94	98	70-130	4	50
Bromomethane	78	82	70-130	5	50
Vinyl chloride	88	91	70-130	3	25
Chloroethane	102	99	70-130	3	25
1,1-Dichloroethene	105	99	70-130	6	25
trans-1,2-Dichloroethene	90	88	70-130	2	25
Trichloroethene	92	85	70-130	8	25
1,2-Dichlorobenzene	96	94	70-130	2	25
1,3-Dichlorobenzene	95	93	70-130	2	25
1,4-Dichlorobenzene	94	93	70-130	1	25
Methyl tert butyl ether	88	89	70-130	1	25
p/m-Xylene	94	91	70-130	3	25
o-Xylene	91	88	70-130	3	25
cis-1,2-Dichloroethene	100	93	70-130	7	25
Dibromomethane	89	87	70-130	2	25
1,2,3-Trichloropropane	113	125	70-130	10	25
Styrene	93	88	70-130	6	25
Dichlorodifluoromethane	94	90	70-130	4	50
Acetone	129	118	70-130	9	50
Carbon disulfide	76	74	70-130	3	25
2-Butanone	125	128	70-130	2	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706011
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279309-7 WG279309-8					
4-Methyl-2-pentanone	93	83	70-130	11	50
2-Hexanone	105	111	70-130	6	50
Bromochloromethane	94	90	70-130	4	25
Tetrahydrofuran	100	97	70-130	3	25
2,2-Dichloropropane	108	96	70-130	12	50
1,2-Dibromoethane	92	91	70-130	1	25
1,3-Dichloropropane	98	97	70-130	1	25
1,1,1,2-Tetrachloroethane	106	96	70-130	10	25
Bromobenzene	92	92	70-130	0	25
n-Butylbenzene	99	93	70-130	6	25
sec-Butylbenzene	98	94	70-130	4	25
tert-Butylbenzene	97	94	70-130	3	25
o-Chlorotoluene	96	95	70-130	1	25
p-Chlorotoluene	97	97	70-130	0	25
1,2-Dibromo-3-chloropropane	116	104	70-130	11	50
Hexachlorobutadiene	86	79	70-130	8	25
Isopropylbenzene	105	98	70-130	7	25
p-Isopropyltoluene	102	98	70-130	4	25
Naphthalene	92	94	70-130	2	25
n-Propylbenzene	96	94	70-130	2	25
1,2,3-Trichlorobenzene	91	90	70-130	1	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706011
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279309-7 WG279309-8					
1,2,4-Trichlorobenzene	87	84	70-130	4	25
1,3,5-Trimethylbenzene	98	96	70-130	2	25
1,2,4-Trimethylbenzene	101	97	70-130	4	25
Ethyl ether	86	93	70-130	8	25
Isopropyl Ether	98	93	70-130	5	25
Ethyl-Tert-Butyl-Ether	80	80	70-130	0	25
Tertiary-Amyl Methyl Ether	103	92	70-130	11	25
1,4-Dioxane	71	73	70-130	3	50
1,1,2-Trichloro-1,2,2-Trifluoroethane	82	75	70-130	9	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	128		123		70-130
Toluene-d8	111		111		70-130
4-Bromofluorobenzene	95		103		70-130
Dibromofluoromethane	115		116		70-130

METALS

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706011
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0706011-01	Date Collected:	04/25/07 09:10
Client ID:	MW-202M-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	18		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:17	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706011
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0706011-02	Date Collected:	04/25/07 10:10
Client ID:	MW-202S-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	79		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:27	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706011
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0706011-04	Date Collected:	04/25/07 11:20
Client ID:	MW-208S-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	35		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:29	EPA 3005A	60,6010B	MG

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series for sample(s): 01-02,04 Batch: WG278801-1									
Sodium, Dissolved	ND		mg/l	2.0	1	05/01/07 16:00	05/03/07 13:41	60,6010B	MG

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0706011

Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01-02,04 Batch: WG278801-2 WG278801-3					
Sodium, Dissolved	99	99	80-120	0	20

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706011
Report Date: 05/07/07

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0706011-01A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-01B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-01C	Plastic 250ml HNO3 preserved	A	<2	2.9C	Y	Absent	MCP-NA-6010S
L0706011-02A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-02B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-02C	Plastic 250ml HNO3 preserved	A	<2	2.9C	Y	Absent	MCP-NA-6010S
L0706011-03A	Vial Na2S2O3 preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-03B	Vial Na2S2O3 preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-04A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-04B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-04C	Plastic 250ml HNO3 preserved	NA	NA	NA	Y	Absent	MCP-NA-6010S
L0706011-05A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706011
Project Number:	0061882	**Report Date:**	05/07/07

GLOSSARY

Acronyms

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.
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.
ND - Not detected at the reported detection limit for the sample.
RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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.

Terms

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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Report Format: Not Specified

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706011
Project Number: 0061882 **Report Date:** 05/07/07

REFERENCES

60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

LIMITATION OF LIABILITIES

Alpha Woods Hole Labs 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 Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods Hole Labs 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 Woods Hole Labs.

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.

05070717:06

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA WOODS HOLE LABS

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

RAYNHAM, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 4/26

ALPHA Job #: L0706011

Client Information

Client: ERM

Address: 319 Boylston St. 6th Fl
Boston, MA 07116

Phone: 617-646-7500

Fax: 617-267-6447

Email:

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon Wayland

Project Location: Wayland, MA

Project #: 0061882

Project Manager: J. Picard

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 5/03 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL

☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
MCP	GW-1

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Projec: Specific Requirements/Comments/Detection Limits:

ANALYSIS: 8021C + MTBE + Benzene; Dissolved (FP) Sulfur - 6010B; 8021C + HTBE + Benzene; 8021C

SAMPLE HANDLING
Filtration
☒ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	8021C + MTBE + Benzene	Dissolved (FP) Sulfur - 6010B	8021C + HTBE + Benzene	8021C	Sample Specific Comments	TOTAL # BOTTLES
06011-01	MW-202M-20070425-01	4/25/07	910	GW	FP	X	X				3
-02	MW-202S-20070425-01	4/25/07	1010	GW	FP	X	X				3
-03	MW-208M-20070425-01	4/25/07	~~11:20~~ 10:05	GW	BH			X			2
-04	MW-208S-20070425-01	4/25/07	11:20	GW	BH	X	X				3
-05	TB-003-20070425-01	4/25/07	02:10	GW	ZP				X		2

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

	V	P	V
Container Type	V	P	V
Preservative	B	C	H

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	4/26/07 11:05	[signature]	4/26/07 11:05
[signature]	4/26/07 16:40	[signature]	4/26 16:40

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01 (rev. 10-OCT-05)

ANALYTICAL REPORT

Lab Number:	L0706025
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jeremy Picard
Project Name:	RAYTHEON WAYLAND
Project Number:	0061882
Report Date:	05/07/07

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (200305), NJ (MA935), RI (LAO00065), ME (2006012), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706025
Report Date: 05/07/07

Alpha Sample ID	Client ID	Sample Location
L0706025-01	MW-106-20070425-01	WAYLAND, MA
L0706025-02	MW-210-20070425-01	WAYLAND, MA
L0706025-03	MW-106M-20070425-01	WAYLAND, MA
L0706025-04	MW-43S-20070425-01	WAYLAND, MA
L0706025-05	MW-211-20070425-01	WAYLAND, MA
L0706025-06	MW-104-20070425-01	WAYLAND, MA
L0706025-07	MW-40-20070425-01	WAYLAND, MA
L0706025-08	DUP-006-20070425-01	WAYLAND, MA

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706025
Project Number:	0061882	**Report Date:**	05/07/07

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, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	NA

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	NO
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

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:** L0706025
Project Number: 0061882 **Report Date:** 05/07/07

Case Narrative

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

MCP Related Narratives

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Volatile Organics

In reference to question E:

WG279326-4/5:

The LCS % recovery is below method acceptance criteria for Bromoform, a difficult analyte.

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

Metals

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

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:

Title: Technical Director Date: 05/07/07

ORGANICS

VOLATILES

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-01	Date Collected:	04/25/07 09:40
Client ID:	MW-106-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 21:55		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	1.5		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	2.0		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	0.58		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	20		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-01	Date Collected:	04/25/07 09:40
Client ID:	MW-106-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	104		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-02	Date Collected:	04/25/07 11:02
Client ID:	MW-210-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 22:27		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.5		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	16		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-02	Date Collected:	04/25/07 11:02
Client ID:	MW-210-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	102		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-03	Date Collected:	04/25/07 11:15
Client ID:	MW-106M-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 22:59		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	1.5		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.3		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	0.60		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	11		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	0.76		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-03	Date Collected:	04/25/07 11:15
Client ID:	MW-106M-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	109		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-04	Date Collected:	04/25/07 13:00
Client ID:	MW-43S-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 23:32		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	2.7		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	45		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-04	Date Collected:	04/25/07 13:00
Client ID:	MW-43S-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	109		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-05	Date Collected:	04/25/07 14:30
Client ID:	MW-211-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/06/07 13:28		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.54		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	0.91		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-05	Date Collected:	04/25/07 14:30
Client ID:	MW-211-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	101		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-06	Date Collected:	04/25/07 14:10
Client ID:	MW-104-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/06/07 14:00		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.6		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	17		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-06	Date Collected:	04/25/07 14:10
Client ID:	MW-104-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	102		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-07	Date Collected:	04/25/07 16:20
Client ID:	MW-40-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/06/07 14:32		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	5.8		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	0.80		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.2		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	2.4		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	5.4		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-07	Date Collected:	04/25/07 16:20
Client ID:	MW-40-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	110		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-08	Date Collected:	04/25/07 00:00
Client ID:	DUP-006-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/06/07 15:04		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	2.7		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	44		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-08	Date Collected:	04/25/07 00:00
Client ID:	DUP-006-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	105		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/05/07 16:33
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279326-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/05/07 16:33
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279326-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/05/07 16:33
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279326-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/06/07 11:19
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 05-08 Batch: WG279326-6				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/06/07 11:19
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 05-08 Batch: WG279326-6				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/06/07 11:19
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 05-08 Batch: WG279326-6				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706025
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279326-1 WG279326-2					
Methylene chloride	105	102	70-130	3	25
1,1-Dichloroethane	104	105	70-130	1	25
Chloroform	106	104	70-130	2	25
Carbon tetrachloride	89	90	70-130	1	25
1,2-Dichloropropane	100	100	70-130	0	25
Dibromochloromethane	81	88	70-130	8	25
1,1,2-Trichloroethane	101	106	70-130	5	25
Tetrachloroethene	100	100	70-130	0	25
Chlorobenzene	98	100	70-130	2	25
Trichlorofluoromethane	106	110	70-130	4	25
1,2-Dichloroethane	106	109	70-130	3	25
1,1,1-Trichloroethane	100	98	70-130	2	25
Bromodichloromethane	89	93	70-130	4	25
trans-1,3-Dichloropropene	88	94	70-130	7	25
cis-1,3-Dichloropropene	89	92	70-130	3	25
1,1-Dichloropropene	100	97	70-130	3	25
Bromoform	81	87	70-130	7	50
1,1,2,2-Tetrachloroethane	101	100	70-130	1	25
Benzene	100	103	70-130	3	25
Toluene	97	102	70-130	5	25
Ethylbenzene	100	104	70-130	4	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706025
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279326-1 WG279326-2					
Chloromethane	94	92	70-130	2	50
Bromomethane	102	106	70-130	4	50
Vinyl chloride	104	103	70-130	1	25
Chloroethane	104	103	70-130	1	25
1,1-Dichloroethene	102	101	70-130	1	25
trans-1,2-Dichloroethene	98	99	70-130	1	25
Trichloroethene	99	98	70-130	1	25
1,2-Dichlorobenzene	98	96	70-130	2	25
1,3-Dichlorobenzene	99	96	70-130	3	25
1,4-Dichlorobenzene	99	96	70-130	3	25
Methyl tert butyl ether	91	96	70-130	5	25
p/m-Xylene	103	105	70-130	2	25
o-Xylene	99	102	70-130	3	25
cis-1,2-Dichloroethene	108	102	70-130	6	25
Dibromomethane	94	101	70-130	7	25
1,2,3-Trichloropropane	113	108	70-130	5	25
Styrene	99	105	70-130	6	25
Dichlorodifluoromethane	112	111	70-130	1	50
Acetone	99	106	70-130	7	50
Carbon disulfide	82	78	70-130	5	25
2-Butanone	94	102	70-130	8	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706025
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279326-1 WG279326-2					
4-Methyl-2-pentanone	89	100	70-130	12	50
2-Hexanone	100	112	70-130	11	50
Bromochloromethane	100	101	70-130	1	25
Tetrahydrofuran	85	91	70-130	7	25
2,2-Dichloropropane	94	93	70-130	1	50
1,2-Dibromoethane	103	106	70-130	3	25
1,3-Dichloropropane	100	103	70-130	3	25
1,1,1,2-Tetrachloroethane	93	92	70-130	1	25
Bromobenzene	98	92	70-130	6	25
n-Butylbenzene	102	95	70-130	7	25
sec-Butylbenzene	105	98	70-130	7	25
tert-Butylbenzene	102	95	70-130	7	25
o-Chlorotoluene	102	96	70-130	6	25
p-Chlorotoluene	104	97	70-130	7	25
1,2-Dibromo-3-chloropropane	89	90	70-130	1	50
Hexachlorobutadiene	95	85	70-130	11	25
Isopropylbenzene	109	113	70-130	4	25
p-Isopropyltoluene	108	99	70-130	9	25
Naphthalene	82	83	70-130	1	25
n-Propylbenzene	104	98	70-130	6	25
1,2,3-Trichlorobenzene	86	86	70-130	0	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706025
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279326-1 WG279326-2					
1,2,4-Trichlorobenzene	89	86	70-130	3	25
1,3,5-Trimethylbenzene	105	97	70-130	8	25
1,2,4-Trimethylbenzene	105	98	70-130	7	25
Ethyl ether	90	89	70-130	1	25
Isopropyl Ether	96	97	70-130	1	25
Ethyl-Tert-Butyl-Ether	96	100	70-130	4	25
Tertiary-Amyl Methyl Ether	92	97	70-130	5	25
1,4-Dioxane	88	105	70-130	18	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		105		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	103		96		70-130
Dibromofluoromethane	101		99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706025
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-08 Batch: WG279326-4 WG279326-5					
Methylene chloride	102	97	70-130	5	25
1,1-Dichloroethane	99	95	70-130	4	25
Chloroform	102	96	70-130	6	25
Carbon tetrachloride	83	82	70-130	1	25
1,2-Dichloropropane	95	91	70-130	4	25
Dibromochloromethane	70	77	70-130	10	25
1,1,2-Trichloroethane	96	92	70-130	4	25
Tetrachloroethene	92	90	70-130	2	25
Chlorobenzene	92	89	70-130	3	25
Trichlorofluoromethane	115	104	70-130	10	25
1,2-Dichloroethane	103	102	70-130	1	25
1,1,1-Trichloroethane	97	92	70-130	5	25
Bromodichloromethane	80	86	70-130	7	25
trans-1,3-Dichloropropene	76	80	70-130	5	25
cis-1,3-Dichloropropene	81	78	70-130	4	25
1,1-Dichloropropene	95	92	70-130	3	25
Bromoform	**69**	80	70-130	15	50
1,1,2,2-Tetrachloroethane	91	98	70-130	7	25
Benzene	98	91	70-130	7	25
Toluene	93	90	70-130	3	25
Ethylbenzene	95	92	70-130	3	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706025
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-08 Batch: WG279326-4 WG279326-5					
Chloromethane	93	91	70-130	2	50
Bromomethane	84	80	70-130	5	50
Vinyl chloride	107	92	70-130	15	25
Chloroethane	106	96	70-130	10	25
1,1-Dichloroethene	100	90	70-130	11	25
trans-1,2-Dichloroethene	96	89	70-130	8	25
Trichloroethene	95	93	70-130	2	25
1,2-Dichlorobenzene	88	92	70-130	4	25
1,3-Dichlorobenzene	93	92	70-130	1	25
1,4-Dichlorobenzene	88	92	70-130	4	25
Methyl tert butyl ether	88	86	70-130	2	25
p/m-Xylene	97	94	70-130	3	25
o-Xylene	94	90	70-130	4	25
cis-1,2-Dichloroethene	98	94	70-130	4	25
Dibromomethane	94	93	70-130	1	25
1,2,3-Trichloropropane	100	110	70-130	10	25
Styrene	94	93	70-130	1	25
Dichlorodifluoromethane	116	103	70-130	12	50
Acetone	107	102	70-130	5	50
Carbon disulfide	80	71	70-130	12	25
2-Butanone	95	98	70-130	3	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706025
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-08 Batch: WG279326-4 WG279326-5					
4-Methyl-2-pentanone	92	86	70-130	7	50
2-Hexanone	98	101	70-130	3	50
Bromochloromethane	95	93	70-130	2	25
Tetrahydrofuran	80	82	70-130	2	25
2,2-Dichloropropane	94	86	70-130	9	50
1,2-Dibromoethane	88	94	70-130	7	25
1,3-Dichloropropane	92	94	70-130	2	25
1,1,1,2-Tetrachloroethane	78	81	70-130	4	25
Bromobenzene	91	88	70-130	3	25
n-Butylbenzene	93	91	70-130	2	25
sec-Butylbenzene	95	93	70-130	2	25
tert-Butylbenzene	94	91	70-130	3	25
o-Chlorotoluene	93	94	70-130	1	25
p-Chlorotoluene	96	93	70-130	3	25
1,2-Dibromo-3-chloropropane	72	80	70-130	11	50
Hexachlorobutadiene	85	84	70-130	1	25
Isopropylbenzene	101	98	70-130	3	25
p-Isopropyltoluene	99	97	70-130	2	25
Naphthalene	70	83	70-130	17	25
n-Propylbenzene	95	95	70-130	0	25
1,2,3-Trichlorobenzene	75	85	70-130	13	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706025
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-08 Batch: WG279326-4 WG279326-5					
1,2,4-Trichlorobenzene	75	84	70-130	11	25
1,3,5-Trimethylbenzene	93	93	70-130	0	25
1,2,4-Trimethylbenzene	95	94	70-130	1	25
Ethyl ether	86	83	70-130	4	25
Isopropyl Ether	95	90	70-130	5	25
Ethyl-Tert-Butyl-Ether	95	90	70-130	5	25
Tertiary-Amyl Methyl Ether	87	88	70-130	1	25
1,4-Dioxane	81	91	70-130	12	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		107		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	99		101		70-130
Dibromofluoromethane	101		97		70-130

METALS

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706025
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-01	Date Collected:	04/25/07 09:40
Client ID:	MW-106-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	73		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:31	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706025
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-02	Date Collected:	04/25/07 11:02
Client ID:	MW-210-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	220		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:34	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706025
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-03	Date Collected:	04/25/07 11:15
Client ID:	MW-106M-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	170		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:36	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706025
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-04	Date Collected:	04/25/07 13:00
Client ID:	MW-43S-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	75		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:39	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706025
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-05	Date Collected:	04/25/07 14:30
Client ID:	MW-211-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	66		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:41	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706025
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-06	Date Collected:	04/25/07 14:10
Client ID:	MW-104-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	56		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:44	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706025
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0706025-07	Date Collected:	04/25/07 16:20
Client ID:	MW-40-20070425-01	Date Received:	04/26/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	30		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:46	EPA 3005A	60,6010B	MG

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series for sample(s): 01-07 Batch: WG278801-1									
Sodium, Dissolved	ND		mg/l	2.0	1	05/01/07 16:00	05/03/07 13:41	60,6010B	MG

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0706025

Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01-07 Batch: WG278801-2 WG278801-3					
Sodium, Dissolved	99	99	80-120	0	20

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706025
Report Date: 05/07/07

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0706025-01A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-01B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-01C	Plastic 500ml HNO3 preserved	A	<2	2.9 C	Y	Absent	MCP-NA-6010S
L0706025-02A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-02B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-02C	Plastic 500ml HNO3 preserved	A	<2	2.9 C	Y	Absent	MCP-NA-6010S
L0706025-03A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-03B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-03C	Plastic 500ml HNO3 preserved	A	<2	2.9 C	Y	Absent	MCP-NA-6010S
L0706025-04A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-04B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-04C	Plastic 500ml HNO3 preserved	A	<2	2.9 C	Y	Absent	MCP-NA-6010S
L0706025-05A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-05B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-05C	Plastic 500ml HNO3 preserved	A	<2	2.9 C	Y	Absent	MCP-NA-6010S
L0706025-06A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-06B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-06C	Plastic 500ml HNO3 preserved	A	<2	2.9 C	Y	Absent	MCP-NA-6010S
L0706025-07A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-07B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-07C	Plastic 500ml HNO3 preserved	A	<2	2.9 C	Y	Absent	MCP-NA-6010S
L0706025-08A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-08B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706025
Project Number:	0061882	**Report Date:**	05/07/07

GLOSSARY

Acronyms

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.
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.
ND - Not detected at the reported detection limit for the sample.
RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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.

Terms

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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Report Format: Not Specified

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706025
Project Number: 0061882 **Report Date:** 05/07/07

REFERENCES

60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

LIMITATION OF LIABILITIES

Alpha Woods Hole Labs 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 Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods Hole Labs 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 Woods Hole Labs.

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.

05070713:19

CHAIN OF CUSTODY

PAGE 1 OF

ALPHA WOODS HOLE LABS

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

RAYNHAM, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 9/26

ALPHA Job #: L0706025 F

Client Information

Client: ERM

Address: 399 Boylston St 6th FL Boston MA 02116

Phone: 617 26[redacted]8377 / 617 646 7800

Fax: 617 267 6447

Email: jeremy.picard@erm.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: RAYTHEON WAYLAND

Project Location: WAYLAND, MA

Project #: 0061882

Project Manager: JEREMY PICARD

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 5/3 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL

☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
MCP	GW-1

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

SAMPLE HANDLING
Filtration
☒ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	8021c & 8260 (VOC)	Dissolved Na (FF)	Sample Specific Comments	TOTAL # BOTTLES
6025.1	MW-106-20070425-01	4-25-07	9:40	GW	TD	2	1		3
2	MW-210-20070425-01	4-25-07	11:02	GW	JRF	2	1		3
3	MW-106M-20070425-01	4-25-07	11:15	GW	TD	2	1		3
4	MW-43S-20070425-01	4-25-07	13:00	GW	JRF	2	1		3
5	MW-[redacted]-20070425-01	4-25-07	14:30	GW	TD	2	1		3
6	MW-104-20070425-01	4-25-07	14:10	GW	JRF	2	1		3
7	MW-40-20070425-01	4-25-07	16:20	GW	JRF	2	1		3
8	DUP-006-20070425-01	4-25-07	00:00	GW	JRF	2			2
	~~MW-106-20070425-01~~	~~4-25-07~~	~~9:40~~	~~GW~~	~~TD~~	~~2~~	~~1~~		~~3~~

Container Type: V P

Preservative: B C

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	4/26/07 16:40	[signature]	4/26/07 16:40
[signature]	4/26/07 16:40	[signature]	4/26/07 16:40

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01 (rev. 10-OCT-05)

ANALYTICAL REPORT

Lab Number:	L0706084
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jeremy Picard
Project Name:	RAYTHEON WAYLAND
Project Number:	0061882
Report Date:	05/07/07

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (200305), NJ (MA935), RI (LAO00065), ME (2006012), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706084
Report Date: 05/07/07

Alpha Sample ID	Client ID	Sample Location
L0706084-01	MW-209-20070426-01	WAYLAND, MA
L0706084-02	MW-103-20070426-01	WAYLAND, MA

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706084
Project Number:	0061882	**Report Date:**	05/07/07

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, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	YES
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

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:** L0706084
Project Number: 0061882 **Report Date:** 05/07/07

Case Narrative

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

MCP Related Narratives:

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Volatile Organics

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

Metals

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

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:

Title: Technical Director Date: 05/07/07

ORGANICS

VOLATILES

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706084

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706084-01	Date Collected:	04/26/07 12:45
Client ID:	MW-209-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/07/07 12:08		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.84		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706084

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706084-01	Date Collected:	04/26/07 12:45
Client ID:	MW-209-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	105		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706084

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706084-02	Date Collected:	04/26/07 15:50
Client ID:	MW-103-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/07/07 12:40		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.79		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706084

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706084-02	Date Collected:	04/26/07 15:50
Client ID:	MW-103-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	108		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706084

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/07/07 08:53
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-02 Batch: WG279335-6				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706084

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/07/07 08:53
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-02 Batch: WG279335-6				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706084

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/07/07 08:53
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-02 Batch: WG279335-6				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706084
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279335-4 WG279335-5					
Methylene chloride	111	107	70-130	4	25
1,1-Dichloroethane	114	109	70-130	4	25
Chloroform	113	108	70-130	5	25
Carbon tetrachloride	97	98	70-130	1	25
1,2-Dichloropropane	102	98	70-130	4	25
Dibromochloromethane	87	88	70-130	1	25
1,1,2-Trichloroethane	102	110	70-130	8	25
Tetrachloroethene	108	102	70-130	6	25
Chlorobenzene	102	101	70-130	1	25
Trichlorofluoromethane	126	119	70-130	6	25
1,2-Dichloroethane	116	114	70-130	2	25
1,1,1-Trichloroethane	108	109	70-130	1	25
Bromodichloromethane	96	97	70-130	1	25
trans-1,3-Dichloropropene	90	92	70-130	2	25
cis-1,3-Dichloropropene	89	90	70-130	1	25
1,1-Dichloropropene	105	102	70-130	3	25
Bromoform	80	90	70-130	12	50
1,1,2,2-Tetrachloroethane	94	97	70-130	3	25
Benzene	108	104	70-130	4	25
Toluene	103	104	70-130	1	25
Ethylbenzene	107	106	70-130	1	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706084
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279335-4 WG279335-5					
Chloromethane	116	109	70-130	6	50
Bromomethane	93	87	70-130	7	50
Vinyl chloride	118	108	70-130	9	25
Chloroethane	114	102	70-130	11	25
1,1-Dichloroethene	106	107	70-130	1	25
trans-1,2-Dichloroethene	105	98	70-130	7	25
Trichloroethene	113	103	70-130	9	25
1,2-Dichlorobenzene	94	93	70-130	1	25
1,3-Dichlorobenzene	97	97	70-130	0	25
1,4-Dichlorobenzene	97	95	70-130	2	25
Methyl tert butyl ether	95	93	70-130	2	25
p/m-Xylene	107	106	70-130	1	25
o-Xylene	102	102	70-130	0	25
cis-1,2-Dichloroethene	106	103	70-130	3	25
Dibromomethane	102	100	70-130	2	25
1,2,3-Trichloropropane	103	106	70-130	3	25
Styrene	107	103	70-130	4	25
Dichlorodifluoromethane	118	109	70-130	8	50
Acetone	115	109	70-130	5	50
Carbon disulfide	87	78	70-130	11	25
2-Butanone	100	101	70-130	1	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706084
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279335-4 WG279335-5					
4-Methyl-2-pentanone	93	95	70-130	2	50
2-Hexanone	101	111	70-130	9	50
Bromochloromethane	101	98	70-130	3	25
Tetrahydrofuran	86	88	70-130	2	25
2,2-Dichloropropane	100	94	70-130	6	50
1,2-Dibromoethane	99	105	70-130	6	25
1,3-Dichloropropane	101	102	70-130	1	25
1,1,1,2-Tetrachloroethane	92	95	70-130	3	25
Bromobenzene	93	92	70-130	1	25
n-Butylbenzene	98	94	70-130	4	25
sec-Butylbenzene	102	97	70-130	5	25
tert-Butylbenzene	100	96	70-130	4	25
o-Chlorotoluene	98	96	70-130	2	25
p-Chlorotoluene	100	97	70-130	3	25
1,2-Dibromo-3-chloropropane	78	86	70-130	10	50
Hexachlorobutadiene	91	89	70-130	2	25
Isopropylbenzene	111	112	70-130	1	25
p-Isopropyltoluene	105	99	70-130	6	25
Naphthalene	72	79	70-130	9	25
n-Propylbenzene	102	98	70-130	4	25
1,2,3-Trichlorobenzene	77	85	70-130	10	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706084
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279335-4 WG279335-5					
1,2,4-Trichlorobenzene	82	82	70-130	0	25
1,3,5-Trimethylbenzene	99	98	70-130	1	25
1,2,4-Trimethylbenzene	99	97	70-130	2	25
Ethyl ether	91	89	70-130	2	25
Isopropyl Ether	104	99	70-130	5	25
Ethyl-Tert-Butyl-Ether	101	99	70-130	2	25
Tertiary-Amyl Methyl Ether	95	96	70-130	1	25
1,4-Dioxane	88	88	70-130	0	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		109		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	97		98		70-130
Dibromofluoromethane	100		101		70-130

METALS

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706084
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0706084-01	Date Collected:	04/26/07 12:45
Client ID:	MW-209-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	33		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:49	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706084
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0706084-02	Date Collected:	04/26/07 15:50
Client ID:	MW-103-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	100		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:58	EPA 3005A	60,6010B	MG

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706084

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series for sample(s): 01-02 Batch: WG278801-1									
Sodium, Dissolved	ND		mg/l	2.0	1	05/01/07 16:00	05/03/07 13:41	60,6010B	MG

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0706084

Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01-02 Batch: WG278801-2 WG278801-3					
Sodium, Dissolved	99	99	80-120	0	20

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706084
Report Date: 05/07/07

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0706084-01A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706084-01B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706084-01C	Plastic 250ml HNO3 preserved	A	<2	2.8C	Y	Absent	MCP-NA-6010S
L0706084-02A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706084-02B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706084-02C	Plastic 250ml HNO3 preserved	A	<2	2.8C	Y	Absent	MCP-NA-6010S

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706084
Project Number:	0061882	**Report Date:**	05/07/07

GLOSSARY

Acronyms

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.
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.
ND - Not detected at the reported detection limit for the sample.
RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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.

Terms

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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Report Format: Not Specified

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706084
Project Number: 0061882 **Report Date:** 05/07/07

REFERENCES

60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

LIMITATION OF LIABILITIES

Alpha Woods Hole Labs 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 Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods Hole Labs 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 Woods Hole Labs.

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.

05070716:16

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA WOODS HOLE LABS

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

RAYNHAM, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 4/27

ALPHA Job #: L0706284

Client Information

Client: ERM

Address: 399 Boylston St, 6th Floor Boston, MA 02116

Phone: (617) 646-7800

Fax: (617) 267-6447

Email: jeremy.picard@erm.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon

Project Location: Wayland, MA

Project #: 0061882

Project Manager: Jeremy Picard

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 05/04 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL

☒ ADEx ☒ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
MA / MCP	GW-1

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

ANALYSIS: 8021c by 8260 (DISSOLVED NaCl)

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	8021c by 8260	DISSOLVED NaCl	Sample Specific Comments	TOTAL # BOTTLES
06084-01	MW-209-20070426-01	04/26/07	12:45	GW	HEA	2	1		3
J-02	MW-103-20070426-01	04/26/07	15:50	GW	HEA	2	1		3

Container Type	V	P
Preservative	B	C

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	4/27/07 4:00	[illegible]	4/27 15:00
[illegible]	4/27/07 18:45	[illegible]	4/27 18:45

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORMNO: 01-01 (rev. 10-OCT-05)

ANALYTICAL REPORT

Lab Number:	L0706124
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jeremy Picard
Project Name:	RAYTHEON WAYLAND
Project Number:	0061882
Report Date:	05/07/07

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (200305), NJ (MA935), RI (LAO00065), ME (2006012), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706124
Report Date: 05/07/07

Alpha Sample ID	Client ID	Sample Location
L0706124-01	MW-101-20070426-01	WAYLAND, MA

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706124
Project Number:	0061882	**Report Date:**	05/07/07

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, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	YES
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

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:** L0706124
Project Number: 0061882 **Report Date:** 05/07/07

Case Narrative

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

MCP Related Narratives:

Volatile Organics

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

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:

Title: Technical Director Date: 05/07/07

ORGANICS

VOLATILES

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706124

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706124-01	Date Collected:	04/26/07 15:00
Client ID:	MW-101-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/07/07 15:54		
Analyst:	RY		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	1.8		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	2.7		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706124

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0706124-01	Date Collected:	04/26/07 15:00
Client ID:	MW-101-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	129		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	113		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706124

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/07/07 09:42
Analyst: RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG279032-9				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706124

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/07/07 09:42
Analyst: RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG279032-9				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706124

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/07/07 09:42
Analyst: RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG279032-9				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	112		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706124
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279032-7 WG279032-8					
Methylene chloride	98	98	70-130	0	25
1,1-Dichloroethane	105	99	70-130	6	25
Chloroform	101	95	70-130	6	25
Carbon tetrachloride	108	99	70-130	9	25
1,2-Dichloropropane	88	86	70-130	2	25
Dibromochloromethane	101	98	70-130	3	25
1,1,2-Trichloroethane	96	94	70-130	2	25
Tetrachloroethene	94	88	70-130	7	25
Chlorobenzene	93	89	70-130	4	25
Trichlorofluoromethane	122	117	70-130	4	25
1,2-Dichloroethane	105	98	70-130	7	25
1,1,1-Trichloroethane	109	102	70-130	7	25
Bromodichloromethane	100	90	70-130	11	25
trans-1,3-Dichloropropene	99	98	70-130	1	25
cis-1,3-Dichloropropene	85	83	70-130	2	25
1,1-Dichloropropene	96	87	70-130	10	25
Bromoform	100	106	70-130	6	50
1,1,2,2-Tetrachloroethane	113	112	70-130	1	25
Benzene	84	79	70-130	6	25
Toluene	96	89	70-130	8	25
Ethylbenzene	98	94	70-130	4	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706124
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279032-7 WG279032-8					
Chloromethane	94	98	70-130	4	50
Bromomethane	78	82	70-130	5	50
Vinyl chloride	88	91	70-130	3	25
Chloroethane	102	99	70-130	3	25
1,1-Dichloroethene	105	99	70-130	6	25
trans-1,2-Dichloroethene	90	88	70-130	2	25
Trichloroethene	92	85	70-130	8	25
1,2-Dichlorobenzene	96	94	70-130	2	25
1,3-Dichlorobenzene	95	93	70-130	2	25
1,4-Dichlorobenzene	94	93	70-130	1	25
Methyl tert butyl ether	88	89	70-130	1	25
p/m-Xylene	94	91	70-130	3	25
o-Xylene	91	88	70-130	3	25
cis-1,2-Dichloroethene	100	93	70-130	7	25
Dibromomethane	89	87	70-130	2	25
1,2,3-Trichloropropane	113	125	70-130	10	25
Styrene	93	88	70-130	6	25
Dichlorodifluoromethane	94	90	70-130	4	50
Acetone	129	118	70-130	9	50
Carbon disulfide	76	74	70-130	3	25
2-Butanone	125	128	70-130	2	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706124
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279032-7 WG279032-8					
4-Methyl-2-pentanone	93	83	70-130	11	50
2-Hexanone	105	111	70-130	6	50
Bromochloromethane	94	90	70-130	4	25
Tetrahydrofuran	100	97	70-130	3	25
2,2-Dichloropropane	108	96	70-130	12	50
1,2-Dibromoethane	92	91	70-130	1	25
1,3-Dichloropropane	98	97	70-130	1	25
1,1,1,2-Tetrachloroethane	106	96	70-130	10	25
Bromobenzene	92	92	70-130	0	25
n-Butylbenzene	99	93	70-130	6	25
sec-Butylbenzene	98	94	70-130	4	25
tert-Butylbenzene	97	94	70-130	3	25
o-Chlorotoluene	96	95	70-130	1	25
p-Chlorotoluene	97	97	70-130	0	25
1,2-Dibromo-3-chloropropane	116	104	70-130	11	50
Hexachlorobutadiene	86	79	70-130	8	25
Isopropylbenzene	105	98	70-130	7	25
p-Isopropyltoluene	102	98	70-130	4	25
Naphthalene	92	94	70-130	2	25
n-Propylbenzene	96	94	70-130	2	25
1,2,3-Trichlorobenzene	91	90	70-130	1	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706124
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279032-7 WG279032-8					
1,2,4-Trichlorobenzene	87	84	70-130	4	25
1,3,5-Trimethylbenzene	98	96	70-130	2	25
1,2,4-Trimethylbenzene	101	97	70-130	4	25
Ethyl ether	86	93	70-130	8	25
Isopropyl Ether	98	93	70-130	5	25
Ethyl-Tert-Butyl-Ether	80	80	70-130	0	25
Tertiary-Amyl Methyl Ether	103	92	70-130	11	25
1,4-Dioxane	71	73	70-130	3	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	128		123		70-130
Toluene-d8	111		111		70-130
4-Bromofluorobenzene	95		103		70-130
Dibromofluoromethane	115		116		70-130

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706124
Report Date: 05/07/07

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0706124-01A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706124-01B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706124
Project Number:	0061882	**Report Date:**	05/07/07

GLOSSARY

Acronyms

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.

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.

ND - Not detected at the reported detection limit for the sample.

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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.

Terms

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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Report Format: Not Specified

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706124
Project Number: 0061882 **Report Date:** 05/07/07

REFERENCES

60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

LIMITATION OF LIABILITIES

Alpha Woods Hole Labs 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 Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods Hole Labs 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 Woods Hole Labs.

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.

05070721:32

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA WOODS HOLE LABS

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

RAYNHAM, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 4/27

ALPHA Job #: L006124

Client Information

Client: ERM

Address: 399 Boylston St. 6th Fl. Boston, MA 02116

Phone: 617-646-7800

Fax: 617-267-6447

Email:

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon Wayland

Project Location: Wayland, MA

Project #: 061882

Project Manager: J. Picard

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 05/04 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL

☒ ADEx ☒ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☐ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

SAMPLE HANDLING

Filtration
☐ Done
☒ Not needed
☐ Lab to do

Preservation
☐ Lab to do

(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS VOC-8260C	Sample Specific Comments	TOTAL # BOTTLES
06124-01	MW-101-20070426-01	4/26/07	1500	GW	FP	X		2

Container Type	V
Preservative	H

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By	Date/Time
[signature]	4/27/07 12:00	[signature]	4/27 12:00
[signature]	4/27/07 18:45	[signature]	4/27 18:45

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01 (rev. 10-OCT-05)

ANALYTICAL REPORT

Lab Number:	L0706126
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jeremy Picard
Project Name:	RAYTHEON WAYLAND
Project Number:	0061882
Report Date:	05/10/07

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (200305), NJ (MA935), RI (LAO00065), ME (2006012), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706126
Report Date: 05/10/07

Alpha Sample ID	Client ID	Sample Location
L0706126-01	MW-33S-20070426-01	WAYLAND, MA
L0706126-02	MW-102-20070426-01	WAYLAND, MA
L0706126-03	MW-214-20070426-01	WAYLAND, MA
L0706126-04	IP-16S-20070426-01	WAYLAND, MA
L0706126-05	IP-17D-20070426-01	WAYLAND, MA
L0706126-06	MW-117-20070426-01	WAYLAND, MA
L0706126-07	MW-213-20070426-01	WAYLAND, MA
L0706126-08	DUP-002-20070426-01	WAYLAND, MA

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706126
Project Number:	0061882	**Report Date:**	05/10/07

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, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	NA

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	YES
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

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:** L0706126
Project Number: 0061882 **Report Date:** 05/10/07

Case Narrative

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

MCP Related Narratives

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Volatile Organics

L0706126-01 was re-analyzed due to overdilution of the original analysis. The results of the re-analysis are reported.

L0706126-02 has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

Metals

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

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:

Title: Technical Director Date: 05/10/07

ORGANICS

VOLATILES

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-01 R	Date Collected:	04/26/07 08:05
Client ID:	MW-33S-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/09/07 14:05		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	14		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	40		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-01 R	Date Collected:	04/26/07 08:05
Client ID:	MW-33S-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	128		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	122		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-02	Date Collected:	04/26/07 10:35
Client ID:	MW-102-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/09/07 01:58		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	10	2
1,1-Dichloroethane	1.9		ug/l	1.5	2
Chloroform	ND		ug/l	1.5	2
Carbon tetrachloride	ND		ug/l	1.0	2
1,2-Dichloropropane	ND		ug/l	3.5	2
Dibromochloromethane	ND		ug/l	1.0	2
1,1,2-Trichloroethane	ND		ug/l	1.5	2
Tetrachloroethene	ND		ug/l	1.0	2
Chlorobenzene	ND		ug/l	1.0	2
1,2-Dichloroethane	ND		ug/l	1.0	2
1,1,1-Trichloroethane	ND		ug/l	1.0	2
Bromodichloromethane	ND		ug/l	1.0	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	2
Bromoform	ND		ug/l	4.0	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	2
Chloromethane	ND		ug/l	5.0	2
Vinyl chloride	ND		ug/l	2.0	2
Chloroethane	ND		ug/l	2.0	2
1,1-Dichloroethene	ND		ug/l	1.0	2
trans-1,2-Dichloroethene	ND		ug/l	1.5	2
Trichloroethene	9.5		ug/l	1.0	2
1,2-Dichlorobenzene	ND		ug/l	5.0	2
1,3-Dichlorobenzene	ND		ug/l	5.0	2
1,4-Dichlorobenzene	ND		ug/l	5.0	2
cis-1,2-Dichloroethene	ND		ug/l	1.0	2
Dichlorodifluoromethane	ND		ug/l	10	2
2,2-Dichloropropane	ND		ug/l	5.0	2
1,2-Dibromoethane	ND		ug/l	4.0	2
1,3-Dichloropropane	ND		ug/l	5.0	2

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-02	Date Collected:	04/26/07 10:35
Client ID:	MW-102-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	2
o-Chlorotoluene	ND		ug/l	5.0	2
p-Chlorotoluene	ND		ug/l	5.0	2
Hexachlorobutadiene	ND		ug/l	1.2	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	110		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-03	Date Collected:	04/26/07 12:00
Client ID:	MW-214-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/09/07 02:29		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.50		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	2.7		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	53		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	3.7		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-03	Date Collected:	04/26/07 12:00
Client ID:	MW-214-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	108		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-04	Date Collected:	04/26/07 13:10
Client ID:	IP-16S-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/09/07 03:00		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	0.88		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-04	Date Collected:	04/26/07 13:10
Client ID:	IP-16S-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	109		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-05	Date Collected:	04/26/07 14:10
Client ID:	IP-17D-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/09/07 03:31		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	1.2		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.53		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-05	Date Collected:	04/26/07 14:10
Client ID:	IP-17D-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	109		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-06	Date Collected:	04/26/07 15:00
Client ID:	MW-117-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/09/07 04:01		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	0.92		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.87		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	6.1		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-06	Date Collected:	04/26/07 15:00
Client ID:	MW-117-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	111		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-07	Date Collected:	04/26/07 16:05
Client ID:	MW-213-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/09/07 04:32		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.51		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.3		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-07	Date Collected:	04/26/07 16:05
Client ID:	MW-213-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	112		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-08	Date Collected:	04/26/07 00:00
Client ID:	DUP-002-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/09/07 12:31		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	1.0		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-08	Date Collected:	04/26/07 00:00
Client ID:	DUP-002-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	127		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	114		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/08/07 20:18
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 02-07 Batch: WG279685-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dichlorodifluoromethane	ND		ug/l	5.0
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/08/07 20:18
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 02-07 Batch: WG279685-3				
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	111		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/09/07 09:24
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01,08 Batch: WG279685-6				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dichlorodifluoromethane	ND		ug/l	5.0
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/09/07 09:24
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01,08 Batch: WG279685-6				
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	114		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	113		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706126
Report Date: 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02-07 Batch: WG279685-1 WG279685-2					
Methylene chloride	106	114	70-130	7	25
1,1-Dichloroethane	106	116	70-130	9	25
Chloroform	103	111	70-130	7	25
Carbon tetrachloride	100	108	70-130	8	25
1,2-Dichloropropane	95	103	70-130	8	25
Dibromochloromethane	100	108	70-130	8	25
1,1,2-Trichloroethane	97	109	70-130	12	25
Tetrachloroethene	102	108	70-130	6	25
Chlorobenzene	99	110	70-130	11	25
1,2-Dichloroethane	106	110	70-130	4	25
1,1,1-Trichloroethane	113	116	70-130	3	25
Bromodichloromethane	94	105	70-130	11	25
trans-1,3-Dichloropropene	96	105	70-130	9	25
cis-1,3-Dichloropropene	90	99	70-130	10	25
Bromoform	98	109	70-130	11	50
1,1,2,2-Tetrachloroethane	116	125	70-130	7	25
Chloromethane	97	106	70-130	9	50
Vinyl chloride	88	107	70-130	19	25
Chloroethane	98	113	70-130	14	25
1,1-Dichloroethene	98	116	70-130	17	25
trans-1,2-Dichloroethene	92	107	70-130	15	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706126
Report Date: 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02-07 Batch: WG279685-1 WG279685-2					
Trichloroethene	96	101	70-130	5	25
1,2-Dichlorobenzene	99	107	70-130	8	25
1,3-Dichlorobenzene	99	110	70-130	11	25
1,4-Dichlorobenzene	97	108	70-130	11	25
cis-1,2-Dichloroethene	106	115	70-130	8	25
Dichlorodifluoromethane	110	120	70-130	9	50
2,2-Dichloropropane	100	108	70-130	8	50
1,2-Dibromoethane	97	107	70-130	10	25
1,3-Dichloropropane	107	112	70-130	5	25
1,1,1,2-Tetrachloroethane	104	113	70-130	8	25
o-Chlorotoluene	101	113	70-130	11	25
p-Chlorotoluene	105	117	70-130	11	25
Hexachlorobutadiene	88	96	70-130	9	25
1,2,4-Trichlorobenzene	88	96	70-130	9	25

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		112		70-130
Toluene-d8	112		110		70-130
4-Bromofluorobenzene	100		98		70-130
Dibromofluoromethane	112		114		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706126
Report Date: 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,08 Batch: WG279685-4 WG279685-5					
Methylene chloride	114	111	70-130	3	25
1,1-Dichloroethane	114	111	70-130	3	25
Chloroform	117	108	70-130	8	25
Carbon tetrachloride	118	110	70-130	7	25
1,2-Dichloropropane	99	95	70-130	4	25
Dibromochloromethane	104	108	70-130	4	25
1,1,2-Trichloroethane	99	102	70-130	3	25
Tetrachloroethene	110	106	70-130	4	25
Chlorobenzene	107	101	70-130	6	25
1,2-Dichloroethane	110	103	70-130	7	25
1,1,1-Trichloroethane	123	111	70-130	10	25
Bromodichloromethane	104	99	70-130	5	25
trans-1,3-Dichloropropene	104	101	70-130	3	25
cis-1,3-Dichloropropene	91	92	70-130	1	25
Bromoform	99	112	70-130	12	50
1,1,2,2-Tetrachloroethane	115	120	70-130	4	25
Chloromethane	105	98	70-130	7	50
Vinyl chloride	96	101	70-130	5	25
Chloroethane	95	98	70-130	3	25
1,1-Dichloroethene	109	110	70-130	1	25
trans-1,2-Dichloroethene	103	101	70-130	2	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706126
Report Date: 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,08 Batch: WG279685-4 WG279685-5					
Trichloroethene	103	96	70-130	7	25
1,2-Dichlorobenzene	108	105	70-130	3	25
1,3-Dichlorobenzene	110	107	70-130	3	25
1,4-Dichlorobenzene	108	106	70-130	2	25
cis-1,2-Dichloroethene	110	105	70-130	5	25
Dichlorodifluoromethane	118	110	70-130	7	50
2,2-Dichloropropane	114	101	70-130	12	50
1,2-Dibromoethane	97	102	70-130	5	25
1,3-Dichloropropane	106	108	70-130	2	25
1,1,1,2-Tetrachloroethane	112	113	70-130	1	25
o-Chlorotoluene	113	110	70-130	3	25
p-Chlorotoluene	118	114	70-130	3	25
Hexachlorobutadiene	96	88	70-130	9	25
1,2,4-Trichlorobenzene	94	94	70-130	0	25

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		115		70-130
Toluene-d8	109		108		70-130
4-Bromofluorobenzene	102		103		70-130
Dibromofluoromethane	113		111		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706126
Report Date: 05/10/07

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-08 QC Batch ID: WG279685-7 WG279685-8 QC Sample: L0706126-06 Client ID: MW-117-20070426-01									
Methylene chloride	ND	10	11	108	11	108	70-130	0	30
1,1-Dichloroethane	ND	10	12	120	11	114	70-130	5	30
Chloroform	0.92	10	12	111	12	106	70-130	5	30
Carbon tetrachloride	ND	10	12	121	11	112	70-130	8	30
1,2-Dichloropropane	ND	10	10	100	9.8	98	70-130	2	30
Dibromochloromethane	ND	10	10	104	10	102	70-130	2	30
1,1,2-Trichloroethane	ND	10	10	103	10	101	70-130	2	30
Tetrachloroethene	0.87	10	11	99	10	95	70-130	4	30
Chlorobenzene	ND	10	10	103	9.7	97	70-130	6	30
1,2-Dichloroethane	ND	10	11	115	12	115	70-130	0	30
1,1,1-Trichloroethane	ND	10	12	121	12	116	70-130	4	30
Bromodichloromethane	ND	10	10	103	9.9	99	70-130	4	30
trans-1,3-Dichloropropene	ND	10	10	103	10	103	70-130	0	30
cis-1,3-Dichloropropene	ND	10	9.0	90	8.9	90	70-130	0	30
Bromoform	ND	10	11	107	10	104	70-130	3	30
1,1,2,2-Tetrachloroethane	ND	10	12	123	12	125	70-130	2	30
Chloromethane	ND	10	9.5	95	8.3	83	70-130	13	30
Vinyl chloride	ND	10	9.3	93	9.4	94	70-130	1	30
Chloroethane	ND	10	12	116	12	115	70-130	1	30
1,1-Dichloroethene	ND	10	12	115	11	111	70-130	4	30
trans-1,2-Dichloroethene	ND	10	10	103	10	100	70-130	3	30

Matrix Spike Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706126
Report Date: 05/10/07

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-08 QC Batch ID: WG279685-7 WG279685-8 QC Sample: L0706126-06 Client ID: MW-117-20070426-01									
Trichloroethene	6.1	10	16	94	15	87	70-130	8	30
1,2-Dichlorobenzene	ND	10	10	104	10	102	70-130	2	30
1,3-Dichlorobenzene	ND	10	10	105	9.7	97	70-130	8	30
1,4-Dichlorobenzene	ND	10	10	105	9.7	97	70-130	8	30
cis-1,2-Dichloroethene	ND	10	11	113	11	107	70-130	5	30
Dichlorodifluoromethane	ND	10	7.7	77	7.3	73	70-130	5	30
2,2-Dichloropropane	ND	10	12	119	11	112	70-130	6	30
1,2-Dibromoethane	ND	10	10	102	10	105	70-130	3	30
1,3-Dichloropropane	ND	10	11	110	11	106	70-130	4	30
1,1,1,2-Tetrachloroethane	ND	10	11	109	10	104	70-130	5	30
o-Chlorotoluene	ND	10	11	106	9.9	99	70-130	7	30
p-Chlorotoluene	ND	10	11	109	10	103	70-130	6	30
Hexachlorobutadiene	ND	10	9.2	92	8.2	82	70-130	11	30
1,2,4-Trichlorobenzene	ND	10	9.2	92	8.4	84	70-130	9	30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		129		70-130
4-Bromofluorobenzene	100		101		70-130
Dibromofluoromethane	114		119		70-130
Toluene-d8	107		110		70-130

METALS

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706126
Project Number:	0061882	**Report Date:**	05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-01	Date Collected:	04/26/07 08:05
Client ID:	MW-33S-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	5.2		mg/l	2.0	1	05/02/07 17:30	05/03/07 18:25	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706126
Project Number:	0061882	**Report Date:**	05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-03	Date Collected:	04/26/07 12:00
Client ID:	MW-214-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	41		mg/l	2.0	1	05/02/07 17:30	05/03/07 18:27	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706126
Project Number:	0061882	**Report Date:**	05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-06	Date Collected:	04/26/07 15:00
Client ID:	MW-117-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	89		mg/l	2.0	1	05/02/07 17:30	05/03/07 18:33	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706126
Project Number:	0061882	**Report Date:**	05/10/07

SAMPLE RESULTS

Lab ID:	L0706126-07	Date Collected:	04/26/07 16:05
Client ID:	MW-213-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	140		mg/l	2.0	1	05/02/07 17:30	05/03/07 18:44	EPA 3005A	60,6010B	MG

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126

Project Number: 0061882 **Report Date:** 05/10/07

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series for sample(s): 01,03,06-07 Batch: WG278911-1									
Sodium, Dissolved	ND		mg/l	2.0	1	05/02/07 17:30	05/03/07 18:06	60,6010B	MG

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0706126

Report Date: 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01,03,06-07 Batch: WG278911-2 WG278911-3					
Sodium, Dissolved	100	95	80-120	5	20

Matrix Spike Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706126
Report Date: 05/10/07

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01,03,06-07 QC Batch ID: WG278911-4 WG278911-5 QC Sample: L0706126-06 Client ID: MW-117-20070426-01									
Sodium, Dissolved	89	10	98	90	100	110	75-125	20	20

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706126
Report Date: 05/10/07

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0706126-01A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-01B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-01C	Plastic 250ml HNO3 preserved	A	<2	2.8 C	Y	Absent	MCP-NA-6010S
L0706126-02A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-02B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-03A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-03B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-03C	Plastic 250ml HNO3 preserved	A	<2	2.8 C	Y	Absent	MCP-NA-6010S
L0706126-04A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-04B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-05A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-05B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-06A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-06B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-06C	Plastic 250ml HNO3 preserved	A	<2	2.8 C	Y	Absent	MCP-NA-6010S
L0706126-06E	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-06F	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-06G	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-06H	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-07A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-07B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-07C	Plastic 250ml HNO3 preserved	A	<2	2.8 C	Y	Absent	MCP-NA-6010S
L0706126-08A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-08B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706126
Project Number:	0061882	**Report Date:**	05/10/07

GLOSSARY

Acronyms

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.

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.

ND - Not detected at the reported detection limit for the sample.

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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.

Terms

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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Report Format: Not Specified

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706126
Project Number: 0061882 **Report Date:** 05/10/07

REFERENCES

60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

LIMITATION OF LIABILITIES

Alpha Woods Hole Labs 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 Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods Hole Labs 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 Woods Hole Labs.

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.

05100716:02

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/27

ALPHA Job #: L0706126

Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Client Information

Client: ERM
Address: 399 BOYLSTON ST
BOSTON, MA 02116
Phone: 617-646-7800
Fax: 617-267-6447
Email: jeremy.picard@erm.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: RAYTHEON, WAYLAND
Project Location: WAYLAND, MA
Project #: 0061882
Project Manager: JEREMY PICARD
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 5/4 Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☒ ADEx ☒ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed[redacted]am	Criteria
MCP	

MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Are Drinking Water Samples Submitted?
☒ Yes ☐ No Have you met minimum field QC requirements?

Other Project Specific Requirements/Comments/Detection Limits:

SAMPLE HANDLING
Filtration
☒ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	8021C	6010B (Dissolved Mn)	8021C	Sample Specific Comments	Total # Bottles
6126.1	MW-339-20070426-01	4/26/07	08:05	GW	JM	2	1			3
2	MW-102-20070426-01	4/26/07	10:35	GW	JM			2		2
3	MW-214-20070426-01	4/26/07	12:40	GW	JM	2	1			3
4	IP-16S-20070426-01	4/26/07	13:10	GW	JM			2		2
5	IP-17S-20070426-01	4/26/07	14:10	GW	JM			2		2
6	MW-117-20070426-01	4/26/07	15:00	GW	JF	2	1			3
6	MW-117-20070426-MS	4/26/07	15:00	GW	JF	2				2
6	MW-117-20070426-MSD	4/26/07	15:00	GW	JF	2				2
7	MW-213-20070426-01	4/26/07	16:05	GW	JM	2	1			3
8	DUP-002-20070426-01	4/26/07	00:00	GW	JM			2		2
					Container Type	V	P	V		
					Preservative	B	C	H		

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	4/27/07 17:00	[signature]	4/27 12:00
[signature]	4/27/07 8:45	Kendra Jenn[illegible]	4/27 8:45

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01(rev. 14-May-04)

ANALYTICAL REPORT

Lab Number:	L0706127
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jeremy Picard
Project Name:	RAYTHEON WAYLAND
Project Number:	0061882
Report Date:	05/10/07

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (200305), NJ (MA935), RI (LAO00065), ME (2006012), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706127
Report Date: 05/10/07

Alpha Sample ID	Client ID	Sample Location
L0706127-01	MW-107-20070426-01	WAYLAND, MA
L0706127-02	MW-109-20070426-01	WAYLAND, MA
L0706127-03	MW-111-20070426-01	WAYLAND, MA
L0706127-04	DUP-003-20070426-01	WAYLAND, MA

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706127
Project Number:	0061882	**Report Date:**	05/10/07

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, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	NO
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

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:** L0706127
Project Number: 0061882 **Report Date:** 05/10/07

Case Narrative

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

MCP Related Narratives

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Volatile Organics

L0706127-01 and -04 had pH's >2.

L0706127-03 required re-analysis on dilution in order to quantitate the sample within the range of the calibration. The result is reported as a greater than value for the compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound which exceeded the range of the calibration.

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

Metals

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

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:

Title: Technical Director Date: 05/10/07

ORGANICS

VOLATILES

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706127

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706127-01	Date Collected:	04/26/07 12:00
Client ID:	MW-107-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/08/07 09:43		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	0.59		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	71		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	6.8		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706127

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706127-01	Date Collected:	04/26/07 12:00
Client ID:	MW-107-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	104		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706127

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706127-02	Date Collected:	04/26/07 12:45
Client ID:	MW-109-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/08/07 10:15		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	16		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	3.1		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706127

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706127-02	Date Collected:	04/26/07 12:45
Client ID:	MW-109-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	103		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706127

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706127-03	Date Collected:	04/26/07 14:15
Client ID:	MW-111-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/08/07 10:47		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	1.4		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	77		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	2.6		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	>100		ug/l	.5	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.6		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706127

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706127-03	Date Collected:	04/26/07 14:15
Client ID:	MW-111-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	102		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706127

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706127-03 R	Date Collected:	04/26/07 14:15
Client ID:	MW-111-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/08/07 14:13		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Trichloroethene	240		ug/l	2.5	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	101		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706127

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706127-04	Date Collected:	04/26/07 00:00
Client ID:	DUP-003-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/08/07 11:19		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	17		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	3.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706127

Project Number: 0061882 **Report Date:** 05/10/07

SAMPLE RESULTS

Lab ID:	L0706127-04	Date Collected:	04/26/07 00:00
Client ID:	DUP-003-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	108		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706127

Project Number: 0061882 **Report Date:** 05/10/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/08/07 08:27
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279510-6				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706127

Project Number: 0061882 **Report Date:** 05/10/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/08/07 08:27
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279510-6				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706127

Project Number: 0061882 **Report Date:** 05/10/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/08/07 08:27
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279510-6				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	109		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706127
Report Date: 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279510-4 WG279510-5					
Methylene chloride	108	102	70-130	6	25
1,1-Dichloroethane	105	107	70-130	2	25
Chloroform	110	111	70-130	1	25
Carbon tetrachloride	92	100	70-130	8	25
1,2-Dichloropropane	99	103	70-130	4	25
Dibromochloromethane	83	100	70-130	19	25
1,1,2-Trichloroethane	99	102	70-130	3	25
Tetrachloroethene	101	104	70-130	3	25
Chlorobenzene	100	100	70-130	0	25
Trichlorofluoromethane	120	120	70-130	0	25
1,2-Dichloroethane	110	116	70-130	5	25
1,1,1-Trichloroethane	104	105	70-130	1	25
Bromodichloromethane	94	103	70-130	9	25
trans-1,3-Dichloropropene	87	93	70-130	7	25
cis-1,3-Dichloropropene	87	91	70-130	4	25
1,1-Dichloropropene	102	105	70-130	3	25
Bromoform	84	112	70-130	29	50
1,1,2,2-Tetrachloroethane	96	101	70-130	5	25
Benzene	102	102	70-130	0	25
Toluene	99	97	70-130	2	25
Ethylbenzene	104	106	70-130	2	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706127
Report Date: 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279510-4 WG279510-5					
Chloromethane	98	95	70-130	3	50
Bromomethane	**48**	**55**	70-130	14	50
Vinyl chloride	95	98	70-130	3	25
Chloroethane	109	107	70-130	2	25
1,1-Dichloroethene	102	108	70-130	6	25
trans-1,2-Dichloroethene	97	96	70-130	1	25
Trichloroethene	114	103	70-130	10	25
1,2-Dichlorobenzene	97	98	70-130	1	25
1,3-Dichlorobenzene	100	97	70-130	3	25
1,4-Dichlorobenzene	99	99	70-130	0	25
Methyl tert butyl ether	86	89	70-130	3	25
p/m-Xylene	104	105	70-130	1	25
o-Xylene	98	102	70-130	4	25
cis-1,2-Dichloroethene	100	100	70-130	0	25
Dibromomethane	98	100	70-130	2	25
1,2,3-Trichloropropane	107	107	70-130	0	25
Styrene	100	104	70-130	4	25
Dichlorodifluoromethane	100	98	70-130	2	50
Acetone	117	107	70-130	9	50
Carbon disulfide	80	78	70-130	3	25
2-Butanone	105	98	70-130	7	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706127
Report Date: 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279510-4 WG279510-5					
4-Methyl-2-pentanone	93	94	70-130	1	50
2-Hexanone	106	104	70-130	2	50
Bromochloromethane	96	99	70-130	3	25
Tetrahydrofuran	81	86	70-130	6	25
2,2-Dichloropropane	97	99	70-130	2	50
1,2-Dibromoethane	95	102	70-130	7	25
1,3-Dichloropropane	101	101	70-130	0	25
1,1,1,2-Tetrachloroethane	92	102	70-130	10	25
Bromobenzene	97	98	70-130	1	25
n-Butylbenzene	100	102	70-130	2	25
sec-Butylbenzene	103	102	70-130	1	25
tert-Butylbenzene	100	98	70-130	2	25
o-Chlorotoluene	99	98	70-130	1	25
p-Chlorotoluene	103	99	70-130	4	25
1,2-Dibromo-3-chloropropane	76	111	70-130	37	50
Hexachlorobutadiene	94	109	70-130	15	25
Isopropylbenzene	110	114	70-130	4	25
p-Isopropyltoluene	104	106	70-130	2	25
Naphthalene	78	92	70-130	16	25
n-Propylbenzene	103	102	70-130	1	25
1,2,3-Trichlorobenzene	80	94	70-130	16	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706127
Report Date: 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279510-4 WG279510-5					
1,2,4-Trichlorobenzene	78	92	70-130	16	25
1,3,5-Trimethylbenzene	101	101	70-130	0	25
1,2,4-Trimethylbenzene	100	98	70-130	2	25
Ethyl ether	80	82	70-130	2	25
Isopropyl Ether	94	98	70-130	4	25
Ethyl-Tert-Butyl-Ether	94	95	70-130	1	25
Tertiary-Amyl Methyl Ether	86	91	70-130	6	25
1,4-Dioxane	109	100	70-130	9	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		111		70-130
Toluene-d8	101		103		70-130
4-Bromofluorobenzene	101		97		70-130
Dibromofluoromethane	102		101		70-130

METALS

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706127
Project Number:	0061882	**Report Date:**	05/10/07

SAMPLE RESULTS

Lab ID:	L0706127-02	Date Collected:	04/26/07 12:45
Client ID:	MW-109-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	15		mg/l	2.0	1	05/02/07 17:30	05/03/07 19:14	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706127
Project Number:	0061882	**Report Date:**	05/10/07

SAMPLE RESULTS

Lab ID:	L0706127-03	Date Collected:	04/26/07 14:15
Client ID:	MW-111-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	53		mg/l	2.0	1	05/02/07 17:30	05/03/07 19:17	EPA 3005A	60,6010B	MG

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706127

Project Number: 0061882 **Report Date:** 05/10/07

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series for sample(s): 02-03 Batch: WG278913-1									
Sodium, Dissolved	ND		mg/l	2.0	1	05/02/07 17:30	05/03/07 18:52	60,6010B	MG

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0706127

Report Date: 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 02-03 Batch: WG278913-2 WG278913-3					
Sodium, Dissolved	96	95	80-120	1	20

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706127
Report Date: 05/10/07

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0706127-01A	Vial Na2S2O3 preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706127-01B	Vial Na2S2O3 preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706127-02A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706127-02B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706127-02C	Plastic 250ml HNO3 preserved	A	<2	2.8C	Y	Absent	MCP-NA-6010S
L0706127-03A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706127-03B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706127-03C	Plastic 250ml HNO3 preserved	A	<2	2.8C	Y	Absent	MCP-NA-6010S
L0706127-04A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706127-04B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706127
Project Number:	0061882	**Report Date:**	05/10/07

GLOSSARY

Acronyms

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.
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.
ND - Not detected at the reported detection limit for the sample.
RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
- 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.

Terms

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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Report Format: Not Specified

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706127
Project Number:	0061882	**Report Date:**	05/10/07

REFERENCES

60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

LIMITATION OF LIABILITIES

Alpha Woods Hole Labs 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 Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods Hole Labs 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 Woods Hole Labs.

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.

05100712:09

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA WOODS HOLE LABS

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

RAYNHAM, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 4/27

ALPHA Job #: L0706127

(5)

Client Information

Client: ERM

Address: 399 Boylston St 6th Floor Boston MA 02116

Phone: 617-646-7800

Fax: 617-267-6447

Email:

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon Wayland

Project Location: Wayland MA

Project #: 0061882

Project Manager: J. Picard

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 05/04 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL

☒ FADEx ☒ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program: MCP

Criteria: GW-1

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

ANALYSIS: 8021c; 8021c; Dissolved Sodium (FE) (GW03)

SAMPLE HANDLING

Filtration: ☐ Done ☐ Not needed ☐ Lab to do

Preservation: ☐ Lab to do (Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	8021c	8021c	Dissolved Sodium (FE) (GW03)	Sample Specific Comments	TOTAL # BOTTLES
06127-01	MW-107-20070426-01	4/26/07	12:00	GW	LR	X				2
-02	MW-109-20070426-01	4/26/07	12:45	GW	LR	X		X		3
-03	MW-111-20070426-01	4/26/07	14:15	GW	LR	X		X		3
-04	DUP-003-20070426-01	4/26/07	2400	GW	LR	X				2

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Container Type	V	V	P
Preservative	B	H	C

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	4/26/07 12:00	[illegible]	4/27 1510
[illegible]	4/27/07 18:45	[illegible]	4/27 18:45

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01 (rev. 10-OCT-05)

ANALYTICAL REPORT

Lab Number:	L0706128
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jeremy Picard
Project Name:	RAYTHEON WAYLAND
Project Number:	0061882
Report Date:	05/09/07

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (200305), NJ (MA935), RI (LAO00065), ME (2006012), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706128
Report Date: 05/09/07

Alpha Sample ID	Client ID	Sample Location
L0706128-01	MW-47S-20070426-01	WAYLAND, MA
L0706128-02	MW-113-20070426-01	WAYLAND, MA
L0706128-03	MW-115-20070426-01	WAYLAND, MA
L0706128-04	MW-118-20070426-01	WAYLAND, MA
L0706128-05	MW-405S-20070426-01	WAYLAND, MA
L0706128-06	MW-40S-20070426-01	WAYLAND, MA
L0706128-07	MW-404-20070426-01	WAYLAND, MA
L0706128-08	MW-403-20070426-01	WAYLAND, MA

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706128
Project Number:	0061882	**Report Date:**	05/09/07

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, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	NA

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	YES
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

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:** L0706128
Project Number: 0061882 **Report Date:** 05/09/07

Case Narrative

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

MCP Related Narratives:
Sample Receipt
The samples were Field Filtered for Dissolved Metals only.
Volatile Organics
It should be noted that L0706128-01 and -04 were received in the laboratory with a pH greater than two.
L0706128-08 was re-analyzed due to an over dilution on the original analysis. The results of the re-analysis are reported.
L0706128-03 and -08 have elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the samples.
In reference to question F:
At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.
Metals
In reference to question F:
At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

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:

Title: Technical Director Date: 05/09/07

ORGANICS

VOLATILES

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-01	Date Collected:	04/26/07 08:00
Client ID:	MW-47S-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/08/07 11:52		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.80		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	4.4		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.94		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-01	Date Collected:	04/26/07 08:00
Client ID:	MW-47S-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	106		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-02	Date Collected:	04/26/07 10:00
Client ID:	MW-113-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/08/07 12:24		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	2.6		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	21		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-02	Date Collected:	04/26/07 10:00
Client ID:	MW-113-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	107		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-03	Date Collected:	04/26/07 11:25
Client ID:	MW-115-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/08/07 12:57		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	12	2.5
1,1-Dichloroethane	ND		ug/l	1.9	2.5
Chloroform	ND		ug/l	1.9	2.5
Carbon tetrachloride	ND		ug/l	1.2	2.5
1,2-Dichloropropane	ND		ug/l	4.4	2.5
Dibromochloromethane	ND		ug/l	1.2	2.5
1,1,2-Trichloroethane	ND		ug/l	1.9	2.5
Tetrachloroethene	ND		ug/l	1.2	2.5
Chlorobenzene	ND		ug/l	1.2	2.5
1,2-Dichloroethane	ND		ug/l	1.2	2.5
1,1,1-Trichloroethane	72		ug/l	1.2	2.5
Bromodichloromethane	ND		ug/l	1.2	2.5
trans-1,3-Dichloropropene	ND		ug/l	1.2	2.5
cis-1,3-Dichloropropene	ND		ug/l	1.2	2.5
Bromoform	ND		ug/l	5.0	2.5
1,1,2,2-Tetrachloroethane	ND		ug/l	1.2	2.5
Chloromethane	ND		ug/l	6.2	2.5
Vinyl chloride	ND		ug/l	2.5	2.5
Chloroethane	ND		ug/l	2.5	2.5
1,1-Dichloroethene	2.6		ug/l	1.2	2.5
trans-1,2-Dichloroethene	ND		ug/l	1.9	2.5
Trichloroethene	230		ug/l	1.2	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	2.5
1,3-Dichlorobenzene	ND		ug/l	6.2	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	2.5
cis-1,2-Dichloroethene	5.9		ug/l	1.2	2.5
Dichlorodifluoromethane	ND		ug/l	12	2.5
1,2-Dibromoethane	ND		ug/l	5.0	2.5
1,3-Dichloropropane	ND		ug/l	6.2	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	1.2	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-03	Date Collected:	04/26/07 11:25
Client ID:	MW-115-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	6.2	2.5
p-Chlorotoluene	ND		ug/l	6.2	2.5
Hexachlorobutadiene	ND		ug/l	1.5	2.5
1,2,4-Trichlorobenzene	ND		ug/l	6.2	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	107		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-04	Date Collected:	04/26/07 12:30
Client ID:	MW-118-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/08/07 13:40		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	5.0		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-04	Date Collected:	04/26/07 12:30
Client ID:	MW-118-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-05	Date Collected:	04/26/07 14:20
Client ID:	MW-405S-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/09/07 05:03		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-05	Date Collected:	04/26/07 14:20
Client ID:	MW-405S-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	115		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	114		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-06	Date Collected:	04/26/07 08:32
Client ID:	MW-40S-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/09/07 05:34		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	3.7		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	1.3		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	1.7		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.3		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-06	Date Collected:	04/26/07 08:32
Client ID:	MW-40S-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	114		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-07	Date Collected:	04/26/07 12:40
Client ID:	MW-404-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/09/07 06:05		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	0.80		ug/l	0.75	1
Chloroform	1.6		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.6		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-07	Date Collected:	04/26/07 12:40
Client ID:	MW-404-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	112		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-08 R	Date Collected:	04/26/07 16:45
Client ID:	MW-403-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/09/07 13:34		
Analyst:	BT		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	25	5
1,1-Dichloroethane	ND		ug/l	3.8	5
Chloroform	ND		ug/l	3.8	5
Carbon tetrachloride	ND		ug/l	2.5	5
1,2-Dichloropropane	ND		ug/l	8.8	5
Dibromochloromethane	ND		ug/l	2.5	5
1,1,2-Trichloroethane	ND		ug/l	3.8	5
Tetrachloroethene	6.3		ug/l	2.5	5
Chlorobenzene	ND		ug/l	2.5	5
1,2-Dichloroethane	ND		ug/l	2.5	5
1,1,1-Trichloroethane	ND		ug/l	2.5	5
Bromodichloromethane	ND		ug/l	2.5	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	5
Bromoform	ND		ug/l	10	5
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	5
Chloromethane	ND		ug/l	12	5
Vinyl chloride	ND		ug/l	5.0	5
Chloroethane	ND		ug/l	5.0	5
1,1-Dichloroethene	ND		ug/l	2.5	5
trans-1,2-Dichloroethene	ND		ug/l	3.8	5
Trichloroethene	190		ug/l	2.5	5
1,2-Dichlorobenzene	ND		ug/l	12	5
1,3-Dichlorobenzene	ND		ug/l	12	5
1,4-Dichlorobenzene	ND		ug/l	12	5
cis-1,2-Dichloroethene	8.4		ug/l	2.5	5
Dichlorodifluoromethane	ND		ug/l	25	5
1,2-Dibromoethane	ND		ug/l	10	5
1,3-Dichloropropane	ND		ug/l	12	5
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-08 R	Date Collected:	04/26/07 16:45
Client ID:	MW-403-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	12	5
p-Chlorotoluene	ND		ug/l	12	5
Hexachlorobutadiene	ND		ug/l	3.0	5
1,2,4-Trichlorobenzene	ND		ug/l	12	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	129		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	114		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/08/07 08:27
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279510-6				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/08/07 08:27
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279510-6				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/08/07 08:27
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279510-6				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	109		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/08/07 20:18
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 05-07 Batch: WG279680-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/08/07 20:18
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 05-07 Batch: WG279680-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/08/07 20:18
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 05-07 Batch: WG279680-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	111		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/09/07 09:24
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 08 Batch: WG279711-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dichlorodifluoromethane	ND		ug/l	5.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
o-Chlorotoluene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/09/07 09:24
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 08 Batch: WG279711-3				
p-Chlorotoluene	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	114		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	113		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706128
Report Date: 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-07 Batch: WG279680-1 WG279680-2					
Methylene chloride	106	114	70-130	7	25
1,1-Dichloroethane	106	116	70-130	9	25
Chloroform	103	111	70-130	7	25
Carbon tetrachloride	100	108	70-130	8	25
1,2-Dichloropropane	95	103	70-130	8	25
Dibromochloromethane	100	108	70-130	8	25
1,1,2-Trichloroethane	97	109	70-130	12	25
Tetrachloroethene	102	108	70-130	6	25
Chlorobenzene	99	110	70-130	11	25
Trichlorofluoromethane	115	130	70-130	12	25
1,2-Dichloroethane	106	110	70-130	4	25
1,1,1-Trichloroethane	113	116	70-130	3	25
Bromodichloromethane	94	105	70-130	11	25
trans-1,3-Dichloropropene	96	105	70-130	9	25
cis-1,3-Dichloropropene	90	99	70-130	10	25
1,1-Dichloropropene	100	107	70-130	7	25
Bromoform	98	109	70-130	11	50
1,1,2,2-Tetrachloroethane	116	125	70-130	7	25
Benzene	90	97	70-130	7	25
Toluene	98	108	70-130	10	25
Ethylbenzene	101	111	70-130	9	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706128
Report Date: 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-07 Batch: WG279680-1 WG279680-2					
Chloromethane	97	106	70-130	9	50
Bromomethane	70	83	70-130	17	50
Vinyl chloride	88	107	70-130	19	25
Chloroethane	98	113	70-130	14	25
1,1-Dichloroethene	98	116	70-130	17	25
trans-1,2-Dichloroethene	92	107	70-130	15	25
Trichloroethene	96	101	70-130	5	25
1,2-Dichlorobenzene	99	107	70-130	8	25
1,3-Dichlorobenzene	99	110	70-130	11	25
1,4-Dichlorobenzene	97	108	70-130	11	25
Methyl tert butyl ether	88	94	70-130	7	25
p/m-Xylene	99	109	70-130	10	25
o-Xylene	94	102	70-130	8	25
cis-1,2-Dichloroethene	106	115	70-130	8	25
Dibromomethane	92	98	70-130	6	25
1,2,3-Trichloropropane	122	130	70-130	6	25
Styrene	96	104	70-130	8	25
Dichlorodifluoromethane	110	120	70-130	9	50
Acetone	127	127	70-130	0	50
Carbon disulfide	71	81	70-130	13	25
2-Butanone	99	103	70-130	4	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706128
Report Date: 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-07 Batch: WG279680-1 WG279680-2					
4-Methyl-2-pentanone	92	98	70-130	6	50
2-Hexanone	111	112	70-130	1	50
Bromochloromethane	98	106	70-130	8	25
Tetrahydrofuran	98	100	70-130	2	25
2,2-Dichloropropane	100	108	70-130	8	50
1,2-Dibromoethane	97	107	70-130	10	25
1,3-Dichloropropane	107	112	70-130	5	25
1,1,1,2-Tetrachloroethane	104	113	70-130	8	25
Bromobenzene	97	107	70-130	10	25
n-Butylbenzene	99	110	70-130	11	25
sec-Butylbenzene	100	112	70-130	11	25
tert-Butylbenzene	101	113	70-130	11	25
o-Chlorotoluene	101	113	70-130	11	25
p-Chlorotoluene	105	117	70-130	11	25
1,2-Dibromo-3-chloropropane	113	124	70-130	9	50
Hexachlorobutadiene	88	96	70-130	9	25
Isopropylbenzene	109	119	70-130	9	25
p-Isopropyltoluene	106	115	70-130	8	25
Naphthalene	95	103	70-130	8	25
n-Propylbenzene	103	113	70-130	9	25
1,2,3-Trichlorobenzene	94	96	70-130	2	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706128
Report Date: 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-07 Batch: WG279680-1 WG279680-2					
1,2,4-Trichlorobenzene	88	96	70-130	9	25
1,3,5-Trimethylbenzene	104	114	70-130	9	25
1,2,4-Trimethylbenzene	105	115	70-130	9	25
Ethyl ether	86	95	70-130	10	25
Isopropyl Ether	97	103	70-130	6	25
Ethyl-Tert-Butyl-Ether	81	83	70-130	2	25
Tertiary-Amyl Methyl Ether	100	106	70-130	6	25
1,4-Dioxane	97	100	70-130	3	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		112		70-130
Toluene-d8	112		110		70-130
4-Bromofluorobenzene	100		98		70-130
Dibromofluoromethane	112		114		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706128
Report Date: 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 08 Batch: WG279711-1 WG279711-2					
Methylene chloride	114	111	70-130	3	25
1,1-Dichloroethane	114	111	70-130	3	25
Chloroform	117	108	70-130	8	25
Carbon tetrachloride	118	110	70-130	7	25
1,2-Dichloropropane	99	95	70-130	4	25
Dibromochloromethane	104	108	70-130	4	25
1,1,2-Trichloroethane	99	102	70-130	3	25
Tetrachloroethene	110	106	70-130	4	25
Chlorobenzene	107	101	70-130	6	25
1,2-Dichloroethane	110	103	70-130	7	25
1,1,1-Trichloroethane	123	111	70-130	10	25
Bromodichloromethane	104	99	70-130	5	25
trans-1,3-Dichloropropene	104	101	70-130	3	25
cis-1,3-Dichloropropene	91	92	70-130	1	25
Bromoform	99	112	70-130	12	50
1,1,2,2-Tetrachloroethane	115	120	70-130	4	25
Chloromethane	105	98	70-130	7	50
Vinyl chloride	96	101	70-130	5	25
Chloroethane	95	98	70-130	3	25
1,1-Dichloroethene	109	110	70-130	1	25
trans-1,2-Dichloroethene	103	101	70-130	2	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0706128
Report Date: 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 08 Batch: WG279711-1 WG279711-2					
Trichloroethene	103	96	70-130	7	25
1,2-Dichlorobenzene	108	105	70-130	3	25
1,3-Dichlorobenzene	110	107	70-130	3	25
1,4-Dichlorobenzene	108	106	70-130	2	25
cis-1,2-Dichloroethene	110	105	70-130	5	25
Dichlorodifluoromethane	118	110	70-130	7	50
1,2-Dibromoethane	97	102	70-130	5	25
1,3-Dichloropropane	106	108	70-130	2	25
1,1,1,2-Tetrachloroethane	112	113	70-130	1	25
o-Chlorotoluene	113	110	70-130	3	25
p-Chlorotoluene	118	114	70-130	3	25
Hexachlorobutadiene	96	88	70-130	9	25
1,2,4-Trichlorobenzene	94	94	70-130	0	25

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		115		70-130
Toluene-d8	109		108		70-130
4-Bromofluorobenzene	102		103		70-130
Dibromofluoromethane	113		111		70-130

METALS

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706128
Project Number:	0061882	**Report Date:**	05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-02	Date Collected:	04/26/07 10:00
Client ID:	MW-113-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	38		mg/l	2.0	1	05/02/07 17:30	05/03/07 19:20	EPA 3005A	60,6010B	MG

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706128
Project Number:	0061882	**Report Date:**	05/09/07

SAMPLE RESULTS

Lab ID:	L0706128-03	Date Collected:	04/26/07 11:25
Client ID:	MW-115-20070426-01	Date Received:	04/27/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	59		mg/l	2.0	1	05/02/07 17:30	05/03/07 19:23	EPA 3005A	60,6010B	MG

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128

Project Number: 0061882 **Report Date:** 05/09/07

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series for sample(s): 02-03 Batch: WG278913-1									
Sodium, Dissolved	ND		mg/l	2.0	1	05/02/07 17:30	05/03/07 18:52	60,6010B	MG

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0706128

Report Date: 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 02-03 Batch: WG278913-2 WG278913-3					
Sodium, Dissolved	96	95	80-120	1	20

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0706128
Report Date: 05/09/07

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0706128-01A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-01B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-02A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-02B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-02C	Plastic 250ml HNO3 preserved	A	<2	2.8 C	Y	Absent	MCP-NA-6010S
L0706128-03A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-03B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-03C	Plastic 250ml HNO3 preserved	A	<2	2.8 C	Y	Absent	MCP-NA-6010S
L0706128-04A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-04B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-05A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-05B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-06A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-06B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-07A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-07B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-08A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-08B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0706128
Project Number:	0061882	**Report Date:**	05/09/07

GLOSSARY

Acronyms

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.

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.

ND - Not detected at the reported detection limit for the sample.

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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.

Terms

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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Report Format: Not Specified

Project Name: RAYTHEON WAYLAND **Lab Number:** L0706128
Project Number: 0061882 **Report Date:** 05/09/07

REFERENCES

60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

LIMITATION OF LIABILITIES

Alpha Woods Hole Labs 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 Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods Hole Labs 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 Woods Hole Labs.

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.

05090717:49

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA WOODS HOLE LABS

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

RAYNHAM, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 4/27

ALPHA Job #: L0706128 (F)

Client Information

Client: ERM

Address: 399 BOYLSTON ST. BOSTON MA 02116

Phone: 617-646-7800

Fax: 617-267-6947

Email: jeremy.picard@erm.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: RAYTHEON, WAYLAND

Project Location: WAYLAND, MA

Project #: 0061882

Project Manager: JEREMY PICARD

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 5/4 Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☒ ADEx ☒ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program: MCP Criteria:

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	8021c by 8260B	8021c by 8260B	Dissolved Sodium	Sample Specific Comments	TOTAL # BOTTLES
6128-1	MW-475-20070426-01	4/26/07	800	GW	BH	X				2
2	MW-113-20070426-01	4/26/07	1000	GW	BH		X	X		3
3	MW-115-20070426-01	4/26/07	1125	GW	BH		X	X		3
4	MW-118-20070426-01	4/26/07	1230	GW	BH	X				2
5	MW-405S-20070426-01	4/26/07	1420	GW	BH	X				2
6	MW-40s-20070426-01	4/26/07	0832	GW	JRF	X				2
7	MW-404-20070426-01	4/26/07	1240	GW	JRF	X				2
	~~MW-117-20070426-01~~	~~4/26/07~~	~~1500~~	~~GW~~	~~JRF~~	~~X~~	~~X~~	~~FP~~	~~FP~~	~~3~~
8	MW-403-20070426-01	4/26/07	1645	GW	BH	X				2

JM

Container Type	V	V	P
Preservative	H	B	C

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	4/26/07 1:00	[signature]	4/27 12a
[signature]	4/27/07 18:45	[signature]	4/27 18:45

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO 01-01 (rev. 10-OCT-05)

ANALYTICAL REPORT

Lab Number:	L0705913
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jeremy Picard
Project Name:	RAYTHEON WAYLAND
Project Number:	0061882
Report Date:	05/07/07

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (200305), NJ (MA935), RI (LAO00065), ME (2006012), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705913
Report Date: 05/07/07

Alpha Sample ID	Client ID	Sample Location
L0705913-01	MW-204S-20070424-01	WAYLAND, MA
L0705913-02	MW-204D-20070424-01	WAYLAND, MA
L0705913-03	DUP-004-20070424-01	WAYLAND, MA
L0705913-04	MW-203D-20070424-01	WAYLAND, MA
L0705913-05	MW-203S-20070424-01	WAYLAND, MA

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705913
Project Number:	0061882	**Report Date:**	05/07/07

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, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	YES
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

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:** L0705913
Project Number: 0061882 **Report Date:** 05/07/07

Case Narrative

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

MCP Related Narratives:

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Volatile Organics

L0705913-04 has elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the sample.

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

Metals

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

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:

Title: Technical Director Date: 05/07/07

ORGANICS

VOLATILES

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705913

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0705913-01	Date Collected:	04/24/07 14:15
Client ID:	MW-204S-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 02:51		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	8.8		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	3.3		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705913

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0705913-01	Date Collected:	04/24/07 14:15
Client ID:	MW-204S-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	110		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705913

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0705913-02	Date Collected:	04/24/07 16:00
Client ID:	MW-204D-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 03:30		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	3.1		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	3.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705913

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0705913-02	Date Collected:	04/24/07 16:00
Client ID:	MW-204D-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	114		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705913

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0705913-03	Date Collected:	04/24/07 00:00
Client ID:	DUP-004-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 05:25		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	3.1		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	3.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705913

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0705913-03	Date Collected:	04/24/07 00:00
Client ID:	DUP-004-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	126		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	112		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705913

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0705913-04	Date Collected:	04/24/07 15:45
Client ID:	MW-203D-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 04:46		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	10	2
1,1-Dichloroethane	ND		ug/l	1.5	2
Chloroform	ND		ug/l	1.5	2
Carbon tetrachloride	ND		ug/l	1.0	2
1,2-Dichloropropane	ND		ug/l	3.5	2
Dibromochloromethane	ND		ug/l	1.0	2
1,1,2-Trichloroethane	ND		ug/l	1.5	2
Tetrachloroethene	2.8		ug/l	1.0	2
Chlorobenzene	ND		ug/l	1.0	2
1,2-Dichloroethane	ND		ug/l	1.0	2
1,1,1-Trichloroethane	ND		ug/l	1.0	2
Bromodichloromethane	ND		ug/l	1.0	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	2
Bromoform	ND		ug/l	4.0	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	2
Chloromethane	ND		ug/l	5.0	2
Vinyl chloride	ND		ug/l	2.0	2
Chloroethane	ND		ug/l	2.0	2
1,1-Dichloroethene	ND		ug/l	1.0	2
trans-1,2-Dichloroethene	ND		ug/l	1.5	2
Trichloroethene	73		ug/l	1.0	2
1,2-Dichlorobenzene	ND		ug/l	5.0	2
1,3-Dichlorobenzene	ND		ug/l	5.0	2
1,4-Dichlorobenzene	ND		ug/l	5.0	2
cis-1,2-Dichloroethene	7.0		ug/l	1.0	2
Dichlorodifluoromethane	ND		ug/l	10	2
1,2-Dibromoethane	ND		ug/l	4.0	2
1,3-Dichloropropane	ND		ug/l	5.0	2
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	2

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705913

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0705913-04	Date Collected:	04/24/07 15:45
Client ID:	MW-203D-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	5.0	2
p-Chlorotoluene	ND		ug/l	5.0	2
Hexachlorobutadiene	ND		ug/l	1.2	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	126		70-130
Toluene-d8	113		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	116		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705913

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0705913-05	Date Collected:	04/24/07 16:25
Client ID:	MW-203S-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	05/05/07 04:08		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.90		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705913

Project Number: 0061882 **Report Date:** 05/07/07

SAMPLE RESULTS

Lab ID:	L0705913-05	Date Collected:	04/24/07 16:25
Client ID:	MW-203S-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	118		70-130

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705913

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/04/07 19:45
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-05 Batch: WG279309-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705913

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/04/07 19:45
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-05 Batch: WG279309-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705913

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 05/04/07 19:45
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-05 Batch: WG279309-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	106		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0705913
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-1 WG279309-2					
Methylene chloride	99	92	70-130	7	25
1,1-Dichloroethane	94	95	70-130	1	25
Chloroform	88	96	70-130	9	25
Carbon tetrachloride	94	99	70-130	5	25
1,2-Dichloropropane	85	85	70-130	0	25
Dibromochloromethane	89	91	70-130	2	25
1,1,2-Trichloroethane	94	87	70-130	8	25
Tetrachloroethene	98	97	70-130	1	25
Chlorobenzene	93	95	70-130	2	25
Trichlorofluoromethane	120	124	70-130	3	25
1,2-Dichloroethane	96	100	70-130	4	25
1,1,1-Trichloroethane	100	104	70-130	4	25
Bromodichloromethane	87	88	70-130	1	25
trans-1,3-Dichloropropene	86	91	70-130	6	25
cis-1,3-Dichloropropene	78	82	70-130	5	25
1,1-Dichloropropene	95	93	70-130	2	25
Bromoform	96	94	70-130	2	50
1,1,2,2-Tetrachloroethane	110	108	70-130	2	25
Benzene	84	85	70-130	1	25
Toluene	94	92	70-130	2	25
Ethylbenzene	96	97	70-130	1	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705913
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-1 WG279309-2					
Chloromethane	106	101	70-130	5	50
Bromomethane	84	73	70-130	14	50
Vinyl chloride	103	93	70-130	10	25
Chloroethane	99	97	70-130	2	25
1,1-Dichloroethene	109	105	70-130	4	25
trans-1,2-Dichloroethene	94	93	70-130	1	25
Trichloroethene	88	88	70-130	0	25
1,2-Dichlorobenzene	97	92	70-130	5	25
1,3-Dichlorobenzene	99	96	70-130	3	25
1,4-Dichlorobenzene	97	94	70-130	3	25
Methyl tert butyl ether	81	82	70-130	1	25
p/m-Xylene	96	97	70-130	1	25
o-Xylene	90	90	70-130	0	25
cis-1,2-Dichloroethene	92	95	70-130	3	25
Dibromomethane	82	80	70-130	2	25
1,2,3-Trichloropropane	112	104	70-130	7	25
Styrene	89	92	70-130	3	25
Dichlorodifluoromethane	120	120	70-130	0	50
Acetone	117	97	70-130	19	50
Carbon disulfide	79	78	70-130	1	25
2-Butanone	119	120	70-130	1	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705913
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-1 WG279309-2					
4-Methyl-2-pentanone	78	80	70-130	3	50
2-Hexanone	93	104	70-130	11	50
Bromochloromethane	88	92	70-130	4	25
Tetrahydrofuran	83	86	70-130	4	25
2,2-Dichloropropane	90	98	70-130	9	50
1,2-Dibromoethane	90	94	70-130	4	25
1,3-Dichloropropane	91	93	70-130	2	25
1,1,1,2-Tetrachloroethane	91	98	70-130	7	25
Bromobenzene	101	92	70-130	9	25
n-Butylbenzene	100	98	70-130	2	25
sec-Butylbenzene	102	98	70-130	4	25
tert-Butylbenzene	103	96	70-130	7	25
o-Chlorotoluene	98	96	70-130	2	25
p-Chlorotoluene	101	99	70-130	2	25
1,2-Dibromo-3-chloropropane	100	113	70-130	12	50
Hexachlorobutadiene	90	88	70-130	2	25
Isopropylbenzene	104	105	70-130	1	25
p-Isopropyltoluene	107	102	70-130	5	25
Naphthalene	98	88	70-130	11	25
n-Propylbenzene	102	98	70-130	4	25
1,2,3-Trichlorobenzene	93	86	70-130	8	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON WAYLAND
Project Number: 0061882
Lab Number: L0705913
Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-1 WG279309-2					
1,2,4-Trichlorobenzene	91	88	70-130	3	25
1,3,5-Trimethylbenzene	101	96	70-130	5	25
1,2,4-Trimethylbenzene	104	99	70-130	5	25
Ethyl ether	84	92	70-130	9	25
Isopropyl Ether	84	87	70-130	4	25
Ethyl-Tert-Butyl-Ether	86	91	70-130	6	25
Tertiary-Amyl Methyl Ether	97	98	70-130	1	25
1,4-Dioxane	72	80	70-130	11	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		114		70-130
Toluene-d8	111		107		70-130
4-Bromofluorobenzene	104		98		70-130
Dibromofluoromethane	104		106		70-130

METALS

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705913
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0705913-01	Date Collected:	04/24/07 14:15
Client ID:	MW-204S-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	30		mg/l	2.0	1	04/26/07 16:40	05/02/07 14:07	EPA 3005A	60,6010B	AI

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705913
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0705913-02	Date Collected:	04/24/07 16:00
Client ID:	MW-204D-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	43		mg/l	2.0	1	04/26/07 16:40	05/02/07 14:28	EPA 3005A	60,6010B	AI

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705913
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0705913-04	Date Collected:	04/24/07 15:45
Client ID:	MW-203D-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	73		mg/l	2.0	1	04/26/07 16:40	05/02/07 14:31	EPA 3005A	60,6010B	AI

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705913
Project Number:	0061882	**Report Date:**	05/07/07

SAMPLE RESULTS

Lab ID:	L0705913-05	Date Collected:	04/24/07 16:25
Client ID:	MW-203S-20070424-01	Date Received:	04/25/07
Sample Location:	WAYLAND, MA	Field Prep:	Field Filtered
Matrix:	Water		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	42		mg/l	2.0	1	04/26/07 16:40	05/02/07 14:34	EPA 3005A	60,6010B	AI

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705913

Project Number: 0061882 **Report Date:** 05/07/07

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series for sample(s): 01-02,04-05 Batch: WG278274-1									
Sodium, Dissolved	ND		mg/l	2.0	1	04/26/07 16:40	05/02/07 13:38	60,6010B	AI

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0705913

Report Date: 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01-02,04-05 Batch: WG278274-2 WG278274-3					
Sodium, Dissolved	93	93	80-120	0	20

Project Name: RAYTHEON WAYLAND
Project Number: 0061882

Lab Number: L0705913
Report Date: 05/07/07

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0705913-01A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-01B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-01C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0705913-02A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-02B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-02C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0705913-03A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-03B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-04A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-04B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-04C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0705913-05A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-05B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-05C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L0705913
Project Number:	0061882	**Report Date:**	05/07/07

GLOSSARY

Acronyms

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.
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.
ND - Not detected at the reported detection limit for the sample.
RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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.

Terms

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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Report Format: Not Specified

Project Name: RAYTHEON WAYLAND **Lab Number:** L0705913
Project Number: 0061882 **Report Date:** 05/07/07

REFERENCES

60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

LIMITATION OF LIABILITIES

Alpha Woods Hole Labs 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 Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods Hole Labs 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 Woods Hole Labs.

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.

05070712:43

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/25

ALPHA Job #: L0705913

ALPHA WOODS HOLE LABS
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
RAYNHAM, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: ERM
Address: 399 Boylston St. 6th Fl. Boston, MA 02116
Phone: 617-646-7800
Fax: 617-267-6447
Email: jeremy.picard@erm.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon Wayland
Project Location: Wayland, MA
Project #: 0061882
Project Manager: J. Picard
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 05/02 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☒ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
MA / MCP	GW-1

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC-8021c	Sodium Dissolved (6010B) (FP)	Sample Specific Comments	Total # Bottles
05913-01	MW-204S-20070424-01	4/24/07	1415	GW	FP	X	X		3
-02	MW-204D-20070424-01	4/24/07	1600	GW	FP	X	X		3
-03	DUP-004-20070424-01	4/24/07	2400	GW	FP	X	X		2
-04	MW-203D-20070424-01	4/24/07	15:45	GW	LR	X	X		3
-05	MW-203S-20070424-01	4/24/07	16:25	GW	BH	X	X		3

SAMPLE HANDLING
Filtration: ☒ Done ☐ Not needed ☐ Lab to do
Preservation: ☐ Lab to do (Please specify below)

Container Type	V	P
Preservative	B	C

PLEASE ANSWER QUESTIONS ABOVE!

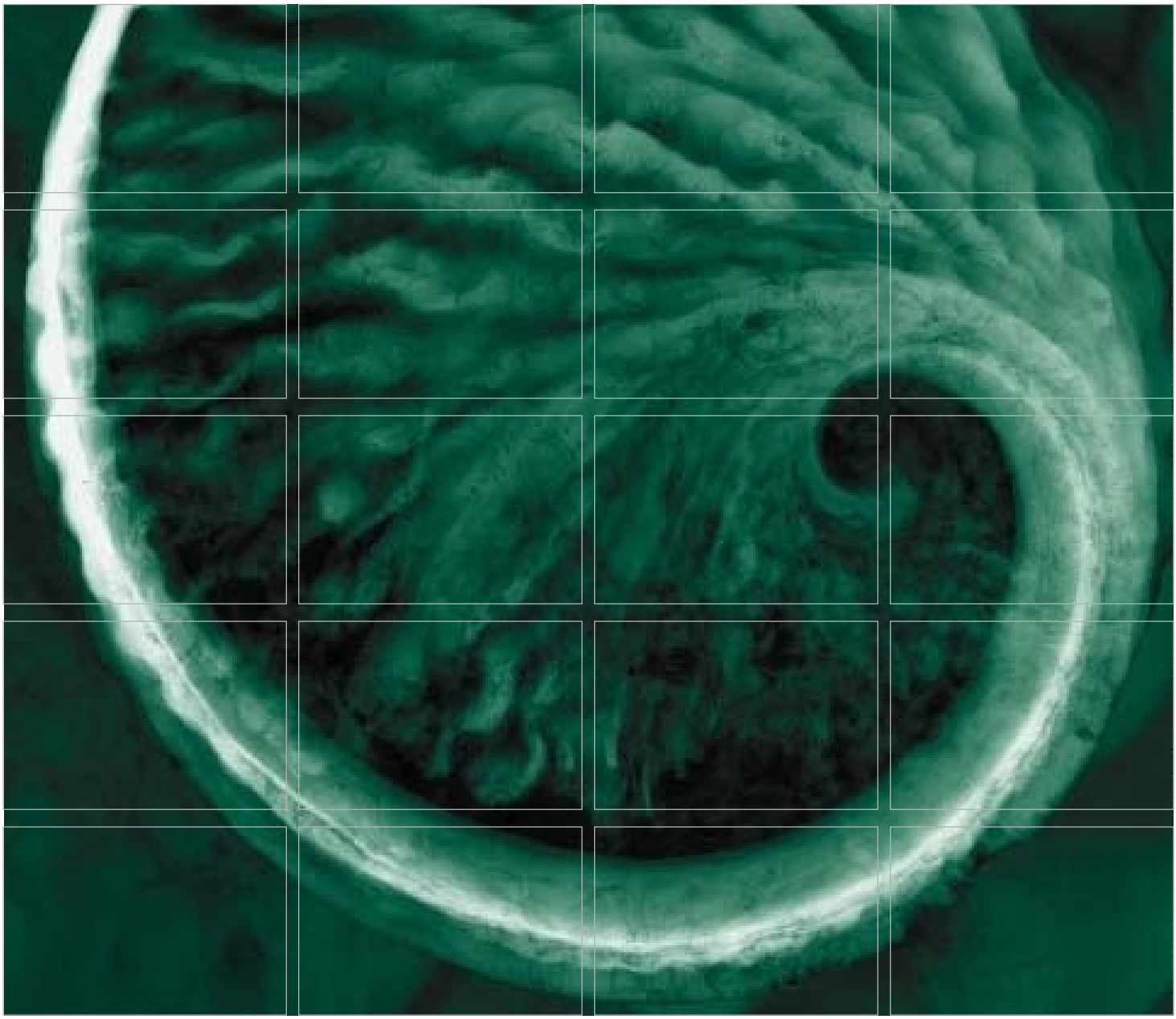
IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
Paul Gilbert	4/25/07 12:25	Paul Gilbert	4/25/07 12:25
	4/25/07 13:25		4/25 13:25

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01 (rev. 10-OCT-05)

Appendix C
2006 Wetland Restoration
Monitoring Report



2006 Wetland Restoration Monitoring Report

Raytheon Company

Former Raytheon Facility
430 Boston Post Road
Wayland, Massachusetts

USACE Permit No. 200300294
MADEP File No. 322-533

15 December 2006

Delivering sustainable solutions in a more competitive world

ERM

FINAL REPORT

Raytheon Company

2006 Wetland Restoration Monitoring Report

430 Boston Post Road

Wayland, Massachusetts

15 December 2006

USACE File #200300294

DEP File #322-553

ERM Reference: 0043034

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

Ann B. McMenemy, PWS, CWS
Wetland Scientist

Environmental Resources Management
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1.0 PROJECT OVERVIEW

Environmental Resources Management (ERM) has prepared this 2006 Wetland Restoration Monitoring Report to present third-year monitoring results for the wetland remediation site at the Former Raytheon Facility at 430 Boston Post Road in Wayland, Massachusetts (Site; Figure 1). This report is prepared in accordance with the 3 August 2006 regulatory guidance letter by the U.S. Army Corps of Engineers (USACE) entitled, "Minimum Monitoring Requirements for Compensatory Mitigation Projects Involving the Creation, Restoration, and/or Enhancement of Aquatic Resources." (USACE; 2006) It also meets the applicable permit condition requirements of the USACE, the Massachusetts Department of Environmental Protection (DEP), and the Wayland Conservation Commission (Commission). Project information is listed below.

USACE Permit No.: 200300294
DEP and Wayland Order of Conditions File No.: 322-553
Permittee: Raytheon Company, 880 Technology Park Drive, Billerica, MA
Consultant: ERM, Attn: John Drobinski, 399 Boylston Street, 6th Floor, Boston, MA
Telephone: 617-646-7800
Date Wetland Restoration Complete: 24 February 2003
Wetland Monitoring Dates: 16 May 2006, 18 August 2006, 6 October 2006
Inspected by: Ann McMenemy and Philip London (ERM)
Site Directions: Route 20 West (Boston Post Road) from Interstate 95/Route 128 (Exit 26)

This project involved restoring the approximately two-acre remediation area by re-establishing the hydrology, topography, and the emergent marsh community disturbed by the excavation and removal of contaminated soils in 2003 and 2004. Site activities in 2006 have included three wetland monitoring events, invasive species management control work, and planting additional buttonbush (*Cephalanthus occidentalis*). The third-year monitoring results by ERM reveal that the remediation area has not achieved several of the Commission's permit requirements due to the further colonization of barnyard grass (*Echinochloa crusgalli*) and revegetation issues. The 2005 annual monitoring report concluded that all of the standards for success required by the USACE were met within two growing seasons, except for 75 percent survivorship of herbaceous plants installed in 2003 (Woodlot, 2005). Raytheon is currently evaluating additional restoration activities for the wetland remediation area to meet the project's permit conditions and standards of success.

2.0 REQUIREMENTS

Special Condition No. 5 of the USACE Section 404 Permit requires that mitigation be performed in accordance with the project's *Regulatory Permit Application for Wetland Impacts Resulting from Remediation of Oils, Hazardous Materials in Sudbury River Floodplain Wetlands, Wayland, Massachusetts* (Plan; ERM, 2003). The goal of the Plan is to produce an emergent marsh community with native herbaceous species consistent with the conditions historically found in the Sudbury River floodplain. The presence of exotic and invasive species is to be minimized.

The standards for success were established in the Plan to ensure that the project can be objectively evaluated to determine if it is developing into the desired resource type and providing the expected functions. The following table identifies which standards of the Plan and additional permit requirements in the Wayland Order of Conditions (OOC) have been met based on the results of the 2006 monitoring results.

Parameter	**Standards for Success**	**Achieved**
Hydrology	Final grading of the remediation project area must be consistent with the original contours.	Yes
Soils	The soils used for restoration shall be a mixture of sand, loam, silt, and clay and 12% organic matter.	Yes
Vegetation	1. *Percent areal cover*: The remediation project area must attain at least 75% areal cover of native, non-invasive species within two growing seasons. The OOC also requires 90% or more areal coverage of wetland vegetation for three consecutive growing seasons. 2. *Survivorship of Planted Stock*: The herbaceous plantings have a 75% survival; planted buttonbush shrubs have an 80% survival within two growing seasons. The OOC also requires 100% survival of the buttonbush for three consecutive growing seasons. 3. *Invasive species*: To be controlled with reasonable measures. 4. *Erosion control*: All slopes within and adjacent to the mitigation sites are stabilized.	Yes No No; Yes No Yes Yes
Wildlife Use	Wetland and aquatic-dependant species must utilize the site.	Yes

3.0 SUMMARY DATA

ERM wetland and soil scientists conducted wetland monitoring on 16 May, 18 August, and 6 October during the 2006 growing season. Wetland monitoring involved collecting data on vegetation, soils, hydrology, and wildlife. Data collection was consistent with the methodology used by Woodlot Alternatives, Inc. (Woodlot) during the 2004 and 2005 monitoring events (Woodlot 2004 and 2005).

The figures attached to this report collectively show the location of the compensatory mitigation site relative to other landscape features, its boundaries, habitat types, locations of photographic reference points, sampling data points, and other features pertinent to the mitigation plan. The locations of the photographs are depicted on Figure 3.

3.1 HYDROLOGY

Pre- and post-remediation topographic elevations were previously surveyed and found to be consistent with the original contours (Woodlot 2004). Based on field observations, hydrologic conditions range from shallow inundation to seasonal saturation depending on the season and location within the remediation project area. In May 2006, ERM observed a majority of the remediation area inundated with 12 to 18 inches of standing water (Photograph 1). In August and October 2006, the flood waters of the Sudbury River had subsided, and surface saturation was observed throughout the remediation area, except for several small pockets of standing water and about four to six inches of flowing water in the swale.

3.2 SOILS

On 6 October 2006, ERM augured three holes to a depth of 30 to 35 inches to document the soil characteristics, including texture, organic content, soil layers, Munsell matrix colors, and Munsell redoximorphoric colors, size, and abundances of depletions and concentrations. The soil boring locations are shown on Figure 3; descriptions can be found in Table 1.

The soil profile descriptions show the constructed soil surface layers ranging from 22 inches or greater in depth and consisting of sandy loam and fine sandy loam textures high in organic matter content. The wetland soils of the remediation area were manufactured off site by Agro-source,

Inc. to ensure the proper organic matter content and textures consistent with the composition of floodplain soils (ERM; 2003). These soils are too young to display hydric soil morphology. However, the frequently flooded nature of these soils for a long duration during the growing season is consistent with the definition of a hydric soil (New England Hydric Soils Technical Committee; 2004).

3.3 VEGETATION

3.3.1 Areal Vegetative Cover

On 18 August 2006, ERM collected vegetation data using 25 one-meter square plots. The plots were randomly spaced throughout Areas A, B and C of the remediation area (Figure 2). Data collected in each plot included a list of species present, estimated percent areal cover by species, and percent areal cover of bare ground and water for each plot. The data was tabulated and averaged across the plots (see Table 2 for results).

The 25 data plots, when extrapolated to the entire site, yield the following results with respect to areal coverage: 51 percent coverage by non-invasive wetland vegetation, 28 percent coverage by invasive species, and 21 percent coverage of bare ground. The 2005 annual monitoring results indicated that the remediation project area had attained 75 percent areal cover of native, non-invasive wetland species within two growing seasons, thereby meeting the USACE-defined success standard for percent areal coverage (Woodlot; 2005). The difference between the 2005 and 2006 data can be attributed to a change in the distribution of the randomly-spaced plots and the further spread of barnyard grass. The 2005 monitoring report also indicated that invasive plants, including cattails (*Typha spp.)*, purple loosestrife (*Lythrum salicaria*), and barnyard grass, averaged about 20 percent of the areal coverage; while ERM's 2006 results show this coverage increasing to about 28 percent.

3.3.2 Planted Stock Survivorship

The data collected on 18 August 2006 suggests that the survivorship of planted herbaceous stock remains less than 75 percent. The 18 August 2006 monitoring procedures included meander surveys to identify plants present in the remediation area but not recorded in the 25 vegetation plots (Table 3). The results of the data plots and meander surveys reveal that only 11 of the 19 wetland plant species installed in 2003 remain. Rice-cut grass (*Leeria oryoides*) had the highest areal coverage of this group, averaging about 23 percent. Plant species installed in 2003, but not observed during the 2006 surveys, include northern blue flag (*Iris*

veriscolor), cardinal flower (*Lobelia cardinalis*), and marsh fern (*Thelypteris palustris*). These species alone account for approximately 25,000 of the 65,100 or 38 percent of the total plants that were originally planted.

The Commission requires the survival of 25 planted buttonbush for three consecutive growing seasons. These shrubs were planted in the northern portion of Area C, generally along the intermittent swale. The 18 August 2006 survey found 14 of the 25 buttonbush remaining in thriving condition. On 5 September 2006, ERM planted 11 additional buttonbush in the same general area. The shrubs were 3 to 4 feet tall and purchased from Garden in the Woods, a nursery located in Framingham, Massachusetts.

3.3.3 *Invasive Species*

ERM conducted invasive species control measures on 5, 11, and 12 September 2006 for purple loosestrife and barnyard grass, which continued the maintenance practices conducted during the 2005 growing season. Purple loosestrife seed heads were cut in and around the entire remediation area, collected in plastic bags, and then disposed of off site. The barnyard grass seed heads were cut to the ground in Area C to reduce the possibility of this seed being carried by wind to southern portions of Area C.

On 6 October 2006, ERM classified the vegetative composition of the remediation area into five categories based on wetland classification and dominance of invasive species, and then field estimated the areal extent of each category (Figure 3). This mapping was done to provide a better understanding of the distribution of invasive species at the Site. Based on this mapping, it is estimated that barnyard grass comprises 25 percent or more of the vegetative composition in about 60 percent of the remediation area. Cattail and purple loosestrife are encroaching into the remediation area from adjacent areas outside of the project area; however, neither is dominant in any project location. Common reed (*Phragmites australis*) is not present in the remediation area.

3.3.4 *Erosion*

The upland areas disturbed during the remediation project have been reclaimed and planted with upland trees and shrubs, and seeded with an erosion control seed mix. The 2005 annual monitoring report indicated that the survival of upland trees and shrubs was approximately 94 percent, including site access areas and the area along the edge of the embankment leading to the wetland floodplain (Woodlot; 2005). ERM's 2006 monitoring work confirms that the upland plantings have a high

degree of survival, and that no associated erosion problems exist in the remediation area.

3.4 WILDLIFE USE

Wildlife observations in the remediation project area are presented in Table 4. Wetland-dependent species observed during the 2006 monitoring work include Red-winged Blackbird (*Agelaius phoeniceus*), Great Blue Heron (*Ardea herodias*), and Green Frog (*Rana clamitans*). On 18 August 2006, ERM observed an approximately 10-inch long fish in the impoundment at outfall OF-2. The wildlife sightings confirm that the remediation area is meeting its success standard of supporting wetland and aquatic-dependent species.

4.0 CONCLUSIONS

The monitoring data collected in 2006 indicate that the wetland remediation project is not meeting the standard for success for areal coverage of native, non-invasive species, and the survivorship of planted stock. These deficiencies can largely can be attributed to the further colonization of barnyard grass throughout the remediation area. Barnyard grass is a summer annual grass that has a Facultative Upland indicator status, therefore, besides being an invasive plant, it is also not a wetland plant. This grass can be controlled over time through early season cutting/mowing; however, the continued cutting of barnyard grass will likely take years to show progress in portions of the remediation area where it dominates, as viable seeds are already present in the soil in great quantities. This situation is demonstrated by the further colonization of this species from past growing seasons.

Consistent with the 2003 Plan and Special Condition 69 of the Commission's OOC, restoration activities will be evaluated to determine the best alternative to meet the standards for success. Special Condition 69 requires the development of a formal restoration plan for the Commission's approval if the restoration work is not successful after three growing seasons.

5.0 REFERENCES

Environmental Resources Management. 2003. "Regulatory Permit Application for Wetland Impacts Resulting from Remediation of Oils, Hazardous Materials in Sudbury River Floodplain Wetlands, Wayland, Massachusetts," 6 February 2003.

New England Hydric Soils Technical Committee. 2004. "Field Indicators for Identifying Hydric Soils in New England, Version 3," 2004.

U.S. Army Corps of Engineers. 2006. "Minimum Monitoring Requirements for Compensatory Mitigation Projects Involving the Creation, Restoration, and/or Enhancement of Aquatic Resources, Regulatory Guidance Letter 06-03," 3 August 2006.

Woodlot Alternatives, Inc. 2004. "The Wetland Remediation Site at the Former Raytheon Facility, Wayland, Massachusetts, 2004 Wetland Restoration Monitoring Report," December 2004.

Woodlot Alternatives, Inc. 2005. "The Wetland Remediation Site at the Former Raytheon Facility, Wayland, Massachusetts, 2005 Wetland Restoration Monitoring Report," December 2005.

Tables

Table 1
Soil Profile Descriptions
Former Raytheon Facility
Wayland, Massachusetts

Test Pit Designation	Depth	Horizon	Color	Texture	Redoximorphic Features Color	Redoximorphic Features Size	Depth to Saturation	Depth to Groundwater	Comments
1	0"-35"	AC	10YR 2/1	Sandy Loam	-	-	Surface	6"	1-5% gravels; 5Y 5/1 silt deposits.
2	0"-35"	AC	10YR 2/1	Sandy Loam	-	-	Surface	Surface	1-5% gravels.
3	0"-22"	AC	2.5Y 2.5/1	Fine Loamy Sand	-	-	Surface	Surface	
	22"-23"	Cg	2.5Y 5/2	Loamy Fine Sand	-	-			Original alluvial sand lens.
	23"-30'+	Oab	10YR 2/1	Sapric	-	-			Original layer.

Notes:
"Original" indicates soils that were not disturbed by the remedial excavation.
All data collected by ERM on 18 August 2006.

Table 2
Summary of Random Vegetation Plot Surveys
Former Raytheon Facility
Wayland, Massachusetts

Plant Species	Common Name	Origin	Wetland Indicator Status	Area C Plots																				Area B Plots			Area A Plots		Species Occurrence In Plots	Total Cover In Plots (%)	Average Cover Per Plot (%)
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25			
Acorus americanus	Sweet flag	V	OBL																			30		25		5			3	60	2.4
Alisma plantago-aquatica var. parviflorum	Lesser water-plantain	P	OBL							20	2																		2	22	0.9
Bidens cernua	Nodding bur-marigold	S	OBL	3	5	5	3	1					3			1				1		10	T						9	32	1.3
Carex/Scirpus	Sedge	V	FACW												3														1	3	0.1
Cephalanthus occidentalis	Buttonbush	P	OBL																T										1	0	0
Cyperus eragrostis	Umbrella sedge	V	OBL	3	7	5	2						5				15	5		15	5	10	25					15	12	112	4.5
Digitaria sp.	Crabgrass	V	UPL																T										1	0	0.0
Echinocloa crus-galli	Barnyard grass	V	FACU	3	3	5	10	15	15	10		3	80	5	10	85	45	55	5	22	50	30	40	10		95			21	596	23.8
Eleocharis obtusa	Spike rush	P	OBL									3			T	1	1			1								5	5	11	0.4
Leersia oryzoides	Rice cut-grass	P	OBL	75	50	78	75	40		15	3	3		90			30	40		60	5				10				14	574	23.0
Ludwigia palustris	Water purslane	V	OBL							20	15				T									50				45	5	130	5.2
Lythrum salicaria	Purple loosestrife	V	FACW	10	25			4	5	20	20	3	3	1	T					1	T	5							13	97	3.9
Penthorum sedoides	Ditch stonecrop	V	OBL		10				30										T										3	40	1.6
Polygonum sp.	Smartweed	P	FACW																								5		1	5	0.2
Polygonum coccineum	Water smartweed	P	OBL						5																				1	5	0.2
Polygonum lupathifolium	Willow-weed	V	FACW+										1																1	1	0
Polygonum persicaria	Lady's thumb	V	FACW																		T							1	2	1	0
Sagittaria latifolia	Common arrowhead	P	OBL						25		15										5								3	45	1.8
Salix nigra	Black willow	V	FACW+							10																			1	10	0.4
Scirpus atrovirens	Black bulrush	V	OBL			7																							1	7	0.3
Scirpus tabernaemontanii	Soft-stemmed bulrush	P	OBL				5					3																	2	8	0.3
Sium suave	Water-parsnip	V	OBL				5																15		90				3	110	4.4
Sparganium americana	Bur-weed	V	OBL							5	25								25										3	55	2.2
Typha xglauca	Hybrid cattail	V	OBL																									7	1	7	0.3
Vegetative forb	Various	S and/or V	N/A									2			T												30	10	4	42	1.7
Thatch/bare ground				6	0	0	0	40	20	0	20	83	8	4	87	13	9	0	70	0	35	15	20	15	0	0	65	17	-	527	21.1
Saturated to surface				Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No			
Standing Water (inches)				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total % Vegetative Cover for Plot				**94**	**100**	**100**	**100**	**60**	**80**	**100**	**80**	**17**	**92**	**96**	**13**	**87**	**91**	**100**	**30**	**100**	**65**	**85**	**80**	**85**	**100**	**100**	**35**	**83**			***79***
Total % Hydrophytic (Non-invasive) Cover for Plot[1]				81	72	95	90	41	60	70	60	11	9	90	3	2	46	45	25	77	15	50	40	75	100	5	35	76			***51***
Total % Invasive Species Cover for Plot				13	28	5	10	19	20	30	20	6	83	6	10	85	45	55	5	23	50	35	40	10	0	95	0	7			***28***

Notes:
P = Planted.
S = Seeded.
V = Volunteer.
UPL = Obligate upland species, < 1% occurrence in wetlands.
FACU = Facultative upland, 1-33% occurrence in wetlands.
FAC = Facultative, 34-66% occurrence in wetlands.
FACW = Facultative wetland, 67-99% occurrence in wetlands.
FACW+ = Facultative wetland, greater occurrence than FACW.
OBL = Obligate wetland, greater than 99% occurrence in wetlands.
T = Species occurs in trace amounts.
1 = Excludes barnyard grass, purple loosestrife, and cattail.

Table 3
Summary of Plant Meander Surveys
Former Raytheon Facility
Wayland, Massachusetts

Plant Species	Common Name	Origin	Wetland Indicator Status
Acer rubrum	Red maple	V	FAC
Bidens frondosa	Beggars-tick	V	FACW
Carex lupulina	Hop-sedge	V	OBL
Eupatorium perfoliatum	Boneset	S	FACW+
Lemna gibba	Duckweed	V	OBL
Pontederia cordata	Pickerel weed	P	OBL

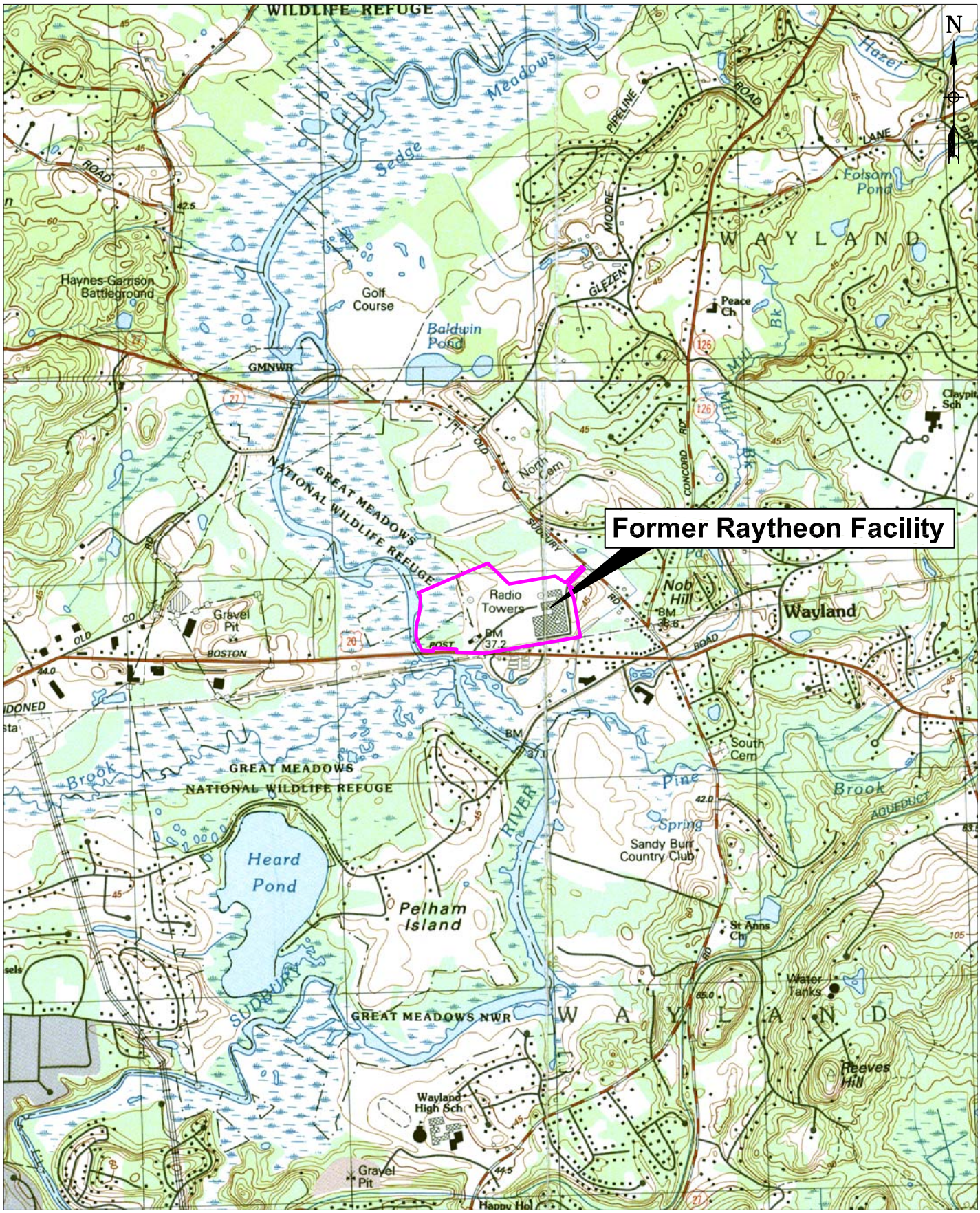
Notes:
P = Planted.
S = Seeded.
V = Volunteer.
FAC = Facultative, 34-36% occurrence in wetlands.
FACW = Facultative wetland, 67-99% occurrence in wetlands.
FACW+ = Facultative wetland, greater occurrence than FACW.
OBL = Obligate wetland, greater than 99% occurrence in wetlands.
All data collected by ERM on 18 August 2006.

Table 4
Summary of Wildlife Observations On and Adjacent to Site
Former Raytheon Facility
Wayland, Massachusetts

SCIENTIFIC NAME	COMMON NAME
Amphibians and Reptiles	
Rana clamitans	Green frog
Birds	
Agelaius phoeninceus	Red-winged blackbird
Anas platyrhynchos	Mallard
Anas rubripes	Black duck
Ardea herodias	Great blue heron
Buteo jamaicensis	Red-tailed hawk
Cardinalis cardinalis	Northern cardinal
Charadrius vociferous	Killdeer
Colaptes autetus	Northern flicker
Cyanocitta cristata	Blue jay
Dendroica petechia	Yellow warbler
Dumetella carolinensis	Gray catbird
Egretta thula	Snowy egret
Melospiza Georgiana	Swamp sparrow
Melospiza melodia	Song sparrow
Molothrus ater	Brown-headed cowbird
Quiscalus quiscala	Common grackle
Tachycineat bicolor	Tree swallow
Zenadia marcoura	Mourning dove
Mammals	
Odocoileus virginianus	White-tailed deer
Procyon lotor	Raccoon
Sciurus carolinensis	Gray squirrel
Sylvilagus floridanus	Eastern cottontail
Insects	
Enallagma signatum	Orange blue damselfly
Melanoplus sp.	Grasshopper
Sympetrum internum	Ruby meadowhawk
Vanessa cardui	Painted lady butterfly
Fish	
Ameiurus catus (or similar species)	White catfish

Notes:
All data collected by ERM on 18 August 2006.

Figures



Scale 1:25,000

0.5 km 0 500 m

0.5 mi 0 1,000 ft

Legend
Subject Property Line

Figure 1 - Site Locus Map
Former Raytheon Facility - Wayland, MA

ERM

R:\Raytheon\Wayland - 1922\REPORT - Phase 3\LOCUS.dwg (10/03/2005 - 4:23pm Boston)

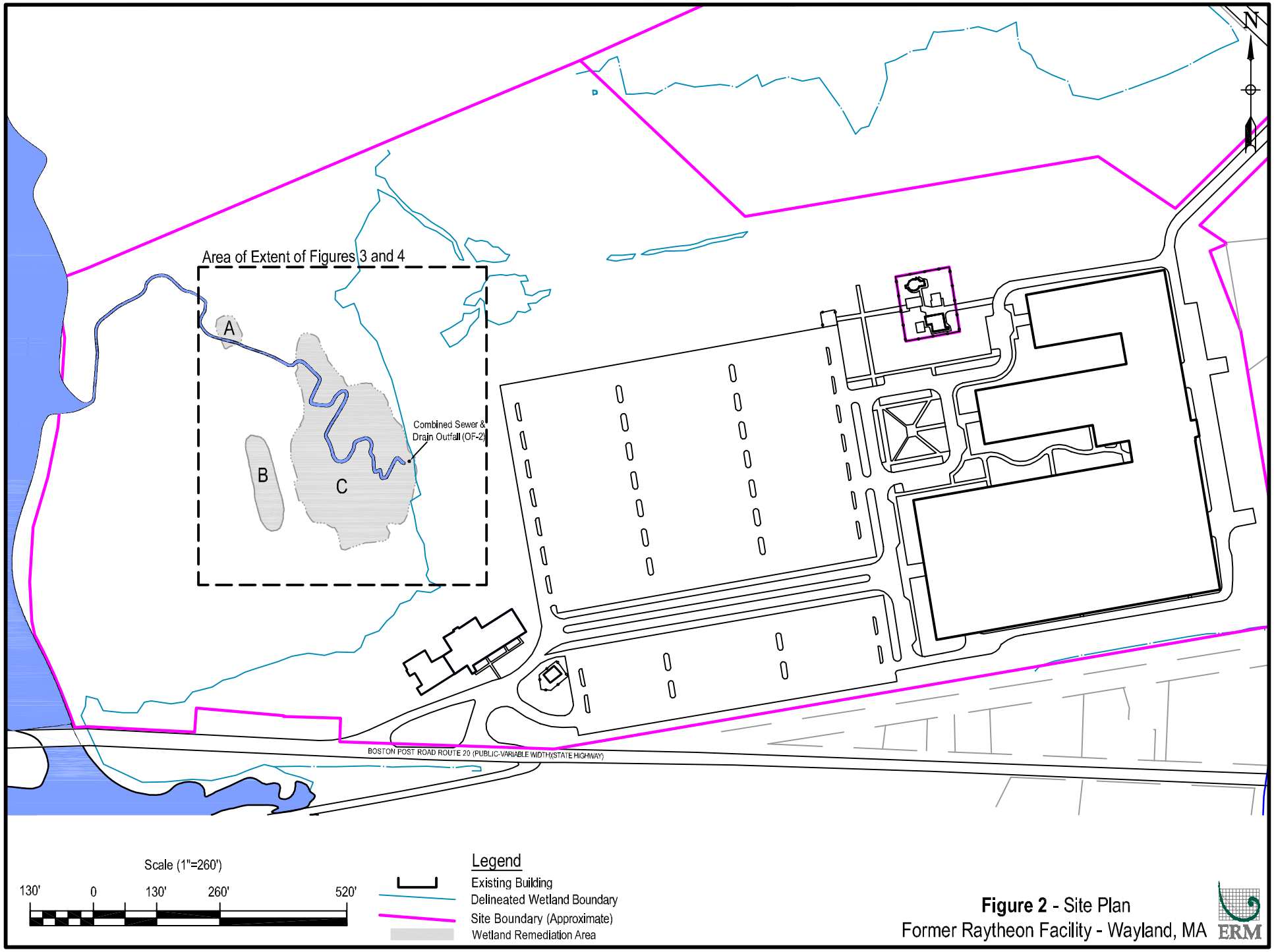


Figure 2 - Site Plan
Former Raytheon Facility - Wayland, MA

R:\Raytheon\Wayland - 1922\raytheon wetlands\Fig 2 Site Map.dwg (12/04/2006 - 4:39pm Boston)

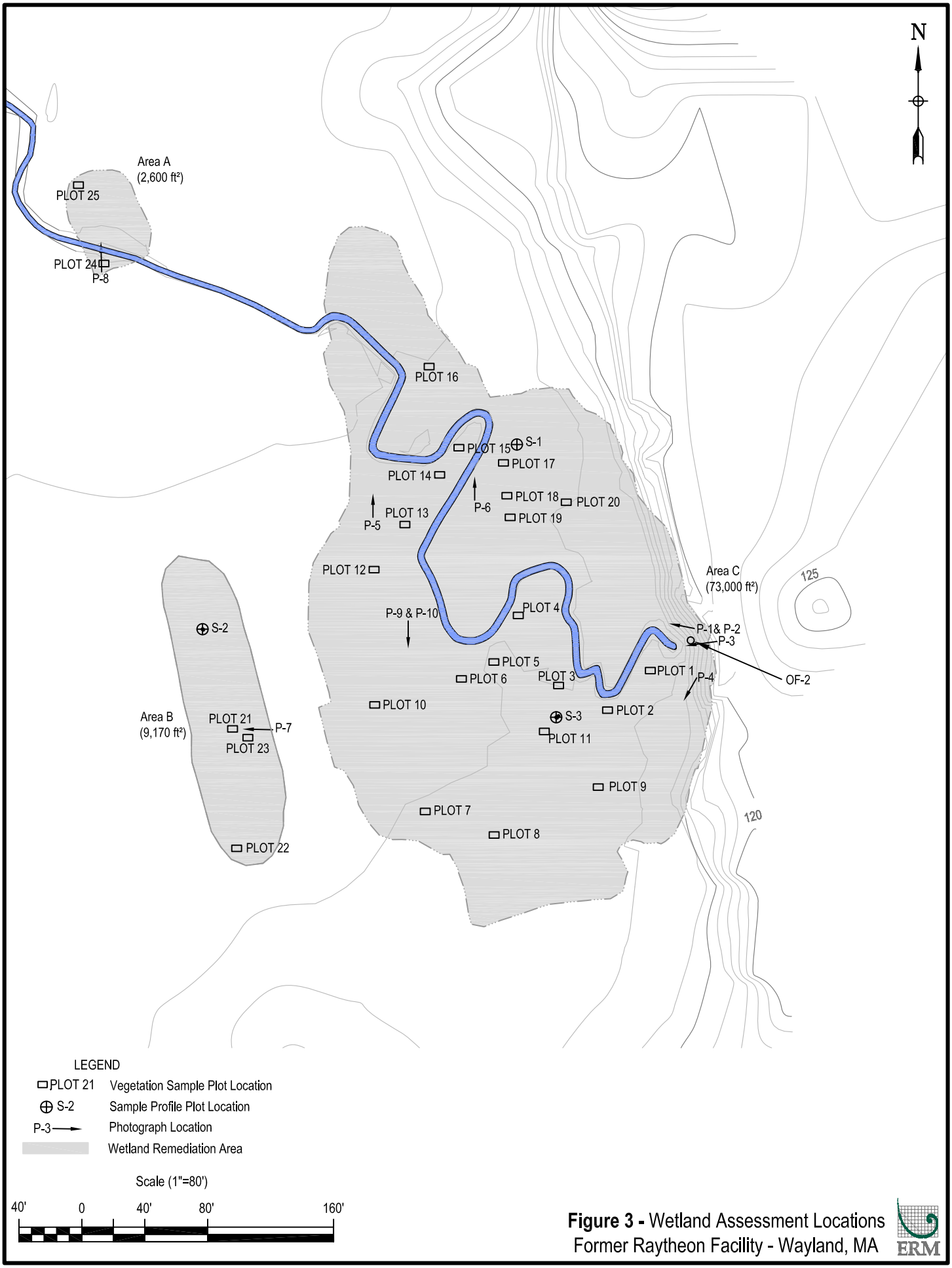
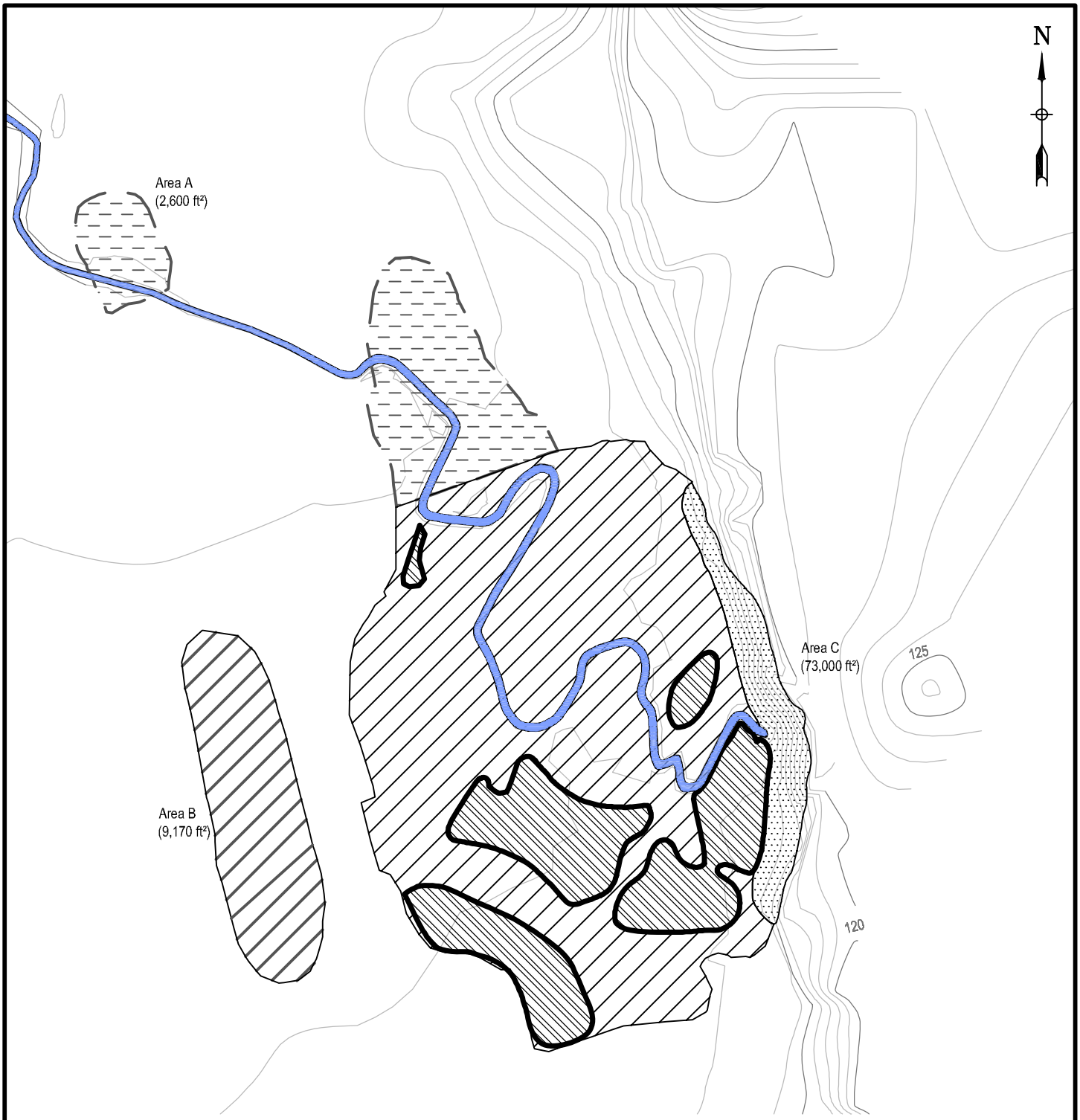


Figure 3 - Wetland Assessment Locations
Former Raytheon Facility - Wayland, MA

ERM

R:\Raytheon\Wayland - 1922\raytheon wetlands\Fig 2 Site Map.dwg (12/05/2006 - 1:54pm Boston)



Legend

- Stream Habitat (Includes Non -Invasive Vegetative Communities in Stream Channel) - 2,935 SQ.FT.
- Wetland Communities: Less Than 25% Aeral Coverage of Invasive Species (Barnyard Grass/Cattail) - 14,425 SQ.FT
- Wetland Communities: 25%-75% Aeral Coverage of Invasive Species (Barnyard Grass) - 11,550 SQ.FT
- Wetland Communities: Over 75% Aeral Coverage of Invasive Species (Barnyard Grass) - 51,210 SQ.FT
- Upland Communities: Less Than 25% Aeral Coverage of Invasive Species - 4,650 SQ.FT.
- 5' Topographic Contour
- 1' Topographic Contour

Notes:
1. Vegetative Communities were Field Estimated by ERM on 10-06-06.
2. Stream Segment in Area A is Vegetated.
3. ft² = square feet

Scale (1"=80')

40' 0 40' 80' 160'

Figure 4 - Invasive Species Mapping
Former Raytheon Facility - Wayland, MA

ERM

R:\Raytheon\Wayland - 1922\raytheon wetlands\Fig 2 Site Map.dwg (12/05/2006 - 11:08am Boston)

Appendix A
Photographs

Photograph 1 – Area C looking northwest from culvert (5/16/06).

Photograph 2 – Area C looking northwest from culvert (8/18/06).

Photograph 3 – Area C looking west from culvert (8/18/06).

Photograph 4 – Area C looking southwest from culvert (8/18/06).

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Photograph 5 – Northern extent of Area C and stream channel (8/18/06).

Photograph 6 – Central portion of Area C looking southwest along stream channel (8/18/06).

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Photograph 7 – Vegetation Plot 21 in Area B (8/18/06).

Photograph 8 – View of Area A looking north across stream channel (8/18/06).

Photograph 9 – View of south-central portion of Area C, where barnyard grass is dominating vegetative cover (8/18/06).

Photograph 10 – Similar view as Photograph 9 taken on 10/6/06.

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ERM's Boston Office

399 Boylston Street, 6th Floor
Boston, MA 02116
(617) 646-7800
(617) 267-6447 (fax)

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Appendix D
MW-40 Chloroform Sampling Memorandum

Memorandum

Environmental Resources Management

399 Boylston Street, 6th Floor
Boston, Massachusetts 02116
(617) 267-8377
(617) 267-6447 (fax)

To: Louis Burkhardt, Raytheon Company

cc: Ben Gould, CMG Environmental
Public Repositories

From: ERM Project Team

Date: 2 April 2007

Subject: MW-40 Area Chloroform Sampling

Environmental Resources Management (ERM) has prepared this memorandum to summarize sampling efforts conducted at monitoring wells MW-40 and MW-40S in the Eastern Area of the Former Raytheon Facility at 430 Boston Post Road in Wayland, Massachusetts (Site). These sampling events were conducted to evaluate the concentrations of chloroform, bromodichloromethane, and dibromochloromethane in those wells.

Background

As detailed in the 20 November 2006 Remedy Operation Status (ROS) Submittal, chloroform, bromodichloromethane (BDCM), and dibromochloromethane (DBCM) were detected above their applicable Reportable Concentrations for groundwater (RCGW-1) at MW-40.

A summary of chloroform, BDCM, and DBCM concentrations in MW-40 and MW-40S are presented in Table 1 and Table 2, respectively.

Well construction logs, included as Attachment A, show that MW-40 is screened from 12 to 22 feet below ground surface (bgs) and that MW-40S is screened from 25 to 30 feet bgs.

Response to Contaminant Detections

Additional groundwater sampling was conducted on 15 November, 29 December 2006 and 15 January 2007. The resulting analytical data confirmed concentrations of chloroform, BDCM, and DBCM were above GW-1 standards at MW-40.

On 29 December ERM personnel observed a nearby fire control system standpipe, labeled "R-8", leaking at a rate of 1.6 liters per minute. Attachment B contains photographs of the standpipe taken on that day;

Figure 1 shows the location of the standpipe and the monitoring wells. Standpipe R-8 is located on the side of the building, approximately 24 feet from the well couplet. From the photographs it can be seen that a pool of water had collected on the grass beneath the standpipe.

On 15 January 2006 Standpipe R-8 was not leaking. However, another standpipe attached to the side of the building was leaking at a rate of nearly 3 liters per minute. This "unnamed standpipe" standpipe is not labeled and lies approximately 20 feet from the well couplet. Photographs 3 and 4 in Attachment B show the "unnamed standpipe" and it's proximity to the monitoring wells.

A sample of the water leaking from the "unnamed standpipe" was collected during the January sampling event, labeled "STANDPIPE-20070115-01" and submitted to the laboratory for analysis of chlorinated volatile organic compounds by U.S. Environmental Protection Agency Method 8260B. The corresponding analytical laboratory report is included as Attachment C. Chloroform, BDCM, and DBCM were detected in the "unnamed standpipe" sample in the following concentrations: 15 micrograms per liter (µg/L) chloroform, 7.8 µg/L BDCM, and 1.8 µg/L DBCM. The relative percentages of these compounds are 61% chloroform, 32% BDCM, and 7.3% DBCM. The sample collected from MW-40 on the same day contained 7.4 µg/L chloroform, 3.6 µg/L BDCM, and 0.87 µg/L DBCM. The relative percentages of compounds in this sample, (62% chloroform, 30% BDCM, and 7.3% DBCM), are nearly identical to those in the "unnamed standpipe" sample.

Conclusion

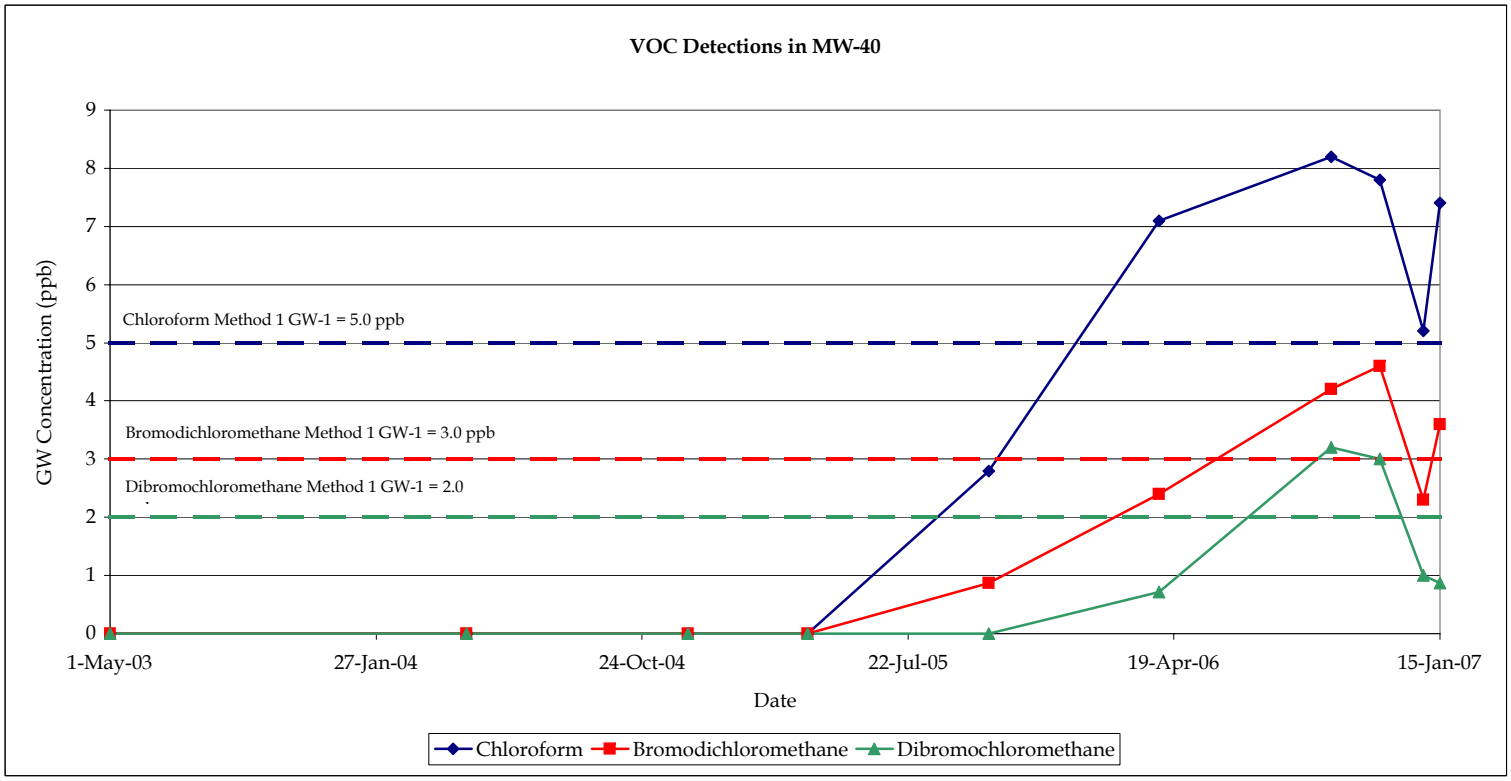
The analytical data revealed concentrations of chloroform, BDCM, and DBCM in the water leaking from the standpipes to be similar to those found in groundwater. The presence of higher concentrations of those compounds in the shallower of the two wells suggests the contaminants are migrating downward from a source above the well screens. The close proximity of the well couplet to the standpipes and the unpaved area onto which the leaking water is pooling make the standpipes a likely source of the contamination.

A Release Notification Form will not be filed on behalf of Raytheon because Raytheon is not responsible for this release of hazardous materials. Additionally, as per 310 CMR 40.0317 (20), notification is not required for the release of chloroform to groundwater attributable to leakage or discharge from a public water supply system.

Tables

Table 1
Summary of COC Detections in MW-40
Former Raytheon Facility
Wayland, Massachusetts

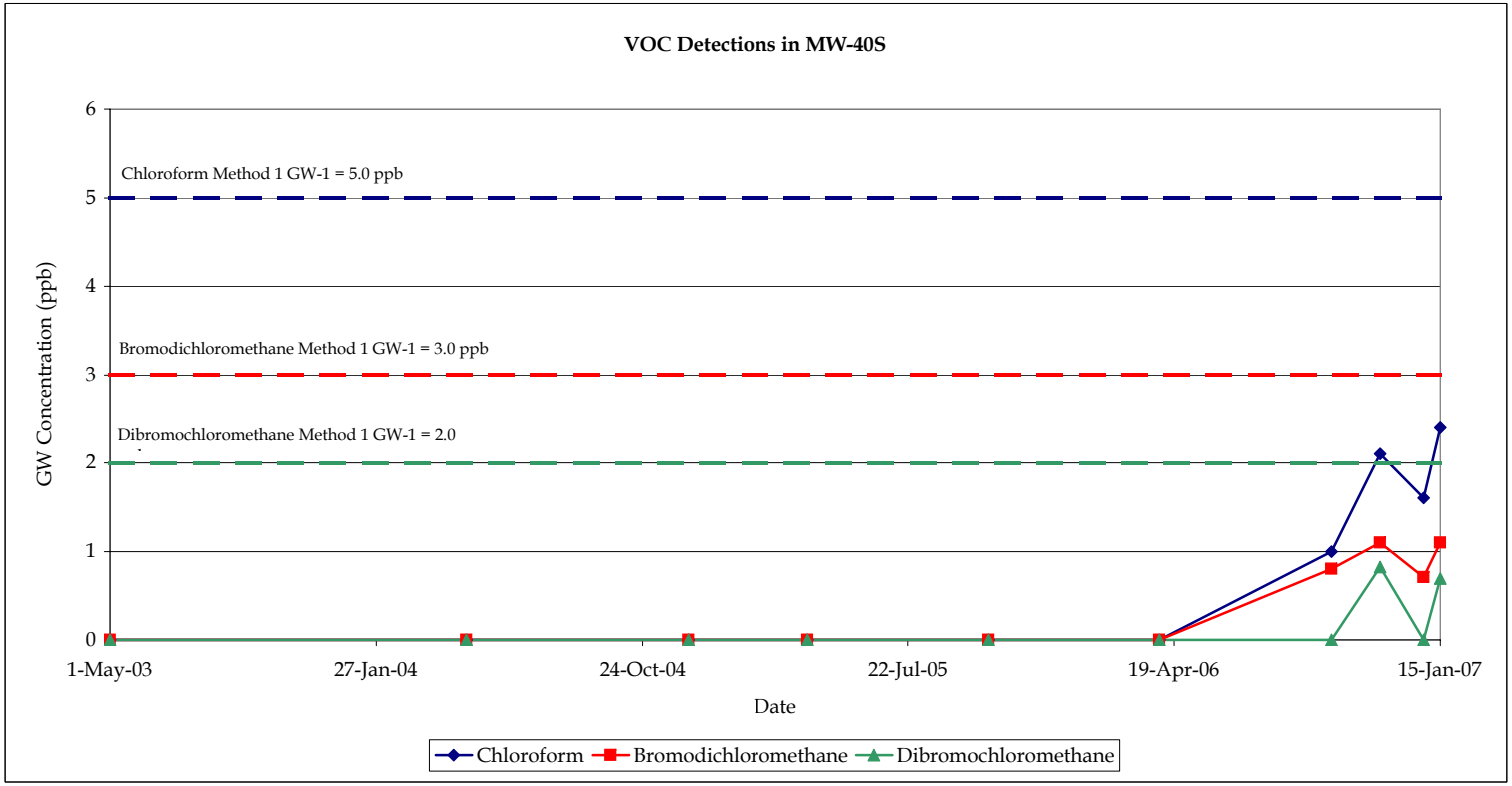
Compound	27-May-98	18-Nov-98	29-Jul-99	5-Apr-00	27-Aug-01	4-Mar-02	1-May-03	28-Apr-04	10-Dec-04	11-Apr-05	12-Oct-05	4-Apr-06	26-Sep-06	15-Nov-06	29-Dec-06	15-Jan-07
Chloroform	ND	ND	ND	ND	ND	ND	< 0.50	< 0.75	< 0.75	< 0.75	2.8	**7.1**	**8.2**	**7.8**	**5.2**	**7.4**
Bromodichloromethane	ND	ND	ND	ND	ND	ND	< 0.50	< 0.50	< 0.50	< 0.50	0.87	2.4	**4.2**	**4.6**	2.3	**3.6**
Dibromochloromethane	ND	ND	ND	ND	ND	ND	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	0.72	**3.2**	**3.0**	1.0	0.87



Notes:
Screened Interval = 12'-22' bgs
Exceedanes of MCP Method 1GW-1 Standards are in bold.
< = Compound was not detected at or above the indicated method detetion limit.
ND = Compound was not detected.

Table 2
Summary of COC Detections in MW-40S
Former Raytheon Facility
Wayland, Massachusetts

Compound	27-May-98	18-Nov-98	29-Jul-99	5-Apr-00	27-Aug-01	4-Mar-02	1-May-03	28-Apr-04	10-Dec-04	11-Apr-05	12-Oct-05	4-Apr-06	26-Sep-06	15-Nov-06	29-Dec-06	15-Jan-07
Chloroform	ND	ND	ND	ND	ND	ND	< 0.50	< 0.75	< 0.75	< 0.75	< 0.75	< 0.75	1.0	2.1	1.6	2.4
Bromodichloromethane	ND	ND	ND	ND	ND	ND	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.8	1.1	0.71	1.1
Dibromochloromethane	ND	ND	ND	ND	ND	ND	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.82	< 0.50	0.69



Notes:
Screened Interval = 25'-30' bgs
Exceedanes of MCP Method 1GW-1 Standards are in bold.
< = Compound was not detected at or above the indicated method detetion limit.
ND = Compound was not detected.

Figures

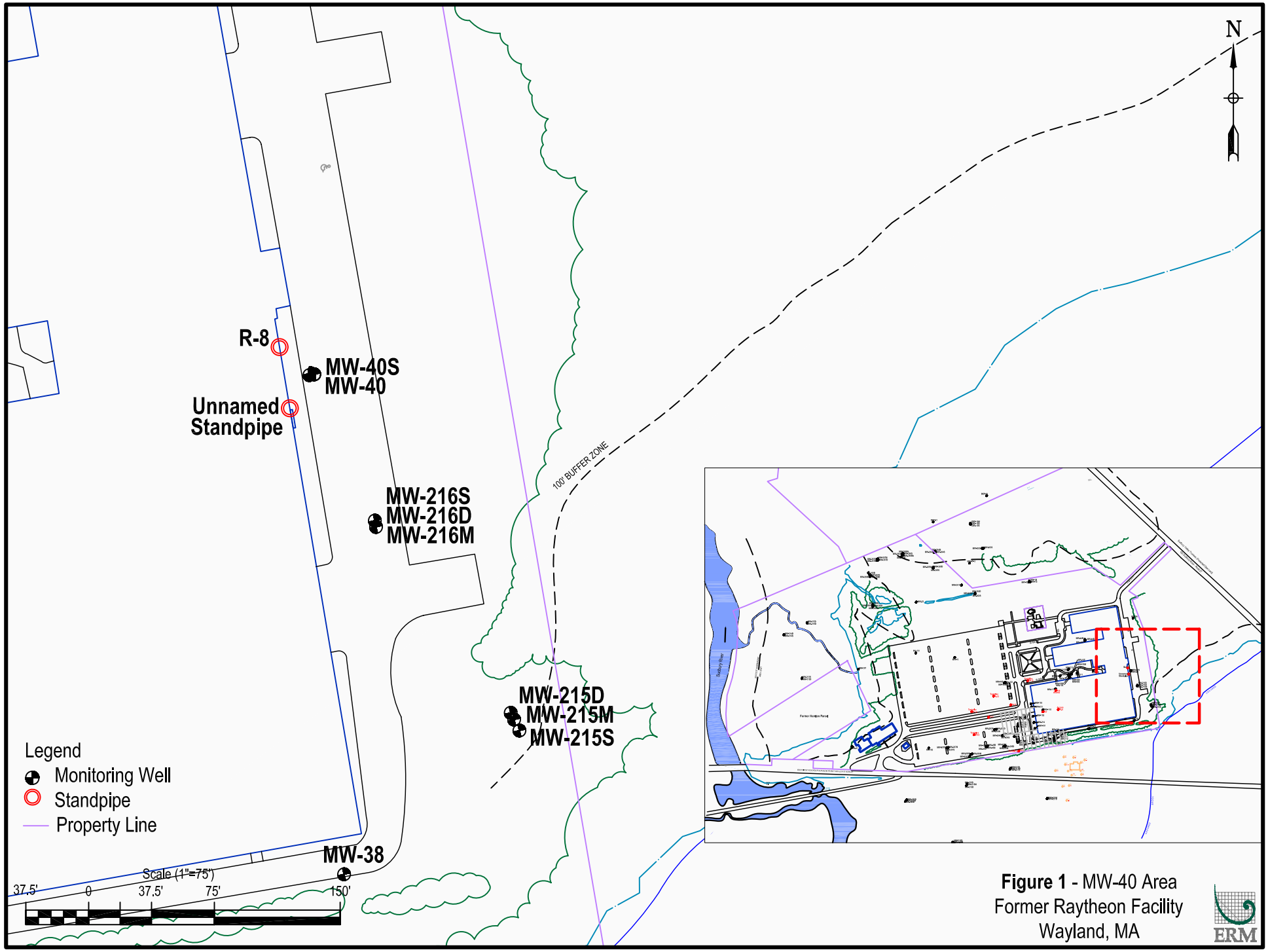


Figure 1 - MW-40 Area
Former Raytheon Facility
Wayland, MA

R:\Raytheon\Wayland - 1922\Raytheon Mw-40 Area.dwg (01/26/2007 - 10:19am Boston)

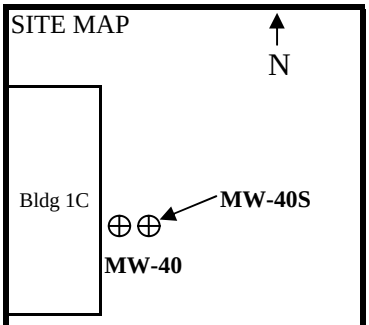
Attachment A
Well Construction Logs

DRILLING LOG for Well #: MW-40

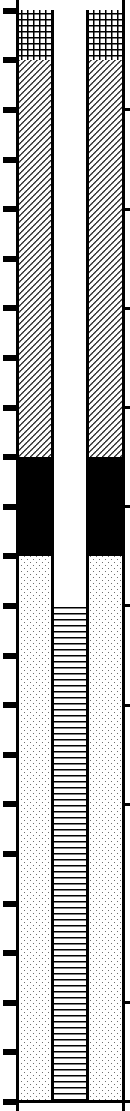
ERM
399 Boylston Street, 6th Floor
Boston, MA 02116

Project:	Raytheon - Wayland		Project Number:	143.45	
Client:	Raytheon		Logged by:	Ryan Bagley	
Drilling Co:	Geosearch, Inc.		Driller:	AJ/Rodney K.	
Date Started:	12-May-98		Date Finished:	12-May-98	
Location:	Wayland, Massachusetts		Drilling Method:	4.25 ID HSA	
Screen Diam:	2"	Length:	10'	Slot Size:	0.01
Casing Diam:	2"	Length:	12'	Type:	PVC
Boring Depth:	22'	Well Depth	22'	Boring Diam.:	8"
Surface Elev.:	135.21'	MP:	PVC	Depth to GW:	13.65'
		MP Elev.:	134.88'		

SITE MAP



Notes: Depth to GW measured on 5/18/98

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	HS Conc. (ppm)	Lab Sample # & Analyses
0–2		SAND & SILT	17,14 12,11	12"	Brown fine SAND and SILT, trace Gravel, dry to damp	S-1 0'-2'	0.0	
2–4		SAND & SILT	7,7 6,4	14"	Brown fine SAND and SILT, trace Gravel, dry to damp	S-2 2'-4'	0.0	
4–6		SAND & SILT	6,6 8,7	20"	Brown fine SAND and SILT, trace Clay, wet	S-3 4'-6'	0.0	
6–8		SAND & SILT	7,11 10,9	16"	Brown fine SAND and SILT, trace Clay, damp to wet	S-4 6'-8'	0.0	
8–10		SAND & SILT	6,9 10,9	14"	Brown fine SAND and SILT, well sorted, damp	S-5 8'-10'	0.0	
10–12		SAND & SILT	5,7 8,9	17"	Brown fine SAND and SILT, well sorted, damp	S-6 10'-12'	0.0	
12–14		SAND & SILT	15,17 23,22	16"	Brown fine SAND and SILT, trace Clay, well sorted, damp to wet	S-7 12'-14'	0.0	
14–16		SAND & SILT	7,14 21,27	18"	Brown fine SAND and SILT, trace Clay, well sorted, saturated	S-8 14'-16'	0.0	
16–20								
20–22		SAND & SILT	8,12 14,18	24"	Brown medium to fine SAND and SILT, trace Clay, saturated	S-9 20'-22'	0.0	
22–23					Well Construction Details on Following Page			

Footnotes for Blowcounts
(1) 140 lb. Hammer
(2) 300 lb. Hammer
(3) Slide Hammer

Key to Well Construction
Sandpack
Bentonite Seal
Well Screen
Cement
Drill Cuttings

DRILLING LOG for Well #: MW-40

ERM
399 Boylston Street, 6th Floor
Boston, MA 02116

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/HS	Lab Sample # & Analyses
					Well Construction Details:			
					Protective Flushmount Roadbox			
					0'-1' Concrete surface seal			
					1'-9' Native backfill			
					9'-11' Bentonite chip seal			
					11'-22' # 1 silica sand filter pack			
					12'-22' 0.010" slotted PVC well screen			
					22' Bottom of boring			

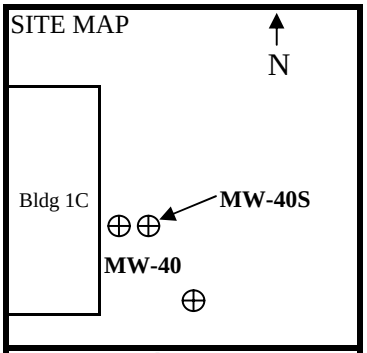
DRILLING LOG for Well #: MW-40S

ERM
399 Boylston Street, 6th Floor
Boston, MA 02116

Project:	Raytheon - Wayland	Project Number:	143.45
Client:	Raytheon	Logged by:	Ryan Bagley
Drilling Co:	Geosearch, Inc.	Driller:	AJ/Rodney K.
Date Started:	14-May-98	Date Finished:	14-May-98
Location:	Wayland, Massachusetts	Drilling Method:	4.25 ID HSA

Screen Diam:	2"	Length:	5'	Slot Size:	0.01
Casing Diam:	2"	Length:	25'	Type:	PVC
Boring Depth:	30'	Well Depth:	30'	Boring Diam.:	8"
Surface Elev.:	135.21'	MP:	PVC	Depth to GW:	13.64'
		MP Elev.:	134.87'		

SITE MAP



Notes: Depth to GW measured on 5/18/98

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	HS Conc. (ppm)	Lab Sample # & Analyses
0								
1								
2								
3								
4								
5								
6								
7								
8					Well Couplet with MW-40			
9					No split spoons advanced prior to 25' bgs			
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								

Footnotes for Blowcounts
(1) 140 lb. Hammer
(2) 300 lb. Hammer
(3) Slide Hammer

Key to Well Construction
Sandpack
Bentonite Seal
Well Screen
Cement
Portland Cement/Bentonite Grou

DRILLING LOG for Well #: MW-40S

ERM
399 Boylston Street, 6th Floor
Boston, MA 02116

Depth	Well Log	Stratigraphy	Blowcounts per 6 inches	Recovery	Split Spoon Description/Soil Classification	Sample # & Depth	PID Conc. (ppm) spoon/HS	Lab Sample # & Analyses
25								
26		SAND	21,24 26,28	20"	Brown medium SAND, some Silt, trace Clay and Gravel, saturated	S-1 25'-27'	0.0	
27								
28								
29								
30								
31		SAND & SILT	11,11 15,20	14"	Grey fine SAND and SILT, trace Clay, saturated	S-2 30'-32'	0.0	
32								
33		SAND & SILT	12,10 11,11	16"	Grey fine SAND and SILT, trace Clay, saturated	S-3 32'-34'	0.0	
34								

Well Construction Details:

Protective Flushmount Roadbox

0'-1'	Concrete surface seal
1'-22'	Portland cement & bentonite grout
22'-24'	Bentonite chip seal
24'-30'	# 1 silica sand filter pack
25'-30'	0.010" slotted PVC well screen
30'	Bottom of boring

Attachment B
Site Photos

Photograph 1 – Leaking Standpipe R-8 (29 December 2006)

Photograph 2 – MW-40 & MW-40S with R-8 in Background (29 December 2006)

Photograph 3 – Unnamed Standpipe (23 January 2007)

Photograph 4 – MW-40 & MW-40S with Standpipe in Background (23 January 2007)

Attachment C
Laboratory Analytical Report

ANALYTICAL REPORT

Lab Number:	L0700670
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Project Name:	RAYTHEON
Project Number:	43034
Report Date:	01/16/07

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (200305), NJ (MA935), RI (LAO00065), ME (2006012), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON
Project Number: 43034

Lab Number: L0700670
Report Date: 01/16/07

Alpha Sample ID	Client ID	Sample Location
L0700670-01	MW-40-20070115-01	WAYLAND, MA
L0700670-02	MW-40S-20070115-01	WAYLAND, MA
L0700670-03	STANDPIPE-20070115-01	WAYLAND, MA
L0700670-04	DUP-001-20070115-01	WAYLAND, MA

Project Name:	RAYTHEON	**Lab Number:**	L0700670
Project Number:	43034	**Report Date:**	01/16/07

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, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	NA

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	NO
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

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 **Lab Number:** L0700670
Project Number: 43034 **Report Date:** 01/16/07

Case Narrative

The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

MCP Related Narratives

Volatile Organics

L0700670-01 through -04 were processed against a calibration curve that utilized a quadratic fit for Vinyl chloride and Bromomethane.

In reference to question E:

The LCSD % recovery for Dichlorodifluoromethane is above method acceptance criteria.

The following LCS/LCSD RPDs are above method acceptance criteria: Tetrachloroethene, Chlorobenzene, Ethylbenzene, 4-Chlorotoluene, 1,3-Dichlorobenzene, 1,1,1,2-Tetrachloroethene, n-Propylbenzene, 1,2,4-Trimethylbenzene, o-Xylene, tert-Butylbenzene, m/p-Xylene, Styrene, Isopropylbenzene, Hexachlorobutadiene, 1,3,5-Trimethylbenzene, sec-Butylbenzene and p-Isopropyltoluene.

In reference to question F:

At the client's request, all submitted samples were not analyzed for the full MCP list of compounds specified for the Method.

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:

Title: Technical Director Date: 01/16/07

ORGANICS

VOLATILES

Project Name: RAYTHEON **Lab Number:** L0700670

Project Number: 43034 **Report Date:** 01/16/07

SAMPLE RESULTS

Lab ID:	L0700670-01	Date Collected:	01/15/07 08:55
Client ID:	MW-40-20070115-01	Date Received:	01/15/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	01/15/07 13:29		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	7.4		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	0.87		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.0		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	3.6		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	2.9		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON **Lab Number:** L0700670

Project Number: 43034 **Report Date:** 01/16/07

SAMPLE RESULTS

Lab ID:	L0700670-01	Date Collected:	01/15/07 08:55
Client ID:	MW-40-20070115-01	Date Received:	01/15/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	99		70-130

Project Name: RAYTHEON **Lab Number:** L0700670

Project Number: 43034 **Report Date:** 01/16/07

SAMPLE RESULTS

Lab ID:	L0700670-02	Date Collected:	01/15/07 10:05
Client ID:	MW-40S-20070115-01	Date Received:	01/15/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	01/15/07 14:05		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	2.4		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	0.69		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	1.1		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.60		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON **Lab Number:** L0700670

Project Number: 43034 **Report Date:** 01/16/07

SAMPLE RESULTS

Lab ID:	L0700670-02	Date Collected:	01/15/07 10:05
Client ID:	MW-40S-20070115-01	Date Received:	01/15/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	103		70-130

Project Name: RAYTHEON **Lab Number:** L0700670

Project Number: 43034 **Report Date:** 01/16/07

SAMPLE RESULTS

Lab ID:	L0700670-03	Date Collected:	01/15/07 09:30
Client ID:	STANDPIPE-20070115-01	Date Received:	01/15/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	01/15/07 14:42		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	15		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	1.8		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	7.8		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON **Lab Number:** L0700670

Project Number: 43034 **Report Date:** 01/16/07

SAMPLE RESULTS

Lab ID:	L0700670-03	Date Collected:	01/15/07 09:30
Client ID:	STANDPIPE-20070115-01	Date Received:	01/15/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	104		70-130

Project Name: RAYTHEON **Lab Number:** L0700670

Project Number: 43034 **Report Date:** 01/16/07

SAMPLE RESULTS

Lab ID:	L0700670-04	Date Collected:	01/15/07 00:00
Client ID:	DUP-001-20070115-01	Date Received:	01/15/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified
Matrix:	Water		
Anaytical Method:	60,8260B		
Analytical Date:	01/15/07 15:20		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	2.4		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	0.64		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	1.0		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.60		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON **Lab Number:** L0700670

Project Number: 43034 **Report Date:** 01/16/07

SAMPLE RESULTS

Lab ID:	L0700670-04	Date Collected:	01/15/07 00:00
Client ID:	DUP-001-20070115-01	Date Received:	01/15/07
Sample Location:	WAYLAND, MA	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	102		70-130

Project Name: RAYTHEON **Lab Number:** L0700670

Project Number: 43034 **Report Date:** 01/16/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 01/15/07 12:03
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG267617-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dichlorodifluoromethane	ND		ug/l	5.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
o-Chlorotoluene	ND		ug/l	2.5

Project Name: RAYTHEON **Lab Number:** L0700670

Project Number: 43034 **Report Date:** 01/16/07

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 01/15/07 12:03
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG267617-3				
p-Chlorotoluene	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	102		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON
Project Number: 43034

Lab Number: L0700670
Report Date: 01/16/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG267617-1 WG267617-2					
Methylene chloride	92	111	70-130	19	25
1,1-Dichloroethane	89	111	70-130	22	25
Chloroform	82	101	70-130	21	25
Carbon tetrachloride	87	108	70-130	22	25
1,2-Dichloropropane	88	110	70-130	22	25
Dibromochloromethane	84	107	70-130	24	25
1,1,2-Trichloroethane	87	109	70-130	22	25
Tetrachloroethene	85	110	70-130	**26**	25
Chlorobenzene	84	109	70-130	**26**	25
Trichlorofluoromethane	97	123	70-130	24	25
1,2-Dichloroethane	88	108	70-130	20	25
1,1,1-Trichloroethane	85	109	70-130	25	25
Bromodichloromethane	84	106	70-130	23	25
trans-1,3-Dichloropropene	84	108	70-130	25	25
cis-1,3-Dichloropropene	84	105	70-130	22	25
1,1-Dichloropropene	86	110	70-130	24	25
Bromoform	96	120	70-130	22	50
1,1,2,2-Tetrachloroethane	94	112	70-130	17	25
Benzene	87	109	70-130	22	25
Toluene	84	108	70-130	25	25
Ethylbenzene	82	107	70-130	**26**	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON
Project Number: 43034

Lab Number: L0700670
Report Date: 01/16/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG267617-1 WG267617-2					
Chloromethane	92	115	70-130	22	50
Bromomethane	96	113	70-130	16	50
Vinyl chloride	106	128	70-130	19	25
Chloroethane	89	110	70-130	21	25
1,1-Dichloroethene	89	114	70-130	25	25
trans-1,2-Dichloroethene	85	105	70-130	21	25
Trichloroethene	84	106	70-130	23	25
1,2-Dichlorobenzene	85	106	70-130	22	25
1,3-Dichlorobenzene	83	108	70-130	**26**	25
1,4-Dichlorobenzene	82	104	70-130	24	25
Methyl tert butyl ether	81	101	70-130	22	25
p/m-Xylene	81	108	70-130	**29**	25
o-Xylene	79	105	70-130	**28**	25
cis-1,2-Dichloroethene	86	107	70-130	22	25
Dibromomethane	85	104	70-130	20	25
1,2,3-Trichloropropane	103	122	70-130	17	25
Styrene	81	108	70-130	**29**	25
Dichlorodifluoromethane	116	**143**	70-130	21	50
Acetone	84	97	70-130	14	50
Carbon disulfide	82	103	70-130	23	25
2-Butanone	96	112	70-130	15	50

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON
Project Number: 43034

Lab Number: L0700670
Report Date: 01/16/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG267617-1 WG267617-2					
4-Methyl-2-pentanone	90	112	70-130	22	50
2-Hexanone	92	116	70-130	23	50
Bromochloromethane	87	107	70-130	21	25
Tetrahydrofuran	85	98	70-130	14	25
2,2-Dichloropropane	88	112	70-130	24	50
1,2-Dibromoethane	86	107	70-130	22	25
1,3-Dichloropropane	88	110	70-130	22	25
1,1,1,2-Tetrachloroethane	85	111	70-130	**27**	25
Bromobenzene	94	114	70-130	19	25
n-Butylbenzene	92	114	70-130	21	25
sec-Butylbenzene	80	108	70-130	**30**	25
tert-Butylbenzene	82	109	70-130	**28**	25
o-Chlorotoluene	87	110	70-130	23	25
p-Chlorotoluene	84	109	70-130	**26**	25
1,2-Dibromo-3-chloropropane	94	112	70-130	17	50
Hexachlorobutadiene	72	96	70-130	**29**	25
Isopropylbenzene	85	114	70-130	**29**	25
p-Isopropyltoluene	79	107	70-130	**30**	25
Naphthalene	94	108	70-130	14	25
n-Propylbenzene	84	110	70-130	**27**	25
1,2,3-Trichlorobenzene	95	112	70-130	16	25

Lab Control Sample Analysis
Batch Quality Control

Project Name: RAYTHEON
Project Number: 43034
Lab Number: L0700670
Report Date: 01/16/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG267617-1 WG267617-2					
1,2,4-Trichlorobenzene	95	114	70-130	18	25
1,3,5-Trimethylbenzene	80	108	70-130	**30**	25
1,2,4-Trimethylbenzene	79	104	70-130	**27**	25
Ethyl ether	87	106	70-130	20	25
Isopropyl Ether	88	111	70-130	23	25
Ethyl-Tert-Butyl-Ether	88	109	70-130	21	25
Tertiary-Amyl Methyl Ether	86	107	70-130	22	25
1,4-Dioxane	94	96	70-130	2	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		98		70-130
Toluene-d8	102		101		70-130
4-Bromofluorobenzene	109		104		70-130
Dibromofluoromethane	101		99		70-130

Project Name: RAYTHEON
Project Number: 43034

Lab Number: L0700670
Report Date: 01/16/07

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0700670-01A	Vial HCl preserved	A	NA	4C	Y	Absent	MCP-8260-04
L0700670-01B	Vial HCl preserved	A	NA	4C	Y	Absent	MCP-8260-04
L0700670-02A	Vial HCl preserved	A	NA	4C	Y	Absent	MCP-8260-04
L0700670-02B	Vial HCl preserved	A	NA	4C	Y	Absent	MCP-8260-04
L0700670-03A	Vial HCl preserved	A	NA	4C	Y	Absent	MCP-8260-04
L0700670-03B	Vial HCl preserved	A	NA	4C	Y	Absent	MCP-8260-04
L0700670-04A	Vial HCl preserved	A	NA	4C	Y	Absent	MCP-8260-04
L0700670-04B	Vial HCl preserved	A	NA	4C	Y	Absent	MCP-8260-04

Project Name:	RAYTHEON	**Lab Number:**	L0700670
Project Number:	43034	**Report Date:**	01/16/07

GLOSSARY

Acronyms

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.

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.

ND - Not detected at the reported detection limit for the sample.

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL 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.

Terms

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

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

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.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Report Format: Not Specified

Project Name: RAYTHEON **Lab Number:** L0700670
Project Number: 43034 **Report Date:** 01/16/07

REFERENCES

60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

LIMITATION OF LIABILITIES

Alpha Woods Hole Labs 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 Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods Hole Labs 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 Woods Hole Labs.

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.

01160715:35

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 1·15·07

ALPHA Job #: L0700670

ALPHA WOODS HOLE LABS
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
RAYNHAM, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: ERM
Address: 399 Boylston St 6th Fl Boston MA 02116
Phone: 617 646 7800
Fax: 617 267 6447
Email: jason.flattery@erm.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: RAYTHEON
Project Location: WAYLAND, MA
Project #: 43034
Project Manager: JASON Flattery
ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ RUSH (only confirmed if pre-approved!)
Date Due: 01·16·2007 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
MCP	GW-1

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

24-HR TAT

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: 8021c by 8260	Sample Specific Comments	TOTAL # BOTTLES
670.1	MW-40-20070115-01	1·15·07	08:55	GW	TD	2		2
.2	MW-40S-20070115-01	1·15·07	10:05	GW	TD	2		2
.3	STANDPIPE-20070115-01	1·15·07	09:30	~~GW~~ X1	TD	2	X1 = WATER COLLECTED FROM FIRE STANDPIPE, NOT GW/DW	2
	TB-001-20070115-01	1·15·07				1		
.4	DUP-001-20070115-01	1·15·07	0:00	GW	TD	2		

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V															
Preservative	B															

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
TYLER PICE	01-15-2007 1·15·07 1100	Leo Rapini	1-15-07 1100 1·15·07 1100

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 01-01 (rev. 10-OCT-05)