

Environmental  
Resources  
Management

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

18 May 2007  
Reference: 0061882

Ms. Paula Phillips  
Congress Group  
33 Arch Street  
Boston, MA 02110



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

Dear Ms. Phillips:


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 85 wells on portions of the Site within the boundaries of your property between 23 and 26 April 2007. All samples were submitted for laboratory analysis of volatile organic compounds by United States Environmental Protection Agency (USEPA) Method 8260. A subset of the samples, (31 in total), was submitted for dissolved sodium analysis by USEPA Method 6010. Sample analysis was conducted by Alpha Analytical Laboratories of Westborough, Massachusetts. Analytical laboratory reports are attached to this letter. This analytical data will be provided to the Massachusetts Department of Environmental Protection in the next required MCP submittal.

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

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

Sincerely,



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



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

enclosures: BWSC-123 - Notice of Environmental Sampling  
Alpha Analytical Laboratories Reports L0705740,  
L0705864, L0705868, L0705869, L0705906, L0705907,  
L0705909, L0705913, L0705999, L0706009, L0706011,  
L0706012, L0706016, L0706025, L0706027, L0706028,  
L0706084, L0706122, L0706123, L0706124, L0706126,  
L0706127, L0706128

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:

- Immediate Response Action
- Release Abatement Measure
- Utility-related Abatement Measure
- Phase I Initial Site Investigation
- Phase II Comprehensive Site Assessment
- Phase III Feasibility Evaluation
- Phase IV Remedy Implementation Plan
- Phase V/Remedy Operation Status
- Post-Class C Operation, Maintenance and Monitoring
- 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

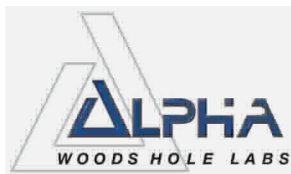
When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice 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: L0705740

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/02/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705740  
**Report Date:** 05/02/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0705740-01	MW-201S-20070423-01	WAYLAND, MA
L0705740-02	MW-201M-20070423-01	WAYLAND, MA
L0705740-03	MW-201D-20070423-01	WAYLAND, MA
L0705740-04	TB-001-20070423-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0705740

Project Number: 0061882

Report Date: 05/02/07

### MADEP MCP Response Action Analytical Report Certification

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

<b>An affirmative response to questions A, B, C &amp; D is required for "Presumptive Certainty" status</b>		
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
<b>A response to questions E and F is required for "Presumptive Certainty" status</b>		
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
<b>For any questions answered "No", please refer to the case narrative section on the following page(s).</b>		

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705740  
**Report Date:** 05/02/07

### Case Narrative

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

#### MCP Related Narratives:

##### Volatile Organics

It should be noted that sample L0705740-01 through -03 were received in the Laboratory at a pH of greater than two.

In reference to question F:

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

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

Authorized Signature:



Title: Technical Director

Date: 05/02/07



# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705740**Project Number:** 0061882**Report Date:** 05/02/07**SAMPLE RESULTS**

Lab ID: L0705740-01  
 Client ID: MW-201S-20070423-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/01/07 18:43  
 Analyst: BT

Date Collected: 04/23/07 14:55  
 Date Received: 04/24/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	1.5		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	12		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	0.85		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705740**Project Number:** 0061882**Report Date:** 05/02/07**SAMPLE RESULTS**

Lab ID: L0705740-01

Date Collected: 04/23/07 14:55

Client ID: MW-201S-20070423-01

Date Received: 04/24/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705740**Project Number:** 0061882**Report Date:** 05/02/07**SAMPLE RESULTS**

Lab ID: L0705740-02  
 Client ID: MW-201M-20070423-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/01/07 19:14  
 Analyst: BT

Date Collected: 04/23/07 16:10  
 Date Received: 04/24/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	1.4		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	2.6		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	84		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	17		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705740**Project Number:** 0061882**Report Date:** 05/02/07**SAMPLE RESULTS**

Lab ID: L0705740-02  
 Client ID: MW-201M-20070423-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/23/07 16:10  
 Date Received: 04/24/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	105		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705740**Project Number:** 0061882**Report Date:** 05/02/07**SAMPLE RESULTS**

**Lab ID:** L0705740-03  
**Client ID:** MW-201D-20070423-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 05/01/07 19:45  
**Analyst:** BT

**Date Collected:** 04/23/07 16:00  
**Date Received:** 04/24/07  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	1.3		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	26		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	2.0		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705740**Project Number:** 0061882**Report Date:** 05/02/07**SAMPLE RESULTS**

Lab ID: L0705740-03

Date Collected: 04/23/07 16:00

Client ID: MW-201D-20070423-01

Date Received: 04/24/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	105		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705740**Project Number:** 0061882**Report Date:** 05/02/07**SAMPLE RESULTS**

Lab ID: L0705740-04  
 Client ID: TB-001-20070423-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/01/07 20:16  
 Analyst: BT

Date Collected: 04/18/07 21:21  
 Date Received: 04/24/07  
 Field Prep: Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705740**Project Number:** 0061882**Report Date:** 05/02/07**SAMPLE RESULTS**

Lab ID: L0705740-04  
 Client ID: TB-001-20070423-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/18/07 21:21  
 Date Received: 04/24/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	105		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705740  
**Report Date:** 05/02/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/01/07 17:42  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG278721-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705740  
**Report Date:** 05/02/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/01/07 17:42  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG278721-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705740  
**Report Date:** 05/02/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/01/07 17:42  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG278721-6				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	98		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0705740

**Project Number:** 0061882

**Report Date:** 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG278721-4 WG278721-5					
Methylene chloride	104	107	70-130	3	25
1,1-Dichloroethane	100	108	70-130	8	25
Chloroform	101	105	70-130	4	25
Carbon tetrachloride	106	108	70-130	2	25
1,2-Dichloropropane	93	92	70-130	1	25
Dibromochloromethane	98	102	70-130	4	25
1,1,2-Trichloroethane	97	95	70-130	2	25
Tetrachloroethene	104	109	70-130	5	25
Chlorobenzene	101	104	70-130	3	25
Trichlorofluoromethane	129	129	70-130	0	25
1,2-Dichloroethane	109	108	70-130	1	25
1,1,1-Trichloroethane	104	109	70-130	5	25
Bromodichloromethane	102	101	70-130	1	25
trans-1,3-Dichloropropene	91	92	70-130	1	25
cis-1,3-Dichloropropene	88	94	70-130	7	25
1,1-Dichloropropene	97	100	70-130	3	25
Bromoform	104	102	70-130	2	50
1,1,2,2-Tetrachloroethane	117	116	70-130	1	25
Benzene	90	94	70-130	4	25
Toluene	97	102	70-130	5	25
Ethylbenzene	102	104	70-130	2	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705740

**Report Date:** 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG278721-4 WG278721-5					
Chloromethane	92	101	70-130	9	50
Bromomethane	74	90	70-130	20	50
Vinyl chloride	86	100	70-130	15	25
Chloroethane	89	100	70-130	12	25
1,1-Dichloroethene	105	110	70-130	5	25
trans-1,2-Dichloroethene	95	102	70-130	7	25
Trichloroethene	102	99	70-130	3	25
1,2-Dichlorobenzene	106	108	70-130	2	25
1,3-Dichlorobenzene	105	108	70-130	3	25
1,4-Dichlorobenzene	106	107	70-130	1	25
Methyl tert butyl ether	92	93	70-130	1	25
p/m-Xylene	102	104	70-130	2	25
o-Xylene	101	100	70-130	1	25
cis-1,2-Dichloroethene	98	103	70-130	5	25
Dibromomethane	97	97	70-130	0	25
1,2,3-Trichloropropane	123	120	70-130	2	25
Styrene	101	101	70-130	0	25
Dichlorodifluoromethane	99	107	70-130	8	50
Acetone	114	116	70-130	2	50
Carbon disulfide	70	77	70-130	10	25
2-Butanone	119	122	70-130	2	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705740

**Report Date:** 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG278721-4 WG278721-5					
4-Methyl-2-pentanone	85	86	70-130	1	50
2-Hexanone	95	91	70-130	4	50
Bromochloromethane	96	100	70-130	4	25
Tetrahydrofuran	93	95	70-130	2	25
2,2-Dichloropropane	96	97	70-130	1	50
1,2-Dibromoethane	98	96	70-130	2	25
1,3-Dichloropropane	100	98	70-130	2	25
1,1,1,2-Tetrachloroethane	107	106	70-130	1	25
Bromobenzene	105	110	70-130	5	25
n-Butylbenzene	106	110	70-130	4	25
sec-Butylbenzene	103	110	70-130	7	25
tert-Butylbenzene	107	112	70-130	5	25
o-Chlorotoluene	103	109	70-130	6	25
p-Chlorotoluene	109	113	70-130	4	25
1,2-Dibromo-3-chloropropane	109	106	70-130	3	50
Hexachlorobutadiene	96	99	70-130	3	25
Isopropylbenzene	112	113	70-130	1	25
p-Isopropyltoluene	111	118	70-130	6	25
Naphthalene	95	95	70-130	0	25
n-Propylbenzene	105	110	70-130	5	25
1,2,3-Trichlorobenzene	99	100	70-130	1	25



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705740

**Report Date:** 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG278721-4 WG278721-5					
1,2,4-Trichlorobenzene	95	99	70-130	4	25
1,3,5-Trimethylbenzene	109	113	70-130	4	25
1,2,4-Trimethylbenzene	108	115	70-130	6	25
Ethyl ether	95	94	70-130	1	25
Isopropyl Ether	95	95	70-130	0	25
Ethyl-Tert-Butyl-Ether	100	98	70-130	2	25
Tertiary-Amyl Methyl Ether	102	103	70-130	1	25
1,4-Dioxane	97	93	70-130	4	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115	110	70-130
Toluene-d8	105	103	70-130
4-Bromofluorobenzene	101	97	70-130
Dibromofluoromethane	104	101	70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705740**Project Number:** 0061882**Report Date:** 05/02/07**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
L0705740-01A	Vial HCl preserved	A	N/A	6.0C	Y	Absent	MCP-8260-04
L0705740-01B	Vial HCl preserved	A	N/A	6.0C	Y	Absent	MCP-8260-04
L0705740-02A	Vial HCl preserved	A	N/A	6.0C	Y	Absent	MCP-8260-04
L0705740-02B	Vial HCl preserved	A	N/A	6.0C	Y	Absent	MCP-8260-04
L0705740-03A	Vial HCl preserved	A	N/A	6.0C	Y	Absent	MCP-8260-04
L0705740-03B	Vial HCl preserved	A	N/A	6.0C	Y	Absent	MCP-8260-04
L0705740-04A	Vial HCl preserved	A	N/A	6.0C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705740  
**Report Date:** 05/02/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
MSD - Matrix Spike Sample Duplicate: Refer to MS.  
NA - Not Applicable.  
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.)

Report Format: Not Specified



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705740  
**Report Date:** 05/02/07

## 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.



05020713:32



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

# CHAIN OF CUSTODY

PAGE \_\_\_\_\_ OF \_\_\_\_\_

Date Rec'd in Lab: 4/24

ALPHA Job #: 20705740

## Client Information

Client: ERM  
Address: 344 BOSTON ST.  
4th Floor BOSTON MA 02110  
Phone: 617-644-7800  
Fax: 617-267-6447  
Email: \_\_\_\_\_

## Project Information

Project Name: Raytheon Wayland  
Project Location: Wayland MA  
Project #: 0061882  
Project Manager: V. Picard  
ALPHA Quote #: \_\_\_\_\_

## Report Information - Data Deliverables

FAX  EMAIL  
 ADEX  Add'l Deliverables

## Billing Information

Same as Client info PO #: \_\_\_\_\_

## Regulatory Requirements/Report Limits

State /Fed Program \_\_\_\_\_ Criteria \_\_\_\_\_

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

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

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits \_\_\_\_\_

## Turn-Around Time

Standard  RUSH (only confirmed if pre-approved)

Date Due: 5/01 Time: \_\_\_\_\_

**ANALYSIS**  
4/23/07 14:55  
4/23/07 16:10  
4/23/07 16:00  
4/24/07 18:30

**SAMPLE HANDLING**

Filtration  
 Done  
 Not needed  
 Lab to do

Preservation  
 Lab to do

(Please specify below)

**TOTAL # BOTTLES**

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials					TOTAL # BOTTLES
		Date	Time							
<u>0570-01</u>	<u>MW-2015-20070423-01</u>	<u>4/23/07</u>	<u>14:55</u>	<u>GW</u>	<u>BT</u>	<u>X</u>				<u>2</u>
<u>-02</u>	<u>MW-2014-20070423-01</u>	<u>4/23/07</u>	<u>16:10</u>	<u>GW</u>	<u>FP</u>	<u>X</u>				<u>2</u>
<u>-03</u>	<u>MW-2017-20070423-01</u>	<u>4/23/07</u>	<u>16:00</u>	<u>GW</u>	<u>TD</u>	<u>X</u>				<u>2</u>
<u>-04</u>	<u>TB-001-20070423-01</u>	<u>4/24/07</u>	<u>18:30</u>	<u>GW</u>	<u>ZP</u>	<u>X</u>				<u>2</u>

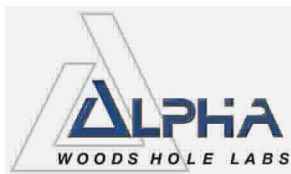
PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
MA MCP or CT RCP?

Container Type V  
Preservative H

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

Relinquished By: ERM MAN D Date/Time: 4/24/07 18:45  
 Received By: John DeCillis Date/Time: 4/24/07 18:30



## ANALYTICAL REPORT

Lab Number: L0705864

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/04/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705864  
**Report Date:** 05/04/07

**Alpha Sample ID**

L0705864-01

**Client ID**

MW204M-20070424

**Sample Location**

WAYLAND, MA

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705864  
**Report Date:** 05/04/07

### MADEP MCP Response Action Analytical Report Certification

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

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

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





**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705864  
**Report Date:** 05/04/07

### Case Narrative

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

#### MCP Related Narratives:

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

In reference to question F:

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

##### Metals

In reference to question F:

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

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

Date: 05/04/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705864**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

**Lab ID:** L0705864-01  
**Client ID:** MW204M-20070424  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Anaytical Method:** 60,8260B  
**Analytical Date:** 05/02/07 01:25  
**Analyst:** BT

**Date Collected:** 04/24/07 12:55  
**Date Received:** 04/25/07  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	0.96		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	22		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	4.0		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	77		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	56		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705864**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

Lab ID: L0705864-01  
 Client ID: MW204M-20070424  
 Sample Location: WAYLAND, MA

Date Collected: 04/24/07 12:55  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	109		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705864  
**Report Date:** 05/04/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/01/07 17:42  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG278841-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705864  
**Report Date:** 05/04/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/01/07 17:42  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG278841-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705864  
**Report Date:** 05/04/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/01/07 17:42  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
-----------	--------	-----------	-------	-----

Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG278841-3

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
-----------	-----------	-----------	------------------------

1,2-Dichloroethane-d4	106		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	98		70-130



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705864

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-1 WG278841-2					
Methylene chloride	104	107	70-130	3	25
1,1-Dichloroethane	100	108	70-130	8	25
Chloroform	101	105	70-130	4	25
Carbon tetrachloride	106	108	70-130	2	25
1,2-Dichloropropane	93	92	70-130	1	25
Dibromochloromethane	98	102	70-130	4	25
1,1,2-Trichloroethane	97	95	70-130	2	25
Tetrachloroethene	104	109	70-130	5	25
Chlorobenzene	101	104	70-130	3	25
Trichlorofluoromethane	129	129	70-130	0	25
1,2-Dichloroethane	109	108	70-130	1	25
1,1,1-Trichloroethane	104	109	70-130	5	25
Bromodichloromethane	102	101	70-130	1	25
trans-1,3-Dichloropropene	91	92	70-130	1	25
cis-1,3-Dichloropropene	88	94	70-130	7	25
1,1-Dichloropropene	97	100	70-130	3	25
Bromoform	104	102	70-130	2	50
1,1,2,2-Tetrachloroethane	117	116	70-130	1	25
Benzene	90	94	70-130	4	25
Toluene	97	102	70-130	5	25
Ethylbenzene	102	104	70-130	2	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705864

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-1 WG278841-2					
Chloromethane	92	101	70-130	9	50
Bromomethane	74	90	70-130	20	50
Vinyl chloride	86	100	70-130	15	25
Chloroethane	89	100	70-130	12	25
1,1-Dichloroethene	105	110	70-130	5	25
trans-1,2-Dichloroethene	95	102	70-130	7	25
Trichloroethene	102	99	70-130	3	25
1,2-Dichlorobenzene	106	108	70-130	2	25
1,3-Dichlorobenzene	105	108	70-130	3	25
1,4-Dichlorobenzene	106	107	70-130	1	25
Methyl tert butyl ether	92	93	70-130	1	25
p/m-Xylene	102	104	70-130	2	25
o-Xylene	101	100	70-130	1	25
cis-1,2-Dichloroethene	98	103	70-130	5	25
Dibromomethane	97	97	70-130	0	25
1,2,3-Trichloropropane	123	120	70-130	2	25
Styrene	101	101	70-130	0	25
Dichlorodifluoromethane	99	107	70-130	8	50
Acetone	114	116	70-130	2	50
Carbon disulfide	70	77	70-130	10	25
2-Butanone	119	122	70-130	2	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705864

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-1 WG278841-2					
4-Methyl-2-pentanone	85	86	70-130	1	50
2-Hexanone	95	91	70-130	4	50
Bromochloromethane	96	100	70-130	4	25
Tetrahydrofuran	93	95	70-130	2	25
2,2-Dichloropropane	96	97	70-130	1	50
1,2-Dibromoethane	98	96	70-130	2	25
1,3-Dichloropropane	100	98	70-130	2	25
1,1,1,2-Tetrachloroethane	107	106	70-130	1	25
Bromobenzene	105	110	70-130	5	25
n-Butylbenzene	106	110	70-130	4	25
sec-Butylbenzene	103	110	70-130	7	25
tert-Butylbenzene	107	112	70-130	5	25
o-Chlorotoluene	103	109	70-130	6	25
p-Chlorotoluene	109	113	70-130	4	25
1,2-Dibromo-3-chloropropane	109	106	70-130	3	50
Hexachlorobutadiene	96	99	70-130	3	25
Isopropylbenzene	112	113	70-130	1	25
p-Isopropyltoluene	111	118	70-130	6	25
Naphthalene	95	95	70-130	0	25
n-Propylbenzene	105	110	70-130	5	25
1,2,3-Trichlorobenzene	99	100	70-130	1	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705864

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-1 WG278841-2					
1,2,4-Trichlorobenzene	95	99	70-130	4	25
1,3,5-Trimethylbenzene	109	113	70-130	4	25
1,2,4-Trimethylbenzene	108	115	70-130	6	25
Ethyl ether	95	94	70-130	1	25
Isopropyl Ether	95	95	70-130	0	25
Ethyl-Tert-Butyl-Ether	100	98	70-130	2	25
Tertiary-Amyl Methyl Ether	102	103	70-130	1	25
1,4-Dioxane	97	93	70-130	4	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115	110	70-130
Toluene-d8	105	103	70-130
4-Bromofluorobenzene	101	97	70-130
Dibromofluoromethane	104	101	70-130

# METALS



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705864**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

Lab ID: L0705864-01

Date Collected: 04/24/07 12:55

Client ID: MW204M-20070424

Date Received: 04/25/07

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										
Sodium, Dissolved	40		mg/l	2.0	1	04/26/07 16:40	05/03/07 16:17	EPA 3005A	60,6010B	AI



Project Name: RAYTHEON WAYLAND

Lab Number: L0705864

Project Number: 0061882

Report Date: 05/04/07

## 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): 01 Batch: WG278269-1								
Sodium, Dissolved	ND	mg/l	2.0	1	04/26/07 16:40	05/01/07 11:26	60,6010B	AI

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705864

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01 Batch: WG278269-2 WG278269-3					
Sodium, Dissolved	93	93	80-120	0	20



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705864**Project Number:** 0061882**Report Date:** 05/04/07**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
L0705864-01A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705864-01B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705864-01C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705864  
**Report Date:** 05/04/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
MSD - Matrix Spike Sample Duplicate: Refer to MS.  
NA - Not Applicable.  
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.)

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705864  
**Report Date:** 05/04/07

## 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.

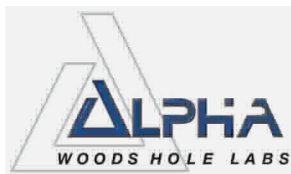
## LIMITATION OF LIABILITIES

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.







## ANALYTICAL REPORT

Lab Number: L0705868

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/03/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705868  
**Report Date:** 05/03/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0705868-01	MW-205D-20070424-01	WAYLAND, MA
L0705868-02	MW-205M-20070424-01	WAYLAND, MA
L0705868-03	MW-205S-20070424-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0705868

Project Number: 0061882

Report Date: 05/03/07

### MADEP MCP Response Action Analytical Report Certification

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

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

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	NO
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	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:** 0061882

**Lab Number:** L0705868  
**Report Date:** 05/03/07

### Case Narrative

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

#### MCP Related Narratives

##### Volatile Organics

L0705868-02 has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

In reference to question E:

The MS/MSD % recoveries are below method acceptance criteria for Trichloroethene and Methyl-tert butyl ether due to the elevated concentrations of these compounds in the sample.

In reference to question F:

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

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

Date: 05/03/07



# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705868**Project Number:** 0061882**Report Date:** 05/03/07**SAMPLE RESULTS**

**Lab ID:** L0705868-01  
**Client ID:** MW-205D-20070424-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 05/02/07 23:46  
**Analyst:** RY

**Date Collected:** 04/24/07 09:30  
**Date Received:** 04/25/07  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	13		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	3.3		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705868**Project Number:** 0061882**Report Date:** 05/03/07**SAMPLE RESULTS**

Lab ID: L0705868-01

Date Collected: 04/24/07 09:30

Client ID: MW-205D-20070424-01

Date Received: 04/25/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705868**Project Number:** 0061882**Report Date:** 05/03/07**SAMPLE RESULTS**

**Lab ID:** L0705868-02  
**Client ID:** MW-205M-20070424-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Anaytical Method:** 60,8260B  
**Analytical Date:** 05/03/07 00:48  
**Analyst:** RY

**Date Collected:** 04/24/07 10:35  
**Date Received:** 04/25/07  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	12	2.5
1,1-Dichloroethane	ND		ug/l	1.9	2.5
Chloroform	ND		ug/l	1.9	2.5
Carbon tetrachloride	ND		ug/l	1.2	2.5
1,2-Dichloropropane	ND		ug/l	4.4	2.5
Dibromochloromethane	ND		ug/l	1.2	2.5
1,1,2-Trichloroethane	ND		ug/l	1.9	2.5
Tetrachloroethene	ND		ug/l	1.2	2.5
Chlorobenzene	ND		ug/l	1.2	2.5
1,2-Dichloroethane	ND		ug/l	1.2	2.5
1,1,1-Trichloroethane	29		ug/l	1.2	2.5
Bromodichloromethane	ND		ug/l	1.2	2.5
trans-1,3-Dichloropropene	ND		ug/l	1.2	2.5
cis-1,3-Dichloropropene	ND		ug/l	1.2	2.5
Bromoform	ND		ug/l	5.0	2.5
1,1,2,2-Tetrachloroethane	ND		ug/l	1.2	2.5
Benzene	ND		ug/l	1.2	2.5
Chloromethane	ND		ug/l	6.2	2.5
Vinyl chloride	ND		ug/l	2.5	2.5
Chloroethane	ND		ug/l	2.5	2.5
1,1-Dichloroethene	2.6		ug/l	1.2	2.5
trans-1,2-Dichloroethene	ND		ug/l	1.9	2.5
Trichloroethene	140		ug/l	1.2	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	2.5
1,3-Dichlorobenzene	ND		ug/l	6.2	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	2.5
Methyl tert butyl ether	120		ug/l	2.5	2.5
cis-1,2-Dichloroethene	ND		ug/l	1.2	2.5
Dichlorodifluoromethane	ND		ug/l	12	2.5
1,2-Dibromoethane	ND		ug/l	5.0	2.5

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705868**Project Number:** 0061882**Report Date:** 05/03/07**SAMPLE RESULTS**

Lab ID: L0705868-02  
 Client ID: MW-205M-20070424-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/24/07 10:35  
 Date Received: 04/25/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	6.2	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	1.2	2.5
o-Chlorotoluene	ND		ug/l	6.2	2.5
p-Chlorotoluene	ND		ug/l	6.2	2.5
Hexachlorobutadiene	ND		ug/l	1.5	2.5
1,2,4-Trichlorobenzene	ND		ug/l	6.2	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705868**Project Number:** 0061882**Report Date:** 05/03/07**SAMPLE RESULTS**

Lab ID: L0705868-03  
 Client ID: MW-205S-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/03/07 00:17  
 Analyst: RY

Date Collected: 04/24/07 12:45  
 Date Received: 04/25/07  
 Field Prep: Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705868**Project Number:** 0061882**Report Date:** 05/03/07**SAMPLE RESULTS**

Lab ID: L0705868-03  
 Client ID: MW-205S-20070424-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/24/07 12:45  
 Date Received: 04/25/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	109		70-130



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705868  
**Report Date:** 05/03/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/02/07 18:38  
Analyst: RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03 Batch: WG279035-5				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705868  
**Report Date:** 05/03/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/02/07 18:38  
Analyst: RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03 Batch: WG279035-5				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705868  
**Report Date:** 05/03/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/02/07 18:38  
Analyst: RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03 Batch: WG279035-5				

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	100		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0705868

**Project Number:** 0061882

**Report Date:** 05/03/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279035-3 WG279035-4					
Methylene chloride	101	100	70-130	1	25
1,1-Dichloroethane	105	101	70-130	4	25
Chloroform	103	98	70-130	5	25
Carbon tetrachloride	106	103	70-130	3	25
1,2-Dichloropropane	94	91	70-130	3	25
Dibromochloromethane	93	102	70-130	9	25
1,1,2-Trichloroethane	97	102	70-130	5	25
Tetrachloroethene	106	106	70-130	0	25
Chlorobenzene	103	101	70-130	2	25
Trichlorofluoromethane	129	127	70-130	2	25
1,2-Dichloroethane	111	110	70-130	1	25
1,1,1-Trichloroethane	111	104	70-130	7	25
Bromodichloromethane	98	100	70-130	2	25
trans-1,3-Dichloropropene	90	95	70-130	5	25
cis-1,3-Dichloropropene	91	90	70-130	1	25
1,1-Dichloropropene	99	96	70-130	3	25
Bromoform	95	98	70-130	3	50
1,1,2,2-Tetrachloroethane	114	115	70-130	1	25
Benzene	93	90	70-130	3	25
Toluene	98	99	70-130	1	25
Ethylbenzene	103	102	70-130	1	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0705868

**Project Number:** 0061882

**Report Date:** 05/03/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279035-3 WG279035-4					
Chloromethane	98	98	70-130	0	50
Bromomethane	88	84	70-130	5	50
Vinyl chloride	92	91	70-130	1	25
Chloroethane	98	98	70-130	0	25
1,1-Dichloroethene	111	107	70-130	4	25
trans-1,2-Dichloroethene	97	97	70-130	0	25
Trichloroethene	103	99	70-130	4	25
1,2-Dichlorobenzene	100	97	70-130	3	25
1,3-Dichlorobenzene	103	98	70-130	5	25
1,4-Dichlorobenzene	102	99	70-130	3	25
Methyl tert butyl ether	96	101	70-130	5	25
p/m-Xylene	102	102	70-130	0	25
o-Xylene	99	101	70-130	2	25
cis-1,2-Dichloroethene	104	98	70-130	6	25
Dibromomethane	103	100	70-130	3	25
1,2,3-Trichloropropane	111	116	70-130	4	25
Styrene	99	101	70-130	2	25
Dichlorodifluoromethane	92	90	70-130	2	50
Acetone	127	<b>140</b>	70-130	10	50
Carbon disulfide	86	88	70-130	2	25
2-Butanone	129	<b>136</b>	70-130	5	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0705868

**Project Number:** 0061882

**Report Date:** 05/03/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279035-3 WG279035-4					
4-Methyl-2-pentanone	95	92	70-130	3	50
2-Hexanone	100	116	70-130	15	50
Bromochloromethane	104	104	70-130	0	25
Tetrahydrofuran	98	102	70-130	4	25
2,2-Dichloropropane	98	99	70-130	1	50
1,2-Dibromoethane	100	100	70-130	0	25
1,3-Dichloropropane	95	103	70-130	8	25
1,1,1,2-Tetrachloroethane	102	104	70-130	2	25
Bromobenzene	102	98	70-130	4	25
n-Butylbenzene	105	97	70-130	8	25
sec-Butylbenzene	103	97	70-130	6	25
tert-Butylbenzene	103	100	70-130	3	25
o-Chlorotoluene	102	97	70-130	5	25
p-Chlorotoluene	104	100	70-130	4	25
1,2-Dibromo-3-chloropropane	104	114	70-130	9	50
Hexachlorobutadiene	92	87	70-130	6	25
Isopropylbenzene	109	110	70-130	1	25
p-Isopropyltoluene	109	103	70-130	6	25
Naphthalene	105	102	70-130	3	25
n-Propylbenzene	104	98	70-130	6	25
1,2,3-Trichlorobenzene	101	95	70-130	6	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0705868

**Project Number:** 0061882

**Report Date:** 05/03/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279035-3 WG279035-4					
1,2,4-Trichlorobenzene	97	93	70-130	4	25
1,3,5-Trimethylbenzene	106	100	70-130	6	25
1,2,4-Trimethylbenzene	107	99	70-130	8	25
Ethyl ether	102	105	70-130	3	25
Isopropyl Ether	100	99	70-130	1	25
Ethyl-Tert-Butyl-Ether	76	86	70-130	12	25
Tertiary-Amyl Methyl Ether	106	97	70-130	9	25
1,4-Dioxane	95	106	70-130	11	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		115		70-130
Toluene-d8	103		106		70-130
4-Bromofluorobenzene	98		95		70-130
Dibromofluoromethane	106		103		70-130

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0705868

**Project Number:** 0061882

**Report Date:** 05/03/07

Parameter	Native Sample	MS Added	MS Found	MS		MSD		Recovery Limits	RPD	RPD Limits
				%Recovery	MSD Found	%Recovery				
Volatile Organics by MCP 8260B Associated sample(s): 01-03 QC Batch ID: WG279035-1 WG279035-2 QC Sample: L0705868-02 Client ID: MW-205M-20070424-01										
Methylene chloride	ND	25	26	103	25	99	70-130	4	30	
1,1-Dichloroethane	1.8J	25	29	117	28	112	70-130	4	30	
Chloroform	ND	25	27	107	27	107	70-130	0	30	
Carbon tetrachloride	ND	25	30	120	28	114	70-130	5	30	
1,2-Dichloropropane	ND	25	24	98	24	96	70-130	2	30	
Dibromochloromethane	ND	25	25	102	26	104	70-130	2	30	
1,1,2-Trichloroethane	ND	25	25	102	22	90	70-130	13	30	
Tetrachloroethene	ND	25	26	104	25	101	70-130	3	30	
Chlorobenzene	ND	25	26	103	25	101	70-130	2	30	
1,2-Dichloroethane	ND	25	27	109	27	108	70-130	1	30	
1,1,1-Trichloroethane	29	25	53	95	49	82	70-130	15	30	
Bromodichloromethane	ND	25	28	114	26	104	70-130	9	30	
trans-1,3-Dichloropropene	ND	25	24	94	22	90	70-130	4	30	
cis-1,3-Dichloropropene	ND	25	21	85	22	88	70-130	3	30	
Bromoform	ND	25	28	110	26	104	70-130	6	30	
1,1,1,2-Tetrachloroethane	ND	25	28	111	29	115	70-130	4	30	
Benzene	ND	25	23	93	22	89	70-130	4	30	
Chloromethane	ND	25	24	95	25	99	70-130	4	30	
Vinyl chloride	ND	25	22	88	23	94	70-130	7	30	
Chloroethane	ND	25	24	97	23	92	70-130	5	30	
1,1-Dichloroethene	2.6	25	29	106	29	106	70-130	0	30	



### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705868  
**Report Date:** 05/03/07

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
-----------	---------------	----------	----------	-----------------	-----------	------------------	--------------------	-----	------------

Volatile Organics by MCP 8260B Associated sample(s): 01-03 QC Batch ID: WG279035-1 WG279035-2 QC Sample: L0705868-02 Client ID: MW-205M-20070424-01

trans-1,2-Dichloroethene	ND	25	24	97	24	97	70-130	0	30
Trichloroethene	140	25	130	0	120	0	70-130	NC	30
1,2-Dichlorobenzene	ND	25	26	102	26	106	70-130	4	30
1,3-Dichlorobenzene	ND	25	26	102	26	106	70-130	4	30
1,4-Dichlorobenzene	ND	25	25	102	26	105	70-130	3	30
Methyl tert butyl ether	120	25	130	10	120	2	70-130	131	30
cis-1,2-Dichloroethene	ND	25	26	106	26	106	70-130	0	30
Dichlorodifluoromethane	ND	25	22	90	21	83	70-130	8	30
1,2-Dibromoethane	ND	25	24	95	24	98	70-130	3	30
1,3-Dichloropropane	ND	25	24	98	24	94	70-130	4	30
1,1,1,2-Tetrachloroethane	ND	25	27	110	27	108	70-130	2	30
o-Chlorotoluene	ND	25	25	100	26	103	70-130	3	30
p-Chlorotoluene	ND	25	27	107	26	106	70-130	1	30
Hexachlorobutadiene	ND	25	22	90	22	89	70-130	1	30
1,2,4-Trichlorobenzene	ND	25	21	85	22	89	70-130	5	30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		112		70-130
4-Bromofluorobenzene	97		101		70-130
Dibromofluoromethane	114		108		70-130

**Matrix Spike Analysis  
Batch Quality Control**

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705868  
**Report Date:** 05/03/07

<u>Parameter</u>	<u>Native Sample</u>	<u>MS Added</u>	<u>MS Found</u>	<u>MS</u> <u>%Recovery</u>	<u>MSD Found</u>	<u>MSD</u> <u>%Recovery</u>	<u>Recovery</u> <u>Limits</u>	<u>RPD</u>	<u>RPD Limits</u>
------------------	----------------------	-----------------	-----------------	-------------------------------	------------------	--------------------------------	----------------------------------	------------	-------------------

Volatile Organics by MCP 8260B Associated sample(s): 01-03 QC Batch ID: WG279035-1 WG279035-2 QC Sample: L0705868-02 Client ID: MW-205M-20070424-01

<u>Surrogate</u>	<u>MS</u>		<u>MSD</u>		<u>Acceptance</u> <u>Criteria</u>
	<u>% Recovery</u>	<u>Qualifier</u>	<u>% Recovery</u>	<u>Qualifier</u>	
Toluene-d8	103		104		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705868**Project Number:** 0061882**Report Date:** 05/03/07**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
L0705868-01A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705868-01B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705868-02A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705868-02B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705868-02C	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705868-02D	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705868-02E	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705868-02F	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705868-03A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705868-03B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705868  
**Report Date:** 05/03/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.
- LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD- Laboratory Control Sample Duplicate: Refer to LCS.
- MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD - Matrix Spike Sample Duplicate: Refer to MS.
- NA - Not Applicable.
- 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.
- 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.)

Report Format: Not Specified



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705868  
**Report Date:** 05/03/07

## 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.

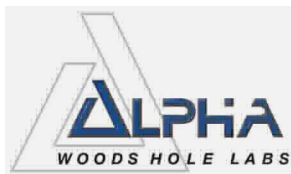
## LIMITATION OF LIABILITIES

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.







## ANALYTICAL REPORT

Lab Number: L0705869

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/03/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705869  
**Report Date:** 05/03/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0705869-01	MW-207D-20070427	WAYLAND, MA
L0705869-02	MW-207M-20070427	WAYLAND, MA
L0705869-03	MW-207S-20070427	WAYLAND, MA



Project Name: RAYTHEON WAYLAND

Lab Number: L0705869

Project Number: 0061882

Report Date: 05/03/07

### MADEP MCP Response Action Analytical Report Certification

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

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705869  
**Report Date:** 05/03/07

### Case Narrative

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

MCP Related Narratives:

Volatile Organics

L0705869-02 has elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the sample.

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

Date: 05/03/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705869**Project Number:** 0061882**Report Date:** 05/03/07**SAMPLE RESULTS**

Lab ID: L0705869-01  
 Client ID: MW-207D-20070427  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/03/07 02:21  
 Analyst: RY

Date Collected: 04/27/07 10:00  
 Date Received: 04/25/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.7		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	1.8		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705869**Project Number:** 0061882**Report Date:** 05/03/07**SAMPLE RESULTS**

Lab ID: L0705869-01

Date Collected: 04/27/07 10:00

Client ID: MW-207D-20070427

Date Received: 04/25/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	109		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705869**Project Number:** 0061882**Report Date:** 05/03/07**SAMPLE RESULTS**

Lab ID: L0705869-02  
 Client ID: MW-207M-20070427  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/03/07 03:22  
 Analyst: RY

Date Collected: 04/27/07 11:40  
 Date Received: 04/25/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	10	2
1,1-Dichloroethane	1.6		ug/l	1.5	2
Chloroform	ND		ug/l	1.5	2
Carbon tetrachloride	ND		ug/l	1.0	2
1,2-Dichloropropane	ND		ug/l	3.5	2
Dibromochloromethane	ND		ug/l	1.0	2
1,1,2-Trichloroethane	ND		ug/l	1.5	2
Tetrachloroethene	ND		ug/l	1.0	2
Chlorobenzene	ND		ug/l	1.0	2
1,2-Dichloroethane	ND		ug/l	1.0	2
1,1,1-Trichloroethane	ND		ug/l	1.0	2
Bromodichloromethane	ND		ug/l	1.0	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	2
Bromoform	ND		ug/l	4.0	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	2
Benzene	ND		ug/l	1.0	2
Chloromethane	ND		ug/l	5.0	2
Vinyl chloride	ND		ug/l	2.0	2
Chloroethane	ND		ug/l	2.0	2
1,1-Dichloroethene	3.1		ug/l	1.0	2
trans-1,2-Dichloroethene	ND		ug/l	1.5	2
Trichloroethene	45		ug/l	1.0	2
1,2-Dichlorobenzene	ND		ug/l	5.0	2
1,3-Dichlorobenzene	ND		ug/l	5.0	2
1,4-Dichlorobenzene	ND		ug/l	5.0	2
Methyl tert butyl ether	7.2		ug/l	2.0	2
cis-1,2-Dichloroethene	1.3		ug/l	1.0	2
Dichlorodifluoromethane	ND		ug/l	10	2
1,2-Dibromoethane	ND		ug/l	4.0	2

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705869**Project Number:** 0061882**Report Date:** 05/03/07**SAMPLE RESULTS**

Lab ID: L0705869-02  
 Client ID: MW-207M-20070427  
 Sample Location: WAYLAND, MA

Date Collected: 04/27/07 11:40  
 Date Received: 04/25/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	5.0	2
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	2
o-Chlorotoluene	ND		ug/l	5.0	2
p-Chlorotoluene	ND		ug/l	5.0	2
Hexachlorobutadiene	ND		ug/l	1.2	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	104		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705869**Project Number:** 0061882**Report Date:** 05/03/07**SAMPLE RESULTS**

**Lab ID:** L0705869-03  
**Client ID:** MW-207S-20070427  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Anaytical Method:** 60,8260B  
**Analytical Date:** 05/03/07 02:51  
**Analyst:** RY

**Date Collected:** 04/27/07 15:15  
**Date Received:** 04/25/07  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	1.9		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	1.6		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	9.5		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705869**Project Number:** 0061882**Report Date:** 05/03/07**SAMPLE RESULTS**

Lab ID: L0705869-03  
 Client ID: MW-207S-20070427  
 Sample Location: WAYLAND, MA

Date Collected: 04/27/07 15:15  
 Date Received: 04/25/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	107		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705869  
**Report Date:** 05/03/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/02/07 18:38  
Analyst: RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03 Batch: WG279032-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705869  
**Report Date:** 05/03/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/02/07 18:38  
Analyst: RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03 Batch: WG279032-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705869  
**Report Date:** 05/03/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/02/07 18:38  
Analyst: RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03 Batch: WG279032-3				

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	100		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0705869

**Project Number:** 0061882

**Report Date:** 05/03/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279032-1 WG279032-2					
Methylene chloride	101	100	70-130	1	25
1,1-Dichloroethane	105	101	70-130	4	25
Chloroform	103	98	70-130	5	25
Carbon tetrachloride	106	103	70-130	3	25
1,2-Dichloropropane	94	91	70-130	3	25
Dibromochloromethane	93	102	70-130	9	25
1,1,2-Trichloroethane	97	102	70-130	5	25
Tetrachloroethene	106	106	70-130	0	25
Chlorobenzene	103	101	70-130	2	25
Trichlorofluoromethane	129	127	70-130	2	25
1,2-Dichloroethane	111	110	70-130	1	25
1,1,1-Trichloroethane	111	104	70-130	7	25
Bromodichloromethane	98	100	70-130	2	25
trans-1,3-Dichloropropene	90	95	70-130	5	25
cis-1,3-Dichloropropene	91	90	70-130	1	25
1,1-Dichloropropene	99	96	70-130	3	25
Bromoform	95	98	70-130	3	50
1,1,2,2-Tetrachloroethane	114	115	70-130	1	25
Benzene	93	90	70-130	3	25
Toluene	98	99	70-130	1	25
Ethylbenzene	103	102	70-130	1	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705869

**Report Date:** 05/03/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279032-1 WG279032-2					
Chloromethane	98	98	70-130	0	50
Bromomethane	88	84	70-130	5	50
Vinyl chloride	92	91	70-130	1	25
Chloroethane	98	98	70-130	0	25
1,1-Dichloroethene	111	107	70-130	4	25
trans-1,2-Dichloroethene	97	97	70-130	0	25
Trichloroethene	103	99	70-130	4	25
1,2-Dichlorobenzene	100	97	70-130	3	25
1,3-Dichlorobenzene	103	98	70-130	5	25
1,4-Dichlorobenzene	102	99	70-130	3	25
Methyl tert butyl ether	96	101	70-130	5	25
p/m-Xylene	102	102	70-130	0	25
o-Xylene	99	101	70-130	2	25
cis-1,2-Dichloroethene	104	98	70-130	6	25
Dibromomethane	103	100	70-130	3	25
1,2,3-Trichloropropane	111	116	70-130	4	25
Styrene	99	101	70-130	2	25
Dichlorodifluoromethane	92	90	70-130	2	50
Acetone	127	140	70-130	10	50
Carbon disulfide	86	88	70-130	2	25
2-Butanone	129	136	70-130	5	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705869

**Report Date:** 05/03/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279032-1 WG279032-2					
4-Methyl-2-pentanone	95	92	70-130	3	50
2-Hexanone	100	116	70-130	15	50
Bromochloromethane	104	104	70-130	0	25
Tetrahydrofuran	98	102	70-130	4	25
2,2-Dichloropropane	98	99	70-130	1	50
1,2-Dibromoethane	100	100	70-130	0	25
1,3-Dichloropropane	95	103	70-130	8	25
1,1,1,2-Tetrachloroethane	102	104	70-130	2	25
Bromobenzene	102	98	70-130	4	25
n-Butylbenzene	105	97	70-130	8	25
sec-Butylbenzene	103	97	70-130	6	25
tert-Butylbenzene	103	100	70-130	3	25
o-Chlorotoluene	102	97	70-130	5	25
p-Chlorotoluene	104	100	70-130	4	25
1,2-Dibromo-3-chloropropane	104	114	70-130	9	50
Hexachlorobutadiene	92	87	70-130	6	25
Isopropylbenzene	109	110	70-130	1	25
p-Isopropyltoluene	109	103	70-130	6	25
Naphthalene	105	102	70-130	3	25
n-Propylbenzene	104	98	70-130	6	25
1,2,3-Trichlorobenzene	101	95	70-130	6	25



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705869

**Report Date:** 05/03/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279032-1 WG279032-2					
1,2,4-Trichlorobenzene	97	93	70-130	4	25
1,3,5-Trimethylbenzene	106	100	70-130	6	25
1,2,4-Trimethylbenzene	107	99	70-130	8	25
Ethyl ether	102	105	70-130	3	25
Isopropyl Ether	100	99	70-130	1	25
Ethyl-Tert-Butyl-Ether	76	86	70-130	12	25
Tertiary-Amyl Methyl Ether	106	97	70-130	9	25
1,4-Dioxane	95	106	70-130	11	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115	115	70-130
Toluene-d8	103	106	70-130
4-Bromofluorobenzene	98	95	70-130
Dibromofluoromethane	106	103	70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705869**Project Number:** 0061882**Report Date:** 05/03/07**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
L0705869-01A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705869-01B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705869-02A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705869-02B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705869-03A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705869-03B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705869  
**Report Date:** 05/03/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
MSD - Matrix Spike Sample Duplicate: Refer to MS.  
NA - Not Applicable.  
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.)

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705869  
**Report Date:** 05/03/07

## 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.



05030715:34



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

# CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/25

ALPHA Job #: L0705869

### Client Information

Client: ERM  
 Address: 399 Boylston St, 6th Floor  
Boston, MA 02116  
 Phone: (617) 646-7800  
 Fax: (617) 267-6447  
 Email: jeremy.picard@erm.com  
 These samples have been previously analyzed by Alpha  
 Other Project Specific Requirements/Comments/Detection Limits:

### Project Information

Project Name: Raytheon  
 Project Location: Wayland, MA  
 Project #: 0161882  
 Project Manager: Jeremy Picard  
 ALPHA Quote #:

### Turn-Around Time

Standard  RUSH (only confirmed if pre-approved!)  
 Date Due: 05/02 Time:

### Report Information - Data Deliverables

FAX  EMAIL  
 ADEx  Add'l Deliverables

### Billing Information

Same as Client info PO #:

### Regulatory Requirements/Report Limits

State / Fed Program: MA / MCP Criteria: GW-T

### 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	SAMPLE HANDLING		TOTAL # BOTTLES
	Filtration	Preservation	
80218, MBE and Benzene	<input type="checkbox"/> Done	<input type="checkbox"/> Lab to do	2
	<input type="checkbox"/> Not needed	<input type="checkbox"/> Lab to do	
	<input type="checkbox"/> Lab to do	<input type="checkbox"/> Lab to do	
	Sample Specific Comments		

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Time	Sample Matrix	Sampler's Initials	
<u>05869-01</u>	<u>MW-207D-20070427</u>	<u>04/27/07</u>	<u>10:00</u>	<u>GW</u>	<u>HEA</u>	<u>2</u>
<u>02</u>	<u>MW-207M-20070427</u>	<u>04/27/07</u>	<u>11:40</u>	<u>GW</u>	<u>HEA</u>	<u>2</u>
<u>03</u>	<u>MW-207S-20070427</u>	<u>04/27/07</u>	<u>15:15</u>	<u>GW</u>	<u>HEA</u>	<u>2</u>

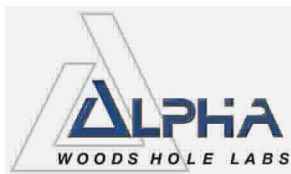
PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
 MA MCP or CT RCP?

Container Type: B  
 Preservative:

Relinquished By: Paul Gilbert Date/Time: 4/24/07 2:25  
 Received By: Paul Gilbert Date/Time: 4/25/07 13:25

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



## ANALYTICAL REPORT

Lab Number: L0705906

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/02/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705906  
**Report Date:** 05/02/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0705906-01	MW-203M-20070424-01	WAYLAND, MA



Project Name: RAYTHEON WAYLAND

Lab Number: L0705906

Project Number: 0061882

Report Date: 05/02/07

### MADEP MCP Response Action Analytical Report Certification

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

An 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:** 0061882

**Lab Number:** L0705906  
**Report Date:** 05/02/07

### Case Narrative

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

MCP Related Narratives:

Volatile Organics

In reference to question F:

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

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

Authorized Signature:



Title: Technical Director

Date: 05/02/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705906**Project Number:** 0061882**Report Date:** 05/02/07**SAMPLE RESULTS**

Lab ID: L0705906-01  
 Client ID: MW-203M-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/02/07 15:13  
 Analyst: BT

Date Collected: 04/24/07 13:50  
 Date Received: 04/25/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	25		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.56		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	1.8		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705906**Project Number:** 0061882**Report Date:** 05/02/07**SAMPLE RESULTS**

Lab ID: L0705906-01  
 Client ID: MW-203M-20070424-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/24/07 13:50  
 Date Received: 04/25/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	114		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705906  
**Report Date:** 05/02/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/02/07 10:34  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG278841-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705906  
**Report Date:** 05/02/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/02/07 10:34  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
-----------	--------	-----------	-------	-----

Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG278841-6

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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705906  
**Report Date:** 05/02/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/02/07 10:34  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
-----------	--------	-----------	-------	-----

Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG278841-6

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
-----------	-----------	-----------	---------------------

1,2-Dichloroethane-d4	113		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	105		70-130



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0705906

**Project Number:** 0061882

**Report Date:** 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-4 WG278841-5					
Methylene chloride	102	104	70-130	2	25
1,1-Dichloroethane	101	108	70-130	7	25
Chloroform	98	108	70-130	10	25
Carbon tetrachloride	97	107	70-130	10	25
1,2-Dichloropropane	89	94	70-130	5	25
Dibromochloromethane	97	104	70-130	7	25
1,1,2-Trichloroethane	96	100	70-130	4	25
Tetrachloroethene	100	108	70-130	8	25
Chlorobenzene	96	104	70-130	8	25
Trichlorofluoromethane	119	130	70-130	9	25
1,2-Dichloroethane	104	113	70-130	8	25
1,1,1-Trichloroethane	105	116	70-130	10	25
Bromodichloromethane	99	105	70-130	6	25
trans-1,3-Dichloropropene	87	94	70-130	8	25
cis-1,3-Dichloropropene	86	94	70-130	9	25
1,1-Dichloropropene	92	104	70-130	12	25
Bromoform	91	101	70-130	10	50
1,1,2,2-Tetrachloroethane	108	111	70-130	3	25
Benzene	91	89	70-130	2	25
Toluene	96	103	70-130	7	25
Ethylbenzene	100	107	70-130	7	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0705906

**Project Number:** 0061882

**Report Date:** 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-4 WG278841-5					
Chloromethane	94	104	70-130	10	50
Bromomethane	75	89	70-130	17	50
Vinyl chloride	86	101	70-130	16	25
Chloroethane	86	99	70-130	14	25
1,1-Dichloroethene	105	110	70-130	5	25
trans-1,2-Dichloroethene	92	106	70-130	14	25
Trichloroethene	98	99	70-130	1	25
1,2-Dichlorobenzene	98	105	70-130	7	25
1,3-Dichlorobenzene	99	102	70-130	3	25
1,4-Dichlorobenzene	97	103	70-130	6	25
Methyl tert butyl ether	92	103	70-130	11	25
p/m-Xylene	99	106	70-130	7	25
o-Xylene	96	104	70-130	8	25
cis-1,2-Dichloroethene	97	109	70-130	12	25
Dibromomethane	98	102	70-130	4	25
1,2,3-Trichloropropane	116	116	70-130	0	25
Styrene	98	102	70-130	4	25
Dichlorodifluoromethane	91	102	70-130	11	50
Acetone	101	124	70-130	20	50
Carbon disulfide	82	95	70-130	15	25
2-Butanone	123	123	70-130	0	50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0705906

Report Date: 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-4 WG278841-5					
4-Methyl-2-pentanone	79	60	70-130	27	50
2-Hexanone	100	110	70-130	10	50
Bromochloromethane	99	106	70-130	7	25
Tetrahydrofuran	92	95	70-130	3	25
2,2-Dichloropropane	89	106	70-130	17	50
1,2-Dibromoethane	97	102	70-130	5	25
1,3-Dichloropropane	95	104	70-130	9	25
1,1,1,2-Tetrachloroethane	98	105	70-130	7	25
Bromobenzene	99	101	70-130	2	25
n-Butylbenzene	98	104	70-130	6	25
sec-Butylbenzene	98	105	70-130	7	25
tert-Butylbenzene	100	105	70-130	5	25
o-Chlorotoluene	99	102	70-130	3	25
p-Chlorotoluene	103	106	70-130	3	25
1,2-Dibromo-3-chloropropane	106	113	70-130	6	50
Hexachlorobutadiene	88	97	70-130	10	25
Isopropylbenzene	108	116	70-130	7	25
p-Isopropyltoluene	106	110	70-130	4	25
Naphthalene	97	99	70-130	2	25
n-Propylbenzene	100	103	70-130	3	25
1,2,3-Trichlorobenzene	98	100	70-130	2	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0705906

**Project Number:** 0061882

**Report Date:** 05/02/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278841-4 WG278841-5					
1,2,4-Trichlorobenzene	94	96	70-130	2	25
1,3,5-Trimethylbenzene	102	105	70-130	3	25
1,2,4-Trimethylbenzene	102	108	70-130	6	25
Ethyl ether	103	105	70-130	2	25
Isopropyl Ether	96	105	70-130	9	25
Ethyl-Tert-Butyl-Ether	96	100	70-130	4	25
Tertiary-Amyl Methyl Ether	104	103	70-130	1	25
1,4-Dioxane	87	92	70-130	6	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		117		70-130
Toluene-d8	106		106		70-130
4-Bromofluorobenzene	95		95		70-130
Dibromofluoromethane	100		113		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705906**Project Number:** 0061882**Report Date:** 05/02/07**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
L0705906-01A	Vial Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705906-01B	Vial Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705906  
**Report Date:** 05/02/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.
- LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD- Laboratory Control Sample Duplicate: Refer to LCS.
- MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD - Matrix Spike Sample Duplicate: Refer to MS.
- NA - Not Applicable.
- 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.
- 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.)

Report Format: Not Specified



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705906  
**Report Date:** 05/02/07

## 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-III A (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.



05020717:42



# CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 04/25

ALPHA Job #: 20705906

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

### Project Information

Project Name: Raytheon Wayland  
Project Location: Wayland MA  
Project #: 0061882  
Project Manager: J Picard  
ALPHA Quote #:

### Report Information - Data Deliverables

FAX  EMAIL  
 ADEx  Add'l Deliverables

### Billing Information

Same as Client info PO #:

### Client Information

Client: ERM  
Address: 399 Boylston St  
WTH Floor Boston MA 02114  
Phone: 617-646-7800  
Fax: 617-267-6447  
Email: jeremy.picard@erm.com  
 These samples have been previously analyzed by Alpha

### Turn-Around Time

Standard  RUSH (only confirmed if pre-approved!)  
Date Due: 05/02 Time:

### Regulatory Requirements/Report Limits

State / Fed Program: MA/MCP 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  
8021c MDE + Benzene  
Disputed Software

**SAMPLE HANDLING**  
Filtration  
 Done  
 Not needed  
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	Comments	Sample Specific Comments	TOTAL # BOTTLES
		Date	Time					
05906-01	MW-205M-20070424-01	4/24/07	13:50	GW	LF	X 98		2

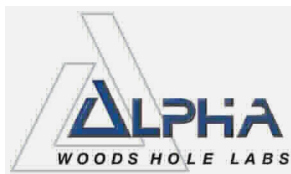
PLEASE ANSWER QUESTIONS ABOVE!  
**IS YOUR PROJECT MA MCP or CT RCP?**

Container Type	V	PC
Preservative	H	C

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

Relinquished By:	Date/Time	Received By:	Date/Time
Paul Gilbert	4/25/07 12:25	Paul Gilbert	4/25/07 12:25
	4/25/07 13:35	Karin Paul	4/25/07 13:25





## ANALYTICAL REPORT

Lab Number: L0705907

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/04/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705907  
**Report Date:** 05/04/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0705907-01	MW-212M-20070424-01	WAYLAND, MA
L0705907-02	MW-212-20070424-01	WAYLAND, MA
L0705907-03	MW-105M-20070424-01	WAYLAND, MA
L0705907-04	MW-105-20070424-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0705907

Project Number: 0061882

Report Date: 05/04/07

### MADEP MCP Response Action Analytical Report Certification

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

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705907  
**Report Date:** 05/04/07

### Case Narrative

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

#### MCP Related Narratives:

##### Volatile Organics

In reference to question E:

The WG279032-2 LCSD has a high recovery for Acetone and 2-Butanone.

The 279214-1/2 MS/MSD has a high recovery for Dichlorodifluoromethane.

The WG279214-3 LCS has a low recovery for Dichlorodifluoromethane.

In reference to question F:

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

##### Metals

In reference to question F:

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

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

Date: 05/04/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705907**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

Lab ID: L0705907-01  
 Client ID: MW-212M-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/04/07 11:13  
 Analyst: BT

Date Collected: 04/24/07 10:15  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	0.73		ug/l	0.50	1
Chlorobenzene	1.4		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	1.7		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	3.7		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	3.6		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705907**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

Lab ID: L0705907-01  
 Client ID: MW-212M-20070424-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/24/07 10:15  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	109		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705907**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

Lab ID: L0705907-02  
 Client ID: MW-212-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/04/07 11:44  
 Analyst: BT

Date Collected: 04/24/07 12:40  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.5		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705907**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

Lab ID: L0705907-02  
 Client ID: MW-212-20070424-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/24/07 12:40  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	115		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	105		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705907**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

Lab ID: L0705907-03  
 Client ID: MW-105M-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/04/07 12:15  
 Analyst: BT

Date Collected: 04/24/07 15:50  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	1.8		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	0.60		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	2.9		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	1.3		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705907**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

Lab ID: L0705907-03  
 Client ID: MW-105M-20070424-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/24/07 15:50  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	108		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705907**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

**Lab ID:** L0705907-04  
**Client ID:** MW-105-20070424-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Anaytical Method:** 60,8260B  
**Analytical Date:** 05/03/07 04:55  
**Analyst:** RY

**Date Collected:** 04/24/07 16:35  
**Date Received:** 04/25/07  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	0.84		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	1.0		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	7.1		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	1.6		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705907**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

Lab ID: L0705907-04  
 Client ID: MW-105-20070424-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/24/07 16:35  
 Date Received: 04/25/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705907  
**Report Date:** 05/04/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/02/07 18:38  
**Analyst:** RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 04 Batch: WG279032-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705907  
**Report Date:** 05/04/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/02/07 18:38  
Analyst: RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 04 Batch: WG279032-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705907  
**Report Date:** 05/04/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/02/07 18:38  
Analyst: RY

Parameter	Result	Qualifier	Units	RDL
-----------	--------	-----------	-------	-----

Volatile Organics by MCP 8260B for sample(s): 04 Batch: WG279032-3

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
-----------	-----------	-----------	------------------------

1,2-Dichloroethane-d4	104		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	100		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705907  
**Report Date:** 05/04/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/04/07 10:43  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03 Batch: WG279214-5				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5
Methyl tert butyl ether	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dichlorodifluoromethane	ND		ug/l	5.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705907  
**Report Date:** 05/04/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/04/07 10:43  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03 Batch: WG279214-5				

1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	135		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	116		70-130
Dibromofluoromethane	114		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0705907

**Project Number:** 0061882

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04 Batch: WG279032-1 WG279032-2					
Methylene chloride	101	100	70-130	1	25
1,1-Dichloroethane	105	101	70-130	4	25
Chloroform	103	98	70-130	5	25
Carbon tetrachloride	106	103	70-130	3	25
1,2-Dichloropropane	94	91	70-130	3	25
Dibromochloromethane	93	102	70-130	9	25
1,1,2-Trichloroethane	97	102	70-130	5	25
Tetrachloroethene	106	106	70-130	0	25
Chlorobenzene	103	101	70-130	2	25
Trichlorofluoromethane	129	127	70-130	2	25
1,2-Dichloroethane	111	110	70-130	1	25
1,1,1-Trichloroethane	111	104	70-130	7	25
Bromodichloromethane	98	100	70-130	2	25
trans-1,3-Dichloropropene	90	95	70-130	5	25
cis-1,3-Dichloropropene	91	90	70-130	1	25
1,1-Dichloropropene	99	96	70-130	3	25
Bromoform	95	98	70-130	3	50
1,1,1,2-Tetrachloroethane	114	115	70-130	1	25
Benzene	93	90	70-130	3	25
Toluene	98	99	70-130	1	25
Ethylbenzene	103	102	70-130	1	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0705907

**Project Number:** 0061882

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04 Batch: WG279032-1 WG279032-2					
Chloromethane	98	98	70-130	0	50
Bromomethane	88	84	70-130	5	50
Vinyl chloride	92	91	70-130	1	25
Chloroethane	98	98	70-130	0	25
1,1-Dichloroethene	111	107	70-130	4	25
trans-1,2-Dichloroethene	97	97	70-130	0	25
Trichloroethene	103	99	70-130	4	25
1,2-Dichlorobenzene	100	97	70-130	3	25
1,3-Dichlorobenzene	103	98	70-130	5	25
1,4-Dichlorobenzene	102	99	70-130	3	25
Methyl tert butyl ether	96	101	70-130	5	25
p/m-Xylene	102	102	70-130	0	25
o-Xylene	99	101	70-130	2	25
cis-1,2-Dichloroethene	104	98	70-130	6	25
Dibromomethane	103	100	70-130	3	25
1,2,3-Trichloropropane	111	116	70-130	4	25
Styrene	99	101	70-130	2	25
Dichlorodifluoromethane	92	90	70-130	2	50
Acetone	127	<b>140</b>	70-130	10	50
Carbon disulfide	86	88	70-130	2	25
2-Butanone	129	<b>136</b>	70-130	5	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705907

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04 Batch: WG279032-1 WG279032-2					
4-Methyl-2-pentanone	95	92	70-130	3	50
2-Hexanone	100	116	70-130	15	50
Bromochloromethane	104	104	70-130	0	25
Tetrahydrofuran	98	102	70-130	4	25
2,2-Dichloropropane	98	99	70-130	1	50
1,2-Dibromoethane	100	100	70-130	0	25
1,3-Dichloropropane	95	103	70-130	8	25
1,1,1,2-Tetrachloroethane	102	104	70-130	2	25
Bromobenzene	102	98	70-130	4	25
n-Butylbenzene	105	97	70-130	8	25
sec-Butylbenzene	103	97	70-130	6	25
tert-Butylbenzene	103	100	70-130	3	25
o-Chlorotoluene	102	97	70-130	5	25
p-Chlorotoluene	104	100	70-130	4	25
1,2-Dibromo-3-chloropropane	104	114	70-130	9	50
Hexachlorobutadiene	92	87	70-130	6	25
Isopropylbenzene	109	110	70-130	1	25
p-Isopropyltoluene	109	103	70-130	6	25
Naphthalene	105	102	70-130	3	25
n-Propylbenzene	104	98	70-130	6	25
1,2,3-Trichlorobenzene	101	95	70-130	6	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705907

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04 Batch: WG279032-1 WG279032-2					
1,2,4-Trichlorobenzene	97	93	70-130	4	25
1,3,5-Trimethylbenzene	106	100	70-130	6	25
1,2,4-Trimethylbenzene	107	99	70-130	8	25
Ethyl ether	102	105	70-130	3	25
Isopropyl Ether	100	99	70-130	1	25
Ethyl-Tert-Butyl-Ether	76	86	70-130	12	25
Tertiary-Amyl Methyl Ether	106	97	70-130	9	25
1,4-Dioxane	95	106	70-130	11	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115	115	70-130
Toluene-d8	103	106	70-130
4-Bromofluorobenzene	98	95	70-130
Dibromofluoromethane	106	103	70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705907

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279214-3 WG279214-4					
Methylene chloride	95	92	70-130	3	25
1,1-Dichloroethane	94	96	70-130	2	25
Chloroform	93	98	70-130	5	25
Carbon tetrachloride	95	98	70-130	3	25
1,2-Dichloropropane	83	84	70-130	1	25
Dibromochloromethane	95	88	70-130	8	25
1,1,2-Trichloroethane	97	84	70-130	14	25
Tetrachloroethene	94	97	70-130	3	25
Chlorobenzene	90	91	70-130	1	25
1,2-Dichloroethane	103	93	70-130	10	25
1,1,1-Trichloroethane	99	105	70-130	6	25
Bromodichloromethane	90	90	70-130	0	25
trans-1,3-Dichloropropene	88	77	70-130	13	25
cis-1,3-Dichloropropene	80	75	70-130	6	25
Bromoform	98	82	70-130	18	50
1,1,1,2-Tetrachloroethane	113	94	70-130	18	25
Benzene	78	83	70-130	6	25
Chloromethane	80	81	70-130	1	50
Vinyl chloride	80	74	70-130	8	25
Chloroethane	87	80	70-130	8	25
1,1-Dichloroethene	97	98	70-130	1	25



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705907

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279214-3 WG279214-4					
trans-1,2-Dichloroethene	85	85	70-130	0	25
Trichloroethene	87	94	70-130	8	25
1,2-Dichlorobenzene	94	94	70-130	0	25
1,3-Dichlorobenzene	93	94	70-130	1	25
1,4-Dichlorobenzene	93	92	70-130	1	25
Methyl tert butyl ether	92	78	70-130	16	25
cis-1,2-Dichloroethene	90	88	70-130	2	25
Dichlorodifluoromethane	<b>68</b>	70	70-130	3	50
1,2-Dibromoethane	95	82	70-130	15	25
1,3-Dichloropropane	96	85	70-130	12	25
1,1,1,2-Tetrachloroethane	99	93	70-130	6	25
o-Chlorotoluene	93	98	70-130	5	25
p-Chlorotoluene	97	101	70-130	4	25
Hexachlorobutadiene	85	90	70-130	6	25
1,2,4-Trichlorobenzene	83	77	70-130	8	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705907

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
-----------	------------------	-------------------	---------------------	-----	------------

Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279214-3 WG279214-4

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		117		70-130
Toluene-d8	108		109		70-130
4-Bromofluorobenzene	101		100		70-130
Dibromofluoromethane	113		112		70-130

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705907

**Report Date:** 05/04/07

Parameter	Native Sample	MS Added	MS Found	MS		MSD		Recovery Limits	RPD	RPD Limits
				%Recovery	MSD Found	%Recovery				
Volatile Organics by MCP 8260B Associated sample(s): 01-03 QC Batch ID: WG279214-1 WG279214-2 QC Sample: L0705907-01 Client ID: MW-212M-20070424-01										
Methylene chloride	ND	10	10	101	11	107	70-130	6	30	
1,1-Dichloroethane	ND	10	11	115	11	107	70-130	7	30	
Chloroform	ND	10	11	108	9.9	99	70-130	9	30	
Carbon tetrachloride	ND	10	12	121	11	110	70-130	10	30	
1,2-Dichloropropane	ND	10	9.6	96	9.3	93	70-130	3	30	
Dibromochloromethane	ND	10	11	108	11	111	70-130	3	30	
1,1,2-Trichloroethane	ND	10	10	101	10	103	70-130	2	30	
Tetrachloroethene	0.73	10	12	116	11	101	70-130	14	30	
Chlorobenzene	1.4	10	12	111	11	100	70-130	10	30	
1,2-Dichloroethane	ND	10	10	105	10	105	70-130	0	30	
1,1,1-Trichloroethane	ND	10	12	120	11	108	70-130	11	30	
Bromodichloromethane	ND	10	10	105	9.9	99	70-130	6	30	
trans-1,3-Dichloropropene	ND	10	10	103	10	101	70-130	2	30	
cis-1,3-Dichloropropene	ND	10	9.3	93	9.0	90	70-130	3	30	
Bromoform	ND	10	11	110	11	115	70-130	4	30	
1,1,2,2-Tetrachloroethane	ND	10	11	114	12	124	70-130	8	30	
Benzene	1.7	10	11	93	10	86	70-130	8	30	
Chloromethane	ND	10	13	128	11	114	70-130	12	30	
Vinyl chloride	ND	10	12	123	12	120	70-130	2	30	
Chloroethane	ND	10	11	113	11	109	70-130	4	30	
1,1-Dichloroethene	ND	10	12	125	12	117	70-130	7	30	

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705907  
**Report Date:** 05/04/07

Parameter	Native Sample	MS Added	MS		MSD		Recovery Limits	RPD	RPD Limits
			MS Found	%Recovery	MSD Found	%Recovery			

Volatile Organics by MCP 8260B Associated sample(s): 01-03 QC Batch ID: WG279214-1 WG279214-2 QC Sample: L0705907-01 Client ID: MW-212M-20070424-01

trans-1,2-Dichloroethene	ND	10	10	104	10	101	70-130	3	30
Trichloroethene	3.7	10	14	109	13	94	70-130	15	30
1,2-Dichlorobenzene	0.7J	10	12	116	12	118	70-130	2	30
1,3-Dichlorobenzene	ND	10	11	112	11	107	70-130	5	30
1,4-Dichlorobenzene	0.6J	10	11	114	11	111	70-130	3	30
Methyl tert butyl ether	ND	10	8.9	89	9.9	99	70-130	11	30
cis-1,2-Dichloroethene	3.6	10	14	107	14	101	70-130	6	30
Dichlorodifluoromethane	ND	10	15	148	14	137	70-130	8	30
1,2-Dibromoethane	ND	10	10	102	10	103	70-130	1	30
1,3-Dichloropropane	ND	10	10	102	10	106	70-130	4	30
1,1,1,2-Tetrachloroethane	ND	10	11	114	11	107	70-130	6	30
o-Chlorotoluene	ND	10	11	112	10	106	70-130	6	30
p-Chlorotoluene	ND	10	11	115	11	108	70-130	6	30
Hexachlorobutadiene	ND	10	11	107	11	115	70-130	7	30
1,2,4-Trichlorobenzene	ND	10	11	109	12	116	70-130	6	30

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	111		111		70-130
4-Bromofluorobenzene	99		99		70-130
Dibromofluoromethane	108		106		70-130
Toluene-d8	107		108		70-130

# METALS



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705907  
**Report Date:** 05/04/07

**SAMPLE RESULTS**

Lab ID: L0705907-01  
 Client ID: MW-212M-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/24/07 10:15  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	150		mg/l	2.0	1		05/02/07 21:43	EPA 3005A	60,6010B	AI



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705907  
**Report Date:** 05/04/07

**SAMPLE RESULTS**

Lab ID: L0705907-02  
 Client ID: MW-212-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/24/07 12:40  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	60		mg/l	2.0	1		05/02/07 21:58	EPA 3005A	60,6010B	AI



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705907  
**Report Date:** 05/04/07

**SAMPLE RESULTS**

Lab ID: L0705907-03  
 Client ID: MW-105M-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/24/07 15:50  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	190		mg/l	2.0	1		05/02/07 22:02	EPA 3005A	60,6010B	AI





Project Name: RAYTHEON WAYLAND

Lab Number: L0705907

Project Number: 0061882

Report Date: 05/04/07

## 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): 01-03 Batch: WG278603-1									
Sodium, Dissolved	ND		mg/l	2.0	1		05/02/07 21:06	60,6010B	AI

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705907

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01-03 Batch: WG278603-2 WG278603-3					
Sodium, Dissolved	90	93	80-120	3	20

**Matrix Spike Analysis  
Batch Quality Control**

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705907  
**Report Date:** 05/04/07

Parameter	Native Sample	MS Added	MS Found	MS		MSD		Recovery	
				%Recovery	MSD Found	%Recovery	Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01-03 QC Batch ID: WG278603-4 WG278603-5 QC Sample: L0705907-01 Client ID: MW-212M-20070424-01									
Sodium, Dissolved	150	10	160	100	160	100	75-125	0	20

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705907**Project Number:** 0061882**Report Date:** 05/04/07**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
L0705907-01A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-01B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-01C	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-01D	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-01E	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-01F	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-01N	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0705907-02A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-02B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-02C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0705907-03A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-03B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-03C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0705907-04A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705907-04B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705907  
**Report Date:** 05/04/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
MSD - Matrix Spike Sample Duplicate: Refer to MS.  
NA - Not Applicable.  
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.)

Report Format: Not Specified



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705907  
**Report Date:** 05/04/07

## 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.



05040720:11

**ALPHA**  
WOODS HOLE LABS  
WESTBORO, MA RAYNHAM, MA  
TEL: 503-898-9220 TEL: 508-822-9300  
FAX: 503-898-9193 FAX: 508-822-3288

**Project Information**

Project Name: RAYTHEON WAYLAND  
Project Location: WAYLAND, MA  
Project #: 0061882  
Project Manager: JEREMY PICARD  
ALPHA Quote #:

**Client Information**

Client: ERM  
Address: 397 BOYLSTON ST 6TH FL  
BOSTON, MA 02116  
Phone: 617-646-7800  
Fax: 617-267-6447  
Email: JEREMY.PICARD@ERM.COM  
 These samples have been previously analyzed by Alpha

**Turn-Around Time**

Standard  RUSH (only confirmed if pre-approved!)  
Date Due: 05/02 Time:

**Report Information - Data Deliverables**

FAX  EMAIL  
 ADEX  Add'l Deliverables

**Billing Information**

Same as Client info PO #:

**Regulatory Requirements/Report Limits**

State /Fed Program: MA/MCP 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**  
VOCs by 8021c call by 8/10/07  
DISS Solids by 8021c call by 8/10/07  
VICS by 8021c call by 8/10/07

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

**TOTAL # BOTTLES**

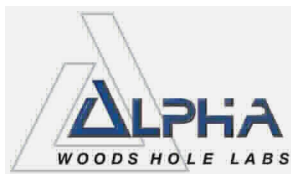
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	TOTAL # BOTTLES		Sample Specific Comments
		Date	Time					
<u>05907-01</u>	<u>MW-212M-20070424-01</u>	<u>4-24-07</u>	<u>10:15</u>	<u>GW</u>	<u>TD</u>	<u>2</u>	<u>1</u>	
<u>01</u>	<u>MW-212M-20070424-MS</u>	<u>4-24-07</u>	<u>10:15</u>	<u>GW</u>	<u>TD</u>	<u>2</u>		<u>20070424-01-MS</u>
<u>01</u>	<u>MW-212M-20070424-MSD</u>	<u>4-24-07</u>	<u>10:15</u>	<u>GW</u>	<u>TD</u>	<u>2</u>		<u>20070424-01-MSD</u>
<u>02</u>	<u>MW-212-20070424-01</u>	<u>4-24-07</u>	<u>12:40</u>	<u>GW</u>	<u>TD</u>	<u>2</u>	<u>1</u>	
<u>03</u>	<u>MW-105M-20070424-01</u>	<u>4-24-07</u>	<u>15:50</u>	<u>GW</u>	<u>TD</u>	<u>2</u>	<u>1</u>	
<u>04</u>	<u>MW-105-20070424-01</u>	<u>4-24-07</u>	<u>16:35</u>	<u>GW</u>	<u>TD</u>		<u>2</u>	

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

Container Type: V P V  
Preservative: B C H

Relinquished By: Paul Gillert Date/Time: 4/25/07 12:25  
Received By: Paul Gillert Date/Time: 4/25/07 12:25  
Kandice Paul 4/25/07 13:25

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



## ANALYTICAL REPORT

Lab Number: L0705909

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/07/07

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

---

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





**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705909  
**Report Date:** 05/07/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0705909-01	MW-267S-20070424-01	WAYLAND, MA
L0705909-02	MW-267M-20070424-01	WAYLAND, MA
L0705909-03	MW-266MA-20070424-01	WAYLAND, MA
L0705909-04	MW-266MB-20070424-01	WAYLAND, MA
L0705909-05	MW-265M-20070424-01	WAYLAND, MA
L0705909-06	MW-268M-20070424-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0705909

Project Number: 0061882

Report Date: 05/07/07

### MADEP MCP Response Action Analytical Report Certification

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

An affirmative response to questions A, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A
A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	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:** 0061882

**Lab Number:** L0705909  
**Report Date:** 05/07/07

### Case Narrative

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

#### MCP Related Narratives:

##### Volatile Organics

L0705909-01 and -04 were re-analyzed due to an over dilution with original analysis. The results of the re-analysis are reported for these samples.

L0705090-01, -02, and -04 through -06 have elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the samples.

In reference to question F:

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

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

Authorized Signature:



Title: Technical Director

Date: 05/07/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705909**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705909-01 R  
 Client ID: MW-267S-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 15:15  
 Analyst: PD

Date Collected: 04/24/07 08:40  
 Date Received: 04/25/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	25	5
1,1-Dichloroethane	ND		ug/l	3.8	5
Chloroform	ND		ug/l	3.8	5
Carbon tetrachloride	ND		ug/l	2.5	5
1,2-Dichloropropane	ND		ug/l	8.8	5
Dibromochloromethane	ND		ug/l	2.5	5
1,1,2-Trichloroethane	ND		ug/l	3.8	5
Tetrachloroethene	3.6		ug/l	2.5	5
Chlorobenzene	ND		ug/l	2.5	5
1,2-Dichloroethane	ND		ug/l	2.5	5
1,1,1-Trichloroethane	ND		ug/l	2.5	5
Bromodichloromethane	ND		ug/l	2.5	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	5
Bromoform	ND		ug/l	10	5
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	5
Chloromethane	ND		ug/l	12	5
Vinyl chloride	ND		ug/l	5.0	5
Chloroethane	ND		ug/l	5.0	5
1,1-Dichloroethene	ND		ug/l	2.5	5
trans-1,2-Dichloroethene	ND		ug/l	3.8	5
Trichloroethene	190		ug/l	2.5	5
1,2-Dichlorobenzene	ND		ug/l	12	5
1,3-Dichlorobenzene	ND		ug/l	12	5
1,4-Dichlorobenzene	ND		ug/l	12	5
cis-1,2-Dichloroethene	48		ug/l	2.5	5
Dichlorodifluoromethane	ND		ug/l	25	5
1,2-Dibromoethane	ND		ug/l	10	5
1,3-Dichloropropane	ND		ug/l	12	5
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	5

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705909**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705909-01 R

Date Collected: 04/24/07 08:40

Client ID: MW-267S-20070424-01

Date Received: 04/25/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	12	5
p-Chlorotoluene	ND		ug/l	12	5
Hexachlorobutadiene	ND		ug/l	3.0	5
1,2,4-Trichlorobenzene	ND		ug/l	12	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	113		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705909**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

**Lab ID:** L0705909-02  
**Client ID:** MW-267M-20070424-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Anaytical Method:** 60,8260B  
**Analytical Date:** 05/04/07 23:38  
**Analyst:** PD

**Date Collected:** 04/24/07 09:55  
**Date Received:** 04/25/07  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	100	20
1,1-Dichloroethane	ND		ug/l	15	20
Chloroform	ND		ug/l	15	20
Carbon tetrachloride	ND		ug/l	10	20
1,2-Dichloropropane	ND		ug/l	35	20
Dibromochloromethane	ND		ug/l	10	20
1,1,2-Trichloroethane	ND		ug/l	15	20
Tetrachloroethene	38		ug/l	10	20
Chlorobenzene	ND		ug/l	10	20
1,2-Dichloroethane	ND		ug/l	10	20
1,1,1-Trichloroethane	ND		ug/l	10	20
Bromodichloromethane	ND		ug/l	10	20
trans-1,3-Dichloropropene	ND		ug/l	10	20
cis-1,3-Dichloropropene	ND		ug/l	10	20
Bromoform	ND		ug/l	40	20
1,1,2,2-Tetrachloroethane	ND		ug/l	10	20
Chloromethane	ND		ug/l	50	20
Vinyl chloride	ND		ug/l	20	20
Chloroethane	ND		ug/l	20	20
1,1-Dichloroethene	ND		ug/l	10	20
trans-1,2-Dichloroethene	ND		ug/l	15	20
Trichloroethene	630		ug/l	10	20
1,2-Dichlorobenzene	ND		ug/l	50	20
1,3-Dichlorobenzene	ND		ug/l	50	20
1,4-Dichlorobenzene	ND		ug/l	50	20
cis-1,2-Dichloroethene	470		ug/l	10	20
Dichlorodifluoromethane	ND		ug/l	100	20
1,2-Dibromoethane	ND		ug/l	40	20
1,3-Dichloropropane	ND		ug/l	50	20
1,1,1,2-Tetrachloroethane	ND		ug/l	10	20



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705909**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705909-02  
 Client ID: MW-267M-20070424-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/24/07 09:55  
 Date Received: 04/25/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
o-Chlorotoluene	ND		ug/l	50	20
p-Chlorotoluene	ND		ug/l	50	20
Hexachlorobutadiene	ND		ug/l	12	20
1,2,4-Trichlorobenzene	ND		ug/l	50	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705909**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705909-03

Date Collected: 04/24/07 12:15

Client ID: MW-266MA-20070424-01

Date Received: 04/25/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Matrix: Water

Analytical Method: 60,8260B

Analytical Date: 05/05/07 00:17

Analyst: PD

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	9.7		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	2.9		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705909**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705909-03

Date Collected: 04/24/07 12:15

Client ID: MW-266MA-20070424-01

Date Received: 04/25/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	108		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705909**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705909-04 R

Date Collected: 04/24/07 13:25

Client ID: MW-266MB-20070424-01

Date Received: 04/25/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Matrix: Water

Analytical Method: 60,8260B

Analytical Date: 05/05/07 15:54

Analyst: PD

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	25	5
1,1-Dichloroethane	ND		ug/l	3.8	5
Chloroform	ND		ug/l	3.8	5
Carbon tetrachloride	ND		ug/l	2.5	5
1,2-Dichloropropane	ND		ug/l	8.8	5
Dibromochloromethane	ND		ug/l	2.5	5
1,1,2-Trichloroethane	ND		ug/l	3.8	5
Tetrachloroethene	36		ug/l	2.5	5
Chlorobenzene	ND		ug/l	2.5	5
1,2-Dichloroethane	ND		ug/l	2.5	5
1,1,1-Trichloroethane	ND		ug/l	2.5	5
Bromodichloromethane	ND		ug/l	2.5	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	5
Bromoform	ND		ug/l	10	5
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	5
Chloromethane	ND		ug/l	12	5
Vinyl chloride	8.8		ug/l	5.0	5
Chloroethane	ND		ug/l	5.0	5
1,1-Dichloroethene	ND		ug/l	2.5	5
trans-1,2-Dichloroethene	ND		ug/l	3.8	5
Trichloroethene	170		ug/l	2.5	5
1,2-Dichlorobenzene	ND		ug/l	12	5
1,3-Dichlorobenzene	ND		ug/l	12	5
1,4-Dichlorobenzene	ND		ug/l	12	5
cis-1,2-Dichloroethene	200		ug/l	2.5	5
Dichlorodifluoromethane	ND		ug/l	25	5
1,2-Dibromoethane	ND		ug/l	10	5
1,3-Dichloropropane	ND		ug/l	12	5
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	5

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705909**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705909-04 R

Date Collected: 04/24/07 13:25

Client ID: MW-266MB-20070424-01

Date Received: 04/25/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
o-Chlorotoluene	ND		ug/l	12	5
p-Chlorotoluene	ND		ug/l	12	5
Hexachlorobutadiene	ND		ug/l	3.0	5
1,2,4-Trichlorobenzene	ND		ug/l	12	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	113		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705909**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705909-05  
 Client ID: MW-265M-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 01:34  
 Analyst: PD

Date Collected: 04/24/07 15:30  
 Date Received: 04/25/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	120	25
1,1-Dichloroethane	ND		ug/l	19	25
Chloroform	ND		ug/l	19	25
Carbon tetrachloride	ND		ug/l	12	25
1,2-Dichloropropane	ND		ug/l	44	25
Dibromochloromethane	ND		ug/l	12	25
1,1,2-Trichloroethane	ND		ug/l	19	25
Tetrachloroethene	39		ug/l	12	25
Chlorobenzene	ND		ug/l	12	25
1,2-Dichloroethane	ND		ug/l	12	25
1,1,1-Trichloroethane	ND		ug/l	12	25
Bromodichloromethane	ND		ug/l	12	25
trans-1,3-Dichloropropene	ND		ug/l	12	25
cis-1,3-Dichloropropene	ND		ug/l	12	25
Bromoform	ND		ug/l	50	25
1,1,2,2-Tetrachloroethane	ND		ug/l	12	25
Chloromethane	ND		ug/l	62	25
Vinyl chloride	63		ug/l	25	25
Chloroethane	ND		ug/l	25	25
1,1-Dichloroethene	ND		ug/l	12	25
trans-1,2-Dichloroethene	ND		ug/l	19	25
Trichloroethene	480		ug/l	12	25
1,2-Dichlorobenzene	ND		ug/l	62	25
1,3-Dichlorobenzene	ND		ug/l	62	25
1,4-Dichlorobenzene	ND		ug/l	62	25
cis-1,2-Dichloroethene	630		ug/l	12	25
Dichlorodifluoromethane	ND		ug/l	120	25
1,2-Dibromoethane	ND		ug/l	50	25
1,3-Dichloropropane	ND		ug/l	62	25
1,1,1,2-Tetrachloroethane	ND		ug/l	12	25

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705909**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705909-05  
 Client ID: MW-265M-20070424-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/24/07 15:30  
 Date Received: 04/25/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
o-Chlorotoluene	ND		ug/l	62	25
p-Chlorotoluene	ND		ug/l	62	25
Hexachlorobutadiene	ND		ug/l	15	25
1,2,4-Trichlorobenzene	ND		ug/l	62	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	115		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705909**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705909-06  
 Client ID: MW-268M-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 02:13  
 Analyst: PD

Date Collected: 04/24/07 16:30  
 Date Received: 04/25/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	500	100
1,1-Dichloroethane	ND		ug/l	75	100
Chloroform	ND		ug/l	75	100
Carbon tetrachloride	ND		ug/l	50	100
1,2-Dichloropropane	ND		ug/l	180	100
Dibromochloromethane	ND		ug/l	50	100
1,1,2-Trichloroethane	ND		ug/l	75	100
Tetrachloroethene	59		ug/l	50	100
Chlorobenzene	ND		ug/l	50	100
1,2-Dichloroethane	ND		ug/l	50	100
1,1,1-Trichloroethane	ND		ug/l	50	100
Bromodichloromethane	ND		ug/l	50	100
trans-1,3-Dichloropropene	ND		ug/l	50	100
cis-1,3-Dichloropropene	ND		ug/l	50	100
Bromoform	ND		ug/l	200	100
1,1,2,2-Tetrachloroethane	ND		ug/l	50	100
Chloromethane	ND		ug/l	250	100
Vinyl chloride	ND		ug/l	100	100
Chloroethane	ND		ug/l	100	100
1,1-Dichloroethene	ND		ug/l	50	100
trans-1,2-Dichloroethene	ND		ug/l	75	100
Trichloroethene	1700		ug/l	50	100
1,2-Dichlorobenzene	ND		ug/l	250	100
1,3-Dichlorobenzene	ND		ug/l	250	100
1,4-Dichlorobenzene	ND		ug/l	250	100
cis-1,2-Dichloroethene	3400		ug/l	50	100
Dichlorodifluoromethane	ND		ug/l	500	100
1,2-Dibromoethane	ND		ug/l	200	100
1,3-Dichloropropane	ND		ug/l	250	100
1,1,1,2-Tetrachloroethane	ND		ug/l	50	100



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705909**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705909-06  
 Client ID: MW-268M-20070424-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/24/07 16:30  
 Date Received: 04/25/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
o-Chlorotoluene	ND		ug/l	250	100
p-Chlorotoluene	ND		ug/l	250	100
Hexachlorobutadiene	ND		ug/l	60	100
1,2,4-Trichlorobenzene	ND		ug/l	250	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	113		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	106		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705909  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/04/07 19:45  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 02-03,05-06 Batch: WG279310-5				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705909  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/04/07 19:45  
**Analyst:** PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 02-03,05-06 Batch: WG279310-5				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705909  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/04/07 19:45  
**Analyst:** PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 02-03,05-06 Batch: WG279310-5				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	106		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705909  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/05/07 13:18  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01,04 Batch: WG279310-8				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705909  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/05/07 13:18  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01,04 Batch: WG279310-8				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705909  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/05/07 13:18  
**Analyst:** PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01,04 Batch: WG279310-8				

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	116		70-130
Dibromofluoromethane	113		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705909

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02-03,05-06 Batch: WG279310-3 WG279310-4					
Methylene chloride	99	92	70-130	7	25
1,1-Dichloroethane	94	95	70-130	1	25
Chloroform	88	96	70-130	9	25
Carbon tetrachloride	94	99	70-130	5	25
1,2-Dichloropropane	85	85	70-130	0	25
Dibromochloromethane	89	91	70-130	2	25
1,1,2-Trichloroethane	94	87	70-130	8	25
Tetrachloroethene	98	97	70-130	1	25
Chlorobenzene	93	95	70-130	2	25
Trichlorofluoromethane	120	124	70-130	3	25
1,2-Dichloroethane	96	100	70-130	4	25
1,1,1-Trichloroethane	100	104	70-130	4	25
Bromodichloromethane	87	88	70-130	1	25
trans-1,3-Dichloropropene	86	91	70-130	6	25
cis-1,3-Dichloropropene	78	82	70-130	5	25
1,1-Dichloropropene	95	93	70-130	2	25
Bromoform	96	94	70-130	2	50
1,1,2,2-Tetrachloroethane	110	108	70-130	2	25
Benzene	84	85	70-130	1	25
Toluene	94	92	70-130	2	25
Ethylbenzene	96	97	70-130	1	25



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705909

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02-03,05-06 Batch: WG279310-3 WG279310-4					
Chloromethane	106	101	70-130	5	50
Bromomethane	84	73	70-130	14	50
Vinyl chloride	103	93	70-130	10	25
Chloroethane	99	97	70-130	2	25
1,1-Dichloroethene	109	105	70-130	4	25
trans-1,2-Dichloroethene	94	93	70-130	1	25
Trichloroethene	88	88	70-130	0	25
1,2-Dichlorobenzene	97	92	70-130	5	25
1,3-Dichlorobenzene	99	96	70-130	3	25
1,4-Dichlorobenzene	97	94	70-130	3	25
Methyl tert butyl ether	81	82	70-130	1	25
p/m-Xylene	96	97	70-130	1	25
o-Xylene	90	90	70-130	0	25
cis-1,2-Dichloroethene	92	95	70-130	3	25
Dibromomethane	82	80	70-130	2	25
1,2,3-Trichloropropane	112	104	70-130	7	25
Styrene	89	92	70-130	3	25
Dichlorodifluoromethane	120	120	70-130	0	50
Acetone	117	97	70-130	19	50
Carbon disulfide	79	78	70-130	1	25
2-Butanone	119	120	70-130	1	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705909

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02-03,05-06 Batch: WG279310-3 WG279310-4					
4-Methyl-2-pentanone	78	80	70-130	3	50
2-Hexanone	93	104	70-130	11	50
Bromochloromethane	88	92	70-130	4	25
Tetrahydrofuran	83	86	70-130	4	25
2,2-Dichloropropane	90	98	70-130	9	50
1,2-Dibromoethane	90	94	70-130	4	25
1,3-Dichloropropane	91	93	70-130	2	25
1,1,1,2-Tetrachloroethane	91	98	70-130	7	25
Bromobenzene	101	92	70-130	9	25
n-Butylbenzene	100	98	70-130	2	25
sec-Butylbenzene	102	98	70-130	4	25
tert-Butylbenzene	103	96	70-130	7	25
o-Chlorotoluene	98	96	70-130	2	25
p-Chlorotoluene	101	99	70-130	2	25
1,2-Dibromo-3-chloropropane	100	113	70-130	12	50
Hexachlorobutadiene	90	88	70-130	2	25
Isopropylbenzene	104	105	70-130	1	25
p-Isopropyltoluene	107	102	70-130	5	25
Naphthalene	98	88	70-130	11	25
n-Propylbenzene	102	98	70-130	4	25
1,2,3-Trichlorobenzene	93	86	70-130	8	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705909

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02-03,05-06 Batch: WG279310-3 WG279310-4					
1,2,4-Trichlorobenzene	91	88	70-130	3	25
1,3,5-Trimethylbenzene	101	96	70-130	5	25
1,2,4-Trimethylbenzene	104	99	70-130	5	25
Ethyl ether	84	92	70-130	9	25
Isopropyl Ether	84	87	70-130	4	25
Ethyl-Tert-Butyl-Ether	86	91	70-130	6	25
Tertiary-Amyl Methyl Ether	97	98	70-130	1	25
1,4-Dioxane	72	80	70-130	11	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113	114	70-130
Toluene-d8	111	107	70-130
4-Bromofluorobenzene	104	98	70-130
Dibromofluoromethane	104	106	70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705909

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,04 Batch: WG279310-6 WG279310-7					
Methylene chloride	104	101	70-130	3	25
1,1-Dichloroethane	110	105	70-130	5	25
Chloroform	109	103	70-130	6	25
Carbon tetrachloride	115	111	70-130	4	25
1,2-Dichloropropane	95	87	70-130	9	25
Dibromochloromethane	99	104	70-130	5	25
1,1,2-Trichloroethane	92	98	70-130	6	25
Tetrachloroethene	102	99	70-130	3	25
Chlorobenzene	98	99	70-130	1	25
Trichlorofluoromethane	138	129	70-130	7	25
1,2-Dichloroethane	115	105	70-130	9	25
1,1,1-Trichloroethane	120	113	70-130	6	25
Bromodichloromethane	101	99	70-130	2	25
trans-1,3-Dichloropropene	93	97	70-130	4	25
cis-1,3-Dichloropropene	89	88	70-130	1	25
1,1-Dichloropropene	99	96	70-130	3	25
Bromoform	99	100	70-130	1	50
1,1,1,2-Tetrachloroethane	104	107	70-130	3	25
Benzene	91	88	70-130	3	25
Toluene	98	97	70-130	1	25
Ethylbenzene	101	101	70-130	0	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705909

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,04 Batch: WG279310-6 WG279310-7					
Chloromethane	112	104	70-130	7	50
Bromomethane	80	71	70-130	12	50
Vinyl chloride	95	94	70-130	1	25
Chloroethane	101	84	70-130	18	25
1,1-Dichloroethene	110	105	70-130	5	25
trans-1,2-Dichloroethene	100	95	70-130	5	25
Trichloroethene	102	90	70-130	13	25
1,2-Dichlorobenzene	98	99	70-130	1	25
1,3-Dichlorobenzene	100	98	70-130	2	25
1,4-Dichlorobenzene	98	96	70-130	2	25
Methyl tert butyl ether	88	87	70-130	1	25
p/m-Xylene	100	100	70-130	0	25
o-Xylene	98	98	70-130	0	25
cis-1,2-Dichloroethene	101	102	70-130	1	25
Dibromomethane	88	89	70-130	1	25
1,2,3-Trichloropropane	105	114	70-130	8	25
Styrene	98	100	70-130	2	25
Dichlorodifluoromethane	125	112	70-130	11	50
Acetone	135	113	70-130	18	50
Carbon disulfide	82	80	70-130	2	25
2-Butanone	107	94	70-130	13	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705909

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,04 Batch: WG279310-6 WG279310-7					
4-Methyl-2-pentanone	82	77	70-130	6	50
2-Hexanone	95	102	70-130	7	50
Bromochloromethane	101	93	70-130	8	25
Tetrahydrofuran	86	92	70-130	7	25
2,2-Dichloropropane	109	105	70-130	4	50
1,2-Dibromoethane	90	97	70-130	7	25
1,3-Dichloropropane	93	100	70-130	7	25
1,1,1,2-Tetrachloroethane	107	108	70-130	1	25
Bromobenzene	97	95	70-130	2	25
n-Butylbenzene	103	99	70-130	4	25
sec-Butylbenzene	102	99	70-130	3	25
tert-Butylbenzene	102	99	70-130	3	25
o-Chlorotoluene	100	98	70-130	2	25
p-Chlorotoluene	104	101	70-130	3	25
1,2-Dibromo-3-chloropropane	100	95	70-130	5	50
Hexachlorobutadiene	88	86	70-130	2	25
Isopropylbenzene	111	110	70-130	1	25
p-Isopropyltoluene	109	104	70-130	5	25
Naphthalene	84	85	70-130	1	25
n-Propylbenzene	100	98	70-130	2	25
1,2,3-Trichlorobenzene	88	90	70-130	2	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705909

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,04 Batch: WG279310-6 WG279310-7					
1,2,4-Trichlorobenzene	86	83	70-130	4	25
1,3,5-Trimethylbenzene	103	102	70-130	1	25
1,2,4-Trimethylbenzene	106	102	70-130	4	25
Ethyl ether	91	91	70-130	0	25
Isopropyl Ether	99	95	70-130	4	25
Ethyl-Tert-Butyl-Ether	72	70	70-130	3	25
Tertiary-Amyl Methyl Ether	106	102	70-130	4	25
1,4-Dioxane	78	66	70-130	17	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125	122	70-130
Toluene-d8	107	109	70-130
4-Bromofluorobenzene	97	92	70-130
Dibromofluoromethane	115	110	70-130

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0705909

**Project Number:** 0061882

**Report Date:** 05/07/07

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
-----------	---------------	----------	----------	--------------	-----------	---------------	-----------------	-----	------------

Volatile Organics by MCP 8260B Associated sample(s): 01-06 QC Batch ID: WG279310-1 WG279310-2 QC Sample: L0705909-02 Client ID: MW-267M-20070424-01

Methylene chloride	ND	200	210	105	200	100	70-130	5	30
1,1-Dichloroethane	ND	200	220	111	210	106	70-130	5	30
Chloroform	ND	200	220	110	210	104	70-130	6	30
Carbon tetrachloride	ND	200	240	123	220	108	70-130	13	30
1,2-Dichloropropane	ND	200	180	93	180	90	70-130	3	30
Dibromochloromethane	ND	200	200	100	200	101	70-130	1	30
1,1,2-Trichloroethane	ND	200	200	98	180	88	70-130	11	30
Tetrachloroethene	38	200	240	103	220	90	70-130	13	30
Chlorobenzene	ND	200	200	102	190	94	70-130	8	30
1,2-Dichloroethane	ND	200	220	113	220	108	70-130	5	30
1,1,1-Trichloroethane	ND	200	240	121	220	111	70-130	9	30
Bromodichloromethane	ND	200	210	105	200	99	70-130	6	30
trans-1,3-Dichloropropene	ND	200	190	97	190	96	70-130	1	30
cis-1,3-Dichloropropene	ND	200	160	83	170	84	70-130	1	30
Bromoform	ND	200	200	102	210	103	70-130	1	30
1,1,2,2-Tetrachloroethane	ND	200	210	106	220	110	70-130	4	30
Chloromethane	ND	200	220	110	210	103	70-130	7	30
Vinyl chloride	14J	200	200	100	200	100	70-130	0	30
Chloroethane	ND	200	190	94	190	95	70-130	1	30
1,1-Dichloroethene	ND	200	230	115	210	104	70-130	10	30
trans-1,2-Dichloroethene	ND	200	200	98	200	98	70-130	0	30



### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705909  
**Report Date:** 05/07/07

Parameter	Native Sample	MS Added	MS Found	MS	MSD Found	MSD	Recovery Limits	RPD	RPD Limits
				%Recovery		%Recovery			

Volatile Organics by MCP 8260B Associated sample(s): 01-06 QC Batch ID: WG279310-1 WG279310-2 QC Sample: L0705909-02 Client ID: MW-267M-20070424-01

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Trichloroethene	630	200	870	120	810	93	70-130	25	30
1,2-Dichlorobenzene	ND	200	200	101	200	101	70-130	0	30
1,3-Dichlorobenzene	ND	200	210	104	200	99	70-130	5	30
1,4-Dichlorobenzene	ND	200	200	102	190	97	70-130	5	30
cis-1,2-Dichloroethene	470	200	690	110	640	86	70-130	24	30
Dichlorodifluoromethane	ND	200	240	123	230	116	70-130	6	30
1,2-Dibromoethane	ND	200	180	91	190	95	70-130	4	30
1,3-Dichloropropane	ND	200	190	97	190	94	70-130	3	30
1,1,1,2-Tetrachloroethane	ND	200	220	111	210	105	70-130	6	30
o-Chlorotoluene	ND	200	210	104	190	97	70-130	7	30
p-Chlorotoluene	ND	200	210	107	200	102	70-130	5	30
Hexachlorobutadiene	ND	200	180	89	180	88	70-130	1	30
1,2,4-Trichlorobenzene	ND	200	160	82	160	81	70-130	1	30

Surrogate	MS	MSD	Acceptance
	% Recovery		Qualifier
1,2-Dichloroethane-d4	124	125	70-130
4-Bromofluorobenzene	96	93	70-130
Dibromofluoromethane	113	116	70-130
Toluene-d8	107	106	70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705909**Project Number:** 0061882**Report Date:** 05/07/07**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
L0705909-01A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705909-01B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705909-02A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705909-02B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705909-02C	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705909-02D	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705909-02E	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705909-02F	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705909-03A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705909-03B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705909-04A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705909-04B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705909-05A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705909-05B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705909-06A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705909-06B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705909  
**Report Date:** 05/07/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
MSD - Matrix Spike Sample Duplicate: Refer to MS.  
NA - Not Applicable.  
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.)

Report Format: Not Specified



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705909  
**Report Date:** 05/07/07

## 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.



05070716:28



# CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/25

ALPHA Job #: 10705909

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

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

### Project Information

Project Name: RAYTHEON WAYLAND

Project Location: WAYLAND, MA

Project #: 0061882

Project Manager: JEREMY PICARD

ALPHA Quote #:

### Report Information - Data Deliverables

FAX  EMAIL  
 ADEx  Add'l Deliverables

### Billing Information

Same as Client info PO #:

### Client Information

Client: ERM

Address: 399 BOSYLSTON ST  
BOSTON, MA 02116

Phone: 617-646-7800

Fax: 617-267-6447

Email: jeremy.picard@erm.com

These samples have been previously analyzed by Alpha

### Turn-Around Time

Standard  RUSH (only confirmed if pre-approved!)

Date Due: 05/02 Time:

### Regulatory Requirements/Report Limits

State /Fed Program: MCP 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	SAMPLE HANDLING	TOTAL # BOTTLES
	<input type="checkbox"/> Done <input type="checkbox"/> Not needed <input type="checkbox"/> Lab to do <input type="checkbox"/> Preservation <input type="checkbox"/> Lab to do <small>(Please specify below)</small>	

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials						Sample Specific Comments	
		Date	Time									
05909-01	MW-267S-20070424-01	4/24/07	08:40	GW	JM	2						2
-02	MW-267M-20070424-01	4/24/07	09:55	GW	JM	2						2
-2	MW-267M-20070424-01-MS	4/24/07	09:55	GW	JM	2					MW-267M-20070427-01-MS	2
-02	MW-267M-20070424-01-MSD	4/24/07	09:55	GW	JM	2					MW-267M-20070427-01-MSD	2
-03	MW-266MA-20070424-01	4/24/07	12:15	GW	JM	2						2
-04	MW-266MB-20070424-01	4/24/07	13:25	GW	JM	2						2
-05	MW-265M-20070424-01	4/24/07	15:30	GW	JM	2						2
-06	MW-268M-20070424-01	4/24/07	16:30	GW	JM	2						2

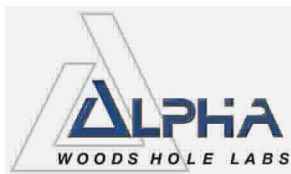
PLEASE ANSWER QUESTIONS ABOVE!

Container Type	V
Preservative	B

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
Paul Gillbert	4/25/07 12:25	Paul Gillbert	4/25/07 12:25
	4/25/07 13:25	Kande Paul	4/25/07 13:25

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



## ANALYTICAL REPORT

Lab Number: L0705913

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/07/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705913  
**Report Date:** 05/07/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0705913-01	MW-204S-20070424-01	WAYLAND, MA
L0705913-02	MW-204D-20070424-01	WAYLAND, MA
L0705913-03	DUP-004-20070424-01	WAYLAND, MA
L0705913-04	MW-203D-20070424-01	WAYLAND, MA
L0705913-05	MW-203S-20070424-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0705913

Project Number: 0061882

Report Date: 05/07/07

### MADEP MCP Response Action Analytical Report Certification

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

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

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





**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705913  
**Report Date:** 05/07/07

### Case Narrative

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

#### MCP Related Narratives:

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

L0705913-04 has elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the sample.

In reference to question F:

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

##### Metals

In reference to question F:

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

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

Date: 05/07/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705913**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705913-01  
 Client ID: MW-204S-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 02:51  
 Analyst: PD

Date Collected: 04/24/07 14:15  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	8.8		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	3.3		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705913**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705913-01

Date Collected: 04/24/07 14:15

Client ID: MW-204S-20070424-01

Date Received: 04/25/07

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	110		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705913**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705913-02  
 Client ID: MW-204D-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 03:30  
 Analyst: PD

Date Collected: 04/24/07 16:00  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	3.1		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	3.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705913**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705913-02  
 Client ID: MW-204D-20070424-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/24/07 16:00  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	114		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705913**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705913-03  
 Client ID: DUP-004-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 05:25  
 Analyst: PD

Date Collected: 04/24/07 00:00  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	3.1		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	3.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705913**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705913-03  
 Client ID: DUP-004-20070424-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/24/07 00:00  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	126		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705913**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

**Lab ID:** L0705913-04  
**Client ID:** MW-203D-20070424-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 05/05/07 04:46  
**Analyst:** PD

**Date Collected:** 04/24/07 15:45  
**Date Received:** 04/25/07  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	10	2
1,1-Dichloroethane	ND		ug/l	1.5	2
Chloroform	ND		ug/l	1.5	2
Carbon tetrachloride	ND		ug/l	1.0	2
1,2-Dichloropropane	ND		ug/l	3.5	2
Dibromochloromethane	ND		ug/l	1.0	2
1,1,2-Trichloroethane	ND		ug/l	1.5	2
Tetrachloroethene	2.8		ug/l	1.0	2
Chlorobenzene	ND		ug/l	1.0	2
1,2-Dichloroethane	ND		ug/l	1.0	2
1,1,1-Trichloroethane	ND		ug/l	1.0	2
Bromodichloromethane	ND		ug/l	1.0	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	2
Bromoform	ND		ug/l	4.0	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	2
Chloromethane	ND		ug/l	5.0	2
Vinyl chloride	ND		ug/l	2.0	2
Chloroethane	ND		ug/l	2.0	2
1,1-Dichloroethene	ND		ug/l	1.0	2
trans-1,2-Dichloroethene	ND		ug/l	1.5	2
Trichloroethene	73		ug/l	1.0	2
1,2-Dichlorobenzene	ND		ug/l	5.0	2
1,3-Dichlorobenzene	ND		ug/l	5.0	2
1,4-Dichlorobenzene	ND		ug/l	5.0	2
cis-1,2-Dichloroethene	7.0		ug/l	1.0	2
Dichlorodifluoromethane	ND		ug/l	10	2
1,2-Dibromoethane	ND		ug/l	4.0	2
1,3-Dichloropropane	ND		ug/l	5.0	2
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	2

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705913**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705913-04

Date Collected: 04/24/07 15:45

Client ID: MW-203D-20070424-01

Date Received: 04/25/07

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	126		70-130
Toluene-d8	113		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	116		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705913**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705913-05  
 Client ID: MW-203S-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 04:08  
 Analyst: PD

Date Collected: 04/24/07 16:25  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	0.90		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705913**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705913-05  
 Client ID: MW-203S-20070424-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/24/07 16:25  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	118		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705913  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/04/07 19:45  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-05 Batch: WG279309-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705913  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/04/07 19:45  
**Analyst:** PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-05 Batch: WG279309-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705913  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/04/07 19:45  
**Analyst:** PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-05 Batch: WG279309-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	106		70-130



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705913

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-1 WG279309-2					
Methylene chloride	99	92	70-130	7	25
1,1-Dichloroethane	94	95	70-130	1	25
Chloroform	88	96	70-130	9	25
Carbon tetrachloride	94	99	70-130	5	25
1,2-Dichloropropane	85	85	70-130	0	25
Dibromochloromethane	89	91	70-130	2	25
1,1,2-Trichloroethane	94	87	70-130	8	25
Tetrachloroethene	98	97	70-130	1	25
Chlorobenzene	93	95	70-130	2	25
Trichlorofluoromethane	120	124	70-130	3	25
1,2-Dichloroethane	96	100	70-130	4	25
1,1,1-Trichloroethane	100	104	70-130	4	25
Bromodichloromethane	87	88	70-130	1	25
trans-1,3-Dichloropropene	86	91	70-130	6	25
cis-1,3-Dichloropropene	78	82	70-130	5	25
1,1-Dichloropropene	95	93	70-130	2	25
Bromoform	96	94	70-130	2	50
1,1,1,2-Tetrachloroethane	110	108	70-130	2	25
Benzene	84	85	70-130	1	25
Toluene	94	92	70-130	2	25
Ethylbenzene	96	97	70-130	1	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705913

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-1 WG279309-2					
Chloromethane	106	101	70-130	5	50
Bromomethane	84	73	70-130	14	50
Vinyl chloride	103	93	70-130	10	25
Chloroethane	99	97	70-130	2	25
1,1-Dichloroethene	109	105	70-130	4	25
trans-1,2-Dichloroethene	94	93	70-130	1	25
Trichloroethene	88	88	70-130	0	25
1,2-Dichlorobenzene	97	92	70-130	5	25
1,3-Dichlorobenzene	99	96	70-130	3	25
1,4-Dichlorobenzene	97	94	70-130	3	25
Methyl tert butyl ether	81	82	70-130	1	25
p/m-Xylene	96	97	70-130	1	25
o-Xylene	90	90	70-130	0	25
cis-1,2-Dichloroethene	92	95	70-130	3	25
Dibromomethane	82	80	70-130	2	25
1,2,3-Trichloropropane	112	104	70-130	7	25
Styrene	89	92	70-130	3	25
Dichlorodifluoromethane	120	120	70-130	0	50
Acetone	117	97	70-130	19	50
Carbon disulfide	79	78	70-130	1	25
2-Butanone	119	120	70-130	1	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705913

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-1 WG279309-2					
4-Methyl-2-pentanone	78	80	70-130	3	50
2-Hexanone	93	104	70-130	11	50
Bromochloromethane	88	92	70-130	4	25
Tetrahydrofuran	83	86	70-130	4	25
2,2-Dichloropropane	90	98	70-130	9	50
1,2-Dibromoethane	90	94	70-130	4	25
1,3-Dichloropropane	91	93	70-130	2	25
1,1,1,2-Tetrachloroethane	91	98	70-130	7	25
Bromobenzene	101	92	70-130	9	25
n-Butylbenzene	100	98	70-130	2	25
sec-Butylbenzene	102	98	70-130	4	25
tert-Butylbenzene	103	96	70-130	7	25
o-Chlorotoluene	98	96	70-130	2	25
p-Chlorotoluene	101	99	70-130	2	25
1,2-Dibromo-3-chloropropane	100	113	70-130	12	50
Hexachlorobutadiene	90	88	70-130	2	25
Isopropylbenzene	104	105	70-130	1	25
p-Isopropyltoluene	107	102	70-130	5	25
Naphthalene	98	88	70-130	11	25
n-Propylbenzene	102	98	70-130	4	25
1,2,3-Trichlorobenzene	93	86	70-130	8	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705913

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-1 WG279309-2					
1,2,4-Trichlorobenzene	91	88	70-130	3	25
1,3,5-Trimethylbenzene	101	96	70-130	5	25
1,2,4-Trimethylbenzene	104	99	70-130	5	25
Ethyl ether	84	92	70-130	9	25
Isopropyl Ether	84	87	70-130	4	25
Ethyl-Tert-Butyl-Ether	86	91	70-130	6	25
Tertiary-Amyl Methyl Ether	97	98	70-130	1	25
1,4-Dioxane	72	80	70-130	11	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113	114	70-130
Toluene-d8	111	107	70-130
4-Bromofluorobenzene	104	98	70-130
Dibromofluoromethane	104	106	70-130

# METALS



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705913**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705913-01

Date Collected: 04/24/07 14:15

Client ID: MW-204S-20070424-01

Date Received: 04/25/07

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										
Sodium, Dissolved	30		mg/l	2.0	1	04/26/07 16:40	05/02/07 14:07	EPA 3005A	60,6010B	AI



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705913**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705913-02  
 Client ID: MW-204D-20070424-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/24/07 16:00  
 Date Received: 04/25/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	43		mg/l	2.0	1	04/26/07 16:40	05/02/07 14:28	EPA 3005A	60,6010B	AI



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705913**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705913-04

Date Collected: 04/24/07 15:45

Client ID: MW-203D-20070424-01

Date Received: 04/25/07

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										
Sodium, Dissolved	73		mg/l	2.0	1	04/26/07 16:40	05/02/07 14:31	EPA 3005A	60,6010B	AI





**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705913**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705913-05

Date Collected: 04/24/07 16:25

Client ID: MW-203S-20070424-01

Date Received: 04/25/07

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										
Sodium, Dissolved	42		mg/l	2.0	1	04/26/07 16:40	05/02/07 14:34	EPA 3005A	60,6010B	AI



Project Name: RAYTHEON WAYLAND

Lab Number: L0705913

Project Number: 0061882

Report Date: 05/07/07

## 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): 01-02,04-05 Batch: WG278274-1									
Sodium, Dissolved	ND		mg/l	2.0	1	04/26/07 16:40	05/02/07 13:38	60,6010B	AI

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705913

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01-02,04-05 Batch: WG278274-2 WG278274-3					
Sodium, Dissolved	93	93	80-120	0	20

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705913**Project Number:** 0061882**Report Date:** 05/07/07**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
L0705913-01A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-01B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-01C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0705913-02A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-02B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-02C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0705913-03A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-03B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-04A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-04B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-04C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S
L0705913-05A	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-05B	Vial HCl preserved	A	N/A	2.2C	Y	Absent	MCP-8260-04
L0705913-05C	Plastic 250ml HNO3 preserved	A	<2	2.2C	Y	Absent	MCP-NA-6010S

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705913  
**Report Date:** 05/07/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
MSD - Matrix Spike Sample Duplicate: Refer to MS.  
NA - Not Applicable.  
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.)

Report Format: Not Specified



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705913  
**Report Date:** 05/07/07

## 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.



05070712:43

# CHAIN OF CUSTODY

PAGE 1 OF 1

**ALPHA**  
WOODS HOLE LABS

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

**Client Information**

Client: ERM

Address: 399 Boylston St.  
6th Fl. Boston, MA 02116

Phone: 617-646-7800

Fax: 617-267-6447

Email: jeremy.picard@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 #: 0061882

Project Manager: J. Picard

ALPHA Quote #:

**Turn-Around Time**

Standard       RUSH (only confirmed if pre-approved)

Date Due: 05/02      Time:

Date Rec'd in Lab: 4/25      ALPHA Job #: 20705913

**Report Information - Data Deliverables**

FAX       EMAIL

ADEx       Add'l Deliverables

**Billing Information**

Same as Client info      PO #:

**Regulatory Requirements/Report Limits**

State /Fed Program      Criteria

MA/MCP      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?

**ANALYSIS**

VOC-021c-021d  
Sodium  
021c  
021d  
021e  
021f

**SAMPLE HANDLING**

Filtration

Done

Not needed

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	
		Date	Time						
<u>05913-01</u>	<u>MW-204S-20070424-01</u>	<u>4/24/07</u>	<u>14:15</u>	<u>GW</u>	<u>FP</u>	<u>X</u>	<u>X</u>		<u>3</u>
<u>-02</u>	<u>MW-204D-20070424-01</u>	<u>4/24/07</u>	<u>16:00</u>	<u>GW</u>	<u>FP</u>	<u>X</u>	<u>X</u>		<u>3</u>
<u>-03</u>	<u>DUP-004-20070424-01</u>	<u>4/24/07</u>	<u>24:00</u>	<u>GW</u>	<u>FP</u>	<u>X</u>	<u>X</u>		<u>3</u>
<u>-04</u>	<u>MW-2031-20070424-01</u>	<u>4/24/07</u>	<u>15:45</u>	<u>GW</u>	<u>LR</u>	<u>X</u>	<u>X</u>		<u>3</u>
<u>-05</u>	<u>MW-2035-20070424-01</u>	<u>4/24/07</u>	<u>16:25</u>	<u>GW</u>	<u>BIT</u>	<u>X</u>	<u>X</u>		<u>3</u>

**PLEASE ANSWER QUESTIONS ABOVE!**

IS YOUR PROJECT MA MCP or CT RCP?

Container Type: AVP

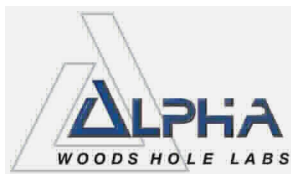
Preservative: BC

Relinquished By: Paul Picard      Date/Time: 4/25/07 12:25

Received By: Paul Picard      Date/Time: 4/25/07 13:25

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

FORM NO: 01-01 (rev. 10-OCT-05)



## ANALYTICAL REPORT

Lab Number: L0705999

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/07/07

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

---

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





**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705999  
**Report Date:** 05/07/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0705999-01	MW-206D-20070425-01	WAYLAND, MA
L0705999-02	MW-206M-20070425-01	WAYLAND, MA
L0705999-03	MW-206S-20070425-01	WAYLAND, MA
L0705999-04	DUP-007-20070425-01	WAYLAND, MA
L0705999-05	MW-45S-20070425-01	WAYLAND, MA
L0705999-06	MW-45M-20070425-01	WAYLAND, MA
L0705999-07	MW-45D-20070425-01	WAYLAND, MA
L0705999-08	MW-45B-20070425-01	WAYLAND, MA
L0705999-09	DUP-008-20070425-01	WAYLAND, MA
L0705999-10	MW-46M-20070425-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0705999

Project Number: 0061882

Report Date: 05/07/07

### MADEP MCP Response Action Analytical Report Certification

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

An affirmative response to questions A, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A
A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	NO
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO
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:** 0061882

**Lab Number:** L0705999  
**Report Date:** 05/07/07

### Case Narrative

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

#### MCP Related Narratives

##### Volatile Organics

L0705999-06 was re-analyzed due to overdilution of the original analysis. The results of the re-analysis are reported.

L0705999-07 and -10 had pHs >2.

In reference to question E:

WG279326-4/5:

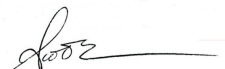
The LCS % recovery is below method acceptance criteria for Bromoform, a difficult analyte.

In reference to question F:

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

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

Authorized Signature:



Title: Technical Director

Date: 05/07/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705999-01  
 Client ID: MW-206D-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 03:22  
 Analyst: MM

Date Collected: 04/25/07 09:00  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	31		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	3.9		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705999-01

Date Collected: 04/25/07 09:00

Client ID: MW-206D-20070425-01

Date Received: 04/26/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	100		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

**Lab ID:** L0705999-02  
**Client ID:** MW-206M-20070425-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Anaytical Method:** 60,8260B  
**Analytical Date:** 05/05/07 03:55  
**Analyst:** MM

**Date Collected:** 04/25/07 09:45  
**Date Received:** 04/26/07  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	2.7		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	2.9		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	22		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	36		ug/l	1.0	1
cis-1,2-Dichloroethene	0.88		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705999-02  
 Client ID: MW-206M-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 09:45  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	99		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705999-03  
 Client ID: MW-206S-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 04:27  
 Analyst: MM

Date Collected: 04/25/07 11:10  
 Date Received: 04/26/07  
 Field Prep: Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705999-03  
 Client ID: MW-206S-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 11:10  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

**Lab ID:** L0705999-04  
**Client ID:** DUP-007-20070425-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Anaytical Method:** 60,8260B  
**Analytical Date:** 05/05/07 18:10  
**Analyst:** MM

**Date Collected:** 04/25/07 00:00  
**Date Received:** 04/26/07  
**Field Prep:** Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705999-04  
 Client ID: DUP-007-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 00:00  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

**Lab ID:** L0705999-05  
**Client ID:** MW-45S-20070425-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Anaytical Method:** 60,8260B  
**Analytical Date:** 05/05/07 04:59  
**Analyst:** MM

**Date Collected:** 04/25/07 10:00  
**Date Received:** 04/26/07  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	1.6		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	2.7		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	2.5		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705999-05  
 Client ID: MW-45S-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 10:00  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705999-06 R  
 Client ID: MW-45M-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 18:42  
 Analyst: MM

Date Collected: 04/25/07 11:15  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	0.82		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	0.51		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	10		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	2.7		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	60		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	64		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705999-06 R  
 Client ID: MW-45M-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 11:15  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	102		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

**Lab ID:** L0705999-07  
**Client ID:** MW-45D-20070425-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Anaytical Method:** 60,8260B  
**Analytical Date:** 05/05/07 05:31  
**Analyst:** MM

**Date Collected:** 04/25/07 08:40  
**Date Received:** 04/26/07  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	53		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	5.0		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705999-07  
 Client ID: MW-45D-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 08:40  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	71		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

**Lab ID:** L0705999-08  
**Client ID:** MW-45B-20070425-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 05/05/07 19:14  
**Analyst:** MM

**Date Collected:** 04/25/07 13:00  
**Date Received:** 04/26/07  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	79		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	7.0		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705999-08

Date Collected: 04/25/07 13:00

Client ID: MW-45B-20070425-01

Date Received: 04/26/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	100		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705999-09  
 Client ID: DUP-008-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/06/07 12:23  
 Analyst: BT

Date Collected: 04/25/07 00:00  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	0.83		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	10		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	2.7		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	57		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	62		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705999-09  
 Client ID: DUP-008-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 00:00  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705999-10  
 Client ID: MW-46M-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 19:46  
 Analyst: MM

Date Collected: 04/25/07 14:00  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	0.58		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	1.8		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	2.0		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.8		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0705999**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0705999-10  
 Client ID: MW-46M-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 14:00  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705999  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/04/07 20:54  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03,05,07 Batch: WG279314-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705999  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/04/07 20:54  
**Analyst:** MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03,05,07 Batch: WG279314-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705999  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/04/07 20:54  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03,05,07 Batch: WG279314-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	94		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705999  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/05/07 16:33  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 04,06,08,10 Batch: WG279314-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705999  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/05/07 16:33  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 04,06,08,10 Batch: WG279314-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705999  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/05/07 16:33  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 04,06,08,10 Batch: WG279314-6				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705999  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/06/07 11:19  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 09 Batch: WG279326-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705999  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/06/07 11:19  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 09 Batch: WG279326-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705999  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/06/07 11:19  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 09 Batch: WG279326-6				

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705999

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03,05,07 Batch: WG279314-1 WG279314-2					
Methylene chloride	108	110	70-130	2	25
1,1-Dichloroethane	105	105	70-130	0	25
Chloroform	106	105	70-130	1	25
Carbon tetrachloride	95	94	70-130	1	25
1,2-Dichloropropane	101	102	70-130	1	25
Dibromochloromethane	82	85	70-130	4	25
1,1,2-Trichloroethane	102	102	70-130	0	25
Tetrachloroethene	100	99	70-130	1	25
Chlorobenzene	101	100	70-130	1	25
Trichlorofluoromethane	112	110	70-130	2	25
1,2-Dichloroethane	100	102	70-130	2	25
1,1,1-Trichloroethane	106	103	70-130	3	25
Bromodichloromethane	92	94	70-130	2	25
trans-1,3-Dichloropropene	93	92	70-130	1	25
cis-1,3-Dichloropropene	92	95	70-130	3	25
1,1-Dichloropropene	103	107	70-130	4	25
Bromoform	88	89	70-130	1	50
1,1,2,2-Tetrachloroethane	102	105	70-130	3	25
Benzene	105	104	70-130	1	25
Toluene	99	98	70-130	1	25
Ethylbenzene	103	103	70-130	0	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705999

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03,05,07 Batch: WG279314-1 WG279314-2					
Chloromethane	114	98	70-130	15	50
Bromomethane	101	109	70-130	8	50
Vinyl chloride	107	107	70-130	0	25
Chloroethane	109	101	70-130	8	25
1,1-Dichloroethene	103	104	70-130	1	25
trans-1,2-Dichloroethene	101	101	70-130	0	25
Trichloroethene	101	100	70-130	1	25
1,2-Dichlorobenzene	103	100	70-130	3	25
1,3-Dichlorobenzene	101	100	70-130	1	25
1,4-Dichlorobenzene	103	104	70-130	1	25
Methyl tert butyl ether	91	91	70-130	0	25
p/m-Xylene	103	105	70-130	2	25
o-Xylene	98	100	70-130	2	25
cis-1,2-Dichloroethene	107	102	70-130	5	25
Dibromomethane	97	98	70-130	1	25
1,2,3-Trichloropropane	115	115	70-130	0	25
Styrene	101	102	70-130	1	25
Dichlorodifluoromethane	122	117	70-130	4	50
Acetone	89	96	70-130	8	50
Carbon disulfide	83	82	70-130	1	25
2-Butanone	96	90	70-130	6	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705999

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03,05,07 Batch: WG279314-1 WG279314-2					
4-Methyl-2-pentanone	89	89	70-130	0	50
2-Hexanone	94	95	70-130	1	50
Bromochloromethane	101	99	70-130	2	25
Tetrahydrofuran	82	82	70-130	0	25
2,2-Dichloropropane	99	97	70-130	2	50
1,2-Dibromoethane	104	103	70-130	1	25
1,3-Dichloropropane	102	98	70-130	4	25
1,1,1,2-Tetrachloroethane	92	98	70-130	6	25
Bromobenzene	100	97	70-130	3	25
n-Butylbenzene	104	99	70-130	5	25
sec-Butylbenzene	106	104	70-130	2	25
tert-Butylbenzene	105	101	70-130	4	25
o-Chlorotoluene	105	100	70-130	5	25
p-Chlorotoluene	106	102	70-130	4	25
1,2-Dibromo-3-chloropropane	84	92	70-130	9	50
Hexachlorobutadiene	98	90	70-130	9	25
Isopropylbenzene	110	110	70-130	0	25
p-Isopropyltoluene	107	104	70-130	3	25
Naphthalene	90	80	70-130	12	25
n-Propylbenzene	105	105	70-130	0	25
1,2,3-Trichlorobenzene	96	86	70-130	11	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705999

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03,05,07 Batch: WG279314-1 WG279314-2					
1,2,4-Trichlorobenzene	96	85	70-130	12	25
1,3,5-Trimethylbenzene	108	103	70-130	5	25
1,2,4-Trimethylbenzene	105	102	70-130	3	25
Ethyl ether	85	83	70-130	2	25
Isopropyl Ether	94	92	70-130	2	25
Ethyl-Tert-Butyl-Ether	96	96	70-130	0	25
Tertiary-Amyl Methyl Ether	94	94	70-130	0	25
1,4-Dioxane	98	94	70-130	4	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101	104	70-130
Toluene-d8	97	101	70-130
4-Bromofluorobenzene	103	100	70-130
Dibromofluoromethane	100	99	70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705999

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04,06,08,10 Batch: WG279314-4 WG279314-5					
Methylene chloride	105	102	70-130	3	25
1,1-Dichloroethane	104	105	70-130	1	25
Chloroform	106	104	70-130	2	25
Carbon tetrachloride	89	90	70-130	1	25
1,2-Dichloropropane	100	100	70-130	0	25
Dibromochloromethane	81	88	70-130	8	25
1,1,2-Trichloroethane	101	106	70-130	5	25
Tetrachloroethene	100	100	70-130	0	25
Chlorobenzene	98	100	70-130	2	25
Trichlorofluoromethane	106	110	70-130	4	25
1,2-Dichloroethane	106	109	70-130	3	25
1,1,1-Trichloroethane	100	98	70-130	2	25
Bromodichloromethane	89	93	70-130	4	25
trans-1,3-Dichloropropene	88	94	70-130	7	25
cis-1,3-Dichloropropene	89	92	70-130	3	25
1,1-Dichloropropene	100	97	70-130	3	25
Bromoform	81	87	70-130	7	50
1,1,2,2-Tetrachloroethane	101	100	70-130	1	25
Benzene	100	103	70-130	3	25
Toluene	97	102	70-130	5	25
Ethylbenzene	100	104	70-130	4	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705999

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04,06,08,10 Batch: WG279314-4 WG279314-5					
Chloromethane	94	92	70-130	2	50
Bromomethane	102	106	70-130	4	50
Vinyl chloride	104	103	70-130	1	25
Chloroethane	104	103	70-130	1	25
1,1-Dichloroethene	102	101	70-130	1	25
trans-1,2-Dichloroethene	98	99	70-130	1	25
Trichloroethene	99	98	70-130	1	25
1,2-Dichlorobenzene	98	96	70-130	2	25
1,3-Dichlorobenzene	99	96	70-130	3	25
1,4-Dichlorobenzene	99	96	70-130	3	25
Methyl tert butyl ether	91	96	70-130	5	25
p/m-Xylene	103	105	70-130	2	25
o-Xylene	99	102	70-130	3	25
cis-1,2-Dichloroethene	108	102	70-130	6	25
Dibromomethane	94	101	70-130	7	25
1,2,3-Trichloropropane	113	108	70-130	5	25
Styrene	99	105	70-130	6	25
Dichlorodifluoromethane	112	111	70-130	1	50
Acetone	99	106	70-130	7	50
Carbon disulfide	82	78	70-130	5	25
2-Butanone	94	102	70-130	8	50



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705999

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04,06,08,10 Batch: WG279314-4 WG279314-5					
4-Methyl-2-pentanone	89	100	70-130	12	50
2-Hexanone	100	112	70-130	11	50
Bromochloromethane	100	101	70-130	1	25
Tetrahydrofuran	85	91	70-130	7	25
2,2-Dichloropropane	94	93	70-130	1	50
1,2-Dibromoethane	103	106	70-130	3	25
1,3-Dichloropropane	100	103	70-130	3	25
1,1,1,2-Tetrachloroethane	93	92	70-130	1	25
Bromobenzene	98	92	70-130	6	25
n-Butylbenzene	102	95	70-130	7	25
sec-Butylbenzene	105	98	70-130	7	25
tert-Butylbenzene	102	95	70-130	7	25
o-Chlorotoluene	102	96	70-130	6	25
p-Chlorotoluene	104	97	70-130	7	25
1,2-Dibromo-3-chloropropane	89	90	70-130	1	50
Hexachlorobutadiene	95	85	70-130	11	25
Isopropylbenzene	109	113	70-130	4	25
p-Isopropyltoluene	108	99	70-130	9	25
Naphthalene	82	83	70-130	1	25
n-Propylbenzene	104	98	70-130	6	25
1,2,3-Trichlorobenzene	86	86	70-130	0	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705999

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04,06,08,10 Batch: WG279314-4 WG279314-5					
1,2,4-Trichlorobenzene	89	86	70-130	3	25
1,3,5-Trimethylbenzene	105	97	70-130	8	25
1,2,4-Trimethylbenzene	105	98	70-130	7	25
Ethyl ether	90	89	70-130	1	25
Isopropyl Ether	96	97	70-130	1	25
Ethyl-Tert-Butyl-Ether	96	100	70-130	4	25
Tertiary-Amyl Methyl Ether	92	97	70-130	5	25
1,4-Dioxane	88	105	70-130	18	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103	105	70-130
Toluene-d8	100	101	70-130
4-Bromofluorobenzene	103	96	70-130
Dibromofluoromethane	101	99	70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0705999

**Project Number:** 0061882

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 09 Batch: WG279326-4 WG279326-5					
Methylene chloride	102	97	70-130	5	25
1,1-Dichloroethane	99	95	70-130	4	25
Chloroform	102	96	70-130	6	25
Carbon tetrachloride	83	82	70-130	1	25
1,2-Dichloropropane	95	91	70-130	4	25
Dibromochloromethane	70	77	70-130	10	25
1,1,2-Trichloroethane	96	92	70-130	4	25
Tetrachloroethene	92	90	70-130	2	25
Chlorobenzene	92	89	70-130	3	25
Trichlorofluoromethane	115	104	70-130	10	25
1,2-Dichloroethane	103	102	70-130	1	25
1,1,1-Trichloroethane	97	92	70-130	5	25
Bromodichloromethane	80	86	70-130	7	25
trans-1,3-Dichloropropene	76	80	70-130	5	25
cis-1,3-Dichloropropene	81	78	70-130	4	25
1,1-Dichloropropene	95	92	70-130	3	25
Bromoform	69	80	70-130	15	50
1,1,2,2-Tetrachloroethane	91	98	70-130	7	25
Benzene	98	91	70-130	7	25
Toluene	93	90	70-130	3	25
Ethylbenzene	95	92	70-130	3	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705999

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 09 Batch: WG279326-4 WG279326-5					
Chloromethane	93	91	70-130	2	50
Bromomethane	84	80	70-130	5	50
Vinyl chloride	107	92	70-130	15	25
Chloroethane	106	96	70-130	10	25
1,1-Dichloroethene	100	90	70-130	11	25
trans-1,2-Dichloroethene	96	89	70-130	8	25
Trichloroethene	95	93	70-130	2	25
1,2-Dichlorobenzene	88	92	70-130	4	25
1,3-Dichlorobenzene	93	92	70-130	1	25
1,4-Dichlorobenzene	88	92	70-130	4	25
Methyl tert butyl ether	88	86	70-130	2	25
p/m-Xylene	97	94	70-130	3	25
o-Xylene	94	90	70-130	4	25
cis-1,2-Dichloroethene	98	94	70-130	4	25
Dibromomethane	94	93	70-130	1	25
1,2,3-Trichloropropane	100	110	70-130	10	25
Styrene	94	93	70-130	1	25
Dichlorodifluoromethane	116	103	70-130	12	50
Acetone	107	102	70-130	5	50
Carbon disulfide	80	71	70-130	12	25
2-Butanone	95	98	70-130	3	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0705999

**Project Number:** 0061882

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 09 Batch: WG279326-4 WG279326-5					
4-Methyl-2-pentanone	92	86	70-130	7	50
2-Hexanone	98	101	70-130	3	50
Bromochloromethane	95	93	70-130	2	25
Tetrahydrofuran	80	82	70-130	2	25
2,2-Dichloropropane	94	86	70-130	9	50
1,2-Dibromoethane	88	94	70-130	7	25
1,3-Dichloropropane	92	94	70-130	2	25
1,1,1,2-Tetrachloroethane	78	81	70-130	4	25
Bromobenzene	91	88	70-130	3	25
n-Butylbenzene	93	91	70-130	2	25
sec-Butylbenzene	95	93	70-130	2	25
tert-Butylbenzene	94	91	70-130	3	25
o-Chlorotoluene	93	94	70-130	1	25
p-Chlorotoluene	96	93	70-130	3	25
1,2-Dibromo-3-chloropropane	72	80	70-130	11	50
Hexachlorobutadiene	85	84	70-130	1	25
Isopropylbenzene	101	98	70-130	3	25
p-Isopropyltoluene	99	97	70-130	2	25
Naphthalene	70	83	70-130	17	25
n-Propylbenzene	95	95	70-130	0	25
1,2,3-Trichlorobenzene	75	85	70-130	13	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0705999

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 09 Batch: WG279326-4 WG279326-5					
1,2,4-Trichlorobenzene	75	84	70-130	11	25
1,3,5-Trimethylbenzene	93	93	70-130	0	25
1,2,4-Trimethylbenzene	95	94	70-130	1	25
Ethyl ether	86	83	70-130	4	25
Isopropyl Ether	95	90	70-130	5	25
Ethyl-Tert-Butyl-Ether	95	90	70-130	5	25
Tertiary-Amyl Methyl Ether	87	88	70-130	1	25
1,4-Dioxane	81	91	70-130	12	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114	107	70-130
Toluene-d8	99	99	70-130
4-Bromofluorobenzene	99	101	70-130
Dibromofluoromethane	101	97	70-130

Project Name: RAYTHEON WAYLAND

Lab Number: L0705999

Project Number: 0061882

Report Date: 05/07/07

## 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
L0705999-01A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-01B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-02A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-02B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-03A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-03B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-04A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-04B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-05A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-05B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-06A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-06B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-07A	Vial Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-07B	Vial Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-08A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-08B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-09A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-09B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-10A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0705999-10B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705999  
**Report Date:** 05/07/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
MSD - Matrix Spike Sample Duplicate: Refer to MS.  
NA - Not Applicable.  
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.)

Report Format: Not Specified





**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0705999  
**Report Date:** 05/07/07

## REFERENCES

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

## LIMITATION OF LIABILITIES

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

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



# CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/26

ALPHA Job #: L0705999



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

### Project Information

Project Name: Raytheon  
Project Location: Wayland, MA  
Project #: 0061882  
Project Manager: Jeremy Picard  
ALPHA Quote #:

### Report Information - Data Deliverables

FAX  EMAIL  
 ADEX  Add'l Deliverables

### Billing Information

Same as Client info PC #:

### Client Information

Client: ERM  
Address: 399 Baylston St, 6th Floor  
Boston, MA 02116  
Phone: (617) 646-7800  
Fax: (617) 267-6447  
Email: jeremy.picard@erm.com

### Turn-Around Time

Standard  RUSH (only confirmed if pre-approved!)

Date Due: 5/03 Time:

### Regulatory Requirements/Report Limits

State / Fed Program Criteria  
MA/MCP EW-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  
802/LC by 8260 MTBE and Benzene  
802/LC METBOL BENCH

**SAMPLE HANDLING**

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

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collector Date	Collector Time	Sample Matrix	Sampler's Initials		Sample Specific Comments	TOTAL # BOTTLES
05999-01	MW-206D-20070425-01	4/25/07	09:00	GW	HEA	2		2
-02	MW-206M-20070425-01	4/25/07	09:45	GW	HEA	2		2
-03	MW-206S-20070425-01	4/25/07	11:10	GW	HEA	2		2
-04	DUP-007-20070425-01	4/25/07	24:00	GW	HEA	2		2
-05	MW-45S-20070425-01	4/25/07	10:00	GW	LR	2		2
-06	MW-45M-20070425-01	4/25/07	11:15	GW	LR	2		2
-07	MW-45D-20070425-01	4/25/07	8:40	GW	LR	2		2
-08	MW-45B-20070425-01	4/25/07	13:00	GW	LR	2		2
-09	MW-45-DUP-008-20070425-01	4/25/07	24:00	GW	LR	2		2
-10	MW-46M-20070425-01	4/25/07	14:00	GW	HEA	2		2

PLEASE ANSWER QUESTIONS ABOVE!

Container Type: VV  
Preservative: BH

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By: [Signature] Date/Time: 4/26/07 16:40  
Received By: [Signature] Date/Time: 4/26/07 16:40

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

05070714:01



## ANALYTICAL REPORT

Lab Number:	L0706009
Client:	ERM-New England 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jeremy Picard
Project Name:	RAYTHEON WAYLAND
Project Number:	0061882
Report Date:	05/07/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706009  
**Report Date:** 05/07/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0706009-01	MW-33M-20070425-01	WAYLAND, MA
L0706009-02	DUP-005-20070425-01	WAYLAND, MA
L0706009-03	MW-47D-20070425-01	WAYLAND, MA
L0706009-04	MW-47M-20070425-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0706009

Project Number: 0061882

Report Date: 05/07/07

### MADEP MCP Response Action Analytical Report Certification

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

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706009  
**Report Date:** 05/07/07

### Case Narrative

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

#### MCP Related Narratives:

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

In reference to question E:

The WG279326-4 LCS has low recovery for Bromoform, a known difficult analyte.

In reference to question F:

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

##### Metals

In reference to question F:

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

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

Date: 05/07/07

# ORGANICS

# VOLATILES



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706009**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706009-01  
 Client ID: MW-33M-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 20:18  
 Analyst: BT

Date Collected: 04/24/07 15:25  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	8.2		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.6		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706009**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706009-01

Date Collected: 04/24/07 15:25

Client ID: MW-33M-20070425-01

Date Received: 04/26/07

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	100		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706009**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706009-02  
 Client ID: DUP-005-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/06/07 12:55  
 Analyst: BT

Date Collected: 04/24/07 00:00  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	8.7		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.6		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706009**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706009-02  
 Client ID: DUP-005-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/24/07 00:00  
 Date Received: 04/26/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	104		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706009**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706009-03  
 Client ID: MW-47D-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 20:50  
 Analyst: BT

Date Collected: 04/25/07 14:05  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	1.0		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	14		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	2.0		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706009**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706009-03  
 Client ID: MW-47D-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 14:05  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	105		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706009**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706009-04  
 Client ID: MW-47M-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 21:23  
 Analyst: BT

Date Collected: 04/25/07 15:25  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	71		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	8.0		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706009**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706009-04  
 Client ID: MW-47M-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 15:25  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706009  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/05/07 16:33  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01,03-04 Batch: WG279326-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706009  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/05/07 16:33  
**Analyst:** BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01,03-04 Batch: WG279326-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706009  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/05/07 16:33  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01,03-04 Batch: WG279326-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706009  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/06/07 11:19  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 02 Batch: WG279326-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706009  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/06/07 11:19  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 02 Batch: WG279326-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706009  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/06/07 11:19  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
-----------	--------	-----------	-------	-----

Volatile Organics by MCP 8260B for sample(s): 02 Batch: WG279326-6

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
-----------	-----------	-----------	------------------------

1,2-Dichloroethane-d4	108		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706009

**Project Number:** 0061882

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,03-04 Batch: WG279326-1 WG279326-2					
Methylene chloride	105	102	70-130	3	25
1,1-Dichloroethane	104	105	70-130	1	25
Chloroform	106	104	70-130	2	25
Carbon tetrachloride	89	90	70-130	1	25
1,2-Dichloropropane	100	100	70-130	0	25
Dibromochloromethane	81	88	70-130	8	25
1,1,2-Trichloroethane	101	106	70-130	5	25
Tetrachloroethene	100	100	70-130	0	25
Chlorobenzene	98	100	70-130	2	25
Trichlorofluoromethane	106	110	70-130	4	25
1,2-Dichloroethane	106	109	70-130	3	25
1,1,1-Trichloroethane	100	98	70-130	2	25
Bromodichloromethane	89	93	70-130	4	25
trans-1,3-Dichloropropene	88	94	70-130	7	25
cis-1,3-Dichloropropene	89	92	70-130	3	25
1,1-Dichloropropene	100	97	70-130	3	25
Bromoform	81	87	70-130	7	50
1,1,2,2-Tetrachloroethane	101	100	70-130	1	25
Benzene	100	103	70-130	3	25
Toluene	97	102	70-130	5	25
Ethylbenzene	100	104	70-130	4	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706009

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,03-04 Batch: WG279326-1 WG279326-2					
Chloromethane	94	92	70-130	2	50
Bromomethane	102	106	70-130	4	50
Vinyl chloride	104	103	70-130	1	25
Chloroethane	104	103	70-130	1	25
1,1-Dichloroethene	102	101	70-130	1	25
trans-1,2-Dichloroethene	98	99	70-130	1	25
Trichloroethene	99	98	70-130	1	25
1,2-Dichlorobenzene	98	96	70-130	2	25
1,3-Dichlorobenzene	99	96	70-130	3	25
1,4-Dichlorobenzene	99	96	70-130	3	25
Methyl tert butyl ether	91	96	70-130	5	25
p/m-Xylene	103	105	70-130	2	25
o-Xylene	99	102	70-130	3	25
cis-1,2-Dichloroethene	108	102	70-130	6	25
Dibromomethane	94	101	70-130	7	25
1,2,3-Trichloropropane	113	108	70-130	5	25
Styrene	99	105	70-130	6	25
Dichlorodifluoromethane	112	111	70-130	1	50
Acetone	99	106	70-130	7	50
Carbon disulfide	82	78	70-130	5	25
2-Butanone	94	102	70-130	8	50



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706009

**Project Number:** 0061882

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,03-04 Batch: WG279326-1 WG279326-2					
4-Methyl-2-pentanone	89	100	70-130	12	50
2-Hexanone	100	112	70-130	11	50
Bromochloromethane	100	101	70-130	1	25
Tetrahydrofuran	85	91	70-130	7	25
2,2-Dichloropropane	94	93	70-130	1	50
1,2-Dibromoethane	103	106	70-130	3	25
1,3-Dichloropropane	100	103	70-130	3	25
1,1,1,2-Tetrachloroethane	93	92	70-130	1	25
Bromobenzene	98	92	70-130	6	25
n-Butylbenzene	102	95	70-130	7	25
sec-Butylbenzene	105	98	70-130	7	25
tert-Butylbenzene	102	95	70-130	7	25
o-Chlorotoluene	102	96	70-130	6	25
p-Chlorotoluene	104	97	70-130	7	25
1,2-Dibromo-3-chloropropane	89	90	70-130	1	50
Hexachlorobutadiene	95	85	70-130	11	25
Isopropylbenzene	109	113	70-130	4	25
p-Isopropyltoluene	108	99	70-130	9	25
Naphthalene	82	83	70-130	1	25
n-Propylbenzene	104	98	70-130	6	25
1,2,3-Trichlorobenzene	86	86	70-130	0	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706009

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,03-04 Batch: WG279326-1 WG279326-2					
1,2,4-Trichlorobenzene	89	86	70-130	3	25
1,3,5-Trimethylbenzene	105	97	70-130	8	25
1,2,4-Trimethylbenzene	105	98	70-130	7	25
Ethyl ether	90	89	70-130	1	25
Isopropyl Ether	96	97	70-130	1	25
Ethyl-Tert-Butyl-Ether	96	100	70-130	4	25
Tertiary-Amyl Methyl Ether	92	97	70-130	5	25
1,4-Dioxane	88	105	70-130	18	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103	105	70-130
Toluene-d8	100	101	70-130
4-Bromofluorobenzene	103	96	70-130
Dibromofluoromethane	101	99	70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706009

**Project Number:** 0061882

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02 Batch: WG279326-4 WG279326-5					
Methylene chloride	102	97	70-130	5	25
1,1-Dichloroethane	99	95	70-130	4	25
Chloroform	102	96	70-130	6	25
Carbon tetrachloride	83	82	70-130	1	25
1,2-Dichloropropane	95	91	70-130	4	25
Dibromochloromethane	70	77	70-130	10	25
1,1,2-Trichloroethane	96	92	70-130	4	25
Tetrachloroethene	92	90	70-130	2	25
Chlorobenzene	92	89	70-130	3	25
Trichlorofluoromethane	115	104	70-130	10	25
1,2-Dichloroethane	103	102	70-130	1	25
1,1,1-Trichloroethane	97	92	70-130	5	25
Bromodichloromethane	80	86	70-130	7	25
trans-1,3-Dichloropropene	76	80	70-130	5	25
cis-1,3-Dichloropropene	81	78	70-130	4	25
1,1-Dichloropropene	95	92	70-130	3	25
Bromoform	69	80	70-130	15	50
1,1,2,2-Tetrachloroethane	91	98	70-130	7	25
Benzene	98	91	70-130	7	25
Toluene	93	90	70-130	3	25
Ethylbenzene	95	92	70-130	3	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706009

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02 Batch: WG279326-4 WG279326-5					
Chloromethane	93	91	70-130	2	50
Bromomethane	84	80	70-130	5	50
Vinyl chloride	107	92	70-130	15	25
Chloroethane	106	96	70-130	10	25
1,1-Dichloroethene	100	90	70-130	11	25
trans-1,2-Dichloroethene	96	89	70-130	8	25
Trichloroethene	95	93	70-130	2	25
1,2-Dichlorobenzene	88	92	70-130	4	25
1,3-Dichlorobenzene	93	92	70-130	1	25
1,4-Dichlorobenzene	88	92	70-130	4	25
Methyl tert butyl ether	88	86	70-130	2	25
p/m-Xylene	97	94	70-130	3	25
o-Xylene	94	90	70-130	4	25
cis-1,2-Dichloroethene	98	94	70-130	4	25
Dibromomethane	94	93	70-130	1	25
1,2,3-Trichloropropane	100	110	70-130	10	25
Styrene	94	93	70-130	1	25
Dichlorodifluoromethane	116	103	70-130	12	50
Acetone	107	102	70-130	5	50
Carbon disulfide	80	71	70-130	12	25
2-Butanone	95	98	70-130	3	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706009

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02 Batch: WG279326-4 WG279326-5					
4-Methyl-2-pentanone	92	86	70-130	7	50
2-Hexanone	98	101	70-130	3	50
Bromochloromethane	95	93	70-130	2	25
Tetrahydrofuran	80	82	70-130	2	25
2,2-Dichloropropane	94	86	70-130	9	50
1,2-Dibromoethane	88	94	70-130	7	25
1,3-Dichloropropane	92	94	70-130	2	25
1,1,1,2-Tetrachloroethane	78	81	70-130	4	25
Bromobenzene	91	88	70-130	3	25
n-Butylbenzene	93	91	70-130	2	25
sec-Butylbenzene	95	93	70-130	2	25
tert-Butylbenzene	94	91	70-130	3	25
o-Chlorotoluene	93	94	70-130	1	25
p-Chlorotoluene	96	93	70-130	3	25
1,2-Dibromo-3-chloropropane	72	80	70-130	11	50
Hexachlorobutadiene	85	84	70-130	1	25
Isopropylbenzene	101	98	70-130	3	25
p-Isopropyltoluene	99	97	70-130	2	25
Naphthalene	70	83	70-130	17	25
n-Propylbenzene	95	95	70-130	0	25
1,2,3-Trichlorobenzene	75	85	70-130	13	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706009

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02 Batch: WG279326-4 WG279326-5					
1,2,4-Trichlorobenzene	75	84	70-130	11	25
1,3,5-Trimethylbenzene	93	93	70-130	0	25
1,2,4-Trimethylbenzene	95	94	70-130	1	25
Ethyl ether	86	83	70-130	4	25
Isopropyl Ether	95	90	70-130	5	25
Ethyl-Tert-Butyl-Ether	95	90	70-130	5	25
Tertiary-Amyl Methyl Ether	87	88	70-130	1	25
1,4-Dioxane	81	91	70-130	12	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114	107	70-130
Toluene-d8	99	99	70-130
4-Bromofluorobenzene	99	101	70-130
Dibromofluoromethane	101	97	70-130

# METALS



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706009  
**Report Date:** 05/07/07

**SAMPLE RESULTS**

Lab ID: L0706009-01  
 Client ID: MW-33M-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/24/07 15:25  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	12		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:09	EPA 3005A	60,6010B	MG





**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706009  
**Report Date:** 05/07/07

**SAMPLE RESULTS**

Lab ID: L0706009-03  
 Client ID: MW-47D-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/25/07 14:05  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	120		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:12	EPA 3005A	60,6010B	MG



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706009  
**Report Date:** 05/07/07

**SAMPLE RESULTS**

Lab ID: L0706009-04  
 Client ID: MW-47M-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/25/07 15:25  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals by MCP 6000/7000 series										
Sodium, Dissolved	23		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:14	EPA 3005A	60,6010B	MG



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706009  
**Report Date:** 05/07/07

## 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): 01,03-04 Batch: WG278801-1								
Sodium, Dissolved	ND	mg/l	2.0	1	05/01/07 16:00	05/03/07 13:41	60,6010B	MG

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706009

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01,03-04 Batch: WG278801-2 WG278801-3					
Sodium, Dissolved	99	99	80-120	0	20

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706009**Project Number:** 0061882**Report Date:** 05/07/07**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
L0706009-01A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-01B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-01C	Plastic 250ml HNO3 preserved	A	<2	2.9C	Y	Absent	MCP-NA-6010S
L0706009-02A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-02B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-03A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-03B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-03C	Plastic 250ml HNO3 preserved	A	<2	2.9C	Y	Absent	MCP-NA-6010S
L0706009-04A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-04B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706009-04C	Plastic 250ml HNO3 preserved	A	<2	2.9C	Y	Absent	MCP-NA-6010S

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706009  
**Report Date:** 05/07/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
MSD - Matrix Spike Sample Duplicate: Refer to MS.  
NA - Not Applicable.  
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.)

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706009  
**Report Date:** 05/07/07

## 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.



05070713:21



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

# CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/26

ALPHA Job #: <sup>(F)</sup> L0706009

### Client Information

Client: ERM  
Address: 399 BOYLSTON ST.  
BOSTON MA 02114  
Phone: 617-646-7800  
Fax: 617-267-6447  
Email: jeremy.picard@erm.com

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

### Project Information

Project Name: RAYNHAM WAYLAND  
Project Location: WAYLAND, MA  
Project #: 006882  
Project Manager: JEREMY PICARD  
ALPHA Quote #:

### Turn-Around Time

Standard  RJSH (only confirmed if pre-approved?)  
Date Due: 5/03 Time:

### Report Information - Data Deliverables

FAX  EMAIL  
 CDEx  CD'l Deliverables

### Billing Information

Same as Client info PO #:

### Regulatory Requirements/Report Limits

State/Fed Program: MCP Criteria: EU-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?

**ANALYSIS**  
8021C  
6010 B.P. (Solved)  
6010 B.P. (UK-PP)

**SAMPLE HANDLING**

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

Sample Specific Comments

**TOTAL # BOTTLES**  
3  
2  
3  
3

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Time	Sample Matrix	Sampler's Initials		
--------------------------------	-----------	-----------------	------	---------------	--------------------	--	--

✓ 06009-0	MW-33M-20070425-01	4/24/07	15:25	GW	JM	2	1
✓ -02	DUP-005-20070425-01	4/24/07	00:00	BW	DM	2	
✓ -03	MW-47D-20070425-01	4/25/07	14:05	GW	BH	X	X
✓ -04	MW-47M-20070425-01	4/25/07	15:25	GW	BH	X	X

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
MA MCP or CT RCP?

Container Type: VP  
Preservative: BC

Relinquished By:

[Signature]

Date/Time

4/26/07 10:40

Received By:

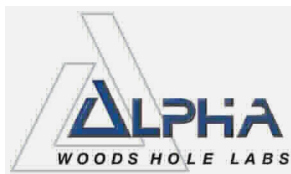
[Signature]

Date/Time

4/26/07

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





## ANALYTICAL REPORT

Lab Number: L0706011

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/07/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706011  
**Report Date:** 05/07/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0706011-01	MW-202M-20070425-01	WAYLAND, MA
L0706011-02	MW-202S-20070425-01	WAYLAND, MA
L0706011-03	MW-208M-20070425-01	WAYLAND, MA
L0706011-04	MW-208S-20070425-01	WAYLAND, MA
L0706011-05	TB-003-20070425-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0706011

Project Number: 0061882

Report Date: 05/07/07

### MADEP MCP Response Action Analytical Report Certification

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

An affirmative response to questions A, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A
A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	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:** 0061882

**Lab Number:** L0706011  
**Report Date:** 05/07/07

### Case Narrative

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

#### MCP Related Narratives:

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

L0706011-01 required re-analysis on dilution in order to quantitate sample within the range of the calibration.

The result is reported as a greater than value for the compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound which exceeded the range of the calibration.

In reference to question F:

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

##### Metals

In reference to question F:

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

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

Date: 05/07/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706011**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

**Lab ID:** L0706011-01  
**Client ID:** MW-202M-20070425-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Anaytical Method:** 60,8260B  
**Analytical Date:** 05/05/07 20:27  
**Analyst:** PD

**Date Collected:** 04/25/07 09:10  
**Date Received:** 04/26/07  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	0.93		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	45		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	2.5		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	>100		ug/l	.5	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	>100		ug/l	1	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706011**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706011-01  
 Client ID: MW-202M-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 09:10  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	114		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706011**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

**Lab ID:** L0706011-01 R  
**Client ID:** MW-202M-20070425-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Anaytical Method:** 60,8260B  
**Analytical Date:** 05/07/07 13:50  
**Analyst:** PD

**Date Collected:** 04/25/07 09:10  
**Date Received:** 04/26/07  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatiles Organics by MCP 8260B</b>					
Trichloroethene	120		ug/l	2.5	5
Methyl tert butyl ether	160		ug/l	5.0	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	114		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706011**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706011-02  
 Client ID: MW-202S-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 21:05  
 Analyst: PD

Date Collected: 04/25/07 10:10  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	1.4		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.5		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706011**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706011-02  
 Client ID: MW-202S-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 10:10  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	116		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706011**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706011-03  
 Client ID: MW-208M-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 21:44  
 Analyst: PD

Date Collected: 04/25/07 10:05  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	2.5		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	1.1		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	12		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	16		ug/l	1.0	1
cis-1,2-Dichloroethene	1.3		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706011**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706011-03  
 Client ID: MW-208M-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 10:05  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	97		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706011**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706011-04  
 Client ID: MW-208S-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 22:23  
 Analyst: PD

Date Collected: 04/25/07 11:20  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	7.0		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	2.1		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706011**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706011-04  
 Client ID: MW-208S-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 11:20  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	114		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706011**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706011-05  
 Client ID: TB-003-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 23:02  
 Analyst: PD

Date Collected: 04/25/07 02:10  
 Date Received: 04/26/07  
 Field Prep: Not Specified

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



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706011**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706011-05  
 Client ID: TB-003-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 02:10  
 Date Received: 04/26/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	110		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706011  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/05/07 13:18  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-05 Batch: WG279309-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706011  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/05/07 13:18  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-05 Batch: WG279309-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706011  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/05/07 13:18  
**Analyst:** PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-05 Batch: WG279309-6				

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	116		70-130
Dibromofluoromethane	113		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706011  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/07/07 09:42  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG279309-9				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706011  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/07/07 09:42  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
-----------	--------	-----------	-------	-----

Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG279309-9

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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706011  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/07/07 09:42  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG279309-9				
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	117		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	112		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706011

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-4 WG279309-5					
Methylene chloride	104	101	70-130	3	25
1,1-Dichloroethane	110	105	70-130	5	25
Chloroform	109	103	70-130	6	25
Carbon tetrachloride	115	111	70-130	4	25
1,2-Dichloropropane	95	87	70-130	9	25
Dibromochloromethane	99	104	70-130	5	25
1,1,2-Trichloroethane	92	98	70-130	6	25
Tetrachloroethene	102	99	70-130	3	25
Chlorobenzene	98	99	70-130	1	25
Trichlorofluoromethane	138	129	70-130	7	25
1,2-Dichloroethane	115	105	70-130	9	25
1,1,1-Trichloroethane	120	113	70-130	6	25
Bromodichloromethane	101	99	70-130	2	25
trans-1,3-Dichloropropene	93	97	70-130	4	25
cis-1,3-Dichloropropene	89	88	70-130	1	25
1,1-Dichloropropene	99	96	70-130	3	25
Bromoform	99	100	70-130	1	50
1,1,2,2-Tetrachloroethane	104	107	70-130	3	25
Benzene	91	88	70-130	3	25
Toluene	98	97	70-130	1	25
Ethylbenzene	101	101	70-130	0	25



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706011

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-4 WG279309-5					
Chloromethane	112	104	70-130	7	50
Bromomethane	80	71	70-130	12	50
Vinyl chloride	95	94	70-130	1	25
Chloroethane	101	84	70-130	18	25
1,1-Dichloroethene	110	105	70-130	5	25
trans-1,2-Dichloroethene	100	95	70-130	5	25
Trichloroethene	102	90	70-130	13	25
1,2-Dichlorobenzene	98	99	70-130	1	25
1,3-Dichlorobenzene	100	98	70-130	2	25
1,4-Dichlorobenzene	98	96	70-130	2	25
Methyl tert butyl ether	88	87	70-130	1	25
p/m-Xylene	100	100	70-130	0	25
o-Xylene	98	98	70-130	0	25
cis-1,2-Dichloroethene	101	102	70-130	1	25
Dibromomethane	88	89	70-130	1	25
1,2,3-Trichloropropane	105	114	70-130	8	25
Styrene	98	100	70-130	2	25
Dichlorodifluoromethane	125	112	70-130	11	50
Acetone	<b>135</b>	113	70-130	18	50
Carbon disulfide	82	80	70-130	2	25
2-Butanone	107	94	70-130	13	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706011

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-4 WG279309-5					
4-Methyl-2-pentanone	82	77	70-130	6	50
2-Hexanone	95	102	70-130	7	50
Bromochloromethane	101	93	70-130	8	25
Tetrahydrofuran	86	92	70-130	7	25
2,2-Dichloropropane	109	105	70-130	4	50
1,2-Dibromoethane	90	97	70-130	7	25
1,3-Dichloropropane	93	100	70-130	7	25
1,1,1,2-Tetrachloroethane	107	108	70-130	1	25
Bromobenzene	97	95	70-130	2	25
n-Butylbenzene	103	99	70-130	4	25
sec-Butylbenzene	102	99	70-130	3	25
tert-Butylbenzene	102	99	70-130	3	25
o-Chlorotoluene	100	98	70-130	2	25
p-Chlorotoluene	104	101	70-130	3	25
1,2-Dibromo-3-chloropropane	100	95	70-130	5	50
Hexachlorobutadiene	88	86	70-130	2	25
Isopropylbenzene	111	110	70-130	1	25
p-Isopropyltoluene	109	104	70-130	5	25
Naphthalene	84	85	70-130	1	25
n-Propylbenzene	100	98	70-130	2	25
1,2,3-Trichlorobenzene	88	90	70-130	2	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706011

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-05 Batch: WG279309-4 WG279309-5					
1,2,4-Trichlorobenzene	86	83	70-130	4	25
1,3,5-Trimethylbenzene	103	102	70-130	1	25
1,2,4-Trimethylbenzene	106	102	70-130	4	25
Ethyl ether	91	91	70-130	0	25
Isopropyl Ether	99	95	70-130	4	25
Ethyl-Tert-Butyl-Ether	72	70	70-130	3	25
Tertiary-Amyl Methyl Ether	106	102	70-130	4	25
1,4-Dioxane	78	66	70-130	17	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125	122	70-130
Toluene-d8	107	109	70-130
4-Bromofluorobenzene	97	92	70-130
Dibromofluoromethane	115	110	70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706011

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279309-7 WG279309-8					
Methylene chloride	98	98	70-130	0	25
1,1-Dichloroethane	105	99	70-130	6	25
Chloroform	101	95	70-130	6	25
Carbon tetrachloride	108	99	70-130	9	25
1,2-Dichloropropane	88	86	70-130	2	25
Dibromochloromethane	101	98	70-130	3	25
1,1,2-Trichloroethane	96	94	70-130	2	25
Tetrachloroethene	94	88	70-130	7	25
Chlorobenzene	93	89	70-130	4	25
Trichlorofluoromethane	122	117	70-130	4	25
1,2-Dichloroethane	105	98	70-130	7	25
1,1,1-Trichloroethane	109	102	70-130	7	25
Bromodichloromethane	100	90	70-130	11	25
trans-1,3-Dichloropropene	99	98	70-130	1	25
cis-1,3-Dichloropropene	85	83	70-130	2	25
1,1-Dichloropropene	96	87	70-130	10	25
Bromoform	100	106	70-130	6	50
1,1,2,2-Tetrachloroethane	113	112	70-130	1	25
Benzene	84	79	70-130	6	25
Toluene	96	89	70-130	8	25
Ethylbenzene	98	94	70-130	4	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706011

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279309-7 WG279309-8					
Chloromethane	94	98	70-130	4	50
Bromomethane	78	82	70-130	5	50
Vinyl chloride	88	91	70-130	3	25
Chloroethane	102	99	70-130	3	25
1,1-Dichloroethene	105	99	70-130	6	25
trans-1,2-Dichloroethene	90	88	70-130	2	25
Trichloroethene	92	85	70-130	8	25
1,2-Dichlorobenzene	96	94	70-130	2	25
1,3-Dichlorobenzene	95	93	70-130	2	25
1,4-Dichlorobenzene	94	93	70-130	1	25
Methyl tert butyl ether	88	89	70-130	1	25
p/m-Xylene	94	91	70-130	3	25
o-Xylene	91	88	70-130	3	25
cis-1,2-Dichloroethene	100	93	70-130	7	25
Dibromomethane	89	87	70-130	2	25
1,2,3-Trichloropropane	113	125	70-130	10	25
Styrene	93	88	70-130	6	25
Dichlorodifluoromethane	94	90	70-130	4	50
Acetone	129	118	70-130	9	50
Carbon disulfide	76	74	70-130	3	25
2-Butanone	125	128	70-130	2	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706011

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279309-7 WG279309-8					
4-Methyl-2-pentanone	93	83	70-130	11	50
2-Hexanone	105	111	70-130	6	50
Bromochloromethane	94	90	70-130	4	25
Tetrahydrofuran	100	97	70-130	3	25
2,2-Dichloropropane	108	96	70-130	12	50
1,2-Dibromoethane	92	91	70-130	1	25
1,3-Dichloropropane	98	97	70-130	1	25
1,1,1,2-Tetrachloroethane	106	96	70-130	10	25
Bromobenzene	92	92	70-130	0	25
n-Butylbenzene	99	93	70-130	6	25
sec-Butylbenzene	98	94	70-130	4	25
tert-Butylbenzene	97	94	70-130	3	25
o-Chlorotoluene	96	95	70-130	1	25
p-Chlorotoluene	97	97	70-130	0	25
1,2-Dibromo-3-chloropropane	116	104	70-130	11	50
Hexachlorobutadiene	86	79	70-130	8	25
Isopropylbenzene	105	98	70-130	7	25
p-Isopropyltoluene	102	98	70-130	4	25
Naphthalene	92	94	70-130	2	25
n-Propylbenzene	96	94	70-130	2	25
1,2,3-Trichlorobenzene	91	90	70-130	1	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706011

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279309-7 WG279309-8					
1,2,4-Trichlorobenzene	87	84	70-130	4	25
1,3,5-Trimethylbenzene	98	96	70-130	2	25
1,2,4-Trimethylbenzene	101	97	70-130	4	25
Ethyl ether	86	93	70-130	8	25
Isopropyl Ether	98	93	70-130	5	25
Ethyl-Tert-Butyl-Ether	80	80	70-130	0	25
Tertiary-Amyl Methyl Ether	103	92	70-130	11	25
1,4-Dioxane	71	73	70-130	3	50
1,1,2-Trichloro-1,2,2-Trifluoroethane	82	75	70-130	9	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	128		123		70-130
Toluene-d8	111		111		70-130
4-Bromofluorobenzene	95		103		70-130
Dibromofluoromethane	115		116		70-130

# METALS





**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706011**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706011-01

Date Collected: 04/25/07 09:10

Client ID: MW-202M-20070425-01

Date Received: 04/26/07

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										
Sodium, Dissolved	18		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:17	EPA 3005A	60,6010B	MG



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706011**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706011-02

Date Collected: 04/25/07 10:10

Client ID: MW-202S-20070425-01

Date Received: 04/26/07

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										
Sodium, Dissolved	79		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:27	EPA 3005A	60,6010B	MG



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706011**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706011-04

Date Collected: 04/25/07 11:20

Client ID: MW-208S-20070425-01

Date Received: 04/26/07

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										
Sodium, Dissolved	35		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:29	EPA 3005A	60,6010B	MG



Project Name: RAYTHEON WAYLAND

Lab Number: L0706011

Project Number: 0061882

Report Date: 05/07/07

## 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): 01-02,04 Batch: WG278801-1									
Sodium, Dissolved	ND		mg/l	2.0	1	05/01/07 16:00	05/03/07 13:41	60,6010B	MG

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706011

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01-02,04 Batch: WG278801-2 WG278801-3					
Sodium, Dissolved	99	99	80-120	0	20

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706011**Project Number:** 0061882**Report Date:** 05/07/07**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
L0706011-01A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-01B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-01C	Plastic 250ml HNO3 preserved	A	<2	2.9C	Y	Absent	MCP-NA-6010S
L0706011-02A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-02B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-02C	Plastic 250ml HNO3 preserved	A	<2	2.9C	Y	Absent	MCP-NA-6010S
L0706011-03A	Vial Na2S2O3 preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-03B	Vial Na2S2O3 preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-04A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-04B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706011-04C	Plastic 250ml HNO3 preserved	NA	NA	NA	Y	Absent	MCP-NA-6010S
L0706011-05A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706011  
**Report Date:** 05/07/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
MSD - Matrix Spike Sample Duplicate: Refer to MS.  
NA - Not Applicable.  
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.)

Report Format: Not Specified



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706011  
**Report Date:** 05/07/07

## 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

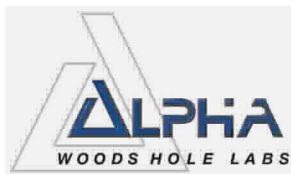
Alpha Woods Hole Labs performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods 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.









## ANALYTICAL REPORT

Lab Number: L0706012

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/03/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706012  
**Report Date:** 05/03/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0706012-01	MW-202D-20070425-01	WAYLAND, MA



Project Name: RAYTHEON WAYLAND

Lab Number: L0706012

Project Number: 0061882

Report Date: 05/03/07

### MADEP MCP Response Action Analytical Report Certification

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

An affirmative response to questions A, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A
A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706012  
**Report Date:** 05/03/07

### Case Narrative

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

MCP Related Narratives:

Report Submission

All MCP required questions were answered with affirmative responses, therefore, there are no relevant data issues to discuss.

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

Date: 05/03/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706012**Project Number:** 0061882**Report Date:** 05/03/07**SAMPLE RESULTS**

Lab ID: L0706012-01  
 Client ID: MW-202D-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/03/07 15:32  
 Analyst: BT

Date Collected: 04/25/07 11:15  
 Date Received: 04/26/07  
 Field Prep: Not Specified

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



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706012**Project Number:** 0061882**Report Date:** 05/03/07**SAMPLE RESULTS**

Lab ID: L0706012-01

Date Collected: 04/25/07 11:15

Client ID: MW-202D-20070425-01

Date Received: 04/26/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706012  
**Report Date:** 05/03/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/03/07 09:20  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG278538-12				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dichlorodifluoromethane	ND		ug/l	5.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
o-Chlorotoluene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND

Lab Number: L0706012

Project Number: 0061882

Report Date: 05/03/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 05/03/07 09:20  
 Analyst: BT

Parameter	Result	Qualifier	Units	RDL
-----------	--------	-----------	-------	-----

Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG278538-12

p-Chlorotoluene	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
-----------	-----------	-----------	------------------------

1,2-Dichloroethane-d4	116		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	108		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706012

**Project Number:** 0061882

**Report Date:** 05/03/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278538-10 WG278538-11					
Methylene chloride	100	103	70-130	3	25
1,1-Dichloroethane	99	105	70-130	6	25
Chloroform	104	102	70-130	2	25
Carbon tetrachloride	110	110	70-130	0	25
1,2-Dichloropropane	94	93	70-130	1	25
Dibromochloromethane	106	110	70-130	4	25
1,1,2-Trichloroethane	98	98	70-130	0	25
Tetrachloroethene	103	108	70-130	5	25
Chlorobenzene	96	100	70-130	4	25
1,2-Dichloroethane	112	114	70-130	2	25
1,1,1-Trichloroethane	111	112	70-130	1	25
Bromodichloromethane	107	107	70-130	0	25
trans-1,3-Dichloropropene	100	101	70-130	1	25
cis-1,3-Dichloropropene	89	94	70-130	5	25
Bromoform	108	118	70-130	9	50
1,1,2,2-Tetrachloroethane	110	118	70-130	7	25
Chloromethane	85	96	70-130	12	50
Vinyl chloride	85	94	70-130	10	25
Chloroethane	85	99	70-130	15	25
1,1-Dichloroethene	100	112	70-130	11	25
trans-1,2-Dichloroethene	97	102	70-130	5	25

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0706012

Project Number: 0061882

Report Date: 05/03/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG278538-10 WG278538-11					
Trichloroethene	98	98	70-130	0	25
1,2-Dichlorobenzene	102	106	70-130	4	25
1,3-Dichlorobenzene	100	104	70-130	4	25
1,4-Dichlorobenzene	98	104	70-130	6	25
cis-1,2-Dichloroethene	100	100	70-130	0	25
Dichlorodifluoromethane	81	80	70-130	1	50
1,2-Dibromoethane	94	104	70-130	10	25
1,3-Dichloropropane	98	104	70-130	6	25
1,1,1,2-Tetrachloroethane	106	114	70-130	7	25
o-Chlorotoluene	98	101	70-130	3	25
p-Chlorotoluene	100	106	70-130	6	25
Hexachlorobutadiene	89	95	70-130	7	25
1,2,4-Trichlorobenzene	89	94	70-130	5	25

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125		115		70-130
Toluene-d8	105		107		70-130
4-Bromofluorobenzene	99		99		70-130
Dibromofluoromethane	115		110		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706012**Project Number:** 0061882**Report Date:** 05/03/07**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
L0706012-01A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706012-01B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706012  
**Report Date:** 05/03/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.
- LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD- Laboratory Control Sample Duplicate: Refer to LCS.
- MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD - Matrix Spike Sample Duplicate: Refer to MS.
- NA - Not Applicable.
- 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.
- 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.)

Report Format: Not Specified



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706012  
**Report Date:** 05/03/07

## 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.





05030717:25

6

# CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/26

ALPHA Job #: 20706012



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

### Client Information

Client: ERM  
Address: 399 Boylston St.  
6th Floor, Boston, MA  
Phone: 617-646-7800  
Fax: 617-267-6447  
Email:

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits

### Project Information

Project Name: Raytheon  
Project Location: Wayland, Ma  
Project #: 061882  
Project Manager: J. Picard  
ALPHA Quote #:

### Turn-Around Time

Standard  RUSH (only confirmed if pre-approved!)

Date Due: 05/03 Time:

### Report Information - Data Deliverables

FAX  EMAIL  
 ADEX  Add'l Deliverables

### Billing Information

Same as Client info PO #:

### Regulatory Requirements/Report Limits

State / Fed Program: MIP 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?

ANALYSIS 80216 - TMTBE + Benzene

**SAMPLE HANDLING**

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

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	X	Sample Specific Comments	TOTAL # BOTTLES
		Date	Time					
06012-01	MW202D-20070425-01	4/25/07	1115	GN	FP	X		2

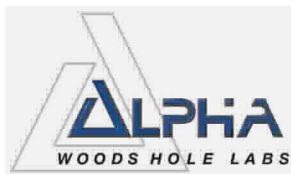
PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Container Type: V  
Preservative: B

Requisitioned By: [Signature] Date/Time: 4/26/07 16:00  
 Received By: [Signature] Date/Time: 4/26/07 16:00

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



## ANALYTICAL REPORT

Lab Number: L0706016

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/04/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706016  
**Report Date:** 05/04/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0706016-01	MW-215D-20070425-01	WAYLAND, MA
L0706016-02	DUP-010-20070425-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0706016

Project Number: 0061882

Report Date: 05/04/07

### MADEP MCP Response Action Analytical Report Certification

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

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

A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	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:** 0061882

**Lab Number:** L0706016  
**Report Date:** 05/04/07

### Case Narrative

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

#### MCP Related Narratives

##### Volatile Organics

L0706016-01 and -02 were re-analyzed to confirm results. The initial analyses were suspect due to high concentrations of target compounds present in a previously analyzed sample. The results of the re-analyses are reported.

In reference to question F:

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

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

Authorized Signature:



Title: Technical Director

Date: 05/04/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706016**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

Lab ID: L0706016-01 R  
 Client ID: MW-215D-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/03/07 18:24  
 Analyst: BT

Date Collected: 04/25/07 15:50  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.69		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706016**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

Lab ID: L0706016-01 R

Date Collected: 04/25/07 15:50

Client ID: MW-215D-20070425-01

Date Received: 04/26/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	104		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706016**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

Lab ID: L0706016-02 R  
 Client ID: DUP-010-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/03/07 18:55  
 Analyst: BT

Date Collected: 04/25/07 00:00  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.74		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706016**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

Lab ID: L0706016-02 R  
 Client ID: DUP-010-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 00:00  
 Date Received: 04/26/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	110		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706016  
**Report Date:** 05/04/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/03/07 17:22  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-02 Batch: WG279183-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706016  
**Report Date:** 05/04/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/03/07 17:22  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-02 Batch: WG279183-6				

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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706016  
**Report Date:** 05/04/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/03/07 17:22  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-02 Batch: WG279183-6				

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	107		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706016

**Project Number:** 0061882

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279183-4 WG279183-5					
Methylene chloride	97	102	70-130	5	25
1,1-Dichloroethane	100	106	70-130	6	25
Chloroform	103	103	70-130	0	25
Carbon tetrachloride	112	114	70-130	2	25
1,2-Dichloropropane	88	97	70-130	10	25
Dibromochloromethane	109	101	70-130	8	25
1,1,2-Trichloroethane	102	100	70-130	2	25
Tetrachloroethene	109	108	70-130	1	25
Chlorobenzene	106	99	70-130	7	25
Trichlorofluoromethane	130	129	70-130	1	25
1,2-Dichloroethane	109	105	70-130	4	25
1,1,1-Trichloroethane	111	114	70-130	3	25
Bromodichloromethane	102	103	70-130	1	25
trans-1,3-Dichloropropene	99	97	70-130	2	25
cis-1,3-Dichloropropene	89	92	70-130	3	25
1,1-Dichloropropene	102	106	70-130	4	25
Bromoform	103	100	70-130	3	50
1,1,2,2-Tetrachloroethane	117	112	70-130	4	25
Benzene	88	91	70-130	3	25
Toluene	104	98	70-130	6	25
Ethylbenzene	109	102	70-130	7	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706016

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279183-4 WG279183-5					
Chloromethane	87	94	70-130	8	50
Bromomethane	83	91	70-130	9	50
Vinyl chloride	81	96	70-130	17	25
Chloroethane	89	99	70-130	11	25
1,1-Dichloroethene	102	117	70-130	14	25
trans-1,2-Dichloroethene	92	98	70-130	6	25
Trichloroethene	97	102	70-130	5	25
1,2-Dichlorobenzene	105	103	70-130	2	25
1,3-Dichlorobenzene	108	104	70-130	4	25
1,4-Dichlorobenzene	103	102	70-130	1	25
Methyl tert butyl ether	92	94	70-130	2	25
p/m-Xylene	109	101	70-130	8	25
o-Xylene	105	100	70-130	5	25
cis-1,2-Dichloroethene	96	105	70-130	9	25
Dibromomethane	93	95	70-130	2	25
1,2,3-Trichloropropane	126	123	70-130	2	25
Styrene	106	101	70-130	5	25
Dichlorodifluoromethane	81	88	70-130	8	50
Acetone	118	119	70-130	1	50
Carbon disulfide	84	92	70-130	9	25
2-Butanone	126	116	70-130	8	50



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706016

**Project Number:** 0061882

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279183-4 WG279183-5					
4-Methyl-2-pentanone	86	87	70-130	1	50
2-Hexanone	114	107	70-130	6	50
Bromochloromethane	103	100	70-130	3	25
Tetrahydrofuran	92	99	70-130	7	25
2,2-Dichloropropane	100	108	70-130	8	50
1,2-Dibromoethane	100	95	70-130	5	25
1,3-Dichloropropane	104	95	70-130	9	25
1,1,1,2-Tetrachloroethane	114	110	70-130	4	25
Bromobenzene	102	104	70-130	2	25
n-Butylbenzene	108	104	70-130	4	25
sec-Butylbenzene	108	107	70-130	1	25
tert-Butylbenzene	109	106	70-130	3	25
o-Chlorotoluene	106	105	70-130	1	25
p-Chlorotoluene	108	110	70-130	2	25
1,2-Dibromo-3-chloropropane	107	117	70-130	9	50
Hexachlorobutadiene	97	95	70-130	2	25
Isopropylbenzene	119	113	70-130	5	25
p-Isopropyltoluene	113	112	70-130	1	25
Naphthalene	97	97	70-130	0	25
n-Propylbenzene	106	107	70-130	1	25
1,2,3-Trichlorobenzene	96	96	70-130	0	25

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0706016

Report Date: 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279183-4 WG279183-5					
1,2,4-Trichlorobenzene	95	92	70-130	3	25
1,3,5-Trimethylbenzene	109	108	70-130	1	25
1,2,4-Trimethylbenzene	109	110	70-130	1	25
Ethyl ether	88	105	70-130	18	25
Isopropyl Ether	97	97	70-130	0	25
Ethyl-Tert-Butyl-Ether	71	67	70-130	6	25
Tertiary-Amyl Methyl Ether	106	109	70-130	3	25
1,4-Dioxane	86	87	70-130	1	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		116		70-130
Toluene-d8	106		105		70-130
4-Bromofluorobenzene	97		102		70-130
Dibromofluoromethane	107		111		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706016**Project Number:** 0061882**Report Date:** 05/04/07**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
L0706016-01A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706016-01B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706016-02A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706016-02B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706016  
**Report Date:** 05/04/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.
- LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD- Laboratory Control Sample Duplicate: Refer to LCS.
- MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD - Matrix Spike Sample Duplicate: Refer to MS.
- NA - Not Applicable.
- 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.
  - 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.)

Report Format: Not Specified



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706016  
**Report Date:** 05/04/07

## 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-III A (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.



05040718:22

# CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/26

ALPHA Job #: 10706016 <sup>①</sup>

PHA  
WESTBORO, MA  
TEL: 508-898-9223  
FAX: 508-898-9193  
RAYNHAMMA  
TEL: 508-822-9300  
FAX: 508-822-3288

### Project Information

Project Name: Raytheon Wayland  
Project Location: Wayland, MA  
Project #: 061852  
Project Manager: J. Picard  
ALPHA Quote #:

### Report Information - Data Deliverables

FAX  EMAIL  
 ADEX  Add'l Deliverables

### Billing Information

Same as Client info PO #:

### Client Information

Client: ERM  
Address: 399 Baylson St. 6th Fl.  
Boston, MA 07116  
Phone: 617-646-7800  
Fax: 617-267-6447  
Email:

### Turn-Around Time

Standard  RUSH (only confirmed if pre-approved!)  
Date Due: 05/03 Time:

### Regulatory Requirements/Report Limits

State /Fed Program: MCP Criteria: 6W-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?

These samples have been previously analyzed by Alpha  
Other Project Specific Requirements/Comments/Detection Limits:

ANALYSIS (VOCs)

**SAMPLE HANDLING**

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

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials			
06016-01	MW-215D-20070425-01	4-25-07	15:50	GW	FP	X		2
06016-02	DUP-010-20070425-01	4-25-07	24:00	GW	FP	X		2

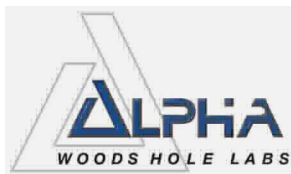
PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Container Type:  V  
Preservative:  B

Relinquished By: [Signature] Date/Time: 4/26/07/10:55  
Received By: [Signature] Date/Time: 4/26/07/16:40

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



## ANALYTICAL REPORT

Lab Number: L0706025

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/07/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706025  
**Report Date:** 05/07/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0706025-01	MW-106-20070425-01	WAYLAND, MA
L0706025-02	MW-210-20070425-01	WAYLAND, MA
L0706025-03	MW-106M-20070425-01	WAYLAND, MA
L0706025-04	MW-43S-20070425-01	WAYLAND, MA
L0706025-05	MW-211-20070425-01	WAYLAND, MA
L0706025-06	MW-104-20070425-01	WAYLAND, MA
L0706025-07	MW-40-20070425-01	WAYLAND, MA
L0706025-08	DUP-006-20070425-01	WAYLAND, MA



Project Name: RAYTHEON WAYLAND

Lab Number: L0706025

Project Number: 0061882

Report Date: 05/07/07

### MADEP MCP Response Action Analytical Report Certification

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

An affirmative response to questions A, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical methods(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	NA
A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	NO
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO
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:** 0061882

**Lab Number:** L0706025  
**Report Date:** 05/07/07

### Case Narrative

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

#### MCP Related Narratives

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

In reference to question E:

WG279326-4/5:

The LCS % recovery is below method acceptance criteria for Bromoform, a difficult analyte.

In reference to question F:

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

##### Metals

In reference to question F:

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

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

Date: 05/07/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-01  
 Client ID: MW-106-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 21:55  
 Analyst: BT

Date Collected: 04/25/07 09:40  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	1.5		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	2.0		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	0.58		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	20		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-01

Date Collected: 04/25/07 09:40

Client ID: MW-106-20070425-01

Date Received: 04/26/07

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	104		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-02  
 Client ID: MW-210-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 22:27  
 Analyst: BT

Date Collected: 04/25/07 11:02  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	1.5		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	16		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-02  
 Client ID: MW-210-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 11:02  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	102		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-03  
 Client ID: MW-106M-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 22:59  
 Analyst: BT

Date Collected: 04/25/07 11:15  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	1.5		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	1.3		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	0.60		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	11		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	0.76		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-03  
 Client ID: MW-106M-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 11:15  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	109		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-04  
 Client ID: MW-43S-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 23:32  
 Analyst: BT

Date Collected: 04/25/07 13:00  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	2.7		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	45		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-04

Date Collected: 04/25/07 13:00

Client ID: MW-43S-20070425-01

Date Received: 04/26/07

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	109		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

**Lab ID:** L0706025-05  
**Client ID:** MW-211-20070425-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Anaytical Method:** 60,8260B  
**Analytical Date:** 05/06/07 13:28  
**Analyst:** BT

**Date Collected:** 04/25/07 14:30  
**Date Received:** 04/26/07  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.54		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	0.91		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-05  
 Client ID: MW-211-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 14:30  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

**Lab ID:** L0706025-06  
**Client ID:** MW-104-20070425-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Anaytical Method:** 60,8260B  
**Analytical Date:** 05/06/07 14:00  
**Analyst:** BT

**Date Collected:** 04/25/07 14:10  
**Date Received:** 04/26/07  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	1.6		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	17		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-06  
 Client ID: MW-104-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 14:10  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	102		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-07  
 Client ID: MW-40-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/06/07 14:32  
 Analyst: BT

Date Collected: 04/25/07 16:20  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	5.8		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	0.80		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.2		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	2.4		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	5.4		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-07  
 Client ID: MW-40-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 16:20  
 Date Received: 04/26/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	110		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-08  
 Client ID: DUP-006-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/06/07 15:04  
 Analyst: BT

Date Collected: 04/25/07 00:00  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	2.7		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	44		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-08

Date Collected: 04/25/07 00:00

Client ID: DUP-006-20070425-01

Date Received: 04/26/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	105		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706025  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/05/07 16:33  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279326-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706025  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/05/07 16:33  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279326-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706025  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/05/07 16:33  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279326-3				

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706025  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/06/07 11:19  
**Analyst:** BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 05-08 Batch: WG279326-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706025  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/06/07 11:19  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 05-08 Batch: WG279326-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706025  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/06/07 11:19  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 05-08 Batch: WG279326-6				

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706025

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279326-1 WG279326-2					
Methylene chloride	105	102	70-130	3	25
1,1-Dichloroethane	104	105	70-130	1	25
Chloroform	106	104	70-130	2	25
Carbon tetrachloride	89	90	70-130	1	25
1,2-Dichloropropane	100	100	70-130	0	25
Dibromochloromethane	81	88	70-130	8	25
1,1,2-Trichloroethane	101	106	70-130	5	25
Tetrachloroethene	100	100	70-130	0	25
Chlorobenzene	98	100	70-130	2	25
Trichlorofluoromethane	106	110	70-130	4	25
1,2-Dichloroethane	106	109	70-130	3	25
1,1,1-Trichloroethane	100	98	70-130	2	25
Bromodichloromethane	89	93	70-130	4	25
trans-1,3-Dichloropropene	88	94	70-130	7	25
cis-1,3-Dichloropropene	89	92	70-130	3	25
1,1-Dichloropropene	100	97	70-130	3	25
Bromoform	81	87	70-130	7	50
1,1,1,2-Tetrachloroethane	101	100	70-130	1	25
Benzene	100	103	70-130	3	25
Toluene	97	102	70-130	5	25
Ethylbenzene	100	104	70-130	4	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706025

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279326-1 WG279326-2					
Chloromethane	94	92	70-130	2	50
Bromomethane	102	106	70-130	4	50
Vinyl chloride	104	103	70-130	1	25
Chloroethane	104	103	70-130	1	25
1,1-Dichloroethene	102	101	70-130	1	25
trans-1,2-Dichloroethene	98	99	70-130	1	25
Trichloroethene	99	98	70-130	1	25
1,2-Dichlorobenzene	98	96	70-130	2	25
1,3-Dichlorobenzene	99	96	70-130	3	25
1,4-Dichlorobenzene	99	96	70-130	3	25
Methyl tert butyl ether	91	96	70-130	5	25
p/m-Xylene	103	105	70-130	2	25
o-Xylene	99	102	70-130	3	25
cis-1,2-Dichloroethene	108	102	70-130	6	25
Dibromomethane	94	101	70-130	7	25
1,2,3-Trichloropropane	113	108	70-130	5	25
Styrene	99	105	70-130	6	25
Dichlorodifluoromethane	112	111	70-130	1	50
Acetone	99	106	70-130	7	50
Carbon disulfide	82	78	70-130	5	25
2-Butanone	94	102	70-130	8	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706025

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279326-1 WG279326-2					
4-Methyl-2-pentanone	89	100	70-130	12	50
2-Hexanone	100	112	70-130	11	50
Bromochloromethane	100	101	70-130	1	25
Tetrahydrofuran	85	91	70-130	7	25
2,2-Dichloropropane	94	93	70-130	1	50
1,2-Dibromoethane	103	106	70-130	3	25
1,3-Dichloropropane	100	103	70-130	3	25
1,1,1,2-Tetrachloroethane	93	92	70-130	1	25
Bromobenzene	98	92	70-130	6	25
n-Butylbenzene	102	95	70-130	7	25
sec-Butylbenzene	105	98	70-130	7	25
tert-Butylbenzene	102	95	70-130	7	25
o-Chlorotoluene	102	96	70-130	6	25
p-Chlorotoluene	104	97	70-130	7	25
1,2-Dibromo-3-chloropropane	89	90	70-130	1	50
Hexachlorobutadiene	95	85	70-130	11	25
Isopropylbenzene	109	113	70-130	4	25
p-Isopropyltoluene	108	99	70-130	9	25
Naphthalene	82	83	70-130	1	25
n-Propylbenzene	104	98	70-130	6	25
1,2,3-Trichlorobenzene	86	86	70-130	0	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706025

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279326-1 WG279326-2					
1,2,4-Trichlorobenzene	89	86	70-130	3	25
1,3,5-Trimethylbenzene	105	97	70-130	8	25
1,2,4-Trimethylbenzene	105	98	70-130	7	25
Ethyl ether	90	89	70-130	1	25
Isopropyl Ether	96	97	70-130	1	25
Ethyl-Tert-Butyl-Ether	96	100	70-130	4	25
Tertiary-Amyl Methyl Ether	92	97	70-130	5	25
1,4-Dioxane	88	105	70-130	18	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103	105	70-130
Toluene-d8	100	101	70-130
4-Bromofluorobenzene	103	96	70-130
Dibromofluoromethane	101	99	70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706025

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-08 Batch: WG279326-4 WG279326-5					
Methylene chloride	102	97	70-130	5	25
1,1-Dichloroethane	99	95	70-130	4	25
Chloroform	102	96	70-130	6	25
Carbon tetrachloride	83	82	70-130	1	25
1,2-Dichloropropane	95	91	70-130	4	25
Dibromochloromethane	70	77	70-130	10	25
1,1,2-Trichloroethane	96	92	70-130	4	25
Tetrachloroethene	92	90	70-130	2	25
Chlorobenzene	92	89	70-130	3	25
Trichlorofluoromethane	115	104	70-130	10	25
1,2-Dichloroethane	103	102	70-130	1	25
1,1,1-Trichloroethane	97	92	70-130	5	25
Bromodichloromethane	80	86	70-130	7	25
trans-1,3-Dichloropropene	76	80	70-130	5	25
cis-1,3-Dichloropropene	81	78	70-130	4	25
1,1-Dichloropropene	95	92	70-130	3	25
Bromoform	69	80	70-130	15	50
1,1,2,2-Tetrachloroethane	91	98	70-130	7	25
Benzene	98	91	70-130	7	25
Toluene	93	90	70-130	3	25
Ethylbenzene	95	92	70-130	3	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706025

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-08 Batch: WG279326-4 WG279326-5					
Chloromethane	93	91	70-130	2	50
Bromomethane	84	80	70-130	5	50
Vinyl chloride	107	92	70-130	15	25
Chloroethane	106	96	70-130	10	25
1,1-Dichloroethene	100	90	70-130	11	25
trans-1,2-Dichloroethene	96	89	70-130	8	25
Trichloroethene	95	93	70-130	2	25
1,2-Dichlorobenzene	88	92	70-130	4	25
1,3-Dichlorobenzene	93	92	70-130	1	25
1,4-Dichlorobenzene	88	92	70-130	4	25
Methyl tert butyl ether	88	86	70-130	2	25
p/m-Xylene	97	94	70-130	3	25
o-Xylene	94	90	70-130	4	25
cis-1,2-Dichloroethene	98	94	70-130	4	25
Dibromomethane	94	93	70-130	1	25
1,2,3-Trichloropropane	100	110	70-130	10	25
Styrene	94	93	70-130	1	25
Dichlorodifluoromethane	116	103	70-130	12	50
Acetone	107	102	70-130	5	50
Carbon disulfide	80	71	70-130	12	25
2-Butanone	95	98	70-130	3	50



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706025

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-08 Batch: WG279326-4 WG279326-5					
4-Methyl-2-pentanone	92	86	70-130	7	50
2-Hexanone	98	101	70-130	3	50
Bromochloromethane	95	93	70-130	2	25
Tetrahydrofuran	80	82	70-130	2	25
2,2-Dichloropropane	94	86	70-130	9	50
1,2-Dibromoethane	88	94	70-130	7	25
1,3-Dichloropropane	92	94	70-130	2	25
1,1,1,2-Tetrachloroethane	78	81	70-130	4	25
Bromobenzene	91	88	70-130	3	25
n-Butylbenzene	93	91	70-130	2	25
sec-Butylbenzene	95	93	70-130	2	25
tert-Butylbenzene	94	91	70-130	3	25
o-Chlorotoluene	93	94	70-130	1	25
p-Chlorotoluene	96	93	70-130	3	25
1,2-Dibromo-3-chloropropane	72	80	70-130	11	50
Hexachlorobutadiene	85	84	70-130	1	25
Isopropylbenzene	101	98	70-130	3	25
p-Isopropyltoluene	99	97	70-130	2	25
Naphthalene	70	83	70-130	17	25
n-Propylbenzene	95	95	70-130	0	25
1,2,3-Trichlorobenzene	75	85	70-130	13	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706025

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-08 Batch: WG279326-4 WG279326-5					
1,2,4-Trichlorobenzene	75	84	70-130	11	25
1,3,5-Trimethylbenzene	93	93	70-130	0	25
1,2,4-Trimethylbenzene	95	94	70-130	1	25
Ethyl ether	86	83	70-130	4	25
Isopropyl Ether	95	90	70-130	5	25
Ethyl-Tert-Butyl-Ether	95	90	70-130	5	25
Tertiary-Amyl Methyl Ether	87	88	70-130	1	25
1,4-Dioxane	81	91	70-130	12	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114	107	70-130
Toluene-d8	99	99	70-130
4-Bromofluorobenzene	99	101	70-130
Dibromofluoromethane	101	97	70-130

# METALS



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-01

Date Collected: 04/25/07 09:40

Client ID: MW-106-20070425-01

Date Received: 04/26/07

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										
Sodium, Dissolved	73		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:31	EPA 3005A	60,6010B	MG



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-02

Date Collected: 04/25/07 11:02

Client ID: MW-210-20070425-01

Date Received: 04/26/07

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										
Sodium, Dissolved	220		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:34	EPA 3005A	60,6010B	MG



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-03

Date Collected: 04/25/07 11:15

Client ID: MW-106M-20070425-01

Date Received: 04/26/07

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										
Sodium, Dissolved	170		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:36	EPA 3005A	60,6010B	MG



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-04

Date Collected: 04/25/07 13:00

Client ID: MW-43S-20070425-01

Date Received: 04/26/07

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										
Sodium, Dissolved	75		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:39	EPA 3005A	60,6010B	MG



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-05

Date Collected: 04/25/07 14:30

Client ID: MW-211-20070425-01

Date Received: 04/26/07

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										
Sodium, Dissolved	66		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:41	EPA 3005A	60,6010B	MG





**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-06

Date Collected: 04/25/07 14:10

Client ID: MW-104-20070425-01

Date Received: 04/26/07

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										
Sodium, Dissolved	56		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:44	EPA 3005A	60,6010B	MG



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706025**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706025-07

Date Collected: 04/25/07 16:20

Client ID: MW-40-20070425-01

Date Received: 04/26/07

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										
Sodium, Dissolved	30		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:46	EPA 3005A	60,6010B	MG



Project Name: RAYTHEON WAYLAND

Lab Number: L0706025

Project Number: 0061882

Report Date: 05/07/07

## 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): 01-07 Batch: WG278801-1									
Sodium, Dissolved	ND		mg/l	2.0	1	05/01/07 16:00	05/03/07 13:41	60,6010B	MG

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706025

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01-07 Batch: WG278801-2 WG278801-3					
Sodium, Dissolved	99	99	80-120	0	20

Project Name: RAYTHEON WAYLAND

Lab Number: L0706025

Project Number: 0061882

Report Date: 05/07/07

## 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
L0706025-01A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-01B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-01C	Plastic 500ml HNO3 preserved	A	<2	2.9 C	Y	Absent	MCP-NA-6010S
L0706025-02A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-02B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-02C	Plastic 500ml HNO3 preserved	A	<2	2.9 C	Y	Absent	MCP-NA-6010S
L0706025-03A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-03B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-03C	Plastic 500ml HNO3 preserved	A	<2	2.9 C	Y	Absent	MCP-NA-6010S
L0706025-04A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-04B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-04C	Plastic 500ml HNO3 preserved	A	<2	2.9 C	Y	Absent	MCP-NA-6010S
L0706025-05A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-05B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-05C	Plastic 500ml HNO3 preserved	A	<2	2.9 C	Y	Absent	MCP-NA-6010S
L0706025-06A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-06B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-06C	Plastic 500ml HNO3 preserved	A	<2	2.9 C	Y	Absent	MCP-NA-6010S
L0706025-07A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-07B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-07C	Plastic 500ml HNO3 preserved	A	<2	2.9 C	Y	Absent	MCP-NA-6010S
L0706025-08A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706025-08B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706025  
**Report Date:** 05/07/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
MSD - Matrix Spike Sample Duplicate: Refer to MS.  
NA - Not Applicable.  
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.)

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706025  
**Report Date:** 05/07/07

## 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

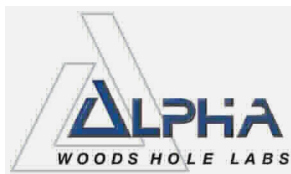
Alpha Woods Hole Labs performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods 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.









## ANALYTICAL REPORT

Lab Number: L0706027

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/04/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706027  
**Report Date:** 05/04/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0706027-01	MW-208D-20070425-01	WAYLAND, MA



Project Name: RAYTHEON WAYLAND

Lab Number: L0706027

Project Number: 0061882

Report Date: 05/04/07

### MADEP MCP Response Action Analytical Report Certification

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

An 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:** 0061882

**Lab Number:** L0706027  
**Report Date:** 05/04/07

### Case Narrative

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

#### MCP Related Narratives:

##### Volatile Organics

L0706027-01 Sample was re-analyzed to confirm results. Initial analysis suspect due high concentration of target compounds present in previously analyzed sample. Re-analysis results reported.

In reference to question F:

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

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

Authorized Signature:



Title: Technical Director

Date: 05/04/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706027**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

Lab ID: L0706027-01 R  
 Client ID: MW-208D-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/03/07 17:53  
 Analyst: BT

Date Collected: 04/25/07 08:45  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	2.7		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	0.75		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706027**Project Number:** 0061882**Report Date:** 05/04/07**SAMPLE RESULTS**

Lab ID: L0706027-01 R

Date Collected: 04/25/07 08:45

Client ID: MW-208D-20070425-01

Date Received: 04/26/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	111		70-130



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706027  
**Report Date:** 05/04/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/03/07 17:22  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG279183-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706027  
**Report Date:** 05/04/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/03/07 17:22  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG279183-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706027  
**Report Date:** 05/04/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/03/07 17:22  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
-----------	--------	-----------	-------	-----

Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG279183-6

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
-----------	-----------	-----------	---------------------

1,2-Dichloroethane-d4	110		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	107		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706027

**Project Number:** 0061882

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279183-4 WG279183-5					
Methylene chloride	97	102	70-130	5	25
1,1-Dichloroethane	100	106	70-130	6	25
Chloroform	103	103	70-130	0	25
Carbon tetrachloride	112	114	70-130	2	25
1,2-Dichloropropane	88	97	70-130	10	25
Dibromochloromethane	109	101	70-130	8	25
1,1,2-Trichloroethane	102	100	70-130	2	25
Tetrachloroethene	109	108	70-130	1	25
Chlorobenzene	106	99	70-130	7	25
Trichlorofluoromethane	130	129	70-130	1	25
1,2-Dichloroethane	109	105	70-130	4	25
1,1,1-Trichloroethane	111	114	70-130	3	25
Bromodichloromethane	102	103	70-130	1	25
trans-1,3-Dichloropropene	99	97	70-130	2	25
cis-1,3-Dichloropropene	89	92	70-130	3	25
1,1-Dichloropropene	102	106	70-130	4	25
Bromoform	103	100	70-130	3	50
1,1,2,2-Tetrachloroethane	117	112	70-130	4	25
Benzene	88	91	70-130	3	25
Toluene	104	98	70-130	6	25
Ethylbenzene	109	102	70-130	7	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706027

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279183-4 WG279183-5					
Chloromethane	87	94	70-130	8	50
Bromomethane	83	91	70-130	9	50
Vinyl chloride	81	96	70-130	17	25
Chloroethane	89	99	70-130	11	25
1,1-Dichloroethene	102	117	70-130	14	25
trans-1,2-Dichloroethene	92	98	70-130	6	25
Trichloroethene	97	102	70-130	5	25
1,2-Dichlorobenzene	105	103	70-130	2	25
1,3-Dichlorobenzene	108	104	70-130	4	25
1,4-Dichlorobenzene	103	102	70-130	1	25
Methyl tert butyl ether	92	94	70-130	2	25
p/m-Xylene	109	101	70-130	8	25
o-Xylene	105	100	70-130	5	25
cis-1,2-Dichloroethene	96	105	70-130	9	25
Dibromomethane	93	95	70-130	2	25
1,2,3-Trichloropropane	126	123	70-130	2	25
Styrene	106	101	70-130	5	25
Dichlorodifluoromethane	81	88	70-130	8	50
Acetone	118	119	70-130	1	50
Carbon disulfide	84	92	70-130	9	25
2-Butanone	126	116	70-130	8	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706027

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279183-4 WG279183-5					
4-Methyl-2-pentanone	86	87	70-130	1	50
2-Hexanone	114	107	70-130	6	50
Bromochloromethane	103	100	70-130	3	25
Tetrahydrofuran	92	99	70-130	7	25
2,2-Dichloropropane	100	108	70-130	8	50
1,2-Dibromoethane	100	95	70-130	5	25
1,3-Dichloropropane	104	95	70-130	9	25
1,1,1,2-Tetrachloroethane	114	110	70-130	4	25
Bromobenzene	102	104	70-130	2	25
n-Butylbenzene	108	104	70-130	4	25
sec-Butylbenzene	108	107	70-130	1	25
tert-Butylbenzene	109	106	70-130	3	25
o-Chlorotoluene	106	105	70-130	1	25
p-Chlorotoluene	108	110	70-130	2	25
1,2-Dibromo-3-chloropropane	107	117	70-130	9	50
Hexachlorobutadiene	97	95	70-130	2	25
Isopropylbenzene	119	113	70-130	5	25
p-Isopropyltoluene	113	112	70-130	1	25
Naphthalene	97	97	70-130	0	25
n-Propylbenzene	106	107	70-130	1	25
1,2,3-Trichlorobenzene	96	96	70-130	0	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706027

**Report Date:** 05/04/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279183-4 WG279183-5					
1,2,4-Trichlorobenzene	95	92	70-130	3	25
1,3,5-Trimethylbenzene	109	108	70-130	1	25
1,2,4-Trimethylbenzene	109	110	70-130	1	25
Ethyl ether	88	105	70-130	18	25
Isopropyl Ether	97	97	70-130	0	25
Ethyl-Tert-Butyl-Ether	71	67	70-130	6	25
Tertiary-Amyl Methyl Ether	106	109	70-130	3	25
1,4-Dioxane	86	87	70-130	1	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113	116	70-130
Toluene-d8	106	105	70-130
4-Bromofluorobenzene	97	102	70-130
Dibromofluoromethane	107	111	70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706027**Project Number:** 0061882**Report Date:** 05/04/07**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
L0706027-01A	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04
L0706027-01B	Vial HCl preserved	A	N/A	2.9C	Y	Absent	MCP-8260-04



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706027  
**Report Date:** 05/04/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
MSD - Matrix Spike Sample Duplicate: Refer to MS.  
NA - Not Applicable.  
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.)

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706027  
**Report Date:** 05/04/07

## 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.



05040718:15



# CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/26

ALPHA Job #: 10756027

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

### Client Information

Client: ERM  
Address: 394 Bayberry St 6th Floor  
Boston MA 02116  
Phone: 617-646-7800  
Fax: 617-267-6447  
Email: \_\_\_\_\_

### Project Information

Project Name: Raytheon Wayland  
Project Location: Wayland MA  
Project #: 061882  
Project Manager: J. Picard  
ALPHA Quote #: \_\_\_\_\_

### Report Information - Data Deliverables

FAX  EMAIL  
 ADEx  Add'l Deliverables

### Billing Information

Same as Client info PC #: \_\_\_\_\_

### Regulatory Requirements/Report Limits

State /Fed Program: MCP 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?

### Turn-Around Time

Standard  RUSH (only confirmed if pre-approved)

Date Due: 05/03 Time: \_\_\_\_\_

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits: \_\_\_\_\_

ANALYSIS 8021C by S&C MBE/BJR	<b>SAMPLE HANDLING</b>	<b>TOTAL # BOTTLES</b>
	Filtration <input type="checkbox"/> Done <input type="checkbox"/> Not needed <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do <small>(Please specify below)</small>	
Sample Specific Comments		

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TOTAL # BOTTLES
<u>060270</u>	<u>MW-2080-20070425-01</u>	<u>4/25/07</u>	<u>0845</u>	<u>GW</u>	<u>BH X</u>	<u>2</u>

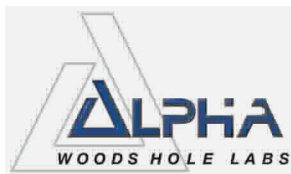
PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Container Type V  
Preservative B

Relinquished By: <u>[Signature]</u>	Date/Time: <u>4/26/07 16:20</u>	Received By: <u>[Signature]</u>	Date/Time: <u>4/26/07 16:20</u>
-------------------------------------	---------------------------------	---------------------------------	---------------------------------

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



## ANALYTICAL REPORT

Lab Number: L0706028

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: Not Specified

Report Date: 05/07/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** Not Specified

**Lab Number:** L0706028  
**Report Date:** 05/07/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0706028-01	MW-262S-20070425-01	WAYLAND, MA
L0706028-02	MW-261S-20070425-01	WAYLAND, MA
L0706028-03	MW-552-20070425-01	WAYLAND, MA
L0706028-04	MW-553-20070425-01	WAYLAND, MA
L0706028-05	MW-551-20070425-01	WAYLAND, MA
L0706028-06	MW-268D-20070425-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0706028

Project Number: Not Specified

Report Date: 05/07/07

### MADEP MCP Response Action Analytical Report Certification

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

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

**Lab Number:** L0706028  
**Report Date:** 05/07/07

### Case Narrative

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

#### MCP Related Narratives

##### Volatile Organics

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

L0706028-01, -02, -03, -04R

L0706028-04 was re-analyzed due to overdilution of the original analysis. The results of the re-analysis are reported.

In reference to question E:

WG279326-4/5:

The LCS % recovery is below method acceptance criteria for Bromoform, a difficult analyte.

In reference to question F:

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

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

Authorized Signature:



Title: Technical Director

Date: 05/07/07

# ORGANICS



# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706028**Project Number:** Not Specified**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706028-01  
 Client ID: MW-262S-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/06/07 00:04  
 Analyst: BT

Date Collected: 04/25/07 08:35  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	10	2
1,1-Dichloroethane	ND		ug/l	1.5	2
Chloroform	ND		ug/l	1.5	2
Carbon tetrachloride	ND		ug/l	1.0	2
1,2-Dichloropropane	ND		ug/l	3.5	2
Dibromochloromethane	ND		ug/l	1.0	2
1,1,2-Trichloroethane	ND		ug/l	1.5	2
Tetrachloroethene	7.5		ug/l	1.0	2
Chlorobenzene	ND		ug/l	1.0	2
1,2-Dichloroethane	ND		ug/l	1.0	2
1,1,1-Trichloroethane	ND		ug/l	1.0	2
Bromodichloromethane	ND		ug/l	1.0	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	2
Bromoform	ND		ug/l	4.0	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	2
Chloromethane	ND		ug/l	5.0	2
Vinyl chloride	ND		ug/l	2.0	2
Chloroethane	ND		ug/l	2.0	2
1,1-Dichloroethene	ND		ug/l	1.0	2
trans-1,2-Dichloroethene	ND		ug/l	1.5	2
Trichloroethene	52		ug/l	1.0	2
1,2-Dichlorobenzene	ND		ug/l	5.0	2
1,3-Dichlorobenzene	ND		ug/l	5.0	2
1,4-Dichlorobenzene	ND		ug/l	5.0	2
cis-1,2-Dichloroethene	ND		ug/l	1.0	2
Dichlorodifluoromethane	ND		ug/l	10	2
1,2-Dibromoethane	ND		ug/l	4.0	2
1,3-Dichloropropane	ND		ug/l	5.0	2
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	2

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706028**Project Number:** Not Specified**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706028-01

Date Collected: 04/25/07 08:35

Client ID: MW-262S-20070425-01

Date Received: 04/26/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706028**Project Number:** Not Specified**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706028-02  
 Client ID: MW-261S-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/06/07 00:36  
 Analyst: BT

Date Collected: 04/25/07 09:25  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	500	100
1,1-Dichloroethane	ND		ug/l	75	100
Chloroform	ND		ug/l	75	100
Carbon tetrachloride	ND		ug/l	50	100
1,2-Dichloropropane	ND		ug/l	180	100
Dibromochloromethane	ND		ug/l	50	100
1,1,2-Trichloroethane	ND		ug/l	75	100
Tetrachloroethene	52		ug/l	50	100
Chlorobenzene	ND		ug/l	50	100
1,2-Dichloroethane	ND		ug/l	50	100
1,1,1-Trichloroethane	ND		ug/l	50	100
Bromodichloromethane	ND		ug/l	50	100
trans-1,3-Dichloropropene	ND		ug/l	50	100
cis-1,3-Dichloropropene	ND		ug/l	50	100
Bromoform	ND		ug/l	200	100
1,1,2,2-Tetrachloroethane	ND		ug/l	50	100
Chloromethane	ND		ug/l	250	100
Vinyl chloride	ND		ug/l	100	100
Chloroethane	ND		ug/l	100	100
1,1-Dichloroethene	ND		ug/l	50	100
trans-1,2-Dichloroethene	ND		ug/l	75	100
Trichloroethene	2300		ug/l	50	100
1,2-Dichlorobenzene	ND		ug/l	250	100
1,3-Dichlorobenzene	ND		ug/l	250	100
1,4-Dichlorobenzene	ND		ug/l	250	100
cis-1,2-Dichloroethene	92		ug/l	50	100
Dichlorodifluoromethane	ND		ug/l	500	100
1,2-Dibromoethane	ND		ug/l	200	100
1,3-Dichloropropane	ND		ug/l	250	100
1,1,1,2-Tetrachloroethane	ND		ug/l	50	100

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706028**Project Number:** Not Specified**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706028-02  
 Client ID: MW-261S-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 09:25  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
o-Chlorotoluene	ND		ug/l	250	100
p-Chlorotoluene	ND		ug/l	250	100
Hexachlorobutadiene	ND		ug/l	60	100
1,2,4-Trichlorobenzene	ND		ug/l	250	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	104		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706028**Project Number:** Not Specified**Report Date:** 05/07/07**SAMPLE RESULTS**

**Lab ID:** L0706028-03  
**Client ID:** MW-552-20070425-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 05/06/07 01:08  
**Analyst:** BT

**Date Collected:** 04/25/07 10:25  
**Date Received:** 04/26/07  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	1000	200
1,1-Dichloroethane	ND		ug/l	150	200
Chloroform	ND		ug/l	150	200
Carbon tetrachloride	ND		ug/l	100	200
1,2-Dichloropropane	ND		ug/l	350	200
Dibromochloromethane	ND		ug/l	100	200
1,1,2-Trichloroethane	ND		ug/l	150	200
Tetrachloroethene	180		ug/l	100	200
Chlorobenzene	ND		ug/l	100	200
1,2-Dichloroethane	ND		ug/l	100	200
1,1,1-Trichloroethane	ND		ug/l	100	200
Bromodichloromethane	ND		ug/l	100	200
trans-1,3-Dichloropropene	ND		ug/l	100	200
cis-1,3-Dichloropropene	ND		ug/l	100	200
Bromoform	ND		ug/l	400	200
1,1,2,2-Tetrachloroethane	ND		ug/l	100	200
Chloromethane	ND		ug/l	500	200
Vinyl chloride	ND		ug/l	200	200
Chloroethane	ND		ug/l	200	200
1,1-Dichloroethene	ND		ug/l	100	200
trans-1,2-Dichloroethene	ND		ug/l	150	200
Trichloroethene	4100		ug/l	100	200
1,2-Dichlorobenzene	ND		ug/l	500	200
1,3-Dichlorobenzene	ND		ug/l	500	200
1,4-Dichlorobenzene	ND		ug/l	500	200
cis-1,2-Dichloroethene	300		ug/l	100	200
Dichlorodifluoromethane	ND		ug/l	1000	200
1,2-Dibromoethane	ND		ug/l	400	200
1,3-Dichloropropane	ND		ug/l	500	200
1,1,1,2-Tetrachloroethane	ND		ug/l	100	200

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706028**Project Number:** Not Specified**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706028-03

Date Collected: 04/25/07 10:25

Client ID: MW-552-20070425-01

Date Received: 04/26/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
o-Chlorotoluene	ND		ug/l	500	200
p-Chlorotoluene	ND		ug/l	500	200
Hexachlorobutadiene	ND		ug/l	120	200
1,2,4-Trichlorobenzene	ND		ug/l	500	200

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	99		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706028**Project Number:** Not Specified**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706028-04 R  
 Client ID: MW-553-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/06/07 11:51  
 Analyst: BT

Date Collected: 04/25/07 11:20  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	25	5
1,1-Dichloroethane	ND		ug/l	3.8	5
Chloroform	ND		ug/l	3.8	5
Carbon tetrachloride	ND		ug/l	2.5	5
1,2-Dichloropropane	ND		ug/l	8.8	5
Dibromochloromethane	ND		ug/l	2.5	5
1,1,2-Trichloroethane	ND		ug/l	3.8	5
Tetrachloroethene	19		ug/l	2.5	5
Chlorobenzene	ND		ug/l	2.5	5
1,2-Dichloroethane	ND		ug/l	2.5	5
1,1,1-Trichloroethane	ND		ug/l	2.5	5
Bromodichloromethane	ND		ug/l	2.5	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	5
Bromoform	ND		ug/l	10	5
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	5
Chloromethane	ND		ug/l	12	5
Vinyl chloride	ND		ug/l	5.0	5
Chloroethane	ND		ug/l	5.0	5
1,1-Dichloroethene	ND		ug/l	2.5	5
trans-1,2-Dichloroethene	ND		ug/l	3.8	5
Trichloroethene	210		ug/l	2.5	5
1,2-Dichlorobenzene	ND		ug/l	12	5
1,3-Dichlorobenzene	ND		ug/l	12	5
1,4-Dichlorobenzene	ND		ug/l	12	5
cis-1,2-Dichloroethene	46		ug/l	2.5	5
Dichlorodifluoromethane	ND		ug/l	25	5
1,2-Dibromoethane	ND		ug/l	10	5
1,3-Dichloropropane	ND		ug/l	12	5
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	5



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706028**Project Number:** Not Specified**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706028-04 R

Date Collected: 04/25/07 11:20

Client ID: MW-553-20070425-01

Date Received: 04/26/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
o-Chlorotoluene	ND		ug/l	12	5
p-Chlorotoluene	ND		ug/l	12	5
Hexachlorobutadiene	ND		ug/l	3.0	5
1,2,4-Trichlorobenzene	ND		ug/l	12	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	102		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706028**Project Number:** Not Specified**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706028-05  
 Client ID: MW-551-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/06/07 15:36  
 Analyst: BT

Date Collected: 04/25/07 12:50  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	19		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706028**Project Number:** Not Specified**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706028-05

Date Collected: 04/25/07 12:50

Client ID: MW-551-20070425-01

Date Received: 04/26/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	104		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706028**Project Number:** Not Specified**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706028-06  
 Client ID: MW-268D-20070425-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/06/07 16:08  
 Analyst: BT

Date Collected: 04/25/07 14:25  
 Date Received: 04/26/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	7.7		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	8.3		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706028**Project Number:** Not Specified**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706028-06  
 Client ID: MW-268D-20070425-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/25/07 14:25  
 Date Received: 04/26/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

Project Name: RAYTHEON WAYLAND

Lab Number: L0706028

Project Number: Not Specified

Report Date: 05/07/07

### Method Blank Analysis Batch Quality Control

Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 16:33  
 Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03 Batch: WG279326-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** Not Specified

**Lab Number:** L0706028  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/05/07 16:33  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03 Batch: WG279326-3				

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 WAYLAND

Lab Number: L0706028

Project Number: Not Specified

Report Date: 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 05/05/07 16:33  
 Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03 Batch: WG279326-3				

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130



Project Name: RAYTHEON WAYLAND

Lab Number: L0706028

Project Number: Not Specified

Report Date: 05/07/07

### Method Blank Analysis Batch Quality Control

Analytical Method: 60,8260B  
 Analytical Date: 05/06/07 11:19  
 Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 04-06 Batch: WG279326-6				
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 WAYLAND

Lab Number: L0706028

Project Number: Not Specified

Report Date: 05/07/07

### Method Blank Analysis Batch Quality Control

Analytical Method: 60,8260B  
 Analytical Date: 05/06/07 11:19  
 Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 04-06 Batch: WG279326-6				
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 WAYLAND

Lab Number: L0706028

Project Number: Not Specified

Report Date: 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 05/06/07 11:19  
 Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 04-06 Batch: WG279326-6				

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706028

**Project Number:** Not Specified

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279326-1 WG279326-2					
Methylene chloride	105	102	70-130	3	25
1,1-Dichloroethane	104	105	70-130	1	25
Chloroform	106	104	70-130	2	25
Carbon tetrachloride	89	90	70-130	1	25
1,2-Dichloropropane	100	100	70-130	0	25
Dibromochloromethane	81	88	70-130	8	25
1,1,2-Trichloroethane	101	106	70-130	5	25
Tetrachloroethene	100	100	70-130	0	25
Chlorobenzene	98	100	70-130	2	25
Trichlorofluoromethane	106	110	70-130	4	25
1,2-Dichloroethane	106	109	70-130	3	25
1,1,1-Trichloroethane	100	98	70-130	2	25
Bromodichloromethane	89	93	70-130	4	25
trans-1,3-Dichloropropene	88	94	70-130	7	25
cis-1,3-Dichloropropene	89	92	70-130	3	25
1,1-Dichloropropene	100	97	70-130	3	25
Bromoform	81	87	70-130	7	50
1,1,2,2-Tetrachloroethane	101	100	70-130	1	25
Benzene	100	103	70-130	3	25
Toluene	97	102	70-130	5	25
Ethylbenzene	100	104	70-130	4	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706028

**Project Number:** Not Specified

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279326-1 WG279326-2					
Chloromethane	94	92	70-130	2	50
Bromomethane	102	106	70-130	4	50
Vinyl chloride	104	103	70-130	1	25
Chloroethane	104	103	70-130	1	25
1,1-Dichloroethene	102	101	70-130	1	25
trans-1,2-Dichloroethene	98	99	70-130	1	25
Trichloroethene	99	98	70-130	1	25
1,2-Dichlorobenzene	98	96	70-130	2	25
1,3-Dichlorobenzene	99	96	70-130	3	25
1,4-Dichlorobenzene	99	96	70-130	3	25
Methyl tert butyl ether	91	96	70-130	5	25
p/m-Xylene	103	105	70-130	2	25
o-Xylene	99	102	70-130	3	25
cis-1,2-Dichloroethene	108	102	70-130	6	25
Dibromomethane	94	101	70-130	7	25
1,2,3-Trichloropropane	113	108	70-130	5	25
Styrene	99	105	70-130	6	25
Dichlorodifluoromethane	112	111	70-130	1	50
Acetone	99	106	70-130	7	50
Carbon disulfide	82	78	70-130	5	25
2-Butanone	94	102	70-130	8	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706028

**Project Number:** Not Specified

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279326-1 WG279326-2					
4-Methyl-2-pentanone	89	100	70-130	12	50
2-Hexanone	100	112	70-130	11	50
Bromochloromethane	100	101	70-130	1	25
Tetrahydrofuran	85	91	70-130	7	25
2,2-Dichloropropane	94	93	70-130	1	50
1,2-Dibromoethane	103	106	70-130	3	25
1,3-Dichloropropane	100	103	70-130	3	25
1,1,1,2-Tetrachloroethane	93	92	70-130	1	25
Bromobenzene	98	92	70-130	6	25
n-Butylbenzene	102	95	70-130	7	25
sec-Butylbenzene	105	98	70-130	7	25
tert-Butylbenzene	102	95	70-130	7	25
o-Chlorotoluene	102	96	70-130	6	25
p-Chlorotoluene	104	97	70-130	7	25
1,2-Dibromo-3-chloropropane	89	90	70-130	1	50
Hexachlorobutadiene	95	85	70-130	11	25
Isopropylbenzene	109	113	70-130	4	25
p-Isopropyltoluene	108	99	70-130	9	25
Naphthalene	82	83	70-130	1	25
n-Propylbenzene	104	98	70-130	6	25
1,2,3-Trichlorobenzene	86	86	70-130	0	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706028

**Project Number:** Not Specified

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279326-1 WG279326-2					
1,2,4-Trichlorobenzene	89	86	70-130	3	25
1,3,5-Trimethylbenzene	105	97	70-130	8	25
1,2,4-Trimethylbenzene	105	98	70-130	7	25
Ethyl ether	90	89	70-130	1	25
Isopropyl Ether	96	97	70-130	1	25
Ethyl-Tert-Butyl-Ether	96	100	70-130	4	25
Tertiary-Amyl Methyl Ether	92	97	70-130	5	25
1,4-Dioxane	88	105	70-130	18	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		105		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	103		96		70-130
Dibromofluoromethane	101		99		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706028

**Project Number:** Not Specified

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04-06 Batch: WG279326-4 WG279326-5					
Methylene chloride	102	97	70-130	5	25
1,1-Dichloroethane	99	95	70-130	4	25
Chloroform	102	96	70-130	6	25
Carbon tetrachloride	83	82	70-130	1	25
1,2-Dichloropropane	95	91	70-130	4	25
Dibromochloromethane	70	77	70-130	10	25
1,1,2-Trichloroethane	96	92	70-130	4	25
Tetrachloroethene	92	90	70-130	2	25
Chlorobenzene	92	89	70-130	3	25
Trichlorofluoromethane	115	104	70-130	10	25
1,2-Dichloroethane	103	102	70-130	1	25
1,1,1-Trichloroethane	97	92	70-130	5	25
Bromodichloromethane	80	86	70-130	7	25
trans-1,3-Dichloropropene	76	80	70-130	5	25
cis-1,3-Dichloropropene	81	78	70-130	4	25
1,1-Dichloropropene	95	92	70-130	3	25
Bromoform	69	80	70-130	15	50
1,1,2,2-Tetrachloroethane	91	98	70-130	7	25
Benzene	98	91	70-130	7	25
Toluene	93	90	70-130	3	25
Ethylbenzene	95	92	70-130	3	25



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706028

**Project Number:** Not Specified

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04-06 Batch: WG279326-4 WG279326-5					
Chloromethane	93	91	70-130	2	50
Bromomethane	84	80	70-130	5	50
Vinyl chloride	107	92	70-130	15	25
Chloroethane	106	96	70-130	10	25
1,1-Dichloroethene	100	90	70-130	11	25
trans-1,2-Dichloroethene	96	89	70-130	8	25
Trichloroethene	95	93	70-130	2	25
1,2-Dichlorobenzene	88	92	70-130	4	25
1,3-Dichlorobenzene	93	92	70-130	1	25
1,4-Dichlorobenzene	88	92	70-130	4	25
Methyl tert butyl ether	88	86	70-130	2	25
p/m-Xylene	97	94	70-130	3	25
o-Xylene	94	90	70-130	4	25
cis-1,2-Dichloroethene	98	94	70-130	4	25
Dibromomethane	94	93	70-130	1	25
1,2,3-Trichloropropane	100	110	70-130	10	25
Styrene	94	93	70-130	1	25
Dichlorodifluoromethane	116	103	70-130	12	50
Acetone	107	102	70-130	5	50
Carbon disulfide	80	71	70-130	12	25
2-Butanone	95	98	70-130	3	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706028

**Project Number:** Not Specified

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04-06 Batch: WG279326-4 WG279326-5					
4-Methyl-2-pentanone	92	86	70-130	7	50
2-Hexanone	98	101	70-130	3	50
Bromochloromethane	95	93	70-130	2	25
Tetrahydrofuran	80	82	70-130	2	25
2,2-Dichloropropane	94	86	70-130	9	50
1,2-Dibromoethane	88	94	70-130	7	25
1,3-Dichloropropane	92	94	70-130	2	25
1,1,1,2-Tetrachloroethane	78	81	70-130	4	25
Bromobenzene	91	88	70-130	3	25
n-Butylbenzene	93	91	70-130	2	25
sec-Butylbenzene	95	93	70-130	2	25
tert-Butylbenzene	94	91	70-130	3	25
o-Chlorotoluene	93	94	70-130	1	25
p-Chlorotoluene	96	93	70-130	3	25
1,2-Dibromo-3-chloropropane	72	80	70-130	11	50
Hexachlorobutadiene	85	84	70-130	1	25
Isopropylbenzene	101	98	70-130	3	25
p-Isopropyltoluene	99	97	70-130	2	25
Naphthalene	70	83	70-130	17	25
n-Propylbenzene	95	95	70-130	0	25
1,2,3-Trichlorobenzene	75	85	70-130	13	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706028

**Project Number:** Not Specified

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 04-06 Batch: WG279326-4 WG279326-5					
1,2,4-Trichlorobenzene	75	84	70-130	11	25
1,3,5-Trimethylbenzene	93	93	70-130	0	25
1,2,4-Trimethylbenzene	95	94	70-130	1	25
Ethyl ether	86	83	70-130	4	25
Isopropyl Ether	95	90	70-130	5	25
Ethyl-Tert-Butyl-Ether	95	90	70-130	5	25
Tertiary-Amyl Methyl Ether	87	88	70-130	1	25
1,4-Dioxane	81	91	70-130	12	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114	107	70-130
Toluene-d8	99	99	70-130
4-Bromofluorobenzene	99	101	70-130
Dibromofluoromethane	101	97	70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706028**Project Number:** Not Specified**Report Date:** 05/07/07**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
L0706028-01A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706028-01B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706028-02A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706028-02B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706028-03A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706028-03B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706028-04A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706028-04B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706028-05A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706028-05B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706028-06A	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04
L0706028-06B	Vial HCl preserved	A	N/A	2.9 C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** Not Specified

**Lab Number:** L0706028  
**Report Date:** 05/07/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.
- LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD- Laboratory Control Sample Duplicate: Refer to LCS.
- MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD - Matrix Spike Sample Duplicate: Refer to MS.
- NA - Not Applicable.
- 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.
- 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.)

Report Format: Not Specified



**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706028

**Project Number:** Not Specified

**Report Date:** 05/07/07

## 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-III A (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.



05070713:13



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

# CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/26

ALPHA Job #: L0706028

## Client Information

Client: ERM  
 Address: 399 BOYLSTON ST  
 BOSTON, MA 02116  
 Phone: 617-646-7800  
 Fax: 617-267-6447  
 Email: jeremy.picard@erm.com

## Project Information

Project Name: RAYNHAM WAYLAND  
 Project Location: WAYLAND, MA  
 Project #:   
 Project Manager: JEREMY PICARD  
 ALPHA Quote #:   
 Turn-Around Time

## Turn-Around Time

Standard  RUSH (only confirmed if pre-approved!)  
 Date Due: 5/3 Time:   
 These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

## Report Information - Data Deliverables

FAX  EMAIL  
 DEX  Add'l Deliverables

## Billing Information

Same as Client info PO #:

## Regulatory Requirements/Report Limits

State/Fed Program: MCP 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?

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	ANALYSIS 8021C	SAMPLE HANDLING Filtration <input type="checkbox"/> Done <input type="checkbox"/> Not needed <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please specify below)	TOTAL # BOTTLES
		Date	Time					
✓ 6028.1	MW-262S-20070425-01	4/25/07	08:35	GW	JM			2
✓ 2	MW-261S-20070425-01	4/25/07	09:25	GW	JM			2
✓ 3	MW-552-20070425-01	4/25/07	10:25	GW	JM			2
✓ 4	MW-553-20070425-01	4/25/07	11:20	GW	JM			2
✓ 5	MW-551-20070425-01	4/25/07	12:50	GW	JM			2
✓ 6	MW-268D-20070425-01	4/25/07	14:25	GW	JM			2

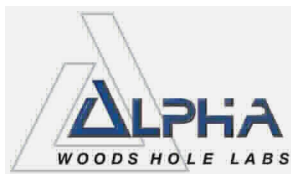
PLEASE ANSWER QUESTIONS ABOVE!

Container Type:  Preservative: B

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By: [Signature] Date/Time: 4/26/07 16:40  
 Received By: [Signature] Date/Time: 4/26/07 16:40

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



## ANALYTICAL REPORT

Lab Number: L0706084

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/07/07

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

---

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





**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706084  
**Report Date:** 05/07/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0706084-01	MW-209-20070426-01	WAYLAND, MA
L0706084-02	MW-103-20070426-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0706084

Project Number: 0061882

Report Date: 05/07/07

### MADEP MCP Response Action Analytical Report Certification

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

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706084  
**Report Date:** 05/07/07

### Case Narrative

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

#### MCP Related Narratives:

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

In reference to question F:

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

##### Metals

In reference to question F:

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

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

Date: 05/07/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706084**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706084-01  
 Client ID: MW-209-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/07/07 12:08  
 Analyst: MM

Date Collected: 04/26/07 12:45  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706084**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706084-01

Date Collected: 04/26/07 12:45

Client ID: MW-209-20070426-01

Date Received: 04/27/07

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	105		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706084**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706084-02  
 Client ID: MW-103-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/07/07 12:40  
 Analyst: MM

Date Collected: 04/26/07 15:50  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.79		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706084**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706084-02  
 Client ID: MW-103-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 15:50  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	108		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706084  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/07/07 08:53  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-02 Batch: WG279335-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706084  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/07/07 08:53  
**Analyst:** MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-02 Batch: WG279335-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706084  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/07/07 08:53  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-02 Batch: WG279335-6				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706084

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279335-4 WG279335-5					
Methylene chloride	111	107	70-130	4	25
1,1-Dichloroethane	114	109	70-130	4	25
Chloroform	113	108	70-130	5	25
Carbon tetrachloride	97	98	70-130	1	25
1,2-Dichloropropane	102	98	70-130	4	25
Dibromochloromethane	87	88	70-130	1	25
1,1,2-Trichloroethane	102	110	70-130	8	25
Tetrachloroethene	108	102	70-130	6	25
Chlorobenzene	102	101	70-130	1	25
Trichlorofluoromethane	126	119	70-130	6	25
1,2-Dichloroethane	116	114	70-130	2	25
1,1,1-Trichloroethane	108	109	70-130	1	25
Bromodichloromethane	96	97	70-130	1	25
trans-1,3-Dichloropropene	90	92	70-130	2	25
cis-1,3-Dichloropropene	89	90	70-130	1	25
1,1-Dichloropropene	105	102	70-130	3	25
Bromoform	80	90	70-130	12	50
1,1,2,2-Tetrachloroethane	94	97	70-130	3	25
Benzene	108	104	70-130	4	25
Toluene	103	104	70-130	1	25
Ethylbenzene	107	106	70-130	1	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706084

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279335-4 WG279335-5					
Chloromethane	116	109	70-130	6	50
Bromomethane	93	87	70-130	7	50
Vinyl chloride	118	108	70-130	9	25
Chloroethane	114	102	70-130	11	25
1,1-Dichloroethene	106	107	70-130	1	25
trans-1,2-Dichloroethene	105	98	70-130	7	25
Trichloroethene	113	103	70-130	9	25
1,2-Dichlorobenzene	94	93	70-130	1	25
1,3-Dichlorobenzene	97	97	70-130	0	25
1,4-Dichlorobenzene	97	95	70-130	2	25
Methyl tert butyl ether	95	93	70-130	2	25
p/m-Xylene	107	106	70-130	1	25
o-Xylene	102	102	70-130	0	25
cis-1,2-Dichloroethene	106	103	70-130	3	25
Dibromomethane	102	100	70-130	2	25
1,2,3-Trichloropropane	103	106	70-130	3	25
Styrene	107	103	70-130	4	25
Dichlorodifluoromethane	118	109	70-130	8	50
Acetone	115	109	70-130	5	50
Carbon disulfide	87	78	70-130	11	25
2-Butanone	100	101	70-130	1	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706084

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279335-4 WG279335-5					
4-Methyl-2-pentanone	93	95	70-130	2	50
2-Hexanone	101	111	70-130	9	50
Bromochloromethane	101	98	70-130	3	25
Tetrahydrofuran	86	88	70-130	2	25
2,2-Dichloropropane	100	94	70-130	6	50
1,2-Dibromoethane	99	105	70-130	6	25
1,3-Dichloropropane	101	102	70-130	1	25
1,1,1,2-Tetrachloroethane	92	95	70-130	3	25
Bromobenzene	93	92	70-130	1	25
n-Butylbenzene	98	94	70-130	4	25
sec-Butylbenzene	102	97	70-130	5	25
tert-Butylbenzene	100	96	70-130	4	25
o-Chlorotoluene	98	96	70-130	2	25
p-Chlorotoluene	100	97	70-130	3	25
1,2-Dibromo-3-chloropropane	78	86	70-130	10	50
Hexachlorobutadiene	91	89	70-130	2	25
Isopropylbenzene	111	112	70-130	1	25
p-Isopropyltoluene	105	99	70-130	6	25
Naphthalene	72	79	70-130	9	25
n-Propylbenzene	102	98	70-130	4	25
1,2,3-Trichlorobenzene	77	85	70-130	10	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706084

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279335-4 WG279335-5					
1,2,4-Trichlorobenzene	82	82	70-130	0	25
1,3,5-Trimethylbenzene	99	98	70-130	1	25
1,2,4-Trimethylbenzene	99	97	70-130	2	25
Ethyl ether	91	89	70-130	2	25
Isopropyl Ether	104	99	70-130	5	25
Ethyl-Tert-Butyl-Ether	101	99	70-130	2	25
Tertiary-Amyl Methyl Ether	95	96	70-130	1	25
1,4-Dioxane	88	88	70-130	0	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116	109	70-130
Toluene-d8	100	101	70-130
4-Bromofluorobenzene	97	98	70-130
Dibromofluoromethane	100	101	70-130



# METALS



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706084**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706084-01

Date Collected: 04/26/07 12:45

Client ID: MW-209-20070426-01

Date Received: 04/27/07

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										
Sodium, Dissolved	33		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:49	EPA 3005A	60,6010B	MG



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706084**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706084-02

Date Collected: 04/26/07 15:50

Client ID: MW-103-20070426-01

Date Received: 04/27/07

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										
Sodium, Dissolved	100		mg/l	2.0	1	05/01/07 16:00	05/03/07 14:58	EPA 3005A	60,6010B	MG



Project Name: RAYTHEON WAYLAND

Lab Number: L0706084

Project Number: 0061882

Report Date: 05/07/07

## 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): 01-02 Batch: WG278801-1									
Sodium, Dissolved	ND		mg/l	2.0	1	05/01/07 16:00	05/03/07 13:41	60,6010B	MG

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706084

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01-02 Batch: WG278801-2 WG278801-3					
Sodium, Dissolved	99	99	80-120	0	20

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706084**Project Number:** 0061882**Report Date:** 05/07/07**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
L0706084-01A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706084-01B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706084-01C	Plastic 250ml HNO3 preserved	A	<2	2.8C	Y	Absent	MCP-NA-6010S
L0706084-02A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706084-02B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706084-02C	Plastic 250ml HNO3 preserved	A	<2	2.8C	Y	Absent	MCP-NA-6010S

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706084  
**Report Date:** 05/07/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
 LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
 LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
 MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
 MSD - Matrix Spike Sample Duplicate: Refer to MS.  
 NA - Not Applicable.  
 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.)

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706084  
**Report Date:** 05/07/07

## 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

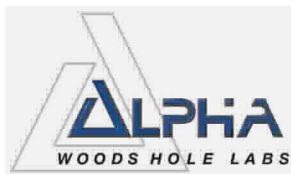
Alpha Woods Hole Labs performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Woods Hole Labs shall be to re-perform the work at it's own expense. In no event shall Alpha Woods 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.









## ANALYTICAL REPORT

Lab Number: L0706122

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/09/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706122  
**Report Date:** 05/09/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0706122-01	MW-215M-20070426-01	WAYLAND, MA
L0706122-02	MW-216D-20070426-01	WAYLAND, MA
L0706122-03	MW-37-20070426-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0706122

Project Number: 0061882

Report Date: 05/09/07

### MADEP MCP Response Action Analytical Report Certification

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

An affirmative response to questions A, B, C & D is required for "Presumptive Certainty" status		
A	Were all samples received by the laboratory in a condition consistent with those described on their Chain-of-Custody documentation for the data set?	YES
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?	YES
C	Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in section 2.0 of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	YES
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?	N/A
A response to questions E and F is required for "Presumptive Certainty" status		
E	Were all QC performance standards and recommendations for the specified method(s) achieved?	NO
F	Were results for all analyte-list compounds/elements for the specified method(s) reported?	NO
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:** 0061882

**Lab Number:** L0706122  
**Report Date:** 05/09/07

### Case Narrative

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

#### MCP Related Narratives

##### Volatile Organics

In reference to question E:

The MS/MSD % recoveries for Bromoform and 1,1,2,2-Tetrachloroethane, and the MS % recoveries for cis-1,2-Dichloroethene, 1,1,1-Trichloroethane, and Carbon tetrachloride, are above method acceptance criteria for the method.

In reference to question F:

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

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

Authorized Signature:



Title: Technical Director

Date: 05/09/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706122**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

**Lab ID:** L0706122-01  
**Client ID:** MW-215M-20070426-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 05/08/07 23:54  
**Analyst:** BT

**Date Collected:** 04/26/07 09:05  
**Date Received:** 04/27/07  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	2.4		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706122**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706122-01  
 Client ID: MW-215M-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 09:05  
 Date Received: 04/27/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706122**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706122-02  
 Client ID: MW-216D-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/09/07 00:25  
 Analyst: BT

Date Collected: 04/26/07 12:05  
 Date Received: 04/27/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	7.4		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	0.84		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706122**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706122-02  
 Client ID: MW-216D-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 12:05  
 Date Received: 04/27/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	109		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706122**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

**Lab ID:** L0706122-03  
**Client ID:** MW-37-20070426-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Anaytical Method:** 60,8260B  
**Analytical Date:** 05/09/07 00:56  
**Analyst:** BT

**Date Collected:** 04/26/07 14:05  
**Date Received:** 04/27/07  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.53		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706122**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706122-03  
 Client ID: MW-37-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 14:05  
 Date Received: 04/27/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	106		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706122  
**Report Date:** 05/09/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/08/07 20:18  
**Analyst:** BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-03 Batch: WG279684-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dichlorodifluoromethane	ND		ug/l	5.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
o-Chlorotoluene	ND		ug/l	2.5

Project Name: RAYTHEON WAYLAND

Lab Number: L0706122

Project Number: 0061882

Report Date: 05/09/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B

Analytical Date: 05/08/07 20:18

Analyst: BT

Parameter	Result	Qualifier	Units	RDL
-----------	--------	-----------	-------	-----

Volatile Organics by MCP 8260B for sample(s): 01-03 Batch: WG279684-3				
---	--	--	--	--

p-Chlorotoluene	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
-----------	-----------	-----------	------------------------

1,2-Dichloroethane-d4	118		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	111		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706122

**Report Date:** 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279684-1 WG279684-2					
Methylene chloride	106	114	70-130	7	25
1,1-Dichloroethane	106	116	70-130	9	25
Chloroform	103	111	70-130	7	25
Carbon tetrachloride	100	108	70-130	8	25
1,2-Dichloropropane	95	103	70-130	8	25
Dibromochloromethane	100	108	70-130	8	25
1,1,2-Trichloroethane	97	109	70-130	12	25
Tetrachloroethene	102	108	70-130	6	25
Chlorobenzene	99	110	70-130	11	25
1,2-Dichloroethane	106	110	70-130	4	25
1,1,1-Trichloroethane	113	116	70-130	3	25
Bromodichloromethane	94	105	70-130	11	25
trans-1,3-Dichloropropene	96	105	70-130	9	25
cis-1,3-Dichloropropene	90	99	70-130	10	25
Bromoform	98	109	70-130	11	50
1,1,2,2-Tetrachloroethane	116	125	70-130	7	25
Chloromethane	97	106	70-130	9	50
Vinyl chloride	88	107	70-130	19	25
Chloroethane	98	113	70-130	14	25
1,1-Dichloroethene	98	116	70-130	17	25
trans-1,2-Dichloroethene	92	107	70-130	15	25



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0706122

Report Date: 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-03 Batch: WG279684-1 WG279684-2					
Trichloroethene	96	101	70-130	5	25
1,2-Dichlorobenzene	99	107	70-130	8	25
1,3-Dichlorobenzene	99	110	70-130	11	25
1,4-Dichlorobenzene	97	108	70-130	11	25
cis-1,2-Dichloroethene	106	115	70-130	8	25
Dichlorodifluoromethane	110	120	70-130	9	50
1,2-Dibromoethane	97	107	70-130	10	25
1,3-Dichloropropane	107	112	70-130	5	25
1,1,1,2-Tetrachloroethane	104	113	70-130	8	25
o-Chlorotoluene	101	113	70-130	11	25
p-Chlorotoluene	105	117	70-130	11	25
Hexachlorobutadiene	88	96	70-130	9	25
1,2,4-Trichlorobenzene	88	96	70-130	9	25

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		112		70-130
Toluene-d8	112		110		70-130
4-Bromofluorobenzene	100		98		70-130
Dibromofluoromethane	112		114		70-130

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706122  
**Report Date:** 05/09/07

Parameter	Native Sample	MS Added	MS Found	MS		MSD		Recovery Limits	RPD	RPD Limits
				%Recovery	MSD Found	%Recovery				

Volatile Organics by MCP 8260B Associated sample(s): 01-03 QC Batch ID: WG279684-7 WG279684-8 QC Sample: L0706122-02 Client ID: MW-216D-20070426-01

Methylene chloride	ND	10	12	117	12	120	70-130	3	30
1,1-Dichloroethane	ND	10	12	124	12	122	70-130	2	30
Chloroform	ND	10	12	124	12	120	70-130	3	30
Carbon tetrachloride	ND	10	14	136	12	125	70-130	8	30
1,2-Dichloropropane	ND	10	11	107	11	110	70-130	3	30
Dibromochloromethane	ND	10	13	127	12	126	70-130	1	30
1,1,2-Trichloroethane	ND	10	13	130	12	124	70-130	5	30
Tetrachloroethene	ND	10	12	119	11	112	70-130	6	30
Chlorobenzene	ND	10	11	113	11	111	70-130	2	30
1,2-Dichloroethane	ND	10	12	126	12	125	70-130	1	30
1,1,1-Trichloroethane	ND	10	13	132	12	123	70-130	7	30
Bromodichloromethane	ND	10	12	116	11	111	70-130	4	30
trans-1,3-Dichloropropene	ND	10	12	123	12	118	70-130	4	30
cis-1,3-Dichloropropene	ND	10	10	100	9.9	99	70-130	1	30
Bromoform	ND	10	13	131	13	132	70-130	1	30
1,1,2,2-Tetrachloroethane	ND	10	14	143	15	147	70-130	3	30
Chloromethane	ND	10	10	103	10	106	70-130	3	30
Vinyl chloride	ND	10	11	109	11	113	70-130	4	30
Chloroethane	ND	10	13	128	13	128	70-130	0	30
1,1-Dichloroethene	ND	10	12	124	13	128	70-130	3	30
trans-1,2-Dichloroethene	ND	10	12	116	11	114	70-130	2	30

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706122  
**Report Date:** 05/09/07

Parameter	Native Sample	MS			MSD		Recovery Limits	RPD	RPD Limits
		MS Added	MS Found	%Recovery	MSD Found	%Recovery			

Volatile Organics by MCP 8260B Associated sample(s): 01-03 QC Batch ID: WG279684-7 WG279684-8 QC Sample: L0706122-02 Client ID: MW-216D-20070426-01

Parameter	Native Sample	MS Added	MS Found	%Recovery	MSD Found	%Recovery	Recovery Limits	RPD	RPD Limits
Trichloroethene	7.4	10	18	111	18	105	70-130	6	30
1,2-Dichlorobenzene	ND	10	12	117	11	114	70-130	3	30
1,3-Dichlorobenzene	ND	10	12	118	11	111	70-130	6	30
1,4-Dichlorobenzene	ND	10	12	116	11	111	70-130	4	30
cis-1,2-Dichloroethene	0.84	10	13	123	13	118	70-130	4	30
Dichlorodifluoromethane	ND	10	13	129	12	122	70-130	6	30
1,2-Dibromoethane	ND	10	12	124	12	122	70-130	2	30
1,3-Dichloropropane	ND	10	13	127	13	128	70-130	1	30
1,1,1,2-Tetrachloroethane	ND	10	13	129	12	121	70-130	6	30
o-Chlorotoluene	ND	10	12	116	11	113	70-130	3	30
p-Chlorotoluene	ND	10	12	120	11	115	70-130	4	30
Hexachlorobutadiene	ND	10	10	103	9.0	90	70-130	13	30
1,2,4-Trichlorobenzene	ND	10	10	101	9.7	97	70-130	4	30

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	128		125		70-130
4-Bromofluorobenzene	98		98		70-130
Dibromofluoromethane	119		118		70-130
Toluene-d8	110		111		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706122**Project Number:** 0061882**Report Date:** 05/09/07**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
L0706122-01A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706122-01B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706122-02A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706122-02B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706122-02C	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706122-02D	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706122-02E	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706122-02F	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706122-03A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706122-03B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706122  
**Report Date:** 05/09/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
MSD - Matrix Spike Sample Duplicate: Refer to MS.  
NA - Not Applicable.  
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.)

Report Format: Not Specified



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706122  
**Report Date:** 05/09/07

## 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.



05090719:37



# CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/25

ALPHA Job #: 20706122

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

### Project Information

Project Name: Roytheon Wayland  
Project Location: Wayland, MA  
Project #: 061882  
Project Manager: J. Picard  
ALPHA Quote #:

### Report Information - Data Deliverables

FAX  EMAIL  
 ADEX  Add'l Deliverables

### Billing Information

Same as Client info PO #:

### Client Information

Client: ERM  
Address: 399 Boylston St. 6<sup>th</sup> Fl.  
Boston, MA 07116  
Phone: 617-646-7800  
Fax: 617-267-6447  
Email:

### Turn-Around Time

Standard  RUSH (only confirmed if pre-approved!)  
Date Due: 05/04 Time:

### 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?

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

ANALYSIS  
8016 (VOC)  
~~8016 (VOC)~~

**SAMPLE HANDLING**  
Filtration  
 Done  
 Not needed  
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								
06122-01	MW-25M-20070426-01	4/26/07	905	GW	FP	X					2
-02	MW-216D-20070426-01MS		1205	GN	FP	X					2
-02	MW-216D-20070426-01-MSD		1205	GN	FP	X					2
-02	MW-216D-20070426-01		1205	GN	FP	X					2
-03	MW-37-20070426-01		1405	GN	FP	X					2

PLEASE ANSWER QUESTIONS ABOVE!

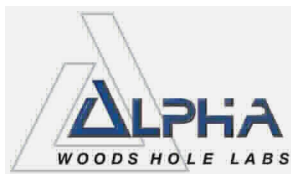
IS YOUR PROJECT MA MCP or CT RCP?

Container Type V VFP  
Preservative B #

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

FORM NO: 01-01 (rev. 10-OCT-05)

Relinquished By: [Signature] Date/Time: 4/27/07 12:00  
Received By: [Signature] Date/Time: 4/27/07 18:45



## ANALYTICAL REPORT

Lab Number: L0706123

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/08/07

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

---

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





**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706123  
**Report Date:** 05/08/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0706123-01	HA-102-20070426-01	WAYLAND, MA
L0706123-02	HA-104-20070426-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0706123

Project Number: 0061882

Report Date: 05/08/07

### MADEP MCP Response Action Analytical Report Certification

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

An 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:** 0061882

**Lab Number:** L0706123  
**Report Date:** 05/08/07

### Case Narrative

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

MCP Related Narratives

Volatile Organics

In reference to question F:

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

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

Authorized Signature:



Title: Technical Director

Date: 05/08/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706123**Project Number:** 0061882**Report Date:** 05/08/07**SAMPLE RESULTS**

Lab ID: L0706123-01  
 Client ID: HA-102-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/07/07 17:52  
 Analyst: MM

Date Collected: 04/26/07 09:25  
 Date Received: 04/27/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	2.3		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	0.91		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	7.0		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706123**Project Number:** 0061882**Report Date:** 05/08/07**SAMPLE RESULTS**

Lab ID: L0706123-01  
 Client ID: HA-102-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 09:25  
 Date Received: 04/27/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	105		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706123**Project Number:** 0061882**Report Date:** 05/08/07**SAMPLE RESULTS**

Lab ID: L0706123-02  
 Client ID: HA-104-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/07/07 18:24  
 Analyst: MM

Date Collected: 04/26/07 11:25  
 Date Received: 04/27/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	11		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Benzene	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.8		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
Methyl tert butyl ether	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706123**Project Number:** 0061882**Report Date:** 05/08/07**SAMPLE RESULTS**

Lab ID: L0706123-02  
 Client ID: HA-104-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 11:25  
 Date Received: 04/27/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1
o-Chlorotoluene	ND		ug/l	2.5	1
p-Chlorotoluene	ND		ug/l	2.5	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	105		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706123  
**Report Date:** 05/08/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/07/07 14:37  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-02 Batch: WG279510-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706123  
**Report Date:** 05/08/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/07/07 14:37  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-02 Batch: WG279510-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706123  
**Report Date:** 05/08/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/07/07 14:37  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-02 Batch: WG279510-3				

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	104		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706123

**Project Number:** 0061882

**Report Date:** 05/08/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279510-1 WG279510-2					
Methylene chloride	107	109	70-130	2	25
1,1-Dichloroethane	102	103	70-130	1	25
Chloroform	104	109	70-130	5	25
Carbon tetrachloride	86	92	70-130	7	25
1,2-Dichloropropane	96	102	70-130	6	25
Dibromochloromethane	74	84	70-130	13	25
1,1,2-Trichloroethane	95	99	70-130	4	25
Tetrachloroethene	101	97	70-130	4	25
Chlorobenzene	99	97	70-130	2	25
Trichlorofluoromethane	114	115	70-130	1	25
1,2-Dichloroethane	111	114	70-130	3	25
1,1,1-Trichloroethane	99	100	70-130	1	25
Bromodichloromethane	86	93	70-130	8	25
trans-1,3-Dichloropropene	84	86	70-130	2	25
cis-1,3-Dichloropropene	84	90	70-130	7	25
1,1-Dichloropropene	99	96	70-130	3	25
Bromoform	78	80	70-130	3	50
1,1,2,2-Tetrachloroethane	94	92	70-130	2	25
Benzene	101	101	70-130	0	25
Toluene	96	98	70-130	2	25
Ethylbenzene	100	101	70-130	1	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706123

**Project Number:** 0061882

**Report Date:** 05/08/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279510-1 WG279510-2					
Chloromethane	100	108	70-130	8	50
Bromomethane	78	81	70-130	4	50
Vinyl chloride	102	102	70-130	0	25
Chloroethane	104	100	70-130	4	25
1,1-Dichloroethene	100	102	70-130	2	25
trans-1,2-Dichloroethene	94	91	70-130	3	25
Trichloroethene	99	98	70-130	1	25
1,2-Dichlorobenzene	93	93	70-130	0	25
1,3-Dichlorobenzene	94	93	70-130	1	25
1,4-Dichlorobenzene	94	93	70-130	1	25
Methyl tert butyl ether	90	89	70-130	1	25
p/m-Xylene	101	102	70-130	1	25
o-Xylene	99	98	70-130	1	25
cis-1,2-Dichloroethene	97	100	70-130	3	25
Dibromomethane	96	102	70-130	6	25
1,2,3-Trichloropropane	108	106	70-130	2	25
Styrene	100	98	70-130	2	25
Dichlorodifluoromethane	100	98	70-130	2	50
Acetone	109	109	70-130	0	50
Carbon disulfide	78	74	70-130	5	25
2-Butanone	100	101	70-130	1	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706123

**Project Number:** 0061882

**Report Date:** 05/08/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279510-1 WG279510-2					
4-Methyl-2-pentanone	90	92	70-130	2	50
2-Hexanone	105	99	70-130	6	50
Bromochloromethane	94	97	70-130	3	25
Tetrahydrofuran	89	91	70-130	2	25
2,2-Dichloropropane	91	92	70-130	1	50
1,2-Dibromoethane	97	98	70-130	1	25
1,3-Dichloropropane	97	100	70-130	3	25
1,1,1,2-Tetrachloroethane	80	90	70-130	12	25
Bromobenzene	92	93	70-130	1	25
n-Butylbenzene	96	92	70-130	4	25
sec-Butylbenzene	99	95	70-130	4	25
tert-Butylbenzene	98	95	70-130	3	25
o-Chlorotoluene	97	95	70-130	2	25
p-Chlorotoluene	98	96	70-130	2	25
1,2-Dibromo-3-chloropropane	73	75	70-130	3	50
Hexachlorobutadiene	90	88	70-130	2	25
Isopropylbenzene	105	108	70-130	3	25
p-Isopropyltoluene	101	99	70-130	2	25
Naphthalene	75	75	70-130	0	25
n-Propylbenzene	99	93	70-130	6	25
1,2,3-Trichlorobenzene	80	81	70-130	1	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706123

**Project Number:** 0061882

**Report Date:** 05/08/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-02 Batch: WG279510-1 WG279510-2					
1,2,4-Trichlorobenzene	81	78	70-130	4	25
1,3,5-Trimethylbenzene	98	96	70-130	2	25
1,2,4-Trimethylbenzene	97	96	70-130	1	25
Ethyl ether	87	83	70-130	5	25
Isopropyl Ether	96	97	70-130	1	25
Ethyl-Tert-Butyl-Ether	96	94	70-130	2	25
Tertiary-Amyl Methyl Ether	90	91	70-130	1	25
1,4-Dioxane	102	108	70-130	6	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		111		70-130
Toluene-d8	102		101		70-130
4-Bromofluorobenzene	101		100		70-130
Dibromofluoromethane	101		103		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706123**Project Number:** 0061882**Report Date:** 05/08/07**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
L0706123-01A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706123-01B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706123-02A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706123-02B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706123  
**Report Date:** 05/08/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.
- LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD- Laboratory Control Sample Duplicate: Refer to LCS.
- MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD - Matrix Spike Sample Duplicate: Refer to MS.
- NA - Not Applicable.
- 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.
- 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.)

Report Format: Not Specified



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706123  
**Report Date:** 05/08/07

## 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.



05080714:57



# CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/27 ALPHA Job #: L0706128

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

**Client Information**  
 Client: ERM  
 Address: 399 BOYLSTON ST, BOSTON, MA 02116  
 Phone: 617-646-7800  
 Fax: 617-267-6447  
 Email: jeremy.picard@erm.com

**Project Information**  
 Project Name: RAYMOND WALKUP  
 Project Location: WALKUP, MA  
 Project #: 0061882  
 Project Manager: JEREMY PICARD  
 ALPHA Quote #:  
 Turn-Around Time  
 Standard  RUSH (only confirmed if pre-approved!)

**Report Information - Data Deliverables**  
 FAX  EMAIL  Same as Client info  
 ADEx  Add'l Deliverables

**Regulatory Requirements/Report Limits**  
 State /Fed Program: MCP Criteria:

**MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED**  
 Yes  No Are MCP Analytical Methods Required?  
 Yes  No Are Drinking Water Samples Submitted?  
 Yes  No Have you met minimum field QC requirements?

These samples have been previously analyzed by Alpha  
 Other Project Specific Requirements/Comments/Detection Limits:

**ANALYSIS**  
 SO210-17BE-00121

**SAMPLE HANDLING**  
 Filtration  
 Done  
 Not needed  
 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										
06123-01	MA-102-20070426-01	4/26/07	09:25	GW	JM	2							2
↓-02	MA-104-20070426-01	4/26/07	11:25	GW	SRF	2							2

**QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY**

IS YOUR PROJECT MCP ?

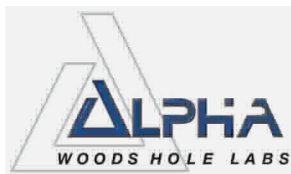
Container Type:  V Preservative:  B

Relinquished By: [Signature] Date/Time: 4/27/07 12:00  
 Received By: [Signature] Date/Time: 4/27/07 12:00

Relinquished By: [Signature] Date/Time: 4/27/07 12:45  
 Received By: [Signature] Date/Time: 4/27/07 12:45

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

FORM NO: 01-01 (rev. 14-May-04)



## ANALYTICAL REPORT

Lab Number: L0706124

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/07/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706124  
**Report Date:** 05/07/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0706124-01	MW-101-20070426-01	WAYLAND, MA



Project Name: RAYTHEON WAYLAND

Lab Number: L0706124

Project Number: 0061882

Report Date: 05/07/07

### MADEP MCP Response Action Analytical Report Certification

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

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706124  
**Report Date:** 05/07/07

### Case Narrative

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

MCP Related Narratives:

Volatile Organics

In reference to question F:

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

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

Authorized Signature:



Title: Technical Director

Date: 05/07/07



# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706124**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706124-01  
 Client ID: MW-101-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/07/07 15:54  
 Analyst: RY

Date Collected: 04/26/07 15:00  
 Date Received: 04/27/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	1.8		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	2.7		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706124**Project Number:** 0061882**Report Date:** 05/07/07**SAMPLE RESULTS**

Lab ID: L0706124-01

Date Collected: 04/26/07 15:00

Client ID: MW-101-20070426-01

Date Received: 04/27/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	129		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	113		70-130

Project Name: RAYTHEON WAYLAND

Lab Number: L0706124

Project Number: 0061882

Report Date: 05/07/07

### Method Blank Analysis Batch Quality Control

Analytical Method: 60,8260B  
 Analytical Date: 05/07/07 09:42  
 Analyst: RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG279032-9				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706124  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/07/07 09:42  
**Analyst:** RY

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG279032-9				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706124  
**Report Date:** 05/07/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/07/07 09:42  
Analyst: RY

Parameter	Result	Qualifier	Units	RDL
-----------	--------	-----------	-------	-----

Volatile Organics by MCP 8260B for sample(s): 01 Batch: WG279032-9

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
-----------	-----------	-----------	------------------------

1,2-Dichloroethane-d4	117		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	112		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706124

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279032-7 WG279032-8					
Methylene chloride	98	98	70-130	0	25
1,1-Dichloroethane	105	99	70-130	6	25
Chloroform	101	95	70-130	6	25
Carbon tetrachloride	108	99	70-130	9	25
1,2-Dichloropropane	88	86	70-130	2	25
Dibromochloromethane	101	98	70-130	3	25
1,1,2-Trichloroethane	96	94	70-130	2	25
Tetrachloroethene	94	88	70-130	7	25
Chlorobenzene	93	89	70-130	4	25
Trichlorofluoromethane	122	117	70-130	4	25
1,2-Dichloroethane	105	98	70-130	7	25
1,1,1-Trichloroethane	109	102	70-130	7	25
Bromodichloromethane	100	90	70-130	11	25
trans-1,3-Dichloropropene	99	98	70-130	1	25
cis-1,3-Dichloropropene	85	83	70-130	2	25
1,1-Dichloropropene	96	87	70-130	10	25
Bromoform	100	106	70-130	6	50
1,1,2,2-Tetrachloroethane	113	112	70-130	1	25
Benzene	84	79	70-130	6	25
Toluene	96	89	70-130	8	25
Ethylbenzene	98	94	70-130	4	25



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706124

**Project Number:** 0061882

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279032-7 WG279032-8					
Chloromethane	94	98	70-130	4	50
Bromomethane	78	82	70-130	5	50
Vinyl chloride	88	91	70-130	3	25
Chloroethane	102	99	70-130	3	25
1,1-Dichloroethene	105	99	70-130	6	25
trans-1,2-Dichloroethene	90	88	70-130	2	25
Trichloroethene	92	85	70-130	8	25
1,2-Dichlorobenzene	96	94	70-130	2	25
1,3-Dichlorobenzene	95	93	70-130	2	25
1,4-Dichlorobenzene	94	93	70-130	1	25
Methyl tert butyl ether	88	89	70-130	1	25
p/m-Xylene	94	91	70-130	3	25
o-Xylene	91	88	70-130	3	25
cis-1,2-Dichloroethene	100	93	70-130	7	25
Dibromomethane	89	87	70-130	2	25
1,2,3-Trichloropropane	113	125	70-130	10	25
Styrene	93	88	70-130	6	25
Dichlorodifluoromethane	94	90	70-130	4	50
Acetone	129	118	70-130	9	50
Carbon disulfide	76	74	70-130	3	25
2-Butanone	125	128	70-130	2	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706124

**Project Number:** 0061882

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279032-7 WG279032-8					
4-Methyl-2-pentanone	93	83	70-130	11	50
2-Hexanone	105	111	70-130	6	50
Bromochloromethane	94	90	70-130	4	25
Tetrahydrofuran	100	97	70-130	3	25
2,2-Dichloropropane	108	96	70-130	12	50
1,2-Dibromoethane	92	91	70-130	1	25
1,3-Dichloropropane	98	97	70-130	1	25
1,1,1,2-Tetrachloroethane	106	96	70-130	10	25
Bromobenzene	92	92	70-130	0	25
n-Butylbenzene	99	93	70-130	6	25
sec-Butylbenzene	98	94	70-130	4	25
tert-Butylbenzene	97	94	70-130	3	25
o-Chlorotoluene	96	95	70-130	1	25
p-Chlorotoluene	97	97	70-130	0	25
1,2-Dibromo-3-chloropropane	116	104	70-130	11	50
Hexachlorobutadiene	86	79	70-130	8	25
Isopropylbenzene	105	98	70-130	7	25
p-Isopropyltoluene	102	98	70-130	4	25
Naphthalene	92	94	70-130	2	25
n-Propylbenzene	96	94	70-130	2	25
1,2,3-Trichlorobenzene	91	90	70-130	1	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706124

**Report Date:** 05/07/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01 Batch: WG279032-7 WG279032-8					
1,2,4-Trichlorobenzene	87	84	70-130	4	25
1,3,5-Trimethylbenzene	98	96	70-130	2	25
1,2,4-Trimethylbenzene	101	97	70-130	4	25
Ethyl ether	86	93	70-130	8	25
Isopropyl Ether	98	93	70-130	5	25
Ethyl-Tert-Butyl-Ether	80	80	70-130	0	25
Tertiary-Amyl Methyl Ether	103	92	70-130	11	25
1,4-Dioxane	71	73	70-130	3	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	128	123	70-130
Toluene-d8	111	111	70-130
4-Bromofluorobenzene	95	103	70-130
Dibromofluoromethane	115	116	70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706124**Project Number:** 0061882**Report Date:** 05/07/07**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
L0706124-01A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706124-01B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706124  
**Report Date:** 05/07/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
MSD - Matrix Spike Sample Duplicate: Refer to MS.  
NA - Not Applicable.  
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.)

Report Format: Not Specified



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706124  
**Report Date:** 05/07/07

## 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.

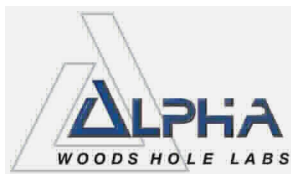
## LIMITATION OF LIABILITIES

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.







## ANALYTICAL REPORT

Lab Number: L0706126

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/10/07

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

---

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





**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706126  
**Report Date:** 05/10/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0706126-01	MW-33S-20070426-01	WAYLAND, MA
L0706126-02	MW-102-20070426-01	WAYLAND, MA
L0706126-03	MW-214-20070426-01	WAYLAND, MA
L0706126-04	IP-16S-20070426-01	WAYLAND, MA
L0706126-05	IP-17D-20070426-01	WAYLAND, MA
L0706126-06	MW-117-20070426-01	WAYLAND, MA
L0706126-07	MW-213-20070426-01	WAYLAND, MA
L0706126-08	DUP-002-20070426-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0706126

Project Number: 0061882

Report Date: 05/10/07

### MADEP MCP Response Action Analytical Report Certification

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

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706126  
**Report Date:** 05/10/07

### Case Narrative

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

#### MCP Related Narratives

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

L0706126-01 was re-analyzed due to overdilution of the original analysis. The results of the re-analysis are reported.

L0706126-02 has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

In reference to question F:

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

##### Metals

In reference to question F:

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

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

Date: 05/10/07

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-01 R  
 Client ID: MW-33S-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/09/07 14:05  
 Analyst: BT

Date Collected: 04/26/07 08:05  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	14		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	40		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-01 R

Date Collected: 04/26/07 08:05

Client ID: MW-33S-20070426-01

Date Received: 04/27/07

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	128		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	122		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-02  
 Client ID: MW-102-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/09/07 01:58  
 Analyst: BT

Date Collected: 04/26/07 10:35  
 Date Received: 04/27/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	10	2
1,1-Dichloroethane	1.9		ug/l	1.5	2
Chloroform	ND		ug/l	1.5	2
Carbon tetrachloride	ND		ug/l	1.0	2
1,2-Dichloropropane	ND		ug/l	3.5	2
Dibromochloromethane	ND		ug/l	1.0	2
1,1,2-Trichloroethane	ND		ug/l	1.5	2
Tetrachloroethene	ND		ug/l	1.0	2
Chlorobenzene	ND		ug/l	1.0	2
1,2-Dichloroethane	ND		ug/l	1.0	2
1,1,1-Trichloroethane	ND		ug/l	1.0	2
Bromodichloromethane	ND		ug/l	1.0	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	2
Bromoform	ND		ug/l	4.0	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	2
Chloromethane	ND		ug/l	5.0	2
Vinyl chloride	ND		ug/l	2.0	2
Chloroethane	ND		ug/l	2.0	2
1,1-Dichloroethene	ND		ug/l	1.0	2
trans-1,2-Dichloroethene	ND		ug/l	1.5	2
Trichloroethene	9.5		ug/l	1.0	2
1,2-Dichlorobenzene	ND		ug/l	5.0	2
1,3-Dichlorobenzene	ND		ug/l	5.0	2
1,4-Dichlorobenzene	ND		ug/l	5.0	2
cis-1,2-Dichloroethene	ND		ug/l	1.0	2
Dichlorodifluoromethane	ND		ug/l	10	2
2,2-Dichloropropane	ND		ug/l	5.0	2
1,2-Dibromoethane	ND		ug/l	4.0	2
1,3-Dichloropropane	ND		ug/l	5.0	2



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-02  
 Client ID: MW-102-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 10:35  
 Date Received: 04/27/07  
 Field Prep: Not Specified

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

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-03  
 Client ID: MW-214-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/09/07 02:29  
 Analyst: BT

Date Collected: 04/26/07 12:00  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	0.50		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	2.7		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	53		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	3.7		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-03  
 Client ID: MW-214-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 12:00  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	108		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

**Lab ID:** L0706126-04  
**Client ID:** IP-16S-20070426-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 05/09/07 03:00  
**Analyst:** BT

**Date Collected:** 04/26/07 13:10  
**Date Received:** 04/27/07  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	0.88		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-04  
 Client ID: IP-16S-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 13:10  
 Date Received: 04/27/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	109		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-05  
 Client ID: IP-17D-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/09/07 03:31  
 Analyst: BT

Date Collected: 04/26/07 14:10  
 Date Received: 04/27/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	1.2		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.53		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-05  
 Client ID: IP-17D-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 14:10  
 Date Received: 04/27/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	109		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-06  
 Client ID: MW-117-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/09/07 04:01  
 Analyst: BT

Date Collected: 04/26/07 15:00  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	0.92		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	0.87		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	6.1		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-06  
 Client ID: MW-117-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 15:00  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-07  
 Client ID: MW-213-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/09/07 04:32  
 Analyst: BT

Date Collected: 04/26/07 16:05  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	0.51		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.3		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
2,2-Dichloropropane	ND		ug/l	2.5	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-07  
 Client ID: MW-213-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 16:05  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-08  
 Client ID: DUP-002-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/09/07 12:31  
 Analyst: BT

Date Collected: 04/26/07 00:00  
 Date Received: 04/27/07  
 Field Prep: Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-08  
 Client ID: DUP-002-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 00:00  
 Date Received: 04/27/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	127		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	114		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706126  
**Report Date:** 05/10/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/08/07 20:18  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 02-07 Batch: WG279685-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dichlorodifluoromethane	ND		ug/l	5.0
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

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706126  
**Report Date:** 05/10/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/08/07 20:18  
**Analyst:** BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 02-07 Batch: WG279685-3				
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706126  
**Report Date:** 05/10/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/09/07 09:24  
**Analyst:** BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01,08 Batch: WG279685-6				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dichlorodifluoromethane	ND		ug/l	5.0
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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706126  
**Report Date:** 05/10/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/09/07 09:24  
**Analyst:** BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01,08 Batch: WG279685-6				

o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	114		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	113		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706126

**Report Date:** 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02-07 Batch: WG279685-1 WG279685-2					
Methylene chloride	106	114	70-130	7	25
1,1-Dichloroethane	106	116	70-130	9	25
Chloroform	103	111	70-130	7	25
Carbon tetrachloride	100	108	70-130	8	25
1,2-Dichloropropane	95	103	70-130	8	25
Dibromochloromethane	100	108	70-130	8	25
1,1,2-Trichloroethane	97	109	70-130	12	25
Tetrachloroethene	102	108	70-130	6	25
Chlorobenzene	99	110	70-130	11	25
1,2-Dichloroethane	106	110	70-130	4	25
1,1,1-Trichloroethane	113	116	70-130	3	25
Bromodichloromethane	94	105	70-130	11	25
trans-1,3-Dichloropropene	96	105	70-130	9	25
cis-1,3-Dichloropropene	90	99	70-130	10	25
Bromoform	98	109	70-130	11	50
1,1,2,2-Tetrachloroethane	116	125	70-130	7	25
Chloromethane	97	106	70-130	9	50
Vinyl chloride	88	107	70-130	19	25
Chloroethane	98	113	70-130	14	25
1,1-Dichloroethene	98	116	70-130	17	25
trans-1,2-Dichloroethene	92	107	70-130	15	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706126

**Project Number:** 0061882

**Report Date:** 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 02-07 Batch: WG279685-1 WG279685-2					
Trichloroethene	96	101	70-130	5	25
1,2-Dichlorobenzene	99	107	70-130	8	25
1,3-Dichlorobenzene	99	110	70-130	11	25
1,4-Dichlorobenzene	97	108	70-130	11	25
cis-1,2-Dichloroethene	106	115	70-130	8	25
Dichlorodifluoromethane	110	120	70-130	9	50
2,2-Dichloropropane	100	108	70-130	8	50
1,2-Dibromoethane	97	107	70-130	10	25
1,3-Dichloropropane	107	112	70-130	5	25
1,1,1,2-Tetrachloroethane	104	113	70-130	8	25
o-Chlorotoluene	101	113	70-130	11	25
p-Chlorotoluene	105	117	70-130	11	25
Hexachlorobutadiene	88	96	70-130	9	25
1,2,4-Trichlorobenzene	88	96	70-130	9	25

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118	112	70-130
Toluene-d8	112	110	70-130
4-Bromofluorobenzene	100	98	70-130
Dibromofluoromethane	112	114	70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706126

**Report Date:** 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,08 Batch: WG279685-4 WG279685-5					
Methylene chloride	114	111	70-130	3	25
1,1-Dichloroethane	114	111	70-130	3	25
Chloroform	117	108	70-130	8	25
Carbon tetrachloride	118	110	70-130	7	25
1,2-Dichloropropane	99	95	70-130	4	25
Dibromochloromethane	104	108	70-130	4	25
1,1,2-Trichloroethane	99	102	70-130	3	25
Tetrachloroethene	110	106	70-130	4	25
Chlorobenzene	107	101	70-130	6	25
1,2-Dichloroethane	110	103	70-130	7	25
1,1,1-Trichloroethane	123	111	70-130	10	25
Bromodichloromethane	104	99	70-130	5	25
trans-1,3-Dichloropropene	104	101	70-130	3	25
cis-1,3-Dichloropropene	91	92	70-130	1	25
Bromoform	99	112	70-130	12	50
1,1,2,2-Tetrachloroethane	115	120	70-130	4	25
Chloromethane	105	98	70-130	7	50
Vinyl chloride	96	101	70-130	5	25
Chloroethane	95	98	70-130	3	25
1,1-Dichloroethene	109	110	70-130	1	25
trans-1,2-Dichloroethene	103	101	70-130	2	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706126

**Project Number:** 0061882

**Report Date:** 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01,08 Batch: WG279685-4 WG279685-5					
Trichloroethene	103	96	70-130	7	25
1,2-Dichlorobenzene	108	105	70-130	3	25
1,3-Dichlorobenzene	110	107	70-130	3	25
1,4-Dichlorobenzene	108	106	70-130	2	25
cis-1,2-Dichloroethene	110	105	70-130	5	25
Dichlorodifluoromethane	118	110	70-130	7	50
2,2-Dichloropropane	114	101	70-130	12	50
1,2-Dibromoethane	97	102	70-130	5	25
1,3-Dichloropropane	106	108	70-130	2	25
1,1,1,2-Tetrachloroethane	112	113	70-130	1	25
o-Chlorotoluene	113	110	70-130	3	25
p-Chlorotoluene	118	114	70-130	3	25
Hexachlorobutadiene	96	88	70-130	9	25
1,2,4-Trichlorobenzene	94	94	70-130	0	25

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121	115	70-130
Toluene-d8	109	108	70-130
4-Bromofluorobenzene	102	103	70-130
Dibromofluoromethane	113	111	70-130

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706126

**Project Number:** 0061882

**Report Date:** 05/10/07

Parameter	Native Sample	MS Added	MS Found	MS		MSD		Recovery Limits	RPD	RPD Limits
				%Recovery	MSD Found	%Recovery				
Volatile Organics by MCP 8260B Associated sample(s): 01-08 QC Batch ID: WG279685-7 WG279685-8 QC Sample: L0706126-06 Client ID: MW-117-20070426-01										
Methylene chloride	ND	10	11	108	11	108	70-130	0	30	
1,1-Dichloroethane	ND	10	12	120	11	114	70-130	5	30	
Chloroform	0.92	10	12	111	12	106	70-130	5	30	
Carbon tetrachloride	ND	10	12	121	11	112	70-130	8	30	
1,2-Dichloropropane	ND	10	10	100	9.8	98	70-130	2	30	
Dibromochloromethane	ND	10	10	104	10	102	70-130	2	30	
1,1,2-Trichloroethane	ND	10	10	103	10	101	70-130	2	30	
Tetrachloroethene	0.87	10	11	99	10	95	70-130	4	30	
Chlorobenzene	ND	10	10	103	9.7	97	70-130	6	30	
1,2-Dichloroethane	ND	10	11	115	12	115	70-130	0	30	
1,1,1-Trichloroethane	ND	10	12	121	12	116	70-130	4	30	
Bromodichloromethane	ND	10	10	103	9.9	99	70-130	4	30	
trans-1,3-Dichloropropene	ND	10	10	103	10	103	70-130	0	30	
cis-1,3-Dichloropropene	ND	10	9.0	90	8.9	90	70-130	0	30	
Bromoform	ND	10	11	107	10	104	70-130	3	30	
1,1,2,2-Tetrachloroethane	ND	10	12	123	12	125	70-130	2	30	
Chloromethane	ND	10	9.5	95	8.3	83	70-130	13	30	
Vinyl chloride	ND	10	9.3	93	9.4	94	70-130	1	30	
Chloroethane	ND	10	12	116	12	115	70-130	1	30	
1,1-Dichloroethene	ND	10	12	115	11	111	70-130	4	30	
trans-1,2-Dichloroethene	ND	10	10	103	10	100	70-130	3	30	

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706126  
**Report Date:** 05/10/07

Parameter	Native Sample	MS Added	MS Found	MS		MSD		Recovery Limits	RPD	RPD Limits
				%Recovery	MSD Found	%Recovery				
Volatile Organics by MCP 8260B Associated sample(s): 01-08 QC Batch ID: WG279685-7 WG279685-8 QC Sample: L0706126-06 Client ID: MW-117-20070426-01										
Trichloroethene	6.1	10	16	94	15	87	70-130	8	30	
1,2-Dichlorobenzene	ND	10	10	104	10	102	70-130	2	30	
1,3-Dichlorobenzene	ND	10	10	105	9.7	97	70-130	8	30	
1,4-Dichlorobenzene	ND	10	10	105	9.7	97	70-130	8	30	
cis-1,2-Dichloroethene	ND	10	11	113	11	107	70-130	5	30	
Dichlorodifluoromethane	ND	10	7.7	77	7.3	73	70-130	5	30	
2,2-Dichloropropane	ND	10	12	119	11	112	70-130	6	30	
1,2-Dibromoethane	ND	10	10	102	10	105	70-130	3	30	
1,3-Dichloropropane	ND	10	11	110	11	106	70-130	4	30	
1,1,1,2-Tetrachloroethane	ND	10	11	109	10	104	70-130	5	30	
o-Chlorotoluene	ND	10	11	106	9.9	99	70-130	7	30	
p-Chlorotoluene	ND	10	11	109	10	103	70-130	6	30	
Hexachlorobutadiene	ND	10	9.2	92	8.2	82	70-130	11	30	
1,2,4-Trichlorobenzene	ND	10	9.2	92	8.4	84	70-130	9	30	

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	122		129		70-130
4-Bromofluorobenzene	100		101		70-130
Dibromofluoromethane	114		119		70-130
Toluene-d8	107		110		70-130

# METALS





**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-01

Date Collected: 04/26/07 08:05

Client ID: MW-33S-20070426-01

Date Received: 04/27/07

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										
Sodium, Dissolved	5.2		mg/l	2.0	1	05/02/07 17:30	05/03/07 18:25	EPA 3005A	60,6010B	MG



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-03

Date Collected: 04/26/07 12:00

Client ID: MW-214-20070426-01

Date Received: 04/27/07

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										
Sodium, Dissolved	41		mg/l	2.0	1	05/02/07 17:30	05/03/07 18:27	EPA 3005A	60,6010B	MG



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-06

Date Collected: 04/26/07 15:00

Client ID: MW-117-20070426-01

Date Received: 04/27/07

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										
Sodium, Dissolved	89		mg/l	2.0	1	05/02/07 17:30	05/03/07 18:33	EPA 3005A	60,6010B	MG



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706126**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706126-07

Date Collected: 04/26/07 16:05

Client ID: MW-213-20070426-01

Date Received: 04/27/07

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										
Sodium, Dissolved	140		mg/l	2.0	1	05/02/07 17:30	05/03/07 18:44	EPA 3005A	60,6010B	MG



Project Name: RAYTHEON WAYLAND

Lab Number: L0706126

Project Number: 0061882

Report Date: 05/10/07

## 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): 01,03,06-07 Batch: WG278911-1									
Sodium, Dissolved	ND		mg/l	2.0	1	05/02/07 17:30	05/03/07 18:06	60,6010B	MG

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706126

**Report Date:** 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01,03,06-07 Batch: WG278911-2 WG278911-3					
Sodium, Dissolved	100	95	80-120	5	20

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706126  
**Report Date:** 05/10/07

Parameter	Native Sample	MS Added	MS Found	MS		MSD		Recovery	RPD	RPD Limits
				%Recovery	MSD Found	%Recovery	Limits			
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 01,03,06-07 QC Batch ID: WG278911-4 WG278911-5 QC Sample: L0706126-06 Client ID: MW-117-20070426-01										
Sodium, Dissolved	89	10	98	90	100	110	75-125	20	20	

Project Name: RAYTHEON WAYLAND

Lab Number: L0706126

Project Number: 0061882

Report Date: 05/10/07

## 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
L0706126-01A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-01B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-01C	Plastic 250ml HNO3 preserved	A	<2	2.8 C	Y	Absent	MCP-NA-6010S
L0706126-02A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-02B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-03A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-03B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-03C	Plastic 250ml HNO3 preserved	A	<2	2.8 C	Y	Absent	MCP-NA-6010S
L0706126-04A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-04B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-05A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-05B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-06A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-06B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-06C	Plastic 250ml HNO3 preserved	A	<2	2.8 C	Y	Absent	MCP-NA-6010S
L0706126-06E	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-06F	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-06G	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-06H	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-07A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-07B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-07C	Plastic 250ml HNO3 preserved	A	<2	2.8 C	Y	Absent	MCP-NA-6010S
L0706126-08A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706126-08B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706126  
**Report Date:** 05/10/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
MSD - Matrix Spike Sample Duplicate: Refer to MS.  
NA - Not Applicable.  
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.)

Report Format: Not Specified



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706126  
**Report Date:** 05/10/07

## REFERENCES

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

## LIMITATION OF LIABILITIES

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

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





# CHAIN OF CUSTODY

PAGE 1 OF 1Date Rec'd in Lab: 4/27 ALPHA Job #: L0706126Eight Walkup Drive Westborough, MA 01581  
TEL: 508-898-9220 FAX: 508-898-9193**Project Information**Project Name: RATHEON, WAYLANDProject Location: WAYLAND, MAProject #: 0061882Project Manager: JEREMY PICARD

ALPHA Quote #

**Turn-Around Time** Standard  RUSH (only confirmed if pre-approved!)Date Due: 5/4 Time:**Report Information - Data Deliverables** FAX  EMAIL ADEx  Add'l Deliverables**Billing Information** Same as Client info PO #:**Client Information**Client: ERMAddress: 379 BOYLSTON ST.  
BOSTON, MA 02116Phone: 617-646-7800Fax: 617-267-6447Email: jeremy.picard@erm.com These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

**Regulatory Requirements/Report Limits**State / Fed: MCP Criteria:**MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED** Yes  No Are MCP Analytical Methods Required? Yes  No Are Drinking Water Samples Submitted? Yes  No Have you met minimum field QC requirements?

ANALYSIS	TOTAL # BOTTLES
0021C	3
6010B (P)	2
0021C	3
	2
	2
	3
	2
	2
	3
	2
	3
	2

**SAMPLE HANDLING**

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Sample Specific Comments										TOTAL # BOTTLES				
		Date	Time																	
6126	1 MW-333-20070426-01	4/26/07	08:05	GW	JM	2	1													3
	2 MW-102-20070426-01	4/26/07	10:35	GW	JM			2												2
	3 MW-214-20070426-01	4/26/07	12:00	GW	JM	2	1													3
	4 IP-16S-20070426-01	4/26/07	13:10	GW	JM			2												2
	5 IP-17S-20070426-01	4/26/07	14:00	GW	JM			2												2
	6 MW-117-20070426-01	4/26/07	15:00	GW	JF	2	1													3
	6 MW-117-20070426-MS	4/26/07	15:00	GW	JF	2														2
	6 MW-117-20070426-MSD	4/26/07	15:00	GW	JF	2														2
	7 MW-213-20070426-01	4/26/07	16:05	GW	JM	2	1													3
	8 DUP-002-20070426-01	4/24/07	00:00	GW	JM			2												2

**QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY**

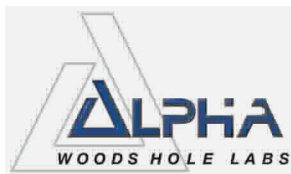
IS YOUR PROJECT MCP?

Container Type V P V  
Preservative D C H

Relinquished By: <u>[Signature]</u>	Date/Time: <u>4/27/07</u>	Received By: <u>[Signature]</u>	Date/Time: <u>4/27 12:00</u>
<u>[Signature]</u>	<u>4/27/07 08:45</u>	<u>[Signature]</u>	<u>4/27 18:45</u>

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

05100716:02



## ANALYTICAL REPORT

Lab Number: L0706127

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/10/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706127  
**Report Date:** 05/10/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0706127-01	MW-107-20070426-01	WAYLAND, MA
L0706127-02	MW-109-20070426-01	WAYLAND, MA
L0706127-03	MW-111-20070426-01	WAYLAND, MA
L0706127-04	DUP-003-20070426-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0706127

Project Number: 0061882

Report Date: 05/10/07

### MADEP MCP Response Action Analytical Report Certification

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

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

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

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:** 0061882

**Lab Number:** L0706127  
**Report Date:** 05/10/07

### Case Narrative

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

#### MCP Related Narratives

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

L0706127-01 and -04 had pH's >2.

L0706127-03 required re-analysis on dilution in order to quantitate the sample within the range of the calibration. The result is reported as a greater than value for the compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound which exceeded the range of the calibration.

In reference to question F:

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

##### Metals

In reference to question F:

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

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

Date: 05/10/07

# ORGANICS



# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706127**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706127-01  
 Client ID: MW-107-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/08/07 09:43  
 Analyst: MM

Date Collected: 04/26/07 12:00  
 Date Received: 04/27/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	0.59		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	71		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	6.8		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706127**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706127-01

Date Collected: 04/26/07 12:00

Client ID: MW-107-20070426-01

Date Received: 04/27/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	104		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706127**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706127-02  
 Client ID: MW-109-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/08/07 10:15  
 Analyst: MM

Date Collected: 04/26/07 12:45  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	16		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	3.1		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706127**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706127-02  
 Client ID: MW-109-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 12:45  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	103		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706127**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706127-03  
 Client ID: MW-111-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/08/07 10:47  
 Analyst: MM

Date Collected: 04/26/07 14:15  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	1.4		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	77		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	2.6		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	>100		ug/l	.5	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.6		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706127**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706127-03  
 Client ID: MW-111-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 14:15  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	102		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706127**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

**Lab ID:** L0706127-03 R  
**Client ID:** MW-111-20070426-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Anaytical Method:** 60,8260B  
**Analytical Date:** 05/08/07 14:13  
**Analyst:** MM

**Date Collected:** 04/26/07 14:15  
**Date Received:** 04/27/07  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
Volatile Organics by MCP 8260B					
Trichloroethene	240		ug/l	2.5	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	101		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706127**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

**Lab ID:** L0706127-04  
**Client ID:** DUP-003-20070426-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 05/08/07 11:19  
**Analyst:** MM

**Date Collected:** 04/26/07 00:00  
**Date Received:** 04/27/07  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	17		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	3.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706127**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706127-04  
 Client ID: DUP-003-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 00:00  
 Date Received: 04/27/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	108		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706127  
**Report Date:** 05/10/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/08/07 08:27  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279510-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706127  
**Report Date:** 05/10/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/08/07 08:27  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279510-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706127  
**Report Date:** 05/10/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/08/07 08:27  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279510-6				

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	109		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706127

**Project Number:** 0061882

**Report Date:** 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279510-4 WG279510-5					
Methylene chloride	108	102	70-130	6	25
1,1-Dichloroethane	105	107	70-130	2	25
Chloroform	110	111	70-130	1	25
Carbon tetrachloride	92	100	70-130	8	25
1,2-Dichloropropane	99	103	70-130	4	25
Dibromochloromethane	83	100	70-130	19	25
1,1,2-Trichloroethane	99	102	70-130	3	25
Tetrachloroethene	101	104	70-130	3	25
Chlorobenzene	100	100	70-130	0	25
Trichlorofluoromethane	120	120	70-130	0	25
1,2-Dichloroethane	110	116	70-130	5	25
1,1,1-Trichloroethane	104	105	70-130	1	25
Bromodichloromethane	94	103	70-130	9	25
trans-1,3-Dichloropropene	87	93	70-130	7	25
cis-1,3-Dichloropropene	87	91	70-130	4	25
1,1-Dichloropropene	102	105	70-130	3	25
Bromoform	84	112	70-130	29	50
1,1,2,2-Tetrachloroethane	96	101	70-130	5	25
Benzene	102	102	70-130	0	25
Toluene	99	97	70-130	2	25
Ethylbenzene	104	106	70-130	2	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706127

**Project Number:** 0061882

**Report Date:** 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279510-4 WG279510-5					
Chloromethane	98	95	70-130	3	50
Bromomethane	48	55	70-130	14	50
Vinyl chloride	95	98	70-130	3	25
Chloroethane	109	107	70-130	2	25
1,1-Dichloroethene	102	108	70-130	6	25
trans-1,2-Dichloroethene	97	96	70-130	1	25
Trichloroethene	114	103	70-130	10	25
1,2-Dichlorobenzene	97	98	70-130	1	25
1,3-Dichlorobenzene	100	97	70-130	3	25
1,4-Dichlorobenzene	99	99	70-130	0	25
Methyl tert butyl ether	86	89	70-130	3	25
p/m-Xylene	104	105	70-130	1	25
o-Xylene	98	102	70-130	4	25
cis-1,2-Dichloroethene	100	100	70-130	0	25
Dibromomethane	98	100	70-130	2	25
1,2,3-Trichloropropane	107	107	70-130	0	25
Styrene	100	104	70-130	4	25
Dichlorodifluoromethane	100	98	70-130	2	50
Acetone	117	107	70-130	9	50
Carbon disulfide	80	78	70-130	3	25
2-Butanone	105	98	70-130	7	50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0706127

Report Date: 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279510-4 WG279510-5					
4-Methyl-2-pentanone	93	94	70-130	1	50
2-Hexanone	106	104	70-130	2	50
Bromochloromethane	96	99	70-130	3	25
Tetrahydrofuran	81	86	70-130	6	25
2,2-Dichloropropane	97	99	70-130	2	50
1,2-Dibromoethane	95	102	70-130	7	25
1,3-Dichloropropane	101	101	70-130	0	25
1,1,1,2-Tetrachloroethane	92	102	70-130	10	25
Bromobenzene	97	98	70-130	1	25
n-Butylbenzene	100	102	70-130	2	25
sec-Butylbenzene	103	102	70-130	1	25
tert-Butylbenzene	100	98	70-130	2	25
o-Chlorotoluene	99	98	70-130	1	25
p-Chlorotoluene	103	99	70-130	4	25
1,2-Dibromo-3-chloropropane	76	111	70-130	37	50
Hexachlorobutadiene	94	109	70-130	15	25
Isopropylbenzene	110	114	70-130	4	25
p-Isopropyltoluene	104	106	70-130	2	25
Naphthalene	78	92	70-130	16	25
n-Propylbenzene	103	102	70-130	1	25
1,2,3-Trichlorobenzene	80	94	70-130	16	25



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706127

**Project Number:** 0061882

**Report Date:** 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 01-04 Batch: WG279510-4 WG279510-5					
1,2,4-Trichlorobenzene	78	92	70-130	16	25
1,3,5-Trimethylbenzene	101	101	70-130	0	25
1,2,4-Trimethylbenzene	100	98	70-130	2	25
Ethyl ether	80	82	70-130	2	25
Isopropyl Ether	94	98	70-130	4	25
Ethyl-Tert-Butyl-Ether	94	95	70-130	1	25
Tertiary-Amyl Methyl Ether	86	91	70-130	6	25
1,4-Dioxane	109	100	70-130	9	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		111		70-130
Toluene-d8	101		103		70-130
4-Bromofluorobenzene	101		97		70-130
Dibromofluoromethane	102		101		70-130

# METALS

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706127**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706127-02

Date Collected: 04/26/07 12:45

Client ID: MW-109-20070426-01

Date Received: 04/27/07

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										
Sodium, Dissolved	15		mg/l	2.0	1	05/02/07 17:30	05/03/07 19:14	EPA 3005A	60,6010B	MG



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706127**Project Number:** 0061882**Report Date:** 05/10/07**SAMPLE RESULTS**

Lab ID: L0706127-03

Date Collected: 04/26/07 14:15

Client ID: MW-111-20070426-01

Date Received: 04/27/07

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										
Sodium, Dissolved	53		mg/l	2.0	1	05/02/07 17:30	05/03/07 19:17	EPA 3005A	60,6010B	MG



Project Name: RAYTHEON WAYLAND

Lab Number: L0706127

Project Number: 0061882

Report Date: 05/10/07

## 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): 02-03 Batch: WG278913-1								
Sodium, Dissolved	ND	mg/l	2.0	1	05/02/07 17:30	05/03/07 18:52	60,6010B	MG

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706127

**Project Number:** 0061882

**Report Date:** 05/10/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 02-03 Batch: WG278913-2 WG278913-3					
Sodium, Dissolved	96	95	80-120	1	20

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706127**Project Number:** 0061882**Report Date:** 05/10/07**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
L0706127-01A	Vial Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706127-01B	Vial Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706127-02A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706127-02B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706127-02C	Plastic 250ml HNO <sub>3</sub> preserved	A	<2	2.8C	Y	Absent	MCP-NA-6010S
L0706127-03A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706127-03B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706127-03C	Plastic 250ml HNO <sub>3</sub> preserved	A	<2	2.8C	Y	Absent	MCP-NA-6010S
L0706127-04A	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04
L0706127-04B	Vial HCl preserved	A	N/A	2.8C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706127  
**Report Date:** 05/10/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.
- LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD- Laboratory Control Sample Duplicate: Refer to LCS.
- MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD - Matrix Spike Sample Duplicate: Refer to MS.
- NA - Not Applicable.
- 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.
- 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.)

Report Format: Not Specified





**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706127  
**Report Date:** 05/10/07

## 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.



05100712:09



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

# CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 4/27

ALPHA Job #: 20706127

### Client Information

Client: ERM  
Address: 399 Baylston St 6<sup>th</sup> Fl  
Boston MA 02114  
Phone: 617-646-7800  
Fax: 617-267-6447  
Email:

### Project Information

Project Name: Kauthon Wayland  
Project Location: Wayland MA  
Project #: 0061882  
Project Manager: J. Picard  
ALPHA Quote #:

### Report Information - Data Deliverables

FAX  EMAIL  
 ADEx  Add'l Deliverables

### Billing Information

Same as Client info PO #:

### Regulatory Requirements/Report Limits

State /Fed Program: MCP Criteria: 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?

### Turn-Around Time

Standard  RUSH (only confirmed if pre-approved!)

Date Due: 05/09 Time:

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

ANALYSIS  
8021c  
8021c  
Dissolved Solids (FA)

**SAMPLE HANDLING**  
Filtration  
 Done  
 Not needed  
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	ANALYSIS		Sample Specific Comments	TOTAL # BOTTLES
		Date	Time			8021c	8021c		
06127-01	MW-107-20070426-01	4/26/07	12:00	GW	LR		X		2
02	MW-109-20070426-01	4/26/07	12:45	GW	UK	X	X		3
03	MW-111-20070426-01	4/26/07	14:15	GW	UK	X	X		3
04	DUP-003-20070426-01	4/26/07	2400	GW	CR	X			2

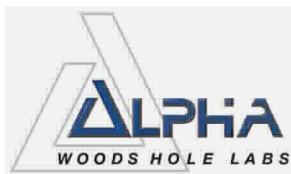
PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Container Type: VVP Preservative: BHC

Requisitioned By: [Signature] Date/Time: 4/27/07 12:00  
 Received By: [Signature] Date/Time: 4/27 18:45

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



## ANALYTICAL REPORT

Lab Number: L0706128

Client: ERM-New England  
399 Boylston Street  
6th Floor  
Boston, MA 02116

ATTN: Jeremy Picard

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Report Date: 05/09/07

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706128  
**Report Date:** 05/09/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0706128-01	MW-47S-20070426-01	WAYLAND, MA
L0706128-02	MW-113-20070426-01	WAYLAND, MA
L0706128-03	MW-115-20070426-01	WAYLAND, MA
L0706128-04	MW-118-20070426-01	WAYLAND, MA
L0706128-05	MW-405S-20070426-01	WAYLAND, MA
L0706128-06	MW-40S-20070426-01	WAYLAND, MA
L0706128-07	MW-404-20070426-01	WAYLAND, MA
L0706128-08	MW-403-20070426-01	WAYLAND, MA

Project Name: RAYTHEON WAYLAND

Lab Number: L0706128

Project Number: 0061882

Report Date: 05/09/07

### MADEP MCP Response Action Analytical Report Certification

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

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706128  
**Report Date:** 05/09/07

### Case Narrative

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

#### MCP Related Narratives:

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

It should be noted that L0706128-01 and -04 were received in the laboratory with a pH greater than two.

L0706128-08 was re-analyzed due to an over dilution on the original analysis. The results of the re-analysis are reported.

L0706128-03 and -08 have elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the samples.

In reference to question F:

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

##### Metals

In reference to question F:

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

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

Date: 05/09/07

# ORGANICS

# VOLATILES



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-01  
 Client ID: MW-47S-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/08/07 11:52  
 Analyst: MM

Date Collected: 04/26/07 08:00  
 Date Received: 04/27/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
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	0.80		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	4.4		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.94		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-01

Date Collected: 04/26/07 08:00

Client ID: MW-47S-20070426-01

Date Received: 04/27/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	106		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-02  
 Client ID: MW-113-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/08/07 12:24  
 Analyst: MM

Date Collected: 04/26/07 10:00  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	2.6		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	21		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-02  
 Client ID: MW-113-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 10:00  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	107		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-03  
 Client ID: MW-115-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/08/07 12:57  
 Analyst: MM

Date Collected: 04/26/07 11:25  
 Date Received: 04/27/07  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	12	2.5
1,1-Dichloroethane	ND		ug/l	1.9	2.5
Chloroform	ND		ug/l	1.9	2.5
Carbon tetrachloride	ND		ug/l	1.2	2.5
1,2-Dichloropropane	ND		ug/l	4.4	2.5
Dibromochloromethane	ND		ug/l	1.2	2.5
1,1,2-Trichloroethane	ND		ug/l	1.9	2.5
Tetrachloroethene	ND		ug/l	1.2	2.5
Chlorobenzene	ND		ug/l	1.2	2.5
1,2-Dichloroethane	ND		ug/l	1.2	2.5
1,1,1-Trichloroethane	72		ug/l	1.2	2.5
Bromodichloromethane	ND		ug/l	1.2	2.5
trans-1,3-Dichloropropene	ND		ug/l	1.2	2.5
cis-1,3-Dichloropropene	ND		ug/l	1.2	2.5
Bromoform	ND		ug/l	5.0	2.5
1,1,2,2-Tetrachloroethane	ND		ug/l	1.2	2.5
Chloromethane	ND		ug/l	6.2	2.5
Vinyl chloride	ND		ug/l	2.5	2.5
Chloroethane	ND		ug/l	2.5	2.5
1,1-Dichloroethene	2.6		ug/l	1.2	2.5
trans-1,2-Dichloroethene	ND		ug/l	1.9	2.5
Trichloroethene	230		ug/l	1.2	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	2.5
1,3-Dichlorobenzene	ND		ug/l	6.2	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	2.5
cis-1,2-Dichloroethene	5.9		ug/l	1.2	2.5
Dichlorodifluoromethane	ND		ug/l	12	2.5
1,2-Dibromoethane	ND		ug/l	5.0	2.5
1,3-Dichloropropane	ND		ug/l	6.2	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	1.2	2.5

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-03

Date Collected: 04/26/07 11:25

Client ID: MW-115-20070426-01

Date Received: 04/27/07

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
o-Chlorotoluene	ND		ug/l	6.2	2.5
p-Chlorotoluene	ND		ug/l	6.2	2.5
Hexachlorobutadiene	ND		ug/l	1.5	2.5
1,2,4-Trichlorobenzene	ND		ug/l	6.2	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	107		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-04  
 Client ID: MW-118-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/08/07 13:40  
 Analyst: MM

Date Collected: 04/26/07 12:30  
 Date Received: 04/27/07  
 Field Prep: Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-04

Date Collected: 04/26/07 12:30

Client ID: MW-118-20070426-01

Date Received: 04/27/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-05  
 Client ID: MW-405S-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/09/07 05:03  
 Analyst: BT

Date Collected: 04/26/07 14:20  
 Date Received: 04/27/07  
 Field Prep: Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-05  
 Client ID: MW-405S-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 14:20  
 Date Received: 04/27/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	115		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	114		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-06  
 Client ID: MW-40S-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/09/07 05:34  
 Analyst: BT

Date Collected: 04/26/07 08:32  
 Date Received: 04/27/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	0.75	1
Chloroform	3.7		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	1.3		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	1.7		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.3		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-06  
 Client ID: MW-40S-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 08:32  
 Date Received: 04/27/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	114		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-07  
 Client ID: MW-404-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/09/07 06:05  
 Analyst: BT

Date Collected: 04/26/07 12:40  
 Date Received: 04/27/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	0.80		ug/l	0.75	1
Chloroform	1.6		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.6		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-07  
 Client ID: MW-404-20070426-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/26/07 12:40  
 Date Received: 04/27/07  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-08 R  
 Client ID: MW-403-20070426-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 05/09/07 13:34  
 Analyst: BT

Date Collected: 04/26/07 16:45  
 Date Received: 04/27/07  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
Methylene chloride	ND		ug/l	25	5
1,1-Dichloroethane	ND		ug/l	3.8	5
Chloroform	ND		ug/l	3.8	5
Carbon tetrachloride	ND		ug/l	2.5	5
1,2-Dichloropropane	ND		ug/l	8.8	5
Dibromochloromethane	ND		ug/l	2.5	5
1,1,2-Trichloroethane	ND		ug/l	3.8	5
Tetrachloroethene	6.3		ug/l	2.5	5
Chlorobenzene	ND		ug/l	2.5	5
1,2-Dichloroethane	ND		ug/l	2.5	5
1,1,1-Trichloroethane	ND		ug/l	2.5	5
Bromodichloromethane	ND		ug/l	2.5	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	5
Bromoform	ND		ug/l	10	5
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	5
Chloromethane	ND		ug/l	12	5
Vinyl chloride	ND		ug/l	5.0	5
Chloroethane	ND		ug/l	5.0	5
1,1-Dichloroethene	ND		ug/l	2.5	5
trans-1,2-Dichloroethene	ND		ug/l	3.8	5
Trichloroethene	190		ug/l	2.5	5
1,2-Dichlorobenzene	ND		ug/l	12	5
1,3-Dichlorobenzene	ND		ug/l	12	5
1,4-Dichlorobenzene	ND		ug/l	12	5
cis-1,2-Dichloroethene	8.4		ug/l	2.5	5
Dichlorodifluoromethane	ND		ug/l	25	5
1,2-Dibromoethane	ND		ug/l	10	5
1,3-Dichloropropane	ND		ug/l	12	5
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	5

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-08 R

Date Collected: 04/26/07 16:45

Client ID: MW-403-20070426-01

Date Received: 04/27/07

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>Volatile Organics by MCP 8260B</b>					
o-Chlorotoluene	ND		ug/l	12	5
p-Chlorotoluene	ND		ug/l	12	5
Hexachlorobutadiene	ND		ug/l	3.0	5
1,2,4-Trichlorobenzene	ND		ug/l	12	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	129		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	114		70-130



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706128  
**Report Date:** 05/09/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/08/07 08:27  
**Analyst:** MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279510-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706128  
**Report Date:** 05/09/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/08/07 08:27  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279510-6				
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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706128  
**Report Date:** 05/09/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/08/07 08:27  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 01-04 Batch: WG279510-6				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	109		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706128  
**Report Date:** 05/09/07

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 60,8260B  
**Analytical Date:** 05/08/07 20:18  
**Analyst:** BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 05-07 Batch: WG279680-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706128  
**Report Date:** 05/09/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/08/07 20:18  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 05-07 Batch: WG279680-3				

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 WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706128  
**Report Date:** 05/09/07

**Method Blank Analysis  
 Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 05/08/07 20:18  
 Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 05-07 Batch: WG279680-3				

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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706128  
**Report Date:** 05/09/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/09/07 09:24  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
Volatile Organics by MCP 8260B for sample(s): 08 Batch: WG279711-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dichlorodifluoromethane	ND		ug/l	5.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
o-Chlorotoluene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706128  
**Report Date:** 05/09/07

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 05/09/07 09:24  
Analyst: BT

Parameter	Result	Qualifier	Units	RDL
-----------	--------	-----------	-------	-----

Volatile Organics by MCP 8260B for sample(s): 08 Batch: WG279711-3

p-Chlorotoluene	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	114		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	113		70-130



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706128

**Report Date:** 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-07 Batch: WG279680-1 WG279680-2					
Methylene chloride	106	114	70-130	7	25
1,1-Dichloroethane	106	116	70-130	9	25
Chloroform	103	111	70-130	7	25
Carbon tetrachloride	100	108	70-130	8	25
1,2-Dichloropropane	95	103	70-130	8	25
Dibromochloromethane	100	108	70-130	8	25
1,1,2-Trichloroethane	97	109	70-130	12	25
Tetrachloroethene	102	108	70-130	6	25
Chlorobenzene	99	110	70-130	11	25
Trichlorofluoromethane	115	130	70-130	12	25
1,2-Dichloroethane	106	110	70-130	4	25
1,1,1-Trichloroethane	113	116	70-130	3	25
Bromodichloromethane	94	105	70-130	11	25
trans-1,3-Dichloropropene	96	105	70-130	9	25
cis-1,3-Dichloropropene	90	99	70-130	10	25
1,1-Dichloropropene	100	107	70-130	7	25
Bromoform	98	109	70-130	11	50
1,1,1,2-Tetrachloroethane	116	125	70-130	7	25
Benzene	90	97	70-130	7	25
Toluene	98	108	70-130	10	25
Ethylbenzene	101	111	70-130	9	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706128

**Report Date:** 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-07 Batch: WG279680-1 WG279680-2					
Chloromethane	97	106	70-130	9	50
Bromomethane	70	83	70-130	17	50
Vinyl chloride	88	107	70-130	19	25
Chloroethane	98	113	70-130	14	25
1,1-Dichloroethene	98	116	70-130	17	25
trans-1,2-Dichloroethene	92	107	70-130	15	25
Trichloroethene	96	101	70-130	5	25
1,2-Dichlorobenzene	99	107	70-130	8	25
1,3-Dichlorobenzene	99	110	70-130	11	25
1,4-Dichlorobenzene	97	108	70-130	11	25
Methyl tert butyl ether	88	94	70-130	7	25
p/m-Xylene	99	109	70-130	10	25
o-Xylene	94	102	70-130	8	25
cis-1,2-Dichloroethene	106	115	70-130	8	25
Dibromomethane	92	98	70-130	6	25
1,2,3-Trichloropropane	122	130	70-130	6	25
Styrene	96	104	70-130	8	25
Dichlorodifluoromethane	110	120	70-130	9	50
Acetone	127	127	70-130	0	50
Carbon disulfide	71	81	70-130	13	25
2-Butanone	99	103	70-130	4	50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706128

**Project Number:** 0061882

**Report Date:** 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-07 Batch: WG279680-1 WG279680-2					
4-Methyl-2-pentanone	92	98	70-130	6	50
2-Hexanone	111	112	70-130	1	50
Bromochloromethane	98	106	70-130	8	25
Tetrahydrofuran	98	100	70-130	2	25
2,2-Dichloropropane	100	108	70-130	8	50
1,2-Dibromoethane	97	107	70-130	10	25
1,3-Dichloropropane	107	112	70-130	5	25
1,1,1,2-Tetrachloroethane	104	113	70-130	8	25
Bromobenzene	97	107	70-130	10	25
n-Butylbenzene	99	110	70-130	11	25
sec-Butylbenzene	100	112	70-130	11	25
tert-Butylbenzene	101	113	70-130	11	25
o-Chlorotoluene	101	113	70-130	11	25
p-Chlorotoluene	105	117	70-130	11	25
1,2-Dibromo-3-chloropropane	113	124	70-130	9	50
Hexachlorobutadiene	88	96	70-130	9	25
Isopropylbenzene	109	119	70-130	9	25
p-Isopropyltoluene	106	115	70-130	8	25
Naphthalene	95	103	70-130	8	25
n-Propylbenzene	103	113	70-130	9	25
1,2,3-Trichlorobenzene	94	96	70-130	2	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706128

**Report Date:** 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 05-07 Batch: WG279680-1 WG279680-2					
1,2,4-Trichlorobenzene	88	96	70-130	9	25
1,3,5-Trimethylbenzene	104	114	70-130	9	25
1,2,4-Trimethylbenzene	105	115	70-130	9	25
Ethyl ether	86	95	70-130	10	25
Isopropyl Ether	97	103	70-130	6	25
Ethyl-Tert-Butyl-Ether	81	83	70-130	2	25
Tertiary-Amyl Methyl Ether	100	106	70-130	6	25
1,4-Dioxane	97	100	70-130	3	50

Surrogate	LCS %Recovery Qualifier	LCSD %Recovery Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118	112	70-130
Toluene-d8	112	110	70-130
4-Bromofluorobenzene	100	98	70-130
Dibromofluoromethane	112	114	70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0706128

**Project Number:** 0061882

**Report Date:** 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 08 Batch: WG279711-1 WG279711-2					
Methylene chloride	114	111	70-130	3	25
1,1-Dichloroethane	114	111	70-130	3	25
Chloroform	117	108	70-130	8	25
Carbon tetrachloride	118	110	70-130	7	25
1,2-Dichloropropane	99	95	70-130	4	25
Dibromochloromethane	104	108	70-130	4	25
1,1,2-Trichloroethane	99	102	70-130	3	25
Tetrachloroethene	110	106	70-130	4	25
Chlorobenzene	107	101	70-130	6	25
1,2-Dichloroethane	110	103	70-130	7	25
1,1,1-Trichloroethane	123	111	70-130	10	25
Bromodichloromethane	104	99	70-130	5	25
trans-1,3-Dichloropropene	104	101	70-130	3	25
cis-1,3-Dichloropropene	91	92	70-130	1	25
Bromoform	99	112	70-130	12	50
1,1,1,2-Tetrachloroethane	115	120	70-130	4	25
Chloromethane	105	98	70-130	7	50
Vinyl chloride	96	101	70-130	5	25
Chloroethane	95	98	70-130	3	25
1,1-Dichloroethene	109	110	70-130	1	25
trans-1,2-Dichloroethene	103	101	70-130	2	25

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0061882

Lab Number: L0706128

Report Date: 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organics by MCP 8260B Associated sample(s): 08 Batch: WG279711-1 WG279711-2					
Trichloroethene	103	96	70-130	7	25
1,2-Dichlorobenzene	108	105	70-130	3	25
1,3-Dichlorobenzene	110	107	70-130	3	25
1,4-Dichlorobenzene	108	106	70-130	2	25
cis-1,2-Dichloroethene	110	105	70-130	5	25
Dichlorodifluoromethane	118	110	70-130	7	50
1,2-Dibromoethane	97	102	70-130	5	25
1,3-Dichloropropane	106	108	70-130	2	25
1,1,1,2-Tetrachloroethane	112	113	70-130	1	25
o-Chlorotoluene	113	110	70-130	3	25
p-Chlorotoluene	118	114	70-130	3	25
Hexachlorobutadiene	96	88	70-130	9	25
1,2,4-Trichlorobenzene	94	94	70-130	0	25

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		115		70-130
Toluene-d8	109		108		70-130
4-Bromofluorobenzene	102		103		70-130
Dibromofluoromethane	113		111		70-130

# METALS



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-02

Date Collected: 04/26/07 10:00

Client ID: MW-113-20070426-01

Date Received: 04/27/07

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										
Sodium, Dissolved	38		mg/l	2.0	1	05/02/07 17:30	05/03/07 19:20	EPA 3005A	60,6010B	MG





**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0706128**Project Number:** 0061882**Report Date:** 05/09/07**SAMPLE RESULTS**

Lab ID: L0706128-03

Date Collected: 04/26/07 11:25

Client ID: MW-115-20070426-01

Date Received: 04/27/07

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										
Sodium, Dissolved	59		mg/l	2.0	1	05/02/07 17:30	05/03/07 19:23	EPA 3005A	60,6010B	MG



Project Name: RAYTHEON WAYLAND

Lab Number: L0706128

Project Number: 0061882

Report Date: 05/09/07

## 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): 02-03 Batch: WG278913-1									
Sodium, Dissolved	ND		mg/l	2.0	1	05/02/07 17:30	05/03/07 18:52	60,6010B	MG

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0061882

**Lab Number:** L0706128

**Report Date:** 05/09/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals by MCP 6000/7000 series Associated sample(s): 02-03 Batch: WG278913-2 WG278913-3					
Sodium, Dissolved	96	95	80-120	1	20

Project Name: RAYTHEON WAYLAND

Lab Number: L0706128

Project Number: 0061882

Report Date: 05/09/07

## 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
L0706128-01A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-01B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-02A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-02B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-02C	Plastic 250ml HNO3 preserved	A	<2	2.8 C	Y	Absent	MCP-NA-6010S
L0706128-03A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-03B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-03C	Plastic 250ml HNO3 preserved	A	<2	2.8 C	Y	Absent	MCP-NA-6010S
L0706128-04A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-04B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-05A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-05B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-06A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-06B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-07A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-07B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-08A	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04
L0706128-08B	Vial HCl preserved	A	N/A	2.8 C	Y	Absent	MCP-8260-04

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706128  
**Report Date:** 05/09/07

## GLOSSARY

### Acronyms

- EPA - Environmental Protection Agency.  
LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  
LCSD- Laboratory Control Sample Duplicate: Refer to LCS.  
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.  
MSD - Matrix Spike Sample Duplicate: Refer to MS.  
NA - Not Applicable.  
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.)

Report Format: Not Specified



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0061882

**Lab Number:** L0706128  
**Report Date:** 05/09/07

## 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.



