19 May 2006
Reference: 0043601

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 2005 through May 2006
Former Raytheon Facility (the "Site")
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 2005 through May 2006 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) is attached to this report. A copy is included in Appendix A.

BACKGROUND

A Phase IV Completion Report was submitted to the Department in November 2004 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; and

- ROS Status Report – May 2005 through November 2005, dated 14 November 2005.

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.

In accordance with 310 CMR 40.0892(3), a Remedial Monitoring Report was not prepared since the Site does not have an Active Operation and Maintenance of a remedial action as part of this ROS.

MONITORING DATA

Wetlands Monitoring Activities

No wetland monitoring activities were conducted during this reporting period. The next wetland monitoring activities are scheduled for Spring 2006. The results for this activity will be presented in the ROS report planned for November 2006.

Groundwater Monitoring Activities

Groundwater monitoring was conducted in accordance with the Phase IV Completion Report to evaluate the efficacy of the In-situ Chemical Oxidation (ISCO) treatment program over time. As discussed in the ROS report dated 14 November 2005, ERM has modified the groundwater monitoring plan to include semi-annual groundwater monitoring. Monitoring activities were conducted from 3 to 7 April 2006. The groundwater-monitoring program will continue semi-annually until such time as permanganate concentrations have significantly decreased in Site monitoring wells, concentrations of chemicals 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 (five wells): MW-117, MW-118, MW-404, MW-405S, IP-16S, IP-16D and IP-17D.

Monitoring activities include:

- measurement of groundwater elevations;
- the visual determination of groundwater color (indicative of the presence of permanganate);
- the collection of groundwater samples for analysis of permanganate concentration;
- the measurement of groundwater geochemical field parameters, including temperature, conductivity, pH, dissolved oxygen (DO), and oxidation-reduction potential (ORP); and
- the 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 instrument. Table 1 summarizes the groundwater monitoring schedule for monitoring wells applicable to RTN 3-13302 for calendar year (CY) 2006.

Groundwater Gauging

ERM conducted groundwater gauging at all accessible Site monitoring wells on 3 April 2006 (Table 2). ERM calculated vertical hydraulic gradients with this data for the Site monitoring wells (Table 3). The upper and lower potentiometric surface maps for the April 2006 gauging event is presented in Figures 4 and 5, respectively.

Groundwater Monitoring – Physical Parameters, Color and Permanganate

Groundwater monitoring was conducted in April 2006. The results from 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. 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 8021B and dissolved sodium by EPA Method 6010B.

ERM ceased collection of chloride analyses following the December 2004 sampling event. Chloride is a byproduct of the groundwater remediation process (i.e. oxidation of chlorinated ethenes). An evaluation of the baseline and subsequent chloride data could not resolve, increases and decreases of chloride concentrations with ISCO injections. We do not anticipate being able to use chloride concentration data to support our ongoing evaluation of groundwater remediation activities.

VOC analytical results and dissolved sodium and historical chloride results for monitoring wells applicable to RTN 3-13302 are presented in Table 6 and 7, respectively. The April 2006 trichloroethene (TCE) concentrations are shown in Figure 6. The Laboratory analytical reports are presented in Appendix B.

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 VOC Groundwater Monitoring Schedule for RTN 3-13302
Table 2 Summary of Groundwater Gauging Data
Table 3 Summary of Vertical Hydraulic Gradients Data
Table 4 Summary of Groundwater Field Parameter Measurements
Table 5 Summary of Permanganate Concentration and Color
Table 6 Summary of Groundwater VOC Analytical Data
Table 7 Summary of Groundwater Sodium and Chloride Analytical Reports

Figure 1 Site Locus Map
Figure 2 Remediation Site Plan
Figure 3 ISCO Treatment Areas
Figure 4 Upper Potentiometric Surface – September 2006
Figure 5 Lower Potentiometric Surface – September 2006
Figure 6 April 2006 TCE Concentration Map

Appendix A BWSC Form (copy)
Appendix B Laboratory Analytical Data Reports

cc: Edwin Madera, 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, MA

Well Designation	AOC	Laboratory Sampling Schedule		
		April	July	October
HA-102	Southern Area	-		
HA-103	Southern Area	-		
HA-104	Southern Area	-		
IP-1	Southern Area	-		*
IP-2	Southern Area	-		*
IP-3S	Southern Area	-		*
IP-3D	Southern Area	-		*
IP-4	Southern Area	-		*
IP-5	Southern Area	-		*
IP-6	Southern Area	-		*
IP-7	Southern Area	-		*
IP-8	Southern Area	-		*
IP-9S	Southern Area	-		*
IP-9D	Southern Area	-		*
IP-10	Southern Area	-		*
IP-11S	Southern Area	-		*
IP-11D	Southern Area	-		*
IP-12	Southern Area	-		*
IP-13	Southern Area	-		*
IP-14	Southern Area	-		*
IP-15S	Southern Area	-		*
IP-15D	Southern Area	-		*
IP-16S	Southern Area	P		X
IP-16D	Southern Area	P		X
IP-17S	Southern Area	-		*
IP-17D	Southern Area	P		X
IP-18	Southern Area	-		*
IP-19	Southern Area	-		*
IP-20	Southern Area	-		*
IP-21	Southern Area	-		*
IP-22	Southern Area	-		*
IP-23	Southern Area	-		*
IP-24S	Southern Area	-		*
IP-24D	Southern Area	-		*
IP-25	Southern Area	-		*
IP-26S	Southern Area	-		*
IP-26D	Southern Area	-		*

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

Well Designation	AOC	Laboratory Sampling Schedule		
		April	July	October
IP-27	Southern Area	-		*
IP-28	Southern Area	-		*
IP-30	Southern Area	-		*
IP-33	Southern Area	-		*
IP-35	Southern Area	-		*
IP-36	Southern Area	-		*
IP-37	Southern Area	-		*
IP-38	Southern Area	-		*
IP-39	Southern Area	-		*
IP-119	Southern Area	-		*
IP-120	Southern Area	-		*
IP-121	Southern Area	-		*
IP-122	Southern Area	-		*
IP-123	Southern Area	-		*
IP-124	Southern Area	-		*
IP-125	Southern Area	-		*
IP-126	Southern Area	-		*
IP-127	Southern Area	-		*
IP-128	Southern Area	-		*
IP-129	Southern Area	-		*
IP-130	Southern Area	-		*
IP-131	Southern Area	-		*
IP-132	Southern Area	-		*
IP-136	Southern Area	-		*
IP-137	Southern Area	-		*
IP-138	Southern Area	-		*
IP-139	Southern Area	-		*
MW-10	Southern Area	-		
MW-33S	Southern Area	S		X
MW-33M	Southern Area	S		X
MW-33D	Southern Area	-		
MW-33B	Southern Area	-		
MW-34	Eastern Area	-		
MW-37	Southern Area	-		
MW-37M	Southern Area	-		
MW-38	Eastern Area	-		
MW-40	Eastern Area	S		X

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

Well Designation	AOC	Laboratory Sampling Schedule		
		April	July	October
MW-40S	Eastern Area	S		X
MW-42S	Southern Area	-		

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

Well Designation	AOC	Laboratory Sampling Schedule		
		April	July	October
MW-43S	Southern Area	S		X
MW-43D	Southern Area	-		
MW-44S	Southern Area	-		
MW-44M	Southern Area	-		
MW-44D	Southern Area	-		
MW-45S	Southern Area	-		
MW-45M	Southern Area	-		
MW-45D	Southern Area	-		
MW-45B	Southern Area	-		
MW-46S	Southern Area	-		
MW-46M	Southern Area	-		
MW-47S	Southern Area	S		X
MW-47M	Southern Area	S		X
MW-47D	Southern Area	S		X
MW-101	Southern Area	S		X
MW-102	Southern Area	S		X
MW-103	Southern Area	S		X
MW-104	Southern Area	S		X
MW-105	Southern Area	S		X
MW-105M	Southern Area	S		X
MW-106	Southern Area	S		X
MW-106M	Southern Area	S		X
MW-107	Southern Area	S		X
MW-108	Southern Area	-		
MW-109	Southern Area	S		X
MW-110	Southern Area	-		
MW-111	Southern Area	S		X
MW-112	Southern Area	-		
MW-113	Southern Area	S		X
MW-114	Southern Area	-		
MW-115	Southern Area	S		X
MW-116	Southern Area	-		
MW-117	Southern Area	Dry+		X
MW-118	Southern Area	S		X
MW-201S	Southern Area	S		X
MW-201M	Southern Area	S		X
MW-201D	Southern Area	S		X

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

Well Designation	AOC	Laboratory Sampling Schedule		
		April	July	October
MW-202S	Southern Area	S		X
MW-202M	Southern Area	S		X
MW-202D	Southern Area	-		
MW-203S	Southern Area	S		X
MW-203M	Southern Area	S		X
MW-203D	Southern Area	S		X
MW-204S	Southern Area	S		X
MW-204M	Southern Area	S		X
MW-204D	Southern Area	S		X
MW-205S	Southern Area	-		
MW-205M	Southern Area	-		
MW-205D	Southern Area	-		
MW-206S	Southern Area	-		
MW-206M	Southern Area	-		
MW-206D	Southern Area	-		
MW-207S	Southern Area	-		
MW-207M	Southern Area	-		
MW-207D	Southern Area	-		
MW-208S	Southern Area	S		X
MW-208M	Southern Area	S		X
MW-208D	Southern Area	-		
MW-209	Southern Area	S		X
MW-210	Southern Area	S		X
MW-211	Southern Area	S		X
MW-212	Southern Area	S		X
MW-212M	Southern Area	S		X
MW-213	Southern Area	P		X
MW-214	Southern Area	S		X
MW-215S	Eastern Area	-		
MW-215M	Eastern Area	-		
MW-215D	Eastern Area	-		
MW-216S	Eastern Area	-		
MW-216M	Eastern Area	-		
MW-216D	Eastern Area	S		X
MW-217S	Southern Area	-		
MW-217M	Southern Area	-		
MW-217D	Southern Area	-		

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

Well Designation	AOC	Laboratory Sampling Schedule		
		April	July	October
MW-218S	Southern Area	-		
MW-218M	Southern Area	-		
MW-218D	Southern Area	-		
MW-219S	Southern Area	-		
MW-219M	Southern Area	-		
MW-219D	Southern Area	-		
MW-220S	Southern Area	-		
MW-220M	Southern Area	-		
MW-220D	Southern Area	-		
MW-221M	Southern Area	-		
MW-221D	Southern Area	-		
MW-403	Southern Area	S		X
MW-404	Southern Area	P		X
MW-405S	Southern Area	P		X
MW-405D	Southern Area	-		

Notes:
- = Not scheduled for sampling
X = Proposed for sampling
S = Sampled
P = Not samples because of high permanganate concentrations
* = May be sampled depending on Site conditions
Dry = Not sampled because monitoring well had <1-ft. of water at time of sampling and purged dry

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

Well I.D.	Measuring Point Elevation (ft. ASL)	3-Apr-06	
		Depth to Water (ft. below measuring point)	Potentiometric Surface Elevation (ft. ASL)
DEP-19S	120.79	2.93	117.86
DEP-19M	120.62	0.40	120.22
DEP-19D	120.78	0.78	120.00
DEP-20	119.98	0.35	119.63
DEP-21	119.18	**	**
HA-101	127.27	6.90	120.37
HA-102	128.14	13.41	114.73
HA-103	131.54	13.67	117.87
HA-104	132.39	16.90	115.49
IP-16S	134.77	16.18	118.59
IP-16D	134.74	16.49	118.25
IP-17S	134.80	17.80	117.00
IP-17D	134.83	17.40	117.43
MW-1S	133.79	9.54	124.25
MW-1M	133.78	12.84	120.94
MW-1D	133.74	14.14	119.60
MW-10	130.86	7.88	122.98
MW-32	124.41	3.62	120.79
MW-33S	133.58	17.75	115.83
MW-33M	133.77	17.62	116.15
MW-33D	133.57	17.68	115.89
MW-33B	133.67	16.48	117.19
MW-34	136.67	10.49	126.18
MW-37	134.43	15.21	119.22
MW-37M	134.40	17.02	117.38
MW-38	134.42	14.67	119.75
MW-40	134.84	14.25	120.59
MW-40S	134.82	14.24	120.58
MW-41	127.46	13.51	113.95
MW-42S	134.44	13.84	120.60
MW-43S	133.82	14.30	119.52
MW-43D	134.31	-	-
MW-44S	134.73	14.85	119.88
MW-44M	134.57	15.12	119.45
MW-44D	134.66	15.30	119.36
MW-45S	132.07	17.14	114.93
MW-45M	132.28	17.33	114.95
MW-45D	131.88	15.41	116.47
MW-45B	131.59	16.43	115.16
MW-46S	131.44	13.56	117.88
MW-46M	131.52	-	-
MW-47S	132.30	16.64	115.66
MW-47M	131.99	15.96	116.03
MW-47D	132.29	16.25	116.04
MW-101	134.60	18.22	116.38
MW-102	134.50	17.89	116.61
MW-103	134.50	15.85	118.65
MW-104	134.22	14.49	119.73
MW-105	134.58	14.63	119.95
MW-105M	134.22	19.94	114.28
MW-106	134.63	15.44	119.19

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

Well I.D.	Measuring Point Elevation (ft. ASL)	3-Apr-06	
		Depth to Water (ft. below measuring point)	Potentiometric Surface Elevation (ft. ASL)
MW-106M	134.63	16.20	118.43
MW-107	134.65	17.42	117.23
MW-108	134.69	17.36	117.33
MW-109	134.12	25.50	108.62
MW-110	134.04	16.21	117.83
MW-111	133.88	24.09	109.79
MW-112	133.68	16.24	117.44
MW-113	133.60	24.65	108.95
MW-114	133.48	16.39	117.09
MW-115	133.56	-	-
MW-116	133.72	16.50	117.22
MW-117	134.84	16.79	118.05
MW-118	134.88	16.61	118.27
MW-201S	132.38	16.59	115.79
MW-201M	132.19	16.25	115.94
MW-201D	132.10	16.00	116.10
MW-202S	132.74	16.48	116.26
MW-202M	132.98	16.80	116.18
MW-202D	132.72	16.74	115.98
MW-203S	132.50	17.41	115.09
MW-203M	132.39	17.20	115.19
MW-203D	132.14	16.24	115.90
MW-204S	132.98	17.69	115.29
MW-204M	132.02	16.69	115.33
MW-204D	132.30	16.55	115.75
MW-205S	131.98	16.61	115.37
MW-205M	132.12	16.79	115.33
MW-205D	131.98	14.50	117.48
MW-206S	130.82	16.04	114.78
MW-206M	130.75	16.19	114.56
MW-206D	130.66	15.61	115.05
MW-207S	129.16	14.49	114.67
MW-207M	129.29	14.74	114.55
MW-207D	129.10	13.70	115.40
MW-208S	132.14	16.39	115.75
MW-208M	132.38	16.73	115.65
MW-208D	132.38	16.42	115.96
MW-209	134.56	****	****
MW-210	134.48	19.92	114.56
MW-211	135.26	14.80	120.46
MW-212	134.39	14.72	119.67
MW-212M	133.84	19.48	114.36
MW-213	134.84	17.81	117.03
MW-214	134.60	18.29	116.31
MW-215S	133.42	13.45	119.97
MW-215M	133.48	13.54	119.94
MW-215D	133.44	14.11	119.33
MW-216S	134.54	14.06	120.48
MW-216M	134.59	14.12	120.47
MW-216D	134.59	15.19	119.40

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

Well I.D.	Measuring Point Elevation (ft. ASL)	3-Apr-06	
		Depth to Water (ft. below measuring point)	Potentiometric Surface Elevation (ft. ASL)
MW-217S	130.06	13.21	116.85
MW-217M	130.44	13.99	116.45
MW-217D	130.20	13.70	116.50
MW-218S	130.24	14.16	116.08
MW-218M	130.16	14.41	115.75
MW-218D	130.02	13.76	116.26
MW-219S	118.12	3.75	114.37
MW-219M	118.09	3.23	114.86
MW-219D	117.95	2.99	114.96
MW-220S	117.09	3.64	113.45
MW-220M	117.29	3.15	114.14
MW-220D	116.99	2.00	114.99
MW-221M	120.07	2.90	117.17
MW-221D	120.22	3.60	116.62
MW-261S	131.28	10.80	120.48
MW-262S	129.60	8.85	120.75
MW-262M	130.52	13.26	117.26
MW-262D	129.73	11.26	118.47
MW-263S	127.96	7.60	120.36
MW-263M	127.77	8.30	119.47
MW-264S	126.32	6.30	120.02
MW-264M	126.28	6.75	119.53
MW-264D	126.63	9.28	117.35
MW-265S	130.06	9.54	120.52
MW-265M	129.89	10.43	119.46
MW-265D	130.07	12.54	117.53
MW-266S	126.79	8.33	118.46
MW-266Ma	127.72	8.22	119.50
MW-266Mb	126.88	10.39	116.49
MW-266D	127.70	10.24	117.46
MW-266B	128.14	8.42	119.72
MW-267S	125.30	8.06	117.24
MW-267M	125.40	8.39	117.01
MW-267D	125.88	8.82	117.06
MW-267B	124.02	7.19	116.83
MW-268S	123.66	6.89	116.77
MW-268M	123.41	6.00	117.41
MW-268D	124.86	7.00	117.86
MW-268B	122.34	8.53	113.81
MW-269S	125.54	8.29	117.25
MW-269Ma	124.96	9.02	115.94
MW-269Mb	125.42	9.76	115.66
MW-269D	125.34	10.74	114.60
MW-307	124.86	10.50	114.36
MW-313S	114.61	1.90	112.71
MW-313D	114.37	3.10	111.27
MW-314S	114.10	3.75	110.35
MW-314D	114.09	3.50	110.59
MW-315S	114.07	3.10	110.97
MW-315D	113.79	-	-
MW-403	134.39	18.21	116.18
MW-404	134.94	17.89	117.05

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

Well I.D.	Measuring Point Elevation (ft. ASL)	3-Apr-06	
		Depth to Water (ft. below measuring point)	Potentiometric Surface Elevation (ft. ASL)
MW-405S	134.90	17.01	117.89
MW-551	129.30	8.68	120.62
MW-552	130.09	9.61	120.48
MW-553	130.33	9.65	120.68
MW-554S	120.93	7.80	113.13
MW-554Ma	120.82	5.20	115.62
MW-554Mb	120.96	4.90	116.06
MW-554D	120.96	5.55	115.41
MW-555S	121.10	8.23	112.87
MW-555Ma	121.25	5.70	115.55
MW-555Mb	121.26	6.12	115.14
MW-555D	121.19	5.93	115.26
MW-556S	120.93	8.90	112.03
MW-556M	121.00	5.36	115.64
MW-556D	120.92	5.44	115.48
MW-TP-3	131.08	9.70	121.38

Notes:
- = not measured / not accessible
* = inaccessible due to high river stage
** = potentiometric surface was at or above the top of casing
*** = well was not installed at time of gauging
**** = dry well

Table 3
Summary of Vertical Hydraulic Gradient Data
Former Raytheon Facility
430 Boston Post Road
Wayland, Massachusetts

	03-Apr-06							
Well Designation	**Reference Elevation (ft ASL)**	**Depth to Water (ft)**	**Saturation Elevation (ft ASL)**	**Head Elevation (ft)**	**Head Change (ft)**	**Length Change (ft)**	**Hydraulic Gradient (ft/ft)**	**Up/Down**
MW-33S	133.58	17.75	106.50	115.83	-0.32	20.00	-0.01600	Up
MW-33M	133.77	17.62	86.50	116.15				
MW-33M	133.77	17.62	86.50	116.15	0.26	10.00	0.02600	Down
MW-33D	133.57	17.68	76.50	115.89				
MW-33D	133.57	17.68	76.50	115.89	-1.30	21.00	-0.06190	Up
MW-33B	133.67	16.48	55.50	117.19				
MW-37	134.43	15.21	117.70	119.22	1.84	30.50	0.06033	Down
MW-37M	134.40	17.02	87.20	117.38				
MW-40	134.84	14.25	118.20	120.59	0.01	10.50	0.00095	Down
MW-40S	134.82	14.24	107.70	120.58				
MW-43S	133.82	14.30	116.90	120.59	--	35.00	--	--
MW-43D	134.31	-	81.90	--				
MW-44S	134.73	14.85	105.40	119.88	0.43	16.00	0.02688	Down
MW-44M	134.57	15.12	89.40	119.45				
MW-44M	134.57	15.12	89.40	119.45	0.09	20.00	0.00450	Down
MW-44D	134.66	15.30	69.40	119.36				
MW-45S	132.07	17.14	98.00	114.93	-0.02	11.00	-0.00182	Up
MW-45M	132.28	17.33	87.00	114.95				
MW-45M	132.28	17.33	87.00	114.95	-1.52	30.00	-0.05067	Up
MW-45D	131.88	15.41	57.00	116.47				
MW-45D	131.88	15.41	57.00	116.47	1.31	19.20	0.06823	Up
MW-45B	131.59	16.43	37.80	115.16				
MW-46S	131.44	13.56	110.30	117.88	--	25.00	--	--
MW-46M	131.52	-	85.30	--				

Table 3
Summary of Vertical Hydraulic Gradient Data
Former Raytheon Facility
430 Boston Post Road
Wayland, Massachusetts

	03-Apr-06							
Well Designation	**Reference Elevation (ft ASL)**	**Depth to Water (ft)**	**Saturation Elevation (ft ASL)**	**Head Elevation (ft)**	**Head Change (ft)**	**Length Change (ft)**	**Hydraulic Gradient (ft/ft)**	**Up/Down**
MW-47S	132.30	16.64	99.10	115.66	-0.37	14.00	-0.02643	Up
MW-47M	131.99	15.96	85.10	116.03				
MW-47M	131.99	15.96	85.10	116.03	-0.01	21.00	-0.00048	Up
MW-47D	132.29	16.25	64.10	116.04				
MW-105	134.58	14.63	119.70	119.95	5.67	-0.08	-70.87500	Up
MW-105M	134.22	19.94	119.78	114.28				
MW-106	134.63	15.44	120.00	119.19	0.76	0.06	12.66667	Down
MW-106M	134.63	16.20	119.94	118.43				
MW-201S	132.38	16.59	115.50	115.79	-0.15	7.50	-0.02000	Up
MW-201M	132.19	16.25	108.00	115.94				
MW-201M	132.19	16.25	108.00	115.94	-0.16	38.00	-0.00421	Up
MW-201D	132.10	16.00	70.00	116.10				
MW-202S	132.74	16.48	116.30	116.26	0.08	13.50	0.00593	Down
MW-202M	132.98	16.80	102.80	116.18				
MW-202M	132.98	16.80	102.80	116.18	0.20	23.00	0.00870	Down
MW-202D	132.72	16.74	79.80	115.98				
MW-203S	132.50	17.41	115.80	115.09	-0.10	23.50	-0.00426	Up
MW-203M	132.39	17.20	92.30	115.19				
MW-203M	132.39	17.20	92.30	115.19	-0.71	20.00	-0.03550	Up
MW-203D	132.14	16.24	72.30	115.90				
MW-204S	132.98	17.69	115.60	115.29	-0.04	26.50	-0.00151	Up
MW-204M	132.02	16.69	89.10	115.33				
MW-204M	132.02	16.69	89.10	115.33	-0.42	26.00	-0.01615	Up
MW-204D	132.30	16.55	63.10	115.75				
MW-205S	131.98	16.61	115.40	115.37	0.04	27.50	0.00145	Down
MW-205M	132.12	16.79	87.90	115.33				
MW-205M	132.12	16.79	87.90	115.33	-2.15	23.00	-0.09348	Up
MW-205D	131.98	14.50	64.90	117.48				
MW-206S	130.82	16.04	114.10	114.78	0.22	35.50	0.00620	Down
MW-206M	130.75	16.19	78.60	114.56				
MW-206M	130.75	16.19	78.60	114.56	-0.49	23.00	-0.02130	Up
MW-206D	130.66	15.61	55.60	115.05				

Table 3
Summary of Vertical Hydraulic Gradient Data
Former Raytheon Facility
430 Boston Post Road
Wayland, Massachusetts

	03-Apr-06							
Well Designation	**Reference Elevation (ft ASL)**	**Depth to Water (ft)**	**Saturation Elevation (ft ASL)**	**Head Elevation (ft)**	**Head Change (ft)**	**Length Change (ft)**	**Hydraulic Gradient (ft/ft)**	**Up/Down**
MW-207S	129.16	14.49	112.50	114.67	0.12	45.50	0.00264	Down
MW-207M	129.29	14.74	67.00	114.55				
MW-207M	129.29	14.74	67.00	114.55	-0.85	17.00	-0.05000	Up
MW-207D	129.10	13.70	50.00	115.40				
MW-208S	132.14	16.39	115.90	115.75	0.10	27.50	0.00364	Down
MW-208M	132.38	16.73	88.40	115.65				
MW-208M	132.38	16.73	88.40	115.65	-0.31	19.00	-0.01632	Up
MW-208D	132.38	16.42	69.40	115.96				
MW-212	134.39	14.72	117.30	119.67	5.31	7.84	0.67730	Down
MW-212M	133.84	19.48	109.46	114.36				
MW-215S	133.42	13.45	116.80	119.97	0.03	7.50	0.00400	Down
MW-215M	133.48	13.54	109.30	119.94				
MW-215M	133.48	13.54	109.30	119.94	0.61	19.50	0.03128	Down
MW-215D	133.44	14.11	89.80	119.33				
MW-216S	134.54	14.06	117.80	120.48	0.01	11.50	0.00087	Down
MW-216M	134.59	14.12	106.30	120.47				
MW-216M	134.59	14.12	106.30	120.47	1.07	26.00	0.04115	Down
MW-216D	134.59	15.19	80.30	119.40				
MW-217S	130.06	13.21	110.50	116.85	0.40	22.50	0.01778	Down
MW-217M	130.44	13.99	88.00	116.45				
MW-217M	130.44	13.99	88.00	116.45	-0.05	20.50	-0.00244	Up
MW-217D	130.20	13.70	67.50	116.50				
MW-218S	130.24	14.16	112.40	116.08	0.33	30.50	0.01082	Down
MW-218M	130.16	14.41	81.90	115.75				
MW-218M	130.16	14.41	81.90	115.75	-0.51	36.00	-0.01417	Up
MW-218D	130.02	13.76	45.90	116.26				

Table 3
Summary of Vertical Hydraulic Gradient Data
Former Raytheon Facility
430 Boston Post Road
Wayland, Massachusetts

	03-Apr-06							
Well Designation	**Reference Elevation (ft ASL)**	**Depth to Water (ft)**	**Saturation Elevation (ft ASL)**	**Head Elevation (ft)**	**Head Change (ft)**	**Length Change (ft)**	**Hydraulic Gradient (ft/ft)**	**Up/Down**
MW-219S	118.12	3.75	108.40	114.37	-0.49	52.50	-0.00933	Up
MW-219M	118.09	3.23	55.90	114.86				
MW-219M	118.09	3.23	55.90	114.86	-0.10	11.50	-0.00870	Up
MW-219D	117.95	2.99	44.40	114.96				
MW-220S	117.09	3.64	107.50	113.45	-0.69	52.50	-0.01314	Up
MW-220M	117.29	3.15	55.00	114.14				
MW-220M	117.29	3.15	55.00	114.14	-0.85	36.00	-0.02361	Up
MW-220D	116.99	2.00	19.00	114.99				
MW-221M	120.07	2.90	101.00	117.17	0.55	19.00	0.02895	Down
MW-221D	120.22	3.60	82.00	116.62				
MW-405S	134.90	17.01	111.90	117.89	0.46	5.16	0.08915	Down
IP-17D	134.83	17.40	106.74	117.43				
IP-16S	134.77	16.18	117.19	118.59	0.34	10.51	0.03235	Down
IP-16D	134.74	16.49	106.68	118.25				

Notes:
(-) vertical gradient represents upward groundwater flow
(+) vertical gradient represents downward groundwater flow
- = Not measured / Not accessible

Table 4
Summary of Groundwater Field Parameter Measurements
Former Raytheon Facility
430 Boston Post Road
Wayland, Massachusetts

Well ID	Temperature (^oC)	pH (standard units)	ORP (mV)	Dissolved Oxygen (mg/L)	Specific Conductivity (uS/cm)
	Apr-2006	Apr-2006	Apr-2006	Apr-2006	Apr-2006
HA-102	NM	NM	NM	NM	NM
HA-103	NM	NM	NM	NM	NM
HA-104	NM	NM	NM	NM	NM
IP-16S	NMP	NMP	NMP	NMP	NMP
IP-16D	NMP	NMP	NMP	NMP	NMP
IP-17S	NM	NM	NM	NM	NM
IP-17D	NMP	NMP	NMP	NMP	NMP
MW-1S	NM	NM	NM	NM	NM
MW-1M	NM	NM	NM	NM	NM
MW-1D	NM	NM	NM	NM	NM
MW-32	NM	NM	NM	NM	NM
MW-33S	11.21	5.81	207.7	3.73	97
MW-33M	11.07	8.12	-134.4	0.40	396
MW-33D	NM	NM	NM	NM	NM
MW-33B	NM	NM	NM	NM	NM
MW-34	NM	NM	NM	NM	NM
MW-37	NM	NM	NM	NM	NM
MW-37M	NM	NM	NM	NM	NM
MW-38	NM	NM	NM	NM	NM
MW-40	11.44	7.02	177.2	9.64	406
MW-40S	NMP	NMP	NMP	NMP	NMP
MW-41	NM	NM	NM	NM	NM
MW-42S	NM	NM	NM	NM	NM
MW-43S	9.14	7.47	327.9	8.00	587
MW-43D	NM	NM	NM	NM	NM
MW-44S	NM	NM	NM	NM	NM
MW-44M	NM	NM	NM	NM	NM
MW-44D	NM	NM	NM	NM	NM
MW-45S	NM	NM	NM	NM	NM
MW-45M	NM	NM	NM	NM	NM
MW-45D	NM	NM	NM	NM	NM
MW-45B	NM	NM	NM	NM	NM
MW-46S	NM	NM	NM	NM	NM
MW-46M	NM	NM	NM	NM	NM
MW-47S	NMP	NMP	NMP	NMP	NMP
MW-47M	10.60	7.47	-92.9	0.79	277
MW-47D	11.53	6.78	-10.5	0.41	878
MW-101	NMP	NMP	NMP	NMP	NMP
MW-102	NMP	NMP	NMP	NMP	NMP
MW-103	NMP	NMP	NMP	NMP	NMP
MW-104	NMH	NMH	NMH	NMH	NMH
MW-105	NMH	NMH	NMH	NMH	NMH
MW-105M	NMP	NMP	NMP	NMP	NMP

Table 4
Summary of Groundwater Field Parameter Measurements
Former Raytheon Facility
430 Boston Post Road
Wayland, Massachusetts

Well ID	Temperature (^oC)	pH (standard units)	ORP (mV)	Dissolved Oxygen (mg/L)	Specific Conductivity (uS/cm)
	Apr-2006	Apr-2006	Apr-2006	Apr-2006	Apr-2006
MW-106	8.63	7.19	309.3	8.48	494
MW-106M	NMH	NMH	NMH	NMH	NMH
MW-107	NMH	NMH	NMH	NMH	NMH
MW-108	NM	NM	NM	NM	NM
MW-109	11.86	6.90	140.6	0.27	440
MW-110	NM	NM	NM	NM	NM
MW-111	11.19	5.73	193.3	0.29	521
MW-112	NM	NM	NM	NM	NM
MW-113	12.08	6.38	170.3	0.35	551
MW-114	NM	NM	NM	NM	NM
MW-115	11.71	6.17	142.6	0.53	551
MW-116	NM	NM	NM	NM	NM
MW-117	NMD	NMD	NMD	NMD	NMD
MW-118	NMP	NMP	NMP	NMP	NMP
MW-201S	NMP	NMP	NMP	NMP	NMP
MW-201M	12.81	7.56	133.5	3.73	941
MW-201D	11.37	7.65	-146.4	1.71	811
MW-202S	NMH	NMH	NMH	NMH	NMH
MW-202M	11.43	6.44	360.3	1.11	220
MW-202D	NM	NM	NM	NM	NM
MW-203S	12.98	7.40	331.4	8.66	426
MW-203M	13.07	6.09	371.4	4.77	792
MW-203D	13.35	6.35	64.0	0.26	658
MW-204S	11.63	7.18	113.7	9.38	168
MW-204M	12.17	5.90	93.1	0.73	241
MW-204D	10.38	7.41	28.3	0.52	1231
MW-205S	NM	NM	NM	NM	NM
MW-205M	NM	NM	NM	NM	NM
MW-205D	NM	NM	NM	NM	NM
MW-206S	NM	NM	NM	NM	NM
MW-206M	NM	NM	NM	NM	NM
MW-206D	NM	NM	NM	NM	NM
MW-207S	NM	NM	NM	NM	NM
MW-207M	NM	NM	NM	NM	NM
MW-207D	NM	NM	NM	NM	NM
MW-208S	10.94	7.30	328.8	9.71	522
MW-208M	NMH	NMH	NMH	NMH	NMH
MW-208D	NM	NM	NM	NM	NM
MW-209	8.45	6.85	366.0	8.91	525
MW-210	NMP	NMP	NMP	NMP	NMP
MW-211	9.01	7.14	398.4	1.14	889

Table 4
Summary of Groundwater Field Parameter Measurements
Former Raytheon Facility
430 Boston Post Road
Wayland, Massachusetts

Well ID	Temperature (^oC)	pH (standard units)	ORP (mV)	Dissolved Oxygen (mg/L)	Specific Conductivity (uS/cm)
	Apr-2006	Apr-2006	Apr-2006	Apr-2006	Apr-2006
MW-212	7.8	7.05	273.1	7.84	356
MW-212M	NMP	NMP	NMP	NMP	NMP
MW-213	NMP	NMP	NMP	NMP	NMP
MW-214	NMP	NMP	NMP	NMP	NMP
MW-215S	NM	NM	NM	NM	NM
MW-215M	NM	NM	NM	NM	NM
MW-215D	NM	NM	NM	NM	NM
MW-216S	NM	NM	NM	NM	NM
MW-216M	NM	NM	NM	NM	NM
MW-216D	9.10	7.51	-30.6	0.41	1201
MW-217S	NM	NM	NM	NM	NM
MW-217M	NM	NM	NM	NM	NM
MW-217D	NM	NM	NM	NM	NM
MW-218S	NM	NM	NM	NM	NM
MW-218M	NM	NM	NM	NM	NM
MW-218D	NM	NM	NM	NM	NM
MW-219S	NM	NM	NM	NM	NM
MW-219M	NM	NM	NM	NM	NM
MW-219D	NM	NM	NM	NM	NM
MW-220S	NM	NM	NM	NM	NM
MW-220M	NM	NM	NM	NM	NM
MW-221M	NM	NM	NM	NM	NM
MW-221D	NM	NM	NM	NM	NM
MW-307	NM	NM	NM	NM	NM
MW-313S	NM	NM	NM	NM	NM
MW-313D	NM	NM	NM	NM	NM
MW-314S	NM	NM	NM	NM	NM
MW-314D	NM	NM	NM	NM	NM
MW-315S	NM	NM	NM	NM	NM
MW-315D	NM	NM	NM	NM	NM
MW-403	NMH	NMH	NMH	NMH	NMH
MW-404	NMP	NMP	NMP	NMP	NMP
MW-405S	NMP	NMP	NMP	NMP	NMP
MW-405D	NM	NM	NM	NM	NM

Notes:
NM = Not Measured because not scheduled for geochemical monitoring
NMP = Not measured due to presence of permanganate
NMH = Not measured due to conductivity over 1,000 uS/cm or ORP over 400 mV. Sampled after purging same well volume as last sampling round
NMF = Not Measured due to Faulty equipment
NMD = Not Measured due to a Dry well
ND = Not Detected
* = PDB used for sampling, no geochemical parameters measured

Table 5
Summary of Groundwater Permanganate Concentration and Color
Former Raytheon Facility
Wayland, Massachusetts

Well ID	Visual Permanganate Presence							Permanganate Concentration (ppm)						
	Apr-2004	Jul-2004	Sep-2004	Dec-2004	Apr-2005	Oct-2005	Apr-2006	Apr-2004	Jul-2004	Sep-2004	Dec-2004	Apr-2005	Oct-2005	Apr-2006
HA-102	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
HA-103	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
HA-104	Clear	NM	Clear	Clear	NM	NM	NM	NM	NM	ND	ND	NM	NM	NM
IP-16S	NM	Dark Purple	NM	Purple	Dark Purple	Purple	Purple	NM	3,560	NM	2,200	5,140	1,130	670
IP-16D	NM	Purple	Pink	Dark Purple	Dark Purple	NM	Magenta	NM	165	76	5,330	6,850	NM	225
IP-17S	NM	Dark Purple	Dark Purple	Purple	NM	Light Pink	NM	NM	5,310	1,010	397	NM	110	NM
IP-17D	NM	Dark Purple	Purple	Dark Purple	Dark Purple	Pink	Light Pink	NM	8,770	230	3,400	5,140	99	24.5
MW-32	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-33S	Clear	NM	NM	Clear	Clear	Clear	Clear	NM	NM	NM	ND	ND	ND	ND
MW-33M	Clear	NM	NM	Clear	Clear	Clear	Clear	NM	NM	NM	ND	ND	ND	ND
MW-33D	NM	NM	Clear	Clear	NM	NM	NM	NM	NM	ND	ND	NM	NM	NM
MW-33B	NM	NM	Clear	Clear	NM	NM	NM	NM	NM	ND	ND	NM	NM	NM
MW-34	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-37	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-37M	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-38	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-40	Clear	Clear	NM	Clear	Clear	NM	Clear	NM	ND	NM	ND	0.6	NM	ND
MW-40S	NM	Light Pink	NM	Pink	Light Pink	Light Pink*	Light Pink	NM	9.2	NM	86	7.8	55	20.6
MW-41	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	NM	NM
MW-42S	NM	NM	Clear	Clear	NM	NM	NM	NM	NM	ND	ND	NM	NM	NM
MW-43S	Clear	Light Pink	NM	Dark Purple	Light Pink	Clear	Clear	NM	13.0	NM	1500	60	0.9	ND
MW-43D	NM	Clear	NM	Clear	NM	NM	NM	NM	ND	NM	ND	NM	NM	NM
MW-44S	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-44M	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-44D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-45S	Clear	NM	NM	Clear	NM	NM	NM	NM	NM	NM	ND	NM	NM	NM
MW-45M	Clear	NM	NM	Clear	NM	NM	NM	NM	NM	NM	ND	NM	NM	NM
MW-45D	Clear	NM	NM	Clear	NM	NM	NM	NM	NM	NM	ND	NM	NM	NM
MW-45B	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-46S	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-46M	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-47S	Clear	Clear	NM	Clear	Light Purple	Pink	Light Pink	NM	ND	NM	ND	37	10.9	19.5
MW-47M	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	1.4	ND	1.6
MW-47D	Clear	Clear	NM	Clear	Clear	Light Pink	Clear	NM	ND	NM	ND	ND	1.0	ND
MW-101	Clear	Light Pink	NM	Dark Purple	Dark Pink	Pink	Light Pink	NM	6.0	NM	1,700	240	65.7	9.6
MW-102	Clear	Dark Purple	NM	Magenta	Light Pink	Clear	Clear	NM	830	NM	78.8	5.8	1.0	ND
MW-103	Clear	Clear	NM	Clear	Clear	Light Pink	Clear	NM	ND	NM	ND	ND	1.0	2.2
MW-104	Clear	Dark Purple	NM	Light Pink	Clear	Dark Pink	Clear	NM	4,770	NM	43.1	ND	47.1	ND
MW-105	Clear	Dark Purple	NM	Dark Purple	Pink	Dark Pink	Clear	NM	1,140	NM	1,710	106	131	ND
MW-105M	Pink	Dark Purple	NM	Dark Purple	Dark Purple	Pink	Pink	NM	961	NM	1,300	510	34.7	29.6

Table 5
Summary of Groundwater Permanganate Concentration and Color
Former Raytheon Facility
Wayland, Massachusetts

Well ID	Visual Permanganate Presence							Permanganate Concentration (ppm)						
	Apr-2004	Jul-2004	Sep-2004	Dec-2004	Apr-2005	Oct-2005	Apr-2006	Apr-2004	Jul-2004	Sep-2004	Dec-2004	Apr-2005	Oct-2005	Apr-2006
MW-106	Pink	Dark Purple	NM	Dark Purple	Light Pink	Clear	Clear	NM	3,390	NM	16,200	8.8	ND	ND
MW-106M	Purple	Dark Purple	NM	Purple	Pink	Light Pink	Clear	NM	666	NM	400	99	4.7	1.3
MW-107	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	ND	ND	ND
MW-108	NM	NM	Clear	Clear	NM	NM	NM	NM	NM	ND	1.3	NM	NM	NM
MW-109	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	16	1.1	ND
MW-110	NM	NM	Pink	Clear	NM	NM	NM	NM	NM	76.4	ND	NM	NM	NM
MW-111	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	4.2	ND	ND
MW-112	Clear	NM	10	Clear	NM	NM	NM	NM	NM	ND	1.4	NM	NM	NM
MW-113	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	ND	ND	4.0
MW-114	Clear	NM	Clear	Clear	NM	NM	NM	NM	NM	ND	ND	NM	NM	NM
MW-115	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	2.3	ND	ND
MW-116	Clear	NM	Clear	Clear	NM	NM	NM	NM	NM	ND	ND	NM	NM	NM
MW-117	Clear	Clear	NM	Clear	Clear	NM	NM	NM	ND	NM	ND	3.3	NM	NM
MW-118	Clear	Clear	NM	Clear	Light Pink	Pink	Light Pink	NM	ND	NM	ND	12.4	260	22.9
MW-201S	Clear	Purple	NM	Pink	Clear	Purple	Clear	NM	790	NM	78.8	3.8	240	ND
MW-201M	Clear	Purple	NM	Pink	Clear	Clear	Clear	NM	21,000	NM	21.4	ND	ND	ND
MW-201D	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	ND	1.2	1.5
MW-202S	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	ND	1.1	ND
MW-202M	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	ND	ND	ND
MW-202D	Clear	Clear	NM	Clear	NM	NM	NM	NM	ND	NM	ND	NM	NM	NM
MW-203S	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	ND	1.2	ND
MW-203M	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	ND	1.3	6.6
MW-203D	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	4.9	1.0	ND
MW-204S	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	ND	1.3	ND
MW-204M	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	2.5	ND	ND
MW-204D	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	2.3	ND	ND
MW-205S	Clear	NM	NM	Clear	NM	NM	NM	NM	NM	NM	ND	NM	NM	NM
MW-205M	Clear	NM	NM	Clear	NM	NM	NM	NM	NM	NM	ND	NM	NM	NM
MW-205D	Clear	NM	NM	Clear	NM	NM	NM	NM	NM	NM	ND	NM	NM	NM
MW-206S	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-206M	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-206D	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-207S	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-207M	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-207D	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-208S	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	ND	ND	ND
MW-208M	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	ND	0.9	4.7
MW-208D	Clear	NM	NM	Clear	NM	NM	NM	NM	NM	NM	ND	NM	NM	NM
MW-209	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	1.5	ND	10.5
MW-210	Purple/Pink	Dark Purple	NM	Dark Purple	Dark Purple	Light Purple	Light Pink	NM	360	NM	2,570	1,010	220	15.7
MW-211	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	ND	ND	ND

Table 5
Summary of Groundwater Permanganate Concentration and Color
Former Raytheon Facility
Wayland, Massachusetts

Well ID	Visual Permanganate Presence							Permanganate Concentration (ppm)						
	Apr-2004	Jul-2004	Sep-2004	Dec-2004	Apr-2005	Oct-2005	Apr-2006	Apr-2004	Jul-2004	Sep-2004	Dec-2004	Apr-2005	Oct-2005	Apr-2006
MW-212	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	ND	ND	ND
MW-212M	Pink	Pink	NM	Clear	Clear	Clear	Clear	NM	24.0	NM	ND	1.6	ND	ND
MW-213	Clear	Clear	NM	Light Pink	Clear	Light Pink	Clear	NM	ND	NM	10.9	1.0	ND	ND
MW-214	Clear	Dark Purple	NM	Clear	Clear	Clear	Clear	NM	720	NM	ND	3.8	2.1	ND
MW-215S	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-215M	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-215D	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-216S	NM	NM	Clear	Clear	NM	NM	NM	NM	NM	1.3	1.0	NM	NM	NM
MW-216M	NM	NM	Clear	Clear	NM	NM	NM	NM	NM	ND	ND	NM	NM	NM
MW-216D	NM	NM	Clear	Clear	NM	NM	Clear	NM	NM	ND	ND	NM	NM	ND
MW-217S	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-217M	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-217D	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-218S	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-218M	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-218D	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-219S	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-219M	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-219D	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-220S	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-220M	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-221M	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-221D	Clear	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-403	Clear	Clear	NM	Clear	Clear	Clear	Clear	NM	ND	NM	ND	5.6	1.2	ND
MW-404	Clear	Dark Purple	NM	Dark Purple	Dark Purple	Dark Purple	Dark Purple	NM	22,500	NM	14,400	9,520	8,490	2,830
MW-405S	Clear	Dark Purple	NM	Dark Purple	Dark Purple	Purple	Purple	NM	3,570	NM	3,390	2,860	2,000	810
MW-405D	NM	Dark Purple	NM	NM	NM	NM	NM	NM	8,720	NM	NM	NM	NM	NM

Notes:
NM = Not Measured because not scheduled for geochemical monitoring
ND = Not Detected
* = MW - 40S turned pink after 20 minutes of purging

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	HA-102 30-Apr-04	HA-104 30-Apr-04	MW-33S 29-Apr-04	MW-33S 10-Dec-04 DUP	MW-33S 10-Dec-04	MW-33S 12-Apr-05	MW-33S 11-Oct-05	MW-33S 3-Apr-06	MW-33M 29-Apr-04	MW-33M 29-Apr-04 DUP	MW-33M 9-Dec-04	MW-33M 12-Apr-05	MW-33M 11-Oct-05	MW-33M 4-Apr-06
Volatile Organics (VOCs) (ug/L)																
Tetrachloroethene		5	1.8	**16**	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene		5	**17**	4.7	**100**	**590**	**560**	**73**	**180**	**190**	**10**	**8.2**	**9.3**	**11**	**12**	**14**
cis-1,2-Dichloroethene		70	-	-	-	-	1.6	-	-	-	1.1	1.2	1.7	1.8	2.3	2.1
trans-1,2-Dichloroethene		100							-	-					-	-
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	0.96	-	28	170	150	22	51	57	-	-	-	-	-	-
1,1-Dichloroethene		7	-	-	-	-	4.6	1.1	6.1	-	-	-	-	-	-	-
1,1-Dichloroethane		70	-	-	-	-	1.6	-	-	-	-	-	-	-	-	-
Benzene		5														
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70														

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-37 30-Apr-04	MW-37M 30-Apr-04	MW-40 28-Apr-04	MW-40 28-Apr-04 DUP	MW-40 10-Dec-04	MW-40 11-Apr-05	MW-40 11-Apr-05 DUP	MW-40 12-Oct-05	MW-40 4-Apr-06	MW-40 4-Apr-06 DUP	MW-40S 28-Apr-04	MW-40S 10-Dec-04	MW-40S 11-Apr-05	MW-40S 12-Oct-05	MW-40S 4-Apr-06
Volatile Organics (VOCs) (ug/L)																	
Tetrachloroethene		5	-	-	1.4	1.3	0.88	1.4	1.5	1.6	0.67	0.8	-	-	-	-	-
Trichloroethene		5	1.8	-	**6.8**	**5.5**	4.1	**6.5**	**6.3**	**5.3**	4.0	4.5	2.6	1.7	4.5	1.5	2.5
cis-1,2-Dichloroethene		70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene		100								-	-	-				-	-
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene		7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane		70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene		5															
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	2.8	**7.1**	**5.8**	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	0.87	2.4	2.2	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	0.72	0.74	-	-	-	-	-
Methyl tert butyl ether		70															

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-42S 28-Apr-04	MW-43S 27-Apr-04	MW-43S 13-Apr-05	MW-43S 12-Oct-05	MW-43S 4-Apr-06	MW-45S 30-Apr-04	MW-45S 22-Jul-04	MW-45S 10-Dec-04	MW-45S 11-Apr-05	MW-45M 30-Apr-04	MW-45M 22-Jul-04	MW-45M 9-Dec-04	MW-45M 9-Dec-04 DUP	MW-45M 11-Apr-05
Volatile Organics (VOCs) (ug/L)																
Tetrachloroethene		5	0.96	3.9	1.2	0.58	3.4	2.8	2.2	2.6	2.2	-	-	-	-	-
Trichloroethene		5	3.5	**92**	**49**	3.4	**51**	**7.8**	3.9	**6.4**	4.8	**70**	**65**	**71**	**71**	**53**
cis-1,2-Dichloroethene		70	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene		100				-	-									
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	-	-	-	-	-	-	-	-	-	14	13	13	14	10
1,1-Dichloroethene		7	-	-	-	-	-	-	-	-	-	4.0	4.3	4.0	3.7	2.8
1,1-Dichloroethane		70	-	-	-	-	-	-	-	-	-	-	-	1.2	1.1	1.2
Benzene		5			-				-	-	-		-	-	-	-
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70			-				15	12	7.4		18	50	51	**140**

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-45D 30-Apr-04	MW-45D 23-Jul-04	MW-45D 9-Dec-04	MW-45D 11-Apr-05	MW-46M 30-Apr-04	MW-47S 28-Apr-04	MW-47S 23-Jul-04	MW-47S 9-Dec-04	MW-47S 12-Oct-05	MW-47S 5-Apr-06	MW-47M 28-Apr-04	MW-47M 23-Jul-04	MW-47M 9-Dec-04	MW-47M 11-Apr-05	MW-47M 10-Oct-05	MW-47M 5-Apr-06	MW-47M 5-Apr-06 DUP
Volatile Organics (VOCs) (ug/L)																			
Tetrachloroethene		5	-	-	-	-	0.62	0.66	-	1.7	1.5	1.3	-	1.4	0.57	-	-	-	-
Trichloroethene		5	**69**	**34**	**33**	**18**	2.5	**25**	**11**	1.6	-	-	**150**	**47**	**100**	**120**	**82**	**14**	**14**
cis-1,2-Dichloroethene		70	5.6	4.1	2.8	0.78	-	-	-	-	-	-	6.3	3.9	7.6	7.1	5.7	1.7	1.4
trans-1,2-Dichloroethene		100									-	-					-	-	-
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	-	-	-	-	2.8	6.4	3.1	0.66	-	0.92	-	-	-	-	-	-	-
1,1-Dichloroethene		7	-	-	-	-	3.1	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane		70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene		5		-	-	-		-	-	-			-	-	-	-			
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70		-	-	-		1.2	-	-			-	-	-	-			

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-47D 28-Apr-04	MW-47D 23-Jul-04	MW-47D 9-Dec-04	MW-47D 11-Apr-05	MW-47D 10-Oct-05	MW-47D 10-Oct-05 DUP	MW-47D 5-Apr-06	MW-101 28-Apr-04	MW-101 3-Apr-06	MW-102 27-Apr-04	MW-102 27-Apr-04 DUP	MW-102 9-Dec-04	MW-102 11-Apr-05	MW-102 12-Oct-05	MW-102 4-Apr-06
Volatile Organics (VOCs) (ug/L)																	
Tetrachloroethene		5	0.62	1.5	1.3	1.1	1.1	1.2	2.2	-	-	-	-		-	-	-
Trichloroethene		5	**18**	**24**	**16**	**23**	**30**	**30**	**56**	**9.9**	-	**240**	**270**	**230**	**240**	**590**	**450**
cis-1,2-Dichloroethene		70	1.3	3.3	2.5	3.7	5.4	5.3	5.2	-	-	6.2	6.6	3.4	3.6	13	6.6
trans-1,2-Dichloroethene		100					-	-	-		-					-	-
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	-	-	-	-	-	-	-	2.3	-	-	-	-	-	-	-
1,1-Dichloroethene		7	0.52	0.82	0.54	0.75	1.4	1.3	0.99	-	-	-	-	-	-	**7.3**	-
1,1-Dichloroethane		70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene		5	-	-	-	-											
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70	-	-	-	-											

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	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-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-105 27-Apr-04	MW-105 13-Apr-05	MW-105 11-Oct-05	MW-105 11-Oct-05 DUP	MW-105 4-Apr-06
Volatile Organics (VOCs) (ug/L)																	
Tetrachloroethene		5	0.56	0.5	-	-	-	3.2	-	1.3	-	2	2	-	-	-	1.2
Trichloroethene		5	2.2	2.0	1.0	1.4	1.2	**110**	-	**15**	0.61	**23**	**43**	-	-	-	**15**
cis-1,2-Dichloroethene		70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene		100				-	-				-	-			-	-	-
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene		7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane		70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene		5															
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70															

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-105M 27-Apr-04	MW-105M 14-Apr-05	MW-105M 11-Oct-05	MW-105M 4-Apr-06	MW-106 27-Apr-04	MW-106 8-Dec-04	MW-106 13-Apr-05	MW-106 12-Oct-05	MW-106 5-Apr-06	MW-106M 27-Apr-04	MW-106M 8-Dec-04	MW-106M 8-Dec-04 DUP	MW-106M 11-Oct-05	MW-106M 5-Apr-06
Volatile Organics (VOCs) (ug/L)																
Tetrachloroethene		5	0.8	-	-	0.5	2.6	-	3.5	-	2.3	0.94	-	-	-	1.1
Trichloroethene		5	**13**	-	0.83	3.4	**40**	-	**36**	3.2	**25**	**5.7**	-	-	3.4	**11**
cis-1,2-Dichloroethene		70	0.7	-	1.5	1.9	-	-	-	1.2	-	-	-	-	-	1.4
trans-1,2-Dichloroethene		100			-	-				-	-				-	-
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene		7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane		70	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene		5														
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70														

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	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-109 28-Apr-04	MW-109 7-Dec-04	MW-109 12-Apr-05	MW-109 12-Oct-05	MW-109 12-Oct-05 DUP	MW-109 4-Apr-06	MW-111 28-Apr-04	MW-111 7-Dec-04	MW-111 12-Apr-05	MW-111 11-Oct-05	MW-111 4-Apr-06
Volatile Organics (VOCs) (ug/L)																		
Tetrachloroethene		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene		5	**73**	**74**	**66**	**47**	**83**	2.0	**41**	**34**	**37**	**34**	**33**	**26**	**18**	**860**	**15**	**100**
cis-1,2-Dichloroethene		70	3.4	8.2	11	11	9.8	-	4.8	4.3	5.9	5.4	4.7	0.87	-	4.9	0.68	0.68
trans-1,2-Dichloroethene		100				-	-				-	-	-				-	-
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	-	-	-	-	-	-	-	-	-	-	-	5.2	4.6	**280**	1.7	25
1,1-Dichloroethene		7	-	-	-	-	0.58	-	-	-	-	-	-	-	-	**32**	-	0.94
1,1-Dichloroethane		70	-	-	-	-	-	-	-	-	-	-	-	-	-	3.3	-	1.3
Benzene		5																
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70																

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-112 28-Apr-04	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-114 29-Apr-04	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-116 29-Apr-04	MW-117 29-Apr-04	MW-117 9-Dec-04	MW-117 14-Apr-05	MW-117 14-Apr-05 DUP
Volatile Organics (VOCs) (ug/L)																			
Tetrachloroethene		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	1.1	1.1
Trichloroethene		5	-	3.2	**12**	**6.4**	**35**	**120**	-	**17**	**14**	**270**	**34**	**220**	-	3.4	**11**	**10**	**10**
cis-1,2-Dichloroethene		70	-	-	0.98	-	1.4	0.81	-	1.4	0.93	1.3	0.95	1.2	-	-	1.0	0.74	0.85
trans-1,2-Dichloroethene		100					-	-					-	-					
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	-	-	0.51	2.3	2.5	32	-	-	16	190	7.4	81	-	-	-	-	-
1,1-Dichloroethene		7	-	-	-	-	0.91	1.5	-	-	-	**7.2**	-	2.6	-	-	-	-	-
1,1-Dichloroethane		70	-	-	-	-	2.6	0.76	-	-	-	2.5	-	1.6	-	-	-	-	-
Benzene		5																	
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-	-	-	4.2	2.8	2.6	2.6
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70																	

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-118 29-Apr-04	MW-118 7-Dec-04	MW-118 14-Apr-05	MW-118 13-Oct-05	MW-118 13-Oct-05 DUP	MW-118 3-Apr-06	MW-201S 28-Apr-04	MW-201S 6-Dec-04	MW-201S 13-Apr-05	MW-201S 4-Apr-06	MW-201M 28-Apr-04	MW-201M 13-Apr-05	MW-201M 10-Oct-05	MW-201M 4-Apr-06
Volatile Organics (VOCs) (ug/L)																
Tetrachloroethene		5	1.5	-	-	-	-	1	3.6	0.88	1.0	0.78	-	-	-	-
Trichloroethene		5	**150**	**120**	**80**	**53**	**55**	**65**	**22**	**5.2**	**7.4**	**11**	**28**	**100**	**150**	**270**
cis-1,2-Dichloroethene		70	1.7	-	-	-	0.61	0.5	-	-	-	-	2.7	6.9	12	12
trans-1,2-Dichloroethene		100				-	-	-				-			-	-
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene		7	-	-	-	-	-	-	-	-	-	-	-	-	3.6	2.8
1,1-Dichloroethane		70	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene		5														
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70														

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	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-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
Volatile Organics (VOCs) (ug/L)													
Tetrachloroethene		5	2.6	-	-	-	-	1.4	-	-	1.7	-	-
Trichloroethene		5	**64**	**7.1**	2.4	-	1.6	2.7	0.97	-	2.4	-	0.75
cis-1,2-Dichloroethene		70	8.1	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene		100				-	-					-	-
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene		7	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane		70	-	-	-	-	-	-	-	-	-	-	-
Benzene		5						-	-	-	-		
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70						-	-	-	-		

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-202M 28-Apr-04	MW-202M 28-Apr-04 DUP	MW-202M 23-Jul-04	MW-202M 10-Dec-04	MW-202M 12-Apr-05	MW-202M 12-Apr-05 DUP	MW-202M 11-Oct-05	MW-202M 4-Apr-06	MW-202D 28-Apr-04	MW-202D 23-Jul-04	MW-202D 6-Dec-04	MW-202D 6-Dec-04 DUP	MW-202D 12-Apr-05
Volatile Organics (VOCs) (ug/L)															
Tetrachloroethene		5	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene		5	**59**	**63**	**70**	**37**	**61**	**63**	**31**	**100**	0.56	-	-	-	0.8
cis-1,2-Dichloroethene		70	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene		100							-	-					
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	13	13	19	9.8	15	16	15	30	-	-	-	-	-
1,1-Dichloroethene		7	1.3	1.4	2.4	-	-	2.1	1.3	1.6	-	-	-	-	-
1,1-Dichloroethane		70	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene		5	-	-	-	-	-	-			-	-	-	-	-
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70	**180**	**150**	**140**	**280**	**190**	**200**			-	-	-	-	-

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-203S 27-Apr-04	MW-203S 22-Jul-04	MW-203S 8-Dec-04	MW-203S 11-Apr-05	MW-203S 4-Apr-06	MW-203M 27-Apr-04	MW-203M 27-Apr-04 DUP	MW-203M 22-Jul-04	MW-203M 7-Dec-04	MW-203M 11-Apr-05	MW-203M 10-Oct-05	MW-203M 4-Apr-06
Volatile Organics (VOCs) (ug/L)														
Tetrachloroethene		5	2.4	**21**	**13**	**5.9**	**8.2**	0.59	0.6	0.65	2.4	0.54	2.2	0.66
Trichloroethene		5	0.68	**10**	2.8	2.3	3.4	**130**	**150**	**14**	**12**	**93**	3.8	1.8
cis-1,2-Dichloroethene		70	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene		100					-						-	-
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	-	-	-	-	-	37	36	3.3	2.6	25	1.6	0.6
1,1-Dichloroethene		7	-	-	-	-	-	2.2	2.2	-	-	1.7	-	-
1,1-Dichloroethane		70	-	-	-	-	-	0.75	-	-	-	1	-	-
Benzene		5	-	-	-	-		-	-	-	-	-		
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70	-	-	-	-		2.7	2.8	-	-	1.2		

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-203D 27-Apr-04	MW-203D 22-Jul-04	MW-203D 22-Jul-04 DUP	MW-203D 7-Dec-04	MW-203D 11-Apr-05	MW-203D 10-Oct-05	MW-203D 4-Apr-06	MW-204S 27-Apr-04	MW-204S 21-Jul-04	MW-204S 8-Dec-04	MW-204S 13-Apr-05	MW-204S 13-Apr-05 DUP	MW-204S 10-Oct-05	MW-204S 4-Apr-06
Volatile Organics (VOCs) (ug/L)																
Tetrachloroethene		5	2.5	1.8	1.9	2.6	3.1	2.8	2.9	**8.2**	**16**	**8.7**	**8.2**	**8.4**	**13**	**9.4**
Trichloroethene		5	**92**	**75**	**74**	**80**	**80**	**82**	**76**	2	3.5	2.4	2	1.9	1.6	1.1
cis-1,2-Dichloroethene		70	4.6	5.8	5.7	6	6.4	7	5.6	-	-	-	-	-	-	-
trans-1,2-Dichloroethene		100						-	-						-	-
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene		7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane		70	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene		5	-	-	-	-	-			-	-	-	-	-		
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70	-	-	-	-	-			-	-	-	-	-		

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	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-204D 28-Apr-04	MW-204D 21-Jul-04	MW-204D 8-Dec-04	MW-204D 13-Apr-05	MW-204D 10-Oct-05	MW-204D 5-Apr-06	MW-204D 5-Apr-06 DUP
Volatile Organics (VOCs) (ug/L)															
Tetrachloroethene		5	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene		5	**130**	**170**	**160**	**150**	**76**	**74**	**30**	**27**	2.5	0.95	**6.2**	**12**	**11**
cis-1,2-Dichloroethene		70	-	-	-	-	-	-	1.9	2.7	-	-	6.9	25	25
trans-1,2-Dichloroethene		100					-	-					-	-	-
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	21	49	34	28	27	26	-	-	-	-	-	-	-
1,1-Dichloroethene		7	3.5	4	3.6	5.9	5.3	2.1	-	-	-	-	-	-	-
1,1-Dichloroethane		70	-	-	-	-	-	2	-	-	-	-	-	-	-
Benzene		5	-	-	-	-			-	-	-	-			
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70	69	33	54	**80**			-	-	-	-			

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-205S 26-Apr-04	MW-205S 22-Jul-04	MW-205S 8-Dec-04	MW-205S 11-Apr-05	MW-205M 26-Apr-04	MW-205M 22-Jul-04	MW-205M 8-Dec-04	MW-205M 8-Dec-04 DUP	MW-205M 11-Apr-05	MW-205D 27-Apr-04	MW-205D 22-Jul-04	MW-205D 8-Dec-04	MW-205D 11-Apr-05
Volatile Organics (VOCs) (ug/L)															
Tetrachloroethene		5	1.1	1.9	0.74	0.84	-	-	-	-	-	-	-	-	-
Trichloroethene		5	-	-	-	-	**19**	**44**	**23**	**24**	**34**	**7.8**	**9.2**	**8.6**	**13**
cis-1,2-Dichloroethene		70	-	-	-	-	-	-	-	-	-	2.1	2.9	2.6	3.2
trans-1,2-Dichloroethene		100													
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	-	-	-	-	3.5	8.3	4.2	3.6	6.3	-	-	-	-
1,1-Dichloroethene		7	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane		70	-	-	-	-	-	-	-	-	2.3	-	-	-	-
Benzene		5	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70	-	-	-	-	**280**	**110**	**190**	**180**	**160**	-	-	-	-

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-206S 26-Apr-04	MW-206S 19-Jul-04	MW-206S 9-Dec-04	MW-206S 12-Apr-05	MW-206S 12-Apr-05 DUP	MW-206M 26-Apr-04 DUP	MW-206M 26-Apr-04	MW-206M 19-Jul-04	MW-206M 9-Dec-04	MW-206M 12-Apr-05	MW-206D 26-Apr-04	MW-206D 19-Jul-04	MW-206D 9-Dec-04	MW-206D 12-Apr-05
Volatile Organics (VOCs) (ug/L)																
Tetrachloroethene		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene		5	-	-	-	-	-	**28**	**29**	**17**	**20**	**23**	**38**	**37**	**26**	**30**
cis-1,2-Dichloroethene		70	-	-	-	-	-	0.64	0.63	0.64	-	0.79	3	4.1	3	3.2
trans-1,2-Dichloroethene		100														
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene		7	-	-	-	-	-	4.1	4	2.9	3.2	4.1	-	-	-	-
1,1-Dichloroethane		70	-	-	-	-	-	3.9	4	2.7	3	2.4	-	-	-	-
Benzene		5	-	-	-	-	-	-	-		-	-	-	-	-	-
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70	-	-	-	-	-	1.8	1.9		1.6	2	-	-	-	-

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 6
Summary of Groundwater VOC Analytical Data
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-207S 26-Apr-04	MW-207S 19-Jul-04	MW-207S 8-Dec-04	MW-207S 12-Apr-05	MW-207M 26-Apr-04	MW-207M 20-Jul-04	MW-207M 8-Dec-04	MW-207M 12-Apr-05	MW-207D 26-Apr-04	MW-207D 21-Jul-04	MW-207D 8-Dec-04	MW-207D 12-Apr-05
Volatile Organics (VOCs) (ug/L)														
Tetrachloroethene		5	1.6	3.8	2	2.6	-	-	-	-	-	-	-	-
Trichloroethene		5	**28**	**28**	**46**	**12**	**120**	**67**	**53**	**49**	1	1.7	1.8	1.4
cis-1,2-Dichloroethene		70	-	-	0.62	-	1.1	1.5	1.2	1.4	0.9	-	-	1.6
trans-1,2-Dichloroethene		100												
Vinyl Chloride		2	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane		200	2.2	4	4.6	1.2	4.4	1	-	1.1	-	-	-	-
1,1-Dichloroethene		7	-	0.55	0.95	-	5.8	3.7	3.3	3.3	-	-	-	-
1,1-Dichloroethane		70	-	-	-	-	2.5	2.1	1.9	1.6	-	-	-	-
Benzene		5	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene		100	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform		5	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane		3	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane		2	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether		70	1.2	1.1	-	-	1.3	-	-	-	-	-	-	-

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
DUP = Field Duplicate
ug/L=micrograms per liter (parts per billion (ppb))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	SMCL	MW-33S 29-Apr-04	MW-33S 10-Dec-04	MW-33S 10-Dec-04 DUP	MW-33S 12-Apr-05	MW-33S 11-Oct-05	MW-33S 03-Apr-06	MW-33M 29-Apr-04	MW-33M 29-Apr-04 DUP	MW-33M 09-Dec-04	MW-33M 12-Apr-05	MW-33M 11-Oct-05	MW-33M 04-Apr-06
Metals (mg/L)															
Sodium		NS		7	8.9	8.8	6.8	6.2	7.2	16	16	14	18	15	15
SW9251 (mg/L)															
Chloride		NS	250	5.3	12	11				69	68	60			

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-40 28-Apr-04	MW-40 28-Apr-04 DUP	MW-40 10-Dec-04	MW-40 11-Apr-05	MW-40 11-Apr-05 DUP	MW-40 12-Oct-05	MW-40 04-Apr-06	MW-40 04-Apr-06 DUP	MW-40S 28-Apr-04	MW-43S 27-Apr-04	MW-43S 04-Apr-06	MW-47S 28-Apr-04	MW-47S 05-Apr-06
Metals (mg/L)															
Sodium		NS	44	43	78	55	56	89	79	76	140	210	120	5.3	12
SW9251 (mg/L)															
Chloride		NS	35	34	75						190	*350*		17	

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-47M 28-Apr-04	MW-47M 11-Apr-05	MW-47M 10-Oct-05	MW-47M 05-Apr-06	MW-47D 28-Apr-04	MW-47D 11-Apr-05	MW-47D 10-Oct-05	MW-47D 10-Oct-05 DUP	MW-47D 05-Apr-06	MW-101 28-Apr-04
Metals (mg/L)												
Sodium		NS	27	27	23	12	25	68	52	52	79	98
SW9251 (mg/L)												
Chloride		NS	120				90					120

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-102 27-Apr-04	MW-102 27-Apr-04 DUP	MW-102 12-Oct-05	MW-102 04-Apr-06	MW-103 27-Apr-04	MW-103 09-Dec-04	MW-103 13-Apr-05	MW-103 11-Oct-05	MW-103 04-Apr-06	MW-104 28-Apr-04	MW-105 27-Apr-04	MW-106 05-Apr-06
Metals (mg/L)														
Sodium		NS	66	66	92	90	180	230	240	220	210	150	300	130
SW9251 (mg/L)														
Chloride		NS	*280*	*280*			160	180				*260*	190	

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-107 28-Apr-04	MW-107 12-Apr-05	MW-107 12-Oct-05	MW-107 06-Apr-06	MW-109 28-Apr-04	MW-109 07-Dec-04	MW-109 08-Dec-04	MW-109 12-Apr-05	MW-109 12-Oct-05	MW-109 12-Oct-05 DUP	MW-109 04-Apr-06
Metals (mg/L)													
Sodium		NS	40	64	65	58	-		15	21	16	16	18
SW9251 (mg/L)													
Chloride		NS	190				49	77					

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-111 28-Apr-04	MW-111 07-Dec-04	MW-111 09-Dec-04	MW-111 12-Apr-05	MW-111 11-Oct-05	MW-111 04-Apr-06	MW-113 29-Apr-04	MW-113 07-Dec-04	MW-113 08-Dec-04	MW-113 12-Apr-05	MW-113 11-Oct-05	MW-113 03-Apr-06
Metals (mg/L)														
Sodium		NS	32		38	53	21	65	69		39	100	22	78
SW9251 (mg/L)														
Chloride		NS	56	54					120	56				

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-115 29-Apr-04	MW-115 08-Dec-04	MW-115 12-Oct-05	MW-115 04-Apr-06	MW-117 29-Apr-04	MW-117 09-Dec-04	MW-117 14-Apr-05	MW-117 14-Apr-05 DUP	MW-118 29-Apr-04	MW-118 07-Dec-04	MW-201S 28-Apr-04
Metals (mg/L)													
Sodium		NS	28	39	51	77	72	93	94	94	99	120	73
SW9251 (mg/L)													
Chloride		NS	60	56			65	73			100	150	*270*

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-201M 28-Apr-04	MW-201M 13-Apr-05	MW-201M 10-Oct-05	MW-201M 04-Apr-06	MW-201D 28-Apr-04	MW-201D 09-Dec-04	MW-201D 13-Apr-05	MW-201D 10-Oct-05	MW-201D 04-Apr-06	MW-202S 28-Apr-04	MW-202S 12-Apr-05	MW-202S 11-Oct-05	MW-202S 04-Apr-06
Metals (mg/L)															
Sodium		NS	22	110	58	56	39	47	180	140	110	140	160	56	15
SW9251 (mg/L)															
Chloride		NS	150				190	120				98			

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-202M 28-Apr-04	MW-202M 28-Apr-04 DUP	MW-202M 12-Apr-05	MW-202M 12-Apr-05 DUP	MW-202M 11-Oct-05	MW-202M 04-Apr-06	MW-203S 28-Apr-04	MW-203S 11-Apr-05	MW-203S 04-Apr-06	MW-203M 27-Apr-04	MW-203M 27-Apr-04 DUP	MW-203M 11-Apr-05	MW-203M 10-Oct-05
Metals (mg/L)															
Sodium		NS	20	20	24	24	23	28	61	77	100	67	69	99	180
SW9251 (mg/L)															
Chloride		NS	33	31					16			65	64		

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-203M 04-Apr-06
Metals (mg/L)			
Sodium		NS	160
SW9251 (mg/L)			
Chloride		NS	

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-203D 27-Apr-04	MW-203D 11-Apr-05	MW-203D 10-Oct-05	MW-203D 04-Apr-06	MW-204S 27-Apr-04	MW-204S 10-Oct-05	MW-204S 04-Apr-06	MW-204M 27-Apr-04	MW-204M 13-Apr-05	MW-204M 10-Oct-05	MW-204M 04-Apr-06
Metals (mg/L)													
Sodium		NS	53	58	64	73	62	36	41	30	32	26	35
SW9251 (mg/L)													
Chloride		NS	120				73			66			

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-204D 28-Apr-04	MW-204D 13-Apr-05	MW-204D 10-Oct-05	MW-204D 05-Apr-06	MW-204D 05-Apr-06 DUP	MW-208S 30-Apr-04	MW-208S 14-Apr-05	MW-208S 12-Oct-05	MW-208S 04-Apr-06
Metals (mg/L)											
Sodium		NS	30	4.2	66	210	210	81	93	94	78
SW9251 (mg/L)											
Chloride		NS	74					45			

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-208M 30-Apr-04	MW-208M 14-Apr-05	MW-208M 14-Apr-05 DUP	MW-208M 12-Oct-05	MW-208M 04-Apr-06	MW-209 27-Apr-04	MW-209 06-Dec-04	MW-209 13-Apr-05	MW-209 13-Apr-05 DUP	MW-209 05-Apr-06
Metals (mg/L)												
Sodium		NS	84	73	71	64	68	84	100	53	52	51
SW9251 (mg/L)												
Chloride		NS	51					190	130			

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-211 28-Apr-04	MW-211 09-Dec-04	MW-211 13-Apr-05	MW-211 12-Oct-05	MW-211 12-Oct-05 DUP	MW-211 04-Apr-06	MW-211 04-Apr-06 DUP	MW-212 28-Apr-04	MW-212 08-Dec-04	MW-212 05-Apr-06	MW-212M 08-Dec-04	MW-212M 12-Oct-05
Metals (mg/L)														
Sodium		NS	52	15	53	17	18	44	45	120	120	68	320	340
SW9251 (mg/L)														
Chloride		NS	60	11						16	13		180	

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-213 27-Apr-04	MW-214 27-Apr-04	MW-214 09-Dec-04	MW-214 09-Dec-04 DUP	MW-214 11-Apr-05	MW-218S 08-Dec-04	MW-218S 27-Apr-04	MW-218M 27-Apr-04	MW-218M 08-Dec-04	MW-218M 08-Dec-04 DUP	MW-218D 27-Apr-04	MW-218D 09-Dec-04
Metals (mg/L)														
Sodium		NS	200	36	45	45	51							
SW9251 (mg/L)														
Chloride		NS	*260*	100	110	110		200	*260*	*540*	*490*	*500*	58	56

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-219S 27-Apr-04	MW-219S 07-Dec-04	MW-219M 27-Apr-04	MW-219M 27-Apr-04 DUP	MW-219M 09-Dec-04	MW-219D 26-Apr-04	MW-219D 07-Dec-04	MW-220S 26-Apr-04	MW-220S 06-Dec-04	MW-220M 26-Apr-04	MW-220M 07-Dec-04	MW-221M 27-Apr-04	MW-221M 09-Dec-04
Metals (mg/L)															
Sodium		NS													
SW9251 (mg/L)															
Chloride		NS	31	21	2	3.1	3.3	50	48	68	49	27	22	120	74

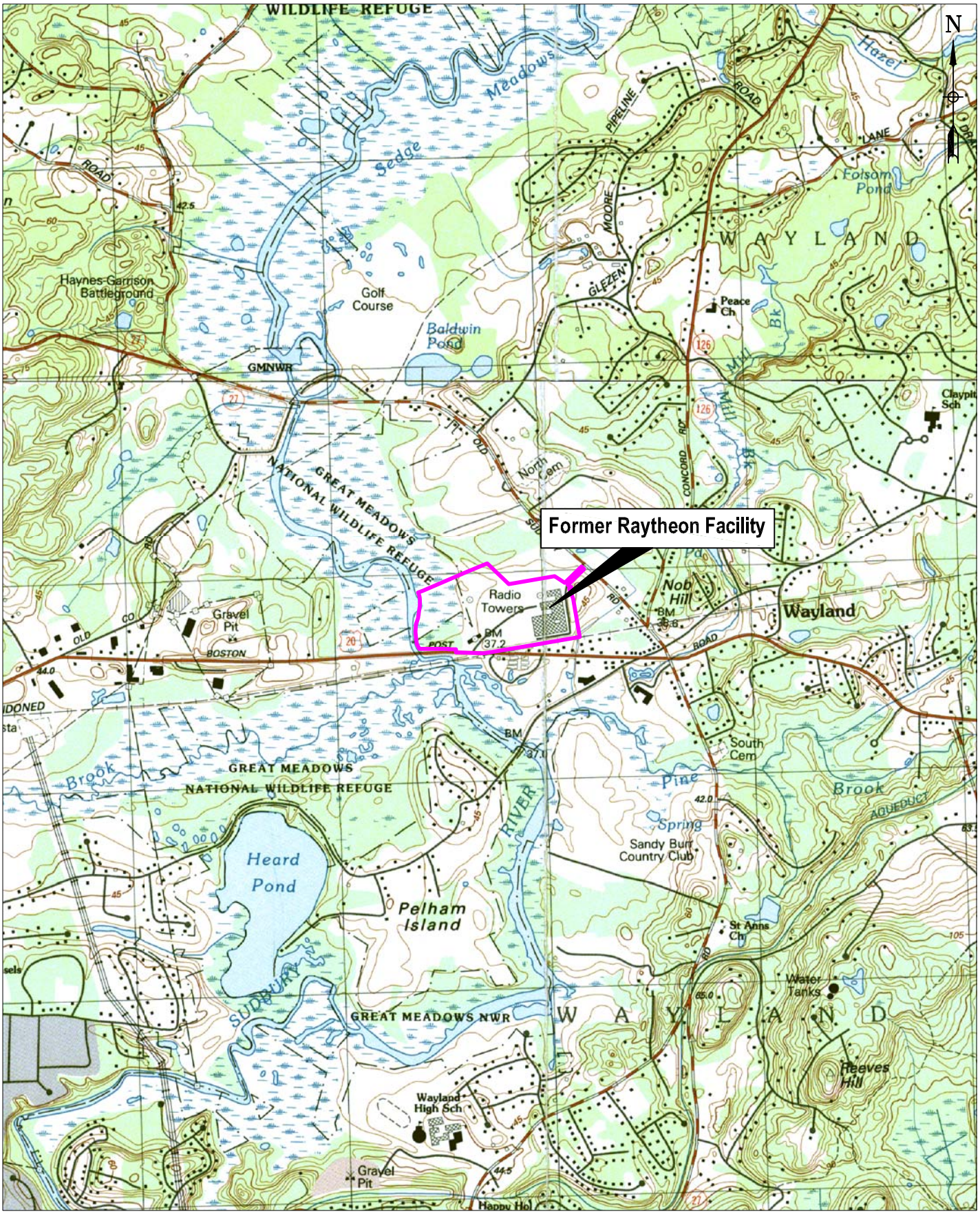
Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

Table 7
Summary of Groundwater Sodium and Chloride Analytical Results
Former Raytheon Facility
Wayland, Massachusetts

Parameter	Sample I.D. Date Sampled Comments	MCP Std Method 1 MCP-GW1	MW-221D 27-Apr-04	MW-221D 09-Dec-04	MW-403 28-Apr-04	MW-403 09-Dec-04	MW-403 11-Apr-05	MW-403 12-Oct-05	MW-403 04-Apr-06	MW-404 30-Apr-04	MW-405S 29-Apr-04
Metals (mg/L)											
Sodium		NS			190	170	200	170	200	55	61
SW9251 (mg/L)											
Chloride		NS	60	96	*380*	*320*				*320*	150

Notes:
- = Analytical result below the method detection limit. (ND)
Empty Cells = Not Analyzed
Bold and Shaded cells indicate exceedance of MCP Standard
Italic font indicates exceedance of Secondary Maximum Contaminant Level (SMCL)
DUP = Field Duplicate
NS = No MCP Standard
mg/L=milligrams per liter (parts per million (ppm))

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)

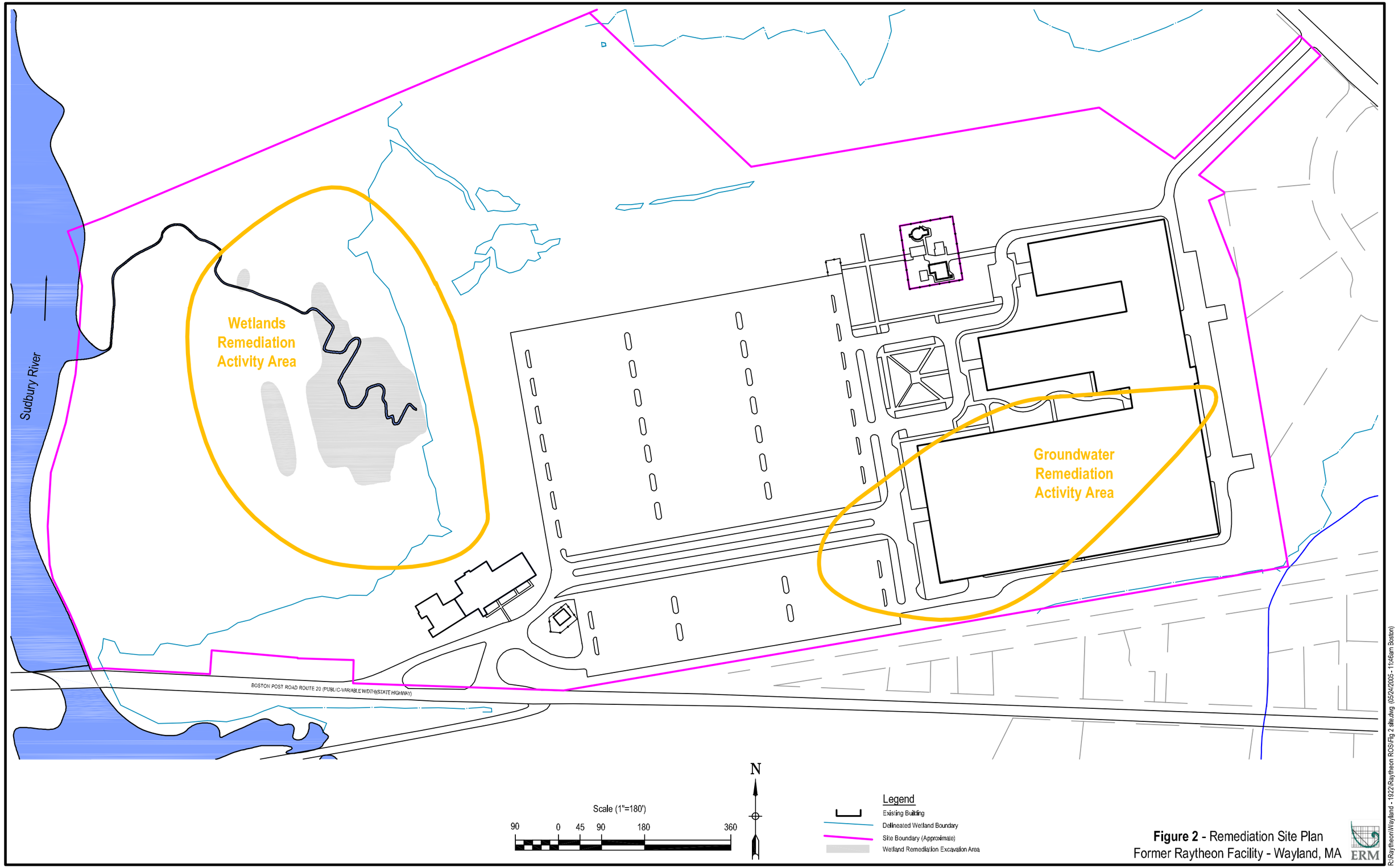


Figure 2 - Remediation Site Plan
Former Raytheon Facility - Wayland, MA

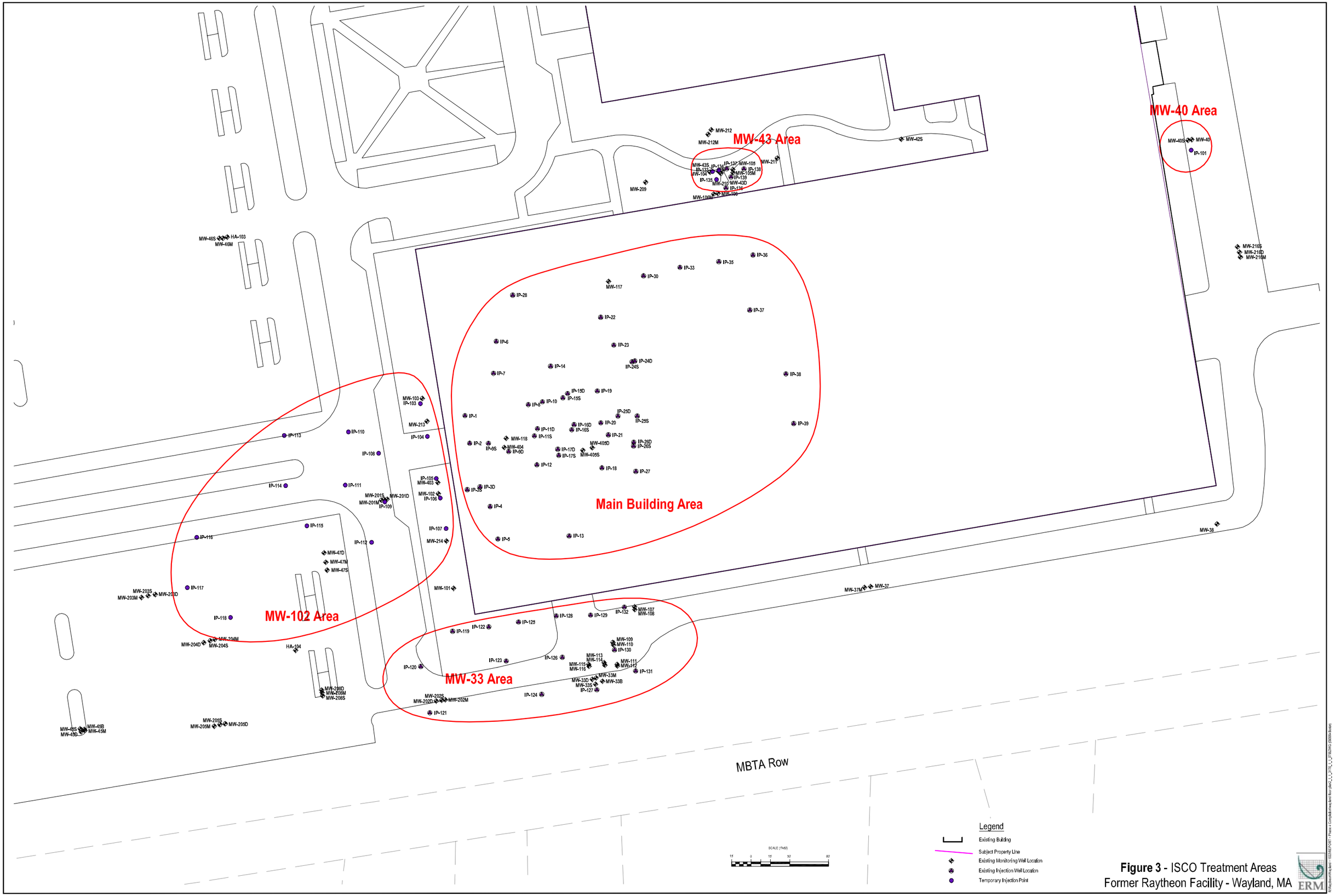
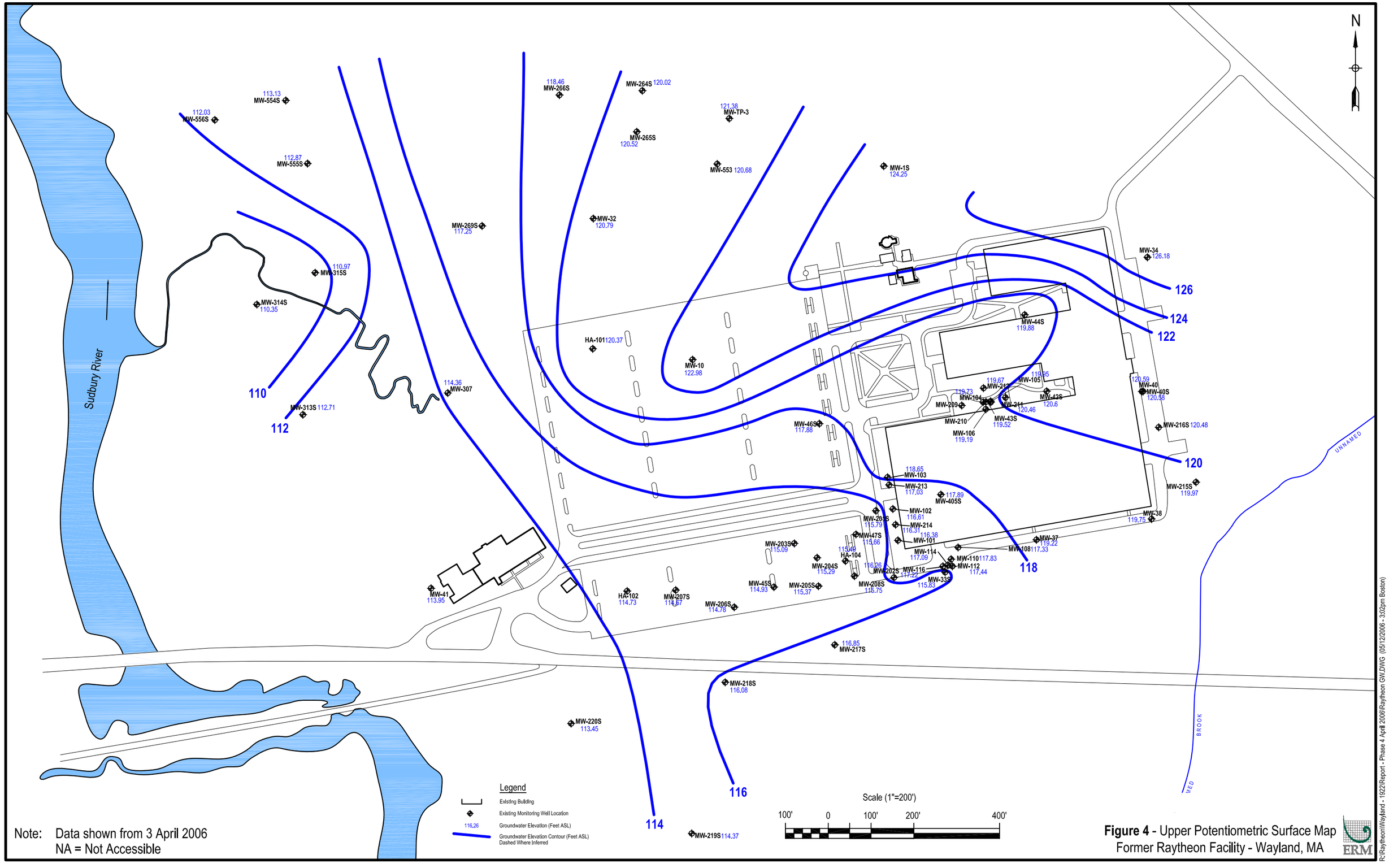


Figure 3 - ISCO Treatment Areas
Former Raytheon Facility - Wayland, MA

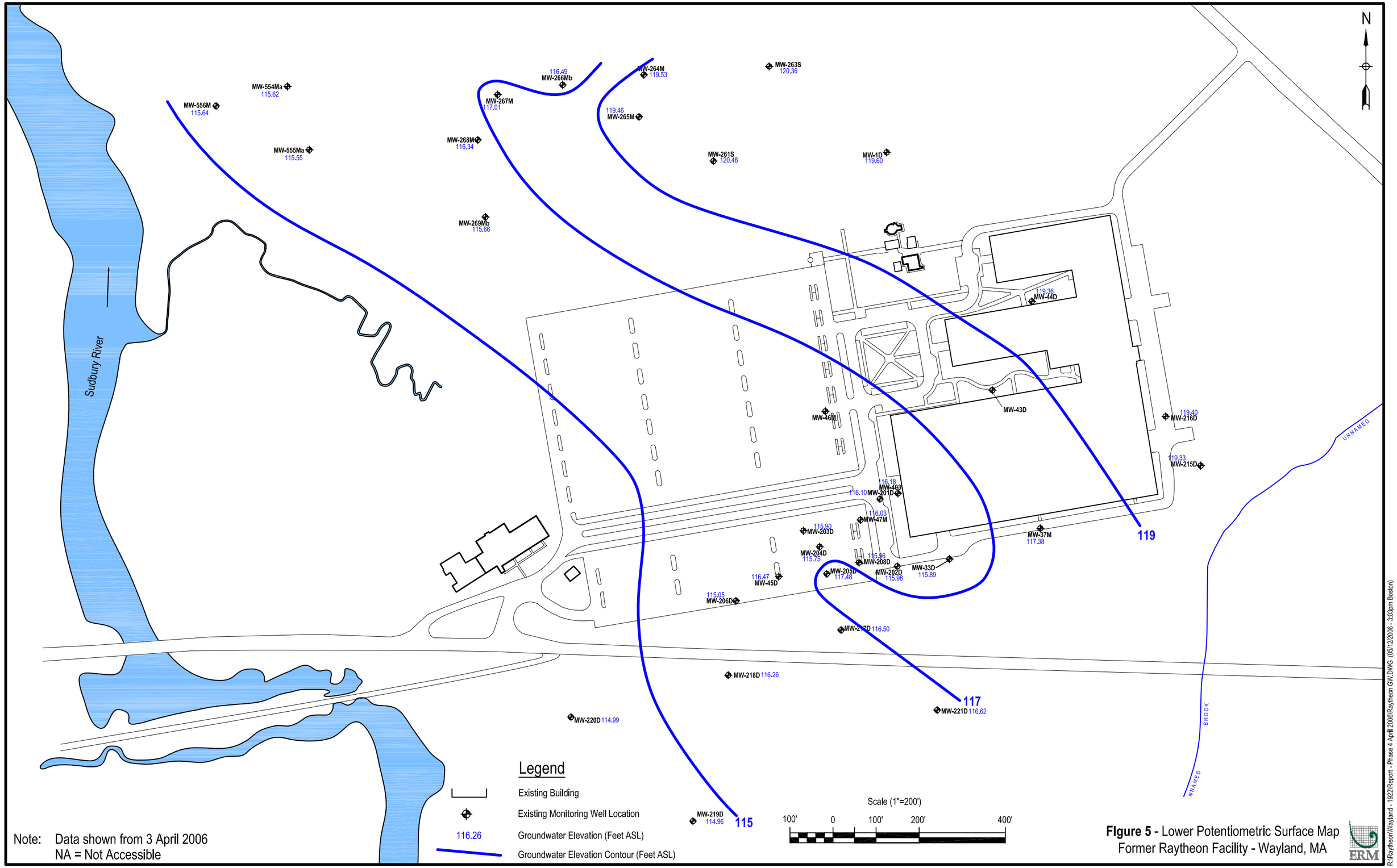


Note: Data shown from 3 April 2006
NA = Not Accessible

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

ERM

R:\Raytheon\Wayland - 1922\Report - Phase 4 April 2006\Raytheon GW.DWG (05/12/2006 - 3:02pm Boston)



Note: Data shown from 3 April 2006
NA = Not Accessible

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

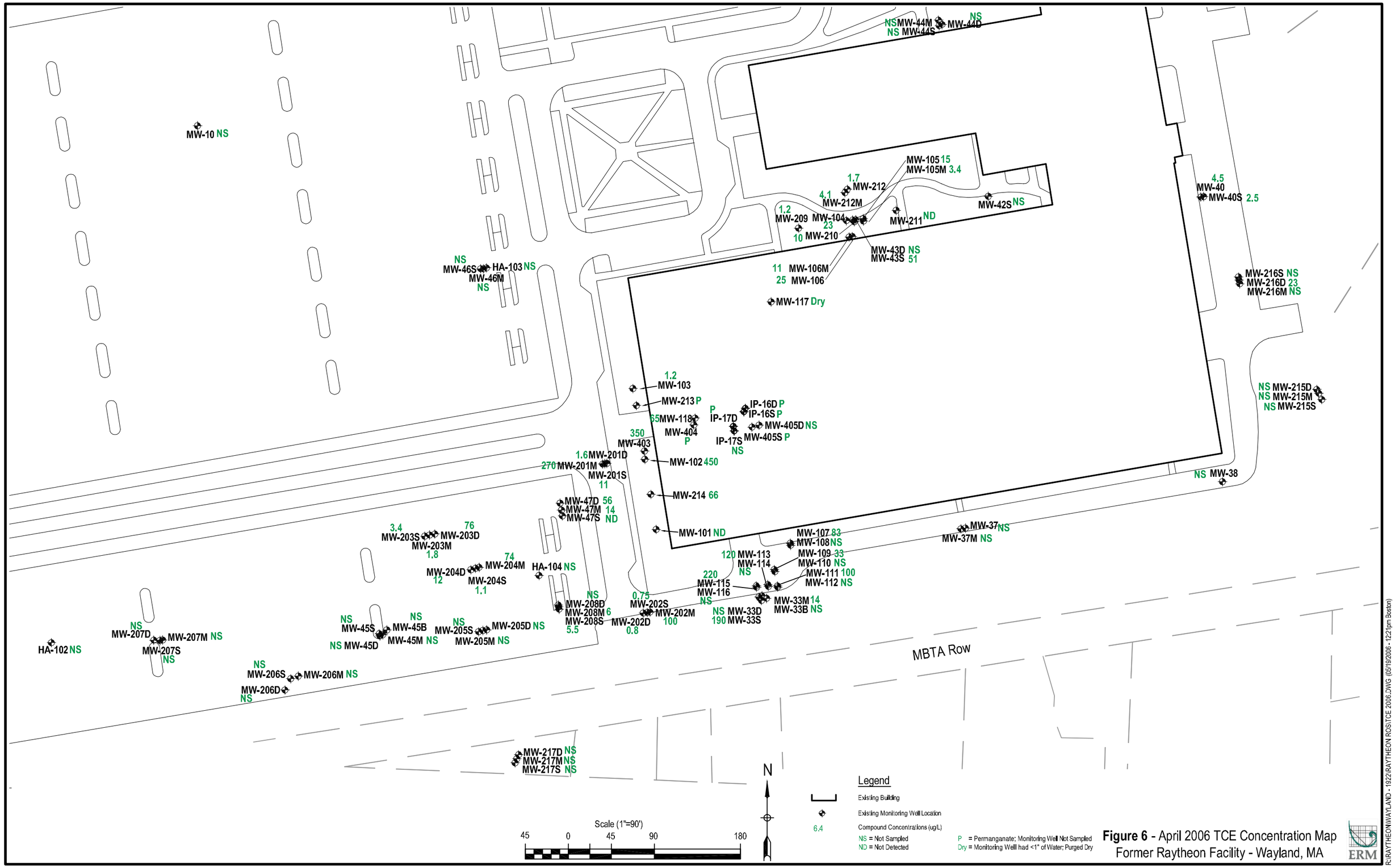


Figure 6 - April 2006 TCE Concentration Map
Former Raytheon Facility - Wayland, MA

Appendix A
BWSC Form (copy)

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)

A. SITE LOCATION:

1. Site Name: Former Raytheon Facility
2. Street Address: 430 Boston Post Road
3. City/Town: Wayland
4. ZIP Code: 01778-1824
5. ☐ 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
6. 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.

(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)

☐ 12. Submit a **Phase IV Final Inspection Report and 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.

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

☐ 14. Submit a **periodic Phase V Inspection & Monitoring Report**, pursuant to 310 CMR 40.0892.

☐ 15. Submit a **Remedy Operation Status**, pursuant to 310 CMR 40.0893.

☑ 16. Submit a **periodic Inspection & Monitoring Report to maintain a Remedy Operation Status**, pursuant to 310 CMR 40.0893(2).

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

☐ 18. Submit a **final Phase V Inspection & Monitoring Report and 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.

☐ 19. Submit a **Revised Phase V Inspection & Monitoring Report and Completion Statement**, pursuant to 310 CMR 40.0894.

☐ 20. Submit a **Post-Response Action Outcome Inspection & Monitoring Report**, pursuant to 310 CMR 40.0897.

(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***, ***Phase V Inspection and Monitoring Report,*** *or a* ***Remedy Operation Status*** *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 3. Last Name: Drobinski

4. Telephone: (617) 646-7850 5. Ext.: _____ 6. FAX: (617) 267-6447

7. Signature: _____

8. Date: _____ (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: Edwin 4. Last Name: Madera

5. Street: 528 Boston Post Road 6. Title: Senior Env. Engineer

7. City/Town: Sudbury 8. State: MA 9. ZIP Code: 01776-3349

10. Telephone: (978) 440-1813 11. Ext.: 12. FAX: (978) 440-1800

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: Former Operator

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

☐ 7. 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

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)

G. CERTIFICATION OF PERSON UNDERTAKING RESPONSE ACTIONS:

1. I, Edwin Madera, 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: _____ 3. Title: Senior Env. Engineer
Signature

4. For: _____ 5. Date: _____
(Name of person or entity recorded in Section D) (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:)

Appendix B
Laboratory Analytical Data Reports

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Jeremy Picard

Project Number: 42925

Site: RAYTHEON GW SAMPLING

Laboratory Job Number: L0604608

Date Received: 04-APR-2006

Date Reported: 10-APR-2006

Delivery Method: Alpha

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 method(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

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: _____
Technical Director

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0604608
Date Reported: 10-APR-2006

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0604608-01	MW-33S-20060403-01	WAYLAND, MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0604608

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.

Volatile Organics

L0604608-01 has elevated limits of detection due to the 4x 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.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604608-01
MW-33S-20060403-01
Sample Matrix: WATER

Date Collected: 03-APR-2006 15:20
Date Received : 04-APR-2006
Date Reported : 10-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	7.2	mg/l	2.0	60 6010B		0407 13:32	RW
Volatile Organics by MCP 8260B				60 8260B		0407 20:06	RY
Methylene chloride	ND	ug/l	20.				
1,1-Dichloroethane	ND	ug/l	3.0				
Chloroform	ND	ug/l	3.0				
Carbon tetrachloride	ND	ug/l	2.0				
1,2-Dichloropropane	ND	ug/l	7.0				
Dibromochloromethane	ND	ug/l	2.0				
1,1,2-Trichloroethane	ND	ug/l	3.0				
Tetrachloroethene	ND	ug/l	2.0				
Chlorobenzene	ND	ug/l	2.0				
1,2-Dichloroethane	ND	ug/l	2.0				
1,1,1-Trichloroethane	57	ug/l	2.0				
Bromodichloromethane	ND	ug/l	2.0				
trans-1,3-Dichloropropene	ND	ug/l	2.0				
cis-1,3-Dichloropropene	ND	ug/l	2.0				
Bromoform	ND	ug/l	8.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	2.0				
Chloromethane	ND	ug/l	10.				
Vinyl chloride	ND	ug/l	4.0				
Chloroethane	ND	ug/l	4.0				
1,1-Dichloroethene	ND	ug/l	2.0				
trans-1,2-Dichloroethene	ND	ug/l	3.0				
Trichloroethene	190	ug/l	2.0				
1,2-Dichlorobenzene	ND	ug/l	10.				
1,3-Dichlorobenzene	ND	ug/l	10.				
1,4-Dichlorobenzene	ND	ug/l	10.				
cis-1,2-Dichloroethene	ND	ug/l	2.0				
Dichlorodifluoromethane	ND	ug/l	20.				
1,2-Dibromoethane	ND	ug/l	8.0				
1,3-Dichloropropane	ND	ug/l	10.				
1,1,1,2-Tetrachloroethane	ND	ug/l	2.0				
o-Chlorotoluene	ND	ug/l	10.				
p-Chlorotoluene	ND	ug/l	10.				
Hexachlorobutadiene	ND	ug/l	2.4				
1,2,4-Trichlorobenzene	ND	ug/l	10.				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604608-01
MW-33S-20060403-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0407 20:06	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	100	%	70-130				
Toluene-d8	97.0	%	70-130				
4-Bromofluorobenzene	104	%	70-130				
Dibromofluoromethane	99.0	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604608

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 01 (WG235241-2, WG235241-3)					
Sodium, Dissolved	100	100	0	20	80-120
Volatile Organics by MCP 8260B for sample(s) 01 (WG235379-1, WG235379-2)					
Methylene chloride	97	96	1	25	70-130
1,1-Dichloroethane	100	95	5	25	70-130
Chloroform	96	92	4	25	70-130
Carbon tetrachloride	102	97	5	25	70-130
1,2-Dichloropropane	100	97	3	25	70-130
Dibromochloromethane	89	89	0	25	70-130
1,1,2-Trichloroethane	90	93	3	25	70-130
Tetrachloroethene	98	94	4	25	70-130
Chlorobenzene	96	93	3	25	70-130
Trichlorofluoromethane	101	95	6	25	70-130
1,2-Dichloroethane	95	94	1	25	70-130
1,1,1-Trichloroethane	99	96	3	25	70-130
Bromodichloromethane	98	95	3	25	70-130
trans-1,3-Dichloropropene	95	94	1	25	70-130
cis-1,3-Dichloropropene	87	86	1	25	70-130
1,1-Dichloropropene	102	96	6	25	70-130
Bromoform	93	92	1	50	70-130
1,1,2,2-Tetrachloroethane	94	95	1	25	70-130
Benzene	100	95	5	25	70-130
Toluene	101	95	6	25	70-130
Ethylbenzene	100	97	3	25	70-130
Chloromethane	88	83	6	50	70-130
Bromomethane	94	93	1	50	70-130
Vinyl chloride	97	94	3	25	70-130
Chloroethane	88	81	8	25	70-130
1,1-Dichloroethene	102	97	5	25	70-130
trans-1,2-Dichloroethene	101	95	6	25	70-130
Trichloroethene	100	95	5	25	70-130
1,2-Dichlorobenzene	94	93	1	25	70-130
1,3-Dichlorobenzene	100	94	6	25	70-130
1,4-Dichlorobenzene	91	86	6	25	70-130
Methyl tert butyl ether	90	93	3	25	70-130
p/m-Xylene	100	96	4	25	70-130
o-Xylene	95	91	4	25	70-130
cis-1,2-Dichloroethene	104	99	5	25	70-130
Dibromomethane	91	91	0	25	70-130
1,2,3-Trichloropropane	99	104	5	25	70-130
Styrene	92	88	4	25	70-130
Dichlorodifluoromethane	92	84	9	50	70-130
Acetone	82	82	0	50	70-130
Carbon disulfide	81	76	6	25	70-130
2-Butanone	89	100	12	50	70-130
4-Methyl-2-pentanone	86	95	10	50	70-130
2-Hexanone	99	106	7	50	70-130
Bromochloromethane	94	95	1	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604608

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 01 (WG235379-1, WG235379-2)					
Tetrahydrofuran	101	92	9	25	70-130
2,2-Dichloropropane	95	81	16	50	70-130
1,2-Dibromoethane	93	94	1	25	70-130
1,3-Dichloropropane	96	95	1	25	70-130
1,1,1,2-Tetrachloroethane	97	96	1	25	70-130
Bromobenzene	98	94	4	25	70-130
n-Butylbenzene	100	90	11	25	70-130
sec-Butylbenzene	96	91	5	25	70-130
tert-Butylbenzene	107	100	7	25	70-130
o-Chlorotoluene	102	97	5	25	70-130
p-Chlorotoluene	98	94	4	25	70-130
1,2-Dibromo-3-chloropropane	79	82	4	50	70-130
Hexachlorobutadiene	92	85	8	25	70-130
Isopropylbenzene	105	102	3	25	70-130
p-Isopropyltoluene	97	89	9	25	70-130
Naphthalene	79	82	4	25	70-130
n-Propylbenzene	110	101	9	25	70-130
1,2,3-Trichlorobenzene	77	80	4	25	70-130
1,2,4-Trichlorobenzene	84	81	4	25	70-130
1,3,5-Trimethylbenzene	108	102	6	25	70-130
1,2,4-Trimethylbenzene	103	96	7	25	70-130
Ethyl ether	86	88	2	25	70-130
Isopropyl Ether	86	86	0	25	70-130
Ethyl-Tert-Butyl-Ether	86	87	1	25	70-130
Tertiary-Amyl Methyl Ether	84	85	1	25	70-130
1,4-Dioxane	86	90	5	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	93	93	0		70-130
Toluene-d8	99	100	1		70-130
4-Bromofluorobenzene	104	101	3		70-130
Dibromofluoromethane	99	95	4		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604608

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG235241-1)							
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	ND	mg/l	2.0	60 6010B		0407 13:20	RW
Blank Analysis for sample(s) 01 (WG235379-3)							
Volatile Organics by MCP 8260B				60 8260B		0407 17:41	RY
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604608

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG235379-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0407 17:41	RY
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				
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	96.0	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	104	%	70-130				
Dibromofluoromethane	99.0	%	70-130				

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.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0604608

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
L0604608-01A	Vial HCl preserved	A	N/A	3.2C	Y	Absent	MCP-8260-04
L0604608-01B	Vial HCl preserved	A	N/A	3.2C	Y	Absent	MCP-8260-04
L0604608-01C	Plastic 250ml HNO3 preserved	A	<2	3.2C	Y	Absent	MCP-NA-6010S

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/4

ALPHA Job #: L0604608

Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Client Information

Client: ERM
Address: 399 Boylston St. 6th Floor Boston MA 02115
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 GW Sampling
Project Location: Wayland, MA
Project #: 42925
Project Manager: Jeremy Picard
ALPHA Quote #

Tum-Around Time

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

Date Due: 4/11 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	

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:

ANALYSIS: 8021B CVOCs; 6010B Diss Mn

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	8021B CVOCs	6010B Diss Mn	Sample Specific Comments	TOTAL # BOTTLES
0460801	MW-33S-20060403-01	04/03/06	15:20	GW	TD	2	1		3

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Container Type	VP
Preservative	bC

Relinquished By:	Date/Time	Received By:	Date/Time
TM DeRice	4/4 0909.30	[illegible]	4/4 9:30
[illegible]	4/4 12:10	Karolie Jeanet	4/4 12:10

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

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Jeremy Picard

Project Number: 42925

Site: RAYTHEON GW SAMPLING

Laboratory Job Number: L0604610

Date Received: 04-APR-2006

Date Reported: 10-APR-2006

Delivery Method: Alpha

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 method(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

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: _____
Technical Director

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0604610
Date Reported: 10-APR-2006

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0604610-01	MW-118-20060403-01	WAYLAND MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0604610

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.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604610-01
MW-118-20060403-01
Sample Matrix: WATER

Date Collected: 03-APR-2006 12:40
Date Received : 04-APR-2006
Date Reported : 10-APR-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		0407 20:42	RY
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	1.0	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	65	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	0.50	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604610-01
MW-118-20060403-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0407 20:42	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	103	%	70-130				
Toluene-d8	98.0	%	70-130				
4-Bromofluorobenzene	103	%	70-130				
Dibromofluoromethane	99.0	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604610

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 01 (WG235379-1, WG235379-2)					
Methylene chloride	97	96	1	25	70-130
1,1-Dichloroethane	100	95	5	25	70-130
Chloroform	96	92	4	25	70-130
Carbon tetrachloride	102	97	5	25	70-130
1,2-Dichloropropane	100	97	3	25	70-130
Dibromochloromethane	89	89	0	25	70-130
1,1,2-Trichloroethane	90	93	3	25	70-130
Tetrachloroethene	98	94	4	25	70-130
Chlorobenzene	96	93	3	25	70-130
Trichlorofluoromethane	101	95	6	25	70-130
1,2-Dichloroethane	95	94	1	25	70-130
1,1,1-Trichloroethane	99	96	3	25	70-130
Bromodichloromethane	98	95	3	25	70-130
trans-1,3-Dichloropropene	95	94	1	25	70-130
cis-1,3-Dichloropropene	87	86	1	25	70-130
1,1-Dichloropropene	102	96	6	25	70-130
Bromoform	93	92	1	50	70-130
1,1,2,2-Tetrachloroethane	94	95	1	25	70-130
Benzene	100	95	5	25	70-130
Toluene	101	95	6	25	70-130
Ethylbenzene	100	97	3	25	70-130
Chloromethane	88	83	6	50	70-130
Bromomethane	94	93	1	50	70-130
Vinyl chloride	97	94	3	25	70-130
Chloroethane	88	81	8	25	70-130
1,1-Dichloroethene	102	97	5	25	70-130
trans-1,2-Dichloroethene	101	95	6	25	70-130
Trichloroethene	100	95	5	25	70-130
1,2-Dichlorobenzene	94	93	1	25	70-130
1,3-Dichlorobenzene	100	94	6	25	70-130
1,4-Dichlorobenzene	91	86	6	25	70-130
Methyl tert butyl ether	90	93	3	25	70-130
p/m-Xylene	100	96	4	25	70-130
o-Xylene	95	91	4	25	70-130
cis-1,2-Dichloroethene	104	99	5	25	70-130
Dibromomethane	91	91	0	25	70-130
1,2,3-Trichloropropane	99	104	5	25	70-130
Styrene	92	88	4	25	70-130
Dichlorodifluoromethane	92	84	9	50	70-130
Acetone	82	82	0	50	70-130
Carbon disulfide	81	76	6	25	70-130
2-Butanone	89	100	12	50	70-130
4-Methyl-2-pentanone	86	95	10	50	70-130
2-Hexanone	99	106	7	50	70-130
Bromochloromethane	94	95	1	25	70-130
Tetrahydrofuran	101	92	9	25	70-130
2,2-Dichloropropane	95	81	16	50	70-130
1,2-Dibromoethane	93	94	1	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604610

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 01 (WG235379-1, WG235379-2)					
1,3-Dichloropropane	96	95	1	25	70-130
1,1,1,2-Tetrachloroethane	97	96	1	25	70-130
Bromobenzene	98	94	4	25	70-130
n-Butylbenzene	100	90	11	25	70-130
sec-Butylbenzene	96	91	5	25	70-130
tert-Butylbenzene	107	100	7	25	70-130
o-Chlorotoluene	102	97	5	25	70-130
p-Chlorotoluene	98	94	4	25	70-130
1,2-Dibromo-3-chloropropane	79	82	4	50	70-130
Hexachlorobutadiene	92	85	8	25	70-130
Isopropylbenzene	105	102	3	25	70-130
p-Isopropyltoluene	97	89	9	25	70-130
Naphthalene	79	82	4	25	70-130
n-Propylbenzene	110	101	9	25	70-130
1,2,3-Trichlorobenzene	77	80	4	25	70-130
1,2,4-Trichlorobenzene	84	81	4	25	70-130
1,3,5-Trimethylbenzene	108	102	6	25	70-130
1,2,4-Trimethylbenzene	103	96	7	25	70-130
Ethyl ether	86	88	2	25	70-130
Isopropyl Ether	86	86	0	25	70-130
Ethyl-Tert-Butyl-Ether	86	87	1	25	70-130
Tertiary-Amyl Methyl Ether	84	85	1	25	70-130
1,4-Dioxane	86	90	5	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	93	93	0		70-130
Toluene-d8	99	100	1		70-130
4-Bromofluorobenzene	104	101	3		70-130
Dibromofluoromethane	99	95	4		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604610

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG235379-3)							
Volatile Organics by MCP 8260B				60 8260B		0407 17:41	RY
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				
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.				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604610

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG235379-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0407 17:41	RY
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				
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	96.0	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	104	%	70-130				
Dibromofluoromethane	99.0	%	70-130				

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.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0604610

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
L0604610-01A	Vial Na2S2O3 preserved	A	N/A	3.2C	Y	Absent	MCP-8260-04
L0604610-01B	Vial Na2S2O3 preserved	A	N/A	3.2C	Y	Absent	MCP-8260-04

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/4

ALPHA Job #: L0604610

Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Client Information

Client: EKM
Address: 399 Boylston MA
Boston MA 02116
Phone: 617-646-7800
Fax: 617-267-0447
Email: jeremy.picard@ekm.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon GW Sampling
Project Location: Wayland MA
Project #: 42925
Project Manager: J. Picard
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 4/11 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

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:

ANALYSIS: VOC 8260 SIM Chlor

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	VOC 8260 SIM Chlor	Sample Specific Comments	Total # Bottles
04610-01	MW-115-20060403-01	4/3/06	12:40	GW	TD	✓	Preserved w/ Sodium Thiosulfate	

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

	VOC 8260 SIM Chlor
Container Type	V
Preservative	G

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	9:30 4/4/06	[illegible]	4/4 9:30
[illegible]	4/4 12:40	Kandie Jean	4/4 12:40

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. 14-May-04)

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Jeremy Picard

Project Number: 42925

Site: RAYTHEON GW SAMPLING

Laboratory Job Number: L0604615

Date Received: 04-APR-2006

Date Reported: 10-APR-2006

Delivery Method: Alpha

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 method(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

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: _____
Technical Director

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0604615
Date Reported: 10-APR-2006

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0604615-01	MW-113-20060403-01	WAYLAND, MA
L0604615-02	MW-101-20060403-01	WAYLAND, MA
L0604615-03	TB-001-20060404-01	WAYLAND, MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0604615

MCP Related Narratives

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.

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.

In reference to question E:

WG235379-4,5:

The LCSD % recovery for Acetone is above the acceptance criteria for the method.

The LCSD % recoveries for 2,2-Dichloropropane, Naphthalene and 1,2,3-Trichlorobenzene are below the acceptance criteria for the method.

The LCS/LCSD RPDs for Acetone and THF are above the acceptance criteria for the method.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604615-01
MW-113-20060403-01
Sample Matrix: WATER

Date Collected: 03-APR-2006 14:35
Date Received : 04-APR-2006
Date Reported : 10-APR-2006

Condition of Sample: Satisfactory

Field Prep: filed filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	78	mg/l	2.0	60 6010B		0407 13:52	RW
Volatile Organics by MCP 8260B				60 8260B		0407 23:07	RY
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	0.76	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	32	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	1.5	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	120	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	0.81	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604615-01
MW-113-20060403-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0407 23:07	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	109	%	70-130				
Toluene-d8	96.0	%	70-130				
4-Bromofluorobenzene	103	%	70-130				
Dibromofluoromethane	104	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604615-02
MW-101-20060403-01
Sample Matrix: WATER

Date Collected: 03-APR-2006 15:30
Date Received : 04-APR-2006
Date Reported : 10-APR-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		0409 11:58	RY
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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604615-02
MW-101-20060403-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 11:58	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	111	%	70-130				
Toluene-d8	95.0	%	70-130				
4-Bromofluorobenzene	102	%	70-130				
Dibromofluoromethane	95.0	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604615-03
TB-001-20060404-01
Sample Matrix: WATER

Date Collected: 23-MAR-2006 18:45
Date Received : 04-APR-2006
Date Reported : 10-APR-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		0408 13:30	PD
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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604615-03
TB-001-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 13:30	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	105	%	70-130				
Toluene-d8	93.0	%	70-130				
4-Bromofluorobenzene	100	%	70-130				
Dibromofluoromethane	116	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604615

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 01 (WG235241-2, WG235241-3)					
Sodium, Dissolved	100	100	0	20	80-120
Volatile Organics by MCP 8260B for sample(s) 01 (WG235379-1, WG235379-2)					
Methylene chloride	97	96	1	25	70-130
1,1-Dichloroethane	100	95	5	25	70-130
Chloroform	96	92	4	25	70-130
Carbon tetrachloride	102	97	5	25	70-130
1,2-Dichloropropane	100	97	3	25	70-130
Dibromochloromethane	89	89	0	25	70-130
1,1,2-Trichloroethane	90	93	3	25	70-130
Tetrachloroethene	98	94	4	25	70-130
Chlorobenzene	96	93	3	25	70-130
Trichlorofluoromethane	101	95	6	25	70-130
1,2-Dichloroethane	95	94	1	25	70-130
1,1,1-Trichloroethane	99	96	3	25	70-130
Bromodichloromethane	98	95	3	25	70-130
trans-1,3-Dichloropropene	95	94	1	25	70-130
cis-1,3-Dichloropropene	87	86	1	25	70-130
1,1-Dichloropropene	102	96	6	25	70-130
Bromoform	93	92	1	50	70-130
1,1,2,2-Tetrachloroethane	94	95	1	25	70-130
Benzene	100	95	5	25	70-130
Toluene	101	95	6	25	70-130
Ethylbenzene	100	97	3	25	70-130
Chloromethane	88	83	6	50	70-130
Bromomethane	94	93	1	50	70-130
Vinyl chloride	97	94	3	25	70-130
Chloroethane	88	81	8	25	70-130
1,1-Dichloroethene	102	97	5	25	70-130
trans-1,2-Dichloroethene	101	95	6	25	70-130
Trichloroethene	100	95	5	25	70-130
1,2-Dichlorobenzene	94	93	1	25	70-130
1,3-Dichlorobenzene	100	94	6	25	70-130
1,4-Dichlorobenzene	91	86	6	25	70-130
Methyl tert butyl ether	90	93	3	25	70-130
p/m-Xylene	100	96	4	25	70-130
o-Xylene	95	91	4	25	70-130
cis-1,2-Dichloroethene	104	99	5	25	70-130
Dibromomethane	91	91	0	25	70-130
1,2,3-Trichloropropane	99	104	5	25	70-130
Styrene	92	88	4	25	70-130
Dichlorodifluoromethane	92	84	9	50	70-130
Acetone	82	82	0	50	70-130
Carbon disulfide	81	76	6	25	70-130
2-Butanone	89	100	12	50	70-130
4-Methyl-2-pentanone	86	95	10	50	70-130
2-Hexanone	99	106	7	50	70-130
Bromochloromethane	94	95	1	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604615

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 01 (WG235379-1, WG235379-2)					
Tetrahydrofuran	101	92	9	25	70-130
2,2-Dichloropropane	95	81	16	50	70-130
1,2-Dibromoethane	93	94	1	25	70-130
1,3-Dichloropropane	96	95	1	25	70-130
1,1,1,2-Tetrachloroethane	97	96	1	25	70-130
Bromobenzene	98	94	4	25	70-130
n-Butylbenzene	100	90	11	25	70-130
sec-Butylbenzene	96	91	5	25	70-130
tert-Butylbenzene	107	100	7	25	70-130
o-Chlorotoluene	102	97	5	25	70-130
p-Chlorotoluene	98	94	4	25	70-130
1,2-Dibromo-3-chloropropane	79	82	4	50	70-130
Hexachlorobutadiene	92	85	8	25	70-130
Isopropylbenzene	105	102	3	25	70-130
p-Isopropyltoluene	97	89	9	25	70-130
Naphthalene	79	82	4	25	70-130
n-Propylbenzene	110	101	9	25	70-130
1,2,3-Trichlorobenzene	77	80	4	25	70-130
1,2,4-Trichlorobenzene	84	81	4	25	70-130
1,3,5-Trimethylbenzene	108	102	6	25	70-130
1,2,4-Trimethylbenzene	103	96	7	25	70-130
Ethyl ether	86	88	2	25	70-130
Isopropyl Ether	86	86	0	25	70-130
Ethyl-Tert-Butyl-Ether	86	87	1	25	70-130
Tertiary-Amyl Methyl Ether	84	85	1	25	70-130
1,4-Dioxane	86	90	5	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	93	93	0		70-130
Toluene-d8	99	100	1		70-130
4-Bromofluorobenzene	104	101	3		70-130
Dibromofluoromethane	99	95	4		70-130
Volatile Organics by MCP 8260B for sample(s) 02 (WG235379-4, WG235379-5)					
Methylene chloride	99	106	7	25	70-130
1,1-Dichloroethane	99	94	5	25	70-130
Chloroform	102	110	8	25	70-130
Carbon tetrachloride	113	126	11	25	70-130
1,2-Dichloropropane	100	104	4	25	70-130
Dibromochloromethane	95	98	3	25	70-130
1,1,2-Trichloroethane	96	100	4	25	70-130
Tetrachloroethene	97	110	13	25	70-130
Chlorobenzene	98	103	5	25	70-130
Trichlorofluoromethane	112	125	11	25	70-130
1,2-Dichloroethane	102	105	3	25	70-130
1,1,1-Trichloroethane	106	114	7	25	70-130
Bromodichloromethane	105	111	6	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604615

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 02 (WG235379-4, WG235379-5)					
trans-1,3-Dichloropropene	98	100	2	25	70-130
cis-1,3-Dichloropropene	89	89	0	25	70-130
1,1-Dichloropropene	105	108	3	25	70-130
Bromoform	98	101	3	50	70-130
1,1,2,2-Tetrachloroethane	93	91	2	25	70-130
Benzene	101	106	5	25	70-130
Toluene	97	104	7	25	70-130
Ethylbenzene	101	109	8	25	70-130
Chloromethane	93	94	1	50	70-130
Bromomethane	111	98	12	50	70-130
Vinyl chloride	107	115	7	25	70-130
Chloroethane	95	98	3	25	70-130
1,1-Dichloroethene	105	106	1	25	70-130
trans-1,2-Dichloroethene	101	103	2	25	70-130
Trichloroethene	100	103	3	25	70-130
1,2-Dichlorobenzene	95	97	2	25	70-130
1,3-Dichlorobenzene	98	101	3	25	70-130
1,4-Dichlorobenzene	92	96	4	25	70-130
Methyl tert butyl ether	91	78	15	25	70-130
p/m-Xylene	101	110	9	25	70-130
o-Xylene	95	103	8	25	70-130
cis-1,2-Dichloroethene	104	107	3	25	70-130
Dibromomethane	94	99	5	25	70-130
1,2,3-Trichloropropane	105	102	3	25	70-130
Styrene	94	101	7	25	70-130
Dichlorodifluoromethane	103	113	9	50	70-130
Acetone	74	320	125	50	70-130
Carbon disulfide	82	90	9	25	70-130
2-Butanone	89	71	23	50	70-130
4-Methyl-2-pentanone	84	76	10	50	70-130
2-Hexanone	99	93	6	50	70-130
Bromochloromethane	101	106	5	25	70-130
Tetrahydrofuran	78	101	26	25	70-130
2,2-Dichloropropane	93	64	37	50	70-130
1,2-Dibromoethane	93	97	4	25	70-130
1,3-Dichloropropane	98	103	5	25	70-130
1,1,1,2-Tetrachloroethane	102	113	10	25	70-130
Bromobenzene	98	102	4	25	70-130
n-Butylbenzene	90	94	4	25	70-130
sec-Butylbenzene	91	95	4	25	70-130
tert-Butylbenzene	101	103	2	25	70-130
o-Chlorotoluene	100	104	4	25	70-130
p-Chlorotoluene	99	101	2	25	70-130
1,2-Dibromo-3-chloropropane	82	75	9	50	70-130
Hexachlorobutadiene	81	88	8	25	70-130
Isopropylbenzene	105	113	7	25	70-130
p-Isopropyltoluene	92	95	3	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604615

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 02 (WG235379-4, WG235379-5)					
Naphthalene	79	66	18	25	70-130
n-Propylbenzene	104	108	4	25	70-130
1,2,3-Trichlorobenzene	79	69	14	25	70-130
1,2,4-Trichlorobenzene	80	72	11	25	70-130
1,3,5-Trimethylbenzene	104	107	3	25	70-130
1,2,4-Trimethylbenzene	97	98	1	25	70-130
Ethyl ether	88	83	6	25	70-130
Isopropyl Ether	84	79	6	25	70-130
Ethyl-Tert-Butyl-Ether	84	76	10	25	70-130
Tertiary-Amyl Methyl Ether	81	77	5	25	70-130
1,4-Dioxane	106	100	6	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	102	108	6		70-130
Toluene-d8	96	97	1		70-130
4-Bromofluorobenzene	100	97	3		70-130
Dibromofluoromethane	107	105	2		70-130
Volatile Organics by MCP 8260B for sample(s) 03 (WG235427-1, WG235427-2)					
Methylene chloride	98	100	2	25	70-130
1,1-Dichloroethane	103	105	2	25	70-130
Chloroform	96	96	0	25	70-130
Carbon tetrachloride	100	104	4	25	70-130
1,2-Dichloropropane	103	103	0	25	70-130
Dibromochloromethane	92	95	3	25	70-130
1,1,2-Trichloroethane	101	104	3	25	70-130
Tetrachloroethene	106	109	3	25	70-130
Chlorobenzene	102	104	2	25	70-130
Trichlorofluoromethane	101	103	2	25	70-130
1,2-Dichloroethane	106	107	1	25	70-130
1,1,1-Trichloroethane	101	104	3	25	70-130
Bromodichloromethane	100	101	1	25	70-130
trans-1,3-Dichloropropene	92	95	3	25	70-130
cis-1,3-Dichloropropene	91	94	3	25	70-130
1,1-Dichloropropene	97	101	4	25	70-130
Bromoform	94	98	4	50	70-130
1,1,2,2-Tetrachloroethane	100	102	2	25	70-130
Benzene	104	106	2	25	70-130
Toluene	102	104	2	25	70-130
Ethylbenzene	101	104	3	25	70-130
Chloromethane	92	95	3	50	70-130
Bromomethane	98	100	2	50	70-130
Vinyl chloride	100	101	1	25	70-130
Chloroethane	98	100	2	25	70-130
1,1-Dichloroethene	93	100	7	25	70-130
trans-1,2-Dichloroethene	99	103	4	25	70-130
Trichloroethene	98	101	3	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604615

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 03 (WG235427-1, WG235427-2)					
1,2-Dichlorobenzene	98	99	1	25	70-130
1,3-Dichlorobenzene	104	105	1	25	70-130
1,4-Dichlorobenzene	99	100	1	25	70-130
Methyl tert butyl ether	90	94	4	25	70-130
p/m-Xylene	104	107	3	25	70-130
o-Xylene	96	98	2	25	70-130
cis-1,2-Dichloroethene	105	110	5	25	70-130
Dibromomethane	103	107	4	25	70-130
1,2,3-Trichloropropane	100	103	3	25	70-130
Styrene	96	97	1	25	70-130
Dichlorodifluoromethane	83	87	5	50	70-130
Acetone	102	103	1	50	70-130
Carbon disulfide	82	84	2	25	70-130
2-Butanone	98	96	2	50	70-130
4-Methyl-2-pentanone	90	94	4	50	70-130
2-Hexanone	86	90	5	50	70-130
Bromochloromethane	106	107	1	25	70-130
Tetrahydrofuran	86	88	2	25	70-130
2,2-Dichloropropane	95	99	4	50	70-130
1,2-Dibromoethane	94	97	3	25	70-130
1,3-Dichloropropane	99	101	2	25	70-130
1,1,1,2-Tetrachloroethane	104	105	1	25	70-130
Bromobenzene	101	103	2	25	70-130
n-Butylbenzene	92	94	2	25	70-130
sec-Butylbenzene	96	98	2	25	70-130
tert-Butylbenzene	98	100	2	25	70-130
o-Chlorotoluene	102	104	2	25	70-130
p-Chlorotoluene	100	102	2	25	70-130
1,2-Dibromo-3-chloropropane	95	98	3	50	70-130
Hexachlorobutadiene	94	97	3	25	70-130
Isopropylbenzene	104	108	4	25	70-130
p-Isopropyltoluene	99	101	2	25	70-130
Naphthalene	78	82	5	25	70-130
n-Propylbenzene	103	105	2	25	70-130
1,2,3-Trichlorobenzene	85	90	6	25	70-130
1,2,4-Trichlorobenzene	83	90	8	25	70-130
1,3,5-Trimethylbenzene	98	101	3	25	70-130
1,2,4-Trimethylbenzene	99	101	2	25	70-130
Ethyl ether	89	95	7	25	70-130
Isopropyl Ether	86	89	3	25	70-130
Ethyl-Tert-Butyl-Ether	83	86	4	25	70-130
Tertiary-Amyl Methyl Ether	83	86	4	25	70-130
1,4-Dioxane	82	92	11	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	100	100	0		70-130
Toluene-d8	98	98	0		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604615

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 03 (WG235427-1, WG235427-2)					
4-Bromofluorobenzene	93	93	0		70-130
Dibromofluoromethane	107	104	3		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604615

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG235241-1)							
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	ND	mg/l	2.0	60 6010B		0407 13:20	RW
Blank Analysis for sample(s) 01 (WG235379-3)							
Volatile Organics by MCP 8260B				60 8260B		0407 17:41	RY
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604615

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG235379-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0407 17:41	RY
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				
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	96.0	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	104	%	70-130				
Dibromofluoromethane	99.0	%	70-130				
Blank Analysis for sample(s) 02 (WG235379-6)							
Volatile Organics by MCP 8260B				60 8260B		0409 11:22	RY
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604615

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 02 (WG235379-6)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 11:22	RY
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604615

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 02 (WG235379-6)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 11:22	RY
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				
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	100	%	70-130				
Toluene-d8	97.0	%	70-130				
4-Bromofluorobenzene	101	%	70-130				
Dibromofluoromethane	104	%	70-130				
Blank Analysis for sample(s) 03 (WG235427-3)							
Volatile Organics by MCP 8260B				60 8260B		0408 10:49	PD
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604615

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 03 (WG235427-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 10:49	PD
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				
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604615

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 03 (WG235427-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 10:49	PD
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	103	%	70-130				
Toluene-d8	93.0	%	70-130				
4-Bromofluorobenzene	94.0	%	70-130				
Dibromofluoromethane	108	%	70-130				

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.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0604615

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
L0604615-01A	Vial HCl preserved	A	N/A	3.2C	Y	Absent	MCP-8260-04
L0604615-01B	Vial HCl preserved	A	N/A	3.2C	Y	Absent	MCP-8260-04
L0604615-01C	Plastic 250ml HNO3 preserved	A	<2	3.2C	Y	Absent	MCP-NA-6010S
L0604615-02A	Vial Na2S2O3 preserved	A	N/A	3.2C	Y	Absent	MCP-8260-04
L0604615-02B	Vial Na2S2O3 preserved	A	N/A	3.2C	Y	Absent	MCP-8260-04
L0604615-03A	Vial HCl preserved	A	N/A	3.2C	Y	Absent	MCP-8260-04

Container Comments

Container ID	Comments
L0604615-02B	This container has not been properly returned to CUSTODY! It was last assigned to KJOZW for department CUSTODY on 04/04/06 14:46 .

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/4

ALPHA Job #: 20609615

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 GW SAMPLING
Project Location: WAYLAND, MA
Project #: 42925
Project Manager: JEREMY PICARD
ALPHA Quote #:

Turn-Around Time

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

Date Due: 4/11 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

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	VOC 8021B CHLORINATED	DIS. NO3	Sample Specific Comments	TOTAL # BOTTLES
04615-01	MW-113-20060403-01	4/3/06	14:35	GW	SM	X	X		3
-02	MW-101-20060403-01	4/3/06	15:30	GW	EB	X		Preserved w/ Na thiosulfate	2
-03	TB-001-20060404-01	4/4/06	18:45	GW	CK	X			

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

Container Type	V	P
Preservative	B	C

IS YOUR PROJECT MCP ?

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	4/4/06 4:30	[illegible]	4/4 4:30
[illegible]	4/4 12:10	[illegible]	4/4 12:10

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)

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Jeremy Picard

Project Number: 42925

Site: RAYTHEON GW

Laboratory Job Number: L0604688

Date Received: 05-APR-2006

Date Reported: 11-APR-2006

Delivery Method: Alpha

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 method(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

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: _____
Technical Director

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0604688
Date Reported: 11-APR-2006

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0604688-01	MW-214-20060404-01	WAYLAND, MA
L0604688-02	MW-403-20060404-01	WAYLAND, MA
L0604688-03	MW-102-20060404-01	WAYLAND, MA
L0604688-04	MW-201M-20060404-01	WAYLAND, MA
L0604688-05	MW-201S-20060404-01	WAYLAND, MA
L0604688-06	MW-103-20060404-01	WAYLAND, MA
L0604688-07	MW-201D-20060404-01	WAYLAND, MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0604688

Metals

L0604688-02 and -06 were re-analyzed on 5x dilution in order to quantitate the samples within the linear range for Na. The result is reported as a greater than value for the element that exceeded the calibration range on the initial analysis. The re-analysis was performed only for the element which exceeded the linear range.

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.

Volatile Organics

The following samples have elevated limits of detection due to the dilutions required by the elevated concentrations of target compounds in the samples:

L0604688-02 (10X)

L0604688-03 (10X)

L0604688-04 (4X)

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.

In reference to question E:

The WG235422-4 MS has a low % recovery for dichlorodifluoromethane. This analyte recovered within QC acceptance criteria in the daily LCS.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604688-01
MW-214-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 08:30
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		0408 00:54	RY
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	2.5	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	66	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	3.1	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604688-01
MW-214-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 00:54	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	112	%	70-130				
Toluene-d8	97.0	%	70-130				
4-Bromofluorobenzene	103	%	70-130				
Dibromofluoromethane	107	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604688-02
MW-403-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 10:15
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	>135	mg/l	2	60 6010B		0410 13:12	RW
Sodium, Dissolved	200	mg/l	10.	60 6010B		0410 15:27	RW
Volatile Organics by MCP 8260B				60 8260B		0408 01:30	RY
Methylene chloride	ND	ug/l	50.				
1,1-Dichloroethane	ND	ug/l	7.5				
Chloroform	ND	ug/l	7.5				
Carbon tetrachloride	ND	ug/l	5.0				
1,2-Dichloropropane	ND	ug/l	18.				
Dibromochloromethane	ND	ug/l	5.0				
1,1,2-Trichloroethane	ND	ug/l	7.5				
Tetrachloroethene	7.4	ug/l	5.0				
Chlorobenzene	ND	ug/l	5.0				
1,2-Dichloroethane	ND	ug/l	5.0				
1,1,1-Trichloroethane	ND	ug/l	5.0				
Bromodichloromethane	ND	ug/l	5.0				
trans-1,3-Dichloropropene	ND	ug/l	5.0				
cis-1,3-Dichloropropene	ND	ug/l	5.0				
Bromoform	ND	ug/l	20.				
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0				
Chloromethane	ND	ug/l	25.				
Vinyl chloride	ND	ug/l	10.				
Chloroethane	ND	ug/l	10.				
1,1-Dichloroethene	ND	ug/l	5.0				
trans-1,2-Dichloroethene	ND	ug/l	7.5				
Trichloroethene	350	ug/l	5.0				
1,2-Dichlorobenzene	ND	ug/l	25.				
1,3-Dichlorobenzene	ND	ug/l	25.				
1,4-Dichlorobenzene	ND	ug/l	25.				
cis-1,2-Dichloroethene	9.1	ug/l	5.0				
Dichlorodifluoromethane	ND	ug/l	50.				
1,2-Dibromoethane	ND	ug/l	20.				
1,3-Dichloropropane	ND	ug/l	25.				
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0				
o-Chlorotoluene	ND	ug/l	25.				
p-Chlorotoluene	ND	ug/l	25.				
Hexachlorobutadiene	ND	ug/l	6.0				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604688-02
MW-403-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 01:30	RY
1,2,4-Trichlorobenzene	ND	ug/l	25.				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	110	%	70-130				
Toluene-d8	100	%	70-130				
4-Bromofluorobenzene	100	%	70-130				
Dibromofluoromethane	111	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604688-03
MW-102-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 10:20
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	90	mg/l	2.0	60 6010B		0410 13:15	RW
Volatile Organics by MCP 8260B				60 8260B		0408 18:52	PD
Methylene chloride	ND	ug/l	50.				
1,1-Dichloroethane	ND	ug/l	7.5				
Chloroform	ND	ug/l	7.5				
Carbon tetrachloride	ND	ug/l	5.0				
1,2-Dichloropropane	ND	ug/l	18.				
Dibromochloromethane	ND	ug/l	5.0				
1,1,2-Trichloroethane	ND	ug/l	7.5				
Tetrachloroethene	ND	ug/l	5.0				
Chlorobenzene	ND	ug/l	5.0				
1,2-Dichloroethane	ND	ug/l	5.0				
1,1,1-Trichloroethane	ND	ug/l	5.0				
Bromodichloromethane	ND	ug/l	5.0				
trans-1,3-Dichloropropene	ND	ug/l	5.0				
cis-1,3-Dichloropropene	ND	ug/l	5.0				
Bromoform	ND	ug/l	20.				
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0				
Chloromethane	ND	ug/l	25.				
Vinyl chloride	ND	ug/l	10.				
Chloroethane	ND	ug/l	10.				
1,1-Dichloroethene	ND	ug/l	5.0				
trans-1,2-Dichloroethene	ND	ug/l	7.5				
Trichloroethene	450	ug/l	5.0				
1,2-Dichlorobenzene	ND	ug/l	25.				
1,3-Dichlorobenzene	ND	ug/l	25.				
1,4-Dichlorobenzene	ND	ug/l	25.				
cis-1,2-Dichloroethene	6.6	ug/l	5.0				
Dichlorodifluoromethane	ND	ug/l	50.				
1,2-Dibromoethane	ND	ug/l	20.				
1,3-Dichloropropane	ND	ug/l	25.				
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0				
o-Chlorotoluene	ND	ug/l	25.				
p-Chlorotoluene	ND	ug/l	25.				
Hexachlorobutadiene	ND	ug/l	6.0				
1,2,4-Trichlorobenzene	ND	ug/l	25.				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604688-03
MW-102-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 18:52	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	106	%	70-130				
Toluene-d8	96.0	%	70-130				
4-Bromofluorobenzene	96.0	%	70-130				
Dibromofluoromethane	115	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604688-04
MW-201M-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 13:40
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	56	mg/l	2.0	60 6010B		0410 13:18	RW
Volatile Organics by MCP 8260B				60 8260B		0408 19:32	PD
Methylene chloride	ND	ug/l	20.				
1,1-Dichloroethane	ND	ug/l	3.0				
Chloroform	ND	ug/l	3.0				
Carbon tetrachloride	ND	ug/l	2.0				
1,2-Dichloropropane	ND	ug/l	7.0				
Dibromochloromethane	ND	ug/l	2.0				
1,1,2-Trichloroethane	ND	ug/l	3.0				
Tetrachloroethene	ND	ug/l	2.0				
Chlorobenzene	ND	ug/l	2.0				
1,2-Dichloroethane	ND	ug/l	2.0				
1,1,1-Trichloroethane	ND	ug/l	2.0				
Bromodichloromethane	ND	ug/l	2.0				
trans-1,3-Dichloropropene	ND	ug/l	2.0				
cis-1,3-Dichloropropene	ND	ug/l	2.0				
Bromoform	ND	ug/l	8.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	2.0				
Chloromethane	ND	ug/l	10.				
Vinyl chloride	ND	ug/l	4.0				
Chloroethane	ND	ug/l	4.0				
1,1-Dichloroethene	2.8	ug/l	2.0				
trans-1,2-Dichloroethene	ND	ug/l	3.0				
Trichloroethene	270	ug/l	2.0				
1,2-Dichlorobenzene	ND	ug/l	10.				
1,3-Dichlorobenzene	ND	ug/l	10.				
1,4-Dichlorobenzene	ND	ug/l	10.				
cis-1,2-Dichloroethene	12	ug/l	2.0				
Dichlorodifluoromethane	ND	ug/l	20.				
1,2-Dibromoethane	ND	ug/l	8.0				
1,3-Dichloropropane	ND	ug/l	10.				
1,1,1,2-Tetrachloroethane	ND	ug/l	2.0				
o-Chlorotoluene	ND	ug/l	10.				
p-Chlorotoluene	ND	ug/l	10.				
Hexachlorobutadiene	ND	ug/l	2.4				
1,2,4-Trichlorobenzene	ND	ug/l	10.				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604688-04
MW-201M-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 19:32	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	113	%	70-130				
Toluene-d8	101	%	70-130				
4-Bromofluorobenzene	107	%	70-130				
Dibromofluoromethane	123	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604688-05
MW-201S-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 15:15
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		0408 20:12	PD
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	0.78	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	11	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604688-05
MW-201S-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 20:12	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	116	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	102	%	70-130				
Dibromofluoromethane	121	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604688-06
MW-103-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 12:04
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	>135	mg/l	2	60 6010B		0410 13:21	RW
Sodium, Dissolved	210	mg/l	10.	60 6010B		0410 15:30	RW
Volatile Organics by MCP 8260B				60 8260B		0408 20:52	PD
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	1.2	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604688-06
MW-103-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 20:52	PD
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	105	%	70-130				
Toluene-d8	91.0	%	70-130				
4-Bromofluorobenzene	92.0	%	70-130				
Dibromofluoromethane	115	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604688-07
MW-201D-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 16:15
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: filed filter

Number & Type of Containers: 3-Plastic,6-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	110	mg/l	2.0	60 6010B		0410 13:28	RW
Volatile Organics by MCP 8260B				60 8260B		0409 18:44	PD
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	1.6	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604688-07
MW-201D-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 18:44	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	120	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	104	%	70-130				
Dibromofluoromethane	126	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604688

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 02-04,06-07 (WG235242-2, WG235242-3)					
Sodium, Dissolved	100	100	0	20	80-120
Volatile Organics by MCP 8260B for sample(s) 01-02 (WG235379-1, WG235379-2)					
Methylene chloride	97	96	1	25	70-130
1,1-Dichloroethane	100	95	5	25	70-130
Chloroform	96	92	4	25	70-130
Carbon tetrachloride	102	97	5	25	70-130
1,2-Dichloropropane	100	97	3	25	70-130
Dibromochloromethane	89	89	0	25	70-130
1,1,2-Trichloroethane	90	93	3	25	70-130
Tetrachloroethene	98	94	4	25	70-130
Chlorobenzene	96	93	3	25	70-130
Trichlorofluoromethane	101	95	6	25	70-130
1,2-Dichloroethane	95	94	1	25	70-130
1,1,1-Trichloroethane	99	96	3	25	70-130
Bromodichloromethane	98	95	3	25	70-130
trans-1,3-Dichloropropene	95	94	1	25	70-130
cis-1,3-Dichloropropene	87	86	1	25	70-130
1,1-Dichloropropene	102	96	6	25	70-130
Bromoform	93	92	1	50	70-130
1,1,2,2-Tetrachloroethane	94	95	1	25	70-130
Benzene	100	95	5	25	70-130
Toluene	101	95	6	25	70-130
Ethylbenzene	100	97	3	25	70-130
Chloromethane	88	83	6	50	70-130
Bromomethane	94	93	1	50	70-130
Vinyl chloride	97	94	3	25	70-130
Chloroethane	88	81	8	25	70-130
1,1-Dichloroethene	102	97	5	25	70-130
trans-1,2-Dichloroethene	101	95	6	25	70-130
Trichloroethene	100	95	5	25	70-130
1,2-Dichlorobenzene	94	93	1	25	70-130
1,3-Dichlorobenzene	100	94	6	25	70-130
1,4-Dichlorobenzene	91	86	6	25	70-130
Methyl tert butyl ether	90	93	3	25	70-130
p/m-Xylene	100	96	4	25	70-130
o-Xylene	95	91	4	25	70-130
cis-1,2-Dichloroethene	104	99	5	25	70-130
Dibromomethane	91	91	0	25	70-130
1,2,3-Trichloropropane	99	104	5	25	70-130
Styrene	92	88	4	25	70-130
Dichlorodifluoromethane	92	84	9	50	70-130
Acetone	82	82	0	50	70-130
Carbon disulfide	81	76	6	25	70-130
2-Butanone	89	100	12	50	70-130
4-Methyl-2-pentanone	86	95	10	50	70-130
2-Hexanone	99	106	7	50	70-130
Bromochloromethane	94	95	1	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604688

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 01-02 (WG235379-1, WG235379-2)					
Tetrahydrofuran	101	92	9	25	70-130
2,2-Dichloropropane	95	81	16	50	70-130
1,2-Dibromoethane	93	94	1	25	70-130
1,3-Dichloropropane	96	95	1	25	70-130
1,1,1,2-Tetrachloroethane	97	96	1	25	70-130
Bromobenzene	98	94	4	25	70-130
n-Butylbenzene	100	90	11	25	70-130
sec-Butylbenzene	96	91	5	25	70-130
tert-Butylbenzene	107	100	7	25	70-130
o-Chlorotoluene	102	97	5	25	70-130
p-Chlorotoluene	98	94	4	25	70-130
1,2-Dibromo-3-chloropropane	79	82	4	50	70-130
Hexachlorobutadiene	92	85	8	25	70-130
Isopropylbenzene	105	102	3	25	70-130
p-Isopropyltoluene	97	89	9	25	70-130
Naphthalene	79	82	4	25	70-130
n-Propylbenzene	110	101	9	25	70-130
1,2,3-Trichlorobenzene	77	80	4	25	70-130
1,2,4-Trichlorobenzene	84	81	4	25	70-130
1,3,5-Trimethylbenzene	108	102	6	25	70-130
1,2,4-Trimethylbenzene	103	96	7	25	70-130
Ethyl ether	86	88	2	25	70-130
Isopropyl Ether	86	86	0	25	70-130
Ethyl-Tert-Butyl-Ether	86	87	1	25	70-130
Tertiary-Amyl Methyl Ether	84	85	1	25	70-130
1,4-Dioxane	86	90	5	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	93	93	0		70-130
Toluene-d8	99	100	1		70-130
4-Bromofluorobenzene	104	101	3		70-130
Dibromofluoromethane	99	95	4		70-130
Volatile Organics by MCP 8260B for sample(s) 07 (WG235422-1, WG235422-2)					
Methylene chloride	95	92	3	25	70-130
1,1-Dichloroethane	100	95	5	25	70-130
Chloroform	95	90	5	25	70-130
Carbon tetrachloride	101	96	5	25	70-130
1,2-Dichloropropane	101	97	4	25	70-130
Dibromochloromethane	94	94	0	25	70-130
1,1,2-Trichloroethane	100	102	2	25	70-130
Tetrachloroethene	105	101	4	25	70-130
Chlorobenzene	102	99	3	25	70-130
Trichlorofluoromethane	102	94	8	25	70-130
1,2-Dichloroethane	101	99	2	25	70-130
1,1,1-Trichloroethane	101	96	5	25	70-130
Bromodichloromethane	100	97	3	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604688

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 07 (WG235422-1, WG235422-2)					
trans-1,3-Dichloropropene	92	92	0	25	70-130
cis-1,3-Dichloropropene	90	90	0	25	70-130
1,1-Dichloropropene	99	92	7	25	70-130
Bromoform	92	98	6	50	70-130
1,1,2,2-Tetrachloroethane	99	102	3	25	70-130
Benzene	100	96	4	25	70-130
Toluene	100	96	4	25	70-130
Ethylbenzene	102	98	4	25	70-130
Chloromethane	91	87	4	50	70-130
Bromomethane	93	91	2	50	70-130
Vinyl chloride	102	94	8	25	70-130
Chloroethane	95	90	5	25	70-130
1,1-Dichloroethene	94	89	5	25	70-130
trans-1,2-Dichloroethene	94	90	4	25	70-130
Trichloroethene	98	93	5	25	70-130
1,2-Dichlorobenzene	96	96	0	25	70-130
1,3-Dichlorobenzene	104	102	2	25	70-130
1,4-Dichlorobenzene	100	99	1	25	70-130
Methyl tert butyl ether	80	85	6	25	70-130
p/m-Xylene	104	101	3	25	70-130
o-Xylene	95	91	4	25	70-130
cis-1,2-Dichloroethene	104	98	6	25	70-130
Dibromomethane	101	102	1	25	70-130
1,2,3-Trichloropropane	99	105	6	25	70-130
Styrene	95	92	3	25	70-130
Dichlorodifluoromethane	82	79	4	50	70-130
Acetone	91	94	3	50	70-130
Carbon disulfide	83	78	6	25	70-130
2-Butanone	90	94	4	50	70-130
4-Methyl-2-pentanone	84	89	6	50	70-130
2-Hexanone	81	88	8	50	70-130
Bromochloromethane	100	100	0	25	70-130
Tetrahydrofuran	82	81	1	25	70-130
2,2-Dichloropropane	96	93	3	50	70-130
1,2-Dibromoethane	91	94	3	25	70-130
1,3-Dichloropropane	94	98	4	25	70-130
1,1,1,2-Tetrachloroethane	104	102	2	25	70-130
Bromobenzene	102	101	1	25	70-130
n-Butylbenzene	94	91	3	25	70-130
sec-Butylbenzene	96	93	3	25	70-130
tert-Butylbenzene	97	95	2	25	70-130
o-Chlorotoluene	104	100	4	25	70-130
p-Chlorotoluene	102	98	4	25	70-130
1,2-Dibromo-3-chloropropane	92	98	6	50	70-130
Hexachlorobutadiene	96	91	5	25	70-130
Isopropylbenzene	104	101	3	25	70-130
p-Isopropyltoluene	98	96	2	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604688

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 07 (WG235422-1, WG235422-2)					
Naphthalene	76	84	10	25	70-130
n-Propylbenzene	102	98	4	25	70-130
1,2,3-Trichlorobenzene	84	89	6	25	70-130
1,2,4-Trichlorobenzene	84	87	4	25	70-130
1,3,5-Trimethylbenzene	99	94	5	25	70-130
1,2,4-Trimethylbenzene	99	97	2	25	70-130
Ethyl ether	78	79	1	25	70-130
Isopropyl Ether	80	79	1	25	70-130
Ethyl-Tert-Butyl-Ether	76	77	1	25	70-130
Tertiary-Amyl Methyl Ether	75	77	3	25	70-130
1,4-Dioxane	79	83	5	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	99	104	5		70-130
Toluene-d8	98	100	2		70-130
4-Bromofluorobenzene	92	96	4		70-130
Dibromofluoromethane	106	109	3		70-130
Volatile Organics by MCP 8260B for sample(s) 03-06 (WG235427-1, WG235427-2)					
Methylene chloride	98	100	2	25	70-130
1,1-Dichloroethane	103	105	2	25	70-130
Chloroform	96	96	0	25	70-130
Carbon tetrachloride	100	104	4	25	70-130
1,2-Dichloropropane	103	103	0	25	70-130
Dibromochloromethane	92	95	3	25	70-130
1,1,2-Trichloroethane	101	104	3	25	70-130
Tetrachloroethene	106	109	3	25	70-130
Chlorobenzene	102	104	2	25	70-130
Trichlorofluoromethane	101	103	2	25	70-130
1,2-Dichloroethane	106	107	1	25	70-130
1,1,1-Trichloroethane	101	104	3	25	70-130
Bromodichloromethane	100	101	1	25	70-130
trans-1,3-Dichloropropene	92	95	3	25	70-130
cis-1,3-Dichloropropene	91	94	3	25	70-130
1,1-Dichloropropene	97	101	4	25	70-130
Bromoform	94	98	4	50	70-130
1,1,2,2-Tetrachloroethane	100	102	2	25	70-130
Benzene	104	106	2	25	70-130
Toluene	102	104	2	25	70-130
Ethylbenzene	101	104	3	25	70-130
Chloromethane	92	95	3	50	70-130
Bromomethane	98	100	2	50	70-130
Vinyl chloride	100	101	1	25	70-130
Chloroethane	98	100	2	25	70-130
1,1-Dichloroethene	93	100	7	25	70-130
trans-1,2-Dichloroethene	99	103	4	25	70-130
Trichloroethene	98	101	3	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604688

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 03-06 (WG235427-1, WG235427-2)					
1,2-Dichlorobenzene	98	99	1	25	70-130
1,3-Dichlorobenzene	104	105	1	25	70-130
1,4-Dichlorobenzene	99	100	1	25	70-130
Methyl tert butyl ether	90	94	4	25	70-130
p/m-Xylene	104	107	3	25	70-130
o-Xylene	96	98	2	25	70-130
cis-1,2-Dichloroethene	105	110	5	25	70-130
Dibromomethane	103	107	4	25	70-130
1,2,3-Trichloropropane	100	103	3	25	70-130
Styrene	96	97	1	25	70-130
Dichlorodifluoromethane	83	87	5	50	70-130
Acetone	102	103	1	50	70-130
Carbon disulfide	82	84	2	25	70-130
2-Butanone	98	96	2	50	70-130
4-Methyl-2-pentanone	90	94	4	50	70-130
2-Hexanone	86	90	5	50	70-130
Bromochloromethane	106	107	1	25	70-130
Tetrahydrofuran	86	88	2	25	70-130
2,2-Dichloropropane	95	99	4	50	70-130
1,2-Dibromoethane	94	97	3	25	70-130
1,3-Dichloropropane	99	101	2	25	70-130
1,1,1,2-Tetrachloroethane	104	105	1	25	70-130
Bromobenzene	101	103	2	25	70-130
n-Butylbenzene	92	94	2	25	70-130
sec-Butylbenzene	96	98	2	25	70-130
tert-Butylbenzene	98	100	2	25	70-130
o-Chlorotoluene	102	104	2	25	70-130
p-Chlorotoluene	100	102	2	25	70-130
1,2-Dibromo-3-chloropropane	95	98	3	50	70-130
Hexachlorobutadiene	94	97	3	25	70-130
Isopropylbenzene	104	108	4	25	70-130
p-Isopropyltoluene	99	101	2	25	70-130
Naphthalene	78	82	5	25	70-130
n-Propylbenzene	103	105	2	25	70-130
1,2,3-Trichlorobenzene	85	90	6	25	70-130
1,2,4-Trichlorobenzene	83	90	8	25	70-130
1,3,5-Trimethylbenzene	98	101	3	25	70-130
1,2,4-Trimethylbenzene	99	101	2	25	70-130
Ethyl ether	89	95	7	25	70-130
Isopropyl Ether	86	89	3	25	70-130
Ethyl-Tert-Butyl-Ether	83	86	4	25	70-130
Tertiary-Amyl Methyl Ether	83	86	4	25	70-130
1,4-Dioxane	82	92	11	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	100	100	0		70-130
Toluene-d8	98	98	0		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604688

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 03-06 (WG235427-1, WG235427-2)					
4-Bromofluorobenzene	93	93	0		70-130
Dibromofluoromethane	107	104	3		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0604688

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 02-04,06-07 (L0604688-07, WG235242-5)					
Sodium, Dissolved	100	100	0	20	75-125
Volatile Organics by MCP 8260B for sample(s) 07 (L0604688-07, WG235422-5)					
Methylene chloride	96	101	5	30	70-130
1,1-Dichloroethane	95	101	6	30	70-130
Chloroform	84	90	7	30	70-130
Carbon tetrachloride	85	93	9	30	70-130
1,2-Dichloropropane	93	99	6	30	70-130
Dibromochloromethane	84	89	6	30	70-130
1,1,2-Trichloroethane	93	98	5	30	70-130
Tetrachloroethene	86	97	12	30	70-130
Chlorobenzene	87	94	8	30	70-130
1,2-Dichloroethane	99	102	3	30	70-130
1,1,1-Trichloroethane	89	96	8	30	70-130
Bromodichloromethane	90	94	4	30	70-130
trans-1,3-Dichloropropene	80	84	5	30	70-130
cis-1,3-Dichloropropene	78	84	7	30	70-130
Bromoform	82	88	7	30	70-130
1,1,2,2-Tetrachloroethane	94	98	4	30	70-130
Chloromethane	85	93	9	30	70-130
Vinyl chloride	92	102	10	30	70-130
Chloroethane	88	97	10	30	70-130
1,1-Dichloroethene	79	92	15	30	70-130
trans-1,2-Dichloroethene	86	94	9	30	70-130
Trichloroethene	79	88	11	30	70-130
1,2-Dichlorobenzene	81	90	11	30	70-130
1,3-Dichlorobenzene	84	94	11	30	70-130
1,4-Dichlorobenzene	81	90	11	30	70-130
cis-1,2-Dichloroethene	94	101	7	30	70-130
Dichlorodifluoromethane	68	76	11	30	70-130
1,2-Dibromoethane	88	91	3	30	70-130
1,3-Dichloropropane	92	96	4	30	70-130
1,1,1,2-Tetrachloroethane	91	96	5	30	70-130
o-Chlorotoluene	84	92	9	30	70-130
p-Chlorotoluene	80	89	11	30	70-130
Hexachlorobutadiene	73	84	14	30	70-130
1,2,4-Trichlorobenzene	71	79	11	30	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	103	106	3		70-130
Toluene-d8	95	101	6		70-130
4-Bromofluorobenzene	90	96	6		70-130
Dibromofluoromethane	106	111	5		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604688

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 02-04,06-07 (WG235242-1)							
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	ND	mg/l	2.0	60 6010B		0410 13:03	RW
Blank Analysis for sample(s) 01-02 (WG235379-3)							
Volatile Organics by MCP 8260B				60 8260B		0407 17:41	RY
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604688

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-02 (WG235379-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0407 17:41	RY
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				
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	96.0	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	104	%	70-130				
Dibromofluoromethane	99.0	%	70-130				
Blank Analysis for sample(s) 07 (WG235422-3)							
Volatile Organics by MCP 8260B				60 8260B		0409 09:57	PD
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604688

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 07 (WG235422-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 09:57	PD
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604688

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 07 (WG235422-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 09:57	PD
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				
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	109	%	70-130				
Toluene-d8	102	%	70-130				
4-Bromofluorobenzene	98.0	%	70-130				
Dibromofluoromethane	116	%	70-130				
Blank Analysis for sample(s) 03-06 (WG235427-3)							
Volatile Organics by MCP 8260B				60 8260B		0408 10:49	PD
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604688

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 03-06 (WG235427-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 10:49	PD
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				
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604688

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 03-06 (WG235427-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 10:49	PD
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	103	%	70-130				
Toluene-d8	93.0	%	70-130				
4-Bromofluorobenzene	94.0	%	70-130				
Dibromofluoromethane	108	%	70-130				

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.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0604688

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
L0604688-01A	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604688-01B	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604688-02A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604688-02B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604688-02C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604688-03A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604688-03B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604688-03C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604688-04A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604688-04B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604688-04C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604688-05A	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604688-05B	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604688-06A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604688-06B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604688-06C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604688-07A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604688-07B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604688-07C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604688-07D	Vial HCl preserved				Y	Absent	MCP-8260-04
L0604688-07E	Vial HCl preserved				Y	Absent	MCP-8260-04
L0604688-07F	Vial HCl preserved				Y	Absent	MCP-8260-04
L0604688-07G	Vial HCl preserved				Y	Absent	MCP-8260-04
L0604688-07K	Plastic 250ml HNO3 preserved				Y	Absent	MCP-NA-6010S
L0604688-07L	Plastic 250ml HNO3 preserved				Y	Absent	MCP-NA-6010S

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE ___ OF ___

Date Rec'd in Lab: 4/5

ALPHA Job #: L0604688

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 GW
Project Location: Wayland, MA
Project #: 42925
Project Manager: J. Picard
ALPHA Quote #:

Turn-Around Time

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

Date Due: 4/12 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

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	8021 B - Nitrate	8021 B - HCL	Diss Na	Sample Specific Comments	TOTAL # BOTTLES
04688-01	MW-214-20060404-01	4/4/06	0830	GW	EB	X			$Na_2S_2O_3$	2
-02	MW-403-20060404-01		1015	GW	EB		X	X		3
-03	MW-102-20060404-01		1020	GW	KM		X	X		3
-04	MW-201M-20060404-01	4/4/06	1340	GW	EB		X	X		3
-05	MW-201S-20060404-01	4/4/06	1515	GW	EB	X				2
-06	MW-103-20060404-01		1204	GW	KM		X	X		3
-07	MW-201D-20060404-01		1615	GW	EB		X	X		3
	MW-201D-20060404-01-MS		1615	GW	EB		X	X		3
	MW-201D-20060404-01-MSD		1615	GW	EB		X	X		3

Container Type: V V P
Preservative: HCL

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	4/5/06 10:00	[signature]	4/5/06 10:03
[signature]	4/5/06 12:05	[signature]	4/5 12:05

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

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Jeremy Picard

Project Number:

Site: RAYTHEON GROUNDWATER

Laboratory Job Number: L0604701

Date Received: 05-APR-2006

Date Reported: 11-APR-2006

Delivery Method: Alpha

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 method(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

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: _____
Technical Director

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0604701
Date Reported: 11-APR-2006

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0604701-01	MW-208M-20060404-01	WAYLAND, MA
L0604701-02	MW-208S-20060404-01	WAYLAND, MA
L0604701-03	MW-202M-20060404-01	WAYLAND, MA
L0604701-04	MW-202S-20060404-01	WAYLAND, MA
L0604701-05	MW-40S-20060404-01	WAYLAND, MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0604701

MCP Related Narratives

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.

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.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604701-01
MW-208M-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 09:40
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	68	mg/l	2.0	60 6010B		0407 13:55	RW
Volatile Organics by MCP 8260B				60 8260B		0408 14:10	PD
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	1.1	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	6.0	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	0.50	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604701-01
MW-208M-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 14:10	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	103	%	70-130				
Toluene-d8	95.0	%	70-130				
4-Bromofluorobenzene	92.0	%	70-130				
Dibromofluoromethane	71.0	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604701-02
MW-208S-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 10:40
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	78	mg/l	2.0	60 6010B		0407 13:58	RW
Volatile Organics by MCP 8260B				60 8260B		0408 14:50	PD
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	5.0	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	5.5	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604701-02
MW-208S-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 14:50	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	113	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	106	%	70-130				
Dibromofluoromethane	123	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604701-03
MW-202M-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 12:15
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	28	mg/l	2.0	60 6010B		0407 14:01	RW
Volatile Organics by MCP 8260B				60 8260B		0408 15:31	PD
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	30	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	1.6	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	100	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604701-03
MW-202M-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 15:31	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	97.0	%	70-130				
Toluene-d8	92.0	%	70-130				
4-Bromofluorobenzene	94.0	%	70-130				
Dibromofluoromethane	102	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604701-04
MW-202S-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 14:10
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	15	mg/l	2.0	60 6010B		0407 14:04	RW
Volatile Organics by MCP 8260B				60 8260B		0408 16:11	PD
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	0.75	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604701-04
MW-202S-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 16:11	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	107	%	70-130				
Toluene-d8	94.0	%	70-130				
4-Bromofluorobenzene	97.0	%	70-130				
Dibromofluoromethane	116	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604701-05
MW-40S-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 15:45
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		0408 16:51	PD
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	2.5	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604701-05
MW-40S-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 16:51	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	113	%	70-130				
Toluene-d8	98.0	%	70-130				
4-Bromofluorobenzene	98.0	%	70-130				
Dibromofluoromethane	121	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604701

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 01-04 (WG235241-2, WG235241-3)					
Sodium, Dissolved	100	100	0	20	80-120
Volatile Organics by MCP 8260B for sample(s) 01-05 (WG235427-1, WG235427-2)					
Methylene chloride	98	100	2	25	70-130
1,1-Dichloroethane	103	105	2	25	70-130
Chloroform	96	96	0	25	70-130
Carbon tetrachloride	100	104	4	25	70-130
1,2-Dichloropropane	103	103	0	25	70-130
Dibromochloromethane	92	95	3	25	70-130
1,1,2-Trichloroethane	101	104	3	25	70-130
Tetrachloroethene	106	109	3	25	70-130
Chlorobenzene	102	104	2	25	70-130
Trichlorofluoromethane	101	103	2	25	70-130
1,2-Dichloroethane	106	107	1	25	70-130
1,1,1-Trichloroethane	101	104	3	25	70-130
Bromodichloromethane	100	101	1	25	70-130
trans-1,3-Dichloropropene	92	95	3	25	70-130
cis-1,3-Dichloropropene	91	94	3	25	70-130
1,1-Dichloropropene	97	101	4	25	70-130
Bromoform	94	98	4	50	70-130
1,1,2,2-Tetrachloroethane	100	102	2	25	70-130
Benzene	104	106	2	25	70-130
Toluene	102	104	2	25	70-130
Ethylbenzene	101	104	3	25	70-130
Chloromethane	92	95	3	50	70-130
Bromomethane	98	100	2	50	70-130
Vinyl chloride	100	101	1	25	70-130
Chloroethane	98	100	2	25	70-130
1,1-Dichloroethene	93	100	7	25	70-130
trans-1,2-Dichloroethene	99	103	4	25	70-130
Trichloroethene	98	101	3	25	70-130
1,2-Dichlorobenzene	98	99	1	25	70-130
1,3-Dichlorobenzene	104	105	1	25	70-130
1,4-Dichlorobenzene	99	100	1	25	70-130
Methyl tert butyl ether	90	94	4	25	70-130
p/m-Xylene	104	107	3	25	70-130
o-Xylene	96	98	2	25	70-130
cis-1,2-Dichloroethene	105	110	5	25	70-130
Dibromomethane	103	107	4	25	70-130
1,2,3-Trichloropropane	100	103	3	25	70-130
Styrene	96	97	1	25	70-130
Dichlorodifluoromethane	83	87	5	50	70-130
Acetone	102	103	1	50	70-130
Carbon disulfide	82	84	2	25	70-130
2-Butanone	98	96	2	50	70-130
4-Methyl-2-pentanone	90	94	4	50	70-130
2-Hexanone	86	90	5	50	70-130
Bromochloromethane	106	107	1	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604701

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 01-05 (WG235427-1, WG235427-2)					
Tetrahydrofuran	86	88	2	25	70-130
2,2-Dichloropropane	95	99	4	50	70-130
1,2-Dibromoethane	94	97	3	25	70-130
1,3-Dichloropropane	99	101	2	25	70-130
1,1,1,2-Tetrachloroethane	104	105	1	25	70-130
Bromobenzene	101	103	2	25	70-130
n-Butylbenzene	92	94	2	25	70-130
sec-Butylbenzene	96	98	2	25	70-130
tert-Butylbenzene	98	100	2	25	70-130
o-Chlorotoluene	102	104	2	25	70-130
p-Chlorotoluene	100	102	2	25	70-130
1,2-Dibromo-3-chloropropane	95	98	3	50	70-130
Hexachlorobutadiene	94	97	3	25	70-130
Isopropylbenzene	104	108	4	25	70-130
p-Isopropyltoluene	99	101	2	25	70-130
Naphthalene	78	82	5	25	70-130
n-Propylbenzene	103	105	2	25	70-130
1,2,3-Trichlorobenzene	85	90	6	25	70-130
1,2,4-Trichlorobenzene	83	90	8	25	70-130
1,3,5-Trimethylbenzene	98	101	3	25	70-130
1,2,4-Trimethylbenzene	99	101	2	25	70-130
Ethyl ether	89	95	7	25	70-130
Isopropyl Ether	86	89	3	25	70-130
Ethyl-Tert-Butyl-Ether	83	86	4	25	70-130
Tertiary-Amyl Methyl Ether	83	86	4	25	70-130
1,4-Dioxane	82	92	11	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	100	100	0		70-130
Toluene-d8	98	98	0		70-130
4-Bromofluorobenzene	93	93	0		70-130
Dibromofluoromethane	107	104	3		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604701

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-04 (WG235241-1)							
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	ND	mg/l	2.0	60 6010B		0407 13:20	RW
Blank Analysis for sample(s) 01-05 (WG235427-3)							
Volatile Organics by MCP 8260B				60 8260B		0408 10:49	PD
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604701

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-05 (WG235427-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 10:49	PD
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				
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	103	%	70-130				
Toluene-d8	93.0	%	70-130				
4-Bromofluorobenzene	94.0	%	70-130				
Dibromofluoromethane	108	%	70-130				

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.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0604701

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
L0604701-01A	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604701-01B	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604701-01C	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604701-02A	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604701-02B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604701-02C	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604701-03A	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604701-03B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604701-03C	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604701-04A	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604701-04B	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604701-04C	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604701-05B	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604701-05C	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/5

ALPHA Job #: L0604701

Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Client Information

Client: ERM
Address: 399 Boylston St 6th Fl Boston MA 02115
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 Groundwater
Project Location: Wayland, MA
Project #:
Project Manager: Jeremy Picard
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 4/12 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	

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:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC 8021B	6010B Dissolved	VOC 8021B	Sample Specific Comments	Total # Bottles
04701-01	MW-208 M-20060404-01	04/04/06	09:40	GW	TD	[illegible]	1	2		3
-02	MW-208 S-20060404-01	04/04/06	10:40	GW	TD	~~2~~	1	[illegible]		3
-03	MW-202M-20060404-01	4/4/06	12:15	GW	TD	2	1			3
-04	MW-202S-20060404-01	4/4/06	14:10	GW	TD	[illegible]	1	2		3
-05	MW-40S-20060404-01	4/4/06	15:45	GW	TD		~~1~~	2		3

SAMPLE HANDLING

Filtration
☒ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Container Type	V	B	V
Preservative	B	C	G

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	4/5/06 0830	[signature]	4/5/06 1031
[signature]	4/5/06 12:05	Koralie Jones	4/5 12:05

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)

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Jeremy Picard

Project Number: 42925

Site: RAYTHEON GW SAMPLING

Laboratory Job Number: L0604704

Date Received: 05-APR-2006

Date Reported: 12-APR-2006

Delivery Method: Alpha

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 method(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

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Douglas Shelby
Technical Director

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0604704
Date Reported: 12-APR-2006

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0604704-01	MW-111-20060404-01	WAYLAND
L0604704-02	MW-115-20060404-01	WAYLAND
L0604704-03	MW-109-20060404-01	WAYLAND
L0604704-04	MW-33M-20060404-01	WAYLAND
L0604704-05	MW-40-20060404-01	WAYLAND
L0604704-06	DUP-001-20060404-01	WAYLAND

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0604704

MCP Related Narratives

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.

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.

L0604704-02 required re-analysis on a 5x 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 E:

The WG235422-6,7 LCS/LCSD % recoveries for Dichlorodifluoromethane, a difficult analyte, are below the acceptance criteria for the method.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604704-01
MW-111-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 09:30
Date Received : 05-APR-2006
Date Reported : 12-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	65	mg/l	2.0	60 6010B		0407 14:06	RW
Volatile Organics by MCP 8260B				60 8260B		0409 11:18	PD
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	1.3	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	25	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	0.94	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	100	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	0.68	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604704-01
MW-111-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 11:18	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	107	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	102	%	70-130				
Dibromofluoromethane	113	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604704-02
MW-115-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 10:45
Date Received : 05-APR-2006
Date Reported : 12-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	77	mg/l	2.0	60 6010B		0407 14:09	RW
Volatile Organics by MCP 8260B				60 8260B		0409 11:58	PD
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	1.6	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	81	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	2.6	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	>100	ug/l	.5				
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	1.2	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604704-02
MW-115-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 11:58	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	108	%	70-130				
Toluene-d8	101	%	70-130				
4-Bromofluorobenzene	102	%	70-130				
Dibromofluoromethane	115	%	70-130				
Volatile Organics by MCP 8260B				60 8260B		0410 18:13	PD
Trichloroethene	220	ug/l	2.5				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	101	%	70-130				
Toluene-d8	93.0	%	70-130				
4-Bromofluorobenzene	95.0	%	70-130				
Dibromofluoromethane	107	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604704-03
MW-109-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 12:00
Date Received : 05-APR-2006
Date Reported : 12-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	18	mg/l	2.0	60 6010B		0407 14:12	RW
Volatile Organics by MCP 8260B				60 8260B		0410 18:54	PD
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	33	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	4.7	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604704-03
MW-109-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 18:54	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	101	%	70-130				
Toluene-d8	91.0	%	70-130				
4-Bromofluorobenzene	98.0	%	70-130				
Dibromofluoromethane	108	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604704-04
MW-33M-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 14:30
Date Received : 05-APR-2006
Date Reported : 12-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	15	mg/l	2.0	60 6010B		0407 14:15	RW
Volatile Organics by MCP 8260B				60 8260B		0409 13:19	PD
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	14	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	2.1	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604704-04
MW-33M-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 13:19	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	125	%	70-130				
Toluene-d8	110	%	70-130				
4-Bromofluorobenzene	111	%	70-130				
Dibromofluoromethane	129	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604704-05
MW-40-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 15:50
Date Received : 05-APR-2006
Date Reported : 12-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	79	mg/l	2.0	60 6010B		0407 14:27	RW
Volatile Organics by MCP 8260B				60 8260B		0412 13:19	RY
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	7.1	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	0.72	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	0.67	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	2.4	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	4.0	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604704-05
MW-40-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0412 13:19	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	115	%	70-130				
Toluene-d8	97.0	%	70-130				
4-Bromofluorobenzene	99.0	%	70-130				
Dibromofluoromethane	115	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604704-06
DUP-001-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 00:00
Date Received : 05-APR-2006
Date Reported : 12-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	76	mg/l	2.0	60 6010B		0407 14:30	RW
Volatile Organics by MCP 8260B				60 8260B		0409 14:40	PD
Methylene chloride	ND	ug/l	5.0				
1,1-Dichloroethane	ND	ug/l	0.75				
Chloroform	5.8	ug/l	0.75				
Carbon tetrachloride	ND	ug/l	0.50				
1,2-Dichloropropane	ND	ug/l	1.8				
Dibromochloromethane	0.74	ug/l	0.50				
1,1,2-Trichloroethane	ND	ug/l	0.75				
Tetrachloroethene	0.80	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	2.2	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	4.5	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604704-06
DUP-001-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 14:40	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	116	%	70-130				
Toluene-d8	96.0	%	70-130				
4-Bromofluorobenzene	97.0	%	70-130				
Dibromofluoromethane	123	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604704

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 01-06 (WG235241-2, WG235241-3)					
Sodium, Dissolved	100	100	0	20	80-120
Volatile Organics by MCP 8260B for sample(s) 01-02,04,06 (WG235422-1, WG235422-2)					
Methylene chloride	95	92	3	25	70-130
1,1-Dichloroethane	100	95	5	25	70-130
Chloroform	95	90	5	25	70-130
Carbon tetrachloride	101	96	5	25	70-130
1,2-Dichloropropane	101	97	4	25	70-130
Dibromochloromethane	94	94	0	25	70-130
1,1,2-Trichloroethane	100	102	2	25	70-130
Tetrachloroethene	105	101	4	25	70-130
Chlorobenzene	102	99	3	25	70-130
Trichlorofluoromethane	102	94	8	25	70-130
1,2-Dichloroethane	101	99	2	25	70-130
1,1,1-Trichloroethane	101	96	5	25	70-130
Bromodichloromethane	100	97	3	25	70-130
trans-1,3-Dichloropropene	92	92	0	25	70-130
cis-1,3-Dichloropropene	90	90	0	25	70-130
1,1-Dichloropropene	99	92	7	25	70-130
Bromoform	92	98	6	50	70-130
1,1,2,2-Tetrachloroethane	99	102	3	25	70-130
Benzene	100	96	4	25	70-130
Toluene	100	96	4	25	70-130
Ethylbenzene	102	98	4	25	70-130
Chloromethane	91	87	4	50	70-130
Bromomethane	93	91	2	50	70-130
Vinyl chloride	102	94	8	25	70-130
Chloroethane	95	90	5	25	70-130
1,1-Dichloroethene	94	89	5	25	70-130
trans-1,2-Dichloroethene	94	90	4	25	70-130
Trichloroethene	98	93	5	25	70-130
1,2-Dichlorobenzene	96	96	0	25	70-130
1,3-Dichlorobenzene	104	102	2	25	70-130
1,4-Dichlorobenzene	100	99	1	25	70-130
Methyl tert butyl ether	80	85	6	25	70-130
p/m-Xylene	104	101	3	25	70-130
o-Xylene	95	91	4	25	70-130
cis-1,2-Dichloroethene	104	98	6	25	70-130
Dibromomethane	101	102	1	25	70-130
1,2,3-Trichloropropane	99	105	6	25	70-130
Styrene	95	92	3	25	70-130
Dichlorodifluoromethane	82	79	4	50	70-130
Acetone	91	94	3	50	70-130
Carbon disulfide	83	78	6	25	70-130
2-Butanone	90	94	4	50	70-130
4-Methyl-2-pentanone	84	89	6	50	70-130
2-Hexanone	81	88	8	50	70-130
Bromochloromethane	100	100	0	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604704

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 01-02,04,06 (WG235422-1, WG235422-2)					
Tetrahydrofuran	82	81	1	25	70-130
2,2-Dichloropropane	96	93	3	50	70-130
1,2-Dibromoethane	91	94	3	25	70-130
1,3-Dichloropropane	94	98	4	25	70-130
1,1,1,2-Tetrachloroethane	104	102	2	25	70-130
Bromobenzene	102	101	1	25	70-130
n-Butylbenzene	94	91	3	25	70-130
sec-Butylbenzene	96	93	3	25	70-130
tert-Butylbenzene	97	95	2	25	70-130
o-Chlorotoluene	104	100	4	25	70-130
p-Chlorotoluene	102	98	4	25	70-130
1,2-Dibromo-3-chloropropane	92	98	6	50	70-130
Hexachlorobutadiene	96	91	5	25	70-130
Isopropylbenzene	104	101	3	25	70-130
p-Isopropyltoluene	98	96	2	25	70-130
Naphthalene	76	84	10	25	70-130
n-Propylbenzene	102	98	4	25	70-130
1,2,3-Trichlorobenzene	84	89	6	25	70-130
1,2,4-Trichlorobenzene	84	87	4	25	70-130
1,3,5-Trimethylbenzene	99	94	5	25	70-130
1,2,4-Trimethylbenzene	99	97	2	25	70-130
Ethyl ether	78	79	1	25	70-130
Isopropyl Ether	80	79	1	25	70-130
Ethyl-Tert-Butyl-Ether	76	77	1	25	70-130
Tertiary-Amyl Methyl Ether	75	77	3	25	70-130
1,4-Dioxane	79	83	5	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	99	104	5		70-130
Toluene-d8	98	100	2		70-130
4-Bromofluorobenzene	92	96	4		70-130
Dibromofluoromethane	106	109	3		70-130
Volatile Organics by MCP 8260B for sample(s) 02-03 (WG235422-6, WG235422-7)					
Methylene chloride	98	94	4	25	70-130
1,1-Dichloroethane	101	97	4	25	70-130
Chloroform	94	92	2	25	70-130
Carbon tetrachloride	102	99	3	25	70-130
1,2-Dichloropropane	100	99	1	25	70-130
Dibromochloromethane	94	90	4	25	70-130
1,1,2-Trichloroethane	102	99	3	25	70-130
Tetrachloroethene	104	103	1	25	70-130
Chlorobenzene	100	98	2	25	70-130
Trichlorofluoromethane	98	96	2	25	70-130
1,2-Dichloroethane	104	101	3	25	70-130
1,1,1-Trichloroethane	102	99	3	25	70-130
Bromodichloromethane	98	97	1	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604704

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 02-03 (WG235422-6, WG235422-7)					
trans-1,3-Dichloropropene	95	91	4	25	70-130
cis-1,3-Dichloropropene	93	92	1	25	70-130
1,1-Dichloropropene	100	96	4	25	70-130
Bromoform	99	96	3	50	70-130
1,1,2,2-Tetrachloroethane	109	102	7	25	70-130
Benzene	101	98	3	25	70-130
Toluene	100	97	3	25	70-130
Ethylbenzene	99	97	2	25	70-130
Chloromethane	84	80	5	50	70-130
Bromomethane	98	96	2	50	70-130
Vinyl chloride	91	88	3	25	70-130
Chloroethane	94	88	7	25	70-130
1,1-Dichloroethene	98	91	7	25	70-130
trans-1,2-Dichloroethene	99	96	3	25	70-130
Trichloroethene	100	98	2	25	70-130
1,2-Dichlorobenzene	100	100	0	25	70-130
1,3-Dichlorobenzene	104	106	2	25	70-130
1,4-Dichlorobenzene	100	101	1	25	70-130
Methyl tert butyl ether	96	91	5	25	70-130
p/m-Xylene	102	99	3	25	70-130
o-Xylene	92	90	2	25	70-130
cis-1,2-Dichloroethene	105	102	3	25	70-130
Dibromomethane	102	99	3	25	70-130
1,2,3-Trichloropropane	110	108	2	25	70-130
Styrene	92	89	3	25	70-130
Dichlorodifluoromethane	68	63	8	50	70-130
Acetone	104	99	5	50	70-130
Carbon disulfide	76	72	5	25	70-130
2-Butanone	110	104	6	50	70-130
4-Methyl-2-pentanone	107	100	7	50	70-130
2-Hexanone	106	96	10	50	70-130
Bromochloromethane	105	103	2	25	70-130
Tetrahydrofuran	91	85	7	25	70-130
2,2-Dichloropropane	102	97	5	50	70-130
1,2-Dibromoethane	100	95	5	25	70-130
1,3-Dichloropropane	100	98	2	25	70-130
1,1,1,2-Tetrachloroethane	100	99	1	25	70-130
Bromobenzene	102	103	1	25	70-130
n-Butylbenzene	92	94	2	25	70-130
sec-Butylbenzene	96	96	0	25	70-130
tert-Butylbenzene	98	99	1	25	70-130
o-Chlorotoluene	101	101	0	25	70-130
p-Chlorotoluene	99	100	1	25	70-130
1,2-Dibromo-3-chloropropane	99	102	3	50	70-130
Hexachlorobutadiene	96	100	4	25	70-130
Isopropylbenzene	104	102	2	25	70-130
p-Isopropyltoluene	98	100	2	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604704

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 02-03 (WG235422-6, WG235422-7)					
Naphthalene	98	90	9	25	70-130
n-Propylbenzene	100	102	2	25	70-130
1,2,3-Trichlorobenzene	93	92	1	25	70-130
1,2,4-Trichlorobenzene	92	92	0	25	70-130
1,3,5-Trimethylbenzene	98	98	0	25	70-130
1,2,4-Trimethylbenzene	97	99	2	25	70-130
Ethyl ether	91	87	4	25	70-130
Isopropyl Ether	86	84	2	25	70-130
Ethyl-Tert-Butyl-Ether	86	83	4	25	70-130
Tertiary-Amyl Methyl Ether	87	83	5	25	70-130
1,4-Dioxane	93	90	3	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	100	99	1		70-130
Toluene-d8	97	97	0		70-130
4-Bromofluorobenzene	94	97	3		70-130
Dibromofluoromethane	105	102	3		70-130
Volatile Organics by MCP 8260B for sample(s) 05 (WG235781-1, WG235781-2)					
Methylene chloride	102	101	1	25	70-130
1,1-Dichloroethane	96	107	11	25	70-130
Chloroform	106	106	0	25	70-130
Carbon tetrachloride	118	118	0	25	70-130
1,2-Dichloropropane	106	105	1	25	70-130
Dibromochloromethane	98	102	4	25	70-130
1,1,2-Trichloroethane	103	102	1	25	70-130
Tetrachloroethene	105	108	3	25	70-130
Chlorobenzene	104	102	2	25	70-130
Trichlorofluoromethane	116	114	2	25	70-130
1,2-Dichloroethane	111	108	3	25	70-130
1,1,1-Trichloroethane	111	111	0	25	70-130
Bromodichloromethane	108	106	2	25	70-130
trans-1,3-Dichloropropene	97	100	3	25	70-130
cis-1,3-Dichloropropene	82	89	8	25	70-130
1,1-Dichloropropene	103	111	7	25	70-130
Bromoform	101	99	2	50	70-130
1,1,2,2-Tetrachloroethane	94	96	2	25	70-130
Benzene	105	106	1	25	70-130
Toluene	104	106	2	25	70-130
Ethylbenzene	108	110	2	25	70-130
Chloromethane	81	84	4	50	70-130
Bromomethane	56	67	18	50	70-130
Vinyl chloride	93	96	3	25	70-130
Chloroethane	87	92	6	25	70-130
1,1-Dichloroethene	98	105	7	25	70-130
trans-1,2-Dichloroethene	96	102	6	25	70-130
Trichloroethene	101	103	2	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604704

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 05 (WG235781-1, WG235781-2)					
1,2-Dichlorobenzene	96	96	0	25	70-130
1,3-Dichlorobenzene	101	100	1	25	70-130
1,4-Dichlorobenzene	93	91	2	25	70-130
Methyl tert butyl ether	88	111	23	25	70-130
p/m-Xylene	107	107	0	25	70-130
o-Xylene	111	111	0	25	70-130
cis-1,2-Dichloroethene	105	107	2	25	70-130
Dibromomethane	104	102	2	25	70-130
1,2,3-Trichloropropane	106	101	5	25	70-130
Styrene	107	107	0	25	70-130
Dichlorodifluoromethane	87	89	2	50	70-130
Acetone	123	104	17	50	70-130
Carbon disulfide	103	103	0	25	70-130
2-Butanone	89	98	10	50	70-130
4-Methyl-2-pentanone	82	92	11	50	70-130
2-Hexanone	100	107	7	50	70-130
Bromochloromethane	105	107	2	25	70-130
Tetrahydrofuran	97	94	3	25	70-130
2,2-Dichloropropane	62	106	52	50	70-130
1,2-Dibromoethane	93	97	4	25	70-130
1,3-Dichloropropane	103	104	1	25	70-130
1,1,1,2-Tetrachloroethane	114	111	3	25	70-130
Bromobenzene	99	100	1	25	70-130
n-Butylbenzene	93	96	3	25	70-130
sec-Butylbenzene	92	95	3	25	70-130
tert-Butylbenzene	102	103	1	25	70-130
o-Chlorotoluene	105	104	1	25	70-130
p-Chlorotoluene	100	98	2	25	70-130
1,2-Dibromo-3-chloropropane	82	84	2	50	70-130
Hexachlorobutadiene	88	92	4	25	70-130
Isopropylbenzene	108	111	3	25	70-130
p-Isopropyltoluene	92	92	0	25	70-130
Naphthalene	73	80	9	25	70-130
n-Propylbenzene	106	107	1	25	70-130
1,2,3-Trichlorobenzene	75	80	6	25	70-130
1,2,4-Trichlorobenzene	74	80	8	25	70-130
1,3,5-Trimethylbenzene	105	106	1	25	70-130
1,2,4-Trimethylbenzene	100	99	1	25	70-130
Ethyl ether	102	114	11	25	70-130
Isopropyl Ether	94	103	9	25	70-130
Ethyl-Tert-Butyl-Ether	91	102	11	25	70-130
Tertiary-Amyl Methyl Ether	89	98	10	25	70-130
1,4-Dioxane	104	109	5	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	111	111	0		70-130
Toluene-d8	99	98	1		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604704

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 05 (WG235781-1, WG235781-2)					
4-Bromofluorobenzene	96	97	1		70-130
Dibromofluoromethane	106	104	2		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0604704

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Volatile Organics by MCP 8260B for sample(s) 01-04,06 (L0604688-07, WG235422-5)					
Methylene chloride	96	101	5	30	70-130
1,1-Dichloroethane	95	101	6	30	70-130
Chloroform	84	90	7	30	70-130
Carbon tetrachloride	85	93	9	30	70-130
1,2-Dichloropropane	93	99	6	30	70-130
Dibromochloromethane	84	89	6	30	70-130
1,1,2-Trichloroethane	93	98	5	30	70-130
Tetrachloroethene	86	97	12	30	70-130
Chlorobenzene	87	94	8	30	70-130
1,2-Dichloroethane	99	102	3	30	70-130
1,1,1-Trichloroethane	89	96	8	30	70-130
Bromodichloromethane	90	94	4	30	70-130
trans-1,3-Dichloropropene	80	84	5	30	70-130
cis-1,3-Dichloropropene	78	84	7	30	70-130
Bromoform	82	88	7	30	70-130
1,1,2,2-Tetrachloroethane	94	98	4	30	70-130
Chloromethane	85	93	9	30	70-130
Vinyl chloride	92	102	10	30	70-130
Chloroethane	88	97	10	30	70-130
1,1-Dichloroethene	79	92	15	30	70-130
trans-1,2-Dichloroethene	86	94	9	30	70-130
Trichloroethene	79	88	11	30	70-130
1,2-Dichlorobenzene	81	90	11	30	70-130
1,3-Dichlorobenzene	84	94	11	30	70-130
1,4-Dichlorobenzene	81	90	11	30	70-130
cis-1,2-Dichloroethene	94	101	7	30	70-130
Dichlorodifluoromethane	68	76	11	30	70-130
1,2-Dibromoethane	88	91	3	30	70-130
1,3-Dichloropropane	92	96	4	30	70-130
1,1,1,2-Tetrachloroethane	91	96	5	30	70-130
o-Chlorotoluene	84	92	9	30	70-130
p-Chlorotoluene	80	89	11	30	70-130
Hexachlorobutadiene	73	84	14	30	70-130
1,2,4-Trichlorobenzene	71	79	11	30	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	103	106	3		70-130
Toluene-d8	95	101	6		70-130
4-Bromofluorobenzene	90	96	6		70-130
Dibromofluoromethane	106	111	5		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604704

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-06 (WG235241-1)							
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	ND	mg/l	2.0	60 6010B		0407 13:20	RW
Blank Analysis for sample(s) 01-02,04,06 (WG235422-3)							
Volatile Organics by MCP 8260B				60 8260B		0409 09:57	PD
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604704

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-02,04,06 (WG235422-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 09:57	PD
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				
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	109	%	70-130				
Toluene-d8	102	%	70-130				
4-Bromofluorobenzene	98.0	%	70-130				
Dibromofluoromethane	116	%	70-130				
Blank Analysis for sample(s) 02-03 (WG235422-8)							
Volatile Organics by MCP 8260B				60 8260B		0410 16:52	PD
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604704

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 02-03 (WG235422-8)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 16:52	PD
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604704

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 02-03 (WG235422-8)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 16:52	PD
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				
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	102	%	70-130				
Toluene-d8	96.0	%	70-130				
4-Bromofluorobenzene	100	%	70-130				
Dibromofluoromethane	105	%	70-130				
Blank Analysis for sample(s) 05 (WG235781-3)							
Volatile Organics by MCP 8260B				60 8260B		0412 10:47	RY
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604704

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 05 (WG235781-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0412 10:47	RY
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				
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604704

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 05 (WG235781-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0412 10:47	RY
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	112	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	104	%	70-130				
Dibromofluoromethane	107	%	70-130				

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.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0604704

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
L0604704-01A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604704-01B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604704-01C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604704-02A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604704-02B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604704-02C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604704-03A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604704-03B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604704-03C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604704-04A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604704-04B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604704-04C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604704-05A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604704-05B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604704-05C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604704-06A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604704-06B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604704-06C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/5

ALPHA Job #: L0604704

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 GW SAMPLING
Project Location: WAYLAND
Project #: 42925
Project Manager: JEREMY PICARD
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 4/12 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

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	VOC 8021B chlorinated	DIS N/A	Sample Specific Comments	TOTAL # BOTTLES
04704001	MW-111-20060404-01	4/4/06	9:30	GW	JM	X	X		3
-02	MW-115-20060404-01	4/4/06	10:45	GW	JM	X	X		3
-03	MW-109-20060404-01	4/4/06	12:00	GW	JM	X	X		3
-04	MW-33M-20060404-01	4/4/06	14:30	GW	JM	X	X		3
-05	MW-40-20060404-01	4/4/06	15:50	GW	JM	X	X		3
-06	DUP-001-20060404-01	4/4/06	0000	GW	JM	X	X		3

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Container Type	V	P
Preservative	B	C

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	4/5/06 1030	[illegible]	4/5/06 10:30
[illegible]	4/5/06 12:05	Carolie Jeup	4/5 12:05

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)

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Jeremy Picard

Project Number: 42925

Site: RAYTHEON GW SAMPLING

Laboratory Job Number: L0604718

Date Received: 05-APR-2006

Date Reported: 11-APR-2006

Delivery Method: Alpha

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 method(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

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: _____
Technical Director

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0604718
Date Reported: 11-APR-2006

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0604718-01	MW-203M-20060404-01	WAYLAND, MA
L0604718-02	MW-203S-20060404-01	WAYLAND, MA
L0604718-03	MW-203D-20060404-01	WAYLAND, MA
L0604718-04	MW-204M-20060404-01	WAYLAND, MA
L0604718-05	MW-204S-20060404-01	WAYLAND, MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0604718

Metals

L0604718-01 was re-analyzed on 5x dilution in order to quantitate the sample within the linear range for Na. The result is reported as a greater than value for the element that exceeded the calibration range on the initial analysis. The re-analysis was performed only for the element which exceeded the linear range.

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.

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.

L0604718-03 and -04 have elevated limits of detection due to the 2x dilutions required by the elevated concentrations of target compounds in the samples.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604718-01
MW-203M-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 09:40
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	>135	mg/l	2	60 6010B		0407 14:33	RW
Sodium, Dissolved	160	mg/l	10.	60 6010B		0410 13:00	RW
Volatile Organics by MCP 8260B				60 8260B		0409 15:21	PD
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	0.66	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	0.60	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	1.8	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604718-01
MW-203M-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 15:21	PD
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	118	%	70-130				
Toluene-d8	98.0	%	70-130				
4-Bromofluorobenzene	100	%	70-130				
Dibromofluoromethane	123	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604718-02
MW-203S-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 10:40
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	100	mg/l	2.0	60 6010B		0407 14:36	RW
Volatile Organics by MCP 8260B				60 8260B		0409 16:01	PD
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	8.2	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	3.4	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604718-02
MW-203S-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 16:01	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	119	%	70-130				
Toluene-d8	96.0	%	70-130				
4-Bromofluorobenzene	102	%	70-130				
Dibromofluoromethane	126	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604718-03
MW-203D-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 12:10
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	73	mg/l	2.0	60 6010B		0407 14:38	RW
Volatile Organics by MCP 8260B				60 8260B		0409 16:42	PD
Methylene chloride	ND	ug/l	10.				
1,1-Dichloroethane	ND	ug/l	1.5				
Chloroform	ND	ug/l	1.5				
Carbon tetrachloride	ND	ug/l	1.0				
1,2-Dichloropropane	ND	ug/l	3.5				
Dibromochloromethane	ND	ug/l	1.0				
1,1,2-Trichloroethane	ND	ug/l	1.5				
Tetrachloroethene	2.9	ug/l	1.0				
Chlorobenzene	ND	ug/l	1.0				
1,2-Dichloroethane	ND	ug/l	1.0				
1,1,1-Trichloroethane	ND	ug/l	1.0				
Bromodichloromethane	ND	ug/l	1.0				
trans-1,3-Dichloropropene	ND	ug/l	1.0				
cis-1,3-Dichloropropene	ND	ug/l	1.0				
Bromoform	ND	ug/l	4.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	1.0				
Chloromethane	ND	ug/l	5.0				
Vinyl chloride	ND	ug/l	2.0				
Chloroethane	ND	ug/l	2.0				
1,1-Dichloroethene	ND	ug/l	1.0				
trans-1,2-Dichloroethene	ND	ug/l	1.5				
Trichloroethene	76	ug/l	1.0				
1,2-Dichlorobenzene	ND	ug/l	5.0				
1,3-Dichlorobenzene	ND	ug/l	5.0				
1,4-Dichlorobenzene	ND	ug/l	5.0				
cis-1,2-Dichloroethene	5.6	ug/l	1.0				
Dichlorodifluoromethane	ND	ug/l	10.				
1,2-Dibromoethane	ND	ug/l	4.0				
1,3-Dichloropropane	ND	ug/l	5.0				
1,1,1,2-Tetrachloroethane	ND	ug/l	1.0				
o-Chlorotoluene	ND	ug/l	5.0				
p-Chlorotoluene	ND	ug/l	5.0				
Hexachlorobutadiene	ND	ug/l	1.2				
1,2,4-Trichlorobenzene	ND	ug/l	5.0				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604718-03
MW-203D-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 16:42	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	114	%	70-130				
Toluene-d8	100	%	70-130				
4-Bromofluorobenzene	96.0	%	70-130				
Dibromofluoromethane	122	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604718-04
MW-204M-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 15:00
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	35	mg/l	2.0	60 6010B		0407 14:41	RW
Volatile Organics by MCP 8260B				60 8260B		0409 17:23	PD
Methylene chloride	ND	ug/l	10.				
1,1-Dichloroethane	2.0	ug/l	1.5				
Chloroform	ND	ug/l	1.5				
Carbon tetrachloride	ND	ug/l	1.0				
1,2-Dichloropropane	ND	ug/l	3.5				
Dibromochloromethane	ND	ug/l	1.0				
1,1,2-Trichloroethane	ND	ug/l	1.5				
Tetrachloroethene	ND	ug/l	1.0				
Chlorobenzene	ND	ug/l	1.0				
1,2-Dichloroethane	ND	ug/l	1.0				
1,1,1-Trichloroethane	26	ug/l	1.0				
Bromodichloromethane	ND	ug/l	1.0				
trans-1,3-Dichloropropene	ND	ug/l	1.0				
cis-1,3-Dichloropropene	ND	ug/l	1.0				
Bromoform	ND	ug/l	4.0				
1,1,2,2-Tetrachloroethane	ND	ug/l	1.0				
Chloromethane	ND	ug/l	5.0				
Vinyl chloride	ND	ug/l	2.0				
Chloroethane	ND	ug/l	2.0				
1,1-Dichloroethene	2.1	ug/l	1.0				
trans-1,2-Dichloroethene	ND	ug/l	1.5				
Trichloroethene	74	ug/l	1.0				
1,2-Dichlorobenzene	ND	ug/l	5.0				
1,3-Dichlorobenzene	ND	ug/l	5.0				
1,4-Dichlorobenzene	ND	ug/l	5.0				
cis-1,2-Dichloroethene	ND	ug/l	1.0				
Dichlorodifluoromethane	ND	ug/l	10.				
1,2-Dibromoethane	ND	ug/l	4.0				
1,3-Dichloropropane	ND	ug/l	5.0				
1,1,1,2-Tetrachloroethane	ND	ug/l	1.0				
o-Chlorotoluene	ND	ug/l	5.0				
p-Chlorotoluene	ND	ug/l	5.0				
Hexachlorobutadiene	ND	ug/l	1.2				
1,2,4-Trichlorobenzene	ND	ug/l	5.0				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604718-04
MW-204M-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 17:23	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	120	%	70-130				
Toluene-d8	107	%	70-130				
4-Bromofluorobenzene	105	%	70-130				
Dibromofluoromethane	124	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604718-05
MW-204S-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 15:45
Date Received : 05-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	41	mg/l	2.0	60 6010B		0407 14:44	RW
Volatile Organics by MCP 8260B				60 8260B		0409 18:03	PD
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	9.4	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	1.1	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604718-05
MW-204S-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 18:03	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	117	%	70-130				
Toluene-d8	95.0	%	70-130				
4-Bromofluorobenzene	98.0	%	70-130				
Dibromofluoromethane	122	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604718

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 01-05 (WG235241-2, WG235241-3)					
Sodium, Dissolved	100	100	0	20	80-120
Volatile Organics by MCP 8260B for sample(s) 01-05 (WG235422-1, WG235422-2)					
Methylene chloride	95	92	3	25	70-130
1,1-Dichloroethane	100	95	5	25	70-130
Chloroform	95	90	5	25	70-130
Carbon tetrachloride	101	96	5	25	70-130
1,2-Dichloropropane	101	97	4	25	70-130
Dibromochloromethane	94	94	0	25	70-130
1,1,2-Trichloroethane	100	102	2	25	70-130
Tetrachloroethene	105	101	4	25	70-130
Chlorobenzene	102	99	3	25	70-130
Trichlorofluoromethane	102	94	8	25	70-130
1,2-Dichloroethane	101	99	2	25	70-130
1,1,1-Trichloroethane	101	96	5	25	70-130
Bromodichloromethane	100	97	3	25	70-130
trans-1,3-Dichloropropene	92	92	0	25	70-130
cis-1,3-Dichloropropene	90	90	0	25	70-130
1,1-Dichloropropene	99	92	7	25	70-130
Bromoform	92	98	6	50	70-130
1,1,2,2-Tetrachloroethane	99	102	3	25	70-130
Benzene	100	96	4	25	70-130
Toluene	100	96	4	25	70-130
Ethylbenzene	102	98	4	25	70-130
Chloromethane	91	87	4	50	70-130
Bromomethane	93	91	2	50	70-130
Vinyl chloride	102	94	8	25	70-130
Chloroethane	95	90	5	25	70-130
1,1-Dichloroethene	94	89	5	25	70-130
trans-1,2-Dichloroethene	94	90	4	25	70-130
Trichloroethene	98	93	5	25	70-130
1,2-Dichlorobenzene	96	96	0	25	70-130
1,3-Dichlorobenzene	104	102	2	25	70-130
1,4-Dichlorobenzene	100	99	1	25	70-130
Methyl tert butyl ether	80	85	6	25	70-130
p/m-Xylene	104	101	3	25	70-130
o-Xylene	95	91	4	25	70-130
cis-1,2-Dichloroethene	104	98	6	25	70-130
Dibromomethane	101	102	1	25	70-130
1,2,3-Trichloropropane	99	105	6	25	70-130
Styrene	95	92	3	25	70-130
Dichlorodifluoromethane	82	79	4	50	70-130
Acetone	91	94	3	50	70-130
Carbon disulfide	83	78	6	25	70-130
2-Butanone	90	94	4	50	70-130
4-Methyl-2-pentanone	84	89	6	50	70-130
2-Hexanone	81	88	8	50	70-130
Bromochloromethane	100	100	0	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604718

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 01-05 (WG235422-1, WG235422-2)					
Tetrahydrofuran	82	81	1	25	70-130
2,2-Dichloropropane	96	93	3	50	70-130
1,2-Dibromoethane	91	94	3	25	70-130
1,3-Dichloropropane	94	98	4	25	70-130
1,1,1,2-Tetrachloroethane	104	102	2	25	70-130
Bromobenzene	102	101	1	25	70-130
n-Butylbenzene	94	91	3	25	70-130
sec-Butylbenzene	96	93	3	25	70-130
tert-Butylbenzene	97	95	2	25	70-130
o-Chlorotoluene	104	100	4	25	70-130
p-Chlorotoluene	102	98	4	25	70-130
1,2-Dibromo-3-chloropropane	92	98	6	50	70-130
Hexachlorobutadiene	96	91	5	25	70-130
Isopropylbenzene	104	101	3	25	70-130
p-Isopropyltoluene	98	96	2	25	70-130
Naphthalene	76	84	10	25	70-130
n-Propylbenzene	102	98	4	25	70-130
1,2,3-Trichlorobenzene	84	89	6	25	70-130
1,2,4-Trichlorobenzene	84	87	4	25	70-130
1,3,5-Trimethylbenzene	99	94	5	25	70-130
1,2,4-Trimethylbenzene	99	97	2	25	70-130
Ethyl ether	78	79	1	25	70-130
Isopropyl Ether	80	79	1	25	70-130
Ethyl-Tert-Butyl-Ether	76	77	1	25	70-130
Tertiary-Amyl Methyl Ether	75	77	3	25	70-130
1,4-Dioxane	79	83	5	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	99	104	5		70-130
Toluene-d8	98	100	2		70-130
4-Bromofluorobenzene	92	96	4		70-130
Dibromofluoromethane	106	109	3		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0604718

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Volatile Organics by MCP 8260B for sample(s) 01-05 (L0604688-07, WG235422-5)					
Methylene chloride	96	101	5	30	70-130
1,1-Dichloroethane	95	101	6	30	70-130
Chloroform	84	90	7	30	70-130
Carbon tetrachloride	85	93	9	30	70-130
1,2-Dichloropropane	93	99	6	30	70-130
Dibromochloromethane	84	89	6	30	70-130
1,1,2-Trichloroethane	93	98	5	30	70-130
Tetrachloroethene	86	97	12	30	70-130
Chlorobenzene	87	94	8	30	70-130
1,2-Dichloroethane	99	102	3	30	70-130
1,1,1-Trichloroethane	89	96	8	30	70-130
Bromodichloromethane	90	94	4	30	70-130
trans-1,3-Dichloropropene	80	84	5	30	70-130
cis-1,3-Dichloropropene	78	84	7	30	70-130
Bromoform	82	88	7	30	70-130
1,1,2,2-Tetrachloroethane	94	98	4	30	70-130
Chloromethane	85	93	9	30	70-130
Vinyl chloride	92	102	10	30	70-130
Chloroethane	88	97	10	30	70-130
1,1-Dichloroethene	79	92	15	30	70-130
trans-1,2-Dichloroethene	86	94	9	30	70-130
Trichloroethene	79	88	11	30	70-130
1,2-Dichlorobenzene	81	90	11	30	70-130
1,3-Dichlorobenzene	84	94	11	30	70-130
1,4-Dichlorobenzene	81	90	11	30	70-130
cis-1,2-Dichloroethene	94	101	7	30	70-130
Dichlorodifluoromethane	68	76	11	30	70-130
1,2-Dibromoethane	88	91	3	30	70-130
1,3-Dichloropropane	92	96	4	30	70-130
1,1,1,2-Tetrachloroethane	91	96	5	30	70-130
o-Chlorotoluene	84	92	9	30	70-130
p-Chlorotoluene	80	89	11	30	70-130
Hexachlorobutadiene	73	84	14	30	70-130
1,2,4-Trichlorobenzene	71	79	11	30	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	103	106	3		70-130
Toluene-d8	95	101	6		70-130
4-Bromofluorobenzene	90	96	6		70-130
Dibromofluoromethane	106	111	5		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604718

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-05 (WG235241-1)							
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	ND	mg/l	2.0	60 6010B		0407 13:20	RW
Blank Analysis for sample(s) 01-05 (WG235422-3)							
Volatile Organics by MCP 8260B				60 8260B		0409 09:57	PD
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604718

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-05 (WG235422-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 09:57	PD
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				
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	109	%	70-130				
Toluene-d8	102	%	70-130				
4-Bromofluorobenzene	98.0	%	70-130				
Dibromofluoromethane	116	%	70-130				

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.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0604718

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
L0604718-01A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604718-01B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604718-01C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604718-02A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604718-02B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604718-02C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604718-03A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604718-03B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604718-03C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604718-04A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604718-04B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604718-04C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604718-05A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604718-05B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604718-05C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE ____ OF ____

Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Date Rec'd In Lab: 4/5

ALPHA Job #: L0604718

Client Information

Client: EKM
Address: 394 Boylston St
Boston MA 02116
Phone: 617-646-7800
Fax: 617-267-6447
Email: jeremy.picard@ekm.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: ~~Waytland~~ Raytheon GW Sampling
Project Location: Wayland MA
Project #: 42925
Project Manager: Jeremy picard
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 4/12 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

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:

ANALYSIS: Ext'd VOCs; Diss Na (FF)

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	Ext'd VOCs	Diss Na (FF)	Sample Specific Comments	TOTAL # BOTTLES
04718-01	MW-203M-20060404-01	4/4/06	9:40	GW	LK	✓	✓		
-02	MW-203S-20060404-01	4/4/06	10:40	GW	LK	✓	✓		
-03	MW-203D-20060404-01	4/4/06	12:00	GW	LK	✓	✓		
-04	MW-204M-20060404-01	4/4/06	15:00	GW	LK	✓	✓		
-05	MW-204S-20060404-01	4/4/06	15:45	GW	LK	✓	✓		

Container Type	V	P
Preservative	B	G

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	4/5/06 1030	[signature]	4/5/06
[signature]	4/5/06 12:05	[signature]	4/5 12:05

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)

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Jeremy Picard

Project Number: 42925

Site: RAYTHEON GW SAMPLING

Laboratory Job Number: L0604774

Date Received: 06-APR-2006

Date Reported: 11-APR-2006

Delivery Method: Alpha

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 method(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

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: _____
Technical Director

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0604774
Date Reported: 11-APR-2006

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0604774-01	MW-216D-20060405-01	WAYLAND, MA
L0604774-02	MW-47D-20060405-01	WAYLAND, MA
L0604774-03	MW-47M-20060405-01	WAYLAND, MA
L0604774-04	MW-47S-20060405-01	WAYLAND, MA
L0604774-05	DUP-006-20060405-01	WAYLAND, MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0604774

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.

Volatile Organics

In reference to question E:

The WG235382-7 LCSD has low recovery for 1,2,4-trichlorobenzene, which was within QC acceptance criteria in the daily LCS.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604774-01
MW-216D-20060405-01
Sample Matrix: WATER

Date Collected: 05-APR-2006 10:55
Date Received : 06-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		0409 16:13	PD
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	23	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	1.9	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604774-01
MW-216D-20060405-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 16:13	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	114	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	102	%	70-130				
Dibromofluoromethane	111	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604774-02
MW-47D-20060405-01
Sample Matrix: WATER

Date Collected: 05-APR-2006 12:35
Date Received : 06-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: Field Filtered

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	79	mg/l	2.0	60 6010B		0410 14:15	RW
Volatile Organics by MCP 8260B				60 8260B		0409 16:50	PD
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	2.2	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	0.99	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	56	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	5.2	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604774-02
MW-47D-20060405-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 16:50	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	118	%	70-130				
Toluene-d8	97.0	%	70-130				
4-Bromofluorobenzene	99.0	%	70-130				
Dibromofluoromethane	111	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604774-03
MW-47M-20060405-01
Sample Matrix: WATER

Date Collected: 05-APR-2006 14:15
Date Received : 06-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: Field Filtered

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	12	mg/l	2.0	60 6010B		0410 14:18	RW
Volatile Organics by MCP 8260B				60 8260B		0410 15:38	PD
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	14	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	1.7	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604774-03
MW-47M-20060405-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 15:38	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	109	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	101	%	70-130				
Dibromofluoromethane	104	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604774-04
MW-47S-20060405-01
Sample Matrix: WATER

Date Collected: 05-APR-2006 15:45
Date Received : 06-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: Field Filtered

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	12	mg/l	2.0	60 6010B		0410 14:21	RW
Volatile Organics by MCP 8260B				60 8260B		0409 18:02	PD
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	1.3	ug/l	0.50				
Chlorobenzene	ND	ug/l	0.50				
1,2-Dichloroethane	ND	ug/l	0.50				
1,1,1-Trichloroethane	0.92	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604774-04
MW-47S-20060405-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 18:02	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	119	%	70-130				
Toluene-d8	98.0	%	70-130				
4-Bromofluorobenzene	103	%	70-130				
Dibromofluoromethane	114	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604774-05
DUP-006-20060405-01
Sample Matrix: WATER

Date Collected: 05-APR-2006 00:00
Date Received : 06-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: Field Filtered

Number & Type of Containers: 2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		0409 18:39	PD
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	14	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	1.4	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604774-05
DUP-006-20060405-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0409 18:39	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	115	%	70-130				
Toluene-d8	100	%	70-130				
4-Bromofluorobenzene	101	%	70-130				
Dibromofluoromethane	113	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604774

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 02-04 (WG235245-2, WG235245-3)					
Sodium, Dissolved	100	100	0	20	80-120
Volatile Organics by MCP 8260B for sample(s) 01-02,04-05 (WG235382-3, WG235382-4)					
Methylene chloride	99	106	7	25	70-130
1,1-Dichloroethane	99	94	5	25	70-130
Chloroform	102	110	8	25	70-130
Carbon tetrachloride	113	126	11	25	70-130
1,2-Dichloropropane	100	104	4	25	70-130
Dibromochloromethane	95	98	3	25	70-130
1,1,2-Trichloroethane	96	100	4	25	70-130
Tetrachloroethene	97	110	13	25	70-130
Chlorobenzene	98	103	5	25	70-130
1,2-Dichloroethane	102	105	3	25	70-130
1,1,1-Trichloroethane	106	114	7	25	70-130
Bromodichloromethane	105	111	6	25	70-130
trans-1,3-Dichloropropene	98	100	2	25	70-130
cis-1,3-Dichloropropene	89	89	0	25	70-130
Bromoform	98	101	3	50	70-130
1,1,2,2-Tetrachloroethane	93	91	2	25	70-130
Chloromethane	93	94	1	50	70-130
Vinyl chloride	107	115	7	25	70-130
Chloroethane	95	98	3	25	70-130
1,1-Dichloroethene	105	106	1	25	70-130
trans-1,2-Dichloroethene	101	103	2	25	70-130
Trichloroethene	100	103	3	25	70-130
1,2-Dichlorobenzene	95	97	2	25	70-130
1,3-Dichlorobenzene	98	101	3	25	70-130
1,4-Dichlorobenzene	92	96	4	25	70-130
cis-1,2-Dichloroethene	104	107	3	25	70-130
Dichlorodifluoromethane	103	113	9	50	70-130
1,2-Dibromoethane	93	97	4	25	70-130
1,3-Dichloropropane	98	103	5	25	70-130
1,1,1,2-Tetrachloroethane	102	113	10	25	70-130
o-Chlorotoluene	100	104	4	25	70-130
p-Chlorotoluene	99	101	2	25	70-130
Hexachlorobutadiene	81	88	8	25	70-130
1,2,4-Trichlorobenzene	80	72	11	25	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	102	108	6		70-130
Toluene-d8	96	97	1		70-130
4-Bromofluorobenzene	100	97	3		70-130
Dibromofluoromethane	107	105	2		70-130
Volatile Organics by MCP 8260B for sample(s) 03 (WG235382-6, WG235382-7)					
Methylene chloride	99	100	1	25	70-130
1,1-Dichloroethane	101	99	2	25	70-130
Chloroform	101	103	2	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604774

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 03 (WG235382-6, WG235382-7)					
Carbon tetrachloride	114	115	1	25	70-130
1,2-Dichloropropane	98	98	0	25	70-130
Dibromochloromethane	96	93	3	25	70-130
1,1,2-Trichloroethane	98	98	0	25	70-130
Tetrachloroethene	102	101	1	25	70-130
Chlorobenzene	98	98	0	25	70-130
1,2-Dichloroethane	102	106	4	25	70-130
1,1,1-Trichloroethane	108	110	2	25	70-130
Bromodichloromethane	102	104	2	25	70-130
trans-1,3-Dichloropropene	100	99	1	25	70-130
cis-1,3-Dichloropropene	88	82	7	25	70-130
Bromoform	100	101	1	50	70-130
1,1,2,2-Tetrachloroethane	90	86	5	25	70-130
Chloromethane	91	90	1	50	70-130
Vinyl chloride	105	105	0	25	70-130
Chloroethane	92	90	2	25	70-130
1,1-Dichloroethene	104	93	11	25	70-130
trans-1,2-Dichloroethene	100	96	4	25	70-130
Trichloroethene	97	92	5	25	70-130
1,2-Dichlorobenzene	92	89	3	25	70-130
1,3-Dichlorobenzene	98	92	6	25	70-130
1,4-Dichlorobenzene	91	87	4	25	70-130
cis-1,2-Dichloroethene	102	98	4	25	70-130
Dichlorodifluoromethane	100	104	4	50	70-130
1,2-Dibromoethane	96	88	9	25	70-130
1,3-Dichloropropane	98	96	2	25	70-130
1,1,1,2-Tetrachloroethane	104	104	0	25	70-130
o-Chlorotoluene	97	93	4	25	70-130
p-Chlorotoluene	94	89	5	25	70-130
Hexachlorobutadiene	86	82	5	25	70-130
1,2,4-Trichlorobenzene	73	65	12	25	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	106	108	2		70-130
Toluene-d8	98	97	1		70-130
4-Bromofluorobenzene	98	94	4		70-130
Dibromofluoromethane	105	111	6		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0604774

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Volatile Organics by MCP 8260B for sample(s) 01-05 (L0604775-04, WG235382-2)					
Methylene chloride	99	93	6	30	70-130
1,1-Dichloroethane	104	94	10	30	70-130
Chloroform	107	97	10	30	70-130
Carbon tetrachloride	119	107	11	30	70-130
1,2-Dichloropropane	105	97	8	30	70-130
Dibromochloromethane	95	92	3	30	70-130
1,1,2-Trichloroethane	100	94	6	30	70-130
Tetrachloroethene	103	96	7	30	70-130
Chlorobenzene	98	94	4	30	70-130
1,2-Dichloroethane	110	100	10	30	70-130
1,1,1-Trichloroethane	112	102	9	30	70-130
Bromodichloromethane	106	100	6	30	70-130
trans-1,3-Dichloropropene	101	97	4	30	70-130
cis-1,3-Dichloropropene	86	81	6	30	70-130
Bromoform	102	96	6	30	70-130
1,1,2,2-Tetrachloroethane	93	93	0	30	70-130
Chloromethane	86	80	7	30	70-130
Vinyl chloride	103	92	11	30	70-130
Chloroethane	92	86	7	30	70-130
1,1-Dichloroethene	96	93	3	30	70-130
trans-1,2-Dichloroethene	97	93	4	30	70-130
Trichloroethene	102	81	23	30	70-130
1,2-Dichlorobenzene	90	89	1	30	70-130
1,3-Dichlorobenzene	93	90	3	30	70-130
1,4-Dichlorobenzene	86	85	1	30	70-130
cis-1,2-Dichloroethene	126	90	33	30	70-130
Dichlorodifluoromethane	97	81	18	30	70-130
1,2-Dibromoethane	97	92	5	30	70-130
1,3-Dichloropropane	102	96	6	30	70-130
1,1,1,2-Tetrachloroethane	108	98	10	30	70-130
o-Chlorotoluene	95	93	2	30	70-130
p-Chlorotoluene	92	90	2	30	70-130
Hexachlorobutadiene	81	76	6	30	70-130
1,2,4-Trichlorobenzene	65	70	7	30	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	117	110	6		70-130
Toluene-d8	101	99	2		70-130
4-Bromofluorobenzene	98	98	0		70-130
Dibromofluoromethane	113	105	7		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604774

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 02-04 (WG235245-1)							
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	ND	mg/l	2.0	60 6010B		0410 13:57	RW
Blank Analysis for sample(s) 01-02,04-05 (WG235382-5)							
Volatile Organics by MCP 8260B				60 8260B		0409 11:22	PD
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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	100	%	70-130				
Toluene-d8	97.0	%	70-130				
4-Bromofluorobenzene	101	%	70-130				
Dibromofluoromethane	104	%	70-130				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604774

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 03 (WG235382-8)							
Volatile Organics by MCP 8260B				60 8260B		0410 10:41	PD
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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	109	%	70-130				
Toluene-d8	96.0	%	70-130				
4-Bromofluorobenzene	102	%	70-130				
Dibromofluoromethane	109	%	70-130				

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.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0604774

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
L0604774-01A	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604774-01B	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604774-02A	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604774-02B	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604774-02C	Plastic 500ml HNO3 preserved	A	< 2	0.8 C	Y	Absent	MCP-NA-6010S
L0604774-03A	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604774-03B	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604774-03C	Plastic 500ml HNO3 preserved	A	< 2	0.8 C	Y	Absent	MCP-NA-6010S
L0604774-04A	Vial Na2S2O3 preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604774-04B	Vial Na2S2O3 preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604774-04C	Plastic 500ml HNO3 preserved	A	< 2	0.8 C	Y	Absent	MCP-NA-6010S
L0604774-05A	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604774-05B	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04

Container Comments

Container ID	Comments
L0604774-01A	This container has not been properly returned to CUSTODY! It was last assigned to LKING for department CUSTODY on 04/06/06 17:12 .
L0604774-02A	This container has not been properly returned to CUSTODY! It was last assigned to LKING for department CUSTODY on 04/06/06 17:12 .
L0604774-04A	This container has not been properly returned to CUSTODY! It was last assigned to LKING for department CUSTODY on 04/06/06 17:13 .
L0604774-05A	This container has not been properly returned to CUSTODY! It was last assigned to LKING for department CUSTODY on 04/06/06 17:36 .

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/6/06

ALPHA Job #: L0604774

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 GW SAMPLING
Project Location: WAYLAND
Project #: 42925
Project Manager: JEREMY PICARD
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 4/13/06 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ FEDEx ☒ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
MCP	GW-1

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	VOC 8021B CHLORINATED	DIS NA VOC 8021B UNCONTAMINATED										Sample Specific Comments	TOTAL # BOTTLES
L0604774-01	MW-216D-20060405-01	4/5/06	10:55	GW	JM	X												2
02	MW-47D-20060405-01	4/5/06	12:35	GW	JM	X	X											3
03	MW-47M-20060405-01	4/5/06	14:15	GW	JM	X	X											3
04	MW-47S-20060405-01	4/5/06	15:45	GW	JM	~~X~~	~~X~~	X									PRESERVED W/ SODIUM THIOSULFATE	2
05	DUP-006-20060405-01	4/5/06	00:00	GW	JM	X	X											3

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Container Type	V	P	V										
Preservative	B	C											

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	4/6/06 10:30	[illegible]	4/6/06 10:30
[illegible]	4/6/06 1730	[illegible]	4/6/06 1730

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)

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Jeremy Picard

Project Number: 42925

Site: RAYTHEON GROUNDWATER

Laboratory Job Number: L0604777

Date Received: 06-APR-2006

Date Reported: 11-APR-2006

Delivery Method: Alpha

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 method(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

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: _____
Technical Director

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0604777
Date Reported: 11-APR-2006

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0604777-01	MW-204D-20060405-01	WAYLAND, MA
L0604777-02	DUP-007-20060405-01	WAYLAND, MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0604777

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.

L0604777-01 and -02 were re-analyzed on 5x dilution in order to quantitate the samples within the linear range for Na. The result is reported as a greater than value for the element(s) that exceeded the calibration range on the initial analysis. The re-analysis was performed only for the element(s) which exceeded the linear range.

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.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604777-01
MW-204D-20060405-01
Sample Matrix: WATER

Date Collected: 05-APR-2006 16:05
Date Received : 06-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: Field Filtered

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	210	mg/l	10.	60 6010B		0411 11:04	RW
Volatile Organics by MCP 8260B				60 8260B		0410 11:34	RY
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	12	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	25	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604777-01
MW-204D-20060405-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 11:34	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	120	%	70-130				
Toluene-d8	100	%	70-130				
4-Bromofluorobenzene	101	%	70-130				
Dibromofluoromethane	114	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604777-02
DUP-007-20060405-01
Sample Matrix: WATER

Date Collected: 05-APR-2006 00:00
Date Received : 06-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: Field Filtered

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	210	mg/l	10.	60 6010B		0410 14:30	RW
Sodium, Dissolved	>135	mg/l	2	60 6010B		0410 14:42	RW
Volatile Organics by MCP 8260B				60 8260B		0410 12:10	RY
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	11	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	25	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604777-02
DUP-007-20060405-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 12:10	RY
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	119	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	102	%	70-130				
Dibromofluoromethane	112	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604777

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 01-02 (WG235245-2, WG235245-3)					
Sodium, Dissolved	100	100	0	20	80-120
Volatile Organics by MCP 8260B for sample(s) 01-02 (WG235447-1, WG235447-2)					
Methylene chloride	95	97	2	25	70-130
1,1-Dichloroethane	103	101	2	25	70-130
Chloroform	100	98	2	25	70-130
Carbon tetrachloride	90	91	1	25	70-130
1,2-Dichloropropane	100	99	1	25	70-130
Dibromochloromethane	86	88	2	25	70-130
1,1,2-Trichloroethane	92	93	1	25	70-130
Tetrachloroethene	99	90	10	25	70-130
Chlorobenzene	94	93	1	25	70-130
Trichlorofluoromethane	119	114	4	25	70-130
1,2-Dichloroethane	102	105	3	25	70-130
1,1,1-Trichloroethane	102	100	2	25	70-130
Bromodichloromethane	99	101	2	25	70-130
trans-1,3-Dichloropropene	77	80	4	25	70-130
cis-1,3-Dichloropropene	76	80	5	25	70-130
1,1-Dichloropropene	101	99	2	25	70-130
Bromoform	90	94	4	50	70-130
1,1,2,2-Tetrachloroethane	82	88	7	25	70-130
Benzene	100	98	2	25	70-130
Toluene	99	93	6	25	70-130
Ethylbenzene	100	96	4	25	70-130
Chloromethane	106	102	4	50	70-130
Bromomethane	92	90	2	50	70-130
Vinyl chloride	110	104	6	25	70-130
Chloroethane	101	97	4	25	70-130
1,1-Dichloroethene	93	93	0	25	70-130
trans-1,2-Dichloroethene	94	94	0	25	70-130
Trichloroethene	98	96	2	25	70-130
1,2-Dichlorobenzene	87	88	1	25	70-130
1,3-Dichlorobenzene	92	90	2	25	70-130
1,4-Dichlorobenzene	92	90	2	25	70-130
Methyl tert butyl ether	83	91	9	25	70-130
p/m-Xylene	103	99	4	25	70-130
o-Xylene	102	100	2	25	70-130
cis-1,2-Dichloroethene	98	96	2	25	70-130
Dibromomethane	97	101	4	25	70-130
1,2,3-Trichloropropane	92	98	6	25	70-130
Styrene	104	102	2	25	70-130
Dichlorodifluoromethane	80	78	3	50	70-130
Acetone	118	129	9	50	70-130
Carbon disulfide	85	82	4	25	70-130
2-Butanone	97	107	10	50	70-130
4-Methyl-2-pentanone	81	93	14	50	70-130
2-Hexanone	88	98	11	50	70-130
Bromochloromethane	96	98	2	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604777

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 01-02 (WG235447-1, WG235447-2)					
Tetrahydrofuran	82	96	16	25	70-130
2,2-Dichloropropane	81	82	1	50	70-130
1,2-Dibromoethane	84	89	6	25	70-130
1,3-Dichloropropane	89	92	3	25	70-130
1,1,1,2-Tetrachloroethane	97	95	2	25	70-130
Bromobenzene	90	87	3	25	70-130
n-Butylbenzene	103	98	5	25	70-130
sec-Butylbenzene	97	92	5	25	70-130
tert-Butylbenzene	96	92	4	25	70-130
o-Chlorotoluene	100	96	4	25	70-130
p-Chlorotoluene	97	93	4	25	70-130
1,2-Dibromo-3-chloropropane	80	92	14	50	70-130
Hexachlorobutadiene	81	81	0	25	70-130
Isopropylbenzene	109	106	3	25	70-130
p-Isopropyltoluene	97	93	4	25	70-130
Naphthalene	72	81	12	25	70-130
n-Propylbenzene	100	94	6	25	70-130
1,2,3-Trichlorobenzene	75	81	8	25	70-130
1,2,4-Trichlorobenzene	76	82	8	25	70-130
1,3,5-Trimethylbenzene	98	95	3	25	70-130
1,2,4-Trimethylbenzene	96	92	4	25	70-130
Ethyl ether	89	98	10	25	70-130
Isopropyl Ether	101	102	1	25	70-130
Ethyl-Tert-Butyl-Ether	84	90	7	25	70-130
Tertiary-Amyl Methyl Ether	75	80	6	25	70-130
1,4-Dioxane	87	100	14	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	127	115	10		70-130
Toluene-d8	107	101	6		70-130
4-Bromofluorobenzene	96	94	2		70-130
Dibromofluoromethane	116	110	5		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604777

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-02 (WG235245-1)							
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	ND	mg/l	2.0	60 6010B		0410 13:57	RW
Blank Analysis for sample(s) 01-02 (WG235447-3)							
Volatile Organics by MCP 8260B				60 8260B		0410 10:22	RY
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604777

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-02 (WG235447-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 10:22	RY
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				
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	120	%	70-130				
Toluene-d8	100	%	70-130				
4-Bromofluorobenzene	98.0	%	70-130				
Dibromofluoromethane	111	%	70-130				

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.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0604777

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
L0604777-01A	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604777-01B	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604777-01C	Plastic 500ml HNO3 preserved	A	< 2	0.8 C	Y	Absent	MCP-NA-6010S
L0604777-02A	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604777-02B	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604777-02C	Plastic 500ml HNO3 preserved	A	< 2	0.8 C	Y	Absent	MCP-NA-6010S

Container Comments

Container ID	Comments

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: 4/6/06

ALPHA Job #: L0604777

Client Information

Client: ERM
Address: 399 Boylston St 6th FL
Boston, MA 02115
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 Groundwater
Project Location: Wayland, MA
Project #: 12425
Project Manager: Jeremy Picard
ALPHA Quote #:

Turn-Around Time

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

Date Due: 4/13/06 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:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: T0218 VOC/C VOC	ANALYSIS: 6010B DISS. SOLVN (FF)	Sample Specific Comments	TOTAL # BOTTLES
L0604777-01	MW-204D-20060405-01	4/5/06	16:05	GW	TD	2	1		3
-02	DUP007-20060405-01	4/5/06	0:00	GW	TD	2	1		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
Tim DaPice	4/6/06 10:00	[illegible]	4/6/06 10:30
[illegible]	4/6/06 1730	[illegible]	4/6/06 1730

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)

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Jeremy Picard

Project Number: 42925

Site: RAYTHEON GW SAMPLING

Laboratory Job Number: L0604778

Date Received: 06-APR-2006

Date Reported: 11-APR-2006

Delivery Method: Alpha

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 method(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

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: _____
Technical Director

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0604778
Date Reported: 11-APR-2006

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0604778-01	MW-212-20060405-01	WAYLAND, MA
L0604778-02	MW-212M-20060405-01	WAYLAND, MA
L0604778-03	MW-106-20060405-01	WAYLAND, MA
L0604778-04	MW-106M-20060405-01	WAYLAND, MA
L0604778-05	MW-209-20060405-01	WAYLAND, MA
L0604778-06	TB-002-20060405-01	WAYLAND, MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0604778

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.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604778-01
MW-212-20060405-01
Sample Matrix: WATER

Date Collected: 05-APR-2006 09:05
Date Received : 06-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: Field Filtered

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	68	mg/l	2.0	60 6010B		0410 14:59	RW
Volatile Organics by MCP 8260B				60 8260B		0410 18:24	RY
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	1.7	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604778-01
MW-212-20060405-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 18:24	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	112	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	102	%	70-130				
Dibromofluoromethane	111	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604778-02
MW-212M-20060405-01
Sample Matrix: WATER

Date Collected: 05-APR-2006 10:30
Date Received : 06-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		0410 19:01	RY
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	0.51	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	4.1	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604778-02
MW-212M-20060405-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 19:01	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	115	%	70-130				
Toluene-d8	96.0	%	70-130				
4-Bromofluorobenzene	101	%	70-130				
Dibromofluoromethane	112	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604778-03
MW-106-20060405-01
Sample Matrix: WATER

Date Collected: 05-APR-2006 12:00
Date Received : 06-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: Field Filtered

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	130	mg/l	2.0	60 6010B		0410 15:02	RW
Volatile Organics by MCP 8260B				60 8260B		0410 19:37	RY
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	2.3	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	25	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604778-03
MW-106-20060405-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 19:37	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	117	%	70-130				
Toluene-d8	97.0	%	70-130				
4-Bromofluorobenzene	99.0	%	70-130				
Dibromofluoromethane	114	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604778-04
MW-106M-20060405-01
Sample Matrix: WATER

Date Collected: 05-APR-2006 14:00
Date Received : 06-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		0410 20:14	RY
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	1.1	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	11	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	1.4	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604778-04
MW-106M-20060405-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 20:14	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	119	%	70-130				
Toluene-d8	98.0	%	70-130				
4-Bromofluorobenzene	96.0	%	70-130				
Dibromofluoromethane	113	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604778-05
MW-209-20060405-01
Sample Matrix: WATER

Date Collected: 05-APR-2006 14:50
Date Received : 06-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: Field Filtered

Number & Type of Containers: 3-Plastic,6-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	51	mg/l	2.0	60 6010B		0410 15:08	RW
Volatile Organics by MCP 8260B				60 8260B		0410 20:51	RY
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	1.2	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604778-05
MW-209-20060405-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 20:51	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	120	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	102	%	70-130				
Dibromofluoromethane	112	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604778-06
TB-002-20060405-01
Sample Matrix: WATER

Date Collected: 23-MAR-2006 18:45
Date Received : 06-APR-2006
Date Reported : 11-APR-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		0410 21:27	RY
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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604778-06
TB-002-20060405-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 21:27	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	115	%	70-130				
Toluene-d8	96.0	%	70-130				
4-Bromofluorobenzene	103	%	70-130				
Dibromofluoromethane	107	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604778

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 01,03,05 (WG235248-2, WG235248-3)					
Sodium, Dissolved	100	100	0	20	80-120
Volatile Organics by MCP 8260B for sample(s) 01-06 (WG235598-3, WG235598-4)					
Methylene chloride	97	96	1	25	70-130
1,1-Dichloroethane	96	89	8	25	70-130
Chloroform	99	102	3	25	70-130
Carbon tetrachloride	109	114	4	25	70-130
1,2-Dichloropropane	101	101	0	25	70-130
Dibromochloromethane	91	93	2	25	70-130
1,1,2-Trichloroethane	97	94	3	25	70-130
Tetrachloroethene	96	100	4	25	70-130
Chlorobenzene	92	94	2	25	70-130
1,2-Dichloroethane	101	105	4	25	70-130
1,1,1-Trichloroethane	105	107	2	25	70-130
Bromodichloromethane	103	106	3	25	70-130
trans-1,3-Dichloropropene	98	94	4	25	70-130
cis-1,3-Dichloropropene	90	85	6	25	70-130
Bromoform	96	94	2	50	70-130
1,1,2,2-Tetrachloroethane	95	89	7	25	70-130
Chloromethane	86	84	2	50	70-130
Vinyl chloride	102	101	1	25	70-130
Chloroethane	88	85	3	25	70-130
1,1-Dichloroethene	99	97	2	25	70-130
trans-1,2-Dichloroethene	99	97	2	25	70-130
Trichloroethene	99	97	2	25	70-130
1,2-Dichlorobenzene	91	90	1	25	70-130
1,3-Dichlorobenzene	93	94	1	25	70-130
1,4-Dichlorobenzene	89	89	0	25	70-130
cis-1,2-Dichloroethene	98	100	2	25	70-130
Dichlorodifluoromethane	88	93	6	50	70-130
1,2-Dibromoethane	93	91	2	25	70-130
1,3-Dichloropropane	96	96	0	25	70-130
1,1,1,2-Tetrachloroethane	99	104	5	25	70-130
o-Chlorotoluene	97	99	2	25	70-130
p-Chlorotoluene	94	94	0	25	70-130
Hexachlorobutadiene	83	89	7	25	70-130
1,2,4-Trichlorobenzene	77	70	10	25	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	103	110	7		70-130
Toluene-d8	98	99	1		70-130
4-Bromofluorobenzene	101	101	0		70-130
Dibromofluoromethane	106	108	2		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0604778

Parameter	MS %	MSD %	RPD	RPD Limit	MS/MSD Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 01,03,05 (L0604778-05, WG235248-5)					
Sodium, Dissolved	90	90	0	20	75-125
Volatile Organics by MCP 8260B for sample(s) 01-06 (L0604778-05, WG235598-2)					
Methylene chloride	105	103	2	30	70-130
1,1-Dichloroethane	107	104	3	30	70-130
Chloroform	117	113	3	30	70-130
Carbon tetrachloride	130	126	3	30	70-130
1,2-Dichloropropane	114	111	3	30	70-130
Dibromochloromethane	109	106	3	30	70-130
1,1,2-Trichloroethane	108	107	1	30	70-130
Tetrachloroethene	112	111	1	30	70-130
Chlorobenzene	108	109	1	30	70-130
1,2-Dichloroethane	120	112	7	30	70-130
1,1,1-Trichloroethane	125	119	5	30	70-130
Bromodichloromethane	122	116	5	30	70-130
trans-1,3-Dichloropropene	106	106	0	30	70-130
cis-1,3-Dichloropropene	97	98	1	30	70-130
Bromoform	111	109	2	30	70-130
1,1,2,2-Tetrachloroethane	100	106	6	30	70-130
Chloromethane	96	96	0	30	70-130
Vinyl chloride	119	116	3	30	70-130
Chloroethane	102	98	4	30	70-130
1,1-Dichloroethene	110	112	2	30	70-130
trans-1,2-Dichloroethene	107	106	1	30	70-130
Trichloroethene	111	109	2	30	70-130
1,2-Dichlorobenzene	96	100	4	30	70-130
1,3-Dichlorobenzene	102	102	0	30	70-130
1,4-Dichlorobenzene	97	97	0	30	70-130
cis-1,2-Dichloroethene	111	110	1	30	70-130
Dichlorodifluoromethane	113	105	7	30	70-130
1,2-Dibromoethane	102	104	2	30	70-130
1,3-Dichloropropane	108	110	2	30	70-130
1,1,1,2-Tetrachloroethane	115	115	0	30	70-130
o-Chlorotoluene	105	107	2	30	70-130
p-Chlorotoluene	103	103	0	30	70-130
Hexachlorobutadiene	91	97	6	30	70-130
1,2,4-Trichlorobenzene	72	80	11	30	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	115	106	8		70-130
Toluene-d8	96	99	3		70-130
4-Bromofluorobenzene	99	100	1		70-130
Dibromofluoromethane	112	103	8		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604778

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01,03,05 (WG235248-1)							
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	ND	mg/l	2.0	60 6010B		0410 14:49	RW
Blank Analysis for sample(s) 01-06 (WG235598-5)							
Volatile Organics by MCP 8260B				60 8260B		0410 17:47	RY
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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	106	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	102	%	70-130				
Dibromofluoromethane	107	%	70-130				

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.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0604778

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
L0604778-01A	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604778-01B	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604778-01C	Plastic 500ml HNO3 preserved	A	< 2	0.8 C	Y	Absent	MCP-NA-6010S
L0604778-02A	Vial Na2S2O3 preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604778-02B	Vial Na2S2O3 preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604778-03A	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604778-03B	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604778-03C	Plastic 500ml HNO3 preserved	A	< 2	0.8 C	Y	Absent	MCP-NA-6010S
L0604778-04A	Vial Na2S2O3 preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604778-04B	Vial Na2S2O3 preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604778-05A	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604778-05B	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604778-05C	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604778-05D	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604778-05E	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604778-05F	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04
L0604778-05G	Plastic 500ml HNO3 preserved	A	< 2	0.8 C	Y	Absent	MCP-NA-6010S
L0604778-05H	Plastic 500ml HNO3 preserved	A	< 2	0.8 C	Y	Absent	MCP-NA-6010S
L0604778-05I	Plastic 500ml HNO3 preserved	A	< 2	0.8 C	Y	Absent	MCP-NA-6010S
L0604778-06A	Vial HCl preserved	A	N/A	0.8 C	Y	Absent	MCP-8260-04

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd In Lab: 4/6/06

ALPHA Job #: L0604778

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 GW Sampling
Project Location: Wayland, MA
Project #: 42925
Project Manager: Jeremy Picard
ALPHA Quote #:

Turn-Around Time

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

Date Due: 4/13/06 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 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	8021B	Dissolved Sodium	5021B	Sample Specific Comments	Total # Bottles
L0604778-01	MW-212-20060405-01	4/5/06	905	GW	CR	X	X			3
02	MW-212M-20060405-01	4/5/06	1030	GW	EB			X	Preserved w/ Thiosulfate	2
03	MW-106-20060405-01	4/5/06	1200	GW	CR	X	X			3
04	MW-106M-20060405-01	4/5/06	1400	GW	CR			X	Preserved w/ Thiosulfate	2
05	MW-209-20060405-01	4/5/06	1450	GW	CR	X	X			3
.05	MW-209-20060405-01-MS	4/5/06	1450	GW	CR	X	X			3
.05	MW-209-20060405-01-MSD	4/5/06	1450	GW	CR	X	X			3
.06	TB-002-20060406-01	3/23/06	18:45	GW	VK	X				

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Container Type	V	P	V
Preservative	B	C	G

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	4/6/06 0930	[illegible]	4/6/06 10[illegible]
[illegible]	4/6/06 1730	[illegible]	4/6/06 1730

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

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Jeremy Picard

Project Number: 42925

Site: RAYTHEON GW SAMPLING

Laboratory Job Number: L0604862

Date Received: 05-APR-2006

Date Reported: 12-APR-2006

Delivery Method: Alpha

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 method(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

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: Kathleen M. O'Brien
Technical Representative

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0604862
Date Reported: 12-APR-2006

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0604862-01	MW-105-20060404-01	WAYLAND, MA
L0604862-02	MW-105M-20060404-01	WAYLAND, MA
L0604862-03	MW-435-20060404-01	WAYLAND, MA
L0604862-04	MW-210-20060404-01	WAYLAND, MA
L0604862-05	MW-104-20060404-01	WAYLAND, MA
L0604862-06	MW-211-20060404-01	WAYLAND, MA
L0604862-07	DUP-008-20060404-01	WAYLAND, MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0604862

MCP Related Narratives

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.

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.

In reference to question E:

WG235781-1,2:

The LCS/LCSD % recoveries for Bromomethane are below the acceptance criteria for the method.

The LCS % recovery for 2,2-Dichloropropane is below the acceptance criteria for the method.

These are both difficult analytes.

The LCS/LCSD RPD for 2,2-Dichloropropane is above the acceptance criteria for the method.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604862-01
MW-105-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 09:15
Date Received : 05-APR-2006
Date Reported : 12-APR-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		0408 17:32	PD
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	1.2	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	15	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604862-01
MW-105-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 17:32	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	110	%	70-130				
Toluene-d8	97.0	%	70-130				
4-Bromofluorobenzene	95.0	%	70-130				
Dibromofluoromethane	120	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604862-02
MW-105M-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 10:35
Date Received : 05-APR-2006
Date Reported : 12-APR-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		0408 18:12	PD
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	0.50	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	3.4	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	1.9	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604862-02
MW-105M-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 18:12	PD
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	104	%	70-130				
Toluene-d8	95.0	%	70-130				
4-Bromofluorobenzene	94.0	%	70-130				
Dibromofluoromethane	112	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604862-03
MW-435-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 11:40
Date Received : 05-APR-2006
Date Reported : 12-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	120	mg/l	2.0	60 6010B		0407 14:47	RW
Volatile Organics by MCP 8260B				60 8260B		0412 11:31	RY
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	3.4	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	51	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604862-03
MW-435-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0412 11:31	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	119	%	70-130				
Toluene-d8	96.0	%	70-130				
4-Bromofluorobenzene	101	%	70-130				
Dibromofluoromethane	114	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604862-04
MW-210-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 13:55
Date Received : 05-APR-2006
Date Reported : 12-APR-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		0410 22:34	RY
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	1.1	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	10	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	0.85	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604862-04
MW-210-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 22:34	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	125	%	70-130				
Toluene-d8	100	%	70-130				
4-Bromofluorobenzene	98.0	%	70-130				
Dibromofluoromethane	111	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604862-05
MW-104-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 15:05
Date Received : 05-APR-2006
Date Reported : 12-APR-2006

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B				60 8260B		0410 23:09	RY
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	2.0	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	23	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604862-05
MW-104-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 23:09	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	120	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	98.0	%	70-130				
Dibromofluoromethane	110	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604862-06
MW-211-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 16:00
Date Received : 05-APR-2006
Date Reported : 12-APR-2006

Condition of Sample: Satisfactory

Field Prep: filed filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	44	mg/l	2.0	60 6010B		0407 14:49	RW
Volatile Organics by MCP 8260B				60 8260B		0410 23:44	RY
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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604862-06
MW-211-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 23:44	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	122	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	99.0	%	70-130				
Dibromofluoromethane	116	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604862-07
DUP-008-20060404-01
Sample Matrix: WATER

Date Collected: 04-APR-2006 00:00
Date Received : 05-APR-2006
Date Reported : 12-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	45	mg/l	2.0	60 6010B		0407 15:04	RW
Volatile Organics by MCP 8260B				60 8260B		0411 00:19	RY
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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604862-07
DUP-008-20060404-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0411 00:19	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	124	%	70-130				
Toluene-d8	100	%	70-130				
4-Bromofluorobenzene	99.0	%	70-130				
Dibromofluoromethane	115	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604862

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 03,06-07 (WG235241-2, WG235241-3)					
Sodium, Dissolved	100	100	0	20	80-120
Volatile Organics by MCP 8260B for sample(s) 01-02 (WG235427-1, WG235427-2)					
Methylene chloride	98	100	2	25	70-130
1,1-Dichloroethane	103	105	2	25	70-130
Chloroform	96	96	0	25	70-130
Carbon tetrachloride	100	104	4	25	70-130
1,2-Dichloropropane	103	103	0	25	70-130
Dibromochloromethane	92	95	3	25	70-130
1,1,2-Trichloroethane	101	104	3	25	70-130
Tetrachloroethene	106	109	3	25	70-130
Chlorobenzene	102	104	2	25	70-130
Trichlorofluoromethane	101	103	2	25	70-130
1,2-Dichloroethane	106	107	1	25	70-130
1,1,1-Trichloroethane	101	104	3	25	70-130
Bromodichloromethane	100	101	1	25	70-130
trans-1,3-Dichloropropene	92	95	3	25	70-130
cis-1,3-Dichloropropene	91	94	3	25	70-130
1,1-Dichloropropene	97	101	4	25	70-130
Bromoform	94	98	4	50	70-130
1,1,2,2-Tetrachloroethane	100	102	2	25	70-130
Benzene	104	106	2	25	70-130
Toluene	102	104	2	25	70-130
Ethylbenzene	101	104	3	25	70-130
Chloromethane	92	95	3	50	70-130
Bromomethane	98	100	2	50	70-130
Vinyl chloride	100	101	1	25	70-130
Chloroethane	98	100	2	25	70-130
1,1-Dichloroethene	93	100	7	25	70-130
trans-1,2-Dichloroethene	99	103	4	25	70-130
Trichloroethene	98	101	3	25	70-130
1,2-Dichlorobenzene	98	99	1	25	70-130
1,3-Dichlorobenzene	104	105	1	25	70-130
1,4-Dichlorobenzene	99	100	1	25	70-130
Methyl tert butyl ether	90	94	4	25	70-130
p/m-Xylene	104	107	3	25	70-130
o-Xylene	96	98	2	25	70-130
cis-1,2-Dichloroethene	105	110	5	25	70-130
Dibromomethane	103	107	4	25	70-130
1,2,3-Trichloropropane	100	103	3	25	70-130
Styrene	96	97	1	25	70-130
Dichlorodifluoromethane	83	87	5	50	70-130
Acetone	102	103	1	50	70-130
Carbon disulfide	82	84	2	25	70-130
2-Butanone	98	96	2	50	70-130
4-Methyl-2-pentanone	90	94	4	50	70-130
2-Hexanone	86	90	5	50	70-130
Bromochloromethane	106	107	1	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604862

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 01-02 (WG235427-1, WG235427-2)					
Tetrahydrofuran	86	88	2	25	70-130
2,2-Dichloropropane	95	99	4	50	70-130
1,2-Dibromoethane	94	97	3	25	70-130
1,3-Dichloropropane	99	101	2	25	70-130
1,1,1,2-Tetrachloroethane	104	105	1	25	70-130
Bromobenzene	101	103	2	25	70-130
n-Butylbenzene	92	94	2	25	70-130
sec-Butylbenzene	96	98	2	25	70-130
tert-Butylbenzene	98	100	2	25	70-130
o-Chlorotoluene	102	104	2	25	70-130
p-Chlorotoluene	100	102	2	25	70-130
1,2-Dibromo-3-chloropropane	95	98	3	50	70-130
Hexachlorobutadiene	94	97	3	25	70-130
Isopropylbenzene	104	108	4	25	70-130
p-Isopropyltoluene	99	101	2	25	70-130
Naphthalene	78	82	5	25	70-130
n-Propylbenzene	103	105	2	25	70-130
1,2,3-Trichlorobenzene	85	90	6	25	70-130
1,2,4-Trichlorobenzene	83	90	8	25	70-130
1,3,5-Trimethylbenzene	98	101	3	25	70-130
1,2,4-Trimethylbenzene	99	101	2	25	70-130
Ethyl ether	89	95	7	25	70-130
Isopropyl Ether	86	89	3	25	70-130
Ethyl-Tert-Butyl-Ether	83	86	4	25	70-130
Tertiary-Amyl Methyl Ether	83	86	4	25	70-130
1,4-Dioxane	82	92	11	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	100	100	0		70-130
Toluene-d8	98	98	0		70-130
4-Bromofluorobenzene	93	93	0		70-130
Dibromofluoromethane	107	104	3		70-130
Volatile Organics by MCP 8260B for sample(s) 04-07 (WG235611-1, WG235611-2)					
Methylene chloride	102	100	2	25	70-130
1,1-Dichloroethane	104	100	4	25	70-130
Chloroform	103	99	4	25	70-130
Carbon tetrachloride	94	92	2	25	70-130
1,2-Dichloropropane	100	100	0	25	70-130
Dibromochloromethane	91	90	1	25	70-130
1,1,2-Trichloroethane	97	96	1	25	70-130
Tetrachloroethene	95	91	4	25	70-130
Chlorobenzene	95	92	3	25	70-130
Trichlorofluoromethane	122	113	8	25	70-130
1,2-Dichloroethane	108	106	2	25	70-130
1,1,1-Trichloroethane	103	98	5	25	70-130
Bromodichloromethane	101	100	1	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604862

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 04-07 (WG235611-1, WG235611-2)					
trans-1,3-Dichloropropene	83	86	4	25	70-130
cis-1,3-Dichloropropene	81	85	5	25	70-130
1,1-Dichloropropene	104	98	6	25	70-130
Bromoform	96	96	0	50	70-130
1,1,2,2-Tetrachloroethane	92	95	3	25	70-130
Benzene	101	98	3	25	70-130
Toluene	98	92	6	25	70-130
Ethylbenzene	101	96	5	25	70-130
Chloromethane	109	101	8	50	70-130
Bromomethane	94	97	3	50	70-130
Vinyl chloride	116	107	8	25	70-130
Chloroethane	101	99	2	25	70-130
1,1-Dichloroethene	96	93	3	25	70-130
trans-1,2-Dichloroethene	98	93	5	25	70-130
Trichloroethene	99	95	4	25	70-130
1,2-Dichlorobenzene	91	89	2	25	70-130
1,3-Dichlorobenzene	93	90	3	25	70-130
1,4-Dichlorobenzene	94	90	4	25	70-130
Methyl tert butyl ether	104	107	3	25	70-130
p/m-Xylene	103	97	6	25	70-130
o-Xylene	107	103	4	25	70-130
cis-1,2-Dichloroethene	102	98	4	25	70-130
Dibromomethane	103	104	1	25	70-130
1,2,3-Trichloropropane	102	105	3	25	70-130
Styrene	109	104	5	25	70-130
Dichlorodifluoromethane	83	77	8	50	70-130
Acetone	124	127	2	50	70-130
Carbon disulfide	81	76	6	25	70-130
2-Butanone	110	114	4	50	70-130
4-Methyl-2-pentanone	93	101	8	50	70-130
2-Hexanone	101	106	5	50	70-130
Bromochloromethane	100	101	1	25	70-130
Tetrahydrofuran	112	115	3	25	70-130
2,2-Dichloropropane	85	86	1	50	70-130
1,2-Dibromoethane	92	93	1	25	70-130
1,3-Dichloropropane	95	95	0	25	70-130
1,1,1,2-Tetrachloroethane	98	96	2	25	70-130
Bromobenzene	92	89	3	25	70-130
n-Butylbenzene	104	96	8	25	70-130
sec-Butylbenzene	98	93	5	25	70-130
tert-Butylbenzene	97	92	5	25	70-130
o-Chlorotoluene	100	96	4	25	70-130
p-Chlorotoluene	99	94	5	25	70-130
1,2-Dibromo-3-chloropropane	95	99	4	50	70-130
Hexachlorobutadiene	84	83	1	25	70-130
Isopropylbenzene	111	106	5	25	70-130
p-Isopropyltoluene	99	93	6	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604862

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 04-07 (WG235611-1, WG235611-2)					
Naphthalene	81	87	7	25	70-130
n-Propylbenzene	99	95	4	25	70-130
1,2,3-Trichlorobenzene	81	83	2	25	70-130
1,2,4-Trichlorobenzene	82	83	1	25	70-130
1,3,5-Trimethylbenzene	99	94	5	25	70-130
1,2,4-Trimethylbenzene	96	91	5	25	70-130
Ethyl ether	120	122	2	25	70-130
Isopropyl Ether	116	114	2	25	70-130
Ethyl-Tert-Butyl-Ether	102	103	1	25	70-130
Tertiary-Amyl Methyl Ether	89	91	2	25	70-130
1,4-Dioxane	72	94	27	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	115	116	1		70-130
Toluene-d8	102	100	2		70-130
4-Bromofluorobenzene	96	96	0		70-130
Dibromofluoromethane	111	110	1		70-130
Volatile Organics by MCP 8260B for sample(s) 03 (WG235781-1, WG235781-2)					
Methylene chloride	102	101	1	25	70-130
1,1-Dichloroethane	96	107	11	25	70-130
Chloroform	106	106	0	25	70-130
Carbon tetrachloride	118	118	0	25	70-130
1,2-Dichloropropane	106	105	1	25	70-130
Dibromochloromethane	98	102	4	25	70-130
1,1,2-Trichloroethane	103	102	1	25	70-130
Tetrachloroethene	105	108	3	25	70-130
Chlorobenzene	104	102	2	25	70-130
Trichlorofluoromethane	116	114	2	25	70-130
1,2-Dichloroethane	111	108	3	25	70-130
1,1,1-Trichloroethane	111	111	0	25	70-130
Bromodichloromethane	108	106	2	25	70-130
trans-1,3-Dichloropropene	97	100	3	25	70-130
cis-1,3-Dichloropropene	82	89	8	25	70-130
1,1-Dichloropropene	103	111	7	25	70-130
Bromoform	101	99	2	50	70-130
1,1,2,2-Tetrachloroethane	94	96	2	25	70-130
Benzene	105	106	1	25	70-130
Toluene	104	106	2	25	70-130
Ethylbenzene	108	110	2	25	70-130
Chloromethane	81	84	4	50	70-130
Bromomethane	56	67	18	50	70-130
Vinyl chloride	93	96	3	25	70-130
Chloroethane	87	92	6	25	70-130
1,1-Dichloroethene	98	105	7	25	70-130
trans-1,2-Dichloroethene	96	102	6	25	70-130
Trichloroethene	101	103	2	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604862

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 03 (WG235781-1, WG235781-2)					
1,2-Dichlorobenzene	96	96	0	25	70-130
1,3-Dichlorobenzene	101	100	1	25	70-130
1,4-Dichlorobenzene	93	91	2	25	70-130
Methyl tert butyl ether	88	111	23	25	70-130
p/m-Xylene	107	107	0	25	70-130
o-Xylene	111	111	0	25	70-130
cis-1,2-Dichloroethene	105	107	2	25	70-130
Dibromomethane	104	102	2	25	70-130
1,2,3-Trichloropropane	106	101	5	25	70-130
Styrene	107	107	0	25	70-130
Dichlorodifluoromethane	87	89	2	50	70-130
Acetone	123	104	17	50	70-130
Carbon disulfide	103	103	0	25	70-130
2-Butanone	89	98	10	50	70-130
4-Methyl-2-pentanone	82	92	11	50	70-130
2-Hexanone	100	107	7	50	70-130
Bromochloromethane	105	107	2	25	70-130
Tetrahydrofuran	97	94	3	25	70-130
2,2-Dichloropropane	62	106	52	50	70-130
1,2-Dibromoethane	93	97	4	25	70-130
1,3-Dichloropropane	103	104	1	25	70-130
1,1,1,2-Tetrachloroethane	114	111	3	25	70-130
Bromobenzene	99	100	1	25	70-130
n-Butylbenzene	93	96	3	25	70-130
sec-Butylbenzene	92	95	3	25	70-130
tert-Butylbenzene	102	103	1	25	70-130
o-Chlorotoluene	105	104	1	25	70-130
p-Chlorotoluene	100	98	2	25	70-130
1,2-Dibromo-3-chloropropane	82	84	2	50	70-130
Hexachlorobutadiene	88	92	4	25	70-130
Isopropylbenzene	108	111	3	25	70-130
p-Isopropyltoluene	92	92	0	25	70-130
Naphthalene	73	80	9	25	70-130
n-Propylbenzene	106	107	1	25	70-130
1,2,3-Trichlorobenzene	75	80	6	25	70-130
1,2,4-Trichlorobenzene	74	80	8	25	70-130
1,3,5-Trimethylbenzene	105	106	1	25	70-130
1,2,4-Trimethylbenzene	100	99	1	25	70-130
Ethyl ether	102	114	11	25	70-130
Isopropyl Ether	94	103	9	25	70-130
Ethyl-Tert-Butyl-Ether	91	102	11	25	70-130
Tertiary-Amyl Methyl Ether	89	98	10	25	70-130
1,4-Dioxane	104	109	5	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	111	111	0		70-130
Toluene-d8	99	98	1		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604862

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 03 (WG235781-1, WG235781-2)					
4-Bromofluorobenzene	96	97	1		70-130
Dibromofluoromethane	106	104	2		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604862

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 03,06-07 (WG235241-1)							
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	ND	mg/l	2.0	60 6010B		0407 13:20	RW
Blank Analysis for sample(s) 01-02 (WG235427-3)							
Volatile Organics by MCP 8260B				60 8260B		0408 10:49	PD
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604862

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01-02 (WG235427-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0408 10:49	PD
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				
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	103	%	70-130				
Toluene-d8	93.0	%	70-130				
4-Bromofluorobenzene	94.0	%	70-130				
Dibromofluoromethane	108	%	70-130				
Blank Analysis for sample(s) 04-07 (WG235611-3)							
Volatile Organics by MCP 8260B				60 8260B		0410 16:04	RY
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604862

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 04-07 (WG235611-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 16:04	RY
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604862

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 04-07 (WG235611-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0410 16:04	RY
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				
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	115	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	101	%	70-130				
Dibromofluoromethane	110	%	70-130				
Blank Analysis for sample(s) 03 (WG235781-3)							
Volatile Organics by MCP 8260B				60 8260B		0412 10:47	RY
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604862

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 03 (WG235781-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0412 10:47	RY
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				
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604862

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 03 (WG235781-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0412 10:47	RY
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	112	%	70-130				
Toluene-d8	99.0	%	70-130				
4-Bromofluorobenzene	104	%	70-130				
Dibromofluoromethane	107	%	70-130				

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.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0604862

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
L0604862-01A	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604862-01B	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604862-02A	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604862-02B	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604862-03A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604862-03B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604862-03C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604862-04A	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604862-04B	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604862-05A	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604862-05B	Vial Na2S2O3 preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604862-06A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604862-06B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604862-06C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0604862-07A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604862-07B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0604862-07C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd In Lab: 4/6

ALPHA Job #: L0604862

Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Client Information

Client: 399 Boylston St
Address: Boston, MA 02116
ERM
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 GW Sampling
Project Location: Wayland, MA
Project #: 42925
Project Manager: Jeremy Picard
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 4/12 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 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	8021B	8021B	Dissolved Sodium	Sample Specific Comments	Total # Bottles
04862-01	MW-105-20060404-01	4/4/06	915	GW	CR	X				2
-02	MW-105M-20060404-01	4/4/06	1035	GW	CR	X				2
-03	MW-43S-20060404-01	4/4/06	1140	GW	CR		X	X		3
-04	MW-210-20060404-01	4/4/06	1355	GW	CR	X				2
-05	MW-104-20060404-01	4/4/06	1505	GW	CR	X				2
-06	MW-211-20060404-01	4/4/06	1600	GW	CR		X	X		3
-07	DUP-008-20060404-01	4/4/06	2400	GW	CR		X	X		3

Container Type	V	V	P
Preservative	G	B	C

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT **MCP ?**

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	4/6/06 10:30	[illegible]	4/6/06 10:30
[illegible]	4/6/06 17:50	Karolina Jones	4/6 17:50

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

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220 www.alphalab.com

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

CERTIFICATE OF ANALYSIS

Client: ERM-New England

Address: 399 Boylston Street
6th Floor
Boston, MA 02116

Attn: Jeremy Picard

Project Number: 42925

Site: RAYTHEON WAYLAND

Laboratory Job Number: L0604975

Date Received: 07-APR-2006

Date Reported: 14-APR-2006

Delivery Method: Alpha

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 method(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

Any answers of NO to the above questions are addressed in the case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: _____
Technical Director

ALPHA ANALYTICAL LABORATORIES

Laboratory Job Number: L0604975
Date Reported: 14-APR-2006

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0604975-01	MW-107-20060406-01	WAYLAND, MA

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0604975

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.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0604975-01
MW-107-20060406-01
Sample Matrix: WATER

Date Collected: 06-APR-2006 11:30
Date Received : 07-APR-2006
Date Reported : 14-APR-2006

Condition of Sample: Satisfactory

Field Prep: field filter

Number & Type of Containers: 1-Plastic,2-Vial

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	58	mg/l	2.0	60 6010B		0414 09:18	RW
Volatile Organics by MCP 8260B				60 8260B		0412 20:20	RY
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	0.58	ug/l	0.50				
trans-1,2-Dichloroethene	ND	ug/l	0.75				
Trichloroethene	83	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	9.8	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				
p-Chlorotoluene	ND	ug/l	2.5				
Hexachlorobutadiene	ND	ug/l	0.60				
1,2,4-Trichlorobenzene	ND	ug/l	2.5				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0604975-01
MW-107-20060406-01

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Volatile Organics by MCP 8260B cont'd				60 8260B		0412 20:20	RY
Surrogate(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	117	%	70-130				
Toluene-d8	98.0	%	70-130				
4-Bromofluorobenzene	97.0	%	70-130				
Dibromofluoromethane	113	%	70-130				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604975

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Dissolved Metals by MCP 6000/7000 series for sample(s) 01 (WG235921-2, WG235921-3)					
Sodium, Dissolved	100	100	0	20	80-120
Volatile Organics by MCP 8260B for sample(s) 01 (WG235883-1, WG235883-2)					
Methylene chloride	108	106	2	25	70-130
1,1-Dichloroethane	111	108	3	25	70-130
Chloroform	113	107	5	25	70-130
Carbon tetrachloride	130	118	10	25	70-130
1,2-Dichloropropane	112	109	3	25	70-130
Dibromochloromethane	103	101	2	25	70-130
1,1,2-Trichloroethane	107	104	3	25	70-130
Tetrachloroethene	115	106	8	25	70-130
Chlorobenzene	107	103	4	25	70-130
Trichlorofluoromethane	119	109	9	25	70-130
1,2-Dichloroethane	117	110	6	25	70-130
1,1,1-Trichloroethane	122	113	8	25	70-130
Bromodichloromethane	113	109	4	25	70-130
trans-1,3-Dichloropropene	107	102	5	25	70-130
cis-1,3-Dichloropropene	97	95	2	25	70-130
1,1-Dichloropropene	113	107	5	25	70-130
Bromoform	105	102	3	50	70-130
1,1,2,2-Tetrachloroethane	94	98	4	25	70-130
Benzene	111	107	4	25	70-130
Toluene	111	102	8	25	70-130
Ethylbenzene	116	107	8	25	70-130
Chloromethane	86	83	4	50	70-130
Bromomethane	78	84	7	50	70-130
Vinyl chloride	106	98	8	25	70-130
Chloroethane	97	94	3	25	70-130
1,1-Dichloroethene	104	103	1	25	70-130
trans-1,2-Dichloroethene	105	103	2	25	70-130
Trichloroethene	110	105	5	25	70-130
1,2-Dichlorobenzene	98	98	0	25	70-130
1,3-Dichlorobenzene	107	102	5	25	70-130
1,4-Dichlorobenzene	97	94	3	25	70-130
Methyl tert butyl ether	101	107	6	25	70-130
p/m-Xylene	114	106	7	25	70-130
o-Xylene	111	103	7	25	70-130
cis-1,2-Dichloroethene	114	110	4	25	70-130
Dibromomethane	110	107	3	25	70-130
1,2,3-Trichloropropane	107	109	2	25	70-130
Styrene	107	100	7	25	70-130
Dichlorodifluoromethane	90	79	13	50	70-130
Acetone	101	92	9	50	70-130
Carbon disulfide	104	95	9	25	70-130
2-Butanone	92	98	6	50	70-130
4-Methyl-2-pentanone	86	89	3	50	70-130
2-Hexanone	100	102	2	50	70-130
Bromochloromethane	113	108	5	25	70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH LCS/LCSD ANALYSIS

Laboratory Job Number: L0604975

Continued

Parameter	LCS %	LCSD %	RPD	RPD Limit	QC Limits
Volatile Organics by MCP 8260B for sample(s) 01 (WG235883-1, WG235883-2)					
Tetrahydrofuran	93	93	0	25	70-130
2,2-Dichloropropane	120	113	6	50	70-130
1,2-Dibromoethane	100	99	1	25	70-130
1,3-Dichloropropane	105	102	3	25	70-130
1,1,1,2-Tetrachloroethane	116	107	8	25	70-130
Bromobenzene	103	101	2	25	70-130
n-Butylbenzene	101	96	5	25	70-130
sec-Butylbenzene	99	94	5	25	70-130
tert-Butylbenzene	106	104	2	25	70-130
o-Chlorotoluene	107	105	2	25	70-130
p-Chlorotoluene	102	99	3	25	70-130
1,2-Dibromo-3-chloropropane	81	85	5	50	70-130
Hexachlorobutadiene	100	90	11	25	70-130
Isopropylbenzene	116	108	7	25	70-130
p-Isopropyltoluene	97	92	5	25	70-130
Naphthalene	86	82	5	25	70-130
n-Propylbenzene	111	107	4	25	70-130
1,2,3-Trichlorobenzene	79	83	5	25	70-130
1,2,4-Trichlorobenzene	80	83	4	25	70-130
1,3,5-Trimethylbenzene	110	107	3	25	70-130
1,2,4-Trimethylbenzene	103	102	1	25	70-130
Ethyl ether	105	108	3	25	70-130
Isopropyl Ether	94	97	3	25	70-130
Ethyl-Tert-Butyl-Ether	94	99	5	25	70-130
Tertiary-Amyl Methyl Ether	90	92	2	25	70-130
1,4-Dioxane	83	89	7	50	70-130
Surrogate(s)					
1,2-Dichloroethane-d4	113	111	2		70-130
Toluene-d8	98	99	1		70-130
4-Bromofluorobenzene	98	101	3		70-130
Dibromofluoromethane	111	106	5		70-130

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604975

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG235921-1)							
Dissolved Metals by MCP 6000/7000 series				60 6010B			
Sodium, Dissolved	ND	mg/l	2.0	60 6010B		0414 08:39	RW
Blank Analysis for sample(s) 01 (WG235883-3)							
Volatile Organics by MCP 8260B				60 8260B		0412 17:18	RY
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				
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				

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0604975

Continued

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	DATE ANAL	ID
Blank Analysis for sample(s) 01 (WG235883-3)							
Volatile Organics by MCP 8260B cont'd				60 8260B		0412 17:18	RY
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				
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(s)	Recovery		QC Criteria				
1,2-Dichloroethane-d4	110	%	70-130				
Toluene-d8	98.0	%	70-130				
4-Bromofluorobenzene	103	%	70-130				
Dibromofluoromethane	105	%	70-130				

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.

GLOSSARY OF TERMS AND SYMBOLS

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

ALPHA ANALYTICAL LABORATORIES
LOGIN SPECIFIC INFORMATION

Laboratory Job Number: L0604975

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
L0604975-01A	Vial HCl preserved	A	N/A	2.0C	Y	Absent	MCP-8260-04
L0604975-01B	Vial HCl preserved	A	N/A	2.0C	Y	Absent	MCP-8260-04
L0604975-01C	Plastic 250ml HNO3 preserved	A	<2	2.0C	Y	Absent	MCP-NA-6010S

Container Comments

Container ID	Comments

CHAIN OF CUSTODY

PAGE _____ OF _____

Date Rec'd in Lab: 4/7

ALPHA Job #: L0604975

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:
Email: jeremy.picard@erm.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Raytheon Waylaved
Project Location: Waylaved MA
Project #: 42925
Project Manager: Jeremy Picard
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 4/14 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

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:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	8021B VOCs	Diss Mn	Sample Specific Comments	Total # Bottles
0419750-01	MW-107-20060406-01	4/6/06	11:30	GW	UK	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

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	4/7/06 10:00	[illegible]	4/7/06 10:00
[illegible]	4/7/06	Kandice Jump	4/7 19:00

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)