26 October 2007 Reference: 0061882

Mr. Robert Schelmerdeine Wayland Meadows Limited Partnership c/o Levco, Inc. 145 Rosemary Street Needham, MA 02494

Re: Transmittal of Groundwater Analytical Data Former Raytheon Facility 430 Boston Post Road, Wayland, Massachusetts

Dear Mr. Schelmerdeine:

On behalf of Raytheon Company (Raytheon), Environmental Resources Management (ERM) is submitting the results of groundwater sample analyses from the Former Raytheon Facility located at 430 Boston Post Road in Wayland, Massachusetts (Site). The results are submitted pursuant to 310 CMR 40.1403(10) of the Massachusetts Contingency Plan (MCP).

ERM collected groundwater samples from 4 wells, (DEP-19 S/M/D and MW-264M), within the boundaries of your property between 2 and 4 October 2007. All samples were submitted for laboratory analysis of volatile organic compounds by United States Environmental Protection Agency (USEPA) Method 8260. Sample analysis was conducted by Alpha Woods Hole Laboratories of Westborough, Massachusetts. Analytical laboratory reports are attached to this letter. This analytical data will be provided to the Massachusetts Department of Environmental Protection in the next required MCP submittal.

Raytheon has implemented the Public Involvement Process in accordance with MCP 310 CMR 40.1405. Documents pertaining to the Site can be found at the Board of Health, the Wayland Public Library Public Involvement Plan files, or at www.ermne.com (username = raytheon, password = wayland).

Environmental Resources Management

399 Boylston Street, 6th Floor Boston, MA 02116 (617) 646-7800 (617) 267-6447 (fax)



Mr. Schelmerdeine Reference: 0061882 26 October 2007 Page 2

If you have any questions or comments, please contact the undersigned at (617) 646-7800 or Louis Burkhardt, Raytheon Company, at (978) 436-8238.

Sincerely,

John C. Drobinski, P.G., LSP

Principal-in-Charge

Jeremy J. Picard, P.G.

Project Manager

Enclosures: BWSC-123 - Notice of Environmental Sampling

Alpha Woods Hole Laboratories Reports

Cc: Louis Burkhardt, Raytheon Company

Ben Gould, CMG Environmental

PIP Repositories

NOTICE OF ENVIRONMENTAL SAMPLING



As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

		This Notice is Related to Release Tracking Number
Α.	A. The address of the disposal site related to this	s Notice and Release Tracking Number (provided above):
	1. Street Address:	
	City/Town: Zip	
_		
	B. This notice is being provided to the following	
1.	1. Name:	
2.	2. Street Address:	
	City/Town: Zip	Code:
C.	C. This notice is being given to inform its recipie	nt (the party listed in Section B):
	1. That environmental sampling will be/has b	een conducted at property owned by the recipient of this notice.
	2. Of the results of environmental sampling c	conducted at property owned by the recipient of this notice.
	Check to indicate if the analytical results a the environmental sampling must be attached	are attached. (If item 2. above is checked, the analytical results from d to this notice.)
D.	D. Location of the property where the environme	
1.	Street Address:	
	City/Town: Zip	Code:
2.	2. MCP phase of work during which the sampling wil	ll be/has been conducted:
	Immediate Response Action	Phase III Feasibility Evaluation
	Release Abatement Measure Utility-related Abatement Measure	Phase IV Remedy Implementation Plan Phase V/Remedy Operation Status
	Phase I Initial Site Investigation	Post-Class C Operation, Maintenance and Monitoring
	Phase II Comprehensive Site Assessment	Other(specify)
3.	3. Description of property where sampling will be/has	
	residential commerical indu	ustrial school/playground Other
4.	4. Description of the sampling locations and types (e	(specify) e.g., soil, groundwater) to the extent known at the time of this notice.
	E. Contact information related to the party provid Contact Name:	ing this notice:
	Street Address:	
		p Code:
To		mail:

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.



ANALYTICAL REPORT

Lab Number: L0714856

Client: ERM-New England

399 Boylston Street

6th Floor

Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882 Report Date: 10/15/07

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

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



Project Number: 0061882 **Report Date:** 10/15/07

roject Number: 0001002 Report Date: 10/15/0

Alpha Sample IDClient IDSample LocationL0714856-01DEP-19M-20071004-01WAYLAND, MA

Project Number: 0061882 **Report Date:** 10/15/07

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An a	ffirmative response to questions A, B, C & D is required for "Presumptive Certainty" status	
А	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
В	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
С	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 res	ponse to questions E and F is required for "Presumptive Certainty" status	
Е	Were all QC performance standards and recommendations for the specified method(s) achieved?	YES
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.



L0714856

Lab Number:

Project Name: RAYTHEON WAYLAND

Project Number: 0061882 **Report Date:** 10/15/07

Case Narrative

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

MCP Related Narratives

Volatile Organics

L0714856-01 was processed against a calibration curve that utilized a quadratic fit for 2-Butanone.

In reference to question F:

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

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

Authorized Signature:

Title: Technical Director/Representative

ALPHA WOODS HOLE LABS

Date: 10/15/07

ORGANICS



VOLATILES



Project Name: RAYTHEON WAYLAND Lab Number: L0714856

Project Number: 0061882 Report Date: 10/15/07

SAMPLE RESULTS

Lab ID: L0714856-01

Client ID: DEP-19M-20071004-01

Sample Location: WAYLAND, MA

Matrix: Water
Anaytical Method: 60,8260B
Analytical Date: 10/13/07 21:28

Analyst: BS

Date Collected:	10/04/07 08:05
Date Received:	10/05/07
Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	5.5		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1



Project Name: RAYTHEON WAYLAND Lab Number: L0714856

Project Number: 0061882 Report Date: 10/15/07

SAMPLE RESULTS

Lab ID: Date Collected: 10/04/07 08:05

Client ID: DEP-19M-20071004-01 Date Received: 10/05/07 Sample Location: WAYLAND, MA Field Prep: Not Specified

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

			Acceptance	
Surrogate	% Recovery	Qualifier	Criteria	
1,2-Dichloroethane-d4	101		70-130	
Toluene-d8	95		70-130	
4-Bromofluorobenzene	102		70-130	
Dibromofluoromethane	110		70-130	



Project Number: 0061882 **Report Date:** 10/15/07

Method Blank Analysis Batch Quality Control

Analytical Method: 60,8260B Analytical Date: 10/13/07 16:57

Analyst: BS

Result	Qual	lifier	Units	RDL
or sample(s):	01	Batch:	WG298	110-3
ND			ua/l	5.0
ND			-	0.75
				0.75
ND				0.50
ND			-	1.8
ND			-	0.50
ND			-	0.75
ND			ug/l	0.50
ND			ug/l	0.50
ND			ug/l	0.50
ND			ug/l	0.50
ND			ug/l	0.50
ND			ug/l	0.50
ND			ug/l	0.50
ND			ug/l	2.0
ND			ug/l	0.50
ND			ug/l	2.5
ND			ug/l	1.0
ND			ug/l	1.0
ND			ug/l	0.50
ND			ug/l	0.75
ND			ug/l	0.50
ND			ug/l	2.5
ND			ug/l	2.5
ND			ug/l	2.5
ND			ug/l	0.50
ND			ug/l	5.0
ND			ug/l	2.5
ND			ug/l	2.0
ND			ug/l	2.5
ND			ug/l	0.50
	ND N	ND N	or sample(s): 01 Batch: ND ND ND ND ND ND ND ND ND N	ND ug/l ND



Project Number: 0061882 **Report Date:** 10/15/07

Method Blank Analysis Batch Quality Control

Analytical Method: 60,8260B Analytical Date: 10/13/07 16:57

Analyst: BS

Parameter	Result	Qual	ifier	Units	RDL
Volatile Organics by MCP 8260B for	sample(s):	01	Batch:	WG29811	0-3
o-Chlorotoluene	ND			ug/l	2.5
p-Chlorotoluene	ND			ug/l	2.5
Hexachlorobutadiene	ND			ug/l	0.60
1,2,4-Trichlorobenzene	ND			ug/l	2.5

			Acceptance	
Surrogate	%Recovery	Qualifier	Criteria	
1,2-Dichloroethane-d4	93		70-130	
Toluene-d8	97		70-130	
4-Bromofluorobenzene	102		70-130	
Dibromofluoromethane	102		70-130	



Lab Control Sample Analysis Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0714856

Report Date: 10/15/07

arameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
platile Organics by MCP 8260B Associate	ted sample(s): 01 Bat	tch: WG298110-1	WG298110-2		
Methylene chloride	86	84	70-130	2	25
1,1-Dichloroethane	82	83	70-130	1	25
Chloroform	84	86	70-130	2	25
Carbon tetrachloride	79	79	70-130	0	25
1,2-Dichloropropane	81	84	70-130	4	25
Dibromochloromethane	86	86	70-130	0	25
1,1,2-Trichloroethane	77	80	70-130	4	25
Tetrachloroethene	81	82	70-130	1	25
Chlorobenzene	80	83	70-130	4	25
1,2-Dichloroethane	81	82	70-130	1	25
1,1,1-Trichloroethane	82	84	70-130	2	25
Bromodichloromethane	83	83	70-130	0	25
trans-1,3-Dichloropropene	77	78	70-130	1	25
cis-1,3-Dichloropropene	82	84	70-130	2	25
Bromoform	85	86	70-130	1	50
1,1,2,2-Tetrachloroethane	89	93	70-130	4	25
Chloromethane	88	88	70-130	0	50
Vinyl chloride	82	86	70-130	5	25
Chloroethane	83	86	70-130	4	25
1,1-Dichloroethene	82	87	70-130	6	25
trans-1,2-Dichloroethene	84	88	70-130	5	25



Lab Control Sample Analysis Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0714856

Report Date: 10/15/07

Parameter	LCS %Recovery		LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated	sample(s): 01	Batch:	WG298110-1	WG298110-2		
Trichloroethene	77		80	70-130	4	25
1,2-Dichlorobenzene	82		82	70-130	0	25
1,3-Dichlorobenzene	84		84	70-130	0	25
1,4-Dichlorobenzene	85		84	70-130	1	25
cis-1,2-Dichloroethene	83		84	70-130	1	25
Dichlorodifluoromethane	100		103	70-130	3	50
2,2-Dichloropropane	88		90	70-130	2	50
1,2-Dibromoethane	80		82	70-130	2	25
1,3-Dichloropropane	79		81	70-130	3	25
1,1,1,2-Tetrachloroethane	78		79	70-130	1	25
o-Chlorotoluene	80		82	70-130	2	25
p-Chlorotoluene	82		84	70-130	2	25
Hexachlorobutadiene	79		85	70-130	7	25
1,2,4-Trichlorobenzene	77		80	70-130	4	25

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99	100	70-130
Toluene-d8	97	97	70-130
4-Bromofluorobenzene	100	98	70-130
Dibromofluoromethane	105	105	70-130



Project Name: RAYTHEON WAYLAND Lab Number: L0714856

Project Number: 0061882 Report Date: 10/15/07

Sample Receipt and Container Information

Were project specific reporting limits specified?

Cooler Information

Cooler Custody Seal A Absent

Container Information

Container ID	Container Type	Cooler	рН	Temp	Pres	Seal	Analysis
L0714856-01A	Vial HCI preserved	Α	N/A	2C	Υ	Absent	MCP-8260-04
L0714856-01B	Vial HCI preserved	Α	N/A	2C	Υ	Absent	MCP-8260-04

Container Comments

L0714856-01A Temp Probe
L0714856-01B Temp Probe



Project Name:RAYTHEON WAYLANDLab Number:L0714856Project Number:0061882Report Date:10/15/07

GLOSSARY

Acronyms

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD- Laboratory Control Sample Duplicate: Refer to LCS.

 MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NI - Not Ignitable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

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

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

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

- A Spectra identified as "Aldol Condensation Product".
- B The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- J Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Standard Qualifiers

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

Report Format: Not Specified



Project Name:RAYTHEON WAYLANDLab Number:L0714856Project Number:0061882Report Date:10/15/07

REFERENCES

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

LIMITATION OF LIABILITIES

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

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



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.	Date/Tim	Received By	Per Proposition of the Propositi	Container Type Preservative Date/Time Date/Time		shed By:	Retinquished By	PLEASE ANSWER QUESTIONS ABOVE! S YOUR PROJECT MA MCP or CT RCP? C DRMNO:01-01(rev. 10-0CT-05)	PLEASE ANSWER QUESTIONS AT IS YOUR PROJECT MA MICP or CT RC	PLEASE ANSV IS YOUF MA MCP	
2			2:	JM G	2 6W	10/4,69-805		10-10M25H004-01		14881	
ments			R	Sampler Initials	Sample Matrix	Collection Date Time		Sample ID	ab ID Only)	ALPHA Lab ID (Lab Use Only)	
<u> </u>			DE / C (Arc		, i	ction Limits:	ments/Dete	These samples have been previously analyzed by Alpha Other Project Specific Requirements/Comments/Detection Limits:	mples have bee	Other Pro	
SAMPLE HANDLING TO			s)		□ RUSH (only confirmed if pre-approved!) Time:	-	Restandard	Email: LEREMY, PICACO & SQUI, Convoire Due:	EREMY, P	Email:	
Are MCP Analytical Methods Required? Are CT RCP (Reasonable Confidence Protocols) Required?	I Methods Require	Are MCP Analytical Methods Required? Are CT RCP (Reasonable Confidence P	Tyes □ No			Turn-Around Time	Turn-Ar	6-7800	-979-09	T _Q	
RESUMPTIVE CERTAINTY CTREASONABLE CONFIDENCE PROTOCOLS	ال المرادة ال	IMPTIVE CERTAINT	MAMCP PRESU	ARC	74 27	Project Manager: JRRSSM 4 PiCARD ALPHA Quote #:	Project Manager: ALPHA Quote #:	7 Borcsion ST		Address:	10
	rt Limits Criteria	rements/Repo	Regulatory Requi	17 A	7	Project # 00.61882	Project #:		CRM	_	15071
Same as Client info PO#:		□ EMAIL ☑ Add'l Deliverables	□ FAX	QWV74	z, WA	Project Location & ILL.	Project Nan	TEL: 508-822-9300 FAX: 508-822-3288	220 TEL: 508 193 FAX: 508		<u>5:1</u> 5
ALPHA Job #: 20714856 Billing Information	,	Date Rec'd in Lab: (0/5/0)—Report Information - Data Deliverables	Date Rec'd in Lab: Report Information	OF	PAGE	, 1	F CUS	CHAIN OF CUSTODY Project Information	RAYNHAMMA		



ANALYTICAL REPORT

Lab Number: L0714855

Client: ERM-New England

399 Boylston Street

6th Floor

Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882 Report Date: 10/15/07

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

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



Project Number: 0061882 **Report Date:** 10/15/07

Alpha Sample ID	Client ID	Sample Location
L0714855-01	DEP-19S-20071004-01	WAYLAND, MA
L0714855-02	DEP-19D-20071004-01	WAYLAND, MA
L0714855-03	DUP-002-20071004-01	WAYLAND, MA

Project Number: 0061882 Report Date: 10/15/07

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

Α	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
В	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
С	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 res	sponse to questions E and F is required for "Presumptive Certainty" status	
Е	Were all QC performance standards and recommendations for the specified method(s) achieved?	YES
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.



L0714855

Lab Number:

Project Name: RAYTHEON WAYLAND

Case Narrative

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

MCP Related Narratives

Volatile Organics

L0714855-01, -02, and -03 were processed against a calibration curve that utilized a quadratic fit for 2-

Butanone.

In reference to question F:

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

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

Authorized Signature:

Title: Technical Director/Representative

ALPHA WOODS HOLE LABS

Date: 10/15/07

ORGANICS



VOLATILES



Project Name: RAYTHEON WAYLAND Lab Number: L0714855

Project Number: 0061882 Report Date: 10/15/07

SAMPLE RESULTS

Lab ID: L0714855-01

Client ID: DEP-19S-20071004-01

Sample Location: WAYLAND, MA

Matrix: Water
Anaytical Method: 60,8260B
Analytical Date: 10/13/07 19:32

Analyst: BS

Date Collected: 10/04/07 08:00

Date Received: 10/05/07 Field Prep: Not Specified

Methylene chloride ND ug/l 5.0 1 1,1-Dichloroethane ND ug/l 0.75 1 Chloroform ND ug/l 0.75 1 Carbon tetrachloride ND ug/l 0.50 1 1,2-Dichloropropane ND ug/l 1.8 1 Dibromochloromethane ND ug/l 0.50 1 1,1,2-Trichloroethane ND ug/l 0.50 1 1-Tetrachloroethane ND ug/l 0.50 1 1-Chlorobenzene ND ug/l 0.50 1 1,2-Dichloroethane ND ug/l 0.50 1 1,2-Dichloroethane ND ug/l 0.50 1 1,1-Trichloroethane ND ug/l 0.50 1 1-Loromochane ND ug/l 0.50 1 1-Loromochane ND ug/l 0.50 1 1-Loromochane ND ug/l 0.50 1	Parameter	Result	Qualifier	Units	RDL	Dilution Factor
ND	Volatile Organics by MCP 8260B					
Chloroform ND ug/l 0.75 1 Carbon tetrachloride ND ug/l 0.50 1 1.2-Dichloropropane ND ug/l 1.8 1 Dibromochloromethane ND ug/l 0.50 1 1.1,2-Trichloroethane ND ug/l 0.75 1 Tetrachloroethane ND ug/l 0.50 1 1.2-Dichloroethane ND ug/l 0.50 1 1.1,1-Trichloroethane ND ug/l 0.50 1 Bromodichloromethane ND ug/l 0.50 1 Bromodichloropropene ND ug/l 0.50 1 Usis-1,3-Dichloropropene ND ug/l 0.50 1 Bromoform ND ug/l 0.50 1 Erromoform ND ug/l 0.50 1 Chloroethane ND ug/l 0.50 1 Chloroethane ND ug/l 0.50 1	Methylene chloride	ND		ug/l	5.0	1
Carbon tetrachloride ND ug/l 0.50 1 1,2-Dichloropropane ND ug/l 1,8 1 Dibromochloromethane ND ug/l 0.50 1 1,1,2-Trichloroethane ND ug/l 0.50 1 Tetrachloroethane ND ug/l 0.50 1 Chlorobenzene ND ug/l 0.50 1 1,2-Dichloroethane ND ug/l 0.50 1 1,1,1-Trichloroethane ND ug/l 0.50 1 Bromodichloromethane ND ug/l 0.50 1 Bromodichloropropene ND ug/l 0.50 1 Itaris-1,3-Dichloropropene ND ug/l 0.50 1 Bromoform ND ug/l 0.50 1 Bromoform ND ug/l 0.50 1 Uhlyrig chloride ND ug/l 0.50 1 Uhlyrig chloride ND ug/l 0.50 <	1,1-Dichloroethane	ND		ug/l	0.75	1
1,2-Dichloropropane ND ug/l 1.8 1	Chloroform	ND		ug/l	0.75	1
Dibromochloromethane ND	Carbon tetrachloride	ND		ug/l	0.50	1
1,1,2-Trichloroethane ND ug/l 0.75 1	1,2-Dichloropropane	ND		ug/l	1.8	1
ND	Dibromochloromethane	ND		ug/l	0.50	1
Chlorobenzene ND ug/l 0.50 1 1,2-Dichloroethane ND ug/l 0.50 1 1,1,1-Trichloroethane ND ug/l 0.50 1 Bromodichloromethane ND ug/l 0.50 1 Bromodichloropropene ND ug/l 0.50 1 cis-1,3-Dichloropropene ND ug/l 0.50 1 Bromoform ND ug/l 0.50 1 Chloromethane ND ug/l 0.50 1 Chloromethane ND ug/l 0.50 1 Chloroethane ND ug/l 0.50 1 Chloroethane ND ug/l 1.0 1 Chloroethane ND ug/l 0.50 1 Itaras-1,2-Dichloroethene ND ug/l 0.50 1 Trichloroethene ND ug/l 0.50 1 Trichloroethene ND ug/l 2.5 1 <	1,1,2-Trichloroethane	ND		ug/l	0.75	1
1,2-Dichloroethane ND	Tetrachloroethene	ND		ug/l	0.50	1
1,1,1-Trichloroethane ND	Chlorobenzene	ND		ug/l	0.50	1
Bromodichloromethane ND ug/l 0.50 1 trans-1,3-Dichloropropene ND ug/l 0.50 1 cis-1,3-Dichloropropene ND ug/l 0.50 1 Bromoform ND ug/l 2.0 1 1,1,2,2-Tetrachloroethane ND ug/l 0.50 1 Chloromethane ND ug/l 2.5 1 Vinyl chloride ND ug/l 1.0 1 Chloroethane ND ug/l 1.0 1 Lycholoroethane ND ug/l 0.50 1 trans-1,2-Dichloroethene ND ug/l 0.50 1 trans-1,2-Dichloroethene ND ug/l 0.50 1 Trichloroethene ND ug/l 2.5 1 1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene ND ug/l 2.5	1,2-Dichloroethane	ND		ug/l	0.50	1
Itrans-1,3-Dichloropropene ND ug/l 0.50 1 cis-1,3-Dichloropropene ND ug/l 0.50 1 Bromoform ND ug/l 2.0 1 1,1,2,2-Tetrachloroethane ND ug/l 0.50 1 Chloromethane ND ug/l 2.5 1 Vinyl chloride ND ug/l 1.0 1 Chloroethane ND ug/l 1.0 1 1,1-Dichloroethene ND ug/l 0.50 1 trans-1,2-Dichloroethene ND ug/l 0.50 1 Trichloroethene ND ug/l 0.50 1 1,2-Dichloroethene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene ND ug/l 0.50 1 Dichlorodiffluoromethane ND ug/l 5.0	1,1,1-Trichloroethane	ND		ug/l	0.50	1
ND	Bromodichloromethane	ND		ug/l	0.50	1
ND	trans-1,3-Dichloropropene	ND		ug/l	0.50	1
1,1,2,2-Tetrachloroethane	cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Chloromethane ND ug/l 2.5 1 Vinyl chloride ND ug/l 1.0 1 Chloroethane ND ug/l 1.0 1 1,1-Dichloroethane ND ug/l 0.50 1 trans-1,2-Dichloroethene ND ug/l 0.75 1 Trichloroethene ND ug/l 0.50 1 1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene ND ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1 2,2-Dichloropropane ND ug/l 2.5 1 1,2-Dibromoethane ND ug/l 2.5 1	Bromoform	ND		ug/l	2.0	1
Vinyl chloride ND ug/l 1.0 1 Chloroethane ND ug/l 1.0 1 1,1-Dichloroethane ND ug/l 0.50 1 trans-1,2-Dichloroethane ND ug/l 0.75 1 Trichloroethane ND ug/l 0.50 1 1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethane ND ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1 2,2-Dichloropropane ND ug/l 2.5 1 1,2-Dibromoethane ND ug/l 2.5 1	1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloroethane ND ug/l 1.0 1 1,1-Dichloroethene ND ug/l 0.50 1 trans-1,2-Dichloroethene ND ug/l 0.75 1 Trichloroethene ND ug/l 0.50 1 1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene ND ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1 2,2-Dichloropropane ND ug/l 2.5 1 1,2-Dibromoethane ND ug/l 2.5 1	Chloromethane	ND		ug/l	2.5	1
1,1-Dichloroethene ND ug/l 0.50 1 trans-1,2-Dichloroethene ND ug/l 0.75 1 Trichloroethene ND ug/l 0.50 1 1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene ND ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1 2,2-Dichloropropane ND ug/l 2.5 1 1,2-Dibromoethane ND ug/l 2.5 1	Vinyl chloride	ND		ug/l	1.0	1
trans-1,2-Dichloroethene ND ug/l 0.75 1 Trichloroethene ND ug/l 0.50 1 1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene ND ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1 2,2-Dichloropropane ND ug/l 2.5 1 1,2-Dibromoethane ND ug/l 2.5 1	Chloroethane	ND		ug/l	1.0	1
Trichloroethene ND ug/l 0.50 1 1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene ND ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1 2,2-Dichloropropane ND ug/l 2.5 1 1,2-Dibromoethane ND ug/l 2.5 1	1,1-Dichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene ND ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1 2,2-Dichloropropane ND ug/l 2.5 1 1,2-Dibromoethane ND ug/l 2.0 1	trans-1,2-Dichloroethene	ND		ug/l	0.75	1
1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene ND ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1 2,2-Dichloropropane ND ug/l 2.5 1 1,2-Dibromoethane ND ug/l 2.0 1	Trichloroethene	ND		ug/l	0.50	1
1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene ND ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1 2,2-Dichloropropane ND ug/l 2.5 1 1,2-Dibromoethane ND ug/l 2.0 1	1,2-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene ND ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1 2,2-Dichloropropane ND ug/l 2.5 1 1,2-Dibromoethane ND ug/l 2.0 1	1,3-Dichlorobenzene	ND		ug/l	2.5	1
Dichlorodifluoromethane ND ug/l 5.0 1 2,2-Dichloropropane ND ug/l 2.5 1 1,2-Dibromoethane ND ug/l 2.0 1	1,4-Dichlorobenzene	ND		ug/l	2.5	1
2,2-Dichloropropane ND ug/l 2.5 1 1,2-Dibromoethane ND ug/l 2.0 1	cis-1,2-Dichloroethene	ND		ug/l	0.50	1
1,2-Dibromoethane ND ug/l 2.0 1	Dichlorodifluoromethane	ND		ug/l	5.0	1
	2,2-Dichloropropane	ND		ug/l	2.5	1
1,3-Dichloropropane ND ug/l 2.5 1	1,2-Dibromoethane	ND		ug/l	2.0	1
	1,3-Dichloropropane	ND		ug/l	2.5	1



Project Name: RAYTHEON WAYLAND Lab Number: L0714855

Project Number: 0061882 Report Date: 10/15/07

SAMPLE RESULTS

Lab ID: L0714855-01 Date Collected: 10/04/07 08:00

Client ID: DEP-19S-20071004-01 Date Received: 10/05/07 Sample Location: WAYLAND, MA Field Prep: Not Specified

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

			Acceptance	
Surrogate	% Recovery	Qualifier	Criteria	
1,2-Dichloroethane-d4	99		70-130	
Toluene-d8	97		70-130	
4-Bromofluorobenzene	108		70-130	
Dibromofluoromethane	106		70-130	



10/04/07 08:10

Not Specified

10/05/07

Date Collected:

Date Received:

Field Prep:

Project Name: RAYTHEON WAYLAND Lab Number: L0714855

Project Number: 0061882 Report Date: 10/15/07

SAMPLE RESULTS

Lab ID: L0714855-02

Client ID: DEP-19D-20071004-01

Sample Location: WAYLAND, MA

Matrix: Water
Anaytical Method: 60,8260B
Analytical Date: 10/13/07 20:11

Analyst: BS

Methylene chloride ND ug/l 5.0 1 1,1-Dichloroethane ND ug/l 0.75 1 Chloroform ND ug/l 0.75 1 Carbon tetrachloride ND ug/l 0.50 1 1,2-Dichloropropane ND ug/l 0.50 1 1,2-Dichloropropane ND ug/l 0.50 1 1,1,2-Trichloroethane ND ug/l 0.50 1 Tetrachloroethane ND ug/l 0.50 1 1,1,2-Trichloroethane ND ug/l 0.50 1 1,2-Dichloroethane ND ug/l 0.50 1 1,1,1-Trichloroethane ND ug/l 0.50 1 1,1,1-Trichloroethane ND ug/l 0.50 1 Bromodichloromethane ND ug/l 0.50 1 trans-1,3-Dichloropropene ND ug/l 0.50 1 germoform ND ug/l 0.50 <th>Parameter</th> <th>Result</th> <th>Qualifier</th> <th>Units</th> <th>RDL</th> <th>Dilution Factor</th>	Parameter	Result	Qualifier	Units	RDL	Dilution Factor
1,1-Dichloroethane ND ug/l 0.75 1	Volatile Organics by MCP 8260B					
Chloroform ND ug/l 0.75 1 Carbon tetrachloride ND ug/l 0.50 1 1,2-Dichloropropane ND ug/l 1.8 1 Dibromochloromethane ND ug/l 0.50 1 1,1,2-Trichloroethane ND ug/l 0.50 1 Tetrachloroethane ND ug/l 0.50 1 Chlorobenzene ND ug/l 0.50 1 L2-Dichloroethane ND ug/l 0.50 1 1,1,1-Trichloroethane ND ug/l 0.50 1 Bromodichloromethane ND ug/l 0.50 1 trans-1,3-Dichloropropene ND ug/l 0.50 1 dis-1,3-Dichloropropene ND ug/l 0.50 1 Bromoform ND ug/l 0.50 1 1,1,2,2-Tetrachloroethane ND ug/l 0.50 1 Chloromethane ND ug/l 0.50	Methylene chloride	ND		ug/l	5.0	1
Carbon tetrachloride ND ug/l 0.50 1 1,2-Dichloropropane ND ug/l 1.8 1 Dibromochloromethane ND ug/l 0.50 1 1,1,2-Trichloroethane ND ug/l 0.50 1 Tetrachloroethane ND ug/l 0.50 1 Chlorobenzene ND ug/l 0.50 1 1,1,1-Trichloroethane ND ug/l 0.50 1 1,1,1-Trichloroethane ND ug/l 0.50 1 Bromodichloromethane ND ug/l 0.50 1 trans-1,3-Dichloropropene ND ug/l 0.50 1 trans-1,3-Dichloropropene ND ug/l 0.50 1 Bromoform ND ug/l 0.50 1 Chloroethane ND ug/l 0.50 1 Vinyl chloride ND ug/l 0.50 1 Chloroethane ND ug/l 0.50	1,1-Dichloroethane	ND		ug/l	0.75	1
1,2-Dichloropropane ND ug/l 1.8 1 Dibromochloromethane ND ug/l 0.50 1 1,1,2-Trichloroethane ND ug/l 0.75 1 Tetrachloroethane ND ug/l 0.50 1 Chlorobenzene ND ug/l 0.50 1 1,2-Dichloroethane ND ug/l 0.50 1 1,1,1-Trichloroethane ND ug/l 0.50 1 Bromodichloromethane ND ug/l 0.50 1 Bromoformethane ND ug/l 0.50 1 Bromoform ND ug/l 0.50 1 Bromoform ND ug/l 0.50 1 Chloroethane ND ug/l 0.50 1	Chloroform	ND		ug/l	0.75	1
Dibromochloromethane ND ug/l 0.50 1 1,1,2-Trichloroethane ND ug/l 0.75 1 Tetrachloroethane ND ug/l 0.50 1 Chlorobenzene ND ug/l 0.50 1 1,2-Dichloroethane ND ug/l 0.50 1 1,1,1-Trichloroethane ND ug/l 0.50 1 Bromodichloromethane ND ug/l 0.50 1 trans-1,3-Dichloropropene ND ug/l 0.50 1 trans-1,3-Dichloropropene ND ug/l 0.50 1 Bromoform ND ug/l 0.50 1 Bromoform ND ug/l 0.50 1 Chloromethane ND ug/l 0.50 1 Chloromethane ND ug/l 1.0 1 Chloroethane ND ug/l 0.50 1 Trichloroethene ND ug/l 0.50 1	Carbon tetrachloride	ND		ug/l	0.50	1
1,1,2-Trichloroethane ND	1,2-Dichloropropane	ND		ug/l	1.8	1
Tetrachloroethene ND	Dibromochloromethane	ND		ug/l	0.50	1
Chlorobenzene ND	1,1,2-Trichloroethane	ND		ug/l	0.75	1
1,2-Dichloroethane	Tetrachloroethene	ND		ug/l	0.50	1
1,1,1-Trichloroethane	Chlorobenzene	ND		ug/l	0.50	1
ND	1,2-Dichloroethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene ND ug/l 0.50 1 Bromoform ND ug/l 0.50 1 Bromoform ND ug/l 0.50 1 1,1,2,2-Tetrachloroethane ND ug/l 0.50 1 Chloromethane ND ug/l 2.5 1 Vinyl chloride ND ug/l 1.0 1 Chloroethane ND ug/l 1.0 1 Chloroethane ND ug/l 1.0 1 Tichloroethene ND ug/l 0.50 1 1,1-Dichloroethene ND ug/l 1.0 1 1,1-Dichloroethene ND ug/l 0.50 1 Trans-1,2-Dichloroethene ND ug/l 0.50 1 1,2-Dichloroethene ND ug/l 0.50 1 1,2-Dichloroethene ND ug/l 0.50 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 1,5-Dichlorobenzene ND ug/l 2.5 1	1,1,1-Trichloroethane	ND		ug/l	0.50	1
cis-1,3-Dichloropropene ND ug/l 0.50 1 Bromoform ND ug/l 2.0 1 1,1,2,2-Tetrachloroethane ND ug/l 0.50 1 Chloromethane ND ug/l 2.5 1 Vinyl chloride ND ug/l 1.0 1 Chloroethane ND ug/l 1.0 1 1,1-Dichloroethene ND ug/l 0.50 1 trans-1,2-Dichloroethene ND ug/l 0.75 1 Trichloroethene ND ug/l 0.50 1 1,2-Dichloroethene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene ND ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1	Bromodichloromethane	ND		ug/l	0.50	1
Bromoform ND ug/l 2.0 1 1,1,2,2-Tetrachloroethane ND ug/l 0.50 1 Chloromethane ND ug/l 2.5 1 Vinyl chloride ND ug/l 1.0 1 Chloroethane ND ug/l 1.0 1 1,1-Dichloroethene ND ug/l 0.50 1 trans-1,2-Dichloroethene ND ug/l 0.50 1 Trichloroethene ND ug/l 0.50 1 1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene 0.84 ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1	trans-1,3-Dichloropropene	ND		ug/l	0.50	1
1,1,2,2-Tetrachloroethane ND ug/l 0.50 1 Chloromethane ND ug/l 2.5 1 Vinyl chloride ND ug/l 1.0 1 Chloroethane ND ug/l 1.0 1 1,1-Dichloroethane ND ug/l 0.50 1 trans-1,2-Dichloroethane ND ug/l 0.75 1 Trichloroethane ND ug/l 0.50 1 1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethane 0.84 ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1	cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Chloromethane ND ug/l 2.5 1 Vinyl chloride ND ug/l 1.0 1 Chloroethane ND ug/l 1.0 1 1,1-Dichloroethene ND ug/l 0.50 1 trans-1,2-Dichloroethene ND ug/l 0.50 1 Trichloroethene ND ug/l 2.5 1 1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene 0.84 ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1	Bromoform	ND		ug/l	2.0	1
Vinyl chloride ND ug/l 1.0 1 Chloroethane ND ug/l 1.0 1 1,1-Dichloroethene ND ug/l 0.50 1 trans-1,2-Dichloroethene ND ug/l 0.75 1 Trichloroethene ND ug/l 0.50 1 1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene 0.84 ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1	1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloroethane ND ug/l 1.0 1 1,1-Dichloroethene ND ug/l 0.50 1 trans-1,2-Dichloroethene ND ug/l 0.75 1 Trichloroethene ND ug/l 0.50 1 1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene 0.84 ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1	Chloromethane	ND		ug/l	2.5	1
1,1-Dichloroethene ND ug/l 0.50 1 trans-1,2-Dichloroethene ND ug/l 0.75 1 Trichloroethene ND ug/l 0.50 1 1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene 0.84 ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1	Vinyl chloride	ND		ug/l	1.0	1
trans-1,2-Dichloroethene ND ug/l 0.75 1 Trichloroethene ND ug/l 0.50 1 1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene 0.84 ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1	Chloroethane	ND		ug/l	1.0	1
Trichloroethene ND ug/l 0.50 1 1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene 0.84 ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1	1,1-Dichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene ND ug/l 2.5 1 1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene 0.84 ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1	trans-1,2-Dichloroethene	ND		ug/l	0.75	1
1,3-Dichlorobenzene ND ug/l 2.5 1 1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene 0.84 ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1	Trichloroethene	ND		ug/l	0.50	1
1,4-Dichlorobenzene ND ug/l 2.5 1 cis-1,2-Dichloroethene 0.84 ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1	1,2-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene 0.84 ug/l 0.50 1 Dichlorodifluoromethane ND ug/l 5.0 1	1,3-Dichlorobenzene	ND		ug/l	2.5	1
Dichlorodifluoromethane ND ug/l 5.0 1	1,4-Dichlorobenzene	ND		ug/l	2.5	1
Ü	cis-1,2-Dichloroethene	0.84		ug/l	0.50	1
2,2-Dichloropropane ND ug/l 2.5 1	Dichlorodifluoromethane	ND		ug/l	5.0	1
	2,2-Dichloropropane	ND		ug/l	2.5	1

ND

ND



1

1

2.0

2.5

ug/l

ug/l

1,2-Dibromoethane

1,3-Dichloropropane

Project Name: RAYTHEON WAYLAND Lab Number: L0714855

Project Number: 0061882 Report Date: 10/15/07

SAMPLE RESULTS

Lab ID: Date Collected: 10/04/07 08:10

Client ID: DEP-19D-20071004-01 Date Received: 10/05/07 Sample Location: WAYLAND, MA Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Surrogate	// INECOVERY	Qualifier	Officeria	
1,2-Dichloroethane-d4	100		70-130	
Toluene-d8	96		70-130	
4-Bromofluorobenzene	101		70-130	
Dibromofluoromethane	109		70-130	



Project Name: RAYTHEON WAYLAND Lab Number: L0714855

Project Number: 0061882 Report Date: 10/15/07

SAMPLE RESULTS

Lab ID: L0714855-03

Client ID: DUP-002-20071004-01

Sample Location: WAYLAND, MA

Matrix: Water
Anaytical Method: 60,8260B
Analytical Date: 10/13/07 20:49

Analyst: BS

Date Collected: 10/04/07 00:00

Date Received: 10/05/07 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	0.70		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1



Project Name: RAYTHEON WAYLAND Lab Number: L0714855

Project Number: 0061882 Report Date: 10/15/07

SAMPLE RESULTS

Lab ID: L0714855-03 Date Collected: 10/04/07 00:00

Client ID: DUP-002-20071004-01 Date Received: 10/05/07 Sample Location: WAYLAND, MA Field Prep: Not Specified

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

Surregate	Acceptance % Recovery Qualifier Criteria					
Surrogate	% Recovery	Qualifier	Criteria			
1,2-Dichloroethane-d4	105		70-130			
Toluene-d8	95		70-130			
4-Bromofluorobenzene	102		70-130			
Dibromofluoromethane	110		70-130			



Project Number: 0061882 **Report Date:** 10/15/07

Method Blank Analysis Batch Quality Control

Analytical Method: 60,8260B Analytical Date: 10/13/07 16:57

Analyst: BS

Result	Qualifie	r U	nits	RDL
for sample(s):	01-03	Batch:	WG2	298110-3
ND			ug/l	5.0
ND			ug/l	0.75
ND			ug/l	0.75
ND			ug/l	0.50
ND			ug/l	1.8
ND			ug/l	0.50
ND			ug/l	0.75
ND			ug/l	0.50
ND			ug/l	0.50
ND			ug/l	0.50
ND			ug/l	0.50
ND			ug/l	0.50
ND			ug/l	0.50
ND		-	ug/l	0.50
ND			ug/l	2.0
ND			ug/l	0.50
ND			ug/l	2.5
ND			ug/l	1.0
ND			ug/l	1.0
ND			ug/l	0.50
ND			ug/l	0.75
ND			ug/l	0.50
ND			ug/l	2.5
ND			ug/l	2.5
ND			ug/l	2.5
ND			ug/l	0.50
ND			ug/l	5.0
ND			ug/l	2.5
ND			ug/l	2.0
ND			ug/l	2.5
ND			ug/l	0.50
	for sample(s):	for sample(s): 01-03 ND ND ND	for sample(s): 01-03 Batch: ND ND ND ND ND ND ND ND ND N	for sample(s): 01-03 Batch: WG2 ND ug/l ND



Project Number: 0061882 **Report Date:** 10/15/07

Method Blank Analysis Batch Quality Control

Analytical Method: 60,8260B Analytical Date: 10/13/07 16:57

Analyst: BS

Parameter	Result	Qualifie	r Uı	nits	RDL
Volatile Organics by MCP 8260B for	sample(s):	01-03	Batch:	WG	298110-3
o-Chlorotoluene	ND		ι	ug/l	2.5
p-Chlorotoluene	ND		ι	ıg/l	2.5
Hexachlorobutadiene	ND		ι	ıg/l	0.60
1,2,4-Trichlorobenzene	ND		ι	ıg/l	2.5

	Acceptance					
Surrogate	%Recovery	Qualifier	Criteria			
1,2-Dichloroethane-d4	93		70-130			
Toluene-d8	97		70-130			
4-Bromofluorobenzene	102		70-130			
Dibromofluoromethane	102		70-130			



Lab Control Sample Analysis Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0714855

Report Date: 10/15/07

rameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
platile Organics by MCP 8260B Asso	ociated sample(s): 01-03	Batch: WG298110-1	WG298110-2		
Methylene chloride	86	84	70-130	2	25
1,1-Dichloroethane	82	83	70-130	1	25
Chloroform	84	86	70-130	2	25
Carbon tetrachloride	79	79	70-130	0	25
1,2-Dichloropropane	81	84	70-130	4	25
Dibromochloromethane	86	86	70-130	0	25
1,1,2-Trichloroethane	77	80	70-130	4	25
Tetrachloroethene	81	82	70-130	1	25
Chlorobenzene	80	83	70-130	4	25
1,2-Dichloroethane	81	82	70-130	1	25
1,1,1-Trichloroethane	82	84	70-130	2	25
Bromodichloromethane	83	83	70-130	0	25
trans-1,3-Dichloropropene	77	78	70-130	1	25
cis-1,3-Dichloropropene	82	84	70-130	2	25
Bromoform	85	86	70-130	1	50
1,1,2,2-Tetrachloroethane	89	93	70-130	4	25
Chloromethane	88	88	70-130	0	50
Vinyl chloride	82	86	70-130	5	25
Chloroethane	83	86	70-130	4	25
1,1-Dichloroethene	82	87	70-130	6	25
trans-1,2-Dichloroethene	84	88	70-130	5	25



Lab Control Sample Analysis Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0714855

Report Date: 10/15/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated	sample(s): 01-03	Batch: WG298110-1	WG298110-2		
Trichloroethene	77	80	70-130	4	25
1,2-Dichlorobenzene	82	82	70-130	0	25
1,3-Dichlorobenzene	84	84	70-130	0	25
1,4-Dichlorobenzene	85	84	70-130	1	25
cis-1,2-Dichloroethene	83	84	70-130	1	25
Dichlorodifluoromethane	100	103	70-130	3	50
2,2-Dichloropropane	88	90	70-130	2	50
1,2-Dibromoethane	80	82	70-130	2	25
1,3-Dichloropropane	79	81	70-130	3	25
1,1,1,2-Tetrachloroethane	78	79	70-130	1	25
o-Chlorotoluene	80	82	70-130	2	25
p-Chlorotoluene	82	84	70-130	2	25
Hexachlorobutadiene	79	85	70-130	7	25
1,2,4-Trichlorobenzene	77	80	70-130	4	25

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99	100	70-130
Toluene-d8	97	97	70-130
4-Bromofluorobenzene	100	98	70-130
Dibromofluoromethane	105	105	70-130



10150715:34

Project Name: RAYTHEON WAYLAND Lab Number: L0714855

Project Number: 0061882 Report Date: 10/15/07

Sample Receipt and Container Information

Were project specific reporting limits specified?

Cooler Information

Cooler Custody Seal A Absent

Container Information

Container ID	Container Type	Cooler	рН	Temp	Pres	Seal	Analysis
L0714855-01A	Vial HCl preserved	Α	N/A	2C	Υ	Absent	MCP-8260-04
L0714855-01B	Vial HCl preserved	Α	N/A	2C	Υ	Absent	MCP-8260-04
L0714855-02A	Vial HCI preserved	Α	N/A	2C	Υ	Absent	MCP-8260-04
L0714855-02B	Vial HCI preserved	Α	N/A	2C	Υ	Absent	MCP-8260-04
L0714855-03A	Vial HCI preserved	Α	N/A	2C	Υ	Absent	MCP-8260-04
L0714855-03B	Vial HCI preserved	Α	N/A	2C	Υ	Absent	MCP-8260-04

Container Comments

L0714855-01A	Temp Probe
L0714855-01B	Temp Probe
L0714855-02A	Temp Probe
L0714855-02B	Temp Probe
L0714855-03A	Temp Probe
L0714855-03B	Temp Probe



Project Name:RAYTHEON WAYLANDLab Number:L0714855Project Number:0061882Report Date:10/15/07

GLOSSARY

Acronyms

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD- Laboratory Control Sample Duplicate: Refer to LCS.

 MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NI - Not Ignitable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

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

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

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

- A Spectra identified as "Aldol Condensation Product".
- B The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- J Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Standard Qualifiers

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

Report Format: Not Specified



Project Name:RAYTHEON WAYLANDLab Number:L0714855Project Number:0061882Report Date:10/15/07

REFERENCES

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

LIMITATION OF LIABILITIES

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

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



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ANALYTICAL REPORT

Lab Number: L0714605

Client: ERM-New England

399 Boylston Street

6th Floor

Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882 Report Date: 10/12/07

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

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



Project Number: 0061882 **Report Date:** 10/12/07

Alpha Sample ID Client ID Sample Location
L0714605-01 MW-264M-20071002-01 WAYLAND, MA

Project Number: 0061882 **Report Date:** 10/12/07

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An a	ffirmative response to questions A, B, C & D is required for "Presumptive Certainty" status	
Α	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
В	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
С	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A

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

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.



L0714605

Lab Number:

Project Name: RAYTHEON WAYLAND

Case Narrative

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

MCP Related Narratives

Volatile Organnics

L0714605-01 has elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the sample.

In reference to question E:

The WG297742-1/-2 LCS/LCSD % recoveries for Dichlorodifluoromethane are below, and the LCS/LCSD % recoveries for 1,4-Dioxane are above, the individual acceptance criteria for the compounds, but within the overall method allowances. These are both difficult analytes.

In reference to question F:

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

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

Authorized Signature:

Title: Technical Director/Representative

ALPHA WOODS HOLE LABS

Date: 10/12/07

ORGANICS



VOLATILES



10120716:28

Project Name: RAYTHEON WAYLAND Lab Number: L0714605

Project Number: 0061882 Report Date: 10/12/07

SAMPLE RESULTS

Lab ID: L0714605-01

Client ID: MW-264M-20071002-01

Sample Location: WAYLAND, MA

Matrix: Water
Anaytical Method: 60,8260B
Analytical Date: 10/11/07 19:27

Analyst: BS

Date Collected: 10/02/07 15:20

Date Received: 10/03/07 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	10	2
1,1-Dichloroethane	ND		ug/l	1.5	2
Chloroform	ND		ug/l	1.5	2
Carbon tetrachloride	ND		ug/l	1.0	2
1,2-Dichloropropane	ND		ug/l	3.5	2
Dibromochloromethane	ND		ug/l	1.0	2
1,1,2-Trichloroethane	ND		ug/l	1.5	2
Tetrachloroethene	11		ug/l	1.0	2
Chlorobenzene	ND		ug/l	1.0	2
1,2-Dichloroethane	ND		ug/l	1.0	2
1,1,1-Trichloroethane	ND		ug/l	1.0	2
Bromodichloromethane	ND		ug/l	1.0	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	2
Bromoform	ND		ug/l	4.0	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	2
Chloromethane	ND		ug/l	5.0	2
Vinyl chloride	12		ug/l	2.0	2
Chloroethane	ND		ug/l	2.0	2
1,1-Dichloroethene	ND		ug/l	1.0	2
trans-1,2-Dichloroethene	ND		ug/l	1.5	2
Trichloroethene	34		ug/l	1.0	2
1,2-Dichlorobenzene	ND		ug/l	5.0	2
1,3-Dichlorobenzene	ND		ug/l	5.0	2
1,4-Dichlorobenzene	ND		ug/l	5.0	2
cis-1,2-Dichloroethene	150		ug/l	1.0	2
Dichlorodifluoromethane	ND		ug/l	10	2
2,2-Dichloropropane	ND		ug/l	5.0	2
1,2-Dibromoethane	ND		ug/l	4.0	2
1,3-Dichloropropane	ND		ug/l	5.0	2



10120716:28

Project Name: RAYTHEON WAYLAND Lab Number: L0714605

Project Number: 0061882 Report Date: 10/12/07

SAMPLE RESULTS

Lab ID: L0714605-01 Date Collected: 10/02/07 15:20

Client ID: MW-264M-20071002-01 Date Received: 10/03/07
Sample Location: WAYLAND, MA Field Prep: Not Specified

Qualifier Units **RDL Dilution Factor Parameter** Result Volatile Organics by MCP 8260B ND 1,1,1,2-Tetrachloroethane ug/l 1.0 2 ND 5.0 2 o-Chlorotoluene ug/l p-Chlorotoluene ND ug/l 5.0 2 ND 1.2 Hexachlorobutadiene ug/l 2 1,2,4-Trichlorobenzene ND ug/l 5.0 2

			Acceptance	
Surrogate	% Recovery	Qualifier	Criteria	
1,2-Dichloroethane-d4	110		70-130	
Toluene-d8	93		70-130	
4-Bromofluorobenzene	104		70-130	
Dibromofluoromethane	109		70-130	



Project Number: 0061882 **Report Date:** 10/12/07

Method Blank Analysis Batch Quality Control

Analytical Method: 60,8260B Analytical Date: 10/11/07 14:50

Analyst: BS

arameter	Result	Qual	lifier	Units	RDL
olatile Organics by MCP 8260B fo	or sample(s):	01	Batch:	WG297	742-3
Methylene chloride	ND			ug/l	5.0
1,1-Dichloroethane	ND			ug/l	0.75
Chloroform	ND			ug/l	0.75
Carbon tetrachloride	ND			ug/l	0.50
1,2-Dichloropropane	ND			ug/l	1.8
Dibromochloromethane	ND			ug/l	0.50
1,1,2-Trichloroethane	ND			ug/l	0.75
Tetrachloroethene	ND			ug/l	0.50
Chlorobenzene	ND			ug/l	0.50
Trichlorofluoromethane	ND			ug/l	2.5
1,2-Dichloroethane	ND			ug/l	0.50
1,1,1-Trichloroethane	ND			ug/l	0.50
Bromodichloromethane	ND			ug/l	0.50
trans-1,3-Dichloropropene	ND			ug/l	0.50
cis-1,3-Dichloropropene	ND			ug/l	0.50
1,1-Dichloropropene	ND			ug/l	2.5
Bromoform	ND			ug/l	2.0
1,1,2,2-Tetrachloroethane	ND			ug/l	0.50
Benzene	ND			ug/l	0.50
Toluene	ND			ug/l	0.75
Ethylbenzene	ND			ug/l	0.50
Chloromethane	ND			ug/l	2.5
Bromomethane	ND			ug/l	1.0
Vinyl chloride	ND			ug/l	1.0
Chloroethane	ND			ug/l	1.0
1,1-Dichloroethene	ND			ug/l	0.50
trans-1,2-Dichloroethene	ND			ug/l	0.75
Trichloroethene	ND			ug/l	0.50
1,2-Dichlorobenzene	ND			ug/l	2.5
1,3-Dichlorobenzene	ND			ug/l	2.5
1,4-Dichlorobenzene	ND			ug/l	2.5



Project Number: 0061882 **Report Date:** 10/12/07

Method Blank Analysis Batch Quality Control

Analytical Method: 60,8260B Analytical Date: 10/11/07 14:50

Analyst: BS

Result	Qua	litier	Units	RDL
or sample(s):	01	Batch:	WG2977	'42-3
ND			ug/l	1.0
ND			ug/l	1.0
ND			ug/l	1.0
ND			ug/l	0.50
ND			ug/l	5.0
ND			ug/l	5.0
ND			ug/l	1.0
ND			ug/l	5.0
ND			ug/l	5.0
ND			ug/l	5.0
ND			ug/l	5.0
ND			ug/l	5.0
ND			ug/l	5.0
ND			ug/l	2.5
ND			ug/l	10
ND			ug/l	2.5
ND			ug/l	2.0
ND			ug/l	2.5
ND			ug/l	0.50
ND			ug/l	2.5
ND			ug/l	0.50
ND			ug/l	0.50
ND			ug/l	2.5
ND			ug/l	2.5
ND			ug/l	2.5
ND			ug/l	2.5
ND			ug/l	0.60
ND			ug/l	0.50
ND			ug/l	0.50
ND			ug/l	2.5
ND			ug/l	0.50
	ND N	ND N	ND N	or sample(s): 01 Batch: WG2977 ND ug/l ug/l



Project Number: 0061882 **Report Date:** 10/12/07

Method Blank Analysis Batch Quality Control

Analytical Method: 60,8260B Analytical Date: 10/11/07 14:50

Analyst: BS

arameter	Result	Qual	ifier	Units	RDL
olatile Organics by MCP 8260B for	sample(s):	01	Batch:	WG2977	742-3
1,2,3-Trichlorobenzene	ND			ug/l	2.5
1,2,4-Trichlorobenzene	ND			ug/l	2.5
1,3,5-Trimethylbenzene	ND			ug/l	2.5
1,2,4-Trimethylbenzene	ND			ug/l	2.5
Ethyl ether	ND			ug/l	2.5
Isopropyl Ether	ND			ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND			ug/l	2.0
Tertiary-Amyl Methyl Ether	ND			ug/l	2.0
1,4-Dioxane	ND			ug/l	250

		Acceptance					
Surrogate	%Recovery	Qualifier Criteria	_				
1.2-Dichloroethane-d4	106	70-130					
,							
Toluene-d8	96	70-130					
4-Bromofluorobenzene	104	70-130					
Dibromofluoromethane	104	70-130					



Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0714605

Report Date: 10/12/07

nrameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
platile Organics by MCP 8260B Asso	ciated sample(s): 01 Bat	tch: WG297742-1	WG297742-2		
Methylene chloride	100	96	70-130	4	25
1,1-Dichloroethane	105	99	70-130	6	25
Chloroform	112	106	70-130	6	25
Carbon tetrachloride	124	118	70-130	5	25
1,2-Dichloropropane	104	99	70-130	5	25
Dibromochloromethane	107	103	70-130	4	25
1,1,2-Trichloroethane	99	95	70-130	4	25
Tetrachloroethene	116	111	70-130	4	25
Chlorobenzene	105	100	70-130	5	25
Trichlorofluoromethane	124	115	70-130	8	25
1,2-Dichloroethane	111	110	70-130	1	25
1,1,1-Trichloroethane	117	111	70-130	5	25
Bromodichloromethane	111	107	70-130	4	25
trans-1,3-Dichloropropene	103	99	70-130	4	25
cis-1,3-Dichloropropene	107	105	70-130	2	25
1,1-Dichloropropene	108	102	70-130	6	25
Bromoform	110	108	70-130	2	50
1,1,2,2-Tetrachloroethane	92	91	70-130	1	25
Benzene	104	100	70-130	4	25
Toluene	101	98	70-130	3	25
Ethylbenzene	105	100	70-130	5	25



Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0714605

Report Date: 10/12/07

Parameter	LCS %Recovery		LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
/olatile Organics by MCP 8260B Associated	sample(s): 01	Batch:	WG297742-1	WG297742-2		
Chloromethane	77		72	70-130	7	50
Bromomethane	97		94	70-130	3	50
Vinyl chloride	88		81	70-130	8	25
Chloroethane	108		100	70-130	8	25
1,1-Dichloroethene	113		105	70-130	7	25
trans-1,2-Dichloroethene	106		102	70-130	4	25
Trichloroethene	110		105	70-130	5	25
1,2-Dichlorobenzene	97		96	70-130	1	25
1,3-Dichlorobenzene	102		100	70-130	2	25
1,4-Dichlorobenzene	99		100	70-130	1	25
Methyl tert butyl ether	103		100	70-130	3	25
p/m-Xylene	107		103	70-130	4	25
o-Xylene	110		104	70-130	6	25
cis-1,2-Dichloroethene	108		103	70-130	5	25
Dibromomethane	111		111	70-130	0	25
1,2,3-Trichloropropane	102		102	70-130	0	25
Styrene	108		104	70-130	4	25
Dichlorodifluoromethane	65		60	70-130	8	50
Acetone	120		102	70-130	16	50
Carbon disulfide	95		89	70-130	7	25
2-Butanone	100		98	70-130	2	50



Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0714605

Report Date: 10/12/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated	sample(s): 01 E	Batch: WG297742-1	WG297742-2		
4-Methyl-2-pentanone	95	98	70-130	3	50
2-Hexanone	91	87	70-130	4	50
Bromochloromethane	113	109	70-130	4	25
Tetrahydrofuran	98	91	70-130	7	25
2,2-Dichloropropane	120	111	70-130	8	50
1,2-Dibromoethane	104	99	70-130	5	25
1,3-Dichloropropane	98	95	70-130	3	25
1,1,1,2-Tetrachloroethane	111	106	70-130	5	25
Bromobenzene	103	102	70-130	1	25
n-Butylbenzene	100	95	70-130	5	25
sec-Butylbenzene	106	102	70-130	4	25
tert-Butylbenzene	106	104	70-130	2	25
o-Chlorotoluene	98	97	70-130	1	25
p-Chlorotoluene	98	94	70-130	4	25
1,2-Dibromo-3-chloropropane	83	89	70-130	7	50
Hexachlorobutadiene	79	74	70-130	7	25
Isopropylbenzene	118	113	70-130	4	25
p-Isopropyltoluene	108	104	70-130	4	25
Naphthalene	81	83	70-130	2	25
n-Propylbenzene	104	101	70-130	3	25
1,2,3-Trichlorobenzene	87	86	70-130	1	25



Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number:

L0714605

10/12/07

Report Date:

arameter	LCS %Recovery		LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
olatile Organics by MCP 8260B Associate	d sample(s): 01	Batch: \	WG297742-1	WG297742-2		
1,2,4-Trichlorobenzene	90		88	70-130	2	25
1,3,5-Trimethylbenzene	105		102	70-130	3	25
1,2,4-Trimethylbenzene	104		101	70-130	3	25
Ethyl ether	102		99	70-130	3	25
Isopropyl Ether	96		94	70-130	2	25
Ethyl-Tert-Butyl-Ether	105		98	70-130	7	25
Tertiary-Amyl Methyl Ether	104		100	70-130	4	25
1,4-Dioxane	139		137	70-130	1	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103	102	70-130
Toluene-d8	96	96	70-130
4-Bromofluorobenzene	96	97	70-130
Dibromofluoromethane	105	103	70-130



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Project Name: RAYTHEON WAYLAND Lab Number: L0714605

Project Number: 0061882 Report Date: 10/12/07

Sample Receipt and Container Information

Were project specific reporting limits specified?

Cooler Information

Cooler Custody Seal A Absent

Container Information

Container ID	Container Type	Cooler	рН	Temp	Pres	Seal	Analysis
L0714605-01A	Vial HCl preserved	Α	NA	3.9 C	Υ	Absent	MCP-8260-04
L0714605-01B	Vial HCl preserved	Α	NA	3.9 C	Υ	Absent	MCP-8260-04



Project Name:RAYTHEON WAYLANDLab Number:L0714605Project Number:0061882Report Date:10/12/07

GLOSSARY

Acronyms

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD- Laboratory Control Sample Duplicate: Refer to LCS.

 MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NI - Not Ignitable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

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

RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

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

- A Spectra identified as "Aldol Condensation Product".
- B The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- J Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

Standard Qualifiers

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

Report Format: Data Usability Report



Project Name:RAYTHEON WAYLANDLab Number:L0714605Project Number:0061882Report Date:10/12/07

REFERENCES

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

LIMITATION OF LIABILITIES

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

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



FORMINO:01-01 (rev. 30-JUL-07)	MA MCP or CT RCP?	IS VOLIB PROJECT 1	PLEASE ANSWER QUESTIONS ABOVE!	The second secon		Control (Section 1) and the co	Manager and the second	A Special Control of the Control of	Activity of the Control of the Contr	en anne de la companya de la company	Para Report	460 (1 mw- 244M-2007-6)	(Lab Use Only) Sample ID	ALPHA Lab ID	Other Project Specific Requirements/Comments/Detection Limits:	Email: 1605-wy, Pl. Ann County. who Date Due:	Tax: 6:7 264677	19 646 7800	Speyrow, MA Carile ALPHA Quote #	Address: 319 BoyLoTON ST, 6 M Crann Project M	Client: EAM Project #	tion	TEL: 508-898-9220 TEL: 508-822-9300 Project Name: FAX: 508-898-9193 FAX: 508-822-3288	MANSFIELD, MA	CHAIN OF CUSTODY
10/36/1400	shed By Date/Time (0/3/07/1/35)	Preservative 3	Container Type V								1	10/62/07 15:70 Gad MFM 2	ime Matrix Initial	Collection Sample Sampler's		(0/10 Time:	☐ RUSH (only confirmed if pre-approved!)	Turn-Around Time		Project Manager: A toward Picture?	Project #: 0061842 S	LAND, MA	でするないとうとう	Project Information	PAGE OF
10/2	Beceived By: Par												× / / / / / /	VC	ANAL SD21 STAN	VSIS 18 Zec 21)		☑Yes ☐ No Are MCP Analytical Methods Required?	MAMCPPRESUMPTIVE CERTAINTYCTF	mer awi	State /Fed Program Criteria	Regulatory Requirements/Report Limits		Report Information - Data Deliverables	Date Rec'd in Lab: $l0/2$
40	will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.	logged in and turnaround time clock	Please print clearly, legibly and		:			1 % 5 1 5					Sample Specific Comments	(Piease spacity below)	□ Done □ Not needed □ Lab to do Preservation □ Lab to do	SAMPLEHANDLING	Summer of the su	Are MCP Analytical Methods Required?	MPTIVE CERTAINTYCTREASONABLE CONFIDENCE PROTOCOLS				☐ Same as Client info PO#:	Billing Information	ALPHA Job #: LOHY60