

**FILE COPY**

Environmental  
Resources  
Management

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

1 April 2008  
Reference: 0079387

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



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

Dear Mr. Schelmerdeine:

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

ERM collected groundwater samples from 2 wells on portions of the Site within the boundaries of your property on 6 March 2008. The two samples were submitted for laboratory analysis of volatile organic compounds, total organic carbon, and dissolved methane, ethane, and ethene gases. One of the samples was also submitted for laboratory analysis for total phosphorus, sulfate, nitrate, dissolved iron, and Q-gene-Trac DHE and VC. Sample analysis was conducted by three laboratories, Alpha Woods Hole Laboratories of Westborough, Massachusetts, Microseeps Inc. of Pittsburgh Pennsylvania, and SiREM Laboratory of Guelph, Ontario. Analytical laboratory reports are attached to this letter. This analytical data will be provided to the Massachusetts Department of Environmental Protection in the next required MCP submittal.

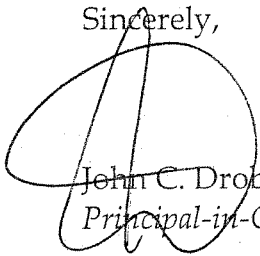
Raytheon has implemented the Public Involvement Process in accordance with MCP 310 CMR 40.1405. Documents pertaining to the Site can be found at the Board of Health, the Wayland Public Library Public Involvement Plan files, or at [www.ermne.com](http://www.ermne.com) (username = raytheon, password =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

Mr. Schelmerdeine  
Reference: 0079387  
1 April 2008  
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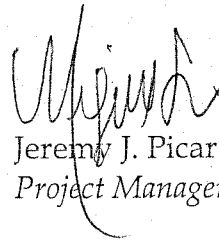
Environmental  
Resources  
Management

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,



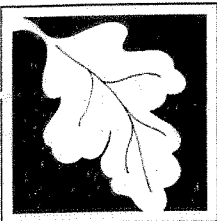
John C. Drobinski, P.G., LSP  
Principal-in-Charge



for Jeremy J. Picard, P.G.  
Project Manager

Enclosures: BWSC-123 - Notice of Environmental Sampling  
Alpha Woods Hole Laboratories Reports  
Microseeps Inc. Laboratory Reports  
SiREM Laboratory Reports

Cc: Louis Burkhardt, Raytheon Company  
Ben Gould, CMG Environmental  
PIP Repositories



# NOTICE OF ENVIRONMENTAL SAMPLING

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

**BWSC 123**

This Notice is Related to  
Release Tracking Number

**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: Congress Group  
2. Street Address: 33 Arch Street  
City/Town: Boston Zip Code: 02110

**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:	L0803223
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Project Name:	RAYTHEON-WAYLAND
Project Number:	0079387
Report Date:	03/14/08

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

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



**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0079387

**Lab Number:** L0803223  
**Report Date:** 03/14/08

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0803223-01	DEP-19M-20080306-01	WAYLAND, MA
L0803223-02	MW-264M-20080306-01	WAYLAND, MA

Project Name: RAYTHEON-WAYLAND

Lab Number: L0803223

Project Number: 0079387

Report Date: 03/14/08

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

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



**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0079387

**Lab Number:** L0803223  
**Report Date:** 03/14/08

### Case Narrative

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

#### MCP Related Narratives

##### Report Submission

The analysis of Volatile Organics by Method 8260B was performed at our Mansfield facility. The report is included as an addendum, and the results can be viewed on ADEx under Alpha Job L0803479.

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Metals

In reference to question F:

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

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: 03/14/08



# METALS

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0803223**Project Number:** 0079387**Report Date:** 03/14/08**SAMPLE RESULTS**

Lab ID: L0803223-02

Date Collected: 03/06/08 14:45

Client ID: MW-264M-20080306-01

Date Received: 03/07/08

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Iron, Dissolved	11		mg/l	0.05	1	03/08/08 13:45	03/10/08 13:43	EPA 3005A	60,6010B	AI



Project Name: RAYTHEON-WAYLAND

Lab Number: L0803223

Project Number: 0079387

Report Date: 03/14/08

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series for sample(s): 02 Batch: WG313976-1								
Iron, Dissolved	ND	mg/l	0.05	1	03/08/08 13:45	03/10/08 13:13	60,6010B	AI

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON-WAYLAND

**Lab Number:** L0803223

**Project Number:** 0079387

**Report Date:** 03/14/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 02 Batch: WG313976-2 WG313976-3					
Iron, Dissolved	94	92	80-120	2	20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0079387

**Lab Number:** L0803223  
**Report Date:** 03/14/08

### SAMPLE RESULTS

**Lab ID:** L0803223-01  
**Client ID:** DEP-19M-20080306-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 03/06/08 16:15  
**Date Received:** 03/07/08  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry</b>									
Total Organic Carbon	1.0		mg/l	0.50	1	-	03/14/08 06:20	1,9060	DW



**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0079387

**Lab Number:** L0803223  
**Report Date:** 03/14/08

### SAMPLE RESULTS

**Lab ID:** L0803223-02  
**Client ID:** MW-264M-20080306-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 03/06/08 14:45  
**Date Received:** 03/07/08  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry</b>									
Nitrogen, Nitrate	ND		mg/l	0.10	1	-	03/07/08 21:02	30,4500NO3-F	DD
Phosphorus, Total	0.05		mg/l	0.01	1	-	03/11/08 15:00	30,4500P-E	HS
Sulfate	28		mg/l	10	1	03/11/08 14:30	03/11/08 14:30	1,9038	ST
Total Organic Carbon	1.3		mg/l	0.50	1	-	03/14/08 06:20	1,9060	DW



Project Name: RAYTHEON-WAYLAND

Lab Number: L0803223

Project Number: 0079387

Report Date: 03/14/08

**Method Blank Analysis**  
**Batch Quality Control**

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry for sample(s): 02 Batch: WG313918-2								
Nitrogen, Nitrate	ND	mg/l	0.10	1	-	03/07/08 20:38	30,4500NO3-F	DD
General Chemistry for sample(s): 02 Batch: WG314166-1								
Sulfate	ND	mg/l	10	1	03/11/08 14:30	03/11/08 14:30	1,9038	ST
General Chemistry for sample(s): 02 Batch: WG314220-1								
Phosphorus, Total	ND	mg/l	0.01	1	-	03/11/08 15:00	30,4500P-E	HS
General Chemistry for sample(s): 01-02 Batch: WG314534-1								
Total Organic Carbon	ND	mg/l	0.50	1	-	03/14/08 06:20	1,9060	DW



## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON-WAYLAND

**Project Number:** 0079387

**Lab Number:** L0803223

**Report Date:** 03/14/08

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Associated sample(s): 02 Batch: WG313918-1					
Nitrogen, Nitrate	102	-	90-110	-	
Associated sample(s): 02 Batch: WG314166-2					
Sulfate	105	-	84-108	-	
Associated sample(s): 02 Batch: WG314220-2					
Phosphorus, Total	105	-	85-115	-	
Associated sample(s): 01-02 Batch: WG314534-2					
Total Organic Carbon	98	-	90-110	-	

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON-WAYLAND

**Lab Number:** L0803223

**Project Number:** 0079387

**Report Date:** 03/14/08

Parameter	Native Sample	MS Added	MS Found	MS		MSD		Recovery Limits	RPD	RPD Limits
				%Recovery	MSD Found	%Recovery				
Associated sample(s): 02    QC Batch ID: WG313918-3    QC Sample: L0803212-02    Client ID: MS Sample										
Nitrogen, Nitrate	11	4	15	100	-	-	83-120	-	6	
Associated sample(s): 02    QC Batch ID: WG314166-3    QC Sample: L0803236-11    Client ID: MS Sample										
Sulfate	25	40	70	112	-	-	55-147	-	14	
Associated sample(s): 02    QC Batch ID: WG314220-4    QC Sample: L0803236-02    Client ID: MS Sample										
Phosphorus, Total	ND	0.5	0.49	99	-	-	80-120	-	20	
Associated sample(s): 01-02    QC Batch ID: WG314534-3    QC Sample: L0803236-06    Client ID: MS Sample										
Total Organic Carbon	1.2	4	5.0	94	-	-	80-120	-	20	

## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** RAYTHEON-WAYLAND

**Project Number:** 0079387

**Lab Number:** L0803223

**Report Date:** 03/14/08

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Associated sample(s): 02 QC Batch ID: WG313918-4 QC Sample: L0803212-01 Client ID: DUP Sample					
Nitrogen, Nitrate	12	12	mg/l	0	6
Associated sample(s): 02 QC Batch ID: WG314166-4 QC Sample: L0803236-11 Client ID: DUP Sample					
Sulfate	25	24	mg/l	4	14
Associated sample(s): 02 QC Batch ID: WG314220-3 QC Sample: L0803236-01 Client ID: DUP Sample					
Phosphorus, Total	0.04	0.04	mg/l	5	20
Associated sample(s): 01-02 QC Batch ID: WG314534-4 QC Sample: L0803236-04 Client ID: DUP Sample					
Total Organic Carbon	1.1	1.0	mg/l	10	20

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0803223**Project Number:** 0079387**Report Date:** 03/14/08**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

**Cooler Information**

Cooler	Custody Seal
A	Absent

**Container Information**

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0803223-01A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	SUB-MAN-8260
L0803223-01B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	SUB-MAN-8260
L0803223-01C	Vial H2SO4 preserved	A	N/A	2.2C	Y	Absent	TOC-9060
L0803223-01D	Vial H2SO4 preserved	A	N/A	2.2C	Y	Absent	TOC-9060
L0803223-02A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	SUB-MAN-8260
L0803223-02B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	SUB-MAN-8260
L0803223-02C	Vial H2SO4 preserved	A	N/A	2.2C	Y	Absent	TOC-9060
L0803223-02D	Vial H2SO4 preserved	A	N/A	2.2C	Y	Absent	TOC-9060
L0803223-02E	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-FE-6010S
L0803223-02F	Plastic 500ml unpreserved	A	7	2.2C	Y	Absent	NO3-4500,SO4-9038
L0803223-02G	Plastic 500ml H2SO4 preserved	A	<2	2.2C	Y	Absent	TPHOS-4500

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0079387

**Lab Number:** L0803223  
**Report Date:** 03/14/08

## 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-WAYLAND  
**Project Number:** 0079387

**Lab Number:** L0803223  
**Report Date:** 03/14/08

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

## LIMITATION OF LIABILITIES

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

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



# CHAIN OF CUSTODY

PAGE 1 OF 1

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

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

**Client Information**

Client: ERM-Boston

Address: 399 Bowdoin St. 6th Floor

Phone: 617-646-7800

Fax: 617-267-6447

Email: Jason.Flatley@erm.com

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

**Project Information**

Project Name: Raytheon-Wayland

Project Location: Wayland, MA

Project #: 0034337

Project Manager: Jason Ferragary

ALPHA Quote #:

Turn-Around Time

Standard  RUSH (only confirmed if pre-approved!)  
Date Due: 3/11/08 Time:

Date Rec'd in Lab: 3/7/08

**Report Information - Data Deliverables**

FAX  EMAIL

ADEX  Add'l Deliverables

**Billing Information**

Same as Client info PO #:

ALPHA Job #: 20803223

**Regulatory Requirements/Report Limits**

State/Fed Program

MA MCP

**MAMCP PRESUMPTIVE CERTAINTY ... CT REASONABLE CONFIDENCE PROTOCOL**

Criteria: Method 1 GW-1

Yes  No Are MCP Analytical Methods Required?

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

**ANALYSIS**  
8021B by 8260 (v.3.0)  
TOTAL PHOSPHORUS  
SILFATE & NITRATE  
Diss. Fe (Filtered)  
TOC

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Date	Time	Sample Matrix	Sampler's Initials	Date	Time	Sample Matrix	Sampler's Initials
		Date	Time										
03223.1	DEP-1911-20080504-01	3/6/08	16:15	GW	JDF								
	2 MW-ZGM-20080506-01	3/6/08	14:45	GW	EB								
<del>_____</del>													

**PLEASE ANSWER QUESTIONS ABOVE!**

IS YOUR PROJECT  
MA MCP or CT RCP?

Relinquished By: AR/KW

Date/Time: 3/10/08 11:17

Container Type	Preservative	Date/Time	Received By:
V	P	3/10/08 11:17	<u>James Spada</u>
B	A	3/10/08 11:17	<u>James Spada</u>

Date/Time: 3/10/08 11:17

Date/Time: 3/7/08 17:15

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



## ANALYTICAL REPORT

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**Prepared for:**  
**Alpha Analytical - Westborough**  
**8 Walkup Drive**  
**Westborough, MA 01581**

**Project:** L0803223 - ERM BOSTON  
**ETR:** 0803046  
**Report Date:** March 14, 2008

### **Certifications and Accreditations**

**Massachusetts M-MA030**  
**Connecticut PH-0141**  
**New Hampshire 2206**  
**Rhode Island LAO00289**  
**New Jersey MA015**  
**Maine MA0030**  
**New York 11627**  
**Louisiana 03090**  
**Florida E87814**  
**Pennsylvania 68-02089**  
**Army Corps of Engineers**  
**Department of the Navy**

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





**Sample ID Cross Reference**

Client: **Alpha Analytical - Westborough**  
Project: **L0803223 - ERM BOSTON**

Lab Code: **MA00030**  
ETR: **0803046**

<b>Lab Sample ID</b>	<b>Client Sample ID</b>
<u>0803046-01</u>	<u>DEP-19M-20080306-01</u>
<u>0803046-02</u>	<u>MW-264M-20080306-01</u>

# MADEP MCP Analytical Method Report Certification Form

**Laboratory Name:** Alpha Analytical  
**Project Number:** 0803046  
**Project Location:** MCP RTN #<sup>1</sup>:

**This Form provides certifications for the following data set: [Laboratory Sample ID Number(s)]:**

0803046-01 through 0803046-02

**Sample Matrices:**  **Groundwater**       **Soil/Sediment**       **Drinking Water**       **Other:**

## MCP SW-846 Methods used (as specified in MADEP Compendium of Analytical Methods)

Check all that apply:

8260B (X)	8151A ( )	8330 ( )	6010B ( )	7470A/1A ( )
8270C ( )	8081A ( )	VPH ( )	6020 ( )	9014M <sup>2</sup> ( )
8082 ( )	8021B ( )	EPH ( )	7000 S <sup>3</sup> ( )	Other:

<sup>1</sup> – List Release Tracking Number (RTN), if known.

<sup>2</sup>M – SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method.

<sup>3</sup>S – SW-846 Methods 7000 Series. List individual method and analyte.

*An affirmative response to question A, B, C and D is required for "Presumptive Certainty" status.*

<b>A</b>	Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set?	<input checked="" type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No<sup>1</sup></b>
<b>B</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?	<input checked="" type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No<sup>1</sup></b>
<b>C</b>	Does the data included in this report meet all the analytical requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No<sup>1</sup></b>
<b>D</b>	<b><u>VPH and EPH methods only:</u></b> Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective Methods)?	<input type="checkbox"/> <b>Yes</b>	<input type="checkbox"/> <b>No<sup>1</sup></b>

*A response to questions E and F below is required for "Presumptive Certainty" status.*

<b>E</b>	Were all analytical QC performance standards and recommendations for the specified methods achieved?	<input type="checkbox"/> <b>Yes</b>	<input checked="" type="checkbox"/> <b>No<sup>1</sup></b>
<b>F</b>	Were results for all analyte-list compounds/elements for the specified method(s) reported?	<input type="checkbox"/> <b>Yes</b>	<input checked="" type="checkbox"/> <b>No<sup>1</sup></b>

<sup>1</sup> All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

***I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.***

**Signature:** Peter Henriksen      **Position:** Project Manager

**Printed Name:** Peter Henriksen      **Date:** 3-14-08

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# CASE NARRATIVE

## Alpha Analytical

**ETR: 0803046**


**Project: L0803223-ERM BOSTON**

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.

### *Volatile Organics by 8260*

1. The initial calibration had values for compounds outside of the 15% RSD QC advisory limit. Refer to the Form VI Initial Calibration Summary report for specific outliers. This initial calibration meets the acceptability criteria.
2. Per client request, only a subset of the MCP analyte list for SW-846 Method 8260B Volatile Organic Compounds by GC/MS were reported.

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: Project Manager Date: 3/14/08  
Peter Henriksen

*i*

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# **VOLATILE ORGANICS**

# Form I

## Volatile Organics by 8260



Client: **Alpha Analytical - Westborough**  
 Project: **L0803223 - ERM BOSTON**  
 Client ID: **DEP-19M-20080306-01**  
 Case: **N/A** SDG: **N/A**  
 Matrix: **Water**

Lab Code: **MA00030**  
 ETR: **0803046**  
 Lab ID: **0803046-01**  
 Associated Blank: **VW031208B02**  
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/06/08	03/11/08	03/12/08	5	5	1	ALM

Parameter	Result
Dichlorodifluoromethane	2.00 U
Chloromethane	2.00 U
Vinyl chloride	2.00 U
Chloroethane	2.00 U
1,1-Dichloroethene	2.00 U
Methylene chloride	5.00 U
trans-1,2-Dichloroethene	2.00 U
1,1-Dichloroethane	2.00 U
cis-1,2-Dichloroethene	14.7
1,1,1-Trichloroethane	2.00 U
Carbon tetrachloride	2.00 U
1,2-Dichloroethane	2.00 U
Trichloroethene	2.65
1,2-Dichloropropane	2.00 U
Bromodichloromethane	2.00 U
cis-1,3-Dichloropropene	2.00 U
trans-1,3-Dichloropropene	2.00 U
1,1,2-Trichloroethane	2.00 U
Tetrachloroethene	2.00 U
1,3-Dichloropropane	2.00 U
Dibromochloromethane	2.00 U
1,2-Dibromoethane	2.00 U
Chlorobenzene	2.00 U
1,1,1,2-Tetrachloroethane	2.00 U
Bromoform	2.00 U
1,1,2,2-Tetrachloroethane	2.00 U
2-Chlorotoluene	2.00 U
4-Chlorotoluene	2.00 U
1,3-Dichlorobenzene	2.00 U
1,4-Dichlorobenzene	2.00 U
1,2-Dichlorobenzene	2.00 U
1,2,4-Trichlorobenzene	2.00 U
Hexachlorobutadiene	2.00 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	101	70-130
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	90	70-130
4-Bromofluorobenzene	98	70-130

N/A - Not Applicable

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

# Form I

## Volatile Organics by 8260



Client: **Alpha Analytical - Westborough**  
 Project: **L0803223 - ERM BOSTON**  
 Client ID: **MW-264M-20080306-01**  
 Case: **N/A** SDG: **N/A**  
 Matrix: **Water**

Lab Code: **MA00030**  
 ETR: **0803046**  
 Lab ID: **0803046-02**  
 Associated Blank: **VW031308B08**  
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
03/06/08	03/11/08	03/13/08	5	5	1	ALM

Parameter	Result
Dichlorodifluoromethane	2.00 U
Chloromethane	2.00 U
Vinyl chloride	2.74
Chloroethane	2.00 U
1,1-Dichloroethene	2.00 U
Methylene chloride	5.00 U
trans-1,2-Dichloroethene	2.00 U
1,1-Dichloroethane	2.00 U
cis-1,2-Dichloroethene	48.9
1,1,1-Trichloroethane	2.00 U
Carbon tetrachloride	2.00 U
1,2-Dichloroethane	2.00 U
Trichloroethene	43.9
1,2-Dichloropropane	2.00 U
Bromodichloromethane	2.00 U
cis-1,3-Dichloropropene	2.00 U
trans-1,3-Dichloropropene	2.00 U
1,1,2-Trichloroethane	2.00 U
Tetrachloroethene	8.05
1,3-Dichloropropane	2.00 U
Dibromochloromethane	2.00 U
1,2-Dibromoethane	2.00 U
Chlorobenzene	2.00 U
1,1,1,2-Tetrachloroethane	2.00 U
Bromoform	2.00 U
1,1,2,2-Tetrachloroethane	2.00 U
2-Chlorotoluene	2.00 U
4-Chlorotoluene	2.00 U
1,3-Dichlorobenzene	2.00 U
1,4-Dichlorobenzene	2.00 U
1,2-Dichlorobenzene	2.00 U
1,2,4-Trichlorobenzene	2.00 U
Hexachlorobutadiene	2.00 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	98	70-130
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	88	70-130
4-Bromofluorobenzene	94	70-130

N/A - Not Applicable

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

# Form I

## Volatile Organics by 8260



Client: **Alpha Analytical - Westborough**  
 Project: **L0803223 - ERM BOSTON**  
 Client ID: **Blank**  
 Case: **N/A**      SDG: **N/A**  
 Matrix: **Water**

Lab Code: **MA00030**  
 ETR: **0803046**  
 Lab ID: **VW031208B02**  
 Associated Blank: **N/A**  
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	03/12/08	5	5	1	ALM

Parameter	Result
Dichlorodifluoromethane	2.00 U
Chloromethane	2.00 U
Vinyl chloride	2.00 U
Chloroethane	2.00 U
1,1-Dichloroethene	2.00 U
Methylene chloride	5.00 U
trans-1,2-Dichloroethene	2.00 U
1,1-Dichloroethane	2.00 U
cis-1,2-Dichloroethene	2.00 U
1,1,1-Trichloroethane	2.00 U
Carbon tetrachloride	2.00 U
1,2-Dichloroethane	2.00 U
Trichloroethene	2.00 U
1,2-Dichloropropane	2.00 U
Bromodichloromethane	2.00 U
cis-1,3-Dichloropropene	2.00 U
trans-1,3-Dichloropropene	2.00 U
1,1,2-Trichloroethane	2.00 U
Tetrachloroethene	2.00 U
1,3-Dichloropropane	2.00 U
Dibromochloromethane	2.00 U
1,2-Dibromoethane	2.00 U
Chlorobenzene	2.00 U
1,1,1,2-Tetrachloroethane	2.00 U
Bromoform	2.00 U
1,1,2,2-Tetrachloroethane	2.00 U
2-Chlorotoluene	2.00 U
4-Chlorotoluene	2.00 U
1,3-Dichlorobenzene	2.00 U
1,4-Dichlorobenzene	2.00 U
1,2-Dichlorobenzene	2.00 U
1,2,4-Trichlorobenzene	2.00 U
Hexachlorobutadiene	2.00 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	102	70-130
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	96	70-130

N/A - Not Applicable

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

# Form I

## Volatile Organics by 8260



Client: **Alpha Analytical - Westborough**  
 Project: **L0803223 - ERM BOSTON**  
 Client ID: **Blank**  
 Case: **N/A**      SDG: **N/A**  
 Matrix: **Water**

Lab Code: **MA00030**  
 ETR: **0803046**  
 Lab ID: **VW031308B08**  
 Associated Blank: **N/A**  
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	03/13/08	5	5	1	ALM

Parameter	Result
Dichlorodifluoromethane	2.00 U
Chloromethane	2.00 U
Vinyl chloride	2.00 U
Chloroethane	2.00 U
1,1-Dichloroethene	2.00 U
Methylene chloride	5.00 U
trans-1,2-Dichloroethene	2.00 U
1,1-Dichloroethane	2.00 U
cis-1,2-Dichloroethene	2.00 U
1,1,1-Trichloroethane	2.00 U
Carbon tetrachloride	2.00 U
1,2-Dichloroethane	2.00 U
Trichloroethene	2.00 U
1,2-Dichloropropane	2.00 U
Bromodichloromethane	2.00 U
cis-1,3-Dichloropropene	2.00 U
trans-1,3-Dichloropropene	2.00 U
1,1,2-Trichloroethane	2.00 U
Tetrachloroethene	2.00 U
1,3-Dichloropropane	2.00 U
Dibromochloromethane	2.00 U
1,2-Dibromoethane	2.00 U
Chlorobenzene	2.00 U
1,1,1,2-Tetrachloroethane	2.00 U
Bromoform	2.00 U
1,1,2,2-Tetrachloroethane	2.00 U
2-Chlorotoluene	2.00 U
4-Chlorotoluene	2.00 U
1,3-Dichlorobenzene	2.00 U
1,4-Dichlorobenzene	2.00 U
1,2-Dichlorobenzene	2.00 U
1,2,4-Trichlorobenzene	2.00 U
Hexachlorobutadiene	2.00 U

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	97	70-130
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130

N/A - Not Applicable

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



## Form III Spike Recovery Summary Volatile Organics by 8260



Client: **Alpha Analytical - Westborough**  
 Project: **L0803223 - ERM BOSTON**  
 Client ID: **Laboratory Control Sample**  
 Case: **N/A** SDG: **N/A**  
 Matrix: **Water**

Lab Code: **MA00030**  
 ETR: **0803046**  
 Lab ID: **See Below**  
 Associated Blank: **VW031208B02**  
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	03/12/08	5	5	1	ALM

Lab ID: VW031208B02 VW031208LCS01 VW031208LCSD01

Parameter	Blank Conc.	U	LCS		LCSD		% RPD	RPD - % Recovery	
			Conc.	% Recovery	Conc.	% Recovery		Limit	Limits
Dichlorodifluoromethane	2.00	U	21.6	108	21.0	105	3	25	70-130
Chloromethane	2.00	U	21.1	106	19.9	99	6	25	70-130
Vinyl chloride	2.00	U	22.2	111	22.1	111	0	25	70-130
Chloroethane	2.00	U	24.6	123	23.0	115	7	25	70-130
1,1-Dichloroethene	2.00	U	19.3	96	19.0	95	1	25	70-130
Methylene chloride	5.00	U	18.9	94	18.8	94	0	25	70-130
trans-1,2-Dichloroethene	2.00	U	19.5	97	18.9	94	3	25	70-130
1,1-Dichloroethane	2.00	U	19.5	97	18.9	94	3	25	70-130
cis-1,2-Dichloroethene	2.00	U	19.7	98	19.0	95	4	25	70-130
1,1,1-Trichloroethane	2.00	U	19.8	99	19.1	95	4	25	70-130
Carbon tetrachloride	2.00	U	19.4	97	18.7	94	3	25	70-130
1,2-Dichloroethane	2.00	U	19.6	98	19.5	98	1	25	70-130
Trichloroethene	2.00	U	20.1	100	19.5	98	3	25	70-130
1,2-Dichloropropane	2.00	U	19.4	97	19.5	97	0	25	70-130
Bromodichloromethane	2.00	U	19.7	99	19.2	96	3	25	70-130
cis-1,3-Dichloropropene	2.00	U	19.4	97	19.3	96	1	25	70-130
trans-1,3-Dichloropropene	2.00	U	19.4	97	19.1	96	2	25	70-130
1,1,2-Trichloroethane	2.00	U	19.6	98	19.4	97	1	25	70-130
Tetrachloroethene	2.00	U	20.3	102	19.4	97	5	25	70-130
1,3-Dichloropropane	2.00	U	19.7	99	19.4	97	1	25	70-130
Dibromochloromethane	2.00	U	19.6	98	20.0	100	2	25	70-130
1,2-Dibromoethane	2.00	U	19.6	98	19.5	98	1	25	70-130
Chlorobenzene	2.00	U	19.7	98	19.2	96	3	25	70-130
1,1,1,2-Tetrachloroethane	2.00	U	19.7	98	19.7	98	0	25	70-130
Bromoform	2.00	U	19.7	98	18.7	93	5	25	70-130
1,1,2,2-Tetrachloroethane	2.00	U	19.7	99	19.3	96	2	25	70-130
2-Chlorotoluene	2.00	U	19.8	99	19.0	95	4	25	70-130
4-Chlorotoluene	2.00	U	19.0	95	18.3	91	4	25	70-130
1,3-Dichlorobenzene	2.00	U	20.0	100	19.2	96	4	25	70-130
1,4-Dichlorobenzene	2.00	U	19.6	98	19.5	97	1	25	70-130
1,2-Dichlorobenzene	2.00	U	20.3	101	19.4	97	4	25	70-130
1,2,4-Trichlorobenzene	2.00	U	20.3	101	19.4	97	5	25	70-130
Hexachlorobutadiene	2.00	U	21.9	110	19.5	98	11	25	70-130

Surrogate	% Recovery		Acceptance Range (%)
Dibromofluoromethane	98	98	70-130
1,2-Dichloroethane-d4	97	97	70-130
Toluene-d8	100	102	70-130
4-Bromofluorobenzene	100	99	70-130

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.

03/14/08 11:24

10/33

## Form III Spike Recovery Summary Volatile Organics by 8260



Client: **Alpha Analytical - Westborough**  
 Project: **L0803223 - ERM BOSTON**  
 Client ID: **Laboratory Control Sample**  
 Case: **N/A** SDG: **N/A**  
 Matrix: **Water**

Lab Code: **MA00030**  
 ETR: **0803046**  
 Lab ID: **See Below**  
 Associated Blank: **VW031308B08**  
 Concentration Units: **µg/L**

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	03/13/08	5	5	1	ALM

Lab ID: VW031308B08 VW031308LCS04 VW031308LCSD04

Parameter	Blank Conc.	U	LCS		LCSD		% RPD	RPD - % Recovery	
			Conc.	% Recovery	Conc.	% Recovery		Limit	Limits
Dichlorodifluoromethane	2.00	U	17.8	89	17.8	89	0	25	70-130
Chloromethane	2.00	U	16.4	82	16.9	85	3	25	70-130
Vinyl chloride	2.00	U	18.3	92	18.5	93	1	25	70-130
Chloroethane	2.00	U	17.4	87	18.0	90	4	25	70-130
1,1-Dichloroethene	2.00	U	20.5	103	20.6	103	0	25	70-130
Methylene chloride	5.00	U	19.9	99	20.3	102	2	25	70-130
trans-1,2-Dichloroethene	2.00	U	18.8	94	20.0	100	6	25	70-130
1,1-Dichloroethane	2.00	U	19.3	96	19.8	99	3	25	70-130
cis-1,2-Dichloroethene	2.00	U	18.4	92	19.4	97	5	25	70-130
1,1,1-Trichloroethane	2.00	U	19.0	95	19.8	99	4	25	70-130
Carbon tetrachloride	2.00	U	19.1	95	19.7	99	3	25	70-130
1,2-Dichloroethane	2.00	U	18.6	93	18.7	94	1	25	70-130
Trichloroethene	2.00	U	19.9	99	20.4	102	3	25	70-130
1,2-Dichloropropane	2.00	U	20.6	103	20.3	102	1	25	70-130
Bromodichloromethane	2.00	U	19.2	96	19.9	100	4	25	70-130
cis-1,3-Dichloropropene	2.00	U	19.7	99	19.7	99	0	25	70-130
trans-1,3-Dichloropropene	2.00	U	19.3	97	19.5	98	1	25	70-130
1,1,2-Trichloroethane	2.00	U	19.8	99	19.8	99	0	25	70-130
Tetrachloroethene	2.00	U	21.3	106	22.2	111	4	25	70-130
1,3-Dichloropropane	2.00	U	19.5	98	19.6	98	0	25	70-130
Dibromochloromethane	2.00	U	19.9	99	20.1	100	1	25	70-130
1,2-Dibromoethane	2.00	U	19.9	99	20.6	103	3	25	70-130
Chlorobenzene	2.00	U	19.6	98	20.0	100	2	25	70-130
1,1,1,2-Tetrachloroethane	2.00	U	20.1	100	20.4	102	2	25	70-130
Bromoform	2.00	U	19.8	99	19.9	99	0	25	70-130
1,1,2,2-Tetrachloroethane	2.00	U	19.5	97	18.8	94	4	25	70-130
2-Chlorotoluene	2.00	U	19.0	95	19.9	100	5	25	70-130
4-Chlorotoluene	2.00	U	19.1	95	19.8	99	4	25	70-130
1,3-Dichlorobenzene	2.00	U	20.0	100	20.7	103	3	25	70-130
1,4-Dichlorobenzene	2.00	U	19.7	98	20.2	101	3	25	70-130
1,2-Dichlorobenzene	2.00	U	19.8	99	20.4	102	3	25	70-130
1,2,4-Trichlorobenzene	2.00	U	20.0	100	20.1	101	1	25	70-130
Hexachlorobutadiene	2.00	U	20.6	103	20.3	102	2	25	70-130

Surrogate	% Recovery		Acceptance Range (%)
Dibromofluoromethane	96	96	70-130
1,2-Dichloroethane-d4	90	90	70-130
Toluene-d8	100	100	70-130
4-Bromofluorobenzene	98	100	70-130

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.

03/14/08 11:25  
11/33

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# *Supporting Quality Control Results*

**Form II**  
**Surrogate Recovery**  
**Volatile Organics by 8260**



Client: **Alpha Analytical - Westborough**  
 Project: **L0803223 - ERM BOSTON**

Lab Code: **MA00030**

ETR: **0803046**

Matrix: **Water**

Case: **N/A**      SDG: **N/A**

Client ID	Lab ID	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
LCS	VW031208LCS01	98	97	100	100
LCSD	VW031208LCSD01	98	97	102	99
Blank	VW031208B02	102	101	101	96
DEP-19M-20080306-01	0803046-01	101	106	90	98
LCS	VW031308LCS04	96	90	100	98
LCSD	VW031308LCSD04	96	90	100	100
Blank	VW031308B08	97	95	98	96
MW-264M-20080306-01	0803046-02	98	98	88	94

N/A - Not Applicable

Surrogate	QC Limit
Dibromofluoromethane	70-130
1,2-Dichloroethane-d4	70-130
Toluene-d8	70-130
4-Bromofluorobenzene	70-130

**Form IV  
Method Blank Summary  
Volatile Organics by 8260**

Client: **Alpha Analytical - Westborough**Project: **L0803223 - ERM BOSTON**Case: **N/A**      SDG: **N/A**Lab Code: **MA00030**ETR: **0803046**Lab ID: **VW031208B02**Date Analyzed: **03/12/08 16:51**

<b>Client ID</b>	<b>Lab ID</b>	<b>Date/Time Analyzed</b>
LCS	VW031208LCS01	03/12/08 15:19
LCSD	VW031208LCSD01	03/12/08 15:50
DEP-19M-20080306-01	0803046-01	03/12/08 17:53

N/A - Not Applicable

**Form IV  
Method Blank Summary  
Volatile Organics by 8260**



Client: **Alpha Analytical - Westborough**

Project: **L0803223 - ERM BOSTON**

Case: **N/A**      SDG: **N/A**

Lab Code: **MA00030**

ETR: **0803046**

Lab ID: **VW031308B08**

Date Analyzed: **03/13/08 18:52**

Client ID	Lab ID	Date/Time Analyzed
LCS	VW031308LCS04	03/13/08 17:20
LCSD	VW031308LCSD04	03/13/08 17:50
MW-264M-20080306-01	0803046-02	03/13/08 19:22

N/A - Not Applicable

**Form V  
Tune Summary  
Volatile Organics by 8260**

Client: **Alpha Analytical - Westborough**Project: **L0803223 - ERM BOSTON**Case: **N/A** SDG: **N/A**Lab Code: **MA00030**ETR: **0803046**Lab ID: **T1031201**Date Analyzed: **03/12/08 08:39**

Target Mass	Relative To Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result
50	95	15	40	21.4	45101	Pass
75	95	30	60	47.1	99181	Pass
95	95	100	100	100	210496	Pass
96	95	5	9	6.6	13976	Pass
173	174	0	2	0	0	Pass
174	95	50	100	69.2	145600	Pass
175	174	5	9	7.7	11160	Pass
176	174	95	101	97.7	142208	Pass
177	176	5	9	6.6	9418	Pass

Client ID	Lab ID	Date/Time Analyzed
Initial Calibration	I1031201	03/12/08 09:10
Initial Calibration	I1031202	03/12/08 09:41
Initial Calibration	I1031204	03/12/08 10:42
Initial Calibration	I1031205	03/12/08 11:13
Initial Calibration	I1031206	03/12/08 11:44
Initial Calibration	I1031207	03/12/08 14:17

N/A - Not Applicable

**Form V  
Tune Summary  
Volatile Organics by 8260**

Client: **Alpha Analytical - Westborough**Project: **L0803223 - ERM BOSTON**Case: **N/A**      SDG: **N/A**Lab Code: **MA00030**ETR: **0803046**Lab ID: **T1031202**Date Analyzed: **03/12/08 13:47**

Target Mass	Relative To Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result
50	95	15	40	21.5	44045	Pass
75	95	30	60	46.4	94901	Pass
95	95	100	100	100	204693	Pass
96	95	5	9	6.9	14054	Pass
173	174	0	2	0	0	Pass
174	95	50	100	71.6	146475	Pass
175	174	5	9	7.5	11025	Pass
176	174	95	101	95.6	140075	Pass
177	176	5	9	6.4	8962	Pass

Client ID	Lab ID	Date/Time Analyzed
CCV	C1031201	03/12/08 14:48
LCS	VW031208LCS01	03/12/08 15:19
LCSD	VW031208LCSD01	03/12/08 15:50
Blank	VW031208B02	03/12/08 16:51
DEP-19M-20080306-01	0803046-01	03/12/08 17:53

N/A - Not Applicable



**Form V  
Tune Summary  
Volatile Organics by 8260**



Client: **Alpha Analytical - Westborough**  
 Project: **L0803223 - ERM BOSTON**  
 Case: **N/A**      SDG: **N/A**

Lab Code: **MA00030**  
 ETR: **0803046**  
 Lab ID: **T1031301**  
 Date Analyzed: **03/13/08 08:44**

Target Mass	Relative To Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result
50	95	15	40	24.5	43397	Pass
75	95	30	60	51.1	90472	Pass
95	95	100	100	100	177152	Pass
96	95	5	9	6.1	10803	Pass
173	174	0	2	0	0	Pass
174	95	50	100	63.1	111861	Pass
175	174	5	9	7.8	8708	Pass
176	174	95	101	97.1	108616	Pass
177	176	5	9	6.4	6997	Pass

Client ID	Lab ID	Date/Time Analyzed
Initial Calibration	11031301	03/13/08 11:42
Initial Calibration	11031302	03/13/08 12:12
Initial Calibration	11031303	03/13/08 12:43
Initial Calibration	11031304	03/13/08 13:14
Initial Calibration	11031305	03/13/08 13:45
Initial Calibration	11031306	03/13/08 14:15

N/A - Not Applicable

**Form V  
Tune Summary  
Volatile Organics by 8260**



Client: **Alpha Analytical - Westborough**  
 Project: **L0803223 - ERM BOSTON**  
 Case: **N/A**      SDG: **N/A**

Lab Code: **MA00030**  
 ETR: **0803046**  
 Lab ID: **T1031302**  
 Date Analyzed: **03/13/08 16:18**

Target Mass	Relative To Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result
50	95	15	40	20.6	42256	Pass
75	95	30	60	47	96448	Pass
95	95	100	100	100	205376	Pass
96	95	5	9	6.5	13449	Pass
173	174	0	2	0	0	Pass
174	95	50	100	68.7	141099	Pass
175	174	5	9	7.9	11150	Pass
176	174	95	101	96.6	136320	Pass
177	176	5	9	6.8	9229	Pass

Client ID	Lab ID	Date/Time Analyzed
CCV	C1031303	03/13/08 16:49
LCS	VW031308LCS04	03/13/08 17:20
LCSD	VW031308LCSD04	03/13/08 17:50
Blank	VW031308B08	03/13/08 18:52
MW-264M-20080306-01	0803046-02	03/13/08 19:22

N/A - Not Applicable

# Form VI

## Initial Calibration Summary

### Volatile Organics by 8260



Client: **Alpha Analytical - Westborough**  
 Project: **L0803223 - ERM BOSTON**

Lab Code: **MA00030**

ETR: **0803046**

Case: **N/A**      SDG: **N/A**

Lab ID	Date/Time Analyzed
I1031201	03/12/08 09:10
I1031202	03/12/08 09:41
I1031204	03/12/08 10:42
I1031205	03/12/08 11:13
I1031206	03/12/08 11:44
I1031207	03/12/08 14:17

Parameter	Response Factors						Mean	% RSD
	2	5	50	100	200	20		
Dichlorodifluoromethane	0.88	1.12	1.34	1.53	1.37	1.51	1.29	19.2 <sup>a</sup>
Chloromethane	0.99	1.26	1.35	1.54	1.39	1.48	1.34	14.7
Vinyl chloride	0.65	0.84	0.92	1.05	0.99	1.02	0.91	16.3
Chloroethane	0.32	0.43	0.42	0.48	0.23	0.47	0.39	24.5 <sup>a</sup>
1,1-Dichloroethene	1.42	1.48	1.52	1.45	1.34	1.35	1.43	5.1
Methylene chloride		1.17	1.09	1.08	1.04	1.04	1.08	5.1
trans-1,2-Dichloroethene	1.32	1.55	1.56	1.50	1.40	1.39	1.45	6.6
1,1-Dichloroethane	1.80	2.02	1.92	1.87	1.75	1.78	1.86	5.4
cis-1,2-Dichloroethene	1.48	1.61	1.65	1.54	1.51	1.48	1.55	4.6
1,1,1-Trichloroethane	1.30	1.52	1.51	1.48	1.41	1.40	1.44	5.8
Carbon tetrachloride	1.27	1.41	1.39	1.37	1.29	1.30	1.34	4.3
1,2-Dichloroethane	1.41	1.63	1.56	1.53	1.40	1.43	1.50	6.3
Trichloroethene	0.44	0.48	0.47	0.46	0.47	0.45	0.46	3.2
1,2-Dichloropropane	0.48	0.53	0.50	0.49	0.49	0.47	0.49	3.8
Bromodichloromethane	0.66	0.71	0.69	0.68	0.69	0.65	0.68	3.0
cis-1,3-Dichloropropene	0.74	0.82	0.82	0.81	0.80	0.77	0.79	4.0
trans-1,3-Dichloropropene	0.60	0.74	0.75	0.74	0.74	0.68	0.71	8.3
1,1,2-Trichloroethane	0.35	0.43	0.40	0.40	0.40	0.38	0.39	6.8
Tetrachloroethene	0.35	0.38	0.38	0.39	0.41	0.36	0.38	5.3
1,3-Dichloropropane	0.69	0.81	0.77	0.77	0.77	0.73	0.75	5.4
Dibromochloromethane	0.51	0.59	0.61	0.62	0.63	0.57	0.59	7.6
1,2-Dibromoethane	0.46	0.53	0.53	0.54	0.55	0.49	0.52	6.9
Chlorobenzene	0.85	0.90	0.86	0.86	0.88	0.82	0.86	3.0
1,1,1,2-Tetrachloroethane	0.30	0.34	0.35	0.35	0.34	0.32	0.33	5.9
Bromoform	0.18	0.23	0.25	0.25	0.26	0.21	0.23	12.6
1,1,1,2,2-Tetrachloroethane	0.40	0.45	0.48	0.48	0.47	0.44	0.45	6.9
2-Chlorotoluene	0.80	0.88	0.90	0.89	0.91	0.83	0.87	5.1
4-Chlorotoluene	0.93	1.03	1.07	1.05	1.07	0.95	1.02	5.9
1,3-Dichlorobenzene	0.53	0.57	0.62	0.63	0.64	0.57	0.59	7.4
1,4-Dichlorobenzene	0.54	0.62	0.66	0.66	0.69	0.58	0.63	8.9
1,2-Dichlorobenzene	0.50	0.56	0.62	0.63	0.65	0.56	0.59	9.5
1,2,4-Trichlorobenzene	0.23	0.25	0.30	0.31	0.33	0.27	0.28	13.6

N/A - Not Applicable

<sup>a</sup> - Value outside of QC advisory limits.

**Form VI**  
**Initial Calibration Summary**  
**Volatile Organics by 8260**



Client: **Alpha Analytical - Westborough**  
 Project: **L0803223 - ERM BOSTON**

Lab Code: **MA00030**  
 ETR: **0803046**

Case: **N/A**      SDG: **N/A**

Lab ID	Date/Time Analyzed
I1031201	03/12/08 09:10
I1031202	03/12/08 09:41
I1031204	03/12/08 10:42
I1031205	03/12/08 11:13
I1031206	03/12/08 11:44
I1031207	03/12/08 14:17

Parameter	Response Factors						Mean	% RSD
	2	5	50	100	200	20		
Hexachlorobutadiene	0.081	0.079	0.092	0.094	0.098	0.085	0.088	8.5
Dibromofluoromethane	0.89	0.90	0.90	0.89	0.82	0.88	0.88	3.3
1,2-Dichloroethane-d4	0.81	0.83	0.83	0.82	0.74	0.81	0.81	4.0
Toluene-d8	1.23	1.24	1.25	1.25	1.26	1.24	1.25	0.9
4-Bromofluorobenzene	0.55	0.56	0.59	0.58	0.57	0.57	0.57	2.4
Average RSD								7.3

N/A - Not Applicable

# Form VI

## Initial Calibration Summary

### Volatile Organics by 8260



Client: **Alpha Analytical - Westborough**  
 Project: **L0803223 - ERM BOSTON**

Lab Code: **MA00030**  
 ETR: **0803046**

Case: **N/A**      SDG: **N/A**

Lab ID	Date/Time Analyzed
I1031301	03/13/08 11:42
I1031302	03/13/08 12:12
I1031303	03/13/08 12:43
I1031304	03/13/08 13:14
I1031305	03/13/08 13:45
I1031306	03/13/08 14:15

Parameter	Response Factors						Mean	% RSD
	2	5	20	50	100	200		
Dichlorodifluoromethane	1.45	1.45	1.52	1.65	1.55	1.35	1.50	6.9
Chloromethane	1.78	1.56	1.49	1.64	1.56	1.42	1.58	7.9
Vinyl chloride	1.05	1.01	1.09	1.18	1.10	0.97	1.07	6.8
Chloroethane	0.59	0.51	0.49	0.54	0.51	0.41	0.51	11.8
1,1-Dichloroethene	1.51	1.35	1.36	1.44	1.37	1.22	1.37	7.1
Methylene chloride		1.05	1.01	1.08	1.05	0.99	1.04	3.4
trans-1,2-Dichloroethene	1.67	1.45	1.45	1.56	1.47	1.31	1.49	8.0
1,1-Dichloroethane	2.07	1.87	1.79	1.98	1.83	1.67	1.87	7.5
cis-1,2-Dichloroethene	1.83	1.57	1.59	1.70	1.64	1.45	1.63	8.0
1,1,1-Trichloroethane	1.70	1.48	1.48	1.56	1.50	1.36	1.51	7.5
Carbon tetrachloride	1.53	1.35	1.34	1.43	1.35	1.23	1.37	7.3
1,2-Dichloroethane	1.64	1.65	1.58	1.71	1.63	1.38	1.60	7.0
Trichloroethene	0.58	0.49	0.44	0.49	0.48	0.46	0.49	10.3
1,2-Dichloropropane	0.53	0.50	0.49	0.53	0.51	0.49	0.51	3.9
Bromodichloromethane	0.73	0.68	0.67	0.75	0.73	0.69	0.71	5.0
cis-1,3-Dichloropropene	0.81	0.77	0.78	0.87	0.85	0.81	0.81	4.9
trans-1,3-Dichloropropene	0.69	0.68	0.71	0.79	0.78	0.73	0.73	6.3
1,1,2-Trichloroethane	0.40	0.40	0.39	0.42	0.42	0.40	0.40	3.1
Tetrachloroethene	0.40	0.35	0.34	0.39	0.39	0.40	0.38	7.2
1,3-Dichloropropane	0.76	0.77	0.75	0.81	0.81	0.76	0.77	3.6
Dibromochloromethane	0.61	0.54	0.57	0.64	0.64	0.63	0.60	6.9
1,2-Dibromoethane	0.50	0.49	0.49	0.55	0.56	0.53	0.52	5.5
Chlorobenzene	0.95	0.83	0.80	0.88	0.88	0.86	0.87	5.9
1,1,1,2-Tetrachloroethane	0.35	0.32	0.32	0.36	0.35	0.33	0.34	5.2
Bromoform	0.20	0.19	0.22	0.24	0.25	0.24	0.22	10.9
1,1,2,2-Tetrachloroethane	0.42	0.42	0.45	0.48	0.47	0.44	0.45	5.4
2-Chlorotoluene	0.98	0.84	0.84	0.96	0.92	0.90	0.91	6.4
4-Chlorotoluene	1.03	0.92	0.99	1.12	1.09	1.07	1.04	7.0
1,3-Dichlorobenzene	0.57	0.53	0.56	0.65	0.64	0.63	0.60	8.5
1,4-Dichlorobenzene	0.63	0.57	0.61	0.69	0.68	0.67	0.64	7.2
1,2-Dichlorobenzene	0.56	0.53	0.57	0.64	0.64	0.62	0.59	8.0
1,2,4-Trichlorobenzene	0.26	0.24	0.27	0.32	0.32	0.32	0.29	12.4

N/A - Not Applicable

**Form VI**  
**Initial Calibration Summary**  
**Volatile Organics by 8260**

Client: **Alpha Analytical - Westborough**Project: **L0803223 - ERM BOSTON**Lab Code: **MA00030**ETR: **0803046**Case: **N/A**      SDG: **N/A**

Lab ID	Date/Time Analyzed
I1031301	03/13/08 11:42
I1031302	03/13/08 12:12
I1031303	03/13/08 12:43
I1031304	03/13/08 13:14
I1031305	03/13/08 13:45
I1031306	03/13/08 14:15

Parameter	Response Factors						Mean	% RSD
	2	5	20	50	100	200		
Hexachlorobutadiene	0.11	0.083	0.083	0.097	0.096	0.095	0.094	10.7
Dibromofluoromethane	0.90	0.91	0.92	0.91	0.89	0.84	0.90	3.2
1,2-Dichloroethane-d4	0.85	0.91	0.90	0.88	0.84	0.74	0.85	7.1
Toluene-d8	1.28	1.27	1.26	1.30	1.30	1.31	1.29	1.5
4-Bromofluorobenzene	0.57	0.58	0.59	0.61	0.60	0.58	0.59	2.5
Average RSD								6.7

N/A - Not Applicable

## Form VII Calibration Verification Volatile Organics by 8260



Client: **Alpha Analytical - Westborough**  
Project: **L0803223 - ERM BOSTON**

Lab Code: **MA00030**

ETR: **0803046**

Lab ID: **C1031201**

Case: **N/A**      SDG: **N/A**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
Dichlorodifluoromethane	1.29	1.22	5.3	30
Chloromethane	1.34	1.25	6.4	30
Vinyl chloride	0.91	0.86	6.0	20
Chloroethane	0.39	0.40	0.6	30
1,1-Dichloroethene	1.43	1.42	0.2	20
Methylene chloride	1.08	1.06	2.3	30
trans-1,2-Dichloroethene	1.45	1.47	0.8	30
1,1-Dichloroethane	1.86	1.81	2.6	30
cis-1,2-Dichloroethene	1.55	1.53	1.1	30
1,1,1-Trichloroethane	1.44	1.44	0.1	30
Carbon tetrachloride	1.34	1.32	1.6	30
1,2-Dichloroethane	1.50	1.49	0.8	30
Trichloroethene	0.46	0.47	2.0	30
1,2-Dichloropropane	0.49	0.49	0.6	20
Bromodichloromethane	0.68	0.69	1.1	30
cis-1,3-Dichloropropene	0.79	0.81	1.4	30
trans-1,3-Dichloropropene	0.71	0.73	2.7	30
1,1,2-Trichloroethane	0.39	0.40	3.0	30
Tetrachloroethene	0.38	0.38	1.5	30
1,3-Dichloropropane	0.75	0.77	2.6	30
Dibromochloromethane	0.59	0.62	4.6	30
1,2-Dibromoethane	0.52	0.54	3.8	30
Chlorobenzene	0.86	0.86	0.6	30
1,1,1,2-Tetrachloroethane	0.33	0.34	2.3	30
Bromoform	0.23	0.25	6.4	30
1,1,2,2-Tetrachloroethane	0.45	0.47	3.8	30
2-Chlorotoluene	0.87	0.88	1.7	30
4-Chlorotoluene	1.02	1.03	1.5	30
1,3-Dichlorobenzene	0.59	0.61	3.8	30
1,4-Dichlorobenzene	0.63	0.64	2.2	30
1,2-Dichlorobenzene	0.59	0.61	4.8	30
1,2,4-Trichlorobenzene	0.28	0.30	4.8	30
Hexachlorobutadiene	0.088	0.090	2.0	30
Dibromofluoromethane	0.88	0.87	1.5	30
1,2-Dichloroethane-d4	0.81	0.79	1.9	30
Toluene-d8	1.25	1.28	2.4	30
4-Bromofluorobenzene	0.57	0.58	1.0	30
Average % D			2.5	

N/A - Not Applicable

## Form VII Calibration Verification Volatile Organics by 8260



Client: **Alpha Analytical - Westborough**  
 Project: **L0803223 - ERM BOSTON**  
 Case: **N/A**      SDG: **N/A**

Lab Code: **MA00030**  
 ETR: **0803046**  
 Lab ID: **C1031303**

Parameter	Ave. RF	CCV RF	Percent Deviation	Deviation Limit
Dichlorodifluoromethane	1.50	1.45	3.0	30
Chloromethane	1.58	1.40	11.2	30
Vinyl chloride	1.07	0.98	8.2	20
Chloroethane	0.51	0.46	9.1	30
1,1-Dichloroethene	1.37	1.27	7.5	20
Methylene chloride	1.04	1.01	2.6	30
trans-1,2-Dichloroethene	1.49	1.35	9.0	30
1,1-Dichloroethane	1.87	1.72	8.3	30
cis-1,2-Dichloroethene	1.63	1.51	7.1	30
1,1,1-Trichloroethane	1.51	1.40	7.6	30
Carbon tetrachloride	1.37	1.26	8.0	30
1,2-Dichloroethane	1.60	1.50	6.0	30
Trichloroethene	0.49	0.47	4.8	30
1,2-Dichloropropane	0.51	0.49	3.1	20
Bromodichloromethane	0.71	0.70	2.0	30
cis-1,3-Dichloropropene	0.81	0.80	1.4	30
trans-1,3-Dichloropropene	0.73	0.73	0.5	30
1,1,2-Trichloroethane	0.40	0.40	1.0	30
Tetrachloroethene	0.38	0.38	0.3	30
1,3-Dichloropropane	0.77	0.76	2.5	30
Dibromochloromethane	0.60	0.62	2.2	30
1,2-Dibromoethane	0.52	0.53	2.4	30
Chlorobenzene	0.87	0.84	3.1	30
1,1,1,2-Tetrachloroethane	0.34	0.33	1.5	30
Bromoform	0.22	0.23	3.9	30
1,1,2,2-Tetrachloroethane	0.45	0.44	2.1	30
2-Chlorotoluene	0.91	0.87	4.0	30
4-Chlorotoluene	1.04	1.03	1.0	30
1,3-Dichlorobenzene	0.60	0.61	1.8	30
1,4-Dichlorobenzene	0.64	0.64	0.3	30
1,2-Dichlorobenzene	0.59	0.60	0.7	30
1,2,4-Trichlorobenzene	0.29	0.30	2.1	30
Hexachlorobutadiene	0.094	0.089	5.7	30
Dibromofluoromethane	0.90	0.88	2.1	30
1,2-Dichloroethane-d4	0.85	0.80	6.6	30
Toluene-d8	1.29	1.31	1.3	30
4-Bromofluorobenzene	0.59	0.59	0.1	30
Average % D			3.9	

N/A - Not Applicable



**Form VIII**  
**Internal Standard Summary**  
**Volatile Organics by 8260**

Client: **Alpha Analytical - Westborough**Project: **L0803223 - ERM BOSTON**Lab Code: **MA00030**ETR: **0803046**Lab ID: **C1031201**Case: **N/A**      SDG: **N/A**

	Pentafluorobenzene		Fluorobenzene		Chlorobenzene-D5		
	Area	RT	Area	RT	Area	RT	
Standard:	309617	5.67	707642	6.40	1005235	10.67	
Upper Limit:	619234	6.17	1415284	6.90	2010470	11.17	
Lower Limit:	154808	5.17	353821	5.90	502618	10.17	
<b>Client ID</b>	<b>Lab ID</b>						
LCS	VW031208LCS01	315245	5.67	722079	6.40	1000948	10.66
LCSD	VW031208LCSD01	311768	5.67	709298	6.40	1003320	10.67
Blank	VW031208B02	299831	5.67	689387	6.40	954353	10.66
DEP-19M-20080306-01	0803046-01	285427	5.66	650771	6.40	914750	10.66

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.

Area Lower Limit = -50% of internal standard.

RT = Retention Time.

RT Upper Limit = +0.5 minutes of internal standard RT.

RT Lower Limit = -0.5 minutes of internal standard RT.

# Form VIII

## Internal Standard Summary

### Volatile Organics by 8260



Client: **Alpha Analytical - Westborough**  
 Project: **L0803223 - ERM BOSTON**

Lab Code: **MA00030**

ETR: **0803046**

Lab ID: **C1031303**

Case: **N/A**      SDG: **N/A**

	Pentafluorobenzene		Fluorobenzene		Chlorobenzene-D5		
	Area	RT	Area	RT	Area	RT	
Standard:	300650	5.63	681462	6.37	998678	10.63	
Upper Limit:	601300	6.13	1362924	6.87	1997356	11.13	
Lower Limit:	150325	5.13	340731	5.87	499339	10.13	
Client ID	Lab ID						
LCS	VW031308LCS04	306283	5.64	683768	6.37	987486	10.63
LCSD	VW031308LCSD04	304003	5.64	675769	6.37	975180	10.63
Blank	VW031308B08	290770	5.64	666016	6.37	933650	10.63
MW-264M-20080306-01	0803046-02	283645	5.64	636285	6.37	913522	10.63

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.

Area Lower Limit = -50% of internal standard.

RT = Retention Time.

RT Upper Limit = +0.5 minutes of internal standard RT.

RT Lower Limit = -0.5 minutes of internal standard RT.

---

# Chain of Custody Records

# CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA Job #: 20803223

Date Rec'd in Lab: 3/7/08

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

Billing Information  
 Same as Client info  
 PO #:

Report Information - Data Deliverables  
 FAX  
 EMAIL  
 Add'l Deliverables

Project Information  
 Project Name: Raytheon-Wayland  
 Project Location: Wayland, MA  
 Project #: 0079387  
 Project Manager: Jason Ferraro  
 ALPHA Quote #:  
 Turn-Around Time

Regulatory Requirements/Report Limits  
 State/Fed Program  
MA MCP  
 Method GW-1

Regulatory Requirements/Report Limits  
 State/Fed Program  
MA MCP  
 Method GW-1

Client Information  
 Client: ERM-Boston  
 Address: 399 Boylston St. 16th Floor  
Boston, MA 02116  
 Phone: 617-646-7800  
 Fax: 617-267-6447  
 Email: Jason.Ferraro@erm.com

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOL  
 Yes  No Are MCP Analytical Methods Required?  
 Yes  No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Time	Sample Matrix	Sampler's Initials
03223.1	DEP-19M-20080506-01	3/6/08	16:15	GW	JDF
2	MW-26M-20080506-01	3/6/08	14:45	GW	EB

Criteria	Sample Specific Comments
ANALYSIS	802 RB by 8260 (KXG)
TOTAL PHOSPHORUS	
SULFATE ALUMINATE	
DISS. Fe (mg/L)	
TIC	

Container Type	Relinquished By:	Date/Time
V P P P V	<u>ARyan</u>	<u>3/7/08 11:00</u>
Preservative	<u>Michael Jackson</u>	<u>3/7/08 11:00</u>
Received By:	<u>Michael Jackson</u>	<u>3/7/08 11:00</u>

PLEASE ANSWER QUESTIONS ABOVE!  
**IS YOUR PROJECT MA MCP or CT RCP?**  
 FORM NO: 01-01 (rev. 10-OCT-05)

802 RB by 8260 (KXG)  
 TOTAL PHOSPHORUS  
 SULFATE ALUMINATE  
 DISS. Fe (mg/L)  
 TIC

Sample Handling  
 Filtration  Done  
 Not needed  
 Lab to do  
 Preservation  Lab to do  
 (Please specify below)

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





## Sample Delivery Group Form

Laboratory Job No: 20803223  
 Receipt Date/Time: 3/7/08 1715

Client: ERM - Boston  
 SDG Reviewer: wm

**Samples Delivered By:**

Alpha Courier  Client  UPS  FedEx  Other \_\_\_\_\_  
 Bill of Laden:  Yes  Unavailable Tracking #: \_\_\_\_\_

**Chain of Custody:**  Present  Absent: \_\_\_\_\_

**Custody Seals:**  Absent  Present/Intact  Present/Broken

**Cooler/Sample Temperature:**

Is Ice/Blue Ice present?  Yes  No  N/A \_\_\_\_\_

Temp taken from: Temp Blank: (a) 2.2<sup>o</sup> (b) \_\_\_\_\_ (c) \_\_\_\_\_ (d) \_\_\_\_\_ (e) \_\_\_\_\_

IR Gun: (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_ (d) \_\_\_\_\_ (e) \_\_\_\_\_

Was Temp:  2-6 Celsius

<2 Celsius ... were samples frozen upon receipt?  Yes  No

>6 Celsius ... were samples delivered direct from site?  Yes  No

**Containers Received:**

Intact  
 Broken/Leaking Sample IDs: \_\_\_\_\_  
 Sample IDs: \_\_\_\_\_

**All Containers Accounted For?**  Yes

No: \_\_\_\_\_

**Extra Samples Received?**  No

Yes: \_\_\_\_\_

**Do Sample Labels and COC agree?**  Yes

No: \_\_\_\_\_

**Are Samples in Appropriate Containers?**  Yes

No: \_\_\_\_\_

**Are samples rec'd within holding time?**  Yes

No: \_\_\_\_\_

\* Please note: the analysis of pH will always be performed beyond the regulatory-required holding time of 15 min. from the time of collection.

**pH of samples upon receipt:**  N/A  <2  >12 and/or  7

Are samples properly preserved?  Yes  No If No then.....

Initial pH= \_\_\_\_\_ preserved In-House with  HCL  H<sub>2</sub>SO<sub>4</sub>  HNO<sub>3</sub> <<Final pH = \_\_\_\_\_>>

Other Issues: \_\_\_\_\_

Chlorine Check:  N/A  Present  Absent

**VOANPH vials:**  Yes  No

Aqueous: vials contain head space?  No  Yes: \_\_\_\_\_

Soils: MeOH covering soil?  Yes  No: \_\_\_\_\_

Reagent H<sub>2</sub>O Preserved vials Frozen @ date/time: \_\_\_\_\_

Frozen by Client?  No  Yes @ date/time: \_\_\_\_\_

**Was Client notified of any discrepancies listed above?**

Yes  No  N/A

If Yes: Call Tracker # \_\_\_\_\_

## Sample Receipt Checklist

Page 1 of 1

Client: <u>Alpha Analytical</u>	Receipt Date: <u>3/11/08</u>
Project: <u>A0803223-ERM</u>	Log-in Date: <u>3/12/08</u>
ETR #: <u>0803046</u>	Inspection by: <u>Jm</u> Login by: <u>w</u>

## ALL SECTIONS BELOW MUST BE COMPLETED

## Comments / Notes

Were samples shipped? Yes, FedEx / UPS / Other: _____ <u>No</u> , <u>Alpha Analytical Courier pick-up</u> / Hand delivered	Sample storage refrigerator #: <u>VOA</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>1</u>	
Indicate cooler temperature upon opening (if multiple coolers, record <u>all</u> temps): <b>Note:</b> 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. <b>Cooler 1:</b> Temperature(s) taken from: <u>5°</u> IR Gun, <u>6°</u> Temp. Blank, / NA	Cooler 2: _____ Cooler 3: _____ Cooler 4: _____ Cooler 5: _____ Cooler 6: _____ Cooler 7: _____ More: _____
Were samples received on ice? <u>Yes</u> / No	
Chain-of-Custody present? <u>Yes</u> / No Complete? <u>Yes</u> / No	
Custody seals present on Cooler? Yes / <u>No</u> on Bottles? Yes / <u>No</u> Intact? Yes / No / <u>NA</u>	
<b>Note:</b> 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 / <u>No</u> / NA 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? <u>Yes</u> / No / NA <input checked="" type="checkbox"/> C=HCl <input type="checkbox"/> M=MeOH <input type="checkbox"/> S=H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> H=NaOH <input type="checkbox"/> N=HNO <sub>3</sub> <input type="checkbox"/> Other: _____ <input type="checkbox"/> U=Unknown	Chemical preservation OK for ALL samples? Yes / No / <u>NA</u> If No, list samples below:
Preservation (pH) verified at lab for EVERY bottle? (Not: VOA / VPH / Sulfide) YES: <2 or >12 (CN) or NO <u>NA</u> If No, why?:	
Were samples received within hold time? <u>Yes</u> / No If No, list samples: →	
Discrepancy between samples rec'd & COC? Yes / <u>No</u> If Yes, list samples: →	
Was the Project Manager notified of any other problems? Yes / No / NA	
Project Manager Acknowledgement: _____ Date: _____	Please use back for any additional notes!

## 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, SM4500NH<sub>3</sub>; 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; : 200.8; 8020, 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-Poratable 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**



Client Name: ERM  
Contact: Jason Flattery  
Address: 399 Boylston Street  
6th Floor  
Boston, MA 02116

Page: Page 2 of 15  
Lab Proj #: P0803069  
Report Date: 03/18/08  
Client Proj Name: Wayland  
Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
DEP-19M-20080306-01	Water	P0803069-01	06 Mar. 08 16:15	07 Mar. 08 10:23		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.039	0.025	ug/L	AM20GAX	3/17/08	rw
N Ethene	0.130	0.025	ug/L	AM20GAX	3/17/08	rw
N Methane	0.480	0.100	ug/L	AM20GAX	3/17/08	rw



Client Name: ERM  
Contact: Jason Flattery  
Address: 399 Boylston Street  
6th Floor  
Boston, MA 02116

Page: Page 4 of 15  
Lab Proj #: P0803069  
Report Date: 03/18/08  
Client Proj Name: Wayland  
Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
MW-264M-20080306-01	Water	P0803069-03	06 Mar. 08 14:45	07 Mar. 08 10:23		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	<0.025	0.025	ug/L	AM20GAX	3/17/08	rw
N Ethene	0.200	0.025	ug/L	AM20GAX	3/17/08	rw
N Methane	7.900	0.100	ug/L	AM20GAX	3/17/08	rw



## Certificate of Analysis: Quantitative Gene-Trac *Dehalococcoides* Assay

**Customer:** Jason Flattery, ERM

**SiREM Reference:** S-1251

**Project:** Raytheon Wayland

**Report Issued:** 25-Mar-08

**Customer Reference:** 0079387

**Data Files:** DHC-UP-0437/0437  
 QPCR-0325/QPCR check-gel-0232

**Table 1: Test Results**

Customer Sample ID	SiREM Sample ID	Sample Collection Date	Sample Matrix	Percent Dhc <sup>A</sup>	<i>Dehalococcoides</i> Enumeration <sup>B</sup>
MW-264M-20080306-01	DHC-3789	6-Mar-08	Groundwater	NA <sup>(1)</sup>	ND <sup>(2)</sup>

**Notes:**

<sup>A</sup> Percent *Dehalococcoides* (Dhc) in microbial population. This value is calculated by dividing the number of Dhc 16S ribosomal ribonucleic acid (rRNA) gene copies by the total number of bacteria as estimated by the mass of DNA extracted from the sample. Range represents normal variation in Dhc enumeration.

<sup>B</sup>Based on quantification of Dhc 16S rRNA gene copies. Dhc are generally reported to contain one 16S rRNA gene copy per cell; therefore, this number is often interpreted to represent the number of Dhc cells present in the sample.

NA = not applicable

ND= not detected

<sup>1</sup>Not applicable as *Dehalococcoides* not detected.

<sup>2</sup>Not detected. The quantitation limit is 4 x 10<sup>3</sup>/liter.

**Analyst:**



**Jennifer Wilkinson**  
 Biotechnology Technologist

**Approved:**



**Ximena Druar, B.Sc.**  
 Molecular Biology Coordinator

**Table 2: Detailed Test Parameters, Gene-Trac Test Reference S-1251**

<b>Customer Sample ID</b>	MW-264M-20080306-01
<b>SiREM Test ID</b>	DHC-3789
<b>Date Received</b>	7-Mar-08
<b>Sample Temperature</b>	8.5 °C
<b>Volume Used for DNA Extraction</b>	500 mL
<b>DNA Extraction Date</b>	18-Mar-08
<b>DNA Concentration in Sample (extractable)</b>	1102 ng/L
<b>Extracted DNA Quality Test (universal PCR primers)</b>	ND
<b>Secondary DNA Purification</b>	R
<b>DNA Repurification Date</b>	39531
<b>Extracted DNA Quality Test (after repurification)</b>	Passed
<b>Dhc qPCR Analysis Date</b>	24-Mar-08
<b>qPCR Controls (see Table 3)</b>	Passed
<b>Comments</b>	--

**Notes:**

Refer to Table 3 for detailed results of controls.  
 NA = not applicable  
 ND = not detected  
 mL = milliliters

PCR = polymerase chain reaction  
 qPCR = quantitative PCR  
 Dhc = *Dehalococcoides*  
 ng/L = nanograms per liter

NR = not required  
 R = required  
 DNA = Deoxyribonucleic acid  
 °C = degrees Celsius

**Table 3: Experimental Control Results, Test Reference S-1251**

Laboratory Control	Analysis Date	Control Description	Spiked Dhc 16S rRNA Gene Copies per Reaction	Recovered Dhc 16S rRNA Gene Copies per Reaction	Comments
<b>Positive Control Low Concentration</b>	24-Mar-08	qPCR with cloned Dhc gene (9.13 x 10 <sup>5</sup> copies)	9.13 x 10 <sup>5</sup>	1.33 x 10 <sup>6</sup>	Normal <sup>1</sup>
<b>Positive Control High Concentration</b>	24-Mar-08	qPCR with cloned Dhc gene (9.13 x 10 <sup>7</sup> copies)	9.13 x 10 <sup>7</sup>	9.05 x 10 <sup>7</sup>	Normal <sup>1</sup>
<b>DNA Extraction Blank</b>	24-Mar-08	DNA extraction sterile water (DB-0737)	0	ND	Normal
<b>Negative Control</b>	24-Mar-08	Tris Reagent Blank	0	ND	Normal

**Notes:**

<sup>1</sup> Within defined limits of +/- 50%

Dhc = *Dehalococcoides*

DNA = Deoxyribonucleic acid

NA = not applicable

ND = not detected

qPCR = quantitative PCR

16S rRNA = 16S ribosomal ribonucleic acid





# CHAIN OF CUSTODY

PAGE 2 OF 2

Date Rec'd in Lab:

ALPHA Job #:

S-1251

WESTBORO, MA RAYNHAM, MA  
 TEL: 508-898-9220 TEL: 508-822-9300  
 FAX: 508-898-9193 FAX: 508-822-3288

**Project Information**

Project Name: Ryan Han Wayland  
 Project Location: Wayland MA  
 Project #: 0079387  
 Project Manager: S. Claffey  
 ALPHA Quote #:

**Report Information - Data Deliverables**

FAX  EMAIL  
 ADEX  Add'l Deliverables

**Billing Information**

Same as Client info PO #:

**Client Information**

Client: ERM  
 Address: 319 Boylston St.  
Boston MA 02166  
 Phone: 617-646-7800  
 Fax: 617-267-6447  
 Email: Jason.Claffey@erm.com  
 These samples have been previously analyzed by Alpha

**Turn-Around Time**

Standard  RUSH (only confirmed if pre-approved!)

Date Due: \_\_\_\_\_ Time: \_\_\_\_\_

**Regulatory Requirements/Report Limits**

State /Fed Program: MA Criteria: GW-1

**MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTOCOLS**

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

Other Project Specific Requirements/Comments/Detection Limits:

**ANALYSIS**  
Gene Trac VC  
Gene Trac DNA

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

**TOTAL # BOTTLES**

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Sample Specific Comments	TOTAL # BOTTLES
		Date	Time				
	<u>MAW-552-20080306-01</u>	<u>3/6/08</u>	<u>1442</u>		<u>✓ ✓</u>		<u>1</u>
	<u>MAW-553-20070306-01</u>	<u>↓</u>	<u>1641</u>		<u>X X</u>		<u>1</u>
	<u>DUP-001-20080306-01</u>	<u>↓</u>	<u>2400</u>		<u>✓ X</u>		<u>1</u>
<hr/>							

PLEASE ANSWER QUESTIONS ABOVE!  
 IS YOUR PROJECT  
 MA MCP or CT RCP?

Container Type	<u>P</u>	<u>AX</u>	
Preservative	<u>A</u>	<u>A</u>	
Relinquished By:	Date/Time	Received By:	Date/Time
		<u>J. Wilkerson</u>	<u>3/7/08 12:30</u>

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