

**Environmental  
Resources  
Management**

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

18 May 2010  
Reference: 0114119

Mr. Anthony DeLuca  
The Koffler Group  
10 Memorial Drive  
Suite 901  
Providence, RI 02903



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

Dear Mr. DeLuca:

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

ERM collected groundwater samples from 71 wells on portions of the Site within the boundaries of your property on 19, 20, 21, and 22 April 2010. Samples were submitted to Alpha Analytical, Inc. of Westborough, Massachusetts for analysis of chlorinated volatile organic compounds by US EPA Method 8260B, sulfate by US EPA Method 9038, total organic carbon by US EPA Method 9060, and/or dissolved sodium and potassium by US EPA Method 6010B. Additionally, ERM used a colorimetric method to analyze groundwater samples from another 28 monitoring wells. Analytical results are attached to this letter. These analytical data will be provided to the Massachusetts Department of Environmental Protection in the next required MCP submittal.

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

If you have any questions or comments, please contact the undersigned at (617) 646-7800 or Jonathan Hone, Raytheon Company, at (978) 436-8298.

Sincerely,



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

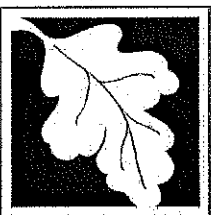


Jason D. Flattery, P.E.  
*Project Manager*

jdf

enclosures: BWSC-123 - Notice of Environmental Sampling  
Laboratory analytical reports

cc: Jonathan Hone, Raytheon Company  
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 13302

### 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: The Koffler Group  
2. Street Address: 10 Memorial Drive, Suite 901  
City/Town: Providence, RI Zip Code: 02903

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

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

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

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

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

- |   |   |
|---|---|
| <input type="checkbox"/> Immediate Response Action              | <input type="checkbox"/> Phase III Feasibility Evaluation                   |
| <input type="checkbox"/> Release Abatement Measure              | <input type="checkbox"/> Phase IV Remedy Implementation Plan                |
| <input type="checkbox"/> Utility-related Abatement Measure      | <input checked="" type="checkbox"/> Phase V/Remedy Operation Status         |
| <input type="checkbox"/> Phase I Initial Site Investigation     | <input type="checkbox"/> Post-Class C Operation, Maintenance and Monitoring |
| <input type="checkbox"/> Phase II Comprehensive Site Assessment | <input type="checkbox"/> Other _____<br>(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, T-3033  
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:	L1005660
Client:	ERM Consulting & Engineering, Inc. 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Phone:	(617) 646-7816
Project Name:	RAYTHEON WAYLAND
Project Number:	0114119
Report Date:	04/26/10

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005660  
**Report Date:** 04/26/10

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1005660-01	MW-201M-20100419-01	WAYLAND, MA	04/19/10 15:30
L1005660-02	DUP-001-20100419-10	WAYLAND, MA	04/19/10 11:11
L1005660-03	TB-001-20100419-01	WAYLAND, MA	04/19/10 00:00
L1005660-04	MW-40-20100419-01	WAYLAND, MA	04/19/10 14:10
L1005660-05	MW-40S-20100419-01	WAYLAND, MA	04/19/10 14:50
L1005660-06	MW-207D-20100419-01	WAYLAND, MA	04/19/10 15:10
L1005660-07	IW-8-20100419-01	WAYLAND, MA	04/19/10 15:30
L1005660-08	IW-5-20100419-01	WAYLAND, MA	04/19/10 15:35

Project Name: RAYTHEON WAYLAND

Lab Number: L1005660

Project Number: 0114119

Report Date: 04/26/10

**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 through F is required for "Presumptive Certainty" status</b>		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

<b>A response to questions G, H and I is required for "Presumptive Certainty" status</b>		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	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:** 0114119

**Lab Number:** L1005660  
**Report Date:** 04/26/10

### Case Narrative

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

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

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

For additional information, please contact Client Services at 800-624-9220.

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#### MCP Related Narratives

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

L1005660-01 through -08 were processed against a calibration curve that utilized a quadratic fit for 1,1,1-Trichloroethane, Carbon tetrachloride, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Dibromochloromethane, 1,2-Dibromoethane, 1,1,1,2-Tetrachloroethane, Bromoform and Hexachlorobutadiene.

L1005660-08 has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005660  
**Report Date:** 04/26/10

### Case Narrative (continued)

In reference to question G:

L1005660-01 through -08: One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question I:

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

Metals

In reference to question I:

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

Non-MCP Related Narratives

Total Organic Carbon

L1005660-07 has an elevated detection limit due to the dilution required by the sample matrix.

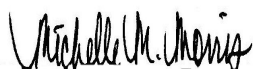
L1005660-08 has an elevated detection limit due to the dilution required by the elevated concentration present in the sample.

Sulfate

L1005660-07 has an elevated detection limit due to the dilution required to quantitate the result within the calibration range.

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:



Michelle M. Morris

Title: Technical Director/Representative

Date: 04/26/10

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

**Lab ID:** L1005660-01  
**Client ID:** MW-201M-20100419-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/24/10 08:53  
**Analyst:** MM

**Date Collected:** 04/19/10 15:30  
**Date Received:** 04/19/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	21		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	5.3		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

Lab ID: L1005660-01

Date Collected: 04/19/10 15:30

Client ID: MW-201M-20100419-01

Date Received: 04/19/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	92		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

**Lab ID:** L1005660-02  
**Client ID:** DUP-001-20100419-10  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/24/10 09:25  
**Analyst:** MM

**Date Collected:** 04/19/10 11:11  
**Date Received:** 04/19/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	22		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	5.7		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

Lab ID: L1005660-02

Date Collected: 04/19/10 11:11

Client ID: DUP-001-20100419-10

Date Received: 04/19/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	97		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

**Lab ID:** L1005660-03  
**Client ID:** TB-001-20100419-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/24/10 08:22  
**Analyst:** MM

**Date Collected:** 04/19/10 00:00  
**Date Received:** 04/19/10  
**Field Prep:** Not Specified

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



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

Lab ID: L1005660-03  
 Client ID: TB-001-20100419-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/19/10 00:00  
 Date Received: 04/19/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	94		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005660  
**Report Date:** 04/26/10

### SAMPLE RESULTS

**Lab ID:** L1005660-04  
**Client ID:** MW-40-20100419-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/24/10 09:57  
**Analyst:** MM

**Date Collected:** 04/19/10 14:10  
**Date Received:** 04/19/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	2.4		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

Lab ID: L1005660-04  
 Client ID: MW-40-20100419-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/19/10 14:10  
 Date Received: 04/19/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	97		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

**Lab ID:** L1005660-05  
**Client ID:** MW-40S-20100419-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/24/10 10:29  
**Analyst:** MM

**Date Collected:** 04/19/10 14:50  
**Date Received:** 04/19/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	11		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	ND		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

Lab ID: L1005660-05  
 Client ID: MW-40S-20100419-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/19/10 14:50  
 Date Received: 04/19/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	102		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

**Lab ID:** L1005660-06  
**Client ID:** MW-207D-20100419-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/24/10 11:00  
**Analyst:** MM

**Date Collected:** 04/19/10 15:10  
**Date Received:** 04/19/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	3.5		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	2.7		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

Lab ID: L1005660-06

Date Collected: 04/19/10 15:10

Client ID: MW-207D-20100419-01

Date Received: 04/19/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005660  
**Report Date:** 04/26/10

### SAMPLE RESULTS

**Lab ID:** L1005660-07  
**Client ID:** IW-8-20100419-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/24/10 11:32  
**Analyst:** MM

**Date Collected:** 04/19/10 15:30  
**Date Received:** 04/19/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	11		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	7.0		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

Lab ID: L1005660-07  
 Client ID: IW-8-20100419-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/19/10 15:30  
 Date Received: 04/19/10  
 Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

**Lab ID:** L1005660-08      D  
**Client ID:** IW-5-20100419-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/24/10 12:04  
**Analyst:** MM

**Date Collected:** 04/19/10 15:35  
**Date Received:** 04/19/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	100	20
1,1-Dichloroethane	ND		ug/l	20	20
Chloroform	ND		ug/l	20	20
Carbon tetrachloride	ND		ug/l	20	20
1,2-Dichloropropane	ND		ug/l	20	20
Dibromochloromethane	ND		ug/l	20	20
1,1,2-Trichloroethane	ND		ug/l	20	20
Tetrachloroethene	22		ug/l	20	20
Chlorobenzene	ND		ug/l	20	20
1,2-Dichloroethane	ND		ug/l	20	20
1,1,1-Trichloroethane	ND		ug/l	20	20
Bromodichloromethane	ND		ug/l	20	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	20	20
Chloromethane	ND		ug/l	40	20
Vinyl chloride	ND		ug/l	20	20
Chloroethane	ND		ug/l	40	20
1,1-Dichloroethene	ND		ug/l	20	20
trans-1,2-Dichloroethene	ND		ug/l	20	20
Trichloroethene	910		ug/l	20	20
1,2-Dichlorobenzene	ND		ug/l	20	20
1,3-Dichlorobenzene	ND		ug/l	20	20
1,4-Dichlorobenzene	ND		ug/l	20	20
cis-1,2-Dichloroethene	620		ug/l	20	20
Dichlorodifluoromethane	ND		ug/l	40	20
1,2-Dibromoethane	ND		ug/l	40	20
1,3-Dichloropropane	ND		ug/l	40	20
1,1,1,2-Tetrachloroethane	ND		ug/l	20	20

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

Lab ID: L1005660-08 D

Date Collected: 04/19/10 15:35

Client ID: IW-5-20100419-01

Date Received: 04/19/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	40	20
p-Chlorotoluene	ND		ug/l	40	20
Hexachlorobutadiene	ND		ug/l	12	20
1,2,4-Trichlorobenzene	ND		ug/l	40	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	98		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005660  
**Report Date:** 04/26/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/24/10 07:50  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-08 Batch: WG409636-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
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	1.0
Chloromethane	ND		ug/l	2.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
o-Chlorotoluene	ND		ug/l	2.0

Project Name: RAYTHEON WAYLAND

Lab Number: L1005660

Project Number: 0114119

Report Date: 04/26/10

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 97,8260B  
 Analytical Date: 04/24/10 07:50  
 Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-08 Batch: WG409636-3				
p-Chlorotoluene	ND		ug/l	2.0
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.0

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	93		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005660

**Project Number:** 0114119

**Report Date:** 04/26/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-08 Batch: WG409636-1 WG409636-2								
Methylene chloride	104		105		70-130	1		20
1,1-Dichloroethane	94		91		70-130	3		20
Chloroform	93		91		70-130	2		20
Carbon tetrachloride	97		88		70-130	10		20
1,2-Dichloropropane	86		88		70-130	2		20
Dibromochloromethane	98		92		70-130	6		20
1,1,2-Trichloroethane	97		99		70-130	2		20
Tetrachloroethene	100		98		70-130	2		20
Chlorobenzene	98		95		70-130	3		20
1,2-Dichloroethane	94		95		70-130	1		20
1,1,1-Trichloroethane	95		90		70-130	5		20
Bromodichloromethane	108		103		70-130	5		20
trans-1,3-Dichloropropene	100		92		70-130	8		20
cis-1,3-Dichloropropene	84		84		70-130	0		20
Bromoform	109		101		70-130	8		20
1,1,2,2-Tetrachloroethane	104		104		70-130	0		20
Chloromethane	90		90		70-130	0		20
Vinyl chloride	104		100		70-130	4		20
Chloroethane	99		96		70-130	3		20
1,1-Dichloroethene	96		93		70-130	3		20
trans-1,2-Dichloroethene	90		89		70-130	1		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L1005660

Project Number: 0114119

Report Date: 04/26/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-08 Batch: WG409636-1 WG409636-2								
Trichloroethene	84		86		70-130	2		20
1,2-Dichlorobenzene	106		105		70-130	1		20
1,3-Dichlorobenzene	106		103		70-130	3		20
1,4-Dichlorobenzene	107		105		70-130	2		20
cis-1,2-Dichloroethene	98		93		70-130	5		20
Dichlorodifluoromethane	87		86		70-130	1		20
1,2-Dibromoethane	100		96		70-130	4		20
1,3-Dichloropropane	88		90		70-130	2		20
1,1,1,2-Tetrachloroethane	106		100		70-130	6		20
o-Chlorotoluene	101		98		70-130	3		20
p-Chlorotoluene	104		101		70-130	3		20
Hexachlorobutadiene	107		109		70-130	2		20
1,2,4-Trichlorobenzene	103		105		70-130	2		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	99		103		70-130
Toluene-d8	108		104		70-130
4-Bromofluorobenzene	97		97		70-130
Dibromofluoromethane	97		99		70-130

# METALS



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

Lab ID: L1005660-07

Date Collected: 04/19/10 15:30

Client ID: IW-8-20100419-01

Date Received: 04/19/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	4.6		mg/l	2.5	1	04/21/10 12:10	04/22/10 17:07	EPA 3005A	97,6010B	AI
Sodium, Dissolved	35		mg/l	2.0	1	04/21/10 12:10	04/22/10 17:07	EPA 3005A	97,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

Lab ID: L1005660-08

Date Collected: 04/19/10 15:35

Client ID: IW-5-20100419-01

Date Received: 04/19/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	300		mg/l	2.5	1	04/21/10 12:10	04/22/10 17:10	EPA 3005A	97,6010B	AI
Sodium, Dissolved	72		mg/l	2.0	1	04/21/10 12:10	04/22/10 17:10	EPA 3005A	97,6010B	AI



Project Name: RAYTHEON WAYLAND

Lab Number: L1005660

Project Number: 0114119

Report Date: 04/26/10

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 07-08 Batch: WG409122-1								
Potassium, Dissolved	ND	mg/l	2.5	1	04/21/10 12:10	04/22/10 16:41	97,6010B	AI
Sodium, Dissolved	ND	mg/l	2.0	1	04/21/10 12:10	04/22/10 16:41	97,6010B	AI

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0114119

**Lab Number:** L1005660

**Report Date:** 04/26/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 07-08 Batch: WG409122-2 WG409122-3								
Potassium, Dissolved	110		100		80-120	10		20
Sodium, Dissolved	100		100		80-120	0		20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

**Lab ID:** L1005660-07  
**Client ID:** IW-8-20100419-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/19/10 15:30  
**Date Received:** 04/19/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Sulfate	57		mg/l	20	2	04/20/10 11:30	04/20/10 11:30	30,4500SO4-E	SD
Total Organic Carbon	1.5		mg/l	1.0	2	-	04/20/10 07:18	1,9060	DW



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005660**Project Number:** 0114119**Report Date:** 04/26/10**SAMPLE RESULTS**

**Lab ID:** L1005660-08  
**Client ID:** IW-5-20100419-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/19/10 15:35  
**Date Received:** 04/19/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Sulfate	ND		mg/l	10	1	04/20/10 11:30	04/20/10 11:30	30,4500SO4-E	SD
Total Organic Carbon	360		mg/l	32	64	-	04/20/10 07:18	1,9060	DW



Project Name: RAYTHEON WAYLAND

Lab Number: L1005660

Project Number: 0114119

Report Date: 04/26/10

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

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 07-08 Batch: WG408949-1								
Total Organic Carbon	ND	mg/l	0.50	1	-	04/20/10 07:18	1,9060	DW
General Chemistry - Westborough Lab for sample(s): 07-08 Batch: WG409107-1								
Sulfate	ND	mg/l	10	1	04/20/10 11:30	04/20/10 11:30	30,4500SO4-E	SD



## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005660

**Project Number:** 0114119

**Report Date:** 04/26/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 07-08 Batch: WG408949-2								
Total Organic Carbon	95		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 07-08 Batch: WG409107-2								
Sulfate	105		-		90-115	-		

**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005660

**Project Number:** 0114119

**Report Date:** 04/26/10

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>MSD Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>MSD Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>RPD Qual</b>	<b>RPD Limits</b>
General Chemistry - Westborough Lab Associated sample(s): 07-08 QC Batch ID: WG408949-3 QC Sample: L1005660-08 Client ID: IW-5-20100419-01												
Total Organic Carbon	360	1020	1500	108	-	-	-	-	80-120	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 07-08 QC Batch ID: WG409107-3 QC Sample: L1005660-07 Client ID: IW-8-20100419-01												
Sulfate	57	100	130	72	-	-	-	-	55-147	-	-	14

## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0114119

**Lab Number:** L1005660

**Report Date:** 04/26/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 07-08 QC Batch ID: WG408949-4 QC Sample: L1005660-08 Client ID: IW-5-20100419-01						
Total Organic Carbon	360	360	mg/l	0		20
General Chemistry - Westborough Lab Associated sample(s): 07-08 QC Batch ID: WG409107-4 QC Sample: L1005660-07 Client ID: IW-8-20100419-01						
Sulfate	57	56	mg/l	2		14

Project Name: RAYTHEON WAYLAND

Lab Number: L1005660

Project Number: 0114119

Report Date: 04/26/10

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

## Cooler Information Custody Seal

## Cooler

A Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis
L1005660-01A	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1005660-01B	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1005660-02A	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1005660-02B	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1005660-03A	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1005660-04A	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1005660-04B	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1005660-05A	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1005660-05B	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1005660-06A	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1005660-06B	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1005660-07A	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1005660-07B	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1005660-07C	Vial H2SO4 preserved	A	N/A	3.0	Y	Absent	TOC-9060(28)
L1005660-07D	Vial H2SO4 preserved	A	N/A	3.0	Y	Absent	TOC-9060(28)
L1005660-07E	Plastic 250ml unpreserved	A	7	3.0	Y	Absent	SO4-4500(28)
L1005660-07F	Plastic 250ml HNO3 preserved	A	<2	3.0	Y	Absent	MCP-NA-6010S-10(180),MCP-K-6010S-10(180)
L1005660-08A	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1005660-08B	Vial HCl preserved	A	N/A	3.0	Y	Absent	MCP-8260-10(14)
L1005660-08C	Vial H2SO4 preserved	A	N/A	3.0	Y	Absent	TOC-9060(28)
L1005660-08D	Vial H2SO4 preserved	A	N/A	3.0	Y	Absent	TOC-9060(28)
L1005660-08E	Plastic 250ml unpreserved	A	10	3.0	Y	Absent	SO4-4500(28)
L1005660-08F	Plastic 250ml HNO3 preserved	A	<2	3.0	Y	Absent	MCP-NA-6010S-10(180),MCP-K-6010S-10(180)

\*Hold days indicated by values in parentheses

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005660  
**Report Date:** 04/26/10

## 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.
- NI** - Not Ignitable.
- 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

- 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 at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to 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.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RDL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reported detection limit (RDL) for the sample.

Report Format: Data Usability Report



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005660  
**Report Date:** 04/26/10

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIB, July 2010.

## LIMITATION OF LIABILITIES

Alpha Analytical 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 Analytical 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.



## Certificate/Approval Program Summary

Last revised March 16, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.  
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

### Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

*Drinking Water* (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Haloacetic Acids, Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB).)

*Wastewater/Non-Potable Water* (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Calcium Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH.)

*Solid Waste/Soil* (Inorganic Parameters: Lead in Paint, pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), Reactivity. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

### Maine Department of Human Services Certificate/Lab ID: 2009024.

*Drinking Water* (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500CI-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1. Organic Parameters: 504.1, 524.2, SM 6251B.)

*Wastewater/Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624.)

### Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

*Drinking Water*

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

*Non-Potable Water*

Inorganic Parameters: (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

**New Hampshire Department of Environmental Services** Certificate/Lab ID: 200307. **NELAP Accredited.**

*Drinking Water* (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)

*Non-Potable Water* (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

**New Jersey Department of Environmental Protection** Certificate/Lab ID: MA935. **NELAP Accredited.**

*Drinking Water* (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

**New York Department of Health** Certificate/Lab ID: 11148. **NELAP Accredited.**

*Drinking Water* (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

**North Carolina Department of the Environment and Natural Resources** Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.**Pennsylvania Department of Environmental Protection** Certificate/Lab ID : 68-03671. **NELAP Accredited.**

*Non-Potable Water* (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

**Rhode Island Department of Health** Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.



**Texas Commission on Environmental Quality** Certificate/Lab ID: T104704476-09-1. NELAP Accredited.

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH<sub>3</sub>-H, 4500NO<sub>2</sub>B, 4500P-E, 4500 S<sup>2-</sup> D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

**Utah Department of Health** Certificate/Lab ID: AAMA. NELAP Accredited.

*Non-Potable Water* (Inorganic Parameters: Chloride EPA 300.0)

**Department of Defense** Certificate/Lab ID: L2217.

*Drinking Water* (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 314, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LCHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO<sub>4</sub>-E, 426C, 4500NH<sub>3</sub>-B, 4500NH<sub>3</sub>-H, 4500NO<sub>3</sub>-F, 4500NO<sub>2</sub>-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S<sub>2</sub>-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035.)

**Analytes Not Accredited by NELAP**

Certification is not available by NELAP for the following analytes: **EPA 8260B**: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.



# CHAIN OF CUSTODY

Page 1 of 1

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

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

### Client Information

Client: GRM

Address: 399 Baylston St.

6th Floor Boston, MA

Phone: (617) 644-7900

Fax: (617) 817-6447

Email: jason.flattery@grm.com

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

### Project Information

Project Name: Northem Wayland

Project Location: Wayland, MA

Project #: 0114119

Project Manager: Jason Flattery

ALPHA Quote #:

Turn-Around Time

Standard  RUSH (only confirmed if pre-approved)

Date Due: 4/30/10 Time:

Date Rec'd in Lab: 4/19/10

### Report Information - Data Deliverables

FAX  EMAIL

ADEX  Add'l Deliverables

### Regulatory Requirements/Report Limits

State / Fed Program Criteria

MA MCP GW-2

### MA MCP PRESUMPTIVE CERTAINTY - CT REASONABLE CONFIDENCE PROTO.

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

ALPHA Job # 4005000

### Billing Information

Same as Client info PO #:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		

TOTAL # BOTTLES	ANALYSIS		SAMPLE HANDLING
	8021B by 8260	DISS. Na+K	
			<input checked="" type="checkbox"/> Done <input type="checkbox"/> Not needed Na+K
			<input type="checkbox"/> Lab to do
			<input type="checkbox"/> Preservation
			<input type="checkbox"/> Lab to do
			<small>(Please specify below)</small>
			Sample Specific Comments

<u>Staged. 1</u>	<u>MMW-201M-20100419-01</u>	<u>4/19/10</u>	<u>1530</u>	<u>GW</u>	<u>EW</u>	<u>2</u>													
<u>2</u>	<u>DWP-001-20100419-01</u>	<u>4/19/10</u>	<u>1111</u>	<u>GW</u>	<u>EW</u>	<u>2</u>													
<u>3</u>	<u>TR-001-20100419-01</u>	<u>4/21/10</u>	<u>1234</u>	<u>—</u>	<u>PC</u>	<u>1</u>													
<u>4</u>	<u>MMW-40-20100419-01</u>	<u>4/19/10</u>	<u>1410</u>	<u>GW</u>	<u>TN</u>	<u>2</u>													
<u>5</u>	<u>MMW-40S-20100419-01</u>	<u>4/19/10</u>	<u>1450</u>	<u>GW</u>	<u>TN</u>	<u>2</u>													
<u>6</u>	<u>MMW-207D-20100419-01</u>	<u>4/19/10</u>	<u>1510</u>	<u>GW</u>	<u>EC</u>	<u>2</u>													
<u>7</u>	<u>TW-8-20100419-01</u>	<u>4/19/10</u>	<u>1430</u>	<u>GW</u>	<u>EG</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>2</u>										
<u>8</u>	<u>TW-S-20100419-01</u>	<u>4/19/10</u>	<u>1535</u>	<u>GW</u>	<u>EG</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>2</u>										

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
MA MCP or CT RCP?

Relinquished By: [Signature]

Date/Time: 4/19/10 1555

Received By: [Signature]

Date/Time: 4/19/10 1555

FORM NO: 01-01 (rev. 14-OCT-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 Terms and Conditions. See reverse side.



## ANALYTICAL REPORT

Lab Number:	L1005710
Client:	ERM Consulting & Engineering, Inc. 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Phone:	(617) 646-7816
Project Name:	RAYTHEON WAYLAND
Project Number:	0114119
Report Date:	04/27/10

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005710  
**Report Date:** 04/27/10

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1005710-01	MW-201D-20100419-01	WAYLAND, MA	04/19/10 16:35
L1005710-02	MW-201S-20100420-01	WAYLAND, MA	04/20/10 09:25
L1005710-03	MW-207S-20100420-01	WAYLAND, MA	04/20/10 08:40
L1005710-04	MW-205M-20100420-01	WAYLAND, MA	04/20/10 09:18
L1005710-05	DUP-003-20100420-01	WAYLAND, MA	04/20/10 00:00
L1005710-06	TB-002-20100420-01	WAYLAND, MA	04/20/10 00:00
L1005710-07	MW-207M-20100420-01	WAYLAND, MA	04/20/10 10:10
L1005710-08	DUP-004-20100420-01	WAYLAND, MA	04/20/10 07:00
L1005710-09	MW-205D-20100420-01	WAYLAND, MA	04/20/10 11:09
L1005710-10	MW-202D-20100420-01	WAYLAND, MA	04/20/10 11:35
L1005710-11	MW-404-20100420-01	WAYLAND, MA	04/20/10 12:05
L1005710-12	MW-405S-20100420-01	WAYLAND, MA	04/20/10 12:40
L1005710-13	MW-117-20100420-01	WAYLAND, MA	04/20/10 13:30
L1005710-14	MW-118-20100420-01	WAYLAND, MA	04/20/10 11:40
L1005710-15	MW-202S-20100420-01	WAYLAND, MA	04/20/10 14:20
L1005710-16	MW-561-20100420-01	WAYLAND, MA	04/20/10 15:50
L1005710-17	MW-266MA-20100420-01	WAYLAND, MA	04/20/10 10:15
L1005710-18	MW-266MB-20100420-01	WAYLAND, MA	04/20/10 08:40
L1005710-19	MW-105M-20100420-01	WAYLAND, MA	04/20/10 12:25
L1005710-20	MW-105-20100420-01	WAYLAND, MA	04/20/10 11:10

Project Name: RAYTHEON WAYLAND

Lab Number: L1005710

Project Number: 0114119

Report Date: 04/27/10

**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 through F is required for "Presumptive Certainty" status</b>		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
<b>A response to questions G, H and I is required for "Presumptive Certainty" status</b>		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	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:** 0114119

**Lab Number:** L1005710  
**Report Date:** 04/27/10

### Case Narrative

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

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

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

For additional information, please contact Client Services at 800-624-9220.

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#### MCP Related Narratives

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

L1005710-01 through -04, -07 through -10, and -13 through -20 were processed against a calibration curve that utilized a quadratic fit for Carbon tetrachloride, Dibromochloromethane, 1,1,1-Trichloroethane, trans-1,3-Dichloropropene, cis-1,3-Dichloropropene, Bromoform, 1,2-Dibromoethane, 1,1,1,2-Tetrachloroethane, and Hexachlorobutadiene.

L1005710-04, -16, and -18 have elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the samples.

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005710  
**Report Date:** 04/27/10

### Case Narrative (continued)

L1005710-05 was re-analyzed on dilution in order to quantitate the sample within the calibration range. The result should be considered estimated, and is qualified with an E flag, for any compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound that exceeded the calibration range.

In reference to question H:

The continuing calibration standard, associated with L1005710-01 through -04, -07 through -10, and -13 through -20, had a response for Dichlorodifluoromethane (22%D) above the acceptance criteria for the method, but within overall method criteria.

The continuing calibration standard, associated with L1005710-06, -11, and -12, had responses for Dichlorodifluoromethane (23%D), Bromodichloromethane (21%D), Bromoform (28%D), and 1,2,4-Trichlorobenzene (23%D) above the method criteria. The associated samples were non-detect, therefore no further action was taken.

The WG409674-2 LCSD recovery, associated with L1005710-06, -11, and -12, was above the acceptance criteria for Bromoform (138%); however, the associated samples were non-detect for this target compound. The results of the original analysis are reported.

The WG409674-1/-2 LCS/LCSD RPDs are above the acceptance criteria for Hexachlorobutadiene (23%) and 1,2,4-Trichlorobenzene (24%); however, the individual LCS/LCSD recoveries are within method limits.

#### Metals

In reference to question I:

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

#### Non-MCP Related Narratives

##### Total Organic Carbon

L1005710-16 has an elevated detection limit due to the dilution required by the sample matrix.

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:

 Lisa Westerlind

Title: Technical Director/Representative

Date: 04/27/10

# ORGANICS



# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-01  
**Client ID:** MW-201D-20100419-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 09:22  
**Analyst:** MM

**Date Collected:** 04/19/10 16:35  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-01

Date Collected: 04/19/10 16:35

Client ID: MW-201D-20100419-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	92		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-02  
**Client ID:** MW-201S-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 09:54  
**Analyst:** MM

**Date Collected:** 04/20/10 09:25  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	3.2		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-02

Date Collected: 04/20/10 09:25

Client ID: MW-201S-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	95		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-03  
**Client ID:** MW-207S-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 10:26  
**Analyst:** MM

**Date Collected:** 04/20/10 08:40  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	1.4		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	1.2		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-03

Date Collected: 04/20/10 08:40

Client ID: MW-207S-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	97		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-04 D  
**Client ID:** MW-205M-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 10:57  
**Analyst:** MM

**Date Collected:** 04/20/10 09:18  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	12	2.5
1,1-Dichloroethane	ND		ug/l	2.5	2.5
Chloroform	ND		ug/l	2.5	2.5
Carbon tetrachloride	ND		ug/l	2.5	2.5
1,2-Dichloropropane	ND		ug/l	2.5	2.5
Dibromochloromethane	ND		ug/l	2.5	2.5
1,1,2-Trichloroethane	ND		ug/l	2.5	2.5
Tetrachloroethene	ND		ug/l	2.5	2.5
Chlorobenzene	ND		ug/l	2.5	2.5
1,2-Dichloroethane	ND		ug/l	2.5	2.5
1,1,1-Trichloroethane	53		ug/l	2.5	2.5
Bromodichloromethane	ND		ug/l	2.5	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	2.5	2.5
Chloromethane	ND		ug/l	5.0	2.5
Vinyl chloride	ND		ug/l	2.5	2.5
Chloroethane	ND		ug/l	5.0	2.5
1,1-Dichloroethene	3.0		ug/l	2.5	2.5
trans-1,2-Dichloroethene	ND		ug/l	2.5	2.5
Trichloroethene	210		ug/l	2.5	2.5
1,2-Dichlorobenzene	ND		ug/l	2.5	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5	2.5
cis-1,2-Dichloroethene	ND		ug/l	2.5	2.5
Dichlorodifluoromethane	ND		ug/l	5.0	2.5
1,2-Dibromoethane	ND		ug/l	5.0	2.5
1,3-Dichloropropane	ND		ug/l	5.0	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	2.5



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-04 D  
 Client ID: MW-205M-20100420-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/20/10 09:18  
 Date Received: 04/20/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	5.0	2.5
p-Chlorotoluene	ND		ug/l	5.0	2.5
Hexachlorobutadiene	ND		ug/l	1.5	2.5
1,2,4-Trichlorobenzene	ND		ug/l	5.0	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	93		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-05  
**Client ID:** DUP-003-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 11:29  
**Analyst:** MM

**Date Collected:** 04/20/10 00:00  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	1.3		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	55		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	3.0		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	220	E	ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-05

Date Collected: 04/20/10 00:00

Client ID: DUP-003-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	86		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-05 D  
**Client ID:** DUP-003-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/26/10 09:40  
**Analyst:** MM

**Date Collected:** 04/20/10 00:00  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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<b>MCP Volatile Organics - Westborough Lab</b>					
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Trichloroethene	190		ug/l	5.0	5
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	89		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-06  
**Client ID:** TB-002-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 11:04  
**Analyst:** MM

**Date Collected:** 04/20/10 00:00  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-06  
 Client ID: TB-002-20100420-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/20/10 00:00  
 Date Received: 04/20/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	104		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-07  
**Client ID:** MW-207M-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 12:01  
**Analyst:** MM

**Date Collected:** 04/20/10 10:10  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	2.3		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	2.1		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	4.2		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	70		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	2.0		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-07

Date Collected: 04/20/10 10:10

Client ID: MW-207M-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	93		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-08  
**Client ID:** DUP-004-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 12:32  
**Analyst:** MM

**Date Collected:** 04/20/10 07:00  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	2.4		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	2.1		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	3.9		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	71		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	1.9		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-08

Date Collected: 04/20/10 07:00

Client ID: DUP-004-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	93		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-09  
**Client ID:** MW-205D-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 13:04  
**Analyst:** MM

**Date Collected:** 04/20/10 11:09  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	28		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	4.6		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-09

Date Collected: 04/20/10 11:09

Client ID: MW-205D-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	94		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-10  
**Client ID:** MW-202D-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 13:36  
**Analyst:** MM

**Date Collected:** 04/20/10 11:35  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	8.2		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	1.1		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-10

Date Collected: 04/20/10 11:35

Client ID: MW-202D-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	96		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-11  
**Client ID:** MW-404-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 12:12  
**Analyst:** MM

**Date Collected:** 04/20/10 12:05  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	1.2		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	ND		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-11  
 Client ID: MW-404-20100420-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/20/10 12:05  
 Date Received: 04/20/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	101		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-12  
**Client ID:** MW-405S-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 12:46  
**Analyst:** MM

**Date Collected:** 04/20/10 12:40  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-12

Date Collected: 04/20/10 12:40

Client ID: MW-405S-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	102		70-130

Project Name: RAYTHEON WAYLAND

Lab Number: L1005710

Project Number: 0114119

Report Date: 04/27/10

## SAMPLE RESULTS

Lab ID: L1005710-13  
 Client ID: MW-117-20100420-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 97,8260B  
 Analytical Date: 04/25/10 14:08  
 Analyst: MM

Date Collected: 04/20/10 13:30  
 Date Received: 04/20/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	2.6		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-13  
 Client ID: MW-117-20100420-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/20/10 13:30  
 Date Received: 04/20/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	97		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-14  
**Client ID:** MW-118-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 14:39  
**Analyst:** MM

**Date Collected:** 04/20/10 11:40  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	11		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-14  
 Client ID: MW-118-20100420-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/20/10 11:40  
 Date Received: 04/20/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	94		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-15  
**Client ID:** MW-202S-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 15:11  
**Analyst:** MM

**Date Collected:** 04/20/10 14:20  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-15

Date Collected: 04/20/10 14:20

Client ID: MW-202S-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	99		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-16 D  
**Client ID:** MW-561-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 15:43  
**Analyst:** MM

**Date Collected:** 04/20/10 15:50  
**Date Received:** 04/20/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	100	20
1,1-Dichloroethane	ND		ug/l	20	20
Chloroform	ND		ug/l	20	20
Carbon tetrachloride	ND		ug/l	20	20
1,2-Dichloropropane	ND		ug/l	20	20
Dibromochloromethane	ND		ug/l	20	20
1,1,2-Trichloroethane	ND		ug/l	20	20
Tetrachloroethene	82		ug/l	20	20
Chlorobenzene	ND		ug/l	20	20
1,2-Dichloroethane	ND		ug/l	20	20
1,1,1-Trichloroethane	ND		ug/l	20	20
Bromodichloromethane	ND		ug/l	20	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	20	20
Chloromethane	ND		ug/l	40	20
Vinyl chloride	66		ug/l	20	20
Chloroethane	ND		ug/l	40	20
1,1-Dichloroethene	ND		ug/l	20	20
trans-1,2-Dichloroethene	ND		ug/l	20	20
Trichloroethene	1700		ug/l	20	20
1,2-Dichlorobenzene	ND		ug/l	20	20
1,3-Dichlorobenzene	ND		ug/l	20	20
1,4-Dichlorobenzene	ND		ug/l	20	20
cis-1,2-Dichloroethene	140		ug/l	20	20
Dichlorodifluoromethane	ND		ug/l	40	20
1,2-Dibromoethane	ND		ug/l	40	20
1,3-Dichloropropane	ND		ug/l	40	20
1,1,1,2-Tetrachloroethane	ND		ug/l	20	20

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-16 D

Date Collected: 04/20/10 15:50

Client ID: MW-561-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	40	20
p-Chlorotoluene	ND		ug/l	40	20
Hexachlorobutadiene	ND		ug/l	12	20
1,2,4-Trichlorobenzene	ND		ug/l	40	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	94		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-17  
**Client ID:** MW-266MA-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 16:15  
**Analyst:** MM

**Date Collected:** 04/20/10 10:15  
**Date Received:** 04/20/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	1.0		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	30		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	9.0		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-17

Date Collected: 04/20/10 10:15

Client ID: MW-266MA-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	99		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-18 D  
**Client ID:** MW-266MB-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 16:46  
**Analyst:** MM

**Date Collected:** 04/20/10 08:40  
**Date Received:** 04/20/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	20	4
1,1-Dichloroethane	ND		ug/l	4.0	4
Chloroform	ND		ug/l	4.0	4
Carbon tetrachloride	ND		ug/l	4.0	4
1,2-Dichloropropane	ND		ug/l	4.0	4
Dibromochloromethane	ND		ug/l	4.0	4
1,1,2-Trichloroethane	ND		ug/l	4.0	4
Tetrachloroethene	21		ug/l	4.0	4
Chlorobenzene	ND		ug/l	4.0	4
1,2-Dichloroethane	ND		ug/l	4.0	4
1,1,1-Trichloroethane	ND		ug/l	4.0	4
Bromodichloromethane	ND		ug/l	4.0	4
trans-1,3-Dichloropropene	ND		ug/l	2.0	4
cis-1,3-Dichloropropene	ND		ug/l	2.0	4
Bromoform	ND		ug/l	8.0	4
1,1,2,2-Tetrachloroethane	ND		ug/l	4.0	4
Chloromethane	ND		ug/l	8.0	4
Vinyl chloride	23		ug/l	4.0	4
Chloroethane	ND		ug/l	8.0	4
1,1-Dichloroethene	ND		ug/l	4.0	4
trans-1,2-Dichloroethene	ND		ug/l	4.0	4
Trichloroethene	88		ug/l	4.0	4
1,2-Dichlorobenzene	ND		ug/l	4.0	4
1,3-Dichlorobenzene	ND		ug/l	4.0	4
1,4-Dichlorobenzene	ND		ug/l	4.0	4
cis-1,2-Dichloroethene	170		ug/l	4.0	4
Dichlorodifluoromethane	ND		ug/l	8.0	4
1,2-Dibromoethane	ND		ug/l	8.0	4
1,3-Dichloropropane	ND		ug/l	8.0	4
1,1,1,2-Tetrachloroethane	ND		ug/l	4.0	4

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-18 D

Date Collected: 04/20/10 08:40

Client ID: MW-266MB-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	8.0	4
p-Chlorotoluene	ND		ug/l	8.0	4
Hexachlorobutadiene	ND		ug/l	2.4	4
1,2,4-Trichlorobenzene	ND		ug/l	8.0	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	93		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-19  
**Client ID:** MW-105M-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 17:18  
**Analyst:** MM

**Date Collected:** 04/20/10 12:25  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	1.3		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	6.9		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-19

Date Collected: 04/20/10 12:25

Client ID: MW-105M-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	93		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-20  
**Client ID:** MW-105-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 17:50  
**Analyst:** MM

**Date Collected:** 04/20/10 11:10  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	1.8		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	10		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-20  
 Client ID: MW-105-20100420-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/20/10 11:10  
 Date Received: 04/20/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	98		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005710  
**Report Date:** 04/27/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/25/10 08:50  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-05,07-10,13-20 Batch: WG409655-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
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	1.0
Chloromethane	ND		ug/l	2.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
o-Chlorotoluene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005710  
**Report Date:** 04/27/10

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

Analytical Method: 97,8260B  
 Analytical Date: 04/25/10 08:50  
 Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-05,07-10,13-20 Batch: WG409655-3				
p-Chlorotoluene	ND		ug/l	2.0
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.0

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	93		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005710  
**Report Date:** 04/27/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/26/10 08:36  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 05 Batch: WG409655-6				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
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	1.0
Chloromethane	ND		ug/l	2.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
o-Chlorotoluene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005710  
**Report Date:** 04/27/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/26/10 08:36  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 05 Batch: WG409655-6				
p-Chlorotoluene	ND		ug/l	2.0
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.0

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	92		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005710  
**Report Date:** 04/27/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/25/10 10:30  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 06,11-12 Batch: WG409674-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
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	1.0
Chloromethane	ND		ug/l	2.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
o-Chlorotoluene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005710  
**Report Date:** 04/27/10

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

Analytical Method: 97,8260B  
 Analytical Date: 04/25/10 10:30  
 Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 06,11-12 Batch: WG409674-3				
p-Chlorotoluene	ND		ug/l	2.0
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.0

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	102		70-130



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005710

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-05,07-10,13-20 Batch: WG409655-1 WG409655-2								
Methylene chloride	98		97		70-130	1		20
1,1-Dichloroethane	88		83		70-130	6		20
Chloroform	90		84		70-130	7		20
Carbon tetrachloride	93		82		70-130	13		20
1,2-Dichloropropane	88		82		70-130	7		20
Dibromochloromethane	94		90		70-130	4		20
1,1,2-Trichloroethane	98		97		70-130	1		20
Tetrachloroethene	92		92		70-130	0		20
Chlorobenzene	94		92		70-130	2		20
1,2-Dichloroethane	91		84		70-130	8		20
1,1,1-Trichloroethane	90		81		70-130	11		20
Bromodichloromethane	101		95		70-130	6		20
trans-1,3-Dichloropropene	94		90		70-130	4		20
cis-1,3-Dichloropropene	83		78		70-130	6		20
Bromoform	109		97		70-130	12		20
1,1,2,2-Tetrachloroethane	100		95		70-130	5		20
Chloromethane	83		82		70-130	1		20
Vinyl chloride	96		94		70-130	2		20
Chloroethane	96		90		70-130	6		20
1,1-Dichloroethene	91		82		70-130	10		20
trans-1,2-Dichloroethene	85		80		70-130	6		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005710

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-05,07-10,13-20 Batch: WG409655-1 WG409655-2								
Trichloroethene	82		76		70-130	8		20
1,2-Dichlorobenzene	105		103		70-130	2		20
1,3-Dichlorobenzene	100		101		70-130	1		20
1,4-Dichlorobenzene	104		100		70-130	4		20
cis-1,2-Dichloroethene	88		82		70-130	7		20
Dichlorodifluoromethane	78		76		70-130	3		20
1,2-Dibromoethane	95		94		70-130	1		20
1,3-Dichloropropane	88		88		70-130	0		20
1,1,1,2-Tetrachloroethane	102		100		70-130	2		20
o-Chlorotoluene	97		95		70-130	2		20
p-Chlorotoluene	99		98		70-130	1		20
Hexachlorobutadiene	104		107		70-130	3		20
1,2,4-Trichlorobenzene	101		100		70-130	1		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	102		97		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	101		96		70-130
Dibromofluoromethane	99		93		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005710

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 05 Batch: WG409655-4 WG409655-5								
Methylene chloride	108		107		70-130	9		20
1,1-Dichloroethane	93		91		70-130	3		20
Chloroform	95		93		70-130	3		20
Carbon tetrachloride	93		90		70-130	3		20
1,2-Dichloropropane	89		90		70-130	2		20
Dibromochloromethane	92		86		70-130	9		20
1,1,2-Trichloroethane	96		95		70-130	3		20
Tetrachloroethene	98		97		70-130	5		20
Chlorobenzene	95		96		70-130	2		20
1,2-Dichloroethane	95		94		70-130	3		20
1,1,1-Trichloroethane	93		90		70-130	0		20
Bromodichloromethane	104		101		70-130	0		20
trans-1,3-Dichloropropene	94		87		70-130	8		20
cis-1,3-Dichloropropene	86		84		70-130	1		20
Bromoform	99		96		70-130	13		20
1,1,2,2-Tetrachloroethane	100		98		70-130	2		20
Chloromethane	91		98		70-130	17		20
Vinyl chloride	100		104		70-130	8		20
Chloroethane	100		103		70-130	7		20
1,1-Dichloroethene	95		91		70-130	0		20
trans-1,2-Dichloroethene	88		87		70-130	2		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005710

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 05 Batch: WG409655-4 WG409655-5								
Trichloroethene	84		88		70-130	7		20
1,2-Dichlorobenzene	102		102		70-130	3		20
1,3-Dichlorobenzene	102		102		70-130	2		20
1,4-Dichlorobenzene	101		101		70-130	3		20
cis-1,2-Dichloroethene	94		94		70-130	7		20
Dichlorodifluoromethane	80		85		70-130	9		20
1,2-Dibromoethane	96		93		70-130	2		20
1,3-Dichloropropane	90		87		70-130	1		20
1,1,1,2-Tetrachloroethane	105		101		70-130	1		20
o-Chlorotoluene	96		96		70-130	1		20
p-Chlorotoluene	100		98		70-130	1		20
Hexachlorobutadiene	96		97		70-130	7		20
1,2,4-Trichlorobenzene	96		97		70-130	4		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	105		103		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	99		93		70-130
Dibromofluoromethane	98		98		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005710

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 06,11-12 Batch: WG409674-1 WG409674-2								
Methylene chloride	101		102		70-130	1		20
1,1-Dichloroethane	105		106		70-130	1		20
Chloroform	109		109		70-130	0		20
Carbon tetrachloride	117		122		70-130	4		20
1,2-Dichloropropane	102		104		70-130	2		20
Dibromochloromethane	119		124		70-130	4		20
1,1,2-Trichloroethane	99		100		70-130	1		20
Tetrachloroethene	104		110		70-130	6		20
Chlorobenzene	96		99		70-130	3		20
1,2-Dichloroethane	112		115		70-130	3		20
1,1,1-Trichloroethane	107		108		70-130	1		20
Bromodichloromethane	121		123		70-130	2		20
trans-1,3-Dichloropropene	97		99		70-130	2		20
cis-1,3-Dichloropropene	92		95		70-130	3		20
Bromoform	128		138	Q	70-130	8		20
1,1,2,2-Tetrachloroethane	89		91		70-130	2		20
Chloromethane	95		98		70-130	3		20
Vinyl chloride	88		89		70-130	1		20
Chloroethane	102		105		70-130	3		20
1,1-Dichloroethene	95		97		70-130	2		20
trans-1,2-Dichloroethene	101		104		70-130	3		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L1005710

Project Number: 0114119

Report Date: 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 06,11-12 Batch: WG409674-1 WG409674-2								
Trichloroethene	97		106		70-130	9		20
1,2-Dichlorobenzene	90		100		70-130	11		20
1,3-Dichlorobenzene	92		103		70-130	11		20
1,4-Dichlorobenzene	93		102		70-130	9		20
cis-1,2-Dichloroethene	105		107		70-130	2		20
Dichlorodifluoromethane	77		80		70-130	4		20
1,2-Dibromoethane	99		101		70-130	2		20
1,3-Dichloropropane	101		101		70-130	0		20
1,1,1,2-Tetrachloroethane	116		112		70-130	4		20
o-Chlorotoluene	90		99		70-130	10		20
p-Chlorotoluene	92		103		70-130	11		20
Hexachlorobutadiene	80		101		70-130	23	Q	20
1,2,4-Trichlorobenzene	77		98		70-130	24	Q	20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	100		103		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	91		96		70-130
Dibromofluoromethane	101		103		70-130

# METALS

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005710  
**Report Date:** 04/27/10

**SAMPLE RESULTS**

Lab ID: L1005710-16  
 Client ID: MW-561-20100420-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/20/10 15:50  
 Date Received: 04/20/10  
 Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	3.9		mg/l	2.5	1	04/21/10 12:10	04/22/10 17:39	EPA 3005A	97,6010B	AI
Sodium, Dissolved	16		mg/l	2.0	1	04/21/10 12:10	04/22/10 17:39	EPA 3005A	97,6010B	AI



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005710  
**Report Date:** 04/27/10

**SAMPLE RESULTS**

Lab ID: L1005710-17  
 Client ID: MW-266MA-20100420-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/20/10 10:15  
 Date Received: 04/20/10  
 Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	5.7		mg/l	2.5	1	04/21/10 12:10	04/22/10 17:42	EPA 3005A	97,6010B	AI
Sodium, Dissolved	32		mg/l	2.0	1	04/21/10 12:10	04/22/10 17:42	EPA 3005A	97,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005710-18

Date Collected: 04/20/10 08:40

Client ID: MW-266MB-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	4.3		mg/l	2.5	1	04/21/10 12:10	04/22/10 17:46	EPA 3005A	97,6010B	AI
Sodium, Dissolved	14		mg/l	2.0	1	04/21/10 12:10	04/22/10 17:46	EPA 3005A	97,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005710  
**Report Date:** 04/27/10

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 16-18 Batch: WG409122-1								
Potassium, Dissolved	ND	mg/l	2.5	1	04/21/10 12:10	04/22/10 16:41	97,6010B	AI
Sodium, Dissolved	ND	mg/l	2.0	1	04/21/10 12:10	04/22/10 16:41	97,6010B	AI

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005710

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Dissolved Metals - Westborough Lab Associated sample(s): 16-18 Batch: WG409122-2 WG409122-3								
Potassium, Dissolved	110		100		80-120	10		20
Sodium, Dissolved	100		100		80-120	0		20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-16  
**Client ID:** MW-561-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/20/10 15:50  
**Date Received:** 04/20/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Sulfate	30		mg/l	10	1	04/22/10 10:30	04/22/10 10:30	30,4500SO4-E	SD
Total Organic Carbon	5.5		mg/l	2.0	4	-	04/22/10 07:48	1,9060	DW



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-17  
**Client ID:** MW-266MA-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/20/10 10:15  
**Date Received:** 04/20/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Sulfate	35		mg/l	10	1	04/22/10 10:30	04/22/10 10:30	30,4500SO4-E	SD
Total Organic Carbon	0.61		mg/l	0.50	1	-	04/22/10 07:48	1,9060	DW



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005710**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005710-18  
**Client ID:** MW-266MB-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/20/10 08:40  
**Date Received:** 04/20/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Sulfate	29		mg/l	10	1	04/22/10 10:30	04/22/10 10:30	30,4500SO4-E	SD
Total Organic Carbon	1.0		mg/l	0.50	1	-	04/22/10 07:48	1,9060	DW





**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005710  
**Report Date:** 04/27/10

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

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 16-18 Batch: WG409311-1								
Total Organic Carbon	ND	mg/l	0.50	1	-	04/22/10 07:48	1,9060	DW
General Chemistry - Westborough Lab for sample(s): 16-18 Batch: WG409369-1								
Sulfate	ND	mg/l	10	1	04/22/10 10:30	04/22/10 10:30	30,4500SO4-E	SD

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005710

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 16-18 Batch: WG409311-2								
Total Organic Carbon	98		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 16-18 Batch: WG409369-2								
Sulfate	105		-		90-115	-		

**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005710

**Project Number:** 0114119

**Report Date:** 04/27/10

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>MSD Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>MSD Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>RPD Qual</b>	<b>RPD Limits</b>
General Chemistry - Westborough Lab Associated sample(s): 16-18 QC Batch ID: WG409311-3 QC Sample: L1005716-11 Client ID: MS Sample												
Total Organic Carbon	120	128	250	104	-	-	-	-	80-120	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 16-18 QC Batch ID: WG409369-3 QC Sample: L1005716-11 Client ID: MS Sample												
Sulfate	14	40	59	112	-	-	-	-	55-147	-	-	14

## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0114119

**Lab Number:** L1005710

**Report Date:** 04/27/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 16-18 QC Batch ID: WG409311-4 QC Sample: L1005716-11 Client ID: DUP Sample						
Total Organic Carbon	120	120	mg/l	0		20
General Chemistry - Westborough Lab Associated sample(s): 16-18 QC Batch ID: WG409369-4 QC Sample: L1005716-11 Client ID: DUP Sample						
Sulfate	14	14	mg/l	0		14

Project Name: RAYTHEON WAYLAND

Lab Number: L1005710

Project Number: 0114119

Report Date: 04/27/10

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

## Cooler Information Custody Seal

## Cooler

A Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis
L1005710-01A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-01B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-02A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-02B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-03A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-03B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-04A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-04B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-05A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-05B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-06A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-07A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-07B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-08A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-08B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-09A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-09B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-10A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-10B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-11A	Clear Vial Ascorbic Acid preserv	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-11B	Clear Vial Ascorbic Acid preserv	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-12A	Clear Vial Ascorbic Acid preserv	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-12B	Clear Vial Ascorbic Acid preserv	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-13A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-13B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-14A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-14B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)

\*Hold days indicated by values in parentheses

Project Name: RAYTHEON WAYLAND

Project Number: 0114119

Lab Number: L1005710

Report Date: 04/27/10

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis
L1005710-15A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-15B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-16A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-16B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-16C	Vial H2SO4 preserved	A	N/A	2.4	Y	Absent	TOC-9060(28)
L1005710-16D	Vial H2SO4 preserved	A	N/A	2.4	Y	Absent	TOC-9060(28)
L1005710-16E	Plastic 250ml unpreserved	A	7	2.4	Y	Absent	SO4-4500(28)
L1005710-16F	Plastic 250ml HNO3 preserved	A	<2	2.4	Y	Absent	MCP-NA-6010S-10(180),MCP-K-6010S-10(180)
L1005710-17A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-17B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-17C	Vial H2SO4 preserved	A	N/A	2.4	Y	Absent	TOC-9060(28)
L1005710-17D	Vial H2SO4 preserved	A	N/A	2.4	Y	Absent	TOC-9060(28)
L1005710-17E	Plastic 250ml unpreserved	A	7	2.4	Y	Absent	SO4-4500(28)
L1005710-17F	Plastic 250ml HNO3 preserved	A	<2	2.4	Y	Absent	MCP-NA-6010S-10(180),MCP-K-6010S-10(180)
L1005710-18A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-18B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-18C	Vial H2SO4 preserved	A	N/A	2.4	Y	Absent	TOC-9060(28)
L1005710-18D	Vial H2SO4 preserved	A	N/A	2.4	Y	Absent	TOC-9060(28)
L1005710-18E	Plastic 250ml unpreserved	A	7	2.4	Y	Absent	SO4-4500(28)
L1005710-18F	Plastic 250ml HNO3 preserved	A	<2	2.4	Y	Absent	MCP-NA-6010S-10(180),MCP-K-6010S-10(180)
L1005710-19A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-19B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-20A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005710-20B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)

\*Hold days indicated by values in parentheses



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005710  
**Report Date:** 04/27/10

## 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.
- LCS D** - 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.
- MS D** - 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.
- NI** - Not Ignitable.
- 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

- 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 at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to 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.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RDL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reported detection limit (RDL) for the sample.

Report Format: Data Usability Report



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005710  
**Report Date:** 04/27/10

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

## LIMITATION OF LIABILITIES

Alpha Analytical 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 Analytical 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.





## Certificate/Approval Program Summary

Last revised March 16, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.  
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

### Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

*Drinking Water* (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Haloacetic Acids, Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB).)

*Wastewater/Non-Potable Water* (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Calcium Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH.)

*Solid Waste/Soil* (Inorganic Parameters: Lead in Paint, pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), Reactivity. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

### Maine Department of Human Services Certificate/Lab ID: 2009024.

*Drinking Water* (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500CI-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1. Organic Parameters: 504.1, 524.2, SM 6251B.)

*Wastewater/Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624.)

### Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

#### *Drinking Water*

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

#### *Non-Potable Water*

Inorganic Parameters: (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

**New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.***

*Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)*

*Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)*

*Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)*

**New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.***

*Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)*

*Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)*

*Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)*

**New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.***

*Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)*

*Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)*

*Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)*

**North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. *Organic Parameters: MA-EPH, MA-VPH.*****Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. *NELAP Accredited.***

*Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)*

*Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)*

**Rhode Island Department of Health Certificate/Lab ID: LAO00065. *NELAP Accredited via NY-DOH.***

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

**Texas Commission on Environmental Quality** Certificate/Lab ID: T104704476-09-1. NELAP Accredited.

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S<sup>2-</sup> D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

**Utah Department of Health** Certificate/Lab ID: AAMA. NELAP Accredited.

*Non-Potable Water* (Inorganic Parameters: Chloride EPA 300.0)

**Department of Defense** Certificate/Lab ID: L2217.

*Drinking Water* (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 314, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035.)

**Analytes Not Accredited by NELAP**

Certification is not available by NELAP for the following analytes: **EPA 8260B**: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.



# CHAIN OF CUSTODY

PAGE 1 OF 34WESTBORO, MA  
TEL: 508-898-9220  
FAX: 508-898-9193MANSFIELD, MA  
TEL: 508-822-9300  
FAX: 508-822-3288**C****Client Information**Client: SRMAddress: 399 Baylston St.10th Floor Boston, MAPhone: (617) 646-7800Fax: (617) 267-6447Email: jason.flatow@erm.com These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

**Project Information**Project Name: Ralphens WeylandProject Location: Weyland, MAProject #: 0114119Project Manager: Jason Flatow

ALPHA Quote #:

**Turn-Around Time** Standard  RUSH (only confirmed if pre-approved)Date Due: 4/27/06 Time:Date Rec'd in Lab: 4/20/06**Report Information - Data Deliverables** FAX  EMAIL ADEX  Add'l Deliverables**Regulatory Requirements/Report Limits**

State / Fed Program

MA MCP GW-2**MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO.****Billing Information**

Same as Client info

PO #:

ALPHA Job # 1100571011005710

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Container Type	Preservative	Date/Time	Received By:	Date/Time	Sample Specific Comments
		Date	Time								
<u>05209</u>	<u>MMW-201D-20100419-01</u>	<u>4/19/10</u>	<u>1035</u>	<u>GW</u>	<u>EW</u>	<u>R</u>	<u>V</u>	<u>4/20/10 1620</u>	<u>John Wagner</u>	<u>4/20/10 1620</u>	
<u>05209</u>	<u>MMW-201S-20100420-01</u>	<u>4/20/10</u>	<u>0925</u>	<u>GW</u>	<u>EW</u>	<u>R</u>	<u>B</u>	<u>4-20-10 1715</u>	<u>John Wagner</u>	<u>4/20/10 1715</u>	
	<u>MMW-207S-20100420-01</u>	<u>4/20/10</u>	<u>0840</u>	<u>GW</u>	<u>CC</u>	<u>R</u>	<u>V</u>				
	<u>MMW-205M-20100420-01</u>	<u>4/20/10</u>	<u>0918</u>	<u>GW</u>	<u>JF</u>	<u>R</u>	<u>V</u>				
	<u>DWP-603-20100420-01</u>	<u>4/20/10</u>	<u>2400</u>	<u>GW</u>	<u>JF</u>	<u>R</u>	<u>V</u>				
	<u>TB-002-20100420-01</u>	<u>4/21/10</u>	<u>1345</u>	<u>---</u>	<u>PC</u>	<u>1</u>	<u>V</u>				
	<u>MMW-207M-20100420-01</u>	<u>4/20/10</u>	<u>1010</u>	<u>GW</u>	<u>CC</u>	<u>R</u>	<u>V</u>				
	<u>DWP-004-20100420-01</u>	<u>4/20/10</u>	<u>0700</u>	<u>GW</u>	<u>CC</u>	<u>R</u>	<u>V</u>				
	<u>MMW-205D-20100420-01</u>	<u>4/20/10</u>	<u>1109</u>	<u>GW</u>	<u>JF</u>	<u>R</u>	<u>V</u>				
	<u>MMW-202D-20100420-01</u>	<u>4/20/10</u>	<u>1135</u>	<u>GW</u>	<u>DW</u>	<u>R</u>	<u>V</u>				

**ANALYSIS**  
8021 B by 8260

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

**TOTAL #** 22  
**BOTTLES** 22

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
MA MCP or CT RCP?

Relinquished By:

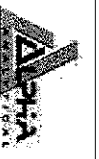
Date/Time

Received By:

Date/Time

FORM NO. 01-01 (REV. 14-OCT-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 Terms and Conditions. See reverse side.



# CHAIN OF CUSTODY

PAGE 23 OF 31

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

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

### Client Information

Client: **ERM**  
Address: **379 Baylston Street**  
**Low Floor Boston, MA 02116**  
Phone: **(617) 646-7800**  
Fax: **(617) 267-6447**  
Email: **Jason.Flattery@erm.com**

Project Name: **Roughneck Wayland**  
Project Location: **Wayland, MA**  
Project #: **0114119**  
Project Manager: **Jason Flattery**  
ALPHA Quote #:  
**Turn-Around Time**  
 Standard  RUSH (only confirmed if pre-approved)  
Date Due: **4/21/10** Time:

Other Project Specific Requirements/Comments/Detection Limits:  
If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.  
(Note: All CAM methods for inorganic analyses require MS every 20 soil samples)  
**Please note: samples preserved w/ascorbic acid have 5 days shorter hold time**

Date Rec'd in Lab: **4/20/10**  
Report Information - Data Deliverables  
 FAX  EMAIL  
 ADEX  Add'l Deliverables  
Regulatory Requirements/Report Limits

ALPHA Job #: **605707**  
Billing Information  
 Same as Client info  
PO #:

State/Fed Program: **MA MCP** Criteria: **GW-2**  
**MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO**

Yes  No Are MCP Analytical Methods Required?  
 Yes  No Is Matrix Spike (MS) Required on this SDG? (if yes see note in Comments)  
 Yes  No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS  
**8021B by 8260**  
**8621B by 8260**  
**SO4**  
**TOC**  
**Diss. Na+K (FF)**

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Time	Sample Matrix	Sampler's Initials
<del>OST70</del>	11	4/20/10	1205	GW	CC
<del>OST70</del>	12	4/20/10	1240	GW	CC
	13	4/20/10	1330	GW	CC
	14	4/20/10	1140	GW	CC
	15	4/20/10	1420	GW	EW
	16	4/20/10	1550	GW	EG
	17	4/20/10	1015	GW	EG
	18	4/20/10	0840	GW	EG
	19	4/20/10	1225	GW	FN
	20	4/20/10	1110	GW	JN

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

PLEASE ANSWER QUESTIONS ABOVE!	
Container Type	Preservative
V	I
V	B
V	A
V	D
V	C

Relinquished By: **Chris Flattery** Date/Time: **4/20/10 1620**  
Received By: **Paul Flattery** Date/Time: **4/20/10 1620**  
IS YOUR PROJECT **MAMCP or CT RCP?**



## ANALYTICAL REPORT

Lab Number:	L1005716
Client:	ERM Consulting & Engineering, Inc. 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Phone:	(617) 646-7816
Project Name:	RAYTHEON WAYLAND
Project Number:	0114119
Report Date:	04/27/10

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005716  
**Report Date:** 04/27/10

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1005716-01	MW-216D-20100420-01	WAYLAND, MA	04/20/10 09:15
L1005716-02	MW-206D-20100420-01	WAYLAND, MA	04/20/10 13:22
L1005716-03	MW-206M-20100420-01	WAYLAND, MA	04/20/10 15:00
L1005716-04	MW-102-20100420-01	WAYLAND, MA	04/20/10 15:20
L1005716-05	MW-106-20100420-01	WAYLAND, MA	04/20/10 13:40
L1005716-06	MW-106M-20100420-01	WAYLAND, MA	04/20/10 14:25
L1005716-07	MW-43S-20100420-01	WAYLAND, MA	04/20/10 15:20
L1005716-08	MW-203M-20100420-01	WAYLAND, MA	04/20/10 14:10
L1005716-09	MW-203S-20100420-01	WAYLAND, MA	04/20/10 15:15
L1005716-10	MW-202M-20100420-01	WAYLAND, MA	04/20/10 15:55
L1005716-11	IW-15-20100420-01	WAYLAND, MA	04/20/10 14:15
L1005716-12	MW-214-20100420-01	WAYLAND, MA	04/20/10 16:10

Project Name: RAYTHEON WAYLAND

Lab Number: L1005716

Project Number: 0114119

Report Date: 04/27/10

**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 through F is required for "Presumptive Certainty" status</b>		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
<b>A response to questions G, H and I is required for "Presumptive Certainty" status</b>		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	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:** 0114119

**Lab Number:** L1005716  
**Report Date:** 04/27/10

### Case Narrative

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

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

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

For additional information, please contact Client Services at 800-624-9220.

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#### MCP Related Narratives

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

L1005716-01 and 02 were processed against a calibration curve that utilized a quadratic fit for 1,1,1-Trichloroethane, Carbon tetrachloride, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Dibromochloromethane, 1,2-Dibromoethane, 1,1,1,2-Tetrachloroethane, Bromoform and Hexachlorobutadiene.

L1005716-08, -09, -11 and -12 were processed against a calibration curve that utilized a quadratic fit for 1,1,1-Trichloroethane, Carbon tetrachloride, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene,

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005716  
**Report Date:** 04/27/10

### Case Narrative (continued)

Dibromochloromethane, 1,2-Dibromoethane, 1,1,1,2-Tetrachloroethane, n-Butylbenzene, Bromoform, Hexachlorobutadiene, Naphthalene and 1,2,3-Trichlorobenzene.

L1005716-11 has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The continuing calibration standard, associated with L1005716-01 and -02, had the response for Dichlorodifluoromethane (22%D) above the acceptance criteria for the method, but within overall acceptance criteria.

The continuing calibration standard, associated with L1005716-03 through -07 and -10, had the response for Dichlorodifluoromethane (23%D), Bromodichloromethane (21%D), Bromoform (28%D) and 1,2,4-Trichlorobenzene (23%D) above the acceptance criteria for the method, but within overall acceptance criteria.

The continuing calibration standard, associated with L1005716-08, -09, -11 and -12, had the response for Dichlorodifluoromethane (23%D) and Naphthalene (26%D) below the acceptance criteria for the method, but within overall acceptance criteria.

The WG409673-1/-2 LCS/LCSD RPD, associated with L1005716-10, is above the acceptance criteria for 1,4-Dioxane (41%); however, the individual LCS/LCSD recoveries are within method limits. The results of the associated sample are reported.

The WG409674-2 LCSD recovery, associated with L1005716-03 through -07 and -10, was above the acceptance criteria for Bromoform (138%); however, the associated samples were non-detect for this target compound. The results of the original analysis are reported.

The WG409674-1/-2 LCS/LCSD RPDs, associated with L1005716-03 through -07 and -10, are above the acceptance criteria for Hexachlorobutadiene (23%) and 1,2,4-Trichlorobenzene (24%); however, the individual LCS/LCSD recoveries are within method limits. The results of the associated samples are reported.

In reference to question I:

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

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005716  
**Report Date:** 04/27/10

### Case Narrative (continued)

#### Semivolatile Organics by SIM

In reference to question I:

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

#### Metals

In reference to question I:

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


#### Non-MCP Related Narratives

#### TOC

L1005716-11 has an elevated detection limit due to the dilution required by the elevated concentration present 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:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 04/27/10

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005716-01  
**Client ID:** MW-216D-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 18:22  
**Analyst:** MM

**Date Collected:** 04/20/10 09:15  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	7.6		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005716-01

Date Collected: 04/20/10 09:15

Client ID: MW-216D-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	98		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005716-02  
**Client ID:** MW-206D-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 18:53  
**Analyst:** MM

**Date Collected:** 04/20/10 13:22  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	38		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	5.0		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005716-02

Date Collected: 04/20/10 13:22

Client ID: MW-206D-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	98		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005716-03  
**Client ID:** MW-206M-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 16:43  
**Analyst:** MM

**Date Collected:** 04/20/10 15:00  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	2.2		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	2.7		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	23		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005716-03

Date Collected: 04/20/10 15:00

Client ID: MW-206M-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	97		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005716-04  
**Client ID:** MW-102-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 13:19  
**Analyst:** MM

**Date Collected:** 04/20/10 15:20  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005716-04  
 Client ID: MW-102-20100420-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/20/10 15:20  
 Date Received: 04/20/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	103		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005716-05  
**Client ID:** MW-106-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 17:17  
**Analyst:** MM

**Date Collected:** 04/20/10 13:40  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	5.9		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	11		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005716-05  
 Client ID: MW-106-20100420-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/20/10 13:40  
 Date Received: 04/20/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	103		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005716-06  
**Client ID:** MW-106M-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 17:51  
**Analyst:** MM

**Date Collected:** 04/20/10 14:25  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	3.2		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005716-06

Date Collected: 04/20/10 14:25

Client ID: MW-106M-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005716-07  
**Client ID:** MW-43S-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 18:24  
**Analyst:** MM

**Date Collected:** 04/20/10 15:20  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	2.7		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	7.1		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005716-07  
 Client ID: MW-43S-20100420-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/20/10 15:20  
 Date Received: 04/20/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	100		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005716-08  
**Client ID:** MW-203M-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/27/10 09:38  
**Analyst:** MM

**Date Collected:** 04/20/10 14:10  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005716-08

Date Collected: 04/20/10 14:10

Client ID: MW-203M-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	88		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005716-09  
**Client ID:** MW-203S-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/27/10 10:09  
**Analyst:** MM

**Date Collected:** 04/20/10 15:15  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005716-09

Date Collected: 04/20/10 15:15

Client ID: MW-203S-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	95		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005716-10  
**Client ID:** MW-202M-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 13:53  
**Analyst:** MM

**Date Collected:** 04/20/10 15:55  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	56		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	2.3		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	170		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005716-10

Date Collected: 04/20/10 15:55

Client ID: MW-202M-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	106		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005716-10  
**Client ID:** MW-202M-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B-SIM  
**Analytical Date:** 04/25/10 13:53  
**Analyst:** MM

**Date Collected:** 04/20/10 15:55  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
MCP Volatile Organics by SIM - Westborough Lab					
1,4-Dioxane	ND		ug/l	3.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005716-11 D  
**Client ID:** IW-15-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/27/10 09:06  
**Analyst:** MM

**Date Collected:** 04/20/10 14:15  
**Date Received:** 04/20/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	250	50
1,1-Dichloroethane	ND		ug/l	50	50
Chloroform	ND		ug/l	50	50
Carbon tetrachloride	ND		ug/l	50	50
1,2-Dichloropropane	ND		ug/l	50	50
Dibromochloromethane	ND		ug/l	50	50
1,1,2-Trichloroethane	ND		ug/l	50	50
Tetrachloroethene	ND		ug/l	50	50
Chlorobenzene	ND		ug/l	50	50
1,2-Dichloroethane	ND		ug/l	50	50
1,1,1-Trichloroethane	ND		ug/l	50	50
Bromodichloromethane	ND		ug/l	50	50
trans-1,3-Dichloropropene	ND		ug/l	25	50
cis-1,3-Dichloropropene	ND		ug/l	25	50
Bromoform	ND		ug/l	100	50
1,1,2,2-Tetrachloroethane	ND		ug/l	50	50
Chloromethane	ND		ug/l	100	50
Vinyl chloride	470		ug/l	50	50
Chloroethane	ND		ug/l	100	50
1,1-Dichloroethene	ND		ug/l	50	50
trans-1,2-Dichloroethene	ND		ug/l	50	50
Trichloroethene	250		ug/l	50	50
1,2-Dichlorobenzene	ND		ug/l	50	50
1,3-Dichlorobenzene	ND		ug/l	50	50
1,4-Dichlorobenzene	ND		ug/l	50	50
cis-1,2-Dichloroethene	1800		ug/l	50	50
Dichlorodifluoromethane	ND		ug/l	100	50
1,2-Dibromoethane	ND		ug/l	100	50
1,3-Dichloropropane	ND		ug/l	100	50
1,1,1,2-Tetrachloroethane	ND		ug/l	50	50

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005716-11 D

Date Collected: 04/20/10 14:15

Client ID: IW-15-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	100	50
p-Chlorotoluene	ND		ug/l	100	50
Hexachlorobutadiene	ND		ug/l	30	50
1,2,4-Trichlorobenzene	ND		ug/l	100	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	92		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005716-12  
**Client ID:** MW-214-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/27/10 10:41  
**Analyst:** MM

**Date Collected:** 04/20/10 16:10  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	6.7		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005716-12  
 Client ID: MW-214-20100420-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/20/10 16:10  
 Date Received: 04/20/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	95		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005716  
**Report Date:** 04/27/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/25/10 08:50  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG409655-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
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	1.0
Chloromethane	ND		ug/l	2.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
o-Chlorotoluene	ND		ug/l	2.0

Project Name: RAYTHEON WAYLAND

Lab Number: L1005716

Project Number: 0114119

Report Date: 04/27/10

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 97,8260B  
 Analytical Date: 04/25/10 08:50  
 Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG409655-3				
p-Chlorotoluene	ND		ug/l	2.0
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.0

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	93		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 97,8260B-SIM

Analytical Date: 04/25/10 08:14

Analyst: MM

<b>Parameter</b>	<b>Result</b>	<b>Qualifier</b>	<b>Units</b>	<b>RDL</b>
MCP Volatile Organics by SIM - Westborough Lab for sample(s): 10 Batch: WG409673-3				
1,4-Dioxane	ND		ug/l	3.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005716  
**Report Date:** 04/27/10

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

Analytical Method: 97,8260B  
 Analytical Date: 04/25/10 10:30  
 Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 03-07,10 Batch: WG409674-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
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	1.0
Chloromethane	ND		ug/l	2.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
o-Chlorotoluene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005716  
**Report Date:** 04/27/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/25/10 10:30  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 03-07,10 Batch: WG409674-3				
p-Chlorotoluene	ND		ug/l	2.0
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.0

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	102		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005716  
**Report Date:** 04/27/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/27/10 08:02  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 08-09,11-12 Batch: WG409938-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
Trichlorofluoromethane	ND		ug/l	2.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.0
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0
Benzene	ND		ug/l	1.0
Toluene	ND		ug/l	1.0
Ethylbenzene	ND		ug/l	1.0
Chloromethane	ND		ug/l	2.0
Bromomethane	ND		ug/l	5.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005716  
**Report Date:** 04/27/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/27/10 08:02  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 08-09,11-12 Batch: WG409938-3				
Methyl tert butyl ether	ND		ug/l	2.0
p/m-Xylene	ND		ug/l	2.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dibromomethane	ND		ug/l	2.0
1,2,3-Trichloropropane	ND		ug/l	2.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	2.0
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	2.0
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
Bromobenzene	ND		ug/l	2.0
n-Butylbenzene	ND		ug/l	2.0
sec-Butylbenzene	ND		ug/l	2.0
tert-Butylbenzene	ND		ug/l	2.0
o-Chlorotoluene	ND		ug/l	2.0
p-Chlorotoluene	ND		ug/l	2.0
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	2.0
p-Isopropyltoluene	ND		ug/l	2.0
Naphthalene	ND		ug/l	5.0
n-Propylbenzene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005716  
**Report Date:** 04/27/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/27/10 08:02  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 08-09,11-12 Batch: WG409938-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.0
1,2,4-Trichlorobenzene	ND		ug/l	2.0
1,3,5-Trimethylbenzene	ND		ug/l	2.0
1,2,4-Trimethylbenzene	ND		ug/l	2.0
Ethyl ether	ND		ug/l	2.0
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	94		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	87		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005716

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG409655-1 WG409655-2								
Methylene chloride	98		97		70-130	1		20
1,1-Dichloroethane	88		83		70-130	6		20
Chloroform	90		84		70-130	7		20
Carbon tetrachloride	93		82		70-130	13		20
1,2-Dichloropropane	88		82		70-130	7		20
Dibromochloromethane	94		90		70-130	4		20
1,1,2-Trichloroethane	98		97		70-130	1		20
Tetrachloroethene	92		92		70-130	0		20
Chlorobenzene	94		92		70-130	2		20
1,2-Dichloroethane	91		84		70-130	8		20
1,1,1-Trichloroethane	90		81		70-130	11		20
Bromodichloromethane	101		95		70-130	6		20
trans-1,3-Dichloropropene	94		90		70-130	4		20
cis-1,3-Dichloropropene	83		78		70-130	6		20
Bromoform	109		97		70-130	12		20
1,1,2,2-Tetrachloroethane	100		95		70-130	5		20
Chloromethane	83		82		70-130	1		20
Vinyl chloride	96		94		70-130	2		20
Chloroethane	96		90		70-130	6		20
1,1-Dichloroethene	91		82		70-130	10		20
trans-1,2-Dichloroethene	85		80		70-130	6		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005716

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG409655-1 WG409655-2								
Trichloroethene	82		76		70-130	8		20
1,2-Dichlorobenzene	105		103		70-130	2		20
1,3-Dichlorobenzene	100		101		70-130	1		20
1,4-Dichlorobenzene	104		100		70-130	4		20
cis-1,2-Dichloroethene	88		82		70-130	7		20
Dichlorodifluoromethane	78		76		70-130	3		20
1,2-Dibromoethane	95		94		70-130	1		20
1,3-Dichloropropane	88		88		70-130	0		20
1,1,1,2-Tetrachloroethane	102		100		70-130	2		20
o-Chlorotoluene	97		95		70-130	2		20
p-Chlorotoluene	99		98		70-130	1		20
Hexachlorobutadiene	104		107		70-130	3		20
1,2,4-Trichlorobenzene	101		100		70-130	1		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	102		97		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	101		96		70-130
Dibromofluoromethane	99		93		70-130



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005716

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by SIM - Westborough Lab Associated sample(s): 10 Batch: WG409673-1 WG409673-2								
1,4-Dioxane	81		123		70-130	41	Q	20

MCP Volatile Organics - Westborough Lab Associated sample(s): 03-07,10 Batch: WG409674-1 WG409674-2								
Methylene chloride	101		102		70-130	1		20
1,1-Dichloroethane	105		106		70-130	1		20
Chloroform	109		109		70-130	0		20
Carbon tetrachloride	117		122		70-130	4		20
1,2-Dichloropropane	102		104		70-130	2		20
Dibromochloromethane	119		124		70-130	4		20
1,1,2-Trichloroethane	99		100		70-130	1		20
Tetrachloroethene	104		110		70-130	6		20
Chlorobenzene	96		99		70-130	3		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005716

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 03-07,10 Batch: WG409674-1 WG409674-2								
1,2-Dichloroethane	112		115		70-130	3		20
1,1,1-Trichloroethane	107		108		70-130	1		20
Bromodichloromethane	121		123		70-130	2		20
trans-1,3-Dichloropropene	97		99		70-130	2		20
cis-1,3-Dichloropropene	92		95		70-130	3		20
Bromoform	128		138	Q	70-130	8		20
1,1,2,2-Tetrachloroethane	89		91		70-130	2		20
Chloromethane	95		98		70-130	3		20
Vinyl chloride	88		89		70-130	1		20
Chloroethane	102		105		70-130	3		20
1,1-Dichloroethene	95		97		70-130	2		20
trans-1,2-Dichloroethene	101		104		70-130	3		20
Trichloroethene	97		106		70-130	9		20
1,2-Dichlorobenzene	90		100		70-130	11		20
1,3-Dichlorobenzene	92		103		70-130	11		20
1,4-Dichlorobenzene	93		102		70-130	9		20
cis-1,2-Dichloroethene	105		107		70-130	2		20
Dichlorodifluoromethane	77		80		70-130	4		20
1,2-Dibromoethane	99		101		70-130	2		20
1,3-Dichloropropane	101		101		70-130	0		20
1,1,1,2-Tetrachloroethane	116		112		70-130	4		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005716

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 03-07,10 Batch: WG409674-1 WG409674-2								
o-Chlorotoluene	90		99		70-130	10		20
p-Chlorotoluene	92		103		70-130	11		20
Hexachlorobutadiene	80		101		70-130	23	Q	20
1,2,4-Trichlorobenzene	77		98		70-130	24	Q	20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	100		103		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	91		96		70-130
Dibromofluoromethane	101		103		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005716

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 08-09,11-12 Batch: WG409938-1 WG409938-2								
Methylene chloride	102		103		70-130	1		20
1,1-Dichloroethane	90		87		70-130	3		20
Chloroform	91		88		70-130	3		20
Carbon tetrachloride	91		87		70-130	4		20
1,2-Dichloropropane	84		85		70-130	1		20
Dibromochloromethane	89		86		70-130	3		20
1,1,2-Trichloroethane	90		95		70-130	5		20
Tetrachloroethene	94		94		70-130	0		20
Chlorobenzene	94		92		70-130	2		20
Trichlorofluoromethane	93		90		70-130	3		20
1,2-Dichloroethane	92		93		70-130	1		20
1,1,1-Trichloroethane	90		88		70-130	2		20
Bromodichloromethane	97		98		70-130	1		20
trans-1,3-Dichloropropene	89		90		70-130	1		20
cis-1,3-Dichloropropene	81		78		70-130	4		20
1,1-Dichloropropene	89		88		70-130	1		20
Bromoform	97		90		70-130	7		20
1,1,2,2-Tetrachloroethane	102		94		70-130	8		20
Benzene	88		90		70-130	2		20
Toluene	95		94		70-130	1		20
Ethylbenzene	104		104		70-130	0		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005716

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 08-09,11-12 Batch: WG409938-1 WG409938-2								
Chloromethane	90		96		70-130	6		20
Bromomethane	98		97		70-130	1		20
Vinyl chloride	102		102		70-130	0		20
Chloroethane	98		99		70-130	1		20
1,1-Dichloroethene	85		85		70-130	0		20
trans-1,2-Dichloroethene	87		83		70-130	5		20
Trichloroethene	80		79		70-130	1		20
1,2-Dichlorobenzene	102		100		70-130	2		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	99		99		70-130	0		20
Methyl tert butyl ether	82		85		70-130	4		20
p/m-Xylene	104		106		70-130	2		20
o-Xylene	104		106		70-130	2		20
cis-1,2-Dichloroethene	90		91		70-130	1		20
Dibromomethane	90		86		70-130	5		20
1,2,3-Trichloropropane	106		103		70-130	3		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	77		77		70-130	0		20
Acetone	101		107		70-130	6		20
Carbon disulfide	82		74		70-130	10		20
2-Butanone	98		110		70-130	12		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005716

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 08-09,11-12 Batch: WG409938-1 WG409938-2								
4-Methyl-2-pentanone	100		94		70-130	6		20
2-Hexanone	106		100		70-130	6		20
Bromochloromethane	93		92		70-130	1		20
Tetrahydrofuran	89		86		70-130	3		20
2,2-Dichloropropane	99		97		70-130	2		20
1,2-Dibromoethane	91		89		70-130	2		20
1,3-Dichloropropane	87		87		70-130	0		20
1,1,1,2-Tetrachloroethane	105		101		70-130	4		20
Bromobenzene	99		95		70-130	4		20
n-Butylbenzene	92		92		70-130	0		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	97		95		70-130	2		20
o-Chlorotoluene	97		96		70-130	1		20
p-Chlorotoluene	100		99		70-130	1		20
1,2-Dibromo-3-chloropropane	103		106		70-130	3		20
Hexachlorobutadiene	94		96		70-130	2		20
Isopropylbenzene	104		105		70-130	1		20
p-Isopropyltoluene	96		94		70-130	2		20
Naphthalene	74		75		70-130	1		20
n-Propylbenzene	98		100		70-130	2		20
1,2,3-Trichlorobenzene	88		89		70-130	1		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005716

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 08-09,11-12 Batch: WG409938-1 WG409938-2								
1,2,4-Trichlorobenzene	93		95		70-130	2		20
1,3,5-Trimethylbenzene	96		93		70-130	3		20
1,2,4-Trimethylbenzene	94		93		70-130	1		20
Ethyl ether	93		88		70-130	6		20
Isopropyl Ether	94		92		70-130	2		20
Ethyl-Tert-Butyl-Ether	93		92		70-130	1		20
Tertiary-Amyl Methyl Ether	90		92		70-130	2		20
1,4-Dioxane	105		112		70-130	6		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	99		102		70-130
Toluene-d8	107		106		70-130
4-Bromofluorobenzene	99		95		70-130
Dibromofluoromethane	94		96		70-130

# SEMIVOLATILES



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005716-10  
**Client ID:** MW-202M-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 1,8270C-SIM  
**Analytical Date:** 04/23/10 22:29  
**Analyst:** WN

**Date Collected:** 04/20/10 15:55  
**Date Received:** 04/20/10  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/23/10 10:02

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
1,4 Dioxane by 8270C-SIM - Mansfield Lab					
1,4-Dioxane	ND		ng/l	505	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	37		15-110

Project Name: RAYTHEON WAYLAND

Lab Number: L1005716

Project Number: 0114119

Report Date: 04/27/10

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

Analytical Method: 1,8270C-SIM

Extraction Method: EPA 3510C

Analytical Date: 04/23/10 15:11

Extraction Date: 04/23/10 10:02

Analyst: WN

Parameter	Result	Qualifier	Units	RDL
1,4 Dioxane by 8270C-SIM - Mansfield Lab for sample(s): 10 Batch: WG409448-1				
1,4-Dioxane	ND		ng/l	500

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

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005716

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270C-SIM - Mansfield Lab Associated sample(s): 10 Batch: WG409448-2 WG409448-3								
1,4-Dioxane	97		98		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	43		46		15-110

# METALS

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

Lab ID: L1005716-11

Date Collected: 04/20/10 14:15

Client ID: IW-15-20100420-01

Date Received: 04/20/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	210		mg/l	2.5	1	04/21/10 12:10	04/22/10 17:01	EPA 3005A	97,6010B	AI
Sodium, Dissolved	28		mg/l	2.0	1	04/21/10 12:10	04/22/10 17:01	EPA 3005A	97,6010B	AI



Project Name: RAYTHEON WAYLAND

Lab Number: L1005716

Project Number: 0114119

Report Date: 04/27/10

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 11 Batch: WG409122-1								
Potassium, Dissolved	ND	mg/l	2.5	1	04/21/10 12:10	04/22/10 16:41	97,6010B	AI
Sodium, Dissolved	ND	mg/l	2.0	1	04/21/10 12:10	04/22/10 16:41	97,6010B	AI

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0114119

**Lab Number:** L1005716

**Report Date:** 04/27/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Dissolved Metals - Westborough Lab Associated sample(s): 11 Batch: WG409122-2 WG409122-3								
Potassium, Dissolved	110		100		80-120	10		20
Sodium, Dissolved	100		100		80-120	0		20

# **INORGANICS & MISCELLANEOUS**



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005716**Project Number:** 0114119**Report Date:** 04/27/10**SAMPLE RESULTS**

**Lab ID:** L1005716-11  
**Client ID:** IW-15-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/20/10 14:15  
**Date Received:** 04/20/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Sulfate	14		mg/l	10	1	04/22/10 10:30	04/22/10 10:30	30,4500SO4-E	SD
Total Organic Carbon	120		mg/l	16	32	-	04/22/10 07:48	1,9060	DW



Project Name: RAYTHEON WAYLAND

Lab Number: L1005716

Project Number: 0114119

Report Date: 04/27/10

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

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 11 Batch: WG409311-1								
Total Organic Carbon	ND	mg/l	0.50	1	-	04/22/10 07:48	1,9060	DW
General Chemistry - Westborough Lab for sample(s): 11 Batch: WG409369-1								
Sulfate	ND	mg/l	10	1	04/22/10 10:30	04/22/10 10:30	30,4500SO4-E	SD

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005716

**Project Number:** 0114119

**Report Date:** 04/27/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11 Batch: WG409311-2								
Total Organic Carbon	98		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 11 Batch: WG409369-2								
Sulfate	105		-		90-115	-		

**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005716

**Project Number:** 0114119

**Report Date:** 04/27/10

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>MSD Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>MSD Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>RPD Qual</b>	<b>RPD Limits</b>
General Chemistry - Westborough Lab Associated sample(s): 11    QC Batch ID: WG409311-3    QC Sample: L1005716-11    Client ID: IW-15-20100420-01												
Total Organic Carbon	120	128	250	104	-	-	-	-	80-120	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 11    QC Batch ID: WG409369-3    QC Sample: L1005716-11    Client ID: IW-15-20100420-01												
Sulfate	14	40	59	112	-	-	-	-	55-147	-	-	14

## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0114119

**Lab Number:** L1005716

**Report Date:** 04/27/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG409311-4 QC Sample: L1005716-11 Client ID: IW-15-20100420-01						
Total Organic Carbon	120	120	mg/l	0		20
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG409369-4 QC Sample: L1005716-11 Client ID: IW-15-20100420-01						
Sulfate	14	14	mg/l	0		14

Project Name: RAYTHEON WAYLAND

Lab Number: L1005716

Project Number: 0114119

Report Date: 04/27/10

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

## Cooler Information Custody Seal

## Cooler

A Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis
L1005716-01A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-01B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-02A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-02B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-03A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-03B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-04A	Clear Vial Ascorbic Acid preserv	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-04B	Clear Vial Ascorbic Acid preserv	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-05A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-05B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-06A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-06B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-07A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-07B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-08A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-08B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-09A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-09B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-10A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1005716-10B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1005716-10C	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1005716-10D	Amber 1000ml unpreserved	A	7	2.4	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L1005716-11A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-11B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-11C	Vial H2SO4 preserved	A	N/A	2.4	Y	Absent	TOC-9060(28)

\*Hold days indicated by values in parentheses

**Project Name:** RAYTHEON WAYLAND**Project Number:** 0114119**Lab Number:** L1005716**Report Date:** 04/27/10**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Analysis</b>
L1005716-11D	Vial H2SO4 preserved	A	N/A	2.4	Y	Absent	TOC-9060(28)
L1005716-11E	Plastic 250ml unpreserved	A	7	2.4	Y	Absent	SO4-4500(28)
L1005716-11F	Plastic 250ml HNO3 preserved	A	<2	2.4	Y	Absent	MCP-NA-6010S-10(180),MCP-K-6010S-10(180)
L1005716-12A	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)
L1005716-12B	Vial HCl preserved	A	N/A	2.4	Y	Absent	MCP-8260-10(14)

\*Hold days indicated by values in parentheses

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005716  
**Report Date:** 04/27/10

## 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.
- LCS D** - 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.
- MS D** - 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.
- NI** - Not Ignitable.
- 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

- 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 at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to 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.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RDL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reported detection limit (RDL) for the sample.

Report Format: Data Usability Report





**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005716  
**Report Date:** 04/27/10

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

## LIMITATION OF LIABILITIES

Alpha Analytical 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 Analytical 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.



## Certificate/Approval Program Summary

Last revised March 16, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.  
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

### Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

*Drinking Water* (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Haloacetic Acids, Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB).)

*Wastewater/Non-Potable Water* (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Calcium Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH.)

*Solid Waste/Soil* (Inorganic Parameters: Lead in Paint, pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), Reactivity. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

### Maine Department of Human Services Certificate/Lab ID: 2009024.

*Drinking Water* (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500CI-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1. Organic Parameters: 504.1, 524.2, SM 6251B.)

*Wastewater/Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624.)

### Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

#### *Drinking Water*

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

#### *Non-Potable Water*

Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

**New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.***

*Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)*

*Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)*

*Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)*

**New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.***

*Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)*

*Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)*

*Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)*

**New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.***

*Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)*

*Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)*

*Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)*

**North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.**

**Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. *NELAP Accredited.***

*Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)*

*Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)*

**Rhode Island Department of Health Certificate/Lab ID: LAO00065. *NELAP Accredited via NY-DOH.***

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

**Texas Commission on Environmental Quality** Certificate/Lab ID: T104704476-09-1. NELAP Accredited.

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH<sub>3</sub>-H, 4500NO<sub>2</sub>B, 4500P-E, 4500 S<sup>2-</sup> D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

**Utah Department of Health** Certificate/Lab ID: AAMA. NELAP Accredited.

*Non-Potable Water* (Inorganic Parameters: Chloride EPA 300.0)

**Department of Defense** Certificate/Lab ID: L2217.

*Drinking Water* (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 314, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LCHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO<sub>4</sub>-E, 426C, 4500NH<sub>3</sub>-B, 4500NH<sub>3</sub>-H, 4500NO<sub>3</sub>-F, 4500NO<sub>2</sub>-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S<sub>2</sub>-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035.)

**Analytes Not Accredited by NELAP**

Certification is not available by NELAP for the following analytes: **EPA 8260B**: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

## Certificate/Approval Program Summary

Last revised December 15, 2009 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

### **Connecticut Department of Public Health Certificate/Lab ID: PH-0141.**

*Wastewater/Non-Potable Water* (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable), Total Cyanide. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

*Solid Waste/Soil* (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Organic Carbon, Total Cyanide, Corrosivity, TCLP 1311. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

### **Florida Department of Health Certificate/Lab ID: E87814. *NELAP Accredited.***

*Non-Potable Water* (Inorganic Parameters: SM2320B, EPA 120.1, SM2510B, EPA 245.1, EPA 150.1, EPA 160.2, SM2540D, EPA 335.2, SM2540G, EPA 180.1. Organic Parameters: EPA 625, 608.)

*Solid & Chemical Materials* (Inorganic Parameters: 6020, 7470, 7471, 9045, 9014. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

*Air & Emissions* (EPA TO-15.)

### **Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. *NELAP Accredited.***

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 150.1, 160.2, 180.1, 200.8, 245.1, 310.1, 335.2, 608, 625, 1631, 3010, 3015, 3020, 6020, 9010, 9014, 9040, SM2320B, 2510B, 2540D, 2540G, 4500CN-E, 4500H-B, Organic Parameters: EPA 3510, 3580, 3630, 3640, 3660, 3665, 5030, 8015 (mod), 3570, 8081, 8082, 8260, 8270, )

*Solid & Chemical Materials* (Inorganic Parameters: 6020, 7196, 7470, 7471, 7474, 9010, 9014, 9040, 9045, 9060. Organic Parameters: EPA 8015 (mod), EPA 3570, 1311, 3050, 3051, 3060, 3580, 3630, 3640, 3660, 3665, 5035, 8081, 8082, 8260, 8270.)

*Biological Tissue* (Inorganic Parameters: EPA 6020. Organic Parameters: EPA 3570, 3510, 3610, 3630, 3640, 8270.)

### **Maine Department of Human Services Certificate/Lab ID: MA0030.**

*Wastewater* (Inorganic Parameters: EPA 120.1, 300.0, SM 2320, 2510B, 2540C, 2540D, EPA 245.1. Organic Parameters: 608, 624.)

### **Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA030.**

*Non-Potable Water* (Inorganic Parameters: SM4500H+B. Organic Parameters: EPA 624.)

### **New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. *NELAP Accredited.***

*Non-Potable Water* (Inorganic Parameters: EPA 200.8, 245.1, 1631E, 120.1, 150.1, 180.1, 310.1, 335.2, 160.2, SM2540D, 2540G, 4500CN-E, 4500H+B, 2320B, 2510B. Organic Parameters: EPA 625, 608.)

**New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. *NELAP Accredited.***

*Non-Potable Water* (Inorganic Parameters: SW-846 1312, 3010, 3020A, 3015, 6020, SM2320B, EPA 200.8, SM2540C, 2540D, 2540G, EPA 120.1, SM2510B, EPA 180.1, 245.1, 1631E, SW-846 9040B, 6020, 9010B, 9014 Organic Parameters: EPA 608, 625, SW-846 3510C, 3580A, 5030B, 3035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082 8260B, 8270C)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 6020, 9010B, 9014, 1311, 1312, 3050B, 3051, 3060A, 7196A, 7470A, 7471A, 9045C, 9060. Organic Parameters: SW-846 3580A, 5030B, 3035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082, 8260B, 8270C, 3570, 8015B.)

*Atmospheric Organic Parameters* (EPA TO-15)

*Biological Tissue* (Inorganic Parameters: SW-846 6020 Organic Parameters: SW-846 8270C, 3510C, 3570, 3610B, 3630C, 3640A)

**New York Department of Health Certificate/Lab ID: 11627. *NELAP Accredited.***

*Non-Potable Water* (Inorganic Parameters: EPA 310.1, SM2320B, EPA 365.2, 160.1, EPA 160.2, SM2540D, EPA 200.8, 6020, 1631E, 245.1, 335.2, 9014, 150.1, 9040B, 120.1, SM2510B, EPA 376.2, 180.1, 9010B. Organic Parameters: EPA 624, 8260B, 8270C, 608, 8081A, 625, 8082, 3510C, 3511, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 9040B, 9045C, SW-846 Ch7 Sec 7.3, EPA 6020, 7196A, 7471A, 7474, 9014, 9040B, 9045C, 9010B. Organic Parameters: EPA 8260B, 8270C, 8081A, DRO 8015B, 8082, 1311, 3050B, 3580, 3050B, 3035, 3570, 3051, 5035, 5030B.)

*Air & Emissions* (EPA TO-15.)

**Pennsylvania Department of Environmental Protection Certificate/Lab ID: 68-02089. *NELAP Accredited.***

*Non-Potable Water* (Organic Parameters: EPA 5030B, EPA 8260)

**Rhode Island Department of Health Certificate/Lab ID: LAO00299. *NELAP Accredited via LA-DEQ.***

Refer to MA-DEP Certificate for Non-Potable Water.

Refer to LA-DEQ Certificate for Non-Potable Water.

**Texas Commission of Environmental Quality Certificate/Lab ID: T104704419-08-TX. *NELAP Accredited.***

*Solid & Chemical Materials* (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 7196, 9014, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8260, 8081, 8082.)

**U.S. Army Corps of Engineers**

**Department of Defense Certificate/Lab ID: L2217.01.**

*Non-Potable Water* (Inorganic Parameters: EPA 3005A,3020, 6020, 245.1, 245.7, 1631E, 7470A, 7474, 9014, 120.1, 9050A, 180.1, SM4500H-B, 2320B, 2510B, 2540D,9040. Organic Parameters: EPA 3510C, 5030B, 9010B, 624, 8260B, 8270C, 8270 Alk-PAH, 8082, 8081A, 8015 (SHC), 8015 (DRO).)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 1312,3051, 6020, 747A, 7474, 9045C,9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580, 3570, 3540C, 5035, 8260B, 8270C, 8270 Alk-PAH, 8082, 8081A, 8015 (SHC), 8015 (DRO).

*Air & Emissions* (EPA TO-15.)

**Analytes Not Accredited by NELAP**

Certification is not available by NELAP for the following analytes: **8270C**: Biphenyl.



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

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

# CHAIN OF CUSTODY

PAGE 3 OF 34

Date Recd in Lab: 4/20/10

Report Information - Data Deliverables

ALPHA Job #: 1005716

**Client Information**

Client: GPRM

Project Name: Roughneck Wayland

Project Location: Wayland, MA

Project #:0114119

Project Manager: Jason Flattery

Project Location: Wayland, MA

Address: 399 Boston St.

Project Manager: Jason Flattery

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

Phone: (617) 444-7800

Project Manager: Jason Flattery

Project Location: Wayland, MA

MA MCP PRESUMPTIVE CERTAINTY ... CT REASONABLE CONFIDENCE PROTO

Fax: (617) 207-6449

Project Manager: Jason Flattery

Project Location: Wayland, MA

Regulatory Requirements/Report Limits

Email: Jason.Flattery@erm.com

Project Manager: Jason Flattery

Project Location: Wayland, MA

Regulatory Requirements/Report Limits

Other Project Specific Requirements/Comments/Detection Limits:

MA MCP PRESUMPTIVE CERTAINTY ... CT REASONABLE CONFIDENCE PROTO

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.

Note: All CAM methods for inorganic analyses require MS every 20 soil samples  
 Note: Samples preserved w/ascorbic acid have a shortened holding time of 5 days

ALPHA Lab ID (Lab Use Only)

Sample ID

Collection Date

Time

Sample Matrix

Sampler's Initials

Container Type

Preservative

Date/Time

Reported By:

Date/Time

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Time	Sample Matrix	Sampler's Initials	Container Type	Preservative	Date/Time	Reported By:	Date/Time	Sample Specific Comments
G5716	MW-216D-20100420-01	4/20/10	0915	GW	JN	V	V	4/20/10 1420	<u>Jason Flattery</u>	4/20/10 1420	
	2. MW-206D-20100420-01	4/20/10	1322	GW	JDF	V	V	4/20/10 1515	<u>Jason Flattery</u>	4/20/10 1515	
	3. MW-206M-20100420-01	4/20/10	1500	GW	JDF	V	V	4/20/10 1555	<u>Jason Flattery</u>	4/20/10 1555	
	4. MW-102-20100420-01	4/20/10	1520	GW	CC	V	V				
	5. MW-106-20100420-01	4/20/10	1340	GW	JN	V	V				
	6. MW-106M-20100420-01	4/20/10	1425	GW	JN	V	V				
	7. MW-435-20100420-01	4/20/10	1520	GW	JN	V	V				
	8. MW-203M-20100420-01	4/20/10	1410	GW	SMC	V	V				
	9. MW-203S-20100420-01	4/20/10	1515	GW	SMC	V	V				
	10. MW-202M-20100420-01	4/20/10	1555	GW	EW	V	V				

**ANALYSIS**

8021 B by 8260

8021 B by 8260

8021 B by 8260

827051M (14 Digoxan)

**SAMPLE HANDLING**

Filtration \_\_\_\_\_

Done

Not needed

Lab to do

Preservation

Lab to do

(Please specify below)

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
 MAMCP or CT RCP?

Relinquished By: Jason Flattery

Date/Time: 4/20/10

Reported By: Jason Flattery

Date/Time: 4/20/10



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

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

**CHAIN OF CUSTODY** PAGE 4 OF 4

**Client Information**

Client: GRM  
 Address: 399 Belkinston Street  
Wm Clear Boston, MA 02114  
 Phone: (617) 646-7800  
 Fax: (617) 267-6447

Project Name: Roughness Wayland  
 Project Location: Wayland, MA  
 Project #: 0114119  
 Project Manager: Jason Flattery  
 ALPHA Quote #:

Turn-Around Time

Email: Jason.Flattery@GRM.COM  
 These samples have been previously analyzed by Alpha

Standard  RUSH (only confirmed if pre-approved)  
 Date Due: 4/27/10 Time:

**Other Project Specific Requirements/Comments/Detection Limits:**  
 If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.  
 (Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
05716	IW-15-20100420-01	4/20/10	1415	GW	EG
12	NW-214-20100420-01	4/20/10	1610	GW	CC

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
 MA MCP or CT RCP?

FORM NO: 01-01 (rev. 18-Jan-2010)

**Report Information - Data Deliverables**

FAX  EMAIL  
 ADEX  Add'l Deliverables

**Regulatory Requirements/Report Limits**

State/Fed Program MA MCP Criteria GW-2  
**MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO**

Date Rec'd in Lab: 4/20/10  
 ALPHA Job #: 11005716

**Billing Information**

Same as Client info PO #:

Yes  No Are MCP Analytical Methods Required?  
 Yes  No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)  
 Yes  No Are CT RCP (Reasonable Confidence Protocol) Required?

ANALYSIS  
8021 B by 8260  
SO4  
TOC  
Diss. Nat K

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

Container Type	Date/Time	Received By:	Date/Time
V P P P	4/20/10	Jason Flattery	4/20/10
B A D N	4/20-10	Mrs. [Signature]	4/20/10

Relinquished By: Angela Wilson  
Spec Reps

Received By: Jason Flattery  
4/20/10  
4/20/10

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 Alphas Terms and Conditions. See reverse side.





# CHAIN OF CUSTODY

PAGE 3 OF 34

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

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

**Client Information**

Client: GRM

Address: 399 Benjiston St.

6th Floor Boston, MA 02116

Phone: (617) 446-7800

Fax: (617) 267-6447

Email: Jason.Flattery@grm.com

These samples have been previously analyzed by Alpha

**Other Project Specific Requirements/Comments/Detection Limits:**

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.  
(Note: All CAM methods for inorganic analyses require MS every 20 soil samples)  
**Note: Samples preserved w/ascorbic acid have a shortened holding time of 5 days**

**Project Information**

Project Name: Raytheon Wayland

Project Location: Wayland, MA

Project #: 0114119

Project Manager: Jason Flattery

Project Quote #:

**Turn-Around Time**

Standard

RUSH (only confirmed if pre-approved)

Date Due: 4/27/10

Time:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials												
		Date	Time														
05716	MW-216D-20100420-01	4/20/10	0915	GW	JN	R											
	MW-206D-20100420-01	4/20/10	1322	GW	JDF	R											
	MW-206M-20100420-01	4/20/10	1500	GW	JDF	R											
	MW-102-20100420-01	4/20/10	1520	GW	CC	R											
	MW-106-20100420-01	4/20/10	1340	GW	JN	R											
	MW-106M-20100420-01	4/20/10	1425	GW	JN	R											
	MW-43S-20100420-01	4/20/10	1520	GW	JN	R											
	MW-203M-20100420-01	4/20/10	1410	GW	SMC	R											
	MW-203S-20100420-01	4/20/10	1515	GW	SMC	R											
	MW-202M-20100420-01	4/20/10	1555	GW	EW	R											

**PLEASE ANSWER QUESTIONS ABOVE!**

**IS YOUR PROJECT MA MCP or CT RCP?**

Relinquished By: David Wynn

Date/Time: 4/20/10 1420

Container Type: V

Preservative: 0

Received By: David Wynn

Date/Time: 4/20/10 1420

**Report Information - Data Deliverables**

FAX  EMAIL  
 ADEX  Add'l Deliverables

**Regulatory Requirements/Report Limits**

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

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

Yes  No Are MCP Analytical Methods Required?  
 Yes  No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)  
 Yes  No Are CT RCP (Reasonable Confidence Protocols) Required?

Date Rec'd in Lab: 4/20/10

ALPHA Job #: 61005716

**Billing Information**

Same as Client info  PO #:

**ANALYSIS**

8021B by 82760  
8021B by 82760  
8021B by 82760  
827051M (1,4 Dioxin)

**SAMPLE HANDLING**

Filtration \_\_\_\_\_  
 Done  
 Not needed  
 Lab to do  
 Preservation  
 Lab to do

(Please specify below)

Sample Specific Comments

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 Terms and Conditions. See reverse side.

Only run 827051M if 827051M 1,4 Dioxin has 4 D1 > 3 ppb



## ANALYTICAL REPORT

Lab Number:	L1005780
Client:	ERM Consulting & Engineering, Inc. 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Phone:	(617) 646-7816
Project Name:	RAYTHEON WAYLAND
Project Number:	0114119
Report Date:	04/30/10

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1005780-01	MW-46M-20100421-01	WAYLAND, MA	04/21/10 10:40
L1005780-02	MW-33S-20100421-01	WAYLAND, MA	04/21/10 08:10
L1005780-03	DUP-005-20100421-01	WAYLAND, MA	04/21/10 07:00
L1005780-04	TB-003-20100421-01	WAYLAND, MA	04/21/10 00:00
L1005780-05	MW-103-20100421-01	WAYLAND, MA	04/21/10 08:40
L1005780-06	MW-33M-20100421-01	WAYLAND, MA	04/21/10 10:20
L1005780-07	MW-210-20100421-01	WAYLAND, MA	04/21/10 10:05
L1005780-08	MW-104-20100421-01	WAYLAND, MA	04/21/10 09:05
L1005780-09	MW-212M-20100421-01	WAYLAND, MA	04/21/10 08:15
L1005780-10	MW-213-20100421-01	WAYLAND, MA	04/21/10 12:00
L1005780-11	IW-2-20100421-01	WAYLAND, MA	04/21/10 11:25
L1005780-12	DUP-006-20100421-01	WAYLAND, MA	04/21/10 11:11
L1005780-13	MW-265M-20100421-01	WAYLAND, MA	04/21/10 08:20
L1005780-14	IW-18-20100421-01	WAYLAND, MA	04/21/10 10:20
L1005780-15	MW-115-20100421-01	WAYLAND, MA	04/21/10 11:30
L1005780-16	MW-113-20100421-01	WAYLAND, MA	04/21/10 12:45
L1005780-17	MW-403-20100421-01	WAYLAND, MA	04/21/10 13:25
L1005780-18	MW-47M-20100421-01	WAYLAND, MA	04/21/10 13:10
L1005780-19	MW-47S-20100421-01	WAYLAND, MA	04/21/10 12:05
L1005780-20	DUP-007-20100421-01	WAYLAND, MA	04/21/10 11:14

Project Name: RAYTHEON WAYLAND

Lab Number: L1005780

Project Number: 0114119

Report Date: 04/30/10

**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 through F is required for "Presumptive Certainty" status</b>		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

<b>A response to questions G, H and I is required for "Presumptive Certainty" status</b>		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	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:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

### Case Narrative

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

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

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

For additional information, please contact Client Services at 800-624-9220.

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#### MCP Related Narratives

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

L1005780-01, -02, -03, -05, -06 and -15 were processed against a calibration curve that utilized a quadratic fit for 1,1,1-Trichloroethane, Carbon tetrachloride, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Dibromochloromethane, 1,2-Dibromoethane, 1,1,1,2-Tetrachloroethane, Bromoform, Hexachlorobutadiene and 1,2,3-Trichlorobenzene.

L1005780-07, -08, -09 and -11 through -14 were processed against a calibration curve that utilized a quadratic fit for 1,1,1-Trichloroethane, Carbon tetrachloride, cis-1,3-Dichloropropene, trans-1,3-

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

### Case Narrative (continued)

Dichloropropene, Dibromochloromethane, 1,2-Dibromoethane, 1,1,1,2-Tetrachloroethane, Bromoform and Hexachlorobutadiene.

L1005780-11, -12 and -13 have elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the samples.

L1005780-15 was re-analyzed on dilution in order to quantitate the sample within the calibration range. The result should be considered estimated, and is qualified with an E flag, for any compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound that exceeded the calibration range.

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The WG409674-2 LCSD recovery, associated with L1005780-04, -10, -17 and -20, was above the acceptance criteria for Bromoform (138%); however, the associated samples were non-detect for this target compound. The results of the original analysis are reported.

The WG409674-1/-2 LCS/LCSD RPDs, associated with L1005780-04, -10, -17 and -20, are above the acceptance criteria for Hexachlorobutadiene (23%) and 1,2,4-Trichlorobenzene (24%); however, the individual LCS/LCSD recoveries are within method limits. The results of the associated samples are reported.

The continuing calibration standard associated with L1005780-04, -10, -17, -20 and the associated WG409674-1/-2/-3 LCS/LCSD/Method Blank is outside the %D criteria for Dichlorodifluoromethane, Bromodichloromethane, Bromoform and 1,2,4-Trichlorobenzene; however, it is within overall acceptance criteria.

The continuing calibration standard associated with L1005780-01, -02, -03, -05 and -06 is outside the %D criteria for Dichlorodifluoromethane; however, it is within overall acceptance criteria.

The continuing calibration standard associated with L1005780-07, -08, -09, -11 through -14 and the associated WG410195-1/-2/-3 LCS/LCSD/Method Blank is outside the %D criteria for Dichlorodifluoromethane; however, it is within overall acceptance criteria.

The continuing calibration standard, associated with L1005780-15 and the associated WG410196-4/-5/-6 LCS/LCSD/Method Blank, is outside the %D criteria for Dichlorodifluoromethane; however, it is within overall

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

### Case Narrative (continued)

acceptance criteria.

In reference to question I:

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

Volatile Organics - SIM

In reference to question H:

The WG409673-1/-2 LCS/LCSD RPD, associated with L1005780-01, -17 and -20, is above the acceptance criteria for 1,4-Dioxane (41%); however, the individual LCS/LCSD recoveries are within method limits. The results of the associated samples are reported.

Metals

In reference to question I:

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

Non-MCP Related Narratives

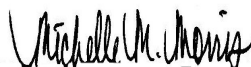
Total Organic Carbon

L1005780-11 and -12 have elevated detection limits due to the dilution required by the sample matrix.

L1005780-14 has an elevated detection limit due to the dilution required by the elevated concentration present 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:



Michelle M. Morris

Title: Technical Director/Representative

Date: 04/30/10

# ORGANICS



# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-01  
**Client ID:** MW-46M-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/27/10 08:34  
**Analyst:** MM

**Date Collected:** 04/21/10 10:40  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-01

Date Collected: 04/21/10 10:40

Client ID: MW-46M-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	89		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-01

Date Collected: 04/21/10 10:40

Client ID: MW-46M-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Matrix: Water

Analytical Method: 97,8260B-SIM

Analytical Date: 04/25/10 14:27

Analyst: MM

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
MCP Volatile Organics by SIM - Westborough Lab					
1,4-Dioxane	ND		ug/l	3.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-02  
**Client ID:** MW-33S-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/27/10 16:30  
**Analyst:** MM

**Date Collected:** 04/21/10 08:10  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	3.0		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	7.9		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-02  
 Client ID: MW-33S-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 08:10  
 Date Received: 04/21/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	103		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-03  
**Client ID:** DUP-005-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/27/10 17:02  
**Analyst:** MM

**Date Collected:** 04/21/10 07:00  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	3.0		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	7.7		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-03

Date Collected: 04/21/10 07:00

Client ID: DUP-005-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	98		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-04  
**Client ID:** TB-003-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 11:38  
**Analyst:** MM

**Date Collected:** 04/21/10 00:00  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-04  
 Client ID: TB-003-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 00:00  
 Date Received: 04/21/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	106		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-05  
**Client ID:** MW-103-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/27/10 17:33  
**Analyst:** MM

**Date Collected:** 04/21/10 08:40  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-05  
 Client ID: MW-103-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 08:40  
 Date Received: 04/21/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	95		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-06  
**Client ID:** MW-33M-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/27/10 18:05  
**Analyst:** MM

**Date Collected:** 04/21/10 10:20  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	4.9		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	1.6		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-06

Date Collected: 04/21/10 10:20

Client ID: MW-33M-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	99		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-07  
**Client ID:** MW-210-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 10:59  
**Analyst:** MM

**Date Collected:** 04/21/10 10:05  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	2.2		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	13		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-07  
 Client ID: MW-210-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 10:05  
 Date Received: 04/21/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	99		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-08  
**Client ID:** MW-104-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 11:31  
**Analyst:** MM

**Date Collected:** 04/21/10 09:05  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	1.4		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	3.4		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-08  
 Client ID: MW-104-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 09:05  
 Date Received: 04/21/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	96		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-09  
**Client ID:** MW-212M-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 12:02  
**Analyst:** MM

**Date Collected:** 04/21/10 08:15  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	2.1		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-09

Date Collected: 04/21/10 08:15

Client ID: MW-212M-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-10  
**Client ID:** MW-213-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 15:01  
**Analyst:** MM

**Date Collected:** 04/21/10 12:00  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-10  
 Client ID: MW-213-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 12:00  
 Date Received: 04/21/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-11 D  
**Client ID:** IW-2-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 09:24  
**Analyst:** MM

**Date Collected:** 04/21/10 11:25  
**Date Received:** 04/21/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	100	20
1,1-Dichloroethane	ND		ug/l	20	20
Chloroform	ND		ug/l	20	20
Carbon tetrachloride	ND		ug/l	20	20
1,2-Dichloropropane	ND		ug/l	20	20
Dibromochloromethane	ND		ug/l	20	20
1,1,2-Trichloroethane	ND		ug/l	20	20
Tetrachloroethene	ND		ug/l	20	20
Chlorobenzene	ND		ug/l	20	20
1,2-Dichloroethane	ND		ug/l	20	20
1,1,1-Trichloroethane	ND		ug/l	20	20
Bromodichloromethane	ND		ug/l	20	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	20	20
Chloromethane	ND		ug/l	40	20
Vinyl chloride	70		ug/l	20	20
Chloroethane	ND		ug/l	40	20
1,1-Dichloroethene	ND		ug/l	20	20
trans-1,2-Dichloroethene	21		ug/l	20	20
Trichloroethene	ND		ug/l	20	20
1,2-Dichlorobenzene	ND		ug/l	20	20
1,3-Dichlorobenzene	ND		ug/l	20	20
1,4-Dichlorobenzene	ND		ug/l	20	20
cis-1,2-Dichloroethene	1000		ug/l	20	20
Dichlorodifluoromethane	ND		ug/l	40	20
1,2-Dibromoethane	ND		ug/l	40	20
1,3-Dichloropropane	ND		ug/l	40	20
1,1,1,2-Tetrachloroethane	ND		ug/l	20	20

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-11 D

Date Collected: 04/21/10 11:25

Client ID: IW-2-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	40	20
p-Chlorotoluene	ND		ug/l	40	20
Hexachlorobutadiene	ND		ug/l	12	20
1,2,4-Trichlorobenzene	ND		ug/l	40	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	98		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-12 D  
**Client ID:** DUP-006-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 09:56  
**Analyst:** MM

**Date Collected:** 04/21/10 11:11  
**Date Received:** 04/21/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	100	20
1,1-Dichloroethane	ND		ug/l	20	20
Chloroform	ND		ug/l	20	20
Carbon tetrachloride	ND		ug/l	20	20
1,2-Dichloropropane	ND		ug/l	20	20
Dibromochloromethane	ND		ug/l	20	20
1,1,2-Trichloroethane	ND		ug/l	20	20
Tetrachloroethene	ND		ug/l	20	20
Chlorobenzene	ND		ug/l	20	20
1,2-Dichloroethane	ND		ug/l	20	20
1,1,1-Trichloroethane	ND		ug/l	20	20
Bromodichloromethane	ND		ug/l	20	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	20	20
Chloromethane	ND		ug/l	40	20
Vinyl chloride	75		ug/l	20	20
Chloroethane	ND		ug/l	40	20
1,1-Dichloroethene	ND		ug/l	20	20
trans-1,2-Dichloroethene	21		ug/l	20	20
Trichloroethene	ND		ug/l	20	20
1,2-Dichlorobenzene	ND		ug/l	20	20
1,3-Dichlorobenzene	ND		ug/l	20	20
1,4-Dichlorobenzene	ND		ug/l	20	20
cis-1,2-Dichloroethene	1000		ug/l	20	20
Dichlorodifluoromethane	ND		ug/l	40	20
1,2-Dibromoethane	ND		ug/l	40	20
1,3-Dichloropropane	ND		ug/l	40	20
1,1,1,2-Tetrachloroethane	ND		ug/l	20	20

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-12 D

Date Collected: 04/21/10 11:11

Client ID: DUP-006-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	40	20
p-Chlorotoluene	ND		ug/l	40	20
Hexachlorobutadiene	ND		ug/l	12	20
1,2,4-Trichlorobenzene	ND		ug/l	40	20

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-13 D  
**Client ID:** MW-265M-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 10:27  
**Analyst:** MM

**Date Collected:** 04/21/10 08:20  
**Date Received:** 04/21/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	50	10
1,1-Dichloroethane	ND		ug/l	10	10
Chloroform	ND		ug/l	10	10
Carbon tetrachloride	ND		ug/l	10	10
1,2-Dichloropropane	ND		ug/l	10	10
Dibromochloromethane	ND		ug/l	10	10
1,1,2-Trichloroethane	ND		ug/l	10	10
Tetrachloroethene	36		ug/l	10	10
Chlorobenzene	ND		ug/l	10	10
1,2-Dichloroethane	ND		ug/l	10	10
1,1,1-Trichloroethane	ND		ug/l	10	10
Bromodichloromethane	ND		ug/l	10	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	10
Bromoform	ND		ug/l	20	10
1,1,2,2-Tetrachloroethane	ND		ug/l	10	10
Chloromethane	ND		ug/l	20	10
Vinyl chloride	100		ug/l	10	10
Chloroethane	ND		ug/l	20	10
1,1-Dichloroethene	ND		ug/l	10	10
trans-1,2-Dichloroethene	ND		ug/l	10	10
Trichloroethene	350		ug/l	10	10
1,2-Dichlorobenzene	ND		ug/l	10	10
1,3-Dichlorobenzene	ND		ug/l	10	10
1,4-Dichlorobenzene	ND		ug/l	10	10
cis-1,2-Dichloroethene	360		ug/l	10	10
Dichlorodifluoromethane	ND		ug/l	20	10
1,2-Dibromoethane	ND		ug/l	20	10
1,3-Dichloropropane	ND		ug/l	20	10
1,1,1,2-Tetrachloroethane	ND		ug/l	10	10

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-13 D  
 Client ID: MW-265M-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 08:20  
 Date Received: 04/21/10  
 Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	20	10
p-Chlorotoluene	ND		ug/l	20	10
Hexachlorobutadiene	ND		ug/l	6.0	10
1,2,4-Trichlorobenzene	ND		ug/l	20	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	97		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

### SAMPLE RESULTS

**Lab ID:** L1005780-14  
**Client ID:** IW-18-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 12:34  
**Analyst:** MM

**Date Collected:** 04/21/10 10:20  
**Date Received:** 04/21/10  
**Field Prep:** See Narrative

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-14  
 Client ID: IW-18-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 10:20  
 Date Received: 04/21/10  
 Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	99		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-15  
**Client ID:** MW-115-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/27/10 10:22  
**Analyst:** PD

**Date Collected:** 04/21/10 11:30  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	1.3		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	58		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	2.6		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	220	E	ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	1.2		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-15  
 Client ID: MW-115-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 11:30  
 Date Received: 04/21/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	96		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-15 D

Date Collected: 04/21/10 11:30

Client ID: MW-115-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Matrix: Water

Analytical Method: 97,8260B

Analytical Date: 04/28/10 14:41

Analyst: PD

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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## MCP Volatile Organics - Westborough Lab

Trichloroethene	170		ug/l	10	10
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	93		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-16  
**Client ID:** MW-113-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/27/10 10:57  
**Analyst:** PD

**Date Collected:** 04/21/10 12:45  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	12		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	44		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-16  
 Client ID: MW-113-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 12:45  
 Date Received: 04/21/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-17  
**Client ID:** MW-403-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 15:35  
**Analyst:** MM

**Date Collected:** 04/21/10 13:25  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	2.5		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	45		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	2.0		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-17  
 Client ID: MW-403-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 13:25  
 Date Received: 04/21/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	103		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-17  
**Client ID:** MW-403-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B-SIM  
**Analytical Date:** 04/25/10 15:35  
**Analyst:** MM

**Date Collected:** 04/21/10 13:25  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
MCP Volatile Organics by SIM - Westborough Lab					
1,4-Dioxane	ND		ug/l	3.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-18  
**Client ID:** MW-47M-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/27/10 11:31  
**Analyst:** PD

**Date Collected:** 04/21/10 13:10  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	54		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	6.2		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-18

Date Collected: 04/21/10 13:10

Client ID: MW-47M-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

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



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-19  
**Client ID:** MW-47S-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/27/10 12:07  
**Analyst:** PD

**Date Collected:** 04/21/10 12:05  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	1.9		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	3.6		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-19  
 Client ID: MW-47S-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 12:05  
 Date Received: 04/21/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-20  
**Client ID:** DUP-007-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/25/10 16:09  
**Analyst:** MM

**Date Collected:** 04/21/10 11:14  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	2.3		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	43		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	2.0		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-20

Date Collected: 04/21/10 11:14

Client ID: DUP-007-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-20

Date Collected: 04/21/10 11:14

Client ID: DUP-007-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Matrix: Water

Analytical Method: 97,8260B-SIM

Analytical Date: 04/25/10 16:09

Analyst: MM

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
MCP Volatile Organics by SIM - Westborough Lab					
1,4-Dioxane	ND		ug/l	3.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 97,8260B-SIM

Analytical Date: 04/25/10 08:14

Analyst: MM

<b>Parameter</b>	<b>Result</b>	<b>Qualifier</b>	<b>Units</b>	<b>RDL</b>
MCP Volatile Organics by SIM - Westborough Lab for sample(s): 01,17,20 Batch: WG409673-3				
1,4-Dioxane	ND		ug/l	3.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/25/10 10:30  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 04,10,17,20 Batch: WG409674-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
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	1.0
Chloromethane	ND		ug/l	2.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
o-Chlorotoluene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/25/10 10:30  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 04,10,17,20 Batch: WG409674-3				
p-Chlorotoluene	ND		ug/l	2.0
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.0

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	102		70-130



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/27/10 08:02  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03,05-06 Batch: WG409938-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
Trichlorofluoromethane	ND		ug/l	2.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.0
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0
Benzene	ND		ug/l	1.0
Toluene	ND		ug/l	1.0
Ethylbenzene	ND		ug/l	1.0
Chloromethane	ND		ug/l	2.0
Bromomethane	ND		ug/l	5.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/27/10 08:02  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03,05-06 Batch: WG409938-3				
Methyl tert butyl ether	ND		ug/l	2.0
p/m-Xylene	ND		ug/l	2.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dibromomethane	ND		ug/l	2.0
1,2,3-Trichloropropane	ND		ug/l	2.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	2.0
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	2.0
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
Bromobenzene	ND		ug/l	2.0
n-Butylbenzene	ND		ug/l	2.0
sec-Butylbenzene	ND		ug/l	2.0
tert-Butylbenzene	ND		ug/l	2.0
o-Chlorotoluene	ND		ug/l	2.0
p-Chlorotoluene	ND		ug/l	2.0
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	2.0
p-Isopropyltoluene	ND		ug/l	2.0
Naphthalene	ND		ug/l	5.0
n-Propylbenzene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

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

Analytical Method: 97,8260B  
 Analytical Date: 04/27/10 08:02  
 Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-03,05-06 Batch: WG409938-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.0
1,2,4-Trichlorobenzene	ND		ug/l	2.0
1,3,5-Trimethylbenzene	ND		ug/l	2.0
1,2,4-Trimethylbenzene	ND		ug/l	2.0
Ethyl ether	ND		ug/l	2.0
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	94		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	87		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/28/10 08:52  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 07-09,11-14 Batch: WG410195-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
Trichlorofluoromethane	ND		ug/l	2.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.0
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0
Benzene	ND		ug/l	1.0
Toluene	ND		ug/l	1.0
Ethylbenzene	ND		ug/l	1.0
Chloromethane	ND		ug/l	2.0
Bromomethane	ND		ug/l	5.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/28/10 08:52  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 07-09,11-14 Batch: WG410195-3				
Methyl tert butyl ether	ND		ug/l	2.0
p/m-Xylene	ND		ug/l	2.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dibromomethane	ND		ug/l	2.0
1,2,3-Trichloropropane	ND		ug/l	2.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	2.0
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	2.0
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
Bromobenzene	ND		ug/l	2.0
n-Butylbenzene	ND		ug/l	2.0
sec-Butylbenzene	ND		ug/l	2.0
tert-Butylbenzene	ND		ug/l	2.0
o-Chlorotoluene	ND		ug/l	2.0
p-Chlorotoluene	ND		ug/l	2.0
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	2.0
p-Isopropyltoluene	ND		ug/l	2.0
Naphthalene	ND		ug/l	5.0
n-Propylbenzene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/28/10 08:52  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 07-09,11-14 Batch: WG410195-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.0
1,2,4-Trichlorobenzene	ND		ug/l	2.0
1,3,5-Trimethylbenzene	ND		ug/l	2.0
1,2,4-Trimethylbenzene	ND		ug/l	2.0
Ethyl ether	ND		ug/l	2.0
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	100		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	92		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/27/10 09:37  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 15-16,18-19 Batch: WG410196-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
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	1.0
Chloromethane	ND		ug/l	2.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
o-Chlorotoluene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/27/10 09:37  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 15-16,18-19 Batch: WG410196-3				
p-Chlorotoluene	ND		ug/l	2.0
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.0

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	96		70-130



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/28/10 08:52  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 15 Batch: WG410196-6				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
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	1.0
Chloromethane	ND		ug/l	2.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
o-Chlorotoluene	ND		ug/l	2.0

Project Name: RAYTHEON WAYLAND

Lab Number: L1005780

Project Number: 0114119

Report Date: 04/30/10

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 97,8260B  
 Analytical Date: 04/28/10 08:52  
 Analyst: PD

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 15 Batch: WG410196-6				
p-Chlorotoluene	ND		ug/l	2.0
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.0

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	92		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics by SIM - Westborough Lab Associated sample(s): 01,17,20 Batch: WG409673-1 WG409673-2								
1,4-Dioxane	81		123		70-130	41	Q	20

MCP Volatile Organics - Westborough Lab Associated sample(s): 04,10,17,20 Batch: WG409674-1 WG409674-2								
Methylene chloride	101		102		70-130	1		20
1,1-Dichloroethane	105		106		70-130	1		20
Chloroform	109		109		70-130	0		20
Carbon tetrachloride	117		122		70-130	4		20
1,2-Dichloropropane	102		104		70-130	2		20
Dibromochloromethane	119		124		70-130	4		20
1,1,2-Trichloroethane	99		100		70-130	1		20
Tetrachloroethene	104		110		70-130	6		20
Chlorobenzene	96		99		70-130	3		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 04,10,17,20 Batch: WG409674-1 WG409674-2								
1,2-Dichloroethane	112		115		70-130	3		20
1,1,1-Trichloroethane	107		108		70-130	1		20
Bromodichloromethane	121		123		70-130	2		20
trans-1,3-Dichloropropene	97		99		70-130	2		20
cis-1,3-Dichloropropene	92		95		70-130	3		20
Bromoform	128		138	Q	70-130	8		20
1,1,2,2-Tetrachloroethane	89		91		70-130	2		20
Chloromethane	95		98		70-130	3		20
Vinyl chloride	88		89		70-130	1		20
Chloroethane	102		105		70-130	3		20
1,1-Dichloroethene	95		97		70-130	2		20
trans-1,2-Dichloroethene	101		104		70-130	3		20
Trichloroethene	97		106		70-130	9		20
1,2-Dichlorobenzene	90		100		70-130	11		20
1,3-Dichlorobenzene	92		103		70-130	11		20
1,4-Dichlorobenzene	93		102		70-130	9		20
cis-1,2-Dichloroethene	105		107		70-130	2		20
Dichlorodifluoromethane	77		80		70-130	4		20
1,2-Dibromoethane	99		101		70-130	2		20
1,3-Dichloropropane	101		101		70-130	0		20
1,1,1,2-Tetrachloroethane	116		112		70-130	4		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 04,10,17,20 Batch: WG409674-1 WG409674-2								
o-Chlorotoluene	90		99		70-130	10		20
p-Chlorotoluene	92		103		70-130	11		20
Hexachlorobutadiene	80		101		70-130	23	Q	20
1,2,4-Trichlorobenzene	77		98		70-130	24	Q	20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		103		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	91		96		70-130
Dibromofluoromethane	101		103		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03,05-06 Batch: WG409938-1 WG409938-2								
Methylene chloride	102		103		70-130	1		20
1,1-Dichloroethane	90		87		70-130	3		20
Chloroform	91		88		70-130	3		20
Carbon tetrachloride	91		87		70-130	4		20
1,2-Dichloropropane	84		85		70-130	1		20
Dibromochloromethane	89		86		70-130	3		20
1,1,2-Trichloroethane	90		95		70-130	5		20
Tetrachloroethene	94		94		70-130	0		20
Chlorobenzene	94		92		70-130	2		20
Trichlorofluoromethane	93		90		70-130	3		20
1,2-Dichloroethane	92		93		70-130	1		20
1,1,1-Trichloroethane	90		88		70-130	2		20
Bromodichloromethane	97		98		70-130	1		20
trans-1,3-Dichloropropene	89		90		70-130	1		20
cis-1,3-Dichloropropene	81		78		70-130	4		20
1,1-Dichloropropene	89		88		70-130	1		20
Bromoform	97		90		70-130	7		20
1,1,2,2-Tetrachloroethane	102		94		70-130	8		20
Benzene	88		90		70-130	2		20
Toluene	95		94		70-130	1		20
Ethylbenzene	104		104		70-130	0		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

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**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03,05-06 Batch: WG409938-1 WG409938-2								
Chloromethane	90		96		70-130	6		20
Bromomethane	98		97		70-130	1		20
Vinyl chloride	102		102		70-130	0		20
Chloroethane	98		99		70-130	1		20
1,1-Dichloroethene	85		85		70-130	0		20
trans-1,2-Dichloroethene	87		83		70-130	5		20
Trichloroethene	80		79		70-130	1		20
1,2-Dichlorobenzene	102		100		70-130	2		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	99		99		70-130	0		20
Methyl tert butyl ether	82		85		70-130	4		20
p/m-Xylene	104		106		70-130	2		20
o-Xylene	104		106		70-130	2		20
cis-1,2-Dichloroethene	90		91		70-130	1		20
Dibromomethane	90		86		70-130	5		20
1,2,3-Trichloropropane	106		103		70-130	3		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	77		77		70-130	0		20
Acetone	101		107		70-130	6		20
Carbon disulfide	82		74		70-130	10		20
2-Butanone	98		110		70-130	12		20

## Lab Control Sample Analysis

### Batch Quality Control

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**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03,05-06 Batch: WG409938-1 WG409938-2								
4-Methyl-2-pentanone	100		94		70-130	6		20
2-Hexanone	106		100		70-130	6		20
Bromochloromethane	93		92		70-130	1		20
Tetrahydrofuran	89		86		70-130	3		20
2,2-Dichloropropane	99		97		70-130	2		20
1,2-Dibromoethane	91		89		70-130	2		20
1,3-Dichloropropane	87		87		70-130	0		20
1,1,1,2-Tetrachloroethane	105		101		70-130	4		20
Bromobenzene	99		95		70-130	4		20
n-Butylbenzene	92		92		70-130	0		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	97		95		70-130	2		20
o-Chlorotoluene	97		96		70-130	1		20
p-Chlorotoluene	100		99		70-130	1		20
1,2-Dibromo-3-chloropropane	103		106		70-130	3		20
Hexachlorobutadiene	94		96		70-130	2		20
Isopropylbenzene	104		105		70-130	1		20
p-Isopropyltoluene	96		94		70-130	2		20
Naphthalene	74		75		70-130	1		20
n-Propylbenzene	98		100		70-130	2		20
1,2,3-Trichlorobenzene	88		89		70-130	1		20



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-03,05-06 Batch: WG409938-1 WG409938-2								
1,2,4-Trichlorobenzene	93		95		70-130	2		20
1,3,5-Trimethylbenzene	96		93		70-130	3		20
1,2,4-Trimethylbenzene	94		93		70-130	1		20
Ethyl ether	93		88		70-130	6		20
Isopropyl Ether	94		92		70-130	2		20
Ethyl-Tert-Butyl-Ether	93		92		70-130	1		20
Tertiary-Amyl Methyl Ether	90		92		70-130	2		20
1,4-Dioxane	105		112		70-130	6		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	99		102		70-130
Toluene-d8	107		106		70-130
4-Bromofluorobenzene	99		95		70-130
Dibromofluoromethane	94		96		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 07-09,11-14 Batch: WG410195-1 WG410195-2								
Methylene chloride	114		105		70-130	8		20
1,1-Dichloroethane	96		90		70-130	6		20
Chloroform	97		92		70-130	5		20
Carbon tetrachloride	99		89		70-130	11		20
1,2-Dichloropropane	93		86		70-130	8		20
Dibromochloromethane	94		87		70-130	8		20
1,1,2-Trichloroethane	100		94		70-130	6		20
Tetrachloroethene	97		96		70-130	1		20
Chlorobenzene	98		96		70-130	2		20
Trichlorofluoromethane	98		90		70-130	9		20
1,2-Dichloroethane	102		91		70-130	11		20
1,1,1-Trichloroethane	98		90		70-130	9		20
Bromodichloromethane	113		98		70-130	14		20
trans-1,3-Dichloropropene	101		90		70-130	12		20
cis-1,3-Dichloropropene	89		79		70-130	12		20
1,1-Dichloropropene	94		90		70-130	4		20
Bromoform	100		96		70-130	4		20
1,1,2,2-Tetrachloroethane	103		99		70-130	4		20
Benzene	98		91		70-130	7		20
Toluene	100		97		70-130	3		20
Ethylbenzene	103		102		70-130	1		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 07-09,11-14 Batch: WG410195-1 WG410195-2								
Chloromethane	100		96		70-130	4		20
Bromomethane	93		85		70-130	9		20
Vinyl chloride	108		100		70-130	8		20
Chloroethane	104		102		70-130	2		20
1,1-Dichloroethene	94		86		70-130	9		20
trans-1,2-Dichloroethene	92		85		70-130	8		20
Trichloroethene	85		82		70-130	4		20
1,2-Dichlorobenzene	106		105		70-130	1		20
1,3-Dichlorobenzene	102		103		70-130	1		20
1,4-Dichlorobenzene	104		103		70-130	1		20
Methyl tert butyl ether	92		80		70-130	14		20
p/m-Xylene	106		103		70-130	3		20
o-Xylene	105		101		70-130	4		20
cis-1,2-Dichloroethene	97		90		70-130	7		20
Dibromomethane	98		90		70-130	9		20
1,2,3-Trichloropropane	108		110		70-130	2		20
Styrene	100		96		70-130	4		20
Dichlorodifluoromethane	79		78		70-130	1		20
Acetone	106		103		70-130	3		20
Carbon disulfide	84		72		70-130	15		20
2-Butanone	120		100		70-130	18		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 07-09,11-14 Batch: WG410195-1 WG410195-2								
4-Methyl-2-pentanone	105		90		70-130	15		20
2-Hexanone	110		104		70-130	6		20
Bromochloromethane	102		90		70-130	13		20
Tetrahydrofuran	94		80		70-130	16		20
2,2-Dichloropropane	102		96		70-130	6		20
1,2-Dibromoethane	98		93		70-130	5		20
1,3-Dichloropropane	92		89		70-130	3		20
1,1,1,2-Tetrachloroethane	109		109		70-130	0		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	95		95		70-130	0		20
sec-Butylbenzene	102		100		70-130	2		20
tert-Butylbenzene	98		96		70-130	2		20
o-Chlorotoluene	99		98		70-130	1		20
p-Chlorotoluene	101		100		70-130	1		20
1,2-Dibromo-3-chloropropane	119		110		70-130	8		20
Hexachlorobutadiene	99		93		70-130	6		20
Isopropylbenzene	106		103		70-130	3		20
p-Isopropyltoluene	96		97		70-130	1		20
Naphthalene	80		77		70-130	4		20
n-Propylbenzene	102		101		70-130	1		20
1,2,3-Trichlorobenzene	95		92		70-130	3		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 07-09,11-14 Batch: WG410195-1 WG410195-2								
1,2,4-Trichlorobenzene	97		95		70-130	2		20
1,3,5-Trimethylbenzene	99		97		70-130	2		20
1,2,4-Trimethylbenzene	95		95		70-130	0		20
Ethyl ether	93		86		70-130	8		20
Isopropyl Ether	95		90		70-130	5		20
Ethyl-Tert-Butyl-Ether	97		90		70-130	7		20
Tertiary-Amyl Methyl Ether	95		94		70-130	1		20
1,4-Dioxane	117		104		70-130	12		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	107		103		70-130
Toluene-d8	103		107		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	98		95		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 15-16,18-19 Batch: WG410196-1 WG410196-2								
Methylene chloride	98		94		70-130	4		20
1,1-Dichloroethane	103		98		70-130	5		20
Chloroform	102		97		70-130	5		20
Carbon tetrachloride	96		98		70-130	2		20
1,2-Dichloropropane	101		98		70-130	3		20
Dibromochloromethane	105		107		70-130	2		20
1,1,2-Trichloroethane	108		109		70-130	1		20
Tetrachloroethene	101		100		70-130	1		20
Chlorobenzene	100		98		70-130	2		20
1,2-Dichloroethane	101		101		70-130	0		20
1,1,1-Trichloroethane	102		98		70-130	4		20
Bromodichloromethane	107		107		70-130	0		20
trans-1,3-Dichloropropene	116		116		70-130	0		20
cis-1,3-Dichloropropene	97		97		70-130	0		20
Bromoform	109		110		70-130	1		20
1,1,2,2-Tetrachloroethane	110		106		70-130	4		20
Chloromethane	76		72		70-130	5		20
Vinyl chloride	80		78		70-130	3		20
Chloroethane	89		83		70-130	7		20
1,1-Dichloroethene	104		104		70-130	0		20
trans-1,2-Dichloroethene	101		97		70-130	4		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 15-16,18-19 Batch: WG410196-1 WG410196-2								
Trichloroethene	97		96		70-130	1		20
1,2-Dichlorobenzene	104		103		70-130	1		20
1,3-Dichlorobenzene	109		104		70-130	5		20
1,4-Dichlorobenzene	106		103		70-130	3		20
cis-1,2-Dichloroethene	103		98		70-130	5		20
Dichlorodifluoromethane	81		76		70-130	6		20
1,2-Dibromoethane	106		107		70-130	1		20
1,3-Dichloropropane	110		111		70-130	1		20
1,1,1,2-Tetrachloroethane	112		114		70-130	2		20
o-Chlorotoluene	106		103		70-130	3		20
p-Chlorotoluene	109		105		70-130	4		20
Hexachlorobutadiene	119		108		70-130	10		20
1,2,4-Trichlorobenzene	116		113		70-130	3		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	103		103		70-130
Toluene-d8	103		100		70-130
4-Bromofluorobenzene	99		96		70-130
Dibromofluoromethane	98		98		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 15 Batch: WG410196-4 WG410196-5								
Methylene chloride	114		105		70-130	8		20
1,1-Dichloroethane	96		90		70-130	6		20
Chloroform	97		92		70-130	5		20
Carbon tetrachloride	99		89		70-130	11		20
1,2-Dichloropropane	93		86		70-130	8		20
Dibromochloromethane	94		87		70-130	8		20
1,1,2-Trichloroethane	100		94		70-130	6		20
Tetrachloroethene	97		96		70-130	1		20
Chlorobenzene	98		96		70-130	2		20
1,2-Dichloroethane	102		91		70-130	11		20
1,1,1-Trichloroethane	98		90		70-130	9		20
Bromodichloromethane	113		98		70-130	14		20
trans-1,3-Dichloropropene	101		90		70-130	12		20
cis-1,3-Dichloropropene	89		79		70-130	12		20
Bromoform	100		96		70-130	4		20
1,1,2,2-Tetrachloroethane	103		99		70-130	4		20
Chloromethane	100		96		70-130	4		20
Vinyl chloride	108		100		70-130	8		20
Chloroethane	104		102		70-130	2		20
1,1-Dichloroethene	94		86		70-130	9		20
trans-1,2-Dichloroethene	92		85		70-130	8		20



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 15 Batch: WG410196-4 WG410196-5								
Trichloroethene	85		82		70-130	4		20
1,2-Dichlorobenzene	106		105		70-130	1		20
1,3-Dichlorobenzene	102		103		70-130	1		20
1,4-Dichlorobenzene	104		103		70-130	1		20
cis-1,2-Dichloroethene	97		90		70-130	7		20
Dichlorodifluoromethane	79		78		70-130	1		20
1,2-Dibromoethane	98		93		70-130	5		20
1,3-Dichloropropane	92		89		70-130	3		20
1,1,1,2-Tetrachloroethane	109		109		70-130	0		20
o-Chlorotoluene	99		98		70-130	1		20
p-Chlorotoluene	101		100		70-130	1		20
Hexachlorobutadiene	99		93		70-130	6		20
1,2,4-Trichlorobenzene	97		95		70-130	2		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	107		103		70-130
Toluene-d8	103		107		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	98		95		70-130

# METALS

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-11

Date Collected: 04/21/10 11:25

Client ID: IW-2-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	49		mg/l	2.5	1	04/22/10 12:30	04/26/10 14:54	EPA 3005A	97,6010B	MG
Sodium, Dissolved	62		mg/l	2.0	1	04/22/10 12:30	04/26/10 14:54	EPA 3005A	97,6010B	MG



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-12

Date Collected: 04/21/10 11:11

Client ID: DUP-006-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	49		mg/l	2.5	1	04/22/10 12:30	04/26/10 15:01	EPA 3005A	97,6010B	MG
Sodium, Dissolved	61		mg/l	2.0	1	04/22/10 12:30	04/26/10 15:01	EPA 3005A	97,6010B	MG

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-13

Date Collected: 04/21/10 08:20

Client ID: MW-265M-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	3.5		mg/l	2.5	1	04/22/10 12:30	04/26/10 15:04	EPA 3005A	97,6010B	MG
Sodium, Dissolved	16		mg/l	2.0	1	04/22/10 12:30	04/26/10 15:04	EPA 3005A	97,6010B	MG



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

Lab ID: L1005780-14

Date Collected: 04/21/10 10:20

Client ID: IW-18-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	170		mg/l	2.5	1	04/22/10 12:30	04/26/10 15:07	EPA 3005A	97,6010B	MG
Sodium, Dissolved	30		mg/l	2.0	1	04/22/10 12:30	04/26/10 15:07	EPA 3005A	97,6010B	MG



Project Name: RAYTHEON WAYLAND

Lab Number: L1005780

Project Number: 0114119

Report Date: 04/30/10

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 11-14 Batch: WG409334-1								
Potassium, Dissolved	ND	mg/l	2.5	1	04/22/10 12:30	04/26/10 14:42	97,6010B	MG
Sodium, Dissolved	ND	mg/l	2.0	1	04/22/10 12:30	04/26/10 14:42	97,6010B	MG

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Dissolved Metals - Westborough Lab Associated sample(s): 11-14 Batch: WG409334-2 WG409334-3								
Potassium, Dissolved	100		100		80-120	0		20
Sodium, Dissolved	110		110		80-120	0		20



# **INORGANICS & MISCELLANEOUS**

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-11  
**Client ID:** IW-2-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/21/10 11:25  
**Date Received:** 04/21/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Sulfate	ND		mg/l	10	1	04/22/10 10:30	04/22/10 10:30	1,9038	SD
Total Organic Carbon	4.5		mg/l	2.0	4	-	04/26/10 07:38	1,9060	DW



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

### SAMPLE RESULTS

**Lab ID:** L1005780-12  
**Client ID:** DUP-006-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/21/10 11:11  
**Date Received:** 04/21/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Sulfate	ND		mg/l	10	1	04/22/10 10:30	04/22/10 10:30	1,9038	SD
Total Organic Carbon	4.4		mg/l	2.0	4	-	04/26/10 07:38	1,9060	DW



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

### SAMPLE RESULTS

**Lab ID:** L1005780-13  
**Client ID:** MW-265M-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/21/10 08:20  
**Date Received:** 04/21/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Sulfate	33		mg/l	10	1	04/22/10 10:30	04/22/10 10:30	1,9038	SD
Total Organic Carbon	2.5		mg/l	0.50	1	-	04/26/10 07:38	1,9060	DW



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005780**Project Number:** 0114119**Report Date:** 04/30/10**SAMPLE RESULTS**

**Lab ID:** L1005780-14  
**Client ID:** IW-18-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/21/10 10:20  
**Date Received:** 04/21/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Sulfate	ND		mg/l	10	1	04/22/10 10:30	04/22/10 10:30	1,9038	SD
Total Organic Carbon	140		mg/l	16	32	-	04/26/10 07:38	1,9060	DW



Project Name: RAYTHEON WAYLAND

Lab Number: L1005780

Project Number: 0114119

Report Date: 04/30/10

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

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 11-14 Batch: WG409372-1								
Sulfate	ND	mg/l	10	1	04/22/10 10:30	04/22/10 10:30	1,9038	SD
General Chemistry - Westborough Lab for sample(s): 11-14 Batch: WG409761-1								
Total Organic Carbon	ND	mg/l	0.50	1	-	04/26/10 07:38	1,9060	DW

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 11-14 Batch: WG409372-2								
Sulfate	100		-		90-115	-		
General Chemistry - Westborough Lab Associated sample(s): 11-14 Batch: WG409761-2								
Total Organic Carbon	102		-		90-110	-		

**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005780

**Project Number:** 0114119

**Report Date:** 04/30/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11-14 QC Batch ID: WG409372-3 QC Sample: L1005784-04 Client ID: MS Sample												
Sulfate	16	40	61	112	-	-	-	-	55-147	-	-	14
General Chemistry - Westborough Lab Associated sample(s): 11-14 QC Batch ID: WG409761-3 QC Sample: L1005761-02 Client ID: MS Sample												
Total Organic Carbon	4.8	16	21	102	-	-	-	-	80-120	-	-	20



## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0114119

**Lab Number:** L1005780

**Report Date:** 04/30/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11-14 QC Batch ID: WG409372-4 QC Sample: L1005784-04 Client ID: DUP Sample						
Sulfate	16	16	mg/l	0		14
General Chemistry - Westborough Lab Associated sample(s): 11-14 QC Batch ID: WG409761-4 QC Sample: L1005761-02 Client ID: DUP Sample						
Total Organic Carbon	4.8	4.7	mg/l	2		20

Project Name: RAYTHEON WAYLAND

Lab Number: L1005780

Project Number: 0114119

Report Date: 04/30/10

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

## Cooler Information Custody Seal

## Cooler

A Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis
L1005780-01A	Clear Vial Ascorbic Acid preserv	A	N/A	2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1005780-01B	Clear Vial Ascorbic Acid preserv	A	N/A	2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1005780-01C	Clear Vial Ascorbic Acid preserv	A	N/A	2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1005780-01D	Amber 1000ml unpreserved	A	7	2	Y	Absent	-
L1005780-02A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-02B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-03A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-03B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-04A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-05A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-05B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-06A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-06B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-07A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-07B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-08A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-08B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-09A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-09B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-10A	Clear Vial Ascorbic Acid preserv	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-10B	Clear Vial Ascorbic Acid preserv	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-11A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-11B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-11C	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L1005780-11D	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)

\*Hold days indicated by values in parentheses

Project Name: RAYTHEON WAYLAND

Project Number: 0114119

Lab Number: L1005780

Report Date: 04/30/10

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis
L1005780-11E	Plastic 250ml unpreserved	A	7	2	Y	Absent	SO4-9038(28)
L1005780-11F	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S-10(180),MCP-K-6010S-10(180)
L1005780-12A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-12B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-12C	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L1005780-12D	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L1005780-12E	Plastic 250ml unpreserved	A	7	2	Y	Absent	SO4-9038(28)
L1005780-12F	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S-10(180),MCP-K-6010S-10(180)
L1005780-13A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-13B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-13C	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L1005780-13D	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L1005780-13E	Plastic 250ml unpreserved	A	7	2	Y	Absent	SO4-9038(28)
L1005780-13F	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S-10(180),MCP-K-6010S-10(180)
L1005780-14A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-14B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-14C	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L1005780-14D	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L1005780-14E	Plastic 250ml unpreserved	A	7	2	Y	Absent	SO4-9038(28)
L1005780-14F	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S-10(180),MCP-K-6010S-10(180)
L1005780-15A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-15B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-16A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-16B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-17A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1005780-17B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1005780-17C	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1005780-17D	Amber 1000ml unpreserved	A	7	2	Y	Absent	-
L1005780-18A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-18B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-19A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005780-19B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)

\*Hold days indicated by values in parentheses

**Project Name:** RAYTHEON WAYLAND**Project Number:** 0114119**Lab Number:** L1005780**Report Date:** 04/30/10**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Analysis</b>
L1005780-20A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1005780-20B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1005780-20C	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260SIM-10(14),MCP-8260-10(14)
L1005780-20D	Amber 1000ml unpreserved	A	7	2	Y	Absent	-

\*Hold days indicated by values in parentheses



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

## 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.
- LCS D** - 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.
- MS D** - 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.
- NI** - Not Ignitable.
- 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

- 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 at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to 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.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RDL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reported detection limit (RDL) for the sample.

Report Format: Data Usability Report



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005780  
**Report Date:** 04/30/10

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

## LIMITATION OF LIABILITIES

Alpha Analytical 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 Analytical 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.



## Certificate/Approval Program Summary

Last revised March 16, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.  
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

### Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

*Drinking Water* (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Haloacetic Acids, Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB).)

*Wastewater/Non-Potable Water* (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Calcium Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH.)

*Solid Waste/Soil* (Inorganic Parameters: Lead in Paint, pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), Reactivity. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

### Maine Department of Human Services Certificate/Lab ID: 2009024.

*Drinking Water* (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500CI-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1. Organic Parameters: 504.1, 524.2, SM 6251B.)

*Wastewater/Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624.)

### Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

*Drinking Water*

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

*Non-Potable Water*

Inorganic Parameters: (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

**New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.***

*Drinking Water* (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)

*Non-Potable Water* (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)

**New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.***

*Drinking Water* (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)

**New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.***

*Drinking Water* (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

**North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.**

**Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. *NELAP Accredited.***

*Non-Potable Water* (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

**Rhode Island Department of Health Certificate/Lab ID: LAO00065. *NELAP Accredited via NY-DOH.***

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.



**Texas Commission on Environmental Quality** Certificate/Lab ID: T104704476-09-1. NELAP Accredited.

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S<sup>2-</sup> D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

**Utah Department of Health** Certificate/Lab ID: AAMA. NELAP Accredited.

*Non-Potable Water* (Inorganic Parameters: Chloride EPA 300.0)

**Department of Defense** Certificate/Lab ID: L2217.

*Drinking Water* (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 314, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LACHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035.)

**Analytes Not Accredited by NELAP**

Certification is not available by NELAP for the following analytes: **EPA 8260B**: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.



# CHAIN OF CUSTODY

PAGE 1 OF 4

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

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

### Client Information

Client: **ERM**  
Address: **399 Baylston Street**  
**6th Floor Boston, MA 02116**  
Phone: **(617) 644-7806**  
Fax: **(617) 267-6447**  
Email: **jason.fletcher@erm.com**

These samples have been previously analyzed by Alpha

### Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.  
(Note: All CAM methods for inorganic analyses require MS every 20 soil samples)  
**Note: 1 Sample preserved w/ascorbic acid have shortened holding time of 15 days.**

**Project Information**  
Project Name: **Raytheon Wayland**  
Project Location: **Wayland, MA**  
Project #: **6114119**  
Project Manager: **Jason Fletcher**  
ALPHA Quote #:

Turn-Around Time  
 Standard  RUSH (only confirmed if pre-approved)  
Date Due: **4/28/10** Time:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
05780	MW-46M-20100421-01	4/21/10	1046	GW	EW
	MW-33S-20100421-01		0816	GW	CC
	DUP-005-20100421-01		0700	GW	CC
	TB-003-20100421-01	4/21/10	1456	-	PC
	MW-163-20100421-01	4/21/10	0840	GW	EW
	MW-33M-20100421-01	4/21/10	1020	GW	CC
	MW-210-20100421-01	4/21/10	1005	GW	JN
	MW-164-20100421-01	4/21/10	0905	GW	JN
	MW-212M-20100421-01	4/21/10	0815	GW	JN
	MW-213-20100421-01	4/21/10	1200	GW	EW

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
MAMCP or CT RCP?

FORM NO. 01-01 (rev. 18-Jan-2010)

Date Rec'd in Lab: **4/21/10**

ALPHA Job #: **6005180**

**Report Information - Data Deliverables**  
 FAX  EMAIL  
 ADEX  Add'l Deliverables  
**Regulatory Requirements/Report Limits**

**Billing Information**  
 Same as Client Info  
PO #:

State/Fed Program: **MA MCP** Criteria: **GLW-1**  
**MAMCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO**

Are MCP Analytical Methods Required?  Yes  No  
Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)  Yes  No  
Are CT RCP (Reasonable Confidence Protocols) Required?  Yes  No

**ANALYSIS**  
80216 by 8260 + 8260SIM  
(14 Dioxane only)  
8270 SIM (14 Dioxane)  
80216 by 8260  
80216 by 8260

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

Sample Specific Comments  
**only run 8260SIM & 8260SIM  
14 Dioxane DL exceeds 3 ppb**

Container Type	Preservative	Date/Time	Received By:	Date/Time
V	A	4/21/10 1605	Jon Ashby	4/21/10 1615
I	A	4-21-10	John Ashby	4/21/10 1715

Relinquished By: **John Ashby**

Date/Time: **4-21-10 1715**

Received By: **John Ashby**

Date/Time: **4/21/10 1715**

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



# CHAIN OF CUSTODY

PAGE 2 OF 4

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

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

**Client Information**

Client: ERM

Address: 399 Boylston Street  
6th Floor Boston, MA 02116

Phone: (617) 646-7806

Fax: (617) 267-6447

Email: Jason.Flattery@erm.com

Other Project Specific Requirements/Comments/Detection Limits:

**Project Information**

Project Name: Roughen Boyland

Project Location: Weyland, MA

Project #: 814119

Project Manager: Jason Flattery

ALPHA Quote #:

Turn-Around Time

Standard  RUSH (only confirmed if pre-approved)  
Date Due: 4/28/10 Time:

Date Rec'd in Lab: 4/21/10

Report Information - Data Deliverables

FAX  EMAIL  
 SAEDEX  Add'l Deliverables

Regulatory Requirements/Report Limits

State/Fed Program: MA MCP GW-1

MA MCP PRESUMPTIVE CERTAINTY - CT REASONABLE CONFIDENCE PROTOCOLS

ALPHA Job #: 11005780

Billing Information

Same as Client Info PO #:

ANALYSIS  
80216 by 8216  
TOC  
S04  
Diss. Na+K  
80216 by 8216  
8216 by 8216  
8270S04M (1,4 Dioxane only)

**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	ANALYSIS	Filtration	Sample Specific Comments
		Date	Time					
0580-11	FW-2-20100421-01	4/21/10	1125	GW	EG	2 2 1 1		
	DVF-006-20100421-01	4/21/10	1111	GW	EG	2 2 1 1		
	MW-26SM-20100421-01	4/21/10	0820	GW	EG	2 2 1 1		
	IW-18-20100421-01	4/21/10	1020	GW	EG	2 2 1 1		
	MW-115-20100421-01	4/21/10	1130	GW	CC			
	MW-113-20100421-01	4/21/10	1245	GW	CC			
	MW-403-20100421-01	4/21/10	1325	GW	EW			
	MW-47M-20100421-01	4/21/10	1310	GW	JN			
	MW-47S-20100421-01	4/21/10	1205	GW	JN			
	DVP-007-20100421-01	4/21/10	1114	GW	EW			

Container Type	Preservative	Date/Time	Received By:	Date/Time
V	V	4/21/10 1605	See Signature	4/21/10
D	D	4/21/10	See Signature	4/21/10
A	A	4/21/10	See Signature	4/21/10
C	C			
B	B			
A	A			

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 Terms and Conditions. See reverse side.

IS YOUR PROJECT  
MA MCP or CT RCP?

Relinquished By: Jason Flattery

Date/Time: 4/21/10

Received By: See Signature

Date/Time: 4/21/10

Page 106



# CHAIN OF CUSTODY

PAGE 1 OF 4

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

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

### Client Information

Client: ERMAddress: 399 Boylston Street  
6th Floor Boston, MA 02116Phone: (617) 646-7806Fax: (617) 267-6447Email: jason.flattery@erm.com These samples have been previously analyzed by Alpha

### Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.  
 (Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

Note: Samples preserved w/ascorbic acid have shortened holding time of 51 days.

### Project Information

Project Name: Rathmore WaylandProject Location: Wayland, MAProject #: 0114119Project Manager: Jason Flattery

ALPHA Quote #:

### Turn-Around Time

 Standard  RUSH (only confirmed if pre-approved)  
 Date Due: 4/28/10 Time:
Date Rec'd in Lab: 4/21/10

### Report Information - Data Deliverables

 FAX  EMAIL  
 ADEX  Add'l Deliverables

### Regulatory Requirements/Report Limits

State/Fed Program: MA MCP Criteria: GM-1

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

 Yes  No Are MCP Analytical Methods Required?  
 Yes  No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)  
 Yes  No Are CT RCP (Reasonable Confidence Protocols) Required?
ALPHA Job #: 1005180

### Billing Information

 Same as Client info PO #:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Container Type	Preservative	Date/Time	Received By:	Date/Time	Sample Specific Comments
		Date	Time								
05780 1	MW-46M-20100421-01	4/21/10	1046	GW	EW	V	A	4/21/10 1605	Jen Miller	4/21/10 1605	only run 37051M & 32051M 1/4 Dioxane DL exceeds 3 ppb
2	MW-33S-20100421-01		0816	GW	CC	V	A				
3	DWE-005-20100421-01		0700	GW	CC	V	A				
4	TB-063-20100421-01	4/21/10	1456		CC	V	A				
5	MW-163-20100421-01	4/21/10	0840	GW	EW	V	A				
6	MW-33M-20100421-01	4/21/10	1020	GW	CC	V	A				
7	MW-240-20100421-01	4/21/10	1005	GW	JN	V	A				
8	MW-164-20100421-01	4/21/10	0905	GW	JN	V	A				
9	MW-212M-20100421-01	4/21/10	0815	GW	JN	V	A				
10	MW-213-20100421-01	4/21/10	1200	GW	EW	V	A				

ANALYSIS  
 80216 by 8260 + 8260 (1/4 Dioxane only)  
 8270 228  
 80216 by 8260  
 80216 by 8260

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

Relinquished By:	Date/Time	Received By:	Date/Time
<u>April Miller</u>	<u>4/21/10 1605</u>	<u>Jen Miller</u>	<u>4/21/10 1605</u>
<u>April Miller</u>	<u>4/21/10</u>	<u>April Miller</u>	<u>4/21/10 1745</u>
<u>April Miller</u>	<u>4/21/10</u>	<u>April Miller</u>	<u>4/21/10 905</u>

PLEASE ANSWER QUESTIONS ABOVE!  
 IS YOUR PROJECT  
 MAMCP or CT RCP?  
 FORM NO: 01-01 (rev. 18-Jan-2010)

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



# CHAIN OF CUSTODY

PAGE 2 OF 4

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

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

**Client Information**

Client: **ERM**

Address: **399 Boylston Street**

**Wm. Claver Boston, MA 02116**

Phone: **(617) 646-7806**

Fax: **(617) 267-6447**

Email: **jason.flattery@erm.com**

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

Standard  RUSH (only confirmed if pre-approved!)

Date Due: **4/28/16** Time:

**Project Information**

Project Name: **Raytheon Wayland**

Project Location: **Wayland, MA**

Project #: **0144119**

Project Manager: **Jason Flattery**

ALPHA Quote #:

Turn-Around Time

Date Rec'd in Lab: **4/8/16**

**Report Information - Data Deliverables**

FAX  EMAIL

SADEX  Add'l Deliverables

Regulatory Requirements/Report Limits

State / Fed Program: **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?

**Billing Information**

Same as Client info

PO #:

ALPHA Job #: **11005780**

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		

0580-11	FW-2-20100421-01	4/21/16	1125	GW	EG	2	2	1	1										
	DVF-006-20100421-01	4/21/16	1111	GW	EG	2	2	1	1										
	MW-26SM-20100421-01	4/21/16	0820	GW	EG	2	2	1	1										
	IW-18-20100421-01	4/21/16	1620	GW	EG	2	2	1	1										
	MW-115-20100421-01	4/21/16	1130	GW	CC	2	2	1	1										
	MW-113-20100421-01	4/21/16	1245	GW	CC	2	2	1	1										
	MW-403-20100421-01	4/21/16	1325	GW	EW	3	1												
	MW-47M-20100421-01	4/21/16	1310	GW	JN	2													
	MW-47S-20100421-01	4/21/16	1265	GW	JN	2													
	DVP-007-20100421-01	4/21/16	1114	GW	EW	3	1												

**ANALYSIS**

80216 by 8260  
 FOC  
 504  
 Diss. Na+K  
 80216 by 8260 +  
 82605114 Dioxan  
 82780505M (1,4 Dioxan)

**SAMPLE HANDLING**

Filtration:  Done  Not needed

Preservation:  Lab to do  Lab to do

(Please specify below)

Sample Specific Comments:

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MCP or CT RCP?

Relinquished By: *[Signature]*

Date/Time

Container Type Preservative

Received By: *[Signature]*

Date/Time

*[Handwritten notes and signatures]*

4/21/16 11:14  
 4/21/16 13:10  
 4/21/16 13:25  
 4/21/16 16:20  
 4/21/16 11:30  
 4/21/16 12:45  
 4/21/16 13:25  
 4/21/16 13:10  
 4/21/16 12:65  
 4/21/16 11:14

MA MCP GW-1

ONLY FOR 82780505M IF 8260  
 SIM 1,4 Dioxan result 3 ppb  
 exceeds 3 ppb



## ANALYTICAL REPORT

Lab Number:	L1005784
Client:	ERM Consulting & Engineering, Inc. 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Phone:	(617) 646-7816
Project Name:	RAYTHEON WAYLAND
Project Number:	0114119
Report Date:	04/29/10

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1005784-01	IW-17-20100421-01	WAYLAND, MA	04/21/10 14:20
L1005784-02	MW-47D-20100421-01	WAYLAND, MA	04/21/10 14:05
L1005784-03	MW-109-20100421-01	WAYLAND, MA	04/21/10 14:40
L1005784-04	MW-553-20100421-01	WAYLAND, MA	04/21/10 15:30
L1005784-05	MW-203D-20100420-01	WAYLAND, MA	04/20/10 16:25
L1005784-06	MW-204M-20100421-01	WAYLAND, MA	04/21/10 08:40
L1005784-07	MW-204S-20100421-01	WAYLAND, MA	04/21/10 09:45
L1005784-08	MW-204D-20100421-01	WAYLAND, MA	04/21/10 12:20
L1005784-09	MW-45M-20100421-01	WAYLAND, MA	04/21/10 13:35
L1005784-10	MW-45B-20100421-01	WAYLAND, MA	04/21/10 14:35
L1005784-11	DUP-008-20100421-01	WAYLAND, MA	04/21/10 00:00
L1005784-12	HA-104-20100421-01	WAYLAND, MA	04/21/10 15:50

Project Name: RAYTHEON WAYLAND

Lab Number: L1005784

Project Number: 0114119

Report Date: 04/29/10

**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 through F is required for "Presumptive Certainty" status</b>		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

<b>A response to questions G, H and I is required for "Presumptive Certainty" status</b>		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	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:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

### Case Narrative

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

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

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

For additional information, please contact Client Services at 800-624-9220.

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#### MCP Related Narratives

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

L1005784-03 through -06 and -08 through -12 were processed against a calibration curve that utilized a quadratic fit for 1,1,1-Trichloroethane, Carbon tetrachloride, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Dibromochloromethane, 1,2-Dibromoethane, 1,1,1,2-Tetrachloroethane, Bromoform and Hexachlorobutadiene.

L1005784-07 was processed against a calibration curve that utilized a quadratic fit for 1,1,1-Trichloroethane, Carbon tetrachloride, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Dibromochloromethane, 1,2-

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

### Case Narrative (continued)

Dibromoethane, 1,1,1,2-Tetrachloroethane, Hexachlorobutadiene and 1,2,3-Trichlorobenzene.

L1005784-01 has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The WG410307-4/-5 MS/MSD RPD associated with L1005784-07 is above the acceptance criteria for Chloroethane (40%). The results of the associated sample are reported.

The continuing calibration standard associated with L1005784-04, -05, -08 through -12 and the associated QC is outside the %D criteria for Dichlorodifluoromethane; however, it is within overall acceptance criteria.

The continuing calibration standard associated with L1005784-03, -06 and the associated QC is outside the %D criteria for Dichlorodifluoromethane; however, it is within overall acceptance criteria.

The continuing calibration standard associated with L1005784-01, -02 and the associated QC is outside the %D criteria for Chloromethane; however, it is within overall acceptance criteria.

The continuing calibration standard associated with L1005784-07 and the associated QC is outside the %D criteria for Dichlorodifluoromethane; however, it is within overall acceptance criteria.

In reference to question I:

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

#### Metals

In reference to question I:

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


#### Non-MCP Related Narratives

#### Total Organic Carbon

L1005784-01 has an elevated detection limit due to the dilution required by the elevated concentration present 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:



Michelle M. Morris

Title: Technical Director/Representative

Date: 04/29/10

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005784-01 D  
**Client ID:** IW-17-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/27/10 12:42  
**Analyst:** MM

**Date Collected:** 04/21/10 14:20  
**Date Received:** 04/21/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	25	5
1,1-Dichloroethane	ND		ug/l	5.0	5
Chloroform	ND		ug/l	5.0	5
Carbon tetrachloride	ND		ug/l	5.0	5
1,2-Dichloropropane	ND		ug/l	5.0	5
Dibromochloromethane	ND		ug/l	5.0	5
1,1,2-Trichloroethane	ND		ug/l	5.0	5
Tetrachloroethene	ND		ug/l	5.0	5
Chlorobenzene	ND		ug/l	5.0	5
1,2-Dichloroethane	ND		ug/l	5.0	5
1,1,1-Trichloroethane	ND		ug/l	5.0	5
Bromodichloromethane	ND		ug/l	5.0	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	5.0	5
Chloromethane	ND		ug/l	10	5
Vinyl chloride	ND		ug/l	5.0	5
Chloroethane	ND		ug/l	10	5
1,1-Dichloroethene	ND		ug/l	5.0	5
trans-1,2-Dichloroethene	ND		ug/l	5.0	5
Trichloroethene	160		ug/l	5.0	5
1,2-Dichlorobenzene	ND		ug/l	5.0	5
1,3-Dichlorobenzene	ND		ug/l	5.0	5
1,4-Dichlorobenzene	ND		ug/l	5.0	5
cis-1,2-Dichloroethene	85		ug/l	5.0	5
Dichlorodifluoromethane	ND		ug/l	10	5
1,2-Dibromoethane	ND		ug/l	10	5
1,3-Dichloropropane	ND		ug/l	10	5
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	5

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005784-01 D

Date Collected: 04/21/10 14:20

Client ID: IW-17-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	10	5
p-Chlorotoluene	ND		ug/l	10	5
Hexachlorobutadiene	ND		ug/l	3.0	5
1,2,4-Trichlorobenzene	ND		ug/l	10	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	106		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005784-02  
**Client ID:** MW-47D-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/27/10 13:15  
**Analyst:** MM

**Date Collected:** 04/21/10 14:05  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	22		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	1.5		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005784-02

Date Collected: 04/21/10 14:05

Client ID: MW-47D-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	111		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005784-03  
**Client ID:** MW-109-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/29/10 08:59  
**Analyst:** MM

**Date Collected:** 04/21/10 14:40  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	5.5		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	9.1		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005784-03  
 Client ID: MW-109-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 14:40  
 Date Received: 04/21/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	93		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005784-04  
**Client ID:** MW-553-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 14:09  
**Analyst:** MM

**Date Collected:** 04/21/10 15:30  
**Date Received:** 04/21/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	3.1		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	24		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	5.3		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005784-04  
 Client ID: MW-553-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 15:30  
 Date Received: 04/21/10  
 Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	96		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005784-05  
**Client ID:** MW-203D-20100420-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 18:23  
**Analyst:** MM

**Date Collected:** 04/20/10 16:25  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	3.8		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	100		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	6.3		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005784-05

Date Collected: 04/20/10 16:25

Client ID: MW-203D-20100420-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	98		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005784-06  
**Client ID:** MW-204M-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/29/10 09:31  
**Analyst:** MM

**Date Collected:** 04/21/10 08:40  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	7.5		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	1.1		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	20		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005784-06

Date Collected: 04/21/10 08:40

Client ID: MW-204M-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	92		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005784-07  
**Client ID:** MW-204S-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 15:12  
**Analyst:** MM

**Date Collected:** 04/21/10 09:45  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	1.2		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	ND		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005784-07

Date Collected: 04/21/10 09:45

Client ID: MW-204S-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	99		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005784-08  
**Client ID:** MW-204D-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 15:44  
**Analyst:** MM

**Date Collected:** 04/21/10 12:20  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	5.1		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	10		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005784-08

Date Collected: 04/21/10 12:20

Client ID: MW-204D-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	99		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005784-09  
**Client ID:** MW-45M-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 16:16  
**Analyst:** MM

**Date Collected:** 04/21/10 13:35  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	5.4		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	3.0		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	1.3		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	28		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005784-09

Date Collected: 04/21/10 13:35

Client ID: MW-45M-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	92		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005784-10  
**Client ID:** MW-45B-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 16:48  
**Analyst:** MM

**Date Collected:** 04/21/10 14:35  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	1.3		ug/l	1.0	1
Trichloroethene	95		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	12		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005784-10  
 Client ID: MW-45B-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 14:35  
 Date Received: 04/21/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	93		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005784-11  
**Client ID:** DUP-008-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 17:19  
**Analyst:** MM

**Date Collected:** 04/21/10 00:00  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	1.2		ug/l	1.0	1
Trichloroethene	95		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	12		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005784-11

Date Collected: 04/21/10 00:00

Client ID: DUP-008-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	95		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005784-12  
**Client ID:** HA-104-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 17:51  
**Analyst:** MM

**Date Collected:** 04/21/10 15:50  
**Date Received:** 04/21/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	7.1		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	ND		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005784-12  
 Client ID: HA-104-20100421-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/21/10 15:50  
 Date Received: 04/21/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	100		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/28/10 08:52  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 04-05,08-12 Batch: WG410195-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
Trichlorofluoromethane	ND		ug/l	2.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.0
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0
Benzene	ND		ug/l	1.0
Toluene	ND		ug/l	1.0
Ethylbenzene	ND		ug/l	1.0
Chloromethane	ND		ug/l	2.0
Bromomethane	ND		ug/l	5.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/28/10 08:52  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 04-05,08-12 Batch: WG410195-3				
Methyl tert butyl ether	ND		ug/l	2.0
p/m-Xylene	ND		ug/l	2.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dibromomethane	ND		ug/l	2.0
1,2,3-Trichloropropane	ND		ug/l	2.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	2.0
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	2.0
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
Bromobenzene	ND		ug/l	2.0
n-Butylbenzene	ND		ug/l	2.0
sec-Butylbenzene	ND		ug/l	2.0
tert-Butylbenzene	ND		ug/l	2.0
o-Chlorotoluene	ND		ug/l	2.0
p-Chlorotoluene	ND		ug/l	2.0
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	2.0
p-Isopropyltoluene	ND		ug/l	2.0
Naphthalene	ND		ug/l	5.0
n-Propylbenzene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/28/10 08:52  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 04-05,08-12 Batch: WG410195-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.0
1,2,4-Trichlorobenzene	ND		ug/l	2.0
1,3,5-Trimethylbenzene	ND		ug/l	2.0
1,2,4-Trimethylbenzene	ND		ug/l	2.0
Ethyl ether	ND		ug/l	2.0
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	100		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	92		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/29/10 07:56  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 03,06 Batch: WG410195-6				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
Trichlorofluoromethane	ND		ug/l	2.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.0
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0
Benzene	ND		ug/l	1.0
Toluene	ND		ug/l	1.0
Ethylbenzene	ND		ug/l	1.0
Chloromethane	ND		ug/l	2.0
Bromomethane	ND		ug/l	5.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/29/10 07:56  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 03,06 Batch: WG410195-6				
Methyl tert butyl ether	ND		ug/l	2.0
p/m-Xylene	ND		ug/l	2.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dibromomethane	ND		ug/l	2.0
1,2,3-Trichloropropane	ND		ug/l	2.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	2.0
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	2.0
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
Bromobenzene	ND		ug/l	2.0
n-Butylbenzene	ND		ug/l	2.0
sec-Butylbenzene	ND		ug/l	2.0
tert-Butylbenzene	ND		ug/l	2.0
o-Chlorotoluene	ND		ug/l	2.0
p-Chlorotoluene	ND		ug/l	2.0
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	2.0
p-Isopropyltoluene	ND		ug/l	2.0
Naphthalene	ND		ug/l	5.0
n-Propylbenzene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/29/10 07:56  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 03,06 Batch: WG410195-6				
1,2,3-Trichlorobenzene	ND		ug/l	2.0
1,2,4-Trichlorobenzene	ND		ug/l	2.0
1,3,5-Trimethylbenzene	ND		ug/l	2.0
1,2,4-Trimethylbenzene	ND		ug/l	2.0
Ethyl ether	ND		ug/l	2.0
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	100		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	94		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/27/10 09:37  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG410307-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
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	1.0
Chloromethane	ND		ug/l	2.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
o-Chlorotoluene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

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

Analytical Method: 97,8260B  
 Analytical Date: 04/27/10 09:37  
 Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG410307-3				
p-Chlorotoluene	ND		ug/l	2.0
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.0

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	96		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 97,8260B  
Analytical Date: 04/28/10 08:52  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 07 Batch: WG410307-8				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
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	1.0
Chloromethane	ND		ug/l	2.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
o-Chlorotoluene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

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

Analytical Method: 97,8260B  
 Analytical Date: 04/28/10 08:52  
 Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 07 Batch: WG410307-8				
p-Chlorotoluene	ND		ug/l	2.0
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.0

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	92		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005784

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 04-05,08-12 Batch: WG410195-1 WG410195-2								
Methylene chloride	114		105		70-130	8		20
1,1-Dichloroethane	96		90		70-130	6		20
Chloroform	97		92		70-130	5		20
Carbon tetrachloride	99		89		70-130	11		20
1,2-Dichloropropane	93		86		70-130	8		20
Dibromochloromethane	94		87		70-130	8		20
1,1,2-Trichloroethane	100		94		70-130	6		20
Tetrachloroethene	97		96		70-130	1		20
Chlorobenzene	98		96		70-130	2		20
Trichlorofluoromethane	98		90		70-130	9		20
1,2-Dichloroethane	102		91		70-130	11		20
1,1,1-Trichloroethane	98		90		70-130	9		20
Bromodichloromethane	113		98		70-130	14		20
trans-1,3-Dichloropropene	101		90		70-130	12		20
cis-1,3-Dichloropropene	89		79		70-130	12		20
1,1-Dichloropropene	94		90		70-130	4		20
Bromoform	100		96		70-130	4		20
1,1,2,2-Tetrachloroethane	103		99		70-130	4		20
Benzene	98		91		70-130	7		20
Toluene	100		97		70-130	3		20
Ethylbenzene	103		102		70-130	1		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005784

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 04-05,08-12 Batch: WG410195-1 WG410195-2								
Chloromethane	100		96		70-130	4		20
Bromomethane	93		85		70-130	9		20
Vinyl chloride	108		100		70-130	8		20
Chloroethane	104		102		70-130	2		20
1,1-Dichloroethene	94		86		70-130	9		20
trans-1,2-Dichloroethene	92		85		70-130	8		20
Trichloroethene	85		82		70-130	4		20
1,2-Dichlorobenzene	106		105		70-130	1		20
1,3-Dichlorobenzene	102		103		70-130	1		20
1,4-Dichlorobenzene	104		103		70-130	1		20
Methyl tert butyl ether	92		80		70-130	14		20
p/m-Xylene	106		103		70-130	3		20
o-Xylene	105		101		70-130	4		20
cis-1,2-Dichloroethene	97		90		70-130	7		20
Dibromomethane	98		90		70-130	9		20
1,2,3-Trichloropropane	108		110		70-130	2		20
Styrene	100		96		70-130	4		20
Dichlorodifluoromethane	79		78		70-130	1		20
Acetone	106		103		70-130	3		20
Carbon disulfide	84		72		70-130	15		20
2-Butanone	120		100		70-130	18		20



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005784

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 04-05,08-12 Batch: WG410195-1 WG410195-2								
4-Methyl-2-pentanone	105		90		70-130	15		20
2-Hexanone	110		104		70-130	6		20
Bromochloromethane	102		90		70-130	13		20
Tetrahydrofuran	94		80		70-130	16		20
2,2-Dichloropropane	102		96		70-130	6		20
1,2-Dibromoethane	98		93		70-130	5		20
1,3-Dichloropropane	92		89		70-130	3		20
1,1,1,2-Tetrachloroethane	109		109		70-130	0		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	95		95		70-130	0		20
sec-Butylbenzene	102		100		70-130	2		20
tert-Butylbenzene	98		96		70-130	2		20
o-Chlorotoluene	99		98		70-130	1		20
p-Chlorotoluene	101		100		70-130	1		20
1,2-Dibromo-3-chloropropane	119		110		70-130	8		20
Hexachlorobutadiene	99		93		70-130	6		20
Isopropylbenzene	106		103		70-130	3		20
p-Isopropyltoluene	96		97		70-130	1		20
Naphthalene	80		77		70-130	4		20
n-Propylbenzene	102		101		70-130	1		20
1,2,3-Trichlorobenzene	95		92		70-130	3		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005784

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 04-05,08-12 Batch: WG410195-1 WG410195-2								
1,2,4-Trichlorobenzene	97		95		70-130	2		20
1,3,5-Trimethylbenzene	99		97		70-130	2		20
1,2,4-Trimethylbenzene	95		95		70-130	0		20
Ethyl ether	93		86		70-130	8		20
Isopropyl Ether	95		90		70-130	5		20
Ethyl-Tert-Butyl-Ether	97		90		70-130	7		20
Tertiary-Amyl Methyl Ether	95		94		70-130	1		20
1,4-Dioxane	117		104		70-130	12		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	107		103		70-130
Toluene-d8	103		107		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	98		95		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005784

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 03,06 Batch: WG410195-4 WG410195-5								
Methylene chloride	109		108		70-130	1		20
1,1-Dichloroethane	94		90		70-130	4		20
Chloroform	95		89		70-130	7		20
Carbon tetrachloride	100		93		70-130	7		20
1,2-Dichloropropane	92		89		70-130	3		20
Dibromochloromethane	99		91		70-130	8		20
1,1,2-Trichloroethane	104		100		70-130	4		20
Tetrachloroethene	99		95		70-130	4		20
Chlorobenzene	99		93		70-130	6		20
Trichlorofluoromethane	102		95		70-130	7		20
1,2-Dichloroethane	98		98		70-130	0		20
1,1,1-Trichloroethane	94		89		70-130	5		20
Bromodichloromethane	110		100		70-130	10		20
trans-1,3-Dichloropropene	102		94		70-130	8		20
cis-1,3-Dichloropropene	85		82		70-130	4		20
1,1-Dichloropropene	92		91		70-130	1		20
Bromoform	107		96		70-130	11		20
1,1,2,2-Tetrachloroethane	100		97		70-130	3		20
Benzene	94		94		70-130	0		20
Toluene	100		95		70-130	5		20
Ethylbenzene	108		101		70-130	7		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005784

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 03,06 Batch: WG410195-4 WG410195-5								
Chloromethane	96		98		70-130	2		20
Bromomethane	98		97		70-130	1		20
Vinyl chloride	106		106		70-130	0		20
Chloroethane	102		103		70-130	1		20
1,1-Dichloroethene	95		90		70-130	5		20
trans-1,2-Dichloroethene	90		86		70-130	5		20
Trichloroethene	86		83		70-130	4		20
1,2-Dichlorobenzene	104		101		70-130	3		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	103		102		70-130	1		20
Methyl tert butyl ether	88		85		70-130	3		20
p/m-Xylene	108		103		70-130	5		20
o-Xylene	106		102		70-130	4		20
cis-1,2-Dichloroethene	92		93		70-130	1		20
Dibromomethane	91		93		70-130	2		20
1,2,3-Trichloropropane	112		106		70-130	6		20
Styrene	100		97		70-130	3		20
Dichlorodifluoromethane	78		79		70-130	1		20
Acetone	96		104		70-130	8		20
Carbon disulfide	76		68	Q	70-130	11		20
2-Butanone	107		108		70-130	1		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005784

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 03,06 Batch: WG410195-4 WG410195-5								
4-Methyl-2-pentanone	94		95		70-130	1		20
2-Hexanone	106		94		70-130	12		20
Bromochloromethane	96		98		70-130	2		20
Tetrahydrofuran	82		79		70-130	4		20
2,2-Dichloropropane	104		100		70-130	4		20
1,2-Dibromoethane	98		98		70-130	0		20
1,3-Dichloropropane	92		90		70-130	2		20
1,1,1,2-Tetrachloroethane	111		108		70-130	3		20
Bromobenzene	96		96		70-130	0		20
n-Butylbenzene	94		94		70-130	0		20
sec-Butylbenzene	102		101		70-130	1		20
tert-Butylbenzene	97		95		70-130	2		20
o-Chlorotoluene	98		94		70-130	4		20
p-Chlorotoluene	100		98		70-130	2		20
1,2-Dibromo-3-chloropropane	116		113		70-130	3		20
Hexachlorobutadiene	98		102		70-130	4		20
Isopropylbenzene	107		104		70-130	3		20
p-Isopropyltoluene	96		96		70-130	0		20
Naphthalene	78		78		70-130	0		20
n-Propylbenzene	101		100		70-130	1		20
1,2,3-Trichlorobenzene	93		95		70-130	2		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005784

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 03,06 Batch: WG410195-4 WG410195-5								
1,2,4-Trichlorobenzene	96		97		70-130	1		20
1,3,5-Trimethylbenzene	98		95		70-130	3		20
1,2,4-Trimethylbenzene	95		95		70-130	0		20
Ethyl ether	92		85		70-130	8		20
Isopropyl Ether	95		92		70-130	3		20
Ethyl-Tert-Butyl-Ether	96		93		70-130	3		20
Tertiary-Amyl Methyl Ether	92		95		70-130	3		20
1,4-Dioxane	102		95		70-130	7		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	104		104		70-130
Toluene-d8	106		105		70-130
4-Bromofluorobenzene	96		93		70-130
Dibromofluoromethane	96		102		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005784

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG410307-1 WG410307-2								
Methylene chloride	98		94		70-130	4		20
1,1-Dichloroethane	103		98		70-130	5		20
Chloroform	102		97		70-130	5		20
Carbon tetrachloride	96		98		70-130	2		20
1,2-Dichloropropane	101		98		70-130	3		20
Dibromochloromethane	105		107		70-130	2		20
1,1,2-Trichloroethane	108		109		70-130	1		20
Tetrachloroethene	101		100		70-130	1		20
Chlorobenzene	100		98		70-130	2		20
1,2-Dichloroethane	101		101		70-130	0		20
1,1,1-Trichloroethane	102		98		70-130	4		20
Bromodichloromethane	107		107		70-130	0		20
trans-1,3-Dichloropropene	116		116		70-130	0		20
cis-1,3-Dichloropropene	97		97		70-130	0		20
Bromoform	109		110		70-130	1		20
1,1,2,2-Tetrachloroethane	110		106		70-130	4		20
Chloromethane	76		72		70-130	5		20
Vinyl chloride	80		78		70-130	3		20
Chloroethane	89		83		70-130	7		20
1,1-Dichloroethene	104		104		70-130	0		20
trans-1,2-Dichloroethene	101		97		70-130	4		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005784

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG410307-1 WG410307-2								
Trichloroethene	97		96		70-130	1		20
1,2-Dichlorobenzene	104		103		70-130	1		20
1,3-Dichlorobenzene	109		104		70-130	5		20
1,4-Dichlorobenzene	106		103		70-130	3		20
cis-1,2-Dichloroethene	103		98		70-130	5		20
Dichlorodifluoromethane	81		76		70-130	6		20
1,2-Dibromoethane	106		107		70-130	1		20
1,3-Dichloropropane	110		111		70-130	1		20
1,1,1,2-Tetrachloroethane	112		114		70-130	2		20
o-Chlorotoluene	106		103		70-130	3		20
p-Chlorotoluene	109		105		70-130	4		20
Hexachlorobutadiene	119		108		70-130	10		20
1,2,4-Trichlorobenzene	116		113		70-130	3		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	103		103		70-130
Toluene-d8	103		100		70-130
4-Bromofluorobenzene	99		96		70-130
Dibromofluoromethane	98		98		70-130



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005784

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 07 Batch: WG410307-6 WG410307-7								
Methylene chloride	114		105		70-130	8		20
1,1-Dichloroethane	96		90		70-130	6		20
Chloroform	97		92		70-130	5		20
Carbon tetrachloride	99		89		70-130	11		20
1,2-Dichloropropane	93		86		70-130	8		20
Dibromochloromethane	94		87		70-130	8		20
1,1,2-Trichloroethane	100		94		70-130	6		20
Tetrachloroethene	97		96		70-130	1		20
Chlorobenzene	98		96		70-130	2		20
1,2-Dichloroethane	102		91		70-130	11		20
1,1,1-Trichloroethane	98		90		70-130	9		20
Bromodichloromethane	113		98		70-130	14		20
trans-1,3-Dichloropropene	101		90		70-130	12		20
cis-1,3-Dichloropropene	89		79		70-130	12		20
Bromoform	100		96		70-130	4		20
1,1,2,2-Tetrachloroethane	103		99		70-130	4		20
Chloromethane	100		96		70-130	4		20
Vinyl chloride	108		100		70-130	8		20
Chloroethane	104		102		70-130	2		20
1,1-Dichloroethene	94		86		70-130	9		20
trans-1,2-Dichloroethene	92		85		70-130	8		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L1005784

Project Number: 0114119

Report Date: 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 07 Batch: WG410307-6 WG410307-7								
Trichloroethene	85		82		70-130	4		20
1,2-Dichlorobenzene	106		105		70-130	1		20
1,3-Dichlorobenzene	102		103		70-130	1		20
1,4-Dichlorobenzene	104		103		70-130	1		20
cis-1,2-Dichloroethene	97		90		70-130	7		20
Dichlorodifluoromethane	79		78		70-130	1		20
1,2-Dibromoethane	98		93		70-130	5		20
1,3-Dichloropropane	92		89		70-130	3		20
1,1,1,2-Tetrachloroethane	109		109		70-130	0		20
o-Chlorotoluene	99		98		70-130	1		20
p-Chlorotoluene	101		100		70-130	1		20
Hexachlorobutadiene	99		93		70-130	6		20
1,2,4-Trichlorobenzene	97		95		70-130	2		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	107		103		70-130
Toluene-d8	103		107		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	98		95		70-130

## Matrix Spike Analysis

### Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L1005784

Project Number: 0114119

Report Date: 04/29/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02,07 QC Batch ID: WG410307-4 WG410307-5 QC Sample: L1005784-07 Client ID: MW-204S-20100421-01												
Methylene chloride	ND	10	9.4	94		8.7	88		70-130	7		20
1,1-Dichloroethane	ND	10	11	107		9.9	99		70-130	8		20
Chloroform	ND	10	11	110		10	101		70-130	9		20
Carbon tetrachloride	ND	10	11	113		10	100		70-130	12		20
1,2-Dichloropropane	ND	10	9.8	98		9.3	93		70-130	5		20
Dibromochloromethane	ND	10	12	116		11	108		70-130	7		20
1,1,2-Trichloroethane	ND	10	11	112		11	108		70-130	4		20
Tetrachloroethene	1.2	10	10	93		9.6	84		70-130	10		20
Chlorobenzene	ND	10	9.6	96		8.6	86		70-130	11		20
1,2-Dichloroethane	ND	10	12	119		11	112		70-130	6		20
1,1,1-Trichloroethane	ND	10	11	110		9.9	99		70-130	11		20
Bromodichloromethane	ND	10	12	115		11	108		70-130	6		20
trans-1,3-Dichloropropene	ND	10	12	116		11	109		70-130	6		20
cis-1,3-Dichloropropene	ND	10	9.3	93		8.8	88		70-130	6		20
Bromoform	ND	10	9.7	97		10	100		70-130	3		20
1,1,2,2-Tetrachloroethane	ND	10	9.8	98		10	104		70-130	6		20
Chloromethane	ND	10	7.9	79		8.6	86		70-130	8		20
Vinyl chloride	ND	10	10	105		9.3	93		70-130	12		20
Chloroethane	ND	10	8.5	85		13	127		70-130	40	Q	20
1,1-Dichloroethene	ND	10	11	106		9.5	95		70-130	11		20
trans-1,2-Dichloroethene	ND	10	9.5	95		8.8	88		70-130	8		20

## Matrix Spike Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005784

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02,07 QC Batch ID: WG410307-4 WG410307-5 QC Sample: L1005784-07 Client ID: MW-204S-20100421-01												
Trichloroethene	ND	10	9.7	97		8.6	86		70-130	12		20
1,2-Dichlorobenzene	ND	10	9.2	92		9.0	90		70-130	2		20
1,3-Dichlorobenzene	ND	10	9.1	92		8.9	90		70-130	2		20
1,4-Dichlorobenzene	ND	10	9.2	92		9.1	91		70-130	1		20
cis-1,2-Dichloroethene	ND	10	10	103		9.6	96		70-130	7		20
Dichlorodifluoromethane	ND	10	8.4	85		8.4	84		70-130	1		20
1,2-Dibromoethane	ND	10	10	105		10	102		70-130	3		20
1,3-Dichloropropane	ND	10	11	111		10	105		70-130	6		20
1,1,1,2-Tetrachloroethane	ND	10	12	117		11	107		70-130	9		20
o-Chlorotoluene	ND	10	9.0	90		8.8	88		70-130	2		20
p-Chlorotoluene	ND	10	9.1	91		8.8	88		70-130	3		20
Hexachlorobutadiene	ND	10	9.0	90		8.6	86		70-130	5		20
1,2,4-Trichlorobenzene	ND	10	8.9	89		8.8	89		70-130	0		20

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	124		119		70-130
4-Bromofluorobenzene	92		94		70-130
Dibromofluoromethane	111		107		70-130
Toluene-d8	104		100		70-130

# METALS

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005784**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005784-01

Date Collected: 04/21/10 14:20

Client ID: IW-17-20100421-01

Date Received: 04/21/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	120		mg/l	2.5	1	04/22/10 12:30	04/26/10 15:24	EPA 3005A	97,6010B	MG
Sodium, Dissolved	88		mg/l	2.0	1	04/22/10 12:30	04/26/10 15:24	EPA 3005A	97,6010B	MG



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

**SAMPLE RESULTS**

Lab ID: L1005784-04  
 Client ID: MW-553-20100421-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/21/10 15:30  
 Date Received: 04/21/10  
 Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	16		mg/l	2.5	1	04/22/10 12:30	04/26/10 15:28	EPA 3005A	97,6010B	MG
Sodium, Dissolved	21		mg/l	2.0	1	04/22/10 12:30	04/26/10 15:28	EPA 3005A	97,6010B	MG

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 01,04 Batch: WG409334-1								
Potassium, Dissolved	ND	mg/l	2.5	1	04/22/10 12:30	04/26/10 14:42	97,6010B	MG
Sodium, Dissolved	ND	mg/l	2.0	1	04/22/10 12:30	04/26/10 14:42	97,6010B	MG

### Prep Information

Digestion Method: EPA 3005A



## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005784

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01,04 Batch: WG409334-2 WG409334-3								
Potassium, Dissolved	100		100		80-120	0		20
Sodium, Dissolved	110		110		80-120	0		20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

### SAMPLE RESULTS

**Lab ID:** L1005784-01  
**Client ID:** IW-17-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/21/10 14:20  
**Date Received:** 04/21/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab									
Sulfate	24		mg/l	10	1	04/22/10 10:30	04/22/10 10:30	1,9038	SD
Total Organic Carbon	110		mg/l	16	32	-	04/22/10 07:48	1,9060	DW



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

### SAMPLE RESULTS

**Lab ID:** L1005784-04  
**Client ID:** MW-553-20100421-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/21/10 15:30  
**Date Received:** 04/21/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Sulfate	16		mg/l	10	1	04/22/10 10:30	04/22/10 10:30	1,9038	SD
Total Organic Carbon	0.78		mg/l	0.50	1	-	04/22/10 07:48	1,9060	DW



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

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

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01,04 Batch: WG409311-1								
Total Organic Carbon	ND	mg/l	0.50	1	-	04/22/10 07:48	1,9060	DW
General Chemistry - Westborough Lab for sample(s): 01,04 Batch: WG409372-1								
Sulfate	ND	mg/l	10	1	04/22/10 10:30	04/22/10 10:30	1,9038	SD

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005784

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01,04 Batch: WG409311-2								
Total Organic Carbon	98		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01,04 Batch: WG409372-2								
Sulfate	100		-		90-115	-		

**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005784

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG409311-3 QC Sample: L1005716-11 Client ID: MS Sample												
Total Organic Carbon	120	128	250	104	-	-	-	-	80-120	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG409372-3 QC Sample: L1005784-04 Client ID: MW-553-20100421-01												
Sulfate	16	40	61	112	-	-	-	-	55-147	-	-	14

## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0114119

**Lab Number:** L1005784

**Report Date:** 04/29/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG409311-4 QC Sample: L1005716-11 Client ID: DUP Sample						
Total Organic Carbon	120	120	mg/l	0		20
General Chemistry - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG409372-4 QC Sample: L1005784-04 Client ID: MW-553-20100421-01						
Sulfate	16	16	mg/l	0		14



Project Name: RAYTHEON WAYLAND

Lab Number: L1005784

Project Number: 0114119

Report Date: 04/29/10

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

## Cooler Information Custody Seal

## Cooler

A Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis
L1005784-01A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-01B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-01C	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L1005784-01D	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L1005784-01E	Plastic 250ml unpreserved	A	7	2	Y	Absent	SO4-9038(28)
L1005784-01F	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S-10(180),MCP-K-6010S-10(180)
L1005784-02A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-02B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-03A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-03B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-04A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-04B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-04C	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L1005784-04D	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L1005784-04E	Plastic 250ml unpreserved	A	7	2	Y	Absent	SO4-9038(28)
L1005784-04F	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S-10(180),MCP-K-6010S-10(180)
L1005784-05A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-05B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-06A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-06B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-07A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-07B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-07C	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-07D	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-07E	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-07F	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)

\*Hold days indicated by values in parentheses



**Project Name:** RAYTHEON WAYLAND**Project Number:** 0114119**Lab Number:** L1005784**Report Date:** 04/29/10**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Analysis</b>
L1005784-08A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-08B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-09A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-09B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-10A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-10B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-11A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-11B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-12A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)
L1005784-12B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-10(14)

\*Hold days indicated by values in parentheses

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

## 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.
- LCS D** - 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.
- MS D** - 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.
- NI** - Not Ignitable.
- 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

- 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 at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to 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.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RDL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reported detection limit (RDL) for the sample.

Report Format: Data Usability Report



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005784  
**Report Date:** 04/29/10

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

## LIMITATION OF LIABILITIES

Alpha Analytical 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 Analytical 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.



## Certificate/Approval Program Summary

Last revised March 16, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.  
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

### Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

*Drinking Water* (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Haloacetic Acids, Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB).)

*Wastewater/Non-Potable Water* (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Calcium Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH.)

*Solid Waste/Soil* (Inorganic Parameters: Lead in Paint, pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), Reactivity. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

### Maine Department of Human Services Certificate/Lab ID: 2009024.

*Drinking Water* (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500CI-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1. Organic Parameters: 504.1, 524.2, SM 6251B.)

*Wastewater/Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624.)

### Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

#### *Drinking Water*

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

#### *Non-Potable Water*

Inorganic Parameters: (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

**New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.***

*Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)*

*Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)*

*Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)*

**New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.***

*Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)*

*Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)*

*Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)*

**New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.***

*Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)*

*Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)*

*Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)*

**North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. *Organic Parameters: MA-EPH, MA-VPH.*****Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. *NELAP Accredited.***

*Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)*

*Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)*

**Rhode Island Department of Health Certificate/Lab ID: LAO00065. *NELAP Accredited via NY-DOH.***

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.

**Texas Commission on Environmental Quality** Certificate/Lab ID: T104704476-09-1. NELAP Accredited.

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S<sup>2-</sup> D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

**Utah Department of Health** Certificate/Lab ID: AAMA. NELAP Accredited.

*Non-Potable Water* (Inorganic Parameters: Chloride EPA 300.0)

**Department of Defense** Certificate/Lab ID: L2217.

*Drinking Water* (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 314, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LCHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035.)

**Analytes Not Accredited by NELAP**

Certification is not available by NELAP for the following analytes: **EPA 8260B**: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.



# CHAIN OF CUSTODY

PAGE 3 OF 4  
ALPHA Job #: L1005784

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

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

Client Information  
Client: ERM

Address: 399 Boston Street  
4th Floor Boston, MA 02116

Project Location: Wayland, MA

Project Manager: Jason Flattery

Project Name: Roughen Wayland

Project #: 0W4116

ALPHA Quote #:  
Turn-Around Time

Phone: (617) 646-7906

Fax: (617) 267-6447

Email: Jason.Flattery@erm.com

Date Due: 4/28/10 Time:

Other Project Specific Requirements/Comments/Detection Limits:

These samples have been previously analyzed by Alpha

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
<u>SR4</u>	<u>IW-17-20100421-01</u>	<u>4/21/10</u>	<u>1420</u>	<u>GW</u>	<u>ER</u>
	<u>2 MW-47D-20100421-01</u>	<u>4/21/10</u>	<u>1405</u>	<u>GW</u>	<u>JN</u>
	<u>3 MW-109-20100421-01</u>	<u>4/21/10</u>	<u>1440</u>	<u>GW</u>	<u>CC</u>
	<u>4 MW-553-20100421-01</u>	<u>4/21/10</u>	<u>1530</u>	<u>GW</u>	<u>EG</u>

ANALYSIS  
80216 by 8260  
SO4  
TOC  
Diss. NatK (FE)

SAMPLE HANDLING  
Filtration Done  
 Done Diss. NatK  
 Not needed  
 Lab to do  
 Preservation  
 Lab to do  
(Please specify below)  
Sample Specific Comments

Date Rec'd in Lab: 4/21/10

Report Information - Data Deliverables  
 FAX  
 EMAIL  
 ADEX  
 Add'l Deliverables

Regulatory Requirements/Report Limits  
State/Fed Program  
MA MCP  
GW-2

Criteria  
MA MCP  
GW-2

Regulatory Requirements/Report Limits  
EMCP Analytical Methods Required

Billing Information  
 Same as Client Info  
PO #:

Container Type	Preservative
<u>V P V P</u>	<u>B A D C</u>

Relinquished By: Jason Flattery  
Date/Time: 4/21/10 1405

Received By: Jason Flattery  
Date/Time: 4/21/10 1405

FORM NO. 01-01 (rev. 14-OCT-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 Terms and Conditions. See reverse side.







## ANALYTICAL REPORT

Lab Number:	L1005901
Client:	ERM Consulting & Engineering, Inc. 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Phone:	(617) 646-7816
Project Name:	RAYTHEON WAYLAND
Project Number:	0114119
Report Date:	04/29/10

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1005901-01	MW-101-20100422-01	WAYLAND, MA	04/22/10 08:00
L1005901-02	MW-208S-20100422-01	WAYLAND, MA	04/22/10 08:40
L1005901-03	MW-208M-20100422-01	WAYLAND, MA	04/22/10 09:20
L1005901-04	MW-208D-20100422-01	WAYLAND, MA	04/22/10 10:05
L1005901-05	HA-102-20100422-01	WAYLAND, MA	04/22/10 12:10
L1005901-06	MW-107-20100422-01	WAYLAND, MA	04/22/10 11:20
L1005901-07	DUP-010-20100422-01	WAYLAND, MA	04/22/10 12:00
L1005901-08	TB-004-20100422-01	WAYLAND, MA	04/22/10 00:00
L1005901-09	MW-261S-20100422-01	WAYLAND, MA	04/22/10 09:10
L1005901-10	MW-551-20100422-01	WAYLAND, MA	04/22/10 08:15
L1005901-11	MW-552-20100422-01	WAYLAND, MA	04/22/10 10:50
L1005901-12	DUP-009-20100422-01	WAYLAND, MA	04/22/10 07:00

Project Name: RAYTHEON WAYLAND

Lab Number: L1005901

Project Number: 0114119

Report Date: 04/29/10

**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 through F is required for "Presumptive Certainty" status</b>		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
<b>A response to questions G, H and I is required for "Presumptive Certainty" status</b>		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	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:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

### Case Narrative

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

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

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

For additional information, please contact Client Services at 800-624-9220.

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#### MCP Related Narratives

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

L1005901-09, -11 and -12 have elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the samples.

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

### Case Narrative (continued)

In reference to question H:

The continuing calibration standard, associated with L1005901-01 through -12 and the associated QC, is outside the %D criteria for 1,1,1,2-Tetrachloroethane; however, it is within overall acceptance criteria.

The WG410328-4/-5 MS/MSD recoveries associated with L1005901-10 are outside the acceptance criteria for Trichloroethene (66%/53%). The unacceptable percent recoveries are attributed to the elevated concentrations of target compounds present in the sample utilized for the MS/MSD. In addition the associated MS/MSD RPD is above the acceptance criteria for Trichloroethene (22%).

In reference to question I:

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

#### Metals

In reference to question I:

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

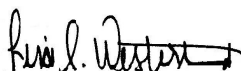
#### Non-MCP Related Narratives

#### Total Organic Carbon

L1005901-09 and -10 have non-detect results at elevated detection limits due to the dilution required by the sample matrix.

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:



Lisa Westerlind

Title: Technical Director/Representative

Date: 04/29/10

# ORGANICS

# VOLATILES



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005901-01  
**Client ID:** MW-101-20100422-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 16:04  
**Analyst:** PD

**Date Collected:** 04/22/10 08:00  
**Date Received:** 04/22/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	3.4		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	ND		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-01

Date Collected: 04/22/10 08:00

Client ID: MW-101-20100422-01

Date Received: 04/22/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	106		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005901-02  
**Client ID:** MW-208S-20100422-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 16:38  
**Analyst:** PD

**Date Collected:** 04/22/10 08:40  
**Date Received:** 04/22/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	2.8		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	1.9		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-02

Date Collected: 04/22/10 08:40

Client ID: MW-208S-20100422-01

Date Received: 04/22/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	105		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005901-03  
**Client ID:** MW-208M-20100422-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 17:13  
**Analyst:** PD

**Date Collected:** 04/22/10 09:20  
**Date Received:** 04/22/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	2.8		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-03

Date Collected: 04/22/10 09:20

Client ID: MW-208M-20100422-01

Date Received: 04/22/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	104		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005901-04  
**Client ID:** MW-208D-20100422-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 17:47  
**Analyst:** PD

**Date Collected:** 04/22/10 10:05  
**Date Received:** 04/22/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	3.4		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-04

Date Collected: 04/22/10 10:05

Client ID: MW-208D-20100422-01

Date Received: 04/22/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	126		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	106		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005901-05  
**Client ID:** HA-102-20100422-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 18:21  
**Analyst:** PD

**Date Collected:** 04/22/10 12:10  
**Date Received:** 04/22/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	1.3		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	ND		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-05  
 Client ID: HA-102-20100422-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/22/10 12:10  
 Date Received: 04/22/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	104		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005901-06  
**Client ID:** MW-107-20100422-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 20:04  
**Analyst:** PD

**Date Collected:** 04/22/10 11:20  
**Date Received:** 04/22/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	7.9		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	30		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-06  
 Client ID: MW-107-20100422-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/22/10 11:20  
 Date Received: 04/22/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005901-07  
**Client ID:** DUP-010-20100422-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 20:38  
**Analyst:** PD

**Date Collected:** 04/22/10 12:00  
**Date Received:** 04/22/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	6.3		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	23		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-07

Date Collected: 04/22/10 12:00

Client ID: DUP-010-20100422-01

Date Received: 04/22/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

### SAMPLE RESULTS

**Lab ID:** L1005901-08  
**Client ID:** TB-004-20100422-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 21:12  
**Analyst:** PD

**Date Collected:** 04/22/10 00:00  
**Date Received:** 04/22/10  
**Field Prep:** Not Specified

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-08  
 Client ID: TB-004-20100422-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/22/10 00:00  
 Date Received: 04/22/10  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	107		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005901-09 D  
**Client ID:** MW-261S-20100422-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 21:46  
**Analyst:** PD

**Date Collected:** 04/22/10 09:10  
**Date Received:** 04/22/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	100	20
1,1-Dichloroethane	ND		ug/l	20	20
Chloroform	ND		ug/l	20	20
Carbon tetrachloride	ND		ug/l	20	20
1,2-Dichloropropane	ND		ug/l	20	20
Dibromochloromethane	ND		ug/l	20	20
1,1,2-Trichloroethane	ND		ug/l	20	20
Tetrachloroethene	ND		ug/l	20	20
Chlorobenzene	ND		ug/l	20	20
1,2-Dichloroethane	ND		ug/l	20	20
1,1,1-Trichloroethane	ND		ug/l	20	20
Bromodichloromethane	ND		ug/l	20	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	20	20
Chloromethane	ND		ug/l	40	20
Vinyl chloride	ND		ug/l	20	20
Chloroethane	ND		ug/l	40	20
1,1-Dichloroethene	ND		ug/l	20	20
trans-1,2-Dichloroethene	ND		ug/l	20	20
Trichloroethene	1100		ug/l	20	20
1,2-Dichlorobenzene	ND		ug/l	20	20
1,3-Dichlorobenzene	ND		ug/l	20	20
1,4-Dichlorobenzene	ND		ug/l	20	20
cis-1,2-Dichloroethene	ND		ug/l	20	20
Dichlorodifluoromethane	ND		ug/l	40	20
1,2-Dibromoethane	ND		ug/l	40	20
1,3-Dichloropropane	ND		ug/l	40	20
1,1,1,2-Tetrachloroethane	ND		ug/l	20	20

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-09 D  
 Client ID: MW-261S-20100422-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/22/10 09:10  
 Date Received: 04/22/10  
 Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	40	20
p-Chlorotoluene	ND		ug/l	40	20
Hexachlorobutadiene	ND		ug/l	12	20
1,2,4-Trichlorobenzene	ND		ug/l	40	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	126		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	110		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005901-10  
**Client ID:** MW-551-20100422-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/28/10 22:20  
**Analyst:** PD

**Date Collected:** 04/22/10 08:15  
**Date Received:** 04/22/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	5.0	1
1,1-Dichloroethane	ND		ug/l	1.0	1
Chloroform	ND		ug/l	1.0	1
Carbon tetrachloride	ND		ug/l	1.0	1
1,2-Dichloropropane	ND		ug/l	1.0	1
Dibromochloromethane	ND		ug/l	1.0	1
1,1,2-Trichloroethane	ND		ug/l	1.0	1
Tetrachloroethene	ND		ug/l	1.0	1
Chlorobenzene	ND		ug/l	1.0	1
1,2-Dichloroethane	ND		ug/l	1.0	1
1,1,1-Trichloroethane	ND		ug/l	1.0	1
Bromodichloromethane	ND		ug/l	1.0	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	1.0	1
Chloromethane	ND		ug/l	2.0	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	2.0	1
1,1-Dichloroethene	ND		ug/l	1.0	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	1
Trichloroethene	11		ug/l	1.0	1
1,2-Dichlorobenzene	ND		ug/l	1.0	1
1,3-Dichlorobenzene	ND		ug/l	1.0	1
1,4-Dichlorobenzene	ND		ug/l	1.0	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	1
Dichlorodifluoromethane	ND		ug/l	2.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.0	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-10  
 Client ID: MW-551-20100422-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/22/10 08:15  
 Date Received: 04/22/10  
 Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	2.0	1
p-Chlorotoluene	ND		ug/l	2.0	1
Hexachlorobutadiene	ND		ug/l	0.60	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	109		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-11 D

Date Collected: 04/22/10 10:50

Client ID: MW-552-20100422-01

Date Received: 04/22/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Matrix: Water

Analytical Method: 97,8260B

Analytical Date: 04/29/10 00:03

Analyst: PD

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	500	100
1,1-Dichloroethane	ND		ug/l	100	100
Chloroform	ND		ug/l	100	100
Carbon tetrachloride	ND		ug/l	100	100
1,2-Dichloropropane	ND		ug/l	100	100
Dibromochloromethane	ND		ug/l	100	100
1,1,2-Trichloroethane	ND		ug/l	100	100
Tetrachloroethene	280		ug/l	100	100
Chlorobenzene	ND		ug/l	100	100
1,2-Dichloroethane	ND		ug/l	100	100
1,1,1-Trichloroethane	ND		ug/l	100	100
Bromodichloromethane	ND		ug/l	100	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	100	100
Chloromethane	ND		ug/l	200	100
Vinyl chloride	ND		ug/l	100	100
Chloroethane	ND		ug/l	200	100
1,1-Dichloroethene	ND		ug/l	100	100
trans-1,2-Dichloroethene	ND		ug/l	100	100
Trichloroethene	4600		ug/l	100	100
1,2-Dichlorobenzene	ND		ug/l	100	100
1,3-Dichlorobenzene	ND		ug/l	100	100
1,4-Dichlorobenzene	ND		ug/l	100	100
cis-1,2-Dichloroethene	330		ug/l	100	100
Dichlorodifluoromethane	ND		ug/l	200	100
1,2-Dibromoethane	ND		ug/l	200	100
1,3-Dichloropropane	ND		ug/l	200	100
1,1,1,2-Tetrachloroethane	ND		ug/l	100	100

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-11 D

Date Collected: 04/22/10 10:50

Client ID: MW-552-20100422-01

Date Received: 04/22/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	200	100
p-Chlorotoluene	ND		ug/l	200	100
Hexachlorobutadiene	ND		ug/l	60	100
1,2,4-Trichlorobenzene	ND		ug/l	200	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	107		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

**Lab ID:** L1005901-12 D  
**Client ID:** DUP-009-20100422-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 97,8260B  
**Analytical Date:** 04/29/10 11:14  
**Analyst:** PD

**Date Collected:** 04/22/10 07:00  
**Date Received:** 04/22/10  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	100	20
1,1-Dichloroethane	ND		ug/l	20	20
Chloroform	ND		ug/l	20	20
Carbon tetrachloride	ND		ug/l	20	20
1,2-Dichloropropane	ND		ug/l	20	20
Dibromochloromethane	ND		ug/l	20	20
1,1,2-Trichloroethane	ND		ug/l	20	20
Tetrachloroethene	ND		ug/l	20	20
Chlorobenzene	ND		ug/l	20	20
1,2-Dichloroethane	ND		ug/l	20	20
1,1,1-Trichloroethane	ND		ug/l	20	20
Bromodichloromethane	ND		ug/l	20	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	20	20
Chloromethane	ND		ug/l	40	20
Vinyl chloride	ND		ug/l	20	20
Chloroethane	ND		ug/l	40	20
1,1-Dichloroethene	ND		ug/l	20	20
trans-1,2-Dichloroethene	ND		ug/l	20	20
Trichloroethene	1100		ug/l	20	20
1,2-Dichlorobenzene	ND		ug/l	20	20
1,3-Dichlorobenzene	ND		ug/l	20	20
1,4-Dichlorobenzene	ND		ug/l	20	20
cis-1,2-Dichloroethene	ND		ug/l	20	20
Dichlorodifluoromethane	ND		ug/l	40	20
1,2-Dibromoethane	ND		ug/l	40	20
1,3-Dichloropropane	ND		ug/l	40	20
1,1,1,2-Tetrachloroethane	ND		ug/l	20	20

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-12 D

Date Collected: 04/22/10 07:00

Client ID: DUP-009-20100422-01

Date Received: 04/22/10

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	40	20
p-Chlorotoluene	ND		ug/l	40	20
Hexachlorobutadiene	ND		ug/l	12	20
1,2,4-Trichlorobenzene	ND		ug/l	40	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	101		70-130



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/28/10 13:48  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-09,11 Batch: WG410327-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
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	1.0
Chloromethane	ND		ug/l	2.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
o-Chlorotoluene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/28/10 13:48  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-09,11 Batch: WG410327-3				
p-Chlorotoluene	ND		ug/l	2.0
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.0

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/28/10 13:48  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 10 Batch: WG410328-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
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	1.0
Chloromethane	ND		ug/l	2.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
o-Chlorotoluene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

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

Analytical Method: 97,8260B  
 Analytical Date: 04/28/10 13:48  
 Analyst: PD

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 10 Batch: WG410328-3				
p-Chlorotoluene	ND		ug/l	2.0
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.0

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/29/10 08:56  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 12 Batch: WG410382-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	1.0
Chloroform	ND		ug/l	1.0
Carbon tetrachloride	ND		ug/l	1.0
1,2-Dichloropropane	ND		ug/l	1.0
Dibromochloromethane	ND		ug/l	1.0
1,1,2-Trichloroethane	ND		ug/l	1.0
Tetrachloroethene	ND		ug/l	1.0
Chlorobenzene	ND		ug/l	1.0
Trichlorofluoromethane	ND		ug/l	2.0
1,2-Dichloroethane	ND		ug/l	1.0
1,1,1-Trichloroethane	ND		ug/l	1.0
Bromodichloromethane	ND		ug/l	1.0
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.0
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0
Benzene	ND		ug/l	1.0
Toluene	ND		ug/l	1.0
Ethylbenzene	ND		ug/l	1.0
Chloromethane	ND		ug/l	2.0
Bromomethane	ND		ug/l	5.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	2.0
1,1-Dichloroethene	ND		ug/l	1.0
trans-1,2-Dichloroethene	ND		ug/l	1.0
Trichloroethene	ND		ug/l	1.0
1,2-Dichlorobenzene	ND		ug/l	1.0
1,3-Dichlorobenzene	ND		ug/l	1.0
1,4-Dichlorobenzene	ND		ug/l	1.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

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

Analytical Method: 97,8260B  
Analytical Date: 04/29/10 08:56  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 12 Batch: WG410382-3				
Methyl tert butyl ether	ND		ug/l	2.0
p/m-Xylene	ND		ug/l	2.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	1.0
Dibromomethane	ND		ug/l	2.0
1,2,3-Trichloropropane	ND		ug/l	2.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	2.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	2.0
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	2.0
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.0
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0
Bromobenzene	ND		ug/l	2.0
n-Butylbenzene	ND		ug/l	2.0
sec-Butylbenzene	ND		ug/l	2.0
tert-Butylbenzene	ND		ug/l	2.0
o-Chlorotoluene	ND		ug/l	2.0
p-Chlorotoluene	ND		ug/l	2.0
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	2.0
p-Isopropyltoluene	ND		ug/l	2.0
Naphthalene	ND		ug/l	5.0
n-Propylbenzene	ND		ug/l	2.0

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 97,8260B  
Analytical Date: 04/29/10 08:56  
Analyst: PD

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 12 Batch: WG410382-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.0
1,2,4-Trichlorobenzene	ND		ug/l	2.0
1,3,5-Trimethylbenzene	ND		ug/l	2.0
1,2,4-Trimethylbenzene	ND		ug/l	2.0
Ethyl ether	ND		ug/l	2.0
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	101		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	104		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005901

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-09,11 Batch: WG410327-1 WG410327-2								
Methylene chloride	95		94		70-130	1		20
1,1-Dichloroethane	103		103		70-130	0		20
Chloroform	105		104		70-130	1		20
Carbon tetrachloride	107		105		70-130	2		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	108		114		70-130	5		20
1,1,2-Trichloroethane	113		116		70-130	3		20
Tetrachloroethene	107		101		70-130	6		20
Chlorobenzene	105		101		70-130	4		20
1,2-Dichloroethane	111		112		70-130	1		20
1,1,1-Trichloroethane	105		103		70-130	2		20
Bromodichloromethane	112		113		70-130	1		20
trans-1,3-Dichloropropene	120		122		70-130	2		20
cis-1,3-Dichloropropene	97		98		70-130	1		20
Bromoform	96		103		70-130	7		20
1,1,2,2-Tetrachloroethane	106		105		70-130	1		20
Chloromethane	90		97		70-130	7		20
Vinyl chloride	102		106		70-130	4		20
Chloroethane	85		90		70-130	6		20
1,1-Dichloroethene	103		102		70-130	1		20
trans-1,2-Dichloroethene	99		98		70-130	1		20



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005901

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-09,11 Batch: WG410327-1 WG410327-2								
Trichloroethene	97		98		70-130	1		20
1,2-Dichlorobenzene	106		106		70-130	0		20
1,3-Dichlorobenzene	110		107		70-130	3		20
1,4-Dichlorobenzene	107		109		70-130	2		20
cis-1,2-Dichloroethene	106		103		70-130	3		20
Dichlorodifluoromethane	89		90		70-130	1		20
1,2-Dibromoethane	104		108		70-130	4		20
1,3-Dichloropropane	114		115		70-130	1		20
1,1,1,2-Tetrachloroethane	124		119		70-130	4		20
o-Chlorotoluene	107		104		70-130	3		20
p-Chlorotoluene	107		106		70-130	1		20
Hexachlorobutadiene	114		110		70-130	4		20
1,2,4-Trichlorobenzene	109		114		70-130	4		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	112		113		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	94		97		70-130
Dibromofluoromethane	103		104		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005901

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 10 Batch: WG410328-1 WG410328-2								
Methylene chloride	95		94		70-130	1		20
1,1-Dichloroethane	103		103		70-130	0		20
Chloroform	105		104		70-130	1		20
Carbon tetrachloride	107		105		70-130	2		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	108		114		70-130	5		20
1,1,2-Trichloroethane	113		116		70-130	3		20
Tetrachloroethene	107		101		70-130	6		20
Chlorobenzene	105		101		70-130	4		20
1,2-Dichloroethane	111		112		70-130	1		20
1,1,1-Trichloroethane	105		103		70-130	2		20
Bromodichloromethane	112		113		70-130	1		20
trans-1,3-Dichloropropene	120		122		70-130	2		20
cis-1,3-Dichloropropene	97		98		70-130	1		20
Bromoform	96		103		70-130	7		20
1,1,2,2-Tetrachloroethane	106		105		70-130	1		20
Chloromethane	90		97		70-130	7		20
Vinyl chloride	102		106		70-130	4		20
Chloroethane	85		90		70-130	6		20
1,1-Dichloroethene	103		102		70-130	1		20
trans-1,2-Dichloroethene	99		98		70-130	1		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005901

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 10 Batch: WG410328-1 WG410328-2								
Trichloroethene	97		98		70-130	1		20
1,2-Dichlorobenzene	106		106		70-130	0		20
1,3-Dichlorobenzene	110		107		70-130	3		20
1,4-Dichlorobenzene	107		109		70-130	2		20
cis-1,2-Dichloroethene	106		103		70-130	3		20
Dichlorodifluoromethane	89		90		70-130	1		20
1,2-Dibromoethane	104		108		70-130	4		20
1,3-Dichloropropane	114		115		70-130	1		20
1,1,1,2-Tetrachloroethane	124		119		70-130	4		20
o-Chlorotoluene	107		104		70-130	3		20
p-Chlorotoluene	107		106		70-130	1		20
Hexachlorobutadiene	114		110		70-130	4		20
1,2,4-Trichlorobenzene	109		114		70-130	4		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	112		113		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	94		97		70-130
Dibromofluoromethane	103		104		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005901

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 12 Batch: WG410382-1 WG410382-2								
Methylene chloride	96		94		70-130	2		20
1,1-Dichloroethane	106		104		70-130	2		20
Chloroform	105		103		70-130	2		20
Carbon tetrachloride	106		105		70-130	1		20
1,2-Dichloropropane	101		100		70-130	1		20
Dibromochloromethane	108		116		70-130	7		20
1,1,2-Trichloroethane	116		113		70-130	3		20
Tetrachloroethene	104		98		70-130	6		20
Chlorobenzene	103		100		70-130	3		20
Trichlorofluoromethane	115		111		70-130	4		20
1,2-Dichloroethane	112		114		70-130	2		20
1,1,1-Trichloroethane	107		102		70-130	5		20
Bromodichloromethane	112		116		70-130	4		20
trans-1,3-Dichloropropene	119		124		70-130	4		20
cis-1,3-Dichloropropene	100		97		70-130	3		20
1,1-Dichloropropene	103		99		70-130	4		20
Bromoform	95		108		70-130	13		20
1,1,2,2-Tetrachloroethane	100		108		70-130	8		20
Benzene	102		98		70-130	4		20
Toluene	103		97		70-130	6		20
Ethylbenzene	113		110		70-130	3		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005901

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 12 Batch: WG410382-1 WG410382-2								
Chloromethane	103		93		70-130	10		20
Bromomethane	80		74		70-130	8		20
Vinyl chloride	101		97		70-130	4		20
Chloroethane	118		99		70-130	18		20
1,1-Dichloroethene	103		100		70-130	3		20
trans-1,2-Dichloroethene	100		97		70-130	3		20
Trichloroethene	99		99		70-130	0		20
1,2-Dichlorobenzene	103		107		70-130	4		20
1,3-Dichlorobenzene	105		106		70-130	1		20
1,4-Dichlorobenzene	104		106		70-130	2		20
Methyl tert butyl ether	106		110		70-130	4		20
p/m-Xylene	110		106		70-130	4		20
o-Xylene	112		106		70-130	6		20
cis-1,2-Dichloroethene	106		97		70-130	9		20
Dibromomethane	110		112		70-130	2		20
1,2,3-Trichloropropane	115		129		70-130	11		20
Styrene	107		103		70-130	4		20
Dichlorodifluoromethane	92		83		70-130	10		20
Acetone	100		111		70-130	10		20
Carbon disulfide	82		78		70-130	5		20
2-Butanone	98		120		70-130	20		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005901

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 12 Batch: WG410382-1 WG410382-2								
4-Methyl-2-pentanone	104		117		70-130	12		20
2-Hexanone	111		119		70-130	7		20
Bromochloromethane	106		101		70-130	5		20
Tetrahydrofuran	96		107		70-130	11		20
2,2-Dichloropropane	109		105		70-130	4		20
1,2-Dibromoethane	106		113		70-130	6		20
1,3-Dichloropropane	114		116		70-130	2		20
1,1,1,2-Tetrachloroethane	121		120		70-130	1		20
Bromobenzene	98		102		70-130	4		20
n-Butylbenzene	114		111		70-130	3		20
sec-Butylbenzene	109		105		70-130	4		20
tert-Butylbenzene	109		109		70-130	0		20
o-Chlorotoluene	100		102		70-130	2		20
p-Chlorotoluene	103		105		70-130	2		20
1,2-Dibromo-3-chloropropane	103		120		70-130	15		20
Hexachlorobutadiene	110		107		70-130	3		20
Isopropylbenzene	119		113		70-130	5		20
p-Isopropyltoluene	114		111		70-130	3		20
Naphthalene	101		118		70-130	16		20
n-Propylbenzene	103		103		70-130	0		20
1,2,3-Trichlorobenzene	106		123		70-130	15		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005901

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
MCP Volatile Organics - Westborough Lab Associated sample(s): 12 Batch: WG410382-1 WG410382-2								
1,2,4-Trichlorobenzene	106		113		70-130	6		20
1,3,5-Trimethylbenzene	103		104		70-130	1		20
1,2,4-Trimethylbenzene	109		108		70-130	1		20
Ethyl ether	103		109		70-130	6		20
Isopropyl Ether	98		98		70-130	0		20
Ethyl-Tert-Butyl-Ether	99		102		70-130	3		20
Tertiary-Amyl Methyl Ether	102		106		70-130	4		20
1,4-Dioxane	84		82		70-130	2		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	115		118		70-130
Toluene-d8	102		100		70-130
4-Bromofluorobenzene	91		97		70-130
Dibromofluoromethane	103		104		70-130

## Matrix Spike Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005901

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-09,11 QC Batch ID: WG410327-4 WG410327-5 QC Sample: L1005901-05 Client ID: HA-102-20100422-01												
Methylene chloride	ND	10	9.4	94		8.2	82		70-130	14		20
1,1-Dichloroethane	ND	10	10	103		9.3	93		70-130	10		20
Chloroform	ND	10	10	105		9.4	94		70-130	11		20
Carbon tetrachloride	ND	10	11	110		9.4	94		70-130	16		20
1,2-Dichloropropane	ND	10	9.6	96		8.6	86		70-130	11		20
Dibromochloromethane	ND	10	10	103		9.8	98		70-130	5		20
1,1,2-Trichloroethane	ND	10	10	105		9.2	92		70-130	13		20
Tetrachloroethene	1.3	10	11	96		9.7	84		70-130	13		20
Chlorobenzene	ND	10	9.0	90		8.2	82		70-130	9		20
1,2-Dichloroethane	ND	10	11	111		10	101		70-130	9		20
1,1,1-Trichloroethane	ND	10	11	110		9.7	97		70-130	13		20
Bromodichloromethane	ND	10	11	111		9.7	97		70-130	13		20
trans-1,3-Dichloropropene	ND	10	10	105		10	102		70-130	3		20
cis-1,3-Dichloropropene	ND	10	9.0	90		7.6	76		70-130	17		20
Bromoform	ND	10	8.7	87		8.6	86		70-130	1		20
1,1,2,2-Tetrachloroethane	ND	10	9.3	93		9.1	91		70-130	2		20
Chloromethane	ND	10	9.6	96		8.9	90		70-130	6		20
Vinyl chloride	ND	10	10	104		9.2	92		70-130	12		20
Chloroethane	ND	10	8.2	82		8.1	81		70-130	1		20
1,1-Dichloroethene	ND	10	9.9	99		9.0	90		70-130	10		20
trans-1,2-Dichloroethene	ND	10	9.2	92		8.6	86		70-130	7		20



## Matrix Spike Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L1005901

Project Number: 0114119

Report Date: 04/29/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-09,11 QC Batch ID: WG410327-4 WG410327-5 QC Sample: L1005901-05 Client ID: HA-102-20100422-01												
Trichloroethene	ND	10	10	102		8.9	89		70-130	14		20
1,2-Dichlorobenzene	ND	10	9.0	90		8.2	82		70-130	9		20
1,3-Dichlorobenzene	ND	10	8.8	88		8.2	82		70-130	7		20
1,4-Dichlorobenzene	ND	10	8.9	89		8.2	82		70-130	8		20
cis-1,2-Dichloroethene	ND	10	10	103		8.9	89		70-130	15		20
Dichlorodifluoromethane	ND	10	7.9	79		7.5	75		70-130	5		20
1,2-Dibromoethane	ND	10	9.6	97		9.5	95		70-130	2		20
1,3-Dichloropropane	ND	10	10	104		9.6	96		70-130	8		20
1,1,1,2-Tetrachloroethane	ND	10	11	111		10	101		70-130	9		20
o-Chlorotoluene	ND	10	8.8	89		8.1	81		70-130	9		20
p-Chlorotoluene	ND	10	9.0	90		8.1	81		70-130	11		20
Hexachlorobutadiene	ND	10	8.4	84		7.8	78		70-130	7		20
1,2,4-Trichlorobenzene	ND	10	8.1	81		8.0	80		70-130	1		20

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	121		123		70-130
4-Bromofluorobenzene	92		95		70-130
Dibromofluoromethane	111		111		70-130
Toluene-d8	100		102		70-130

## Matrix Spike Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005901

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 10 QC Batch ID: WG410328-4 WG410328-5 QC Sample: L1005901-10 Client ID: MW-551-20100422-01												
Methylene chloride	ND	10	10	100		9.4	94		70-130	6		20
1,1-Dichloroethane	ND	10	11	113		10	102		70-130	10		20
Chloroform	ND	10	11	114		10	102		70-130	11		20
Carbon tetrachloride	ND	10	12	117		10	103		70-130	13		20
1,2-Dichloropropane	ND	10	10	103		9.7	97		70-130	6		20
Dibromochloromethane	ND	10	12	121		11	109		70-130	10		20
1,1,2-Trichloroethane	ND	10	12	115		11	108		70-130	6		20
Tetrachloroethene	ND	10	9.2	92		8.5	85		70-130	8		20
Chlorobenzene	ND	10	9.3	93		8.6	86		70-130	8		20
1,2-Dichloroethane	ND	10	12	123		11	114		70-130	8		20
1,1,1-Trichloroethane	ND	10	12	115		10	103		70-130	11		20
Bromodichloromethane	ND	10	12	125		11	113		70-130	10		20
trans-1,3-Dichloropropene	ND	10	12	120		11	108		70-130	11		20
cis-1,3-Dichloropropene	ND	10	9.6	96		9.0	90		70-130	6		20
Bromoform	ND	10	11	110		10	103		70-130	7		20
1,1,2,2-Tetrachloroethane	ND	10	10	106		10	105		70-130	1		20
Chloromethane	ND	10	9.0	90		9.0	90		70-130	0		20
Vinyl chloride	ND	10	11	113		10	101		70-130	11		20
Chloroethane	ND	10	9.0	90		9.0	90		70-130	0		20
1,1-Dichloroethene	ND	10	10	105		10	100		70-130	5		20
trans-1,2-Dichloroethene	ND	10	9.5	95		9.2	92		70-130	3		20

## Matrix Spike Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L1005901

Project Number: 0114119

Report Date: 04/29/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 10 QC Batch ID: WG410328-4 WG410328-5 QC Sample: L1005901-10 Client ID: MW-551-20100422-01												
Trichloroethene	11	10	18	66	Q	17	53	Q	70-130	22	Q	20
1,2-Dichlorobenzene	ND	10	9.5	95		9.0	90		70-130	5		20
1,3-Dichlorobenzene	ND	10	9.4	94		9.0	90		70-130	4		20
1,4-Dichlorobenzene	ND	10	9.4	94		8.9	89		70-130	5		20
cis-1,2-Dichloroethene	ND	10	11	109		10	101		70-130	8		20
Dichlorodifluoromethane	ND	10	8.3	83		8.1	81		70-130	2		20
1,2-Dibromoethane	ND	10	11	111		10	103		70-130	7		20
1,3-Dichloropropane	ND	10	11	112		11	108		70-130	4		20
1,1,1,2-Tetrachloroethane	ND	10	12	120		11	109		70-130	10		20
o-Chlorotoluene	ND	10	9.1	91		8.5	85		70-130	7		20
p-Chlorotoluene	ND	10	9.2	92		8.6	86		70-130	7		20
Hexachlorobutadiene	ND	10	8.7	87		8.2	82		70-130	6		20
1,2,4-Trichlorobenzene	ND	10	8.9	89		8.8	88		70-130	1		20

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	128		120		70-130
4-Bromofluorobenzene	94		95		70-130
Dibromofluoromethane	113		110		70-130
Toluene-d8	100		100		70-130

# METALS

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-09

Date Collected: 04/22/10 09:10

Client ID: MW-261S-20100422-01

Date Received: 04/22/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	ND		mg/l	2.5	1	04/23/10 10:15	04/29/10 10:56	EPA 3005A	97,6010B	MG
Sodium, Dissolved	11		mg/l	2.0	1	04/23/10 10:15	04/29/10 10:56	EPA 3005A	97,6010B	MG

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-10

Date Collected: 04/22/10 08:15

Client ID: MW-551-20100422-01

Date Received: 04/22/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	3.2		mg/l	2.5	1	04/23/10 10:15	04/29/10 10:16	EPA 3005A	97,6010B	MG
Sodium, Dissolved	15		mg/l	2.0	1	04/23/10 10:15	04/29/10 10:16	EPA 3005A	97,6010B	MG

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L1005901**Project Number:** 0114119**Report Date:** 04/29/10**SAMPLE RESULTS**

Lab ID: L1005901-11

Date Collected: 04/22/10 10:50

Client ID: MW-552-20100422-01

Date Received: 04/22/10

Sample Location: WAYLAND, MA

Field Prep: See Narrative

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	ND		mg/l	2.5	1	04/23/10 10:15	04/29/10 10:59	EPA 3005A	97,6010B	MG
Sodium, Dissolved	13		mg/l	2.0	1	04/23/10 10:15	04/29/10 10:59	EPA 3005A	97,6010B	MG

Project Name: RAYTHEON WAYLAND

Lab Number: L1005901

Project Number: 0114119

Report Date: 04/29/10

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 09-11 Batch: WG409545-1								
Potassium, Dissolved	ND	mg/l	2.5	1	04/23/10 10:15	04/29/10 09:55	97,6010B	MG
Sodium, Dissolved	ND	mg/l	2.0	1	04/23/10 10:15	04/29/10 09:55	97,6010B	MG

### Prep Information

Digestion Method: EPA 3005A



## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005901

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 09-11 Batch: WG409545-2 WG409545-3								
Potassium, Dissolved	95		95		80-120	0		20
Sodium, Dissolved	100		100		80-120	0		20

**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005901

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 09-11 QC Batch ID: WG409545-6 WG409545-7 QC Sample: L1005901-10 Client ID: MW-551-20100422-01												
Potassium, Dissolved	3.2	10	14	108		14	108		75-125	0		20
Sodium, Dissolved	15	10	25	100		25	100		75-125	0		20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

### SAMPLE RESULTS

**Lab ID:** L1005901-09  
**Client ID:** MW-261S-20100422-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/22/10 09:10  
**Date Received:** 04/22/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Sulfate	31		mg/l	10	1	04/26/10 14:30	04/26/10 14:30	30,4500SO4-E	SD
Total Organic Carbon	ND		mg/l	1.0	2	-	04/27/10 07:28	1,9060	DW



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

### SAMPLE RESULTS

**Lab ID:** L1005901-10  
**Client ID:** MW-551-20100422-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/22/10 08:15  
**Date Received:** 04/22/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Sulfate	32		mg/l	10	1	04/26/10 14:30	04/26/10 14:30	30,4500SO4-E	SD
Total Organic Carbon	ND		mg/l	1.0	2	-	04/27/10 07:28	1,9060	DW



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

### SAMPLE RESULTS

**Lab ID:** L1005901-11  
**Client ID:** MW-552-20100422-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/22/10 10:50  
**Date Received:** 04/22/10  
**Field Prep:** See Narrative

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Sulfate	35		mg/l	10	1	04/26/10 14:30	04/26/10 14:30	30,4500SO4-E	SD
Total Organic Carbon	1.1		mg/l	0.50	1	-	04/27/10 07:28	1,9060	DW



Project Name: RAYTHEON WAYLAND

Lab Number: L1005901

Project Number: 0114119

Report Date: 04/29/10

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

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 09-11 Batch: WG409819-1								
Sulfate	ND	mg/l	10	1	04/26/10 14:30	04/26/10 14:30	30,4500SO4-E	SD
General Chemistry - Westborough Lab for sample(s): 09-11 Batch: WG409968-1								
Total Organic Carbon	ND	mg/l	0.50	1	-	04/27/10 07:28	1,9060	DW

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005901

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 09-11 Batch: WG409819-2								
Sulfate	105		-		90-115	-		
General Chemistry - Westborough Lab Associated sample(s): 09-11 Batch: WG409968-2								
Total Organic Carbon	97		-		90-110	-		



**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L1005901

**Project Number:** 0114119

**Report Date:** 04/29/10

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 09-11 QC Batch ID: WG409819-3 QC Sample: L1005901-10 Client ID: MW-551-20100422-01												
Sulfate	32	50	89	114	-	-	-	-	55-147	-	-	14
General Chemistry - Westborough Lab Associated sample(s): 09-11 QC Batch ID: WG409968-3 QC Sample: L1005901-10 Client ID: MW-551-20100422-01												
Total Organic Carbon	ND	8	8.9	111	-	-	-	-	80-120	-	-	20

## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0114119

**Lab Number:** L1005901

**Report Date:** 04/29/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 09-11 QC Batch ID: WG409819-4 QC Sample: L1005901-10 Client ID: MW-551-20100422-01						
Sulfate	32	32	mg/l	0		14
General Chemistry - Westborough Lab Associated sample(s): 09-11 QC Batch ID: WG409968-4 QC Sample: L1005901-10 Client ID: MW-551-20100422-01						
Total Organic Carbon	ND	ND	mg/l	NC		20

Project Name: RAYTHEON WAYLAND

Lab Number: L1005901

Project Number: 0114119

Report Date: 04/29/10

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

## Cooler Information Custody Seal

## Cooler

A Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis
L1005901-01A	Clear Vial Ascorbic Acid preserv	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-01B	Clear Vial Ascorbic Acid preserv	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-02A	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-02B	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-03A	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-03B	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-04A	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-04B	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-05A	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-05B	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-05C	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-05D	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-05E	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-05F	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-06A	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-06B	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-07A	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-07B	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-08A	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-09A	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-09B	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-09C	Vial H2SO4 preserved	A	N/A	2.2	Y	Absent	TOC-9060(28)
L1005901-09D	Vial H2SO4 preserved	A	N/A	2.2	Y	Absent	TOC-9060(28)
L1005901-09E	Plastic 250ml unpreserved	A	7	2.2	Y	Absent	SO4-4500(28)
L1005901-09F	Plastic 250ml HNO3 preserved	A	<2	2.2	Y	Absent	MCP-NA-6010S-10(180),MCP-K-6010S-10(180)
L1005901-10A	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)

\*Hold days indicated by values in parentheses

Project Name: RAYTHEON WAYLAND

Project Number: 0114119

Lab Number: L1005901

Report Date: 04/29/10

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis
L1005901-10B	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-10C	Vial H2SO4 preserved	A	N/A	2.2	Y	Absent	TOC-9060(28)
L1005901-10D	Vial H2SO4 preserved	A	N/A	2.2	Y	Absent	TOC-9060(28)
L1005901-10E	Plastic 250ml unpreserved	A	7	2.2	Y	Absent	SO4-4500(28)
L1005901-10F	Plastic 250ml HNO3 preserved	A	<2	2.2	Y	Absent	MCP-NA-6010S-10(180),MCP-K-6010S-10(180)
L1005901-10G	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-10H	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-10M	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-10N	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-11A	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-11B	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-11C	Vial H2SO4 preserved	A	N/A	2.2	Y	Absent	TOC-9060(28)
L1005901-11D	Vial H2SO4 preserved	A	N/A	2.2	Y	Absent	TOC-9060(28)
L1005901-11E	Plastic 250ml unpreserved	A	7	2.2	Y	Absent	SO4-4500(28)
L1005901-11F	Plastic 250ml HNO3 preserved	A	<2	2.2	Y	Absent	MCP-NA-6010S-10(180),MCP-K-6010S-10(180)
L1005901-12A	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)
L1005901-12B	Vial HCl preserved	A	N/A	2.2	Y	Absent	MCP-8260-10(14)

**Container Comments**

L1005901-10B

\*Hold days indicated by values in parentheses



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

## 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.
- LCS D** - 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.
- MS D** - 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.
- NI** - Not Ignitable.
- 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

- 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 at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to 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.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RDL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reported detection limit (RDL) for the sample.

Report Format: Data Usability Report



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0114119

**Lab Number:** L1005901  
**Report Date:** 04/29/10

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

## LIMITATION OF LIABILITIES

Alpha Analytical 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 Analytical 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.



## Certificate/Approval Program Summary

Last revised March 16, 2010 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.  
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

### Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

*Drinking Water* (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Haloacetic Acids, Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB).)

*Wastewater/Non-Potable Water* (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Calcium Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH.)

*Solid Waste/Soil* (Inorganic Parameters: Lead in Paint, pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), Reactivity. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

### Maine Department of Human Services Certificate/Lab ID: 2009024.

*Drinking Water* (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 180.1, 300.0, 353.2, SM2130B, 2320B, 4500CI-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1. Organic Parameters: 504.1, 524.2, SM 6251B.)

*Wastewater/Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, Lachat 10-107-06-1-B, SM2320B, 2340B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B.5, 4500P-E, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624.)

### Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

*Drinking Water*

Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl)

(EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, SM4500H-B.

Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics)

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), 314.0, 332.

Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; MF-SM9222D

*Non-Potable Water*

Inorganic Parameters: (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn)

(EPA 200.7 for: Al,Sb,As,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Mo,Ni,Se,Ag,Sr,Ti,Tl, V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-B,C-Titr, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics)

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables, 600/4-81-045-PCB-Oil

**New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.***

*Drinking Water (Inorganic Parameters: SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 120.1, 300.0, 314.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 331.0. Organic Parameters: 504.1, 524.2, SM6251B.)*

*Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH3-H, 4500NH3-E, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 2320B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-117-07-1-B, LACHAT 10-107-06-1-B, LACHAT 10-107-04-1-C, LACHAT 10-107-04-1-J, LACHAT 10-117-07-1-A, SM4500CL-E, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3005A, 3015A, 3510C, 5030B, 8021B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A.)*

*Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 7.3.3.2, 7.3.4.2, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040, 9045C, 9050C, 1311, 3005A, 3050B, 3051A. Organic Parameters: SW-846 3540C, 3545, 3580A, 5030B, 5035, 8021B, 8260B, 8270C, 8330, 8151A, 8082, 8081A.)*

**New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.***

*Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, SM2120B, 2510B, 5310C, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)*

*Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, SM9221CE, 9222D, 9221B, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, SM5210B, SW-846 3015, 6020, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, EPA 245.1, 245.2, SW-846 9040B, 3005A, EPA 6010B, 7196A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 3510C, EPA 608, 624, 625, SW-846 5030B, 8021B, 8081A, 8082, 8151A, 8330, NJ OQA-QAM-025 Rev.7.)*

*Solid & Chemical Materials (Inorganic Parameters: SW-846 9040B, 3005A, 6010B, 7196A, 5030B, 9010B, 9030B, 1030, 1311, 3050B, 3051, 7471A, 9014, 9012A, 9045C, 9050A, 9065. Organic Parameters: SW-846 8021B, 8081A, 8082, 8151A, 8330, 8260B, 8270C, 1311, 1312, 3540C, 3545, 3550B, 3580A, 5035L, 5035H, NJ OQA-QAM-025 Rev.7.)*

**New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.***

*Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)*

*Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, LACHAT 10-117-07-1A or B, SM4500CI-E, 4500F-C, SM15 426C, EPA 350.1, LACHAT 10-107-06-1-B, SM4500NH3-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, SM4500-CN-E LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B, 9010B, 9030B.)*

*Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)*

**North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. *Organic Parameters: MA-EPH, MA-VPH.*****Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. *NELAP Accredited.***

*Non-Potable Water (Organic Parameters: EPA 3510C, 5030B, 625, 624. 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)*

*Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, 1311, 3050B, 3051, 6010B, EPA 7.3.3.2, EPA 7.3.4.2, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065. Organic Parameters: 3540C, 3545, 3580A, 5035, 8021B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)*

**Rhode Island Department of Health Certificate/Lab ID: LAO00065. *NELAP Accredited via NY-DOH.***

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NY-DOH Certificate for Potable and Non-Potable Water.



**Texas Commission on Environmental Quality** Certificate/Lab ID: T104704476-09-1. NELAP Accredited.

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S<sup>2-</sup> D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

**Utah Department of Health** Certificate/Lab ID: AAMA. NELAP Accredited.

*Non-Potable Water* (Inorganic Parameters: Chloride EPA 300.0)

**Department of Defense** Certificate/Lab ID: L2217.

*Drinking Water* (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 9251, 9038, 350.1, 353.2, 351.1, 314, 120.1, 9050A, 410.4, 9060, 1664, 420.1, LCHAT 10-107-06-1-B, SM 4500CN-E, 4500H-B, 4500CL-E, 4500F-BC, 4500SO4-E, 426C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500Norg-C, 4500PE, 2510B, 5540C, 5220D, 5310C, 2540B, 2540C, 2540D, 510C, 4500S2-AD, 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8330, 625, 8082, 8151A, 8081A, 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9040B, 9045C, 9065, 420.1, 9012A, 6860, 1311, 1312, 3050B, 9030B, 3051, 9010B, 3540C, SM 510ABC, 4500CN-CE, 2540G, SW-846 7.3, Organic Parameters: EPA 8260B, 8270C, 8330, 8082, 8081A, 8151A, 3545, 3546, 3580, 5035.)

**Analytes Not Accredited by NELAP**

Certification is not available by NELAP for the following analytes: **EPA 8260B**: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.



# CHAIN OF CUSTODY

PAGE 1 OF 2

WOODS HOLE LABS  
 WESTBORO, MA  
 TEL: 508-898-9220  
 FAX: 508-898-9193

RAYNHAM, MA  
 TEL: 508-822-9300  
 FAX: 508-822-9298

### Client Information

Client: **ERM**  
 Address: **399 Bowditch St.**  
**1st Floor Boston MA**  
 Phone: **(617) 476-7800**  
 Fax: **(617) 267-6447**  
 Email: **Jason.Plattner@erm.com**

Project Name: **Raytheon Wayland**  
 Project Location: **Wayland, MA**  
 Project #: **0114119**  
 Project Manager: **Jason Plattner**  
 ALPHA Quote #:  
 Turn-Around Time  
 Standard  RUSH (only confirmed if pre-approved)  
 Date Due: **4/29/10** Time:

Other Project Specific Requirements/Comments/Detection Limits:  
 Note: Samples preserved w/ ascorbic acid have a shortened holding time of **5** days

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
05901	1 MW-101-20100422-01	4/24/10	0800	GW	EW
	2 MW-208S-20100422-01		0840		JN
	3 MW-208M-20100422-01		0920		JN
	4 MW-208D-20100422-01	4/24/10	1005		JN
	5 HA-102-20100422-01		1210		JN
	5 HA-102-20100422-01-MS		1210		JN
	5 HA-102-20100422-01-MSD		1210		JN
	6 MW-107-20100422-01		1120		JN
	7 DUP-010-20100422-01		1200		JN
	8 TB-004-20100422-01	4/21/10	1567		PC

### PLEASE ANSWER QUESTIONS ABOVE!

### IS YOUR PROJECT MA MCP or CT RCP?

Container Type	Preservative
V	I
V	B
V	D
V	A
P	C

Relinquished By: *[Signature]*  
 Date/Time: **4/22/10 1505**

Received By: *[Signature]*  
 Date/Time: **4/22/10 1505**

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.

### Report Information - Data Deliverables

Date Rec'd in Lab: **4/22/10**  
 FAX  EMAIL  
 ADDEX  Add'l Deliverables

### Regulatory Requirements/Report Limits

State/Fed Program: **MA MCP** Criteria: **GW-2**  
**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 by 8260  
 80216 by 8260  
 TOC  
 SO4  
 Diss. NatK (FF)

SAMPLE HANDLING  
 Filtration:  Done  Not needed  
 Diss. NatK:  Lab to do  Preservation  
 Lab to do:  Lab to do  
 (Please specify below)  
 Sample Specific Comments



# CHAIN OF CUSTODY

PAGE 2 OF 2

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

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

### Client Information

Client: BRM  
Address: 399 Boylston Street  
6th Floor Boston, MA 02116  
Phone: (617) 646-7800  
Fax: (617) 267-6447  
Email: Jason.Plattery@brm.com

Project Name: Roughness Wayland  
Project Location: Wayland, MA  
Project #: 0114119  
Project Manager: Jason Plattery  
ALPHA Quote #:  
Turn-Around Time  
 Standard  RUSH (only confirmed if pre-approved)  
Date Due: 4/29/10 Time:

Other Project Specific Requirements/Comments/Detection Limits:

Date Rec'd In Lab: 4/22/10

ALPHA Job #: 21065901

### 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

ANALYSIS  
80216 by 8260  
TOC  
SO4  
DISS. Nat K (FP)

SAMPLE HANDLING  
 Filtration  
 Done  Diss Nat  
 Not needed  
 Lab to do  
 Preservation  
 Lab to do  
(Please specify below)  
Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Date	Time	Date/Time	Container Type	Date/Time	Received By:	Date/Time	Sample Specific Comments	
		Date	Time											
DS901	9	MMW-2615-20100422-01	4/22/10	0910	GW	CC	2	2	1	1				
	10	MMW-551-20100422-01		0815	GW	CC	2	2	1	1				
	11	MMW-552-20100422-01		1050	GW	CC	2	2	1	1				
	12	DVP-609-20100422-01		0700	GW	CC	2							
	10	MMW-551-20100422-01-MS		0815	GW	CC	2							
	10	MMW-551-20100422-01-MSD		0815	GW	CC	2							

Relinquished By:	Date/Time	Received By:	Date/Time
<u>[Signature]</u>	<u>4/22/10 1505</u>	<u>[Signature]</u>	<u>4/22/10 1505</u>
<u>[Signature]</u>	<u>4/22/10 1830</u>	<u>[Signature]</u>	<u>4/22/10 1740</u>
<u>[Signature]</u>	<u>4/22/10 1830</u>	<u>[Signature]</u>	<u>4/22/10 1830</u>

FORM NO: 01-01 (rev. 14-OCT-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 Terms and Conditions. See reverse side.

TOTAL # BOTTLES



Field Colorimetry  
Data Form  
WATER SAMPLES

Analyst: J. Nally  
Date: 2010/04/23  
Checked by: E. Winer  
Site Name: Raytheon Wayland  
Project Number: 0114119.03  
Project Manager: Jason Flattery

Sample Name	Well ID	Collection Date / Time	Preservative (Note)	Color	Measured (ppm)	Dilution (X factor)	Concentration as KMnO <sub>4</sub> (ppm)	Concentration as NaMnO <sub>4</sub> (ppm)	Concentration as NaMnO <sub>4</sub> (%)	Notes
MW-33S	MW-33S-20100421-03	04/21/10 0810	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-40	MW-40-20100419-03	04/19/10 1410	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-40S	MW-40S-20100419-03	04/19/10 1450	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-43S	MW-43S-20100420-03	04/20/10 1530	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-46M	MW-46M-20100421-03	04/21/10 1040	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-47S	MW-47S-20100421-03	04/21/10 1205	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-101	MW-101-20100422-03	04/22/10 0800	Ice	Pink	35.8	1	< 1	< 1	-	-
MW-102	MW-102-20100420-03	04/20/10 1520	Ice	Light Pink	5.8	1	5.8	10	0.00	-
MW-103	MW-103-20100421-03	04/21/10 0840	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-113	MW-113-20100421-03	04/21/10 0840	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-118	MW-118-20100420-03	04/20/10 1140	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-201S	MW-201S-20100420-03	04/20/10 0925	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-201M	MW-201M-20100419-03	04/19/10 1530	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-202S	MW-202S-20100420-03	04/20/10 1420	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-202M	MW-202M-20100420-03	04/20/10 1555	Ice	Clear	0.3	1	0.3	0.3	0.00	-
MW-203S	MW-203S-20100420-03	04/20/10 1515	Ice	Clear	0.3	1	< 1	< 1	-	-
MW-203M	MW-203M-20100420-03	04/20/10 1410	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-203D	MW-203D-20100420-03	04/20/10 1625	Ice	Clear	0.3	1	< 1	< 1	-	-
MW-204M	MW-204M-20100421-03	04/21/10 0840	Ice	Clear	0.3	1	< 1	< 1	-	-
MW-208S	MW-208S-20100422-03	04/22/10 0840	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-212	MW-212-20100420-03	04/20/10 1625	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-213	MW-213-20100421-03	04/21/10 1200	Ice	Clear	0.3	1	< 1	< 1	-	-
MW-403	MW-403-20100421-03	04/21/10 1325	Ice	Clear	0.0	1	< 1	< 1	-	-
MW-404	MW-404-20100420-03	04/20/10 1205	Ice	Purple	5.1	100	510	458	0.05	-
MW-405S	MW-405S-20100420-03	04/20/10 1245	Ice	Purple	3.0	100	300	270	0.03	-
IP-16S	MW-16S-20100420-03	04/20/10 1415	Ice	S. pink	2.6	1	2.6	2.3	0.00	-
IP-16D	MW-16D-20100420-03	04/20/10 1440	Ice	Light Pink	8.1	1	8.1	7.3	0.00	-
IP-17D	IP-17D-20100420-03	04/20/10 1500	Ice	D. Purple	2.5	1,000	2,500	2,200	0.22	-

Note:

< 1 less than detection limit of method (1 ppm)