

Environmental
Resources
Management

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

FILE COPY

24 July 2008
Reference: 0079387

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). These are additional samples that are associated with the May 2008 sampling round which you had received a notification and results dated 12 June 2008. These results are submitted pursuant to 310 CMR 40.1403(10) of the Massachusetts Contingency Plan (MCP).

ERM collected groundwater samples from one well on the Site within the boundaries of your property on 25 June 2008. The sample was submitted for laboratory analysis of 1,4-dioxane. Sample analysis was conducted by Alpha Woods Hole Laboratories of Westborough, Massachusetts. This analytical data will be provided to the Massachusetts Department of Environmental Protection in the next required MCP submittal.

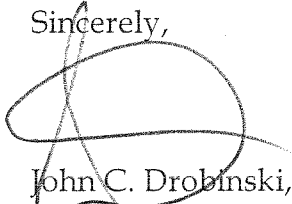
Raytheon has implemented the Public Involvement Process in accordance with 310 CMR 40.1405. Documents pertaining to the Site can be found at the Board of Health, the Wayland Public Library Public Involvement Plan files, or at www.ermne.com (username = raytheon, password = wayland).

Mr. Schelmerdeine
Reference: 0079387
24 July 2008
Page 2

Environmental
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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,



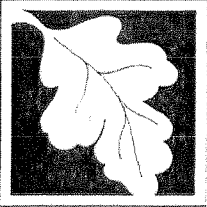
John C. Drobinski, P.G., LSP
Principal-in-Charge



Jason D. Flattery
Project Manager

enclosures: BWSC-123 - Notice of Environmental Sampling

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

3 22408

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 430 Boston Post Road
City/Town: Wayland Zip Code: 01778

B. This notice is being provided to the following party:

1. Name: Wayland Meadows Limited Partnership
2. Street Address: 145 Rosemary Street
City/Town: Needham Zip Code: 02494

C. This notice is being given to inform its recipient (the party listed in Section B):

- 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.
- 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.
- 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 430 Boston Post Road
City/Town: Wayland Zip Code: 01778

2. MCP phase of work during which the sampling will be/has been conducted:

- | | |
|---|---|
| <input type="checkbox"/> Immediate Response Action | <input type="checkbox"/> Phase III Feasibility Evaluation |
| <input type="checkbox"/> Release Abatement Measure | <input type="checkbox"/> Phase IV Remedy Implementation Plan |
| <input type="checkbox"/> Utility-related Abatement Measure | <input checked="" type="checkbox"/> Phase V/Remedy Operation Status |
| <input type="checkbox"/> Phase I Initial Site Investigation | <input type="checkbox"/> Post-Class C Operation, Maintenance and Monitoring |
| <input type="checkbox"/> Phase II Comprehensive Site Assessment | <input type="checkbox"/> Other _____
(specify) |

3. Description of property where sampling will be/has been conducted:

- residential commercial industrial school/playground Other _____
(specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Collection of groundwater samples from existing monitoring wells.

E. Contact information related to the party providing this notice:

Contact Name: Louis J. Burkhardt
Street Address: 880 Technology Park Drive, MS 2-2124-01
City/Town: Billerica Zip Code: 01821
Telephone: (978) 436-8238 Email: louis_j_burkhardt@raytheon.com

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:	L0809876
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Project Name:	RAYTHEON
Project Number:	0079387
Report Date:	07/15/08

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

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



Project Name: RAYTHEON
Project Number: 0079387

Lab Number: L0809876
Report Date: 07/15/08

Alpha Sample ID

L0809876-01

Client ID

MW-264M-20080625-01

Sample Location

WAYLAND, MA

Project Name: RAYTHEON

Lab Number: L0809876

Project Number: 0079387

Report Date: 07/15/08

MADEP MCP Response Action Analytical Report Certification

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

An affirmative response to questions A, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical 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?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

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



Project Name: RAYTHEON
Project Number: 0079387

Lab Number: L0809876
Report Date: 07/15/08

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

Non-MCP Related Narratives

1,4-Dioxane

The analysis of 1,4-Dioxane by method 8270-SIM isotope dilution was performed at our Mansfield facility. The results are provided within this report and a copy of the laboratory report is included as an addendum.

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

Date: 07/15/08

ORGANICS

SEMIVOLATILES

Project Name: RAYTHEON**Lab Number:** L0809876**Project Number:** 0079387**Report Date:** 07/15/08**SAMPLE RESULTS**

Lab ID: L0809876-01
Client ID: MW-264M-20080625-01
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 1,8270
Analytical Date: 07/08/08 13:18
Analyst: TW

Date Collected: 06/25/08 12:05
Date Received: 06/27/08
Field Prep: Not Specified
Extraction Method: 3510C
Extraction Date: 07/02/08 00:00

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
-----------	--------	-----------	-------	-----	-----------------

1,4-Dioxane by 8270					
---------------------	--	--	--	--	--

1,4-Dioxane	ND		ng/l	500	1
-------------	----	--	------	-----	---

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Project Name: RAYTHEON

Lab Number: L0809876

Project Number: 0079387

Report Date: 07/15/08

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270
 Analytical Date: 07/08/08 03:31
 Analyst: TW

Extraction Method: 3510C
 Extraction Date: 07/02/08 00:00

Parameter	Result	Qualifier	Units	RDL
1,4-Dioxane by 8270 for sample(s): 01 Batch: WG329190-1				
1,4-Dioxane	ND		ng/l	500

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	40		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0809876

Project Number: 0079387

Report Date: 07/15/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
1,4-Dioxane by 8270 Associated sample(s): 01 Batch: WG329190-2 WG329190-3					
1,4-Dioxane	92	94	40-140	2	30

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	43		34		15-110

Project Name: RAYTHEON

Lab Number: L0809876

Project Number: 0079387

Report Date: 07/15/08

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
D	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0809876-01A	Amber 1000ml unpreserved	A	7	2.9C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809876-01B	Amber 1000ml unpreserved	A	7	2.9C	Y	Absent	SUB-MAN-1,4DIOXANE

Project Name: RAYTHEON
Project Number: 0079387

Lab Number: L0809876
Report Date: 07/15/08

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
Project Number: 0079387

Lab Number: L0809876
Report Date: 07/15/08

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

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.





WESTBORO, MA
TEL: 508-896-9220
FAX: 508-896-9193

RAYNHAM, MA
TEL: 508-822-8300
FAX: 508-822-3288

CHAIN OF CUSTODY

PAGE 1 OF 1

Revised Col Rec'd 7/1/08

10809876

Client: **EDM**

Address: **399 BOYSDEN ST**

6TH FLOOR - BOSTON, MA 02116

Phone: **617-646-7800**

Fax: **617-267-6447**

Email: **JASON.FURNEY @ EDM.COM**

Other Project Specific Requirements/Comments/Detection Limits:

Project Name: **DWYTRGON**

Project Location: **WAYLAND, MA**

Project #: **0019387**

Project Manager: **JASON FURNEY**

ALPHA Quote #:

Standard RUSH (only confirmed if pre-approved)

Date Due: Time:

FAX EMAIL

Add'l Deliverables

Same as Client Info

PO #:

State/Fed Program

MA RCP GW-1

Criteria

Yes No Are MCP Analytical Methods Required?
 Yes No Are CT RCP (Reasonable Confidence Protocols) Required?

SAMPLE HANDLING

- Filtration
- Done
- Not needed
- Lab to do
- Preservation
- Lab to do

(Please specify below)

Sample Specific Comments

Alpha Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
9876	MW-264M-2080625-01	6/25/08	12:05	GW	MS 2

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Requested By:

Date/Time

Received By:

Date/Time

Container Type	A
Preservative	A



ANALYTICAL REPORT

Prepared for:

**Alpha Analytical - Westborough
8 Walkup Drive
Westborough, MA 01581**

Project:

ETR: 0806187

Report Date: July 15, 2008

Certifications and Accreditations

Massachusetts M-MA030

Connecticut PH-0141

New Hampshire 2206

Rhode Island LAO00289

New Jersey MA015

Maine MA0030

New York 11627

Louisiana 03090

Florida E87814

Pennsylvania 68-02089

Army Corps of Engineers

Department of the Navy

This report shall not be reproduced except in full, without written approval from the laboratory.



320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Sample ID Cross ReferenceClient: **Alpha Analytical - Westborough**

Project:

Lab Code: **MA00030**ETR: **0806187****Lab Sample ID****Client Sample ID**0806187-01MW-264M-20080625-01

CASE NARRATIVE

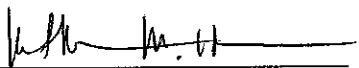
Alpha Analytical

ETR: 0806187

Project: ERM Raytheon, Wayland, MA

All analyses were performed according to Alpha Analytical quality assurance program and documented Standard Operating Procedures (SOPs). The analytical results contained in this report were performed within holding time, and with appropriate quality control measures, except where noted. All soil/sediment results are reported on a dry weight basis unless otherwise noted. A summary of all state and federal accreditations is provided within this report. Blank correction of results is not performed in the laboratory for any parameter. Alpha Analytical certifies that the test results within meet all of the requirements of NELAC, for all NELAC accredited parameters.

The enclosed results of analyses are representative of the samples as received by the laboratory. Alpha Analytical makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Alpha Analytical. To the best of my knowledge, the information contained in this report is accurate and complete. For any questions regarding this report, please contact the signatory below at 508-822-9300.

Approved by:  Title: Technical Representative Date: 7/15/08
Kathleen O'Brien

i

O:\Report\NARRTEMP\2008\Alpha\0806187.doc

Alpha Analytical, 320 Forbes Blvd., Mansfield, MA 02048, 508-822-9300

1,4-Dioxane
By
8270



Client: **Alpha Analytical - Westborough**
 Project:
 Client ID: **MW-264M-20080625-01**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0806187**
 Lab ID: **0806187-01**
 Associated Blank: **SW070108B02**
 Concentration Units: **ng/L**

Date Collected	Date Received	Date Extracted	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
06/25/08	06/30/08	07/02/08	07/08/08	1000	10	1	ALM

Parameter	Result
1,4-Dioxane	360 J

Surrogate	% Recovery	Acceptance Range (%)
1,4-Dioxane-d8	30	15-110

N/A - Not Applicable
 J - Estimated value, below quantitation limit.

Blank Semi-Volatile Organics by 8270



Client: **Alpha Analytical - Westborough**
 Project:
 Client ID: **Blank**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0806187**
 Lab ID: **SW070108B02**
 Associated Blank: **N/A**
 Concentration Units: **ng/L**

Date Collected	Date Received	Date Extracted	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	07/02/08	07/08/08	1000	10	1	ALM

Parameter	Result
1,4-Dioxane	500 U

Surrogate	% Recovery	Acceptance Range (%)
1,4-Dioxane-d8	40	15-110

N/A - Not Applicable
 U - The analyte was analyzed for but not detected at the sample specific level reported.

Laboratory Control Summary Semi-Volatile Organics by 8270



Client: **Alpha Analytical - Westborough**
 Project:
 Client ID: **Laboratory Control Sample**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0806187**
 Lab ID: **See Below**
 Associated Blank: **SW070108B02**
 Concentration Units: **ng/L**

Date Collected	Date Received	Date Extracted	Analyst
N/A	N/A	07/02/08	ALM

Lab ID: SW070108B02 SW070108LCS01 SW070108LCSD01

Parameter	Blank		LCS		LCSD		% RPD	RPD % Recovery	
	Conc.	U	Conc.	% Recovery	Conc.	% Recovery		Limit	Limits
1,4-Dioxane	500	U	4610	92	4680	94	2	30	40-140

Surrogate	% Recovery		Acceptance Range (%)
1,4-Dioxane-d8	43	34	15-110

N/A - Not Applicable

U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

07/10/08 08:01

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Chain of Custody Records



WESTBORO, MA
TEL: 508-866-9220
FAX: 508-866-9183

RAYNHAM, MA
TEL: 508-822-4300
FAX: 508-822-3238

CHAIN OF CUSTODY

Page 1 of 1

Revised for Reid 7/10/08

15809876

Project Name: **RAYTHEON**

Project Location: **WAYLAND, MA**

Project #: **0094387**

Project Manager: **JASON FUMERY**

ALPHA Quote #:

Standard

Date Due:

Other Project Specific Requirements/Comments/Detection Limits:

FAX EMAIL

VADER Add'l Deliverables

State/Fed Program: **MA MCP GW-1**

Criteria:

Yes No Are MCP Analytical Methods Required?
 Yes No Are CT RCP (Reasonable Confidence Protocols) Required?

- SAMPLE HANDLING**
- Filtration
 - Done
 - Not needed
 - Lab to do
 - Lab to do
 - Preservation
 - Lab to do
- (Please specify volume)

Sample ID	Collection		Sample Matrix	Sample Inlets	MS	2
	Date	Time				
MW-264M-2080625-01	6/25/08	12:05	GW	MS	2	

PLEASE ANSWER QUESTIONS ABOVE

IS YOUR PROJECT
MA MCP or CT RCP?

Relinquished By: *[Signature]*

Date/Time: **6/27/08 13:16**

Received By: *[Signature]*

Date/Time: **6/27-13:10**

FORM NO: 01-01 (Rev. 10-OCT-06)

CHAIN OF CUSTODY

PAGE 1 OF 1



Westborough, MA TEL: 508-898-9220
 Raynham, MA TEL: 508-422-9300
 Bedford, NH TEL: 603-333-8247
 FAX: 508-898-9193 FAX: 508-422-3288 FAX: 603-333-2241

Client Information

Client: Alpha Analytical Labs, Inc.
 Address: 8 Walkup Dr.
 Westboro, Ma 01581

Project Information

Project Name: Raytheon
 Project Location: MA
 Project #: _____
 Project Manager: Matt Beaupre
 ALPHA Quote #: _____

Turnaround Time

Phone: _____
 Fax: _____
 Email: _____
 Standard Rush (ONLY IF PRE-APPROVED)
 Due Date: 07/14/08 Time: _____

Other Project Specific Requirements/Comments/Detection Limits:

Revised coc

ALPHA Lab ID (Lab Use Only)

Sample ID

Collection Date Time

Sample Matrix

Sampler's Initials

	L0809876-01	06/25/08	GW	

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP OR CT RCP?

FORM NO: 14-91 Internal (Rev. 02-04-03)

Date Rec'd in Lab

ALPHA Job #:

Report Information Data Deliverables

FAX EMAIL
 ADEX Add'l Deliverables

Billing Information

Same as Client info

Regulatory Requirements/Report Limits

State/Fed Program

Criteria

MCP PRESUMPTIVE CERTAINTY/CT REASONABLE CONFIDENCE PROTOCOLS

MA Yes No No
 Are MCP Analytical Methods Required?
 Yes No
 Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS

1,4 Dioxane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample Specific Comments

Was 9566-01

SAMPLE HANDLING
 Filtration Done Not Needed
 Preservation Lab to do Lab to do (Please specify below)

Relinquished By: _____
 Container Type: _____
 Preservative: _____

Date/Time: _____ Received By: _____ Date/Time: _____

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.

Sample Receipt Checklist

Client: <u>ALPHA</u>	Receipt Date: <u>6/30/08</u>
Project: _____	Log-in Date: _____
ETR #: <u>0806187</u>	Inspection by: <u>w</u> Login by: <u>m</u>

ALL SECTIONS BELOW MUST BE COMPLETED

Comments / Notes

Were samples shipped? Yes, FedEx / UPS / Other: _____ <u>No</u> , Alpha Analytical Courier pick-up / Hand delivered	Sample storage refrigerator #: <u>03</u>
Is bill of lading retained? Yes, Tracking #: _____ No, Unavailable / <u>NA</u>	Sample storage freezer #: _____
Number of coolers received for this project delivery: <u>3 w</u>	Cooler 2: <u>4°/4°</u> Cooler 3: <u>4°/4°</u>
Indicate cooler temperature upon opening (if multiple coolers, record <u>all</u> temps): Note: If <u>all</u> coolers are 2-6°C, use one checklist, if NOT, use separate checklists and note <u>all</u> samples received <u>above</u> 6°C.	Cooler 4: <u>4°/4°</u> Cooler 5: _____ Cooler 6: _____ Cooler 7: _____
Cooler 1: Temperature(s) taken from: <u>4°</u> IR Gun, (Circle one) SN 460647143 or 94031 <u>4°</u> Temp. Blank, / NA	More: _____
Were samples received on ice? <u>Yes</u> / No	
Chain-of-Custody present? <u>Yes</u> / No Complete? <u>Yes</u> / No	
Custody seals present on Cooler? Yes / <u>No</u> on Bottles? Yes / <u>No</u> Intact? Yes / No / <u>NA</u>	
Note: Affix custody seals to back of this page.	
Were sample containers intact? <u>Yes</u> / No If No, list samples: →	
Did VOA/VPH waters contain headspace (>5mm)? Yes / No / <u>NA</u> If Yes, list samples: →	
Were 5035 VOA soils, or VPH soils, covered with MeOH? Yes / No / <u>NA</u> If No, list samples: →	
Was a sufficient amount of sample received for each test indicated on the COC? <u>Yes</u> / No If No, list samples: →	
If chemical preservation is appropriate - Were samples field preserved? Yes / No / <u>NA</u> <input type="checkbox"/> C=HCl <input type="checkbox"/> M=MeOH <input type="checkbox"/> S=H ₂ SO ₄ <input type="checkbox"/> H=NaOH <input type="checkbox"/> N=HNO ₃ <input type="checkbox"/> Other: _____ <input type="checkbox"/> U= Unknown	Chemical preservation OK for ALL samples? Yes / No / <u>NA</u> If No, list samples below:
Preservation (pH) verified at lab for EVERY bottle? (Not: VOA / VPH / Sulfide) YES: <2 or >12 (CN) or NO <u>NA</u> If No, why?:	
Were samples received within hold time? <u>Yes</u> / No If No, list samples: →	
Discrepancy between samples rec'd & COC? Yes / <u>No</u> If Yes, list samples: →	
Was the Project Manager notified of any other problems? Yes / No / NA	
Project Manager Acknowledgement: _____ Date: _____	Please use back for any additional notes!



Sample Delivery Group Form

Laboratory Job number: L0809566

Client Account: ERM-New England

Received: 06/27/2008 17:10

Samples Delivered by: CLIENT

Bill Of Laden: N/A

Trackingnum:

Coc Present: Present

Container Status: Intact

Sample IDs:

All Containers Accounted For? No

Missing: MW-555S-20080627-01, MW-555M-20080627-01, MW-555D-20080627-01.

Also missing: Amber for Dup-003-20080625-01

Were Extra Samples Received? Yes

Rec'd MW-556S-20080627-01, MW-556M-20080627-01, MW-556D-20080627-01 with date and time match above samples

Do Sample Labels and COC agree? Yes

Are Samples in Appropriate Containers? Yes

Are Samples Received within Holding time? Yes

pH of Samples upon Receipt

Are samples Properly Preserved? Yes

Initial pH: preserved in house with

Final pH:

Other Issues:

Chlorine Check: N/A

Are VOA/PH Vials Present? No

Aqueous: Do Vials Contain Head Space? N/A

Soils: Is MeOH covering the Soil? N/A

Reagent H2O Preserved vials Frozen on: N/A

Frozen by Client: N/A

Cooler

Seal

Ice Present

Blue Ice Present

Temperature

Frozen upon Receipt

Delivered Direct from Site

C

Absent

Yes

No

2c - IR Gun

No

No



Sample Delivery Group Form

Cooler	Seal	Ice Present	Blue Ice Present	Temperature	Frozen upon Receipt	Delivered Direct from Site
A	Absent	Yes	No	2.9 c - Temp. Blank	No	No
B	Absent	Yes	No	2.5 c - Temp. Blank	No	No
D	Absent	Yes	No	2.6 c - Temp. Blank	No	No

Certificate/Approval Program Summary



Method numbers assume the most recent EPA revisions. For a complete listing of analytes for the referenced methods please contact your Alpha Woods Hole Lab Project Manager or the Quality Assurance Manager.

Connecticut Department of Public Health Certificate/Lab ID : PH-0141 - *Wastewater* (General Chemistry: EPA 120.1, 150.1, 160.1, 160.2, 180.1, 300.0, 310.1, 335.2; Metals: 200.8, 245.1; Organics: 608-PCB, ETPH) *Solid Waste/Soil* (General Chemistry: 1010, 9010/9014, 9045, 9060; Metals: 6020, 7470, 7471; Organics: 8081, 8082, 8260, 8270, ETPH).

Florida Department of Health Certificate/Lab ID : E87814 - Primary NELAP Accreditation Authority for Air & Emissions. Secondary NELAP Accreditation for Wastewater and Solid & Hazardous Waste. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 335.2, SM2320B, SM2340B, SM2540G, SM4500NH3; Metals: 245.1; Organics: 608-PCB). *Solid and Hazardous Waste* (General Chemistry: 9010/9014, 9045, 9050, 9056, 9065, Reactivity 7.3; Metals: 6020, 7470, 7471; Organics: 8081, 8082, 8260, 8270). *Air & Emissions* (Organics: EPA TO-15).

Louisiana Department of Environmental Quality Certificate/Lab ID : 03090 - Primary NELAP Accrediting Authority for Wastewater, Solid & Hazardous Waste. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 376.2, 9010/9014, 9056, SM2540G; Metals: 200.8, 245.1, 6020; Organics: 608-PCB, 8015-DRO, 8081, 8082, 8260, 8270). *Solid and Hazardous Waste* (General Chemistry: 1010, 1311, 9010/9014, 9040, 9045, 9056, 9060, Reactivity 7.3; Metals: 6020, 7196, 7470, 7471; Organics: 8015-DRO, 8081, 8082, 8260, 8270).

Maine Department of Human Services Certificate/Lab ID : MA0030 - *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 160.1/SM2540C, 160.2/SM2540D, 300.0, 310.1/SM2320B, 335.2; Metals: EPA 245.1; Organics: 608-PCB).

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA030 - *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 300.0, 310.1/SM2320B, 335.2; Metals: EPA 245.1; Organics: EPA 608-PCB).

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206 - Secondary NELAP Accreditation. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 376.2, SM2540G; Metals: 200.8, 245.4; Organics: 608-PCB).

New Jersey Department of Environmental Protection Certificate/Lab ID : MA015 - Secondary NELAP Accreditation. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 376.2, 9010/9014, 9056, SM2540G; Metals: 200.8, 245.1 6020; Organics: 608-PCB, 8081, 8082, 8260, 8270). *Solid & Hazardous Waste* (General Chemistry: EPA 1010, 1311, 9010/9014, 9040, 9045, 9056, 9060; Metals: 6020, 7196, 7470, 7471; Organics: 8015-DRO, 8081, 8082, 8260, 8270). *Air & Emissions* (Organics: EPA TO-15).

New York Department of Health Certificate/Lab ID : 11627 - Secondary NELAP Accreditation. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 300.0, 310.1/SM2320B, 376.2; Metals: 200.8, 245.1; Organics: 608-PCB). *Solid and Hazardous Waste* (General Chemistry: EPA 1010, 1311; Metals: 200.8, 6020, 7041; Organics: 8081, 8082, 8260, 8270). *Air & Emissions* (Organics: EPA TO-15).

Rhode Island Department of Health Certificate/Lab ID : LAO00289 - Chemistry: *Organic and Inorganic in Non-Portable Water, Wastewater/Sewage and Soil* (Refer to LADEQ and MADEP certificates for method numbers.)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-02089 - Registered laboratory

U.S. Army Corps of Engineers

Department of the Navy

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288



ANALYTICAL REPORT

Lab Number:	L0809567
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Project Name:	RAYTHEON
Project Number:	0079387
Report Date:	07/09/08

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

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



Project Name: RAYTHEON
Project Number: 0079387

Lab Number: L0809567
Report Date: 07/09/08

Alpha Sample ID	Client ID	Sample Location
L0809567-01	TB-01-20080627	WAYLAND, MA
L0809567-02	MW-267S-20080625-01	WAYLAND, MA
L0809567-03	DUP-003-20080625-01	WAYLAND, MA

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

MADEP MCP Response Action Analytical Report Certification

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

An affirmative response to questions A, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A
A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	NO
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

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



Project Name: RAYTHEON
Project Number: 0079387

Lab Number: L0809567
Report Date: 07/09/08

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

Report Submission

This report replaces the report issued June 3, 2008. The results for samples L0809567-04, -05, and -06 were removed and reported under Alpha Job L0809866.

The results of the 1,4-Dioxane analysis will be issued under separate cover.

MCP Related Narratives:

Volatile Organics

L0809567-02 and -03 have elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the samples.

In reference to question E:

Project Name: RAYTHEON
Project Number: 0079387

Lab Number: L0809567
Report Date: 07/09/08

Case Narrative (continued)

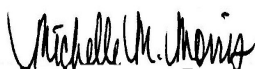
The WG327572-1/-2 LCS/LCSD recoveries associated with L0809567-01 and -02 are below the acceptance criteria for Bromomethane; however, it has been identified as a "difficult" analyte. The results of the associated samples are reported; however, all results are considered to have a potentially low bias for this compound.

The WG327572-2 LCSD recovery associated with L0809567-01 and -02 is above the acceptance criteria for Dichlorodifluoromethane; however, it has been identified as a "difficult" analyte. The results of the associated samples are reported; however, all positive detects are considered to have a potentially high bias for this compound.

The WG327797-1/-2 LCS/LCSD recoveries associated with L0809567-03 are below the acceptance criteria for Acetone; however, it has been identified as a "difficult" analyte. The results of the associated samples are reported; however, all results are considered to have a potentially low bias for this compound.

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

Date: 07/09/08

ORGANICS

VOLATILES

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

SAMPLE RESULTS

Lab ID: L0809567-01
 Client ID: TB-01-20080627
 Sample Location: WAYLAND, MA
 Matrix: Water
 Analytical Method: 60,8260B
 Analytical Date: 06/30/08 18:23
 Analyst: GK

Date Collected: 06/22/08 17:00
 Date Received: 06/27/08
 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
Trichlorofluoromethane	ND		ug/l	2.5	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
1,1-Dichloropropene	ND		ug/l	2.5	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Toluene	ND		ug/l	0.75	1
Ethylbenzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Bromomethane	ND		ug/l	1.0	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

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

SAMPLE RESULTS

Lab ID: L0809567-01

Date Collected: 06/22/08 17:00

Client ID: TB-01-20080627

Date Received: 06/27/08

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
p/m-Xylene	ND		ug/l	1.0	1
o-Xylene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dibromomethane	ND		ug/l	5.0	1
1,2,3-Trichloropropane	ND		ug/l	5.0	1
Styrene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
Acetone	ND		ug/l	5.0	1
Carbon disulfide	ND		ug/l	5.0	1
2-Butanone	ND		ug/l	5.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1
2-Hexanone	ND		ug/l	5.0	1
Bromochloromethane	ND		ug/l	2.5	1
Tetrahydrofuran	ND		ug/l	10	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
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
Bromobenzene	ND		ug/l	2.5	1
n-Butylbenzene	ND		ug/l	0.50	1
sec-Butylbenzene	ND		ug/l	0.50	1
tert-Butylbenzene	ND		ug/l	2.5	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
Isopropylbenzene	ND		ug/l	0.50	1
p-Isopropyltoluene	ND		ug/l	0.50	1
Naphthalene	ND		ug/l	2.5	1
n-Propylbenzene	ND		ug/l	0.50	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	1
Ethyl ether	ND		ug/l	2.5	1

Project Name: RAYTHEON**Lab Number:** L0809567**Project Number:** 0079387**Report Date:** 07/09/08**SAMPLE RESULTS**

Lab ID: L0809567-01
 Client ID: TB-01-20080627
 Sample Location: WAYLAND, MA

Date Collected: 06/22/08 17:00
 Date Received: 06/27/08
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Isopropyl Ether	ND		ug/l	2.0	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	1
1,4-Dioxane	ND		ug/l	250	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	98		70-130

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

SAMPLE RESULTS

Lab ID: L0809567-02
 Client ID: MW-267S-20080625-01
 Sample Location: WAYLAND, MA
 Matrix: Water
 Analytical Method: 60,8260B
 Analytical Date: 06/30/08 18:57
 Analyst: GK

Date Collected: 06/27/08 15:45
 Date Received: 06/27/08
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	50	10
1,1-Dichloroethane	ND		ug/l	7.5	10
Chloroform	ND		ug/l	7.5	10
Carbon tetrachloride	ND		ug/l	5.0	10
1,2-Dichloropropane	ND		ug/l	18	10
Dibromochloromethane	ND		ug/l	5.0	10
1,1,2-Trichloroethane	ND		ug/l	7.5	10
Tetrachloroethene	17		ug/l	5.0	10
Chlorobenzene	ND		ug/l	5.0	10
Trichlorofluoromethane	ND		ug/l	25	10
1,2-Dichloroethane	ND		ug/l	5.0	10
1,1,1-Trichloroethane	ND		ug/l	5.0	10
Bromodichloromethane	ND		ug/l	5.0	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	10
1,1-Dichloropropene	ND		ug/l	25	10
Bromoform	ND		ug/l	20	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	10
Benzene	ND		ug/l	5.0	10
Toluene	ND		ug/l	7.5	10
Ethylbenzene	ND		ug/l	5.0	10
Chloromethane	ND		ug/l	25	10
Bromomethane	ND		ug/l	10	10
Vinyl chloride	ND		ug/l	10	10
Chloroethane	ND		ug/l	10	10
1,1-Dichloroethene	ND		ug/l	5.0	10
trans-1,2-Dichloroethene	ND		ug/l	7.5	10
Trichloroethene	610		ug/l	5.0	10
1,2-Dichlorobenzene	ND		ug/l	25	10
1,3-Dichlorobenzene	ND		ug/l	25	10

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

SAMPLE RESULTS

Lab ID: L0809567-02
 Client ID: MW-267S-20080625-01
 Sample Location: WAYLAND, MA

Date Collected: 06/27/08 15:45
 Date Received: 06/27/08
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,4-Dichlorobenzene	ND		ug/l	25	10
Methyl tert butyl ether	ND		ug/l	10	10
p/m-Xylene	ND		ug/l	10	10
o-Xylene	ND		ug/l	10	10
cis-1,2-Dichloroethene	89		ug/l	5.0	10
Dibromomethane	ND		ug/l	50	10
1,2,3-Trichloropropane	ND		ug/l	50	10
Styrene	ND		ug/l	10	10
Dichlorodifluoromethane	ND		ug/l	50	10
Acetone	ND		ug/l	50	10
Carbon disulfide	ND		ug/l	50	10
2-Butanone	ND		ug/l	50	10
4-Methyl-2-pentanone	ND		ug/l	50	10
2-Hexanone	ND		ug/l	50	10
Bromochloromethane	ND		ug/l	25	10
Tetrahydrofuran	ND		ug/l	100	10
2,2-Dichloropropane	ND		ug/l	25	10
1,2-Dibromoethane	ND		ug/l	20	10
1,3-Dichloropropane	ND		ug/l	25	10
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	10
Bromobenzene	ND		ug/l	25	10
n-Butylbenzene	ND		ug/l	5.0	10
sec-Butylbenzene	ND		ug/l	5.0	10
tert-Butylbenzene	ND		ug/l	25	10
o-Chlorotoluene	ND		ug/l	25	10
p-Chlorotoluene	ND		ug/l	25	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	10
Hexachlorobutadiene	ND		ug/l	6.0	10
Isopropylbenzene	ND		ug/l	5.0	10
p-Isopropyltoluene	ND		ug/l	5.0	10
Naphthalene	ND		ug/l	25	10
n-Propylbenzene	ND		ug/l	5.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	10
1,2,4-Trichlorobenzene	ND		ug/l	25	10
1,3,5-Trimethylbenzene	ND		ug/l	25	10
1,2,4-Trimethylbenzene	ND		ug/l	25	10
Ethyl ether	ND		ug/l	25	10

Project Name: RAYTHEON**Lab Number:** L0809567**Project Number:** 0079387**Report Date:** 07/09/08**SAMPLE RESULTS**

Lab ID: L0809567-02
 Client ID: MW-267S-20080625-01
 Sample Location: WAYLAND, MA

Date Collected: 06/27/08 15:45
 Date Received: 06/27/08
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Isopropyl Ether	ND		ug/l	20	10
Ethyl-Tert-Butyl-Ether	ND		ug/l	20	10
Tertiary-Amyl Methyl Ether	ND		ug/l	20	10
1,4-Dioxane	ND		ug/l	2500	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	98		70-130

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

SAMPLE RESULTS

Lab ID: L0809567-03
 Client ID: DUP-003-20080625-01
 Sample Location: WAYLAND, MA
 Matrix: Water
 Analytical Method: 60,8260B
 Analytical Date: 07/01/08 14:10
 Analyst: BS

Date Collected: 06/27/08 00:00
 Date Received: 06/27/08
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Methylene chloride	ND		ug/l	50	10
1,1-Dichloroethane	ND		ug/l	7.5	10
Chloroform	ND		ug/l	7.5	10
Carbon tetrachloride	ND		ug/l	5.0	10
1,2-Dichloropropane	ND		ug/l	18	10
Dibromochloromethane	ND		ug/l	5.0	10
1,1,2-Trichloroethane	ND		ug/l	7.5	10
Tetrachloroethene	17		ug/l	5.0	10
Chlorobenzene	ND		ug/l	5.0	10
Trichlorofluoromethane	ND		ug/l	25	10
1,2-Dichloroethane	ND		ug/l	5.0	10
1,1,1-Trichloroethane	ND		ug/l	5.0	10
Bromodichloromethane	ND		ug/l	5.0	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	10
1,1-Dichloropropene	ND		ug/l	25	10
Bromoform	ND		ug/l	20	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	10
Benzene	ND		ug/l	5.0	10
Toluene	ND		ug/l	7.5	10
Ethylbenzene	ND		ug/l	5.0	10
Chloromethane	ND		ug/l	25	10
Bromomethane	ND		ug/l	10	10
Vinyl chloride	ND		ug/l	10	10
Chloroethane	ND		ug/l	10	10
1,1-Dichloroethene	ND		ug/l	5.0	10
trans-1,2-Dichloroethene	ND		ug/l	7.5	10
Trichloroethene	650		ug/l	5.0	10
1,2-Dichlorobenzene	ND		ug/l	25	10
1,3-Dichlorobenzene	ND		ug/l	25	10

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

SAMPLE RESULTS

Lab ID: L0809567-03
 Client ID: DUP-003-20080625-01
 Sample Location: WAYLAND, MA

Date Collected: 06/27/08 00:00
 Date Received: 06/27/08
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
1,4-Dichlorobenzene	ND		ug/l	25	10
Methyl tert butyl ether	ND		ug/l	10	10
p/m-Xylene	ND		ug/l	10	10
o-Xylene	ND		ug/l	10	10
cis-1,2-Dichloroethene	95		ug/l	5.0	10
Dibromomethane	ND		ug/l	50	10
1,2,3-Trichloropropane	ND		ug/l	50	10
Styrene	ND		ug/l	10	10
Dichlorodifluoromethane	ND		ug/l	50	10
Acetone	ND		ug/l	50	10
Carbon disulfide	ND		ug/l	50	10
2-Butanone	ND		ug/l	50	10
4-Methyl-2-pentanone	ND		ug/l	50	10
2-Hexanone	ND		ug/l	50	10
Bromochloromethane	ND		ug/l	25	10
Tetrahydrofuran	ND		ug/l	100	10
2,2-Dichloropropane	ND		ug/l	25	10
1,2-Dibromoethane	ND		ug/l	20	10
1,3-Dichloropropane	ND		ug/l	25	10
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	10
Bromobenzene	ND		ug/l	25	10
n-Butylbenzene	ND		ug/l	5.0	10
sec-Butylbenzene	ND		ug/l	5.0	10
tert-Butylbenzene	ND		ug/l	25	10
o-Chlorotoluene	ND		ug/l	25	10
p-Chlorotoluene	ND		ug/l	25	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	10
Hexachlorobutadiene	ND		ug/l	6.0	10
Isopropylbenzene	ND		ug/l	5.0	10
p-Isopropyltoluene	ND		ug/l	5.0	10
Naphthalene	ND		ug/l	25	10
n-Propylbenzene	ND		ug/l	5.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	10
1,2,4-Trichlorobenzene	ND		ug/l	25	10
1,3,5-Trimethylbenzene	ND		ug/l	25	10
1,2,4-Trimethylbenzene	ND		ug/l	25	10
Ethyl ether	ND		ug/l	25	10

Project Name: RAYTHEON**Lab Number:** L0809567**Project Number:** 0079387**Report Date:** 07/09/08**SAMPLE RESULTS**

Lab ID: L0809567-03
 Client ID: DUP-003-20080625-01
 Sample Location: WAYLAND, MA

Date Collected: 06/27/08 00:00
 Date Received: 06/27/08
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Isopropyl Ether	ND		ug/l	20	10
Ethyl-Tert-Butyl-Ether	ND		ug/l	20	10
Tertiary-Amyl Methyl Ether	ND		ug/l	20	10
1,4-Dioxane	ND		ug/l	2500	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	109		70-130

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
 Analytical Date: 06/30/08 11:07
 Analyst: GK

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-02 Batch: WG327572-3				

Parameter	Result	Qualifier	Units	RDL
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
 Analytical Date: 06/30/08 11:07
 Analyst: GK

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-02 Batch: WG327572-3				

Parameter	Result	Qualifier	Units	RDL
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 60,8260B
 Analytical Date: 06/30/08 11:07
 Analyst: GK

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-02 Batch: WG327572-3				

Parameter	Result	Qualifier	Units	RDL
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	10

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/l
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Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	101		70-130

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 07/01/08 10:52
Analyst: BS

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 03 Batch: WG327797-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

Method Blank Analysis
Batch Quality Control

Analytical Method: 60,8260B
Analytical Date: 07/01/08 10:52
Analyst: BS

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 03 Batch: WG327797-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 60,8260B
 Analytical Date: 07/01/08 10:52
 Analyst: BS

Parameter	Result	Qualifier	Units	RDL
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Volatile Organics by MCP 8260B for sample(s): 03 Batch: WG327797-3

1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
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1,2-Dichloroethane-d4	98		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	106		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG327572-1 WG327572-2					
Methylene chloride	83	85	70-130	2	25
1,1-Dichloroethane	88	88	70-130	0	25
Chloroform	88	89	70-130	1	25
Carbon tetrachloride	107	111	70-130	4	25
1,2-Dichloropropane	89	90	70-130	1	25
Dibromochloromethane	97	99	70-130	2	25
1,1,2-Trichloroethane	89	93	70-130	4	25
Tetrachloroethene	97	96	70-130	1	25
Chlorobenzene	95	94	70-130	1	25
Trichlorofluoromethane	88	93	70-130	6	25
1,2-Dichloroethane	84	88	70-130	5	25
1,1,1-Trichloroethane	91	95	70-130	4	25
Bromodichloromethane	90	94	70-130	4	25
trans-1,3-Dichloropropene	86	88	70-130	2	25
cis-1,3-Dichloropropene	92	96	70-130	4	25
1,1-Dichloropropene	86	88	70-130	2	25
Bromoform	103	106	70-130	3	50
1,1,2,2-Tetrachloroethane	96	100	70-130	4	25
Benzene	92	93	70-130	1	25
Toluene	94	93	70-130	1	25
Ethylbenzene	94	94	70-130	0	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG327572-1 WG327572-2					
Chloromethane	92	96	70-130	4	50
Bromomethane	68	65	70-130	5	50
Vinyl chloride	80	81	70-130	1	25
Chloroethane	77	80	70-130	4	25
1,1-Dichloroethene	80	83	70-130	4	25
trans-1,2-Dichloroethene	94	95	70-130	1	25
Trichloroethene	91	91	70-130	0	25
1,2-Dichlorobenzene	100	101	70-130	1	25
1,3-Dichlorobenzene	99	98	70-130	1	25
1,4-Dichlorobenzene	100	99	70-130	1	25
Methyl tert butyl ether	97	104	70-130	7	25
p/m-Xylene	98	96	70-130	2	25
o-Xylene	101	100	70-130	1	25
cis-1,2-Dichloroethene	95	94	70-130	1	25
Dibromomethane	87	93	70-130	7	25
1,2,3-Trichloropropane	100	103	70-130	3	25
Styrene	100	98	70-130	2	25
Dichlorodifluoromethane	129	131	70-130	2	50
Acetone	71	74	70-130	4	50
Carbon disulfide	72	74	70-130	3	25
2-Butanone	82	88	70-130	7	50

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG327572-1 WG327572-2					
4-Methyl-2-pentanone	89	93	70-130	4	50
2-Hexanone	81	85	70-130	5	50
Bromochloromethane	96	100	70-130	4	25
Tetrahydrofuran	78	94	70-130	19	25
2,2-Dichloropropane	118	121	70-130	3	50
1,2-Dibromoethane	97	98	70-130	1	25
1,3-Dichloropropane	86	91	70-130	6	25
1,1,1,2-Tetrachloroethane	102	102	70-130	0	25
Bromobenzene	99	98	70-130	1	25
n-Butylbenzene	93	97	70-130	4	25
sec-Butylbenzene	96	98	70-130	2	25
tert-Butylbenzene	96	98	70-130	2	25
o-Chlorotoluene	91	89	70-130	2	25
p-Chlorotoluene	92	92	70-130	0	25
1,2-Dibromo-3-chloropropane	97	95	70-130	2	50
Hexachlorobutadiene	100	106	70-130	6	25
Isopropylbenzene	114	114	70-130	0	25
p-Isopropyltoluene	100	102	70-130	2	25
Naphthalene	97	102	70-130	5	25
n-Propylbenzene	94	93	70-130	1	25
1,2,3-Trichlorobenzene	106	110	70-130	4	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG327572-1 WG327572-2					
1,2,4-Trichlorobenzene	100	103	70-130	3	25
1,3,5-Trimethylbenzene	94	94	70-130	0	25
1,2,4-Trimethylbenzene	94	93	70-130	1	25
Ethyl ether	80	83	70-130	4	25
Isopropyl Ether	89	92	70-130	3	25
Ethyl-Tert-Butyl-Ether	110	116	70-130	5	25
Tertiary-Amyl Methyl Ether	115	123	70-130	7	25
1,4-Dioxane	110	108	70-130	2	50
1,1,2-Trichloro-1,2,2-Trifluoroethane	88	88	70-130	0	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		85		70-130
Toluene-d8	100		98		70-130
4-Bromofluorobenzene	96		94		70-130
Dibromofluoromethane	97		98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 03 Batch: WG327797-1 WG327797-2					
Methylene chloride	105	105	70-130	0	25
1,1-Dichloroethane	100	98	70-130	2	25
Chloroform	100	98	70-130	2	25
Carbon tetrachloride	104	95	70-130	9	25
1,2-Dichloropropane	98	97	70-130	1	25
Dibromochloromethane	102	101	70-130	1	25
1,1,2-Trichloroethane	94	95	70-130	1	25
Tetrachloroethene	98	91	70-130	7	25
Chlorobenzene	98	97	70-130	1	25
Trichlorofluoromethane	110	103	70-130	7	25
1,2-Dichloroethane	95	95	70-130	0	25
1,1,1-Trichloroethane	101	93	70-130	8	25
Bromodichloromethane	102	99	70-130	3	25
trans-1,3-Dichloropropene	95	97	70-130	2	25
cis-1,3-Dichloropropene	96	96	70-130	0	25
1,1-Dichloropropene	95	88	70-130	8	25
Bromoform	107	109	70-130	2	50
1,1,2,2-Tetrachloroethane	99	103	70-130	4	25
Benzene	102	99	70-130	3	25
Toluene	100	99	70-130	1	25
Ethylbenzene	101	100	70-130	1	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON
Project Number: 0079387

Lab Number: L0809567
Report Date: 07/09/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 03 Batch: WG327797-1 WG327797-2					
Chloromethane	105	98	70-130	7	50
Bromomethane	110	114	70-130	4	50
Vinyl chloride	109	99	70-130	10	25
Chloroethane	121	115	70-130	5	25
1,1-Dichloroethene	109	100	70-130	9	25
trans-1,2-Dichloroethene	100	95	70-130	5	25
Trichloroethene	96	90	70-130	6	25
1,2-Dichlorobenzene	99	101	70-130	2	25
1,3-Dichlorobenzene	104	104	70-130	0	25
1,4-Dichlorobenzene	102	102	70-130	0	25
Methyl tert butyl ether	87	91	70-130	4	25
p/m-Xylene	106	103	70-130	3	25
o-Xylene	104	105	70-130	1	25
cis-1,2-Dichloroethene	101	98	70-130	3	25
Dibromomethane	96	97	70-130	1	25
1,2,3-Trichloropropane	96	102	70-130	6	25
Styrene	106	106	70-130	0	25
Dichlorodifluoromethane	122	114	70-130	7	50
Acetone	69	69	70-130	0	50
Carbon disulfide	88	80	70-130	10	25
2-Butanone	82	82	70-130	0	50

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 03 Batch: WG327797-1 WG327797-2					
4-Methyl-2-pentanone	87	85	70-130	2	50
2-Hexanone	75	76	70-130	1	50
Bromochloromethane	107	108	70-130	1	25
Tetrahydrofuran	93	84	70-130	10	25
2,2-Dichloropropane	104	98	70-130	6	50
1,2-Dibromoethane	93	96	70-130	3	25
1,3-Dichloropropane	95	95	70-130	0	25
1,1,1,2-Tetrachloroethane	102	103	70-130	1	25
Bromobenzene	99	102	70-130	3	25
n-Butylbenzene	104	100	70-130	4	25
sec-Butylbenzene	104	100	70-130	4	25
tert-Butylbenzene	101	101	70-130	0	25
o-Chlorotoluene	102	102	70-130	0	25
p-Chlorotoluene	103	104	70-130	1	25
1,2-Dibromo-3-chloropropane	92	95	70-130	3	50
Hexachlorobutadiene	103	102	70-130	1	25
Isopropylbenzene	117	113	70-130	3	25
p-Isopropyltoluene	108	105	70-130	3	25
Naphthalene	81	84	70-130	4	25
n-Propylbenzene	104	101	70-130	3	25
1,2,3-Trichlorobenzene	90	91	70-130	1	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON
Project Number: 0079387

Lab Number: L0809567
Report Date: 07/09/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 03 Batch: WG327797-1 WG327797-2					
1,2,4-Trichlorobenzene	90	92	70-130	2	25
1,3,5-Trimethylbenzene	101	100	70-130	1	25
1,2,4-Trimethylbenzene	102	101	70-130	1	25
Ethyl ether	98	98	70-130	0	25
Isopropyl Ether	90	90	70-130	0	25
Ethyl-Tert-Butyl-Ether	92	93	70-130	1	25
Tertiary-Amyl Methyl Ether	86	87	70-130	1	25
1,4-Dioxane	99	98	70-130	1	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		91		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	94		97		70-130
Dibromofluoromethane	102		99		70-130

Project Name: RAYTHEON

Lab Number: L0809567

Project Number: 0079387

Report Date: 07/09/08

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
D	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0809567-01A	Vial HCl preserved	A	N/A	2.9 c	Y	Absent	MCP-8260-04
L0809567-02A	Vial HCl preserved	A	N/A	2.9 c	Y	Absent	MCP-8260-04
L0809567-02B	Vial HCl preserved	A	N/A	2.9 c	Y	Absent	MCP-8260-04
L0809567-03A	Vial HCl preserved	A	N/A	2.9 c	Y	Absent	MCP-8260-04
L0809567-03B	Vial HCl preserved	A	N/A	2.9 c	Y	Absent	MCP-8260-04
L0809567-04A	Vial HCl preserved	A	N/A	2.9 c	Y	Absent	-
L0809567-05A	Vial HCl preserved	A	N/A	2.9 c	Y	Absent	-
L0809567-06A	Vial HCl preserved	A	N/A	2.9 c	Y	Absent	-

Project Name: RAYTHEON
Project Number: 0079387

Lab Number: L0809567
Report Date: 07/09/08

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.

Project Name: RAYTHEON
Project Number: 0079387

Lab Number: L0809567
Report Date: 07/09/08

REFERENCES

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

LIMITATION OF LIABILITIES

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

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





CHAIN OF CUSTODY

PAGE 2 OF 2

WESTBORO, MA
 TEL: 508-998-9220
 FAX: 508-998-9193

MANFIELD, MA
 TEL: 508-822-8300
 FAX: 508-822-3288

Client Information

Client: **EDM**

Address: **399 BOYKSTON ST**

6th Floor - Boston, MA 02116

Phone: **617-646-7800**

Fax: **617-267-6447**

Email: **JASON.FITNEY@EDM.COM**

Other Project Specific Requirements/Comments/Detection Limits:

Project Information

Project Name: **PHYTAPON**

Project Location: **WAYLAND, MA**

Project # **0079387**

Project Manager: **JASON FITNEY**

Alpha Order #:

Date Due:

Standard

RUSH (only confirmed if pre-approved)

Report Information - Data Deliverables

FAX EMAIL

ADEX Add'l Deliverables

State/Fed Program

Criteria

Billing Information

Same as Client Info

Proj #:

Alpha Lab #: **10809567**

Revised COC
 Rec'd 7/1/08

ALPHA LAB ID (Sub Line Only)	Sample ID	Collection Date	Time	Sample Matrix	Sampler's Initials	1,4-DIOXANE VOCs 8260	Sample Specific Comments
9567.1	TB-01 - 20080629-01	6/27/08	15:00	GW	MS	1	
	MW-267S-20080625-01-HS	6/25/08	15:45	GW	EW	2	
	MW-267S-20080625-01-HSD	6/25/08	15:45	GW	EW	2	

PLEASE ANSWER QUESTIONS ABOVE:

IS YOUR PROJECT MA MCP or CT RCP?

Container Type	A	V
Preservative	A	B

Relinquished By:

[Signature]

Date/Time

6/27/08 160

Received By:

[Signature]

Date/Time

6/27 1710



WESTBORO, MA
TEL: 508-898-9220
FAX: 508-998-9193

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

CHAIN OF CUSTODY

Page 1 of 2

Revised Coc rec'd 7/1/08

10809567

Project Name: **RAYTHEON**
 Project Location: **WAYLAND, MA**
 Project #: **0029383**
 Project Manager: **JASON FURBERY**
 ALPHA Quote #:

Client: **ERM**
 Address: **399 BOSTON ST**
6TH FLOOR - BOSTON, MA 02116
 Phone: **617-646-7800**
 Fax: **617-267-6447**
 Email: **JASON.FURBERY@ERM.COM**

Standard RUSH (only confirmed if pre-approved)
 Date Due: _____ Time: _____
 Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab # (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Container Type	Preservative	State/Fed Program	Criteria	Sample Specific Comments
		Date	Time							
	MW-265M-20080625-01	6/25/08	10:50	GW	MS	A	A	MA MCP	GW-1	
	MW-266Ma-20080625-01	6/25/08	13:50	GW	MS	A	B	MA MCP	GW-1	
	MW-266Mb-20080625-01	6/25/08	13:40	EW	EW	A	B	MA MCP	GW-1	
	MW-267S-20080625-01	6/25/08	15:45	GW	EW	A	B	MA MCP	GW-1	
	MW-268D-20080625-01	6/25/08	16:40	GW	MS	A	B	MA MCP	GW-1	
	MW-269Ma-20080626-01	6/26/08	15:40	GW	LR	A	B	MA MCP	GW-1	
	MW-269D-20080626-01	6/26/08	15:50	GW	LR	A	B	MA MCP	GW-1	
	DUP-001-20080625-01	6/25/08	00:00	GW	MS	A	B	MA MCP	GW-1	
	DUP-002-20080625-01	6/25/08	00:00	GW	MS	A	B	MA MCP	GW-1	
	DUP-003-20080625-01	6/25/08	00:00	GW	EW	A	B	MA MCP	GW-1	

14-DIDNAME
VOCs: 8260

- SAMPLE HANDLING**
- Filtration
 - Done
 - Not needed
 - Lab to do
 - Preservation
 - Lab to do
- (Please specify below)

PLEASE ANSWER QUESTIONS ABOVE

IS YOUR PROJECT
MA MCP or CT RCP?

Retinquished By: [Signature] Date/Time: 6/27/08 9:16
 Received By: [Signature] Date/Time: 6/27-17:10