

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

Jennifer Smith
U.S. Fish and Wildlife Services - CGS Division
300 Westgate Center Drive
Hadley, MA 01035



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

Dear Ms. Smith:

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). We were unable to access the wells during the previous sampling round in May, and had informed you per a letter dated 12 June 2008 that we would be collecting these samples at a later date. These results are submitted pursuant to 310 CMR 40.1403(10) of the Massachusetts Contingency Plan (MCP).

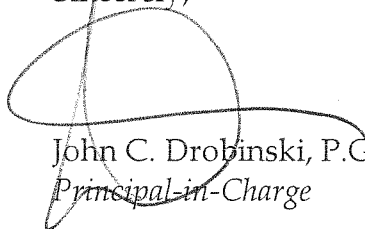
ERM collected groundwater samples from 11 wells on portions of the Site within the boundaries of your property between on 25 and 26 June 2008. All samples were analyzed 1,4-dioxane. Three samples were analyzed for volatile organic compounds. Sample analysis was conducted by Alpha Woods Hole Laboratories of Westborough, Massachusetts. This analytical data will be provided to the Massachusetts Department of Environmental Protection in the next required MCP submittal

Ms. Phillips
Reference: 0079387
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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,

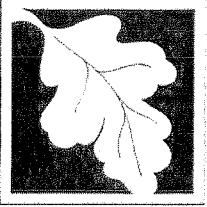


John C. Drobinski, P.G., LSP
Principal-in-Charge



Jason D. Flattery
Project Manager

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: U.S. Fish and Wildlife Services
2. Street Address: 300 Westgate Center Drive
City/Town: Hadley Zip Code: 01035

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:	L0809877
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: L0809877
Report Date: 07/15/08

Alpha Sample ID	Client ID	Sample Location
L0809877-01	MW-554S-20080626-01	WAYLAND, MA
L0809877-02	MW-554MA-20080626-01	WAYLAND, MA
L0809877-03	MW-554MB-20080626-01	WAYLAND, MA
L0809877-04	MW-554D-20080626-01	WAYLAND, MA
L0809877-05	MW-555S-20080627-01	WAYLAND, MA
L0809877-06	MW-555MA-20080627-01	WAYLAND, MA
L0809877-07	MW-555MB-20080627-01	WAYLAND, MA
L0809877-08	MW-555D-20080627-01	WAYLAND, MA
L0809877-09	MW-556S-20080627-01	WAYLAND, MA
L0809877-10	MW-556M-20080627-01	WAYLAND, MA
L0809877-11	MW-556D-20080627-01	WAYLAND, MA

Project Name: RAYTHEON

Lab Number: L0809877

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: L0809877
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

Report Submission

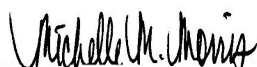
This report contains the results for the 1,4-Dioxane analysis. The results of all other analyses were issued under separate cover.

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:** L0809877**Project Number:** 0079387**Report Date:** 07/15/08**SAMPLE RESULTS**

Lab ID: L0809877-01
Client ID: MW-554S-20080626-01
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 1,8270
Analytical Date: 07/09/08 05:53
Analyst: TW

Date Collected: 06/26/08 12:00
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	532	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	46		15-110

Project Name: RAYTHEON**Lab Number:** L0809877**Project Number:** 0079387**Report Date:** 07/15/08**SAMPLE RESULTS**

Lab ID: L0809877-02
Client ID: MW-554MA-20080626-01
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 1,8270
Analytical Date: 07/09/08 06:37
Analyst: TW

Date Collected: 06/26/08 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	550	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	46		15-110

Project Name: RAYTHEON**Lab Number:** L0809877**Project Number:** 0079387**Report Date:** 07/15/08**SAMPLE RESULTS**

Lab ID: L0809877-03
Client ID: MW-554MB-20080626-01
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 1,8270
Analytical Date: 07/09/08 07:21
Analyst: TW

Date Collected: 06/26/08 10:25
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	526	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	42		15-110

Project Name: RAYTHEON**Lab Number:** L0809877**Project Number:** 0079387**Report Date:** 07/15/08**SAMPLE RESULTS**

Lab ID: L0809877-04
Client ID: MW-554D-20080626-01
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 1,8270
Analytical Date: 07/09/08 08:06
Analyst: TW

Date Collected: 06/26/08 10:30
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	41		15-110

Project Name: RAYTHEON**Lab Number:** L0809877**Project Number:** 0079387**Report Date:** 07/15/08**SAMPLE RESULTS**

Lab ID: L0809877-05
Client ID: MW-555S-20080627-01
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 1,8270
Analytical Date: 07/09/08 08:51
Analyst: TW

Date Collected: 06/27/08 11:10
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	532	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	46		15-110

Project Name: RAYTHEON**Lab Number:** L0809877**Project Number:** 0079387**Report Date:** 07/15/08**SAMPLE RESULTS**

Lab ID: L0809877-06
Client ID: MW-555MA-20080627-01
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 1,8270
Analytical Date: 07/09/08 09:36
Analyst: TW

Date Collected: 06/27/08 10:50
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	521	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	45		15-110

Project Name: RAYTHEON**Lab Number:** L0809877**Project Number:** 0079387**Report Date:** 07/15/08**SAMPLE RESULTS**

Lab ID: L0809877-07
Client ID: MW-555MB-20080627-01
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 1,8270
Analytical Date: 07/09/08 10:21
Analyst: TW

Date Collected: 06/27/08 09:30
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	51		15-110

Project Name: RAYTHEON**Lab Number:** L0809877**Project Number:** 0079387**Report Date:** 07/15/08**SAMPLE RESULTS**

Lab ID: L0809877-08
Client ID: MW-555D-20080627-01
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 1,8270
Analytical Date: 07/08/08 21:37
Analyst: TW

Date Collected: 06/27/08 09:00
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
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1,4-Dioxane by 8270					
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1,4-Dioxane	2000		ng/l	500	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	31		15-110

Project Name: RAYTHEON**Lab Number:** L0809877**Project Number:** 0079387**Report Date:** 07/15/08**SAMPLE RESULTS**

Lab ID: L0809877-09
Client ID: MW-556S-20080627-01
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 1,8270
Analytical Date: 07/09/08 13:32
Analyst: TW

Date Collected: 06/27/08 13:25
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	532	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

Project Name: RAYTHEON**Lab Number:** L0809877**Project Number:** 0079387**Report Date:** 07/15/08**SAMPLE RESULTS**

Lab ID: L0809877-10
Client ID: MW-556M-20080627-01
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 1,8270
Analytical Date: 07/09/08 01:27
Analyst: TW

Date Collected: 06/27/08 13:25
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	521	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: RAYTHEON**Lab Number:** L0809877**Project Number:** 0079387**Report Date:** 07/15/08**SAMPLE RESULTS**

Lab ID: L0809877-11
Client ID: MW-556D-20080627-01
Sample Location: WAYLAND, MA
Matrix: Water
Analytical Method: 1,8270
Analytical Date: 07/09/08 02:11
Analyst: TW

Date Collected: 06/27/08 13:20
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	538	1

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

Project Name: RAYTHEON

Lab Number: L0809877

Project Number: 0079387

Report Date: 07/15/08

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270
 Analytical Date: 07/08/08 17:06
 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): 01-11 Batch: WG329193-1				
1,4-Dioxane	ND		ng/l	500

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	42		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0809877

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): 01-11 Batch: WG329193-2 WG329193-3					
1,4-Dioxane	91	92	40-140	1	30

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	42		42		15-110

Project Name: RAYTHEON

Lab Number: L0809877

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
L0809877-01A	Amber 1000ml unpreserved	A	7	2.9C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-01B	Amber 1000ml unpreserved	A	7	2.9C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-02A	Amber 1000ml unpreserved	A	7	2.9C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-02B	Amber 1000ml unpreserved	A	7	2.9C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-03A	Amber 1000ml unpreserved	A	7	2.9C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-03B	Amber 1000ml unpreserved	A	7	2.9C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-04A	Amber 1000ml unpreserved	B	7	2.5C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-04B	Amber 1000ml unpreserved	B	7	2.5C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-05A	Amber 1000ml unpreserved	B	7	2.5C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-05B	Amber 1000ml unpreserved	B	7	2.5C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-06A	Amber 1000ml unpreserved	B	7	2.5C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-06B	Amber 1000ml unpreserved	B	7	2.5C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-07A	Amber 1000ml unpreserved	C	7	2C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-07B	Amber 1000ml unpreserved	C	7	2C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-08A	Amber 1000ml unpreserved	C	7	2C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-08B	Amber 1000ml unpreserved	C	7	2C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-09A	Amber 1000ml unpreserved	C	7	2C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-09B	Amber 1000ml unpreserved	C	7	2C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-10A	Amber 1000ml unpreserved	D	7	2.6C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-10B	Amber 1000ml unpreserved	D	7	2.6C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-11A	Amber 1000ml unpreserved	D	7	2.6C	Y	Absent	SUB-MAN-1,4DIOXANE
L0809877-11B	Amber 1000ml unpreserved	D	7	2.6C	Y	Absent	SUB-MAN-1,4DIOXANE

Project Name: RAYTHEON
Project Number: 0079387

Lab Number: L0809877
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: L0809877
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.





CHAIN OF CUSTODY

PAGE 1 OF 2

WESTBORO, MA
TEL: 508-898-8220
FAX: 508-998-9188

MANFIELD, MA
TEL: 508-822-8300
FAX: 508-822-3286

Client Information

Client: **EDM**

Address: **399 BOYLSTON ST**

Phone: **617-646-3800**

Fax: **617-267-6447**

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

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

Project Information

Project Name: **DAYTRIEON**

Project Location: **WYMAN, MA**

Project #: **0019382**

Project Manager: **JASON FITZGERALD**

Alpha Quote #:

Analysis Type:

Standard RUSH (only confirmed / pre-approved)

Date Due: _____ Time: _____

Report Information - Data Deliverables

FAX EMAIL

ADEP Add'l Deliverables

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

Criteria:

Are MCP Analytical Methods Required? Yes No

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

Are Additional Methods Required? Yes No

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

Are Additional Methods Required? Yes No

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

Are Additional Methods Required? Yes No

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

Are Additional Methods Required? Yes No

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

Are Additional Methods Required? Yes No

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

Are Additional Methods Required? Yes No

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

Are Additional Methods Required? Yes No

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

Are Additional Methods Required? Yes No

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

Are Additional Methods Required? Yes No

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

Are Additional Methods Required? Yes No

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

Are Additional Methods Required? Yes No

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

Are Additional Methods Required? Yes No

Billng Information

Same as Client Info Yes No

PO #:

Invoice #:

Invoice Date:

Invoice Due Date:

Invoice Terms:

Invoice Contact:

Invoice Email:

Invoice Phone:

Invoice Fax:

Invoice Address:

Invoice City:

Invoice State:

Invoice Zip:

Invoice Country:

Invoice Currency:

Invoice Language:

Invoice Units:

Invoice Weight:

Invoice Volume:

Invoice Area:

Invoice Country:

Invoice Currency:

Invoice Language:

Invoice Units:

Invoice Weight:

Invoice Volume:

Invoice Area:

Invoice Country:

ALPHA LAB # **L0809877**

Revised COC Rec'd 7/1/08 (PB)

ANALYSIS ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Depth	Container Type	Preservative	Date/Time	Received By:	Date/Time	Comments
		Date	Time									
9877.1	MW-554 S-20080626-01	6/26/08	12:00	GW	MS	2	A	V	6/27/08 12:10	W. Murphy	6/27/08 12:10	
9877.2	MW-554 Ma-20080626-01	6/26/08	12:05	GW	LR	2	A	B	6/27/08 12:10	W. Murphy	6/27/08 12:10	
9877.3	MW-554 Mb-20080626-01	6/26/08	10:25	GW	LR	2	A	B	6/27/08 12:10	W. Murphy	6/27/08 12:10	
9877.4	MW-554 D-20080626-01	6/26/08	10:30	GW	MS	2	A	B	6/27/08 12:10	W. Murphy	6/27/08 12:10	
9877.5	MW-555 S-20080627-01	6/27/08	11:10	GW	MS	2	A	B	6/27/08 13:25	W. Murphy	6/27/08 13:25	
9877.6	MW-555 Ma-20080627-01	6/27/08	10:50	GW	EW	2	A	B	6/27/08 13:25	W. Murphy	6/27/08 13:25	
9877.7	MW-555 Mb-20080627-01	6/27/08	9:30	GW	EW	2	A	B	6/27/08 13:25	W. Murphy	6/27/08 13:25	
9877.8	MW-555 D-20080627-01	6/27/08	9:50	GW	MS	2	A	B	6/27/08 13:25	W. Murphy	6/27/08 13:25	
9877.9	MW-556 S-20080627-01	6/27/08	13:25	GW	JM	2	A	B	6/27/08 13:25	W. Murphy	6/27/08 13:25	
9877.10	MW-556 M-20080627-01	6/27/08	13:25	GW	EW	2	A	B	6/27/08 13:25	W. Murphy	6/27/08 13:25	

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?

FORM NO: 01-01 (rev. 30-JUL-07)



CHAIN OF CUSTODY

PAGE 2 OF 2

WESTBORO, MA
TEL: 508-898-8220
FAX: 508-898-8133

MANFIELD, MA
TEL: 508-822-8300
FAX: 508-822-3286

Client: **EDM**

Address: **399 BOYSTON ST**

6TH FLOOR, BOSTON, MA 02116

Phone: **617-646-7800**

Fax: **617-267-6447**

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

Other Project Specific Requirements/Comments/Detection Limits:

Project Information

Project Name: **DAYMECON**

Project Location: **WAYLAND, MA**

Project #: **0029387**

Project Manager: **JASON FURNERY**

Standard: Standard

Date Due:

RUSH (only confirmed if pre-approved!)

Time:

Report Informator: Data Deliverables

FAX EMAIL

ADX Add'l Deliverables

State/Fed Program:

MA MCP SWA

MA MCP SWA

Are MCP Any of the following Required?
 Yes No

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

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

Sample ID	Collection		Sample Matrix	Sampler's Initials
	Date	Time		
007-61 MW-56D-20080627-01	6/27/08	13:20	GW	MS

<p>1,4-DIOXANE 8260 VOCs</p>				
4				

PLEASE ANSWER QUESTIONS ABOVE

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:

Date/Time

Received By:

Date/Time

Revised CoC
Rec'd 7/1/08 (108)



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

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

Sample ID Cross Reference



Client: Alpha Analytical - Westborough
 Project: L0809566 - ERM

Lab Code: MA00030
 ETR: 0806187

Lab Sample ID

Client Sample ID

0806187-08	MW-555D-20080627-01
0806187-09	MW-556S-20080627-01
0806187-10	MW-556M-20080627-01
0806187-11	MW-556D-20080627-01
0806187-16	MW-554S-20080626-01
0806187-17	MW-554Ma-20080626-01
0806187-18	MW-554Mb-20080626-01
0806187-19	MW-554D-20080626-01
0806187-20	MW-555S-20080627-01
0806187-21	MW-555Ma-20080627-01
0806187-22	MW-555Mb-20080627-01

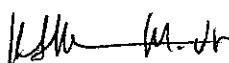
CASE NARRATIVE

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

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

1,4-Dioxane
By
8270

Semi-Volatile Organics by 8270



Client: **Alpha Analytical - Westborough**
 Project:
 Client ID: **MW-554S-20080626-01**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0806187**
 Lab ID: **0806187-16**
 Associated Blank: **SW070108B12**
 Concentration Units: **ng/L**

Date Collected	Date Received	Date Extracted	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
06/26/08	06/30/08	07/02/08	07/09/08	940	10	1	ALM

Parameter**Result**

1,4-Dioxane

532 U

Surrogate	% Recovery	Acceptance Range (%)
1,4-Dioxane-d8	46	15-110

N/A - Not Applicable

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

Semi-Volatile Organics by 8270

07150819:27



Client: Alpha Analytical - Westborough
Project: L0809566 - ERM
Client ID:
Case: N/A **SDG:** N/A
Matrix: Water

Lab Code: MA00030
ETR: 0806187
Lab ID: 0806187-17
Associated Blank: SW070108B12
Concentration Units: ng/L

Date Collected	Date Received	Date Extracted	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
06/26/08	06/30/08	07/02/08	07/09/08	910	10	1	ALM

Parameter	Result
1,4-Dioxane	550 U

Surrogate	% Recovery	Acceptance Range (%)
1,4-Dioxane-d8	46	15-110

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

07/10/08 07:59



Client: Alpha Analytical - Westborough
 Project: L0809566 - ERM
 Client ID: [redacted]
 Case: N/A SDG: N/A
 Matrix: Water

Lab Code: MA00030
 ETR: 0806187
 Lab ID: 0806187-18
 Associated Blank: SW070108B12
 Concentration Units: ng/L

Date Collected	Date Received	Date Extracted	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
06/26/08	06/30/08	07/02/08	07/09/08	950	10	1	ALM

Parameter	Result
1,4-Dioxane	526 U

Surrogate	% Recovery	Acceptance Range (%)
1,4-Dioxane-d8	42	15-110

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



Client: **Alpha Analytical - Westborough**
 Project: **L0809566 - ERM**
 Client ID:
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0806187**
 Lab ID: **0806187-19**
 Associated Blank: **SW070108B12**
 Concentration Units: **ng/L**

Date Collected	Date Received	Date Extracted	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
06/26/08	06/30/08	07/02/08	07/09/08	950	10	1	ALM

Parameter	Result
1,4-Dioxane	486 J

Surrogate	% Recovery	Acceptance Range (%)
1,4-Dioxane-d8	41	15-110

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



Client: Alpha Analytical - Westborough
 Project: L0809566 - ERM
 Client ID:
 Case: N/A SDG: N/A
 Matrix: Water

Lab Code: MA00030
 ETR: 0806187
 Lab ID: 0806187-20
 Associated Blank: SW070108B12
 Concentration Units: ng/L

Date Collected	Date Received	Date Extracted	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
06/27/08	06/30/08	07/02/08	07/09/08	940	10	1	ALM

Parameter

Result

1,4-Dioxane

532 U

Surrogate	% Recovery	Acceptance Range (%)
1,4-Dioxane-d8	46	15-110

N/A - Not Applicable

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



Client: **Alpha Analytical - Westborough**
 Project: **L0809566 - ERM**
 Client ID:
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0806187**
 Lab ID: **0806187-21**
 Associated Blank: **SW070108B12**
 Concentration Units: **ng/L**

Date Collected	Date Received	Date Extracted	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
06/27/08	06/30/08	07/02/08	07/09/08	960	10	1	ALM

Parameter

Result

1,4-Dioxane

521 U

Surrogate	% Recovery	Acceptance Range (%)
1,4-Dioxane-d8	45	15-110

N/A - Not Applicable

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

Semi-Volatile Organics by 8270

07150819:27



Client: Alpha Analytical - Westborough
Project: L0809566 - ERM
Client ID:
Case: N/A **SDG:** N/A
Matrix: Water

Lab Code: MA00030
ETR: 0806187
Lab ID: 0806187-22
Associated Blank: SW070108B12
Concentration Units: ng/L

Date Collected	Date Received	Date Extracted	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
06/27/08	06/30/08	07/02/08	07/09/08	1000	10	1	ALM

Parameter	Result
1,4-Dioxane	500 U

Surrogate	% Recovery	Acceptance Range (%)
1,4-Dioxane-d8	51	15-110

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

07/10/08 08:00



Client: **Alpha Analytical - Westborough**
 Project: **L0809566 - ERM**
 Client ID:
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0806187**
 Lab ID: **0806187-08**
 Associated Blank: **SW070108B12**
 Concentration Units: **ng/L**

Date Collected	Date Received	Date Extracted	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
06/27/08	06/30/08	07/02/08	07/08/08	1000	10	1	ALM

Parameter	Result
1,4-Dioxane	2000

Surrogate	% Recovery	Acceptance Range (%)	N/A - Not Applicable
1,4-Dioxane-d8	31	15-110	



Client: Alpha Analytical - Westborough
 Project: L0809566 - ERM
 Client ID:
 Case: N/A SDG: N/A
 Matrix: Water

Lab Code: MA00030
 ETR: 0806187
 Lab ID: 0806187-09
 Associated Blank: SW070108B12
 Concentration Units: ng/L

Date Collected	Date Received	Date Extracted	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
06/27/08	06/30/08	07/02/08	07/09/08	940	10	1	ALM

Parameter	Result
1,4-Dioxane	532 U

Surrogate	% Recovery	Acceptance Range (%)
1,4-Dioxane-d8	29	15-110

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

Semi-Volatile Organics by 8270

07150819:27



Client: Alpha Analytical - Westborough
Project: L0809566 - ERM
Client ID:
Case: N/A **SDG:** N/A
Matrix: Water

Lab Code: MA00030
ETR: 0806187
Lab ID: 0806187-10
Associated Blank: SW070108B12
Concentration Units: ng/L

Date Collected	Date Received	Date Extracted	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
06/27/08	06/30/08	07/02/08	07/09/08	960	10	1	ALM

Parameter	Result
<u>1,4-Dioxane</u>	521 U

Surrogate	% Recovery	Acceptance Range (%)
1,4-Dioxane-d8	26	15-110

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

07/10/08 07:57

Semi-Volatile Organics by 8270



Client: **Alpha Analytical - Westborough**
 Project: **L0809566 - ERM**
 Client ID:
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0806187**
 Lab ID: **0806187-11**
 Associated Blank: **SW070108B12**
 Concentration Units: **ng/L**

Date Collected	Date Received	Date Extracted	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
06/27/08	06/30/08	07/02/08	07/09/08	930	10	1	ALM

Parameter	Result
1,4-Dioxane	402 J

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

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

Blank Semi-Volatile Organics by 8270



Client: **Alpha Analytical - Westborough**
 Project: **100000**
 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.

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: SW070108B12
 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	42	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

07150819:27



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

Surrogate	% Recovery		Acceptance Range (%)
I,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

Laboratory Control Summary Semi-Volatile Organics by 8270

07150819:27



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: **SW070108B12**
 Concentration Units: **ng/L**

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

Lab ID: SW070108B12 SW070108LCS05 SW070108LCSD05

Parameter	Blank Conc.	U	LCS		LCSD		% RPD	RPD % Recovery	
			Conc.	% Recovery	Conc.	% Recovery		Limit	Limits
1,4-Dioxane	500	U	4570	91	4620	92	1	30	40-140

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptance Range (%)</u>
1,4-Dioxane-d8	42 42	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

Matrix Spike Duplicate Semi-Volatile Organics by 8270

07150819:27



Client: **Alpha Analytical - Westborough**
 Project:
 Client ID: **MW-267S-20080625-01**
 Case: **N/A** SDG: **N/A**
 Matrix: **Water**

Lab Code: **MA00030**
 ETR: **0806187**
 Lab ID: **See Below**
 Associated Blank: **SW070108B12**
 Concentration Units: **ng/L**

Date Collected	Date Received	Date Extracted	Analyst
06/25/08	06/30/08	07/02/08	ALM

Lab ID: 0806187-06 0806187-06 0806187-06

Parameter	Sample Conc.	Matrix Spike		Matrix Spike Dup.		% RPD	RPD % Recovery	
		Conc.	% Recovery	Conc.	% Recovery		Limit	Limits
1,4-Dioxane	10900	15400	81	15100	75	2	30	40-140

Surrogate	% Recovery	Acceptance Range (%)	N/A - Not Applicable
1,4-Dioxane-d8	37 40	15-110	

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 08:02

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

Chain of Custody Records

Revised COC Rec'd 7/1/08 (2)

CHAIN OF CUSTODY PAGE 1 of 2

Project Information
 Project Name: **DAITKON**
 Project Location: **WILMUND, MA**
 Project #: **0079387**
 Project Manager: **JASON FATTREY**
 ALPHA Sample #

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

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

Report Information Data Deliverables: FAX EMAIL Same as Client Info Add'l Deliverables
 PD #:

State/Fed Program MA MCP OWA-1
 Criteria

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

Sample ID	Collection Date	Time	Sample Matrix	Sampler's Initials	Container Type		Sample Specific Comments
					A	B	
MW-554 S - 20080626-01	6/24/08	12:00	GW	MS			2
MW-554 Ma - 20080626-01	6/26/08	12:05	GW	LR			2
MW-554 Mb - 20080626-01	6/26/08	10:25	GW	LR			2
MW-554 D - 20080626-01	6/26/08	10:30	GW	MS			4
MW-555 S - 20080627-01	6/27/08	11:10	GW	MS			2
MW-555 Ma - 20080627-01	6/27/08	10:50	GW	EW			2
MW-555 Mb - 20080627-01	6/27/08	9:20	GW	EW			2
MW-555 D - 20080627-01	6/27/08	9:50	GW	MS </td <td></td> <td></td> <td>4</td>			4
MW-556 S - 20080627-01	6/27/08	13:25	GW	JM			2
MW-556 M - 20080627-01	6/27/08	13:25	GW	EW			2

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?

Relinquished By: *[Signature]* Date/Time: 6/27/08 11:00
 Received By: *[Signature]* Date/Time: 6/27-17:00

FORM NO: 01-01 (rev. 30-JUL-07)

Revised CoC
Rec'd 7/1/08 (10)

CHAIN OF CUSTODY PAGE 2 OF 2

Project Information
 Project Name: DAYMEON
 Project Location: WAYLAND, MA
 Project #: 0079387
 Project Manager: JASON FATTREY
 ALPHA DUCT #
 Standard RUSH (not permitted if pre-analyzed) Time:
 Date Due:

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

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

REPORT INFORMATION: Data Deliverables
 FAX EMAIL
 ADEX Add'l Deliverables
 Same as Client Info PG #:
 Billing Information: 10809877

STATE/FED PROGRAM
 MA MCP SWA
 Are MCP Applicable? Yes No
 Are CT RCP (Reasonable Confidence Protocols) Required? Yes No

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

Sample ID	Collection Date	Time	Sample Matrix	Sampler's Initials	Sample Specific Comments
0057.61 MW-556D-2008007-01	6/27/08	13:20	GW	MS	4

PLEASE ANSWER QUESTIONS ABOVE
 IS YOUR PROJECT MA MCP or CT RCP?
 Relinquished By: [Signature] Date/Time: 6/27/08
 Received By: [Signature] Date/Time: 6/27/08

FORM NO: 01-01 (rev. 30-JUL-07)

CHAIN OF CUSTODY PAGE 1 OF 2

Project Information

Project Name: Raytheon

Project Location: MA

Client Information

Client: Alpha Analytical Labs, Inc.

Address: 8 Walkup Dr.

Westboro, Ma 01581

Phone: _____

Fax: _____

Email: _____

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

Client Information

Client: Alpha Analytical Labs, Inc.

Address: 8 Walkup Dr.

Westboro, Ma 01581

Phone: _____

Fax: _____

Email: _____

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

Project Information

Project Name: Raytheon

Project Location: MA

Client Information

Client: Alpha Analytical Labs, Inc.

Address: 8 Walkup Dr.

Westboro, Ma 01581

Phone: _____

Fax: _____

Email: _____

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA-Lab ID (Lab-Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	ANALYSIS		Sample Specific Comment
		Date	Time			Are MC? Analytical Methods Required?	Are CT RCP (Reasonable Confidence Protocols) Required?	
L0809877-01		06/26/08		GW		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Was 9566-16
L0809877-02						<input checked="" type="checkbox"/>	<input type="checkbox"/>	9566-17
L0809877-03						<input checked="" type="checkbox"/>	<input type="checkbox"/>	9566-18
L0809877-04						<input checked="" type="checkbox"/>	<input type="checkbox"/>	9566-19
L0809877-05		06/27/08				<input checked="" type="checkbox"/>	<input type="checkbox"/>	9566-20
L0809877-06						<input checked="" type="checkbox"/>	<input type="checkbox"/>	9566-21
L0809877-07						<input checked="" type="checkbox"/>	<input type="checkbox"/>	9566-22
L0809877-08						<input checked="" type="checkbox"/>	<input type="checkbox"/>	9566-08
L0809877-09						<input checked="" type="checkbox"/>	<input type="checkbox"/>	9566-09
L0809877-10						<input checked="" type="checkbox"/>	<input type="checkbox"/>	9566-10

PLEASE ANSWER QUESTIONS ABOVE!

Container Type: Preservative

Relinquished By: _____

Date/Time: _____

Received By: _____

Date/Time: _____

IS YOUR PROJECT MA MCP or CT RCP?

Form 15-04-001

ANALYSIS

1,4 Dioxane

SAMPLE HANDLING

Filtration

Done

Not Needed

Lab to do

Preservation

Lab to do

(Please specify below)

TOTAL # BOTTLES

REPORT INFORMATION

FAX EMAIL Same as Client info PO #:

ADEx Add'l Deliverables

Regulatory Requirements/Report Limits

State/Fed Program: _____

Criteria: _____

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

Yes No No No

Are MC? Analytical Methods Required?

Are CT RCP (Reasonable Confidence Protocols) Required?

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.

CHAIN OF CUSTODY



Westborough, MA
 TEL: 508-898-8220
 FAX: 508-898-9193

Raytheon
 TEL: 603-232-9287
 FAX: 603-628-2241

Client Information

Client: Alpha Analytical Labs, Inc.

Address: 8 Walkup Dr.

Westboro, Ma 01581

Phone:

Fax:

Email:

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

Date Rec'd In Lab:

ALPHA Job #:

Project Information

Project Name: Raytheon

Project Location: MA

Project #:

Project Manager: Matt Beaupre

ALPHA Quote #:

Turn-Around Time

Standard Rush (ONLY IF PRE-APPROVED)

Due Date: 07/14/08

Time:

Report Information

Report Information Data Deliverables

FAX EMAIL

ADEX Add'l Deliverables

Regulatory Requirements/Report Limits

State/Fed Program

Criteria

MA

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

Yes No Are MCP Analytical Methods Required?

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

ANALYSIS

ANALYSIS	TOTAL BOTTLES										SAMPLE HANDLING	SAMPLE SPECIFIC COMMENTS
											Filtration <input type="checkbox"/> Done <input type="checkbox"/> Not Needed <input type="checkbox"/>	
1,4 Dioxane	<input checked="" 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"/>	Lab to do Preservation <input type="checkbox"/>	Was 9566-11
	<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"/>	<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"/>	<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"/>	<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"/>	<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"/>		
	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>		

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

FORMING RCPs Internal (rev. 10/4/08)

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.

Relinquished By:	Received By:
Date/Time	Date/Time
Container Type	
Preservative	

Sample Receipt Checklist

Page 1 of 1

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

ALL SECTIONS BELOW MUST BE COMPLETED

Comments / Notes

Were samples shipped? Yes, FedEx / UPS / Other: _____ <u>No, Alpha Analytical Courier pick-up / Hand delivered</u>	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</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 1: Temperature(s) taken from: <u>4°</u> IR Gun, (Circle one) SN 460647143 or 94031 <u>4°</u> Temp. Blank, / NA	Cooler 6: _____ Cooler 7: _____
Were samples received on ice? <u>Yes</u> / No	More: _____
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>N/A</u>
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?:	If No, list samples below:
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 Coc Present: Present	Trackingnum:
--	--------------

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 Initial pH: preserved in house with Other Issues Chlorine Check: N/A	Are samples Properly Preserved? Yes Final pH:
--	--

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	2 c 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, 8081, 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



ANALYTICAL REPORT

Lab Number:	L0809866
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Project Name:	RAYTHEON
Project Number:	0079387
Report Date:	07/08/08

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: L0809866
Report Date: 07/08/08

Alpha Sample ID	Client ID	Sample Location
L0809866-01	MW-554D-20080626-01	WAYLAND, MA
L0809866-02	MW-555D-20080627-01	WAYLAND, MA
L0809866-03	MW-556D-20080627-01	WAYLAND, MA

Project Name: RAYTHEON

Lab Number: L0809866

Project Number: 0079387

Report Date: 07/08/08

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?	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: L0809866
Report Date: 07/08/08

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.

MCP Related Narratives

Report Submission

This report contains the results for the Volatile Organics by MCP 8260B analysis. The results for all other analyses will be issued under separate cover.

Volatile Organics

In reference to question E:

The WG328133-1/-2 LCS/LCSD recoveries associated with L0809866-01 through -03 are outside the acceptance criteria for several compounds; however, they have been identified as "difficult" analytes. The results of the associated samples are reported; however, all results are considered to have a potentially high bias for Dichlorodifluoromethane and a potentially low bias for Bromomethane.

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: 07/08/08

ORGANICS

VOLATILES

Project Name: RAYTHEON

Lab Number: L0809866

Project Number: 0079387

Report Date: 07/08/08

SAMPLE RESULTS

Lab ID: L0809866-01
 Client ID: MW-554D-20080626-01
 Sample Location: WAYLAND, MA
 Matrix: Water
 Analytical Method: 60,8260B
 Analytical Date: 06/30/08 20:37
 Analyst: GK

Date Collected: 06/26/08 10:30
 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: L0809866

Project Number: 0079387

Report Date: 07/08/08

SAMPLE RESULTS

Lab ID: L0809866-01
 Client ID: MW-554D-20080626-01
 Sample Location: WAYLAND, MA

Date Collected: 06/26/08 10:30
 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	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	0.55		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: L0809866

Project Number: 0079387

Report Date: 07/08/08

SAMPLE RESULTS

Lab ID: L0809866-01
 Client ID: MW-554D-20080626-01
 Sample Location: WAYLAND, MA

Date Collected: 06/26/08 10:30
 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	97		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	97		70-130

Project Name: RAYTHEON

Lab Number: L0809866

Project Number: 0079387

Report Date: 07/08/08

SAMPLE RESULTS

Lab ID: L0809866-02
 Client ID: MW-555D-20080627-01
 Sample Location: WAYLAND, MA
 Matrix: Water
 Analytical Method: 60,8260B
 Analytical Date: 06/30/08 19:30
 Analyst: GK

Date Collected: 06/27/08 09:50
 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: L0809866

Project Number: 0079387

Report Date: 07/08/08

SAMPLE RESULTS

Lab ID: L0809866-02
 Client ID: MW-555D-20080627-01
 Sample Location: WAYLAND, MA

Date Collected: 06/27/08 09:50
 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	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	2.8		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:** L0809866**Project Number:** 0079387**Report Date:** 07/08/08**SAMPLE RESULTS**

Lab ID: L0809866-02
 Client ID: MW-555D-20080627-01
 Sample Location: WAYLAND, MA

Date Collected: 06/27/08 09:50
 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	86		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	101		70-130

Project Name: RAYTHEON

Lab Number: L0809866

Project Number: 0079387

Report Date: 07/08/08

SAMPLE RESULTS

Lab ID: L0809866-03
 Client ID: MW-556D-20080627-01
 Sample Location: WAYLAND, MA
 Matrix: Water
 Analytical Method: 60,8260B
 Analytical Date: 06/30/08 20:04
 Analyst: GK

Date Collected: 06/27/08 13:20
 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: L0809866

Project Number: 0079387

Report Date: 07/08/08

SAMPLE RESULTS

Lab ID: L0809866-03
 Client ID: MW-556D-20080627-01
 Sample Location: WAYLAND, MA

Date Collected: 06/27/08 13:20
 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	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:** L0809866**Project Number:** 0079387**Report Date:** 07/08/08**SAMPLE RESULTS**

Lab ID: L0809866-03
 Client ID: MW-556D-20080627-01
 Sample Location: WAYLAND, MA

Date Collected: 06/27/08 13:20
 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	88		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	98		70-130

Project Name: RAYTHEON

Lab Number: L0809866

Project Number: 0079387

Report Date: 07/08/08

**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): 01-03 Batch: WG328133-3				

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: L0809866

Project Number: 0079387

Report Date: 07/08/08

**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): 01-03 Batch: WG328133-3				

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: L0809866

Project Number: 0079387

Report Date: 07/08/08

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): 01-03 Batch: WG328133-3				

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

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

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0809866

Project Number: 0079387

Report Date: 07/08/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG328133-1 WG328133-2					
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: L0809866

Project Number: 0079387

Report Date: 07/08/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG328133-1 WG328133-2					
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: L0809866

Project Number: 0079387

Report Date: 07/08/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG328133-1 WG328133-2					
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
Project Number: 0079387

Lab Number: L0809866
Report Date: 07/08/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG328133-1 WG328133-2					
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

Project Name: RAYTHEON

Lab Number: L0809866

Project Number: 0079387

Report Date: 07/08/08

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
L0809866-01A	Vial HCl preserved	A	NA	2.9C	Y	Absent	MCP-8260-04
L0809866-01B	Vial HCl preserved	A	NA	2.9C	Y	Absent	MCP-8260-04
L0809866-02A	Vial HCl preserved	A	NA	2.9C	Y	Absent	MCP-8260-04
L0809866-02B	Vial HCl preserved	A	NA	2.9C	Y	Absent	MCP-8260-04
L0809866-03A	Vial HCl preserved	A	NA	2.9C	Y	Absent	MCP-8260-04
L0809866-03B	Vial HCl preserved	A	NA	2.9C	Y	Absent	MCP-8260-04

Project Name: RAYTHEON
Project Number: 0079387

Lab Number: L0809866
Report Date: 07/08/08

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: L0809866
Report Date: 07/08/08

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.





WESTBORO, MA
TEL: 508-898-9220
FAX: 508-999-9193

MANFIELD, MA
TEL: 508-822-8300
FAX: 508-422-3298

CHAIN OF CUSTODY

PAGE 1 OF 2

Project Information
 Project Name: **MYRTLETON**
 Project Location: **WYLAND, MA**
 Project #: **0029387**

Client: **EDM**
 Address: **399 BOYLSTON ST**
6TH FLOOR - BOSTON, MA 02116
 Phone: **617-646-7800**
 Fax: **617-267-6447**

Project Manager: **JASON FURNEY**
 Alpha Quote #: _____
 Date Due: _____
 Standard RUSH (only confirmed if pre-approved)
 Time: _____

Other Project Specific Requirements/Comments/Deviation Limits:

Report Information Data Deliverables

FAX EMAIL
 ADEX Add'l Deliverables

State/Fed Program: _____
 Criteria: _____

Reporting Requirements: STAINITY CT REACTIVABLE CONFIDENCE PROTOCOLS

Reporting Requirements: STAINITY CT REACTIVABLE CONFIDENCE PROTOCOLS

SAMPLE HANDLING

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

Sample Specific Comments

Sample ID	Collection		Sample Matrix	Sampler's Initials	Container Type	Preservative	Date/Time	Received By:	Date/Time
	Date	Time							
MW-554 S-20080626-01	6/26/08	12:00	GW	MS	2		6/27/08 07:10	6/27/08 07:10	
MW-554 Ma-20080626-01	6/26/08	12:05	GW	LR	2				
MW-554 Mb-20080626-01	6/26/08	10:25	GW	LR	2				
MW-554 D-20080626-01	6/26/08	10:30	GW	MS	2				
MW-555 S-20080627-01	6/27/08	11:10	GW	MS	2				
MW-555 Ma-20080627-01	6/27/08	10:50	GW	EW	2				
MW-555 Mb-20080627-01	6/27/08	9:30	GW	EW	2				
MW-555 D-20080627-01	6/27/08	9:50	GW	MS	2				
MW-556 S-20080627-01	6/27/08	13:25	GW	JM	2				
MW-556 M-20080627-01	6/27/08	13:25	GW	EW	2				

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By: *[Signature]*

Date/Time: 6/27/08 07:10

Received By: *[Signature]*

Date/Time: 6/27/08 07:10

1 M - DROXANE VOC 8260

Revised COC Rec'd 7/1/08



CHAIN OF CUSTODY

Page 2 of 2

WESTBORO, MA
TEL: 508-898-8220
FAX: 508-898-9189

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

Client Information

Client: **B2M**

Address: **399 Boylston St**

6th Floor, Boston MA 02116

Phone: **617-646-7800**

Fax: **617-267-6447**

Email: **JASON.FURNERY@B2M.COM**

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

Project Information

Project Name: **DAYMEON**

Project Location: **WATYARD, MA**

Project #: **0029387**

Project Manager: **JASON FURNERY**

Alpha Order #:

Date Due:

Standard RUSH (only confirmed if pre-approved)
Time:

Report Information: Data Deliverables

FAX EMAIL

ADEP Add'l Deliverables

State/Fed Program: **MA MCP SW1**

Contract #:

Reporting Method: **STAIN/STRESS/ABLET/CONFIDENCE PROTOCOLS**

Reporting Method: **STAIN/STRESS/ABLET/CONFIDENCE PROTOCOLS**

Reporting Method: **STAIN/STRESS/ABLET/CONFIDENCE PROTOCOLS**

Reporting Method: **STAIN/STRESS/ABLET/CONFIDENCE PROTOCOLS**

Reporting Method: **STAIN/STRESS/ABLET/CONFIDENCE PROTOCOLS**

Reporting Method: **STAIN/STRESS/ABLET/CONFIDENCE PROTOCOLS**

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Reporting Method: **STAIN/STRESS/ABLET/CONFIDENCE PROTOCOLS**

Reporting Method: **STAIN/STRESS/ABLET/CONFIDENCE PROTOCOLS**

Reporting Method: **STAIN/STRESS/ABLET/CONFIDENCE PROTOCOLS**

4

Sample Specific Comments

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

(Please specify below)

Sample Specific Comments

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT
MA MCP or CT RCP?

Relinquished By: *[Signature]*

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

Container Type: **A IV**

Preservative: **A B**

Received By: *[Signature]*

Date/Time: **7/2/08**

Revised COC
Rec'd 7/1/08