

Environmental  
Resources  
Management

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

9 June 2009  
Reference: 0095922

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 from the Former Raytheon Facility located at 430 Boston Post Road in Wayland, Massachusetts (Site). The results are submitted pursuant to 310 CMR 40.1403(10) of the Massachusetts Contingency Plan (MCP).

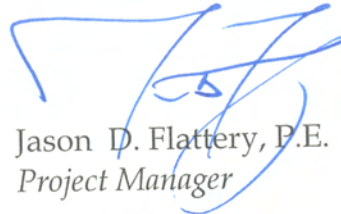
ERM collected groundwater samples from 74 wells on portions of the Site within the boundaries of your property between 13 April and 17 April 2009. Samples were submitted for one or more of the following analyses; volatile organic compounds, total organic carbon, total phosphorus, dissolved iron, dissolved manganese, dissolved sodium, dissolved potassium, chloride, sulfate, nitrogen as nitrate, alkalinity, 1,4-dioxane, dissolved ethane, ethene, and methane gases, and field analysis of permanganate concentration by colorimetry. Sample analyses were conducted by Alpha Analytical, Inc. of Westborough, Massachusetts, with the exception of dissolved methane, ethane, and ethene analyses conducted by Microseeps, Inc. of Pittsburgh, Pennsylvania, and permanganate concentration by colorimetry conducted by ERM. These analytical data will be provided to the Massachusetts Department of Environmental Protection in the next required MCP submittal.

Mr. DeLuca  
Reference: 0095922  
9 June 2009  
Page 2

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

Sincerely,

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

  
Jason D. Flattery, P.E.  
Project Manager

enclosures: BWSC-123 - Notice of Environmental Sampling  
Laboratory Analytical Reports

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



**NOTICE OF ENVIRONMENTAL SAMPLING**

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

**BWSC 123**

This Notice is Related to Release Tracking Number

3 22408

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

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

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

1. Name: The Koffler Group  
2. Street Address: 10 Memorial Drive, Suite 901  
City/Town: Providence 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:

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

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

- residential
- commercial
- industrial
- school/playground
- Other \_\_\_\_\_ (specify)

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

Collection of groundwater samples from existing monitoring wells.

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

Contact Name: Louis J. Burkhardt  
Street Address: 880 Technology Park Drive, 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.



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

Page: Page 1 of 5  
Lab Proj #: P0904238  
Report Date: 04/24/09  
Client Proj Name: Wayland  
Client Proj #: Wayland

### Laboratory Results

Total pages in data package: 6

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0904238-01	MW-267S-20090414-04
P0904238-02	MW-267M-20090414-04
P0904238-03	MWIW-8-20090414-04
P0904238-04	IW-5-20090414-04

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

**Approved By:** Heather Hauser **Date:** 4/27/09

**Project Manager:** Heather Hauser

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.  
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

**Case Narrative:**

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

Page: Page 2 of 5  
 Lab Proj #: P0904238  
 Report Date: 04/24/09  
 Client Proj Name: Wayland  
 Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
MW-267S-20090414-04	Water	P0904238-01	14 Apr. 09 10:05	18 Apr. 09 10:59		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	<0.025	0.025	ug/L	AM20GAX	4/23/09	rw
N Ethene	0.380	0.025	ug/L	AM20GAX	4/23/09	rw
N Methane	350.000	0.100	ug/L	AM20GAX	4/23/09	rw



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

Page: Page 3 of 5  
 Lab Proj #: P0904238  
 Report Date: 04/24/09  
 Client Proj Name: Wayland  
 Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
MW-267M-20090414-04	Water	P0904238-02	14 Apr. 09 12:10	18 Apr. 09 10:59		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	<0.025	0.025	ug/L	AM20GAX	4/23/09	rw
N Ethene	0.890	0.025	ug/L	AM20GAX	4/23/09	rw
N Methane	50.000	0.100	ug/L	AM20GAX	4/23/09	rw



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

Page: Page 4 of 5  
 Lab Proj #: P0904238  
 Report Date: 04/24/09  
 Client Proj Name: Wayland  
 Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
MWIW-8-20090414-04	Water	P0904238-03	14 Apr. 09 12:50	18 Apr. 09 10:59		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.032	0.025	ug/L	AM20GAX	4/23/09	rw
N Ethene	1.600	0.025	ug/L	AM20GAX	4/23/09	rw
N Methane	400.000	0.100	ug/L	AM20GAX	4/23/09	rw



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

Page: Page 5 of 5  
 Lab Proj #: P0904238  
 Report Date: 04/24/09  
 Client Proj Name: Wayland  
 Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
IW-5-20090414-04	Water	P0904238-04	14 Apr. 09 10:35	18 Apr. 09 10:59		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.150	0.025	ug/L	AM20GAX	4/23/09	nw
N Ethene	6.000	0.025	ug/L	AM20GAX	4/23/09	nw
N Methane	26.000	0.100	ug/L	AM20GAX	4/23/09	nw



Microseeps

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# CHAIN OF CUSTODY

PAGE 2 OF 2

ALPHA Job #:



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

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

### Client Information

Client: EPDM

Address: 399 Boylston St.

4th Floor Boston, MA

Phone: (617) 644-7800

Fax: (617) 267-6447

Email: balvaar.frost@epdm.com

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

### Project Information

Project Name: Raytheon Wayland

Project Location: Wayland, MA

Project #: 0095922

Project Manager: Jason Flattery

ALPHA Quote #:

Turn-Around Time

Standard

Date Due:

RUSH (only confirmed if pre-approved!)

Time:

### 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 Are CT RCP (Reasonable Confidence Protocols) Required?

### ANALYSIS

Diss. gases (ethanol, acetone)

### SAMPLE HANDLING

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

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Date Rec'd in Lab:	Alpha Job #:
		Date	Time				
	MMW-267S-26090414-04	4/14/09	1005	GW	EW		
	MMW-267M-20090414-04		1210		EW		
	MMW IW-8-20090414-04		1250		EW		
	IW-S-20090414-04		1035		EW		

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
MAMCP or CT RCP?

Container Type  
Preservative

Received By:

Date/Time

Relinquished By:

Date/Time

Received By:

Date/Time

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



## ANALYTICAL REPORT

Lab Number:	L0904664
Client:	ERM Consulting & Engineering, Inc. 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Project Name:	RAYTHEON WAYLAND
Project Number:	0095922
Report Date:	04/21/09

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:** 0095922

**Lab Number:** L0904664  
**Report Date:** 04/21/09

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L0904664-01	IW-2-20090415-01	WAYLAND, MA	04/15/09 09:40

Project Name: RAYTHEON WAYLAND

Lab Number: L0904664

Project Number: 0095922

Report Date: 04/21/09

### MADEP MCP Response Action Analytical Report Certification

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

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904664  
**Report Date:** 04/21/09

### 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.

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

L0904664-01 has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

In reference to question F:

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

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904664  
**Report Date:** 04/21/09

**Case Narrative (continued)**

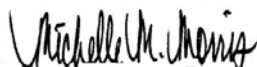
Metals

In reference to question F:

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

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

Authorized Signature:



Title: Technical Director/Representative

Date: 04/21/09

# ORGANICS



# VOLATILES

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904664  
**Report Date:** 04/21/09

### SAMPLE RESULTS

**Lab ID:** L0904664-01  
**Client ID:** IW-2-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/20/09 16:11  
**Analyst:** GK

**Date Collected:** 04/15/09 09:40  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	120	25
1,1-Dichloroethane	ND		ug/l	19	25
Chloroform	ND		ug/l	19	25
Carbon tetrachloride	ND		ug/l	12	25
1,2-Dichloropropane	ND		ug/l	44	25
Dibromochloromethane	ND		ug/l	12	25
1,1,2-Trichloroethane	ND		ug/l	19	25
Tetrachloroethene	ND		ug/l	12	25
Chlorobenzene	ND		ug/l	12	25
1,2-Dichloroethane	ND		ug/l	12	25
1,1,1-Trichloroethane	ND		ug/l	12	25
Bromodichloromethane	ND		ug/l	12	25
trans-1,3-Dichloropropene	ND		ug/l	12	25
cis-1,3-Dichloropropene	ND		ug/l	12	25
Bromoform	ND		ug/l	50	25
1,1,2,2-Tetrachloroethane	ND		ug/l	12	25
Chloromethane	ND		ug/l	62	25
Vinyl chloride	92		ug/l	25	25
Chloroethane	ND		ug/l	25	25
1,1-Dichloroethene	ND		ug/l	12	25
trans-1,2-Dichloroethene	ND		ug/l	19	25
Trichloroethene	ND		ug/l	12	25
1,2-Dichlorobenzene	ND		ug/l	62	25
1,3-Dichlorobenzene	ND		ug/l	62	25
1,4-Dichlorobenzene	ND		ug/l	62	25
cis-1,2-Dichloroethene	1200		ug/l	12	25
Dichlorodifluoromethane	ND		ug/l	120	25
1,2-Dibromoethane	ND		ug/l	50	25
1,3-Dichloropropane	ND		ug/l	62	25
1,1,1,2-Tetrachloroethane	ND		ug/l	12	25

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904664**Project Number:** 0095922**Report Date:** 04/21/09**SAMPLE RESULTS**

Lab ID: L0904664-01  
 Client ID: IW-2-20090415-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/15/09 09:40  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904664  
**Report Date:** 04/21/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/20/09 11:20  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG359567-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904664  
**Report Date:** 04/21/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/20/09 11:20  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG359567-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904664  
**Report Date:** 04/21/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 04/20/09 11:20  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01 Batch: WG359567-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	107		70-130

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0904664

Project Number: 0095922

Report Date: 04/21/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG359567-1 WG359567-2					
Methylene chloride	95	95	70-130	0	25
1,1-Dichloroethane	95	99	70-130	4	25
Chloroform	91	95	70-130	4	25
Carbon tetrachloride	107	108	70-130	1	25
1,2-Dichloropropane	89	94	70-130	5	25
Dibromochloromethane	98	106	70-130	8	25
1,1,2-Trichloroethane	88	96	70-130	9	25
Tetrachloroethene	114	125	70-130	9	25
Chlorobenzene	97	103	70-130	6	25
Trichlorofluoromethane	127	128	70-130	1	25
1,2-Dichloroethane	98	100	70-130	2	25
1,1,1-Trichloroethane	105	108	70-130	3	25
Bromodichloromethane	97	100	70-130	3	25
trans-1,3-Dichloropropene	89	94	70-130	5	25
cis-1,3-Dichloropropene	80	82	70-130	2	25
1,1-Dichloropropene	97	98	70-130	1	25
Bromoform	109	115	70-130	5	50
1,1,2,2-Tetrachloroethane	80	85	70-130	6	25
Benzene	91	96	70-130	5	25
Toluene	98	101	70-130	3	25
Ethylbenzene	99	106	70-130	7	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904664

**Project Number:** 0095922

**Report Date:** 04/21/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG359567-1 WG359567-2					
Chloromethane	88	87	70-130	1	50
Bromomethane	93	95	70-130	2	50
Vinyl chloride	91	92	70-130	1	25
Chloroethane	104	105	70-130	1	25
1,1-Dichloroethene	102	106	70-130	4	25
trans-1,2-Dichloroethene	104	104	70-130	0	25
Trichloroethene	98	100	70-130	2	25
1,2-Dichlorobenzene	94	103	70-130	9	25
1,3-Dichlorobenzene	97	104	70-130	7	25
1,4-Dichlorobenzene	96	102	70-130	6	25
Methyl tert butyl ether	94	93	70-130	1	25
p/m-Xylene	100	105	70-130	5	25
o-Xylene	98	104	70-130	6	25
cis-1,2-Dichloroethene	96	98	70-130	2	25
Dibromomethane	87	95	70-130	9	25
1,2,3-Trichloropropane	88	92	70-130	4	25
Styrene	96	103	70-130	7	25
Dichlorodifluoromethane	97	101	70-130	4	50
Acetone	110	110	70-130	0	50
Carbon disulfide	70	72	70-130	3	50
2-Butanone	79	86	70-130	8	50



## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0904664

Project Number: 0095922

Report Date: 04/21/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG359567-1 WG359567-2					
4-Methyl-2-pentanone	71	83	70-130	16	50
2-Hexanone	71	80	70-130	12	50
Bromochloromethane	98	101	70-130	3	25
Tetrahydrofuran	76	88	70-130	15	25
2,2-Dichloropropane	90	92	70-130	2	50
1,2-Dibromoethane	92	98	70-130	6	25
1,3-Dichloropropane	90	98	70-130	9	25
1,1,1,2-Tetrachloroethane	100	108	70-130	8	25
Bromobenzene	102	104	70-130	2	25
n-Butylbenzene	90	97	70-130	7	25
sec-Butylbenzene	93	98	70-130	5	25
tert-Butylbenzene	92	97	70-130	5	25
o-Chlorotoluene	91	95	70-130	4	25
p-Chlorotoluene	96	100	70-130	4	25
1,2-Dibromo-3-chloropropane	79	81	70-130	3	50
Hexachlorobutadiene	113	120	70-130	6	25
Isopropylbenzene	100	106	70-130	6	25
p-Isopropyltoluene	98	104	70-130	6	25
Naphthalene	71	78	70-130	9	25
n-Propylbenzene	91	97	70-130	6	25
1,2,3-Trichlorobenzene	109	116	70-130	6	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904664

**Project Number:** 0095922

**Report Date:** 04/21/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG359567-1 WG359567-2					
1,2,4-Trichlorobenzene	104	110	70-130	6	25
1,3,5-Trimethylbenzene	90	97	70-130	7	25
1,2,4-Trimethylbenzene	91	95	70-130	4	25
Ethyl ether	94	98	70-130	4	25
Isopropyl Ether	78	82	70-130	5	25
Ethyl-Tert-Butyl-Ether	83	86	70-130	4	25
Tertiary-Amyl Methyl Ether	74	80	70-130	8	25
1,4-Dioxane	99	104	70-130	5	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		108		70-130
Toluene-d8	109		110		70-130
4-Bromofluorobenzene	88		90		70-130
Dibromofluoromethane	108		109		70-130

# METALS

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904664**Project Number:** 0095922**Report Date:** 04/21/09**SAMPLE RESULTS**

Lab ID: L0904664-01

Date Collected: 04/15/09 09:40

Client ID: IW-2-20090415-01

Date Received: 04/15/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	3.2		mg/l	0.05	1	04/16/09 12:40	04/21/09 11:58	EPA 3005A	60,6010B	AI
Manganese, Dissolved	0.900		mg/l	0.010	1	04/16/09 12:40	04/21/09 11:58	EPA 3005A	60,6010B	AI

Project Name: RAYTHEON WAYLAND

Lab Number: L0904664

Project Number: 0095922

Report Date: 04/21/09

## 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 Batch: WG359117-1								
Iron, Dissolved	ND	mg/l	0.05	1	04/16/09 12:40	04/21/09 11:47	60,6010B	AI
Manganese, Dissolved	ND	mg/l	0.010	1	04/16/09 12:40	04/21/09 11:47	60,6010B	AI

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0095922

**Lab Number:** L0904664

**Report Date:** 04/21/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG359117-2 WG359117-3					
Iron, Dissolved	110	110	80-120	0	20
Manganese, Dissolved	102	101	80-120	1	20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904664  
**Report Date:** 04/21/09

### SAMPLE RESULTS

**Lab ID:** L0904664-01  
**Client ID:** IW-2-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/15/09 09:40  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	190		mg CaCO3/L	2.0	1	-	04/16/09 10:13	30,2320B	SD
Chloride	26		mg/l	1.0	1	-	04/17/09 20:23	1,9251	DD
Nitrogen, Nitrate	ND		mg/l	0.10	1	-	04/15/09 23:01	30,4500NO3-F	DD
Phosphorus, Total	0.352		mg/l	0.010	1	-	04/18/09 14:31	30,4500P-E	ST
Sulfate	18		mg/l	10	1	04/17/09 10:30	04/17/09 10:30	1,9038	SD
Total Organic Carbon	5.2		mg/l	0.50	1	-	04/20/09 05:37	1,9060	DW





Project Name: RAYTHEON WAYLAND

Lab Number: L0904664

Project Number: 0095922

Report Date: 04/21/09

**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 Batch: WG359007-2								
Nitrogen, Nitrate	ND	mg/l	0.10	1	-	04/15/09 22:25	30,4500NO3-F	DD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG359175-1								
Alkalinity, Total	ND	mg CaCO3/L	2.0	1	-	04/16/09 10:13	30,2320B	SD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG359321-2								
Chloride	ND	mg/l	1.0	1	-	04/17/09 19:11	1,9251	DD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG359331-1								
Sulfate	ND	mg/l	10	1	04/17/09 10:30	04/17/09 10:30	1,9038	SD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG359381-1								
Phosphorus, Total	ND	mg/l	0.010	1	-	04/18/09 14:28	30,4500P-E	ST
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG359491-1								
Total Organic Carbon	ND	mg/l	0.50	1	-	04/20/09 05:37	1,9060	DW

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0095922

**Lab Number:** L0904664

**Report Date:** 04/21/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG359007-1					
Nitrogen, Nitrate	100	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG359175-2					
Alkalinity, Total	102	-	80-115	-	4
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG359321-1					
Chloride	100	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG359331-2					
Sulfate	115	-	90-115	-	
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG359381-2					
Phosphorus, Total	108	-	85-115	-	
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG359491-2					
Total Organic Carbon	101	-	90-110	-	

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904664  
**Report Date:** 04/21/09

Parameter	Native Sample	MS Added	MS Found	MS	MSD Found	MSD	Recovery	RPD	RPD Limits
				%Recovery		%Recovery	Limits		
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG359007-3 QC Sample: L0904651-03 Client ID: MS Sample									
Nitrogen, Nitrate	2.3	4	6.3	100	-	-	83-120	-	6
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG359175-3 QC Sample: L0904662-10 Client ID: MS Sample									
Alkalinity, Total	260	100	350	90	-	-	86-116	-	4
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG359321-3 QC Sample: L0904662-04 Client ID: MS Sample									
Chloride	8.4	20	29	103	-	-	58-140	-	7
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG359331-3 QC Sample: L0904664-01 Client ID: IW-2-20090415-01									
Sulfate	18	40	63	112	-	-	55-147	-	14
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG359381-3 QC Sample: L0904664-01 Client ID: IW-2-20090415-01									
Phosphorus, Total	0.352	0.5	0.864	102	-	-	80-120	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG359491-3 QC Sample: L0904518-03 Client ID: MS Sample									
Total Organic Carbon	31	40	69	96	-	-	80-120	-	20

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0095922

Lab Number: L0904664

Report Date: 04/21/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG359007-4 QC Sample: L0904651-03 Client ID: DUP Sample					
Nitrogen, Nitrate	2.3	2.3	mg/l	0	6
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG359175-4 QC Sample: L0904662-10 Client ID: DUP Sample					
Alkalinity, Total	260	260	mg CaCO3/L	0	4
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG359321-4 QC Sample: L0904651-03 Client ID: DUP Sample					
Chloride	30	30	mg/l	0	7
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG359331-4 QC Sample: L0904664-01 Client ID: IW-2-20090415-01					
Sulfate	18	18	mg/l	0	14
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG359381-4 QC Sample: L0904664-01 Client ID: IW-2-20090415-01					
Phosphorus, Total	0.352	0.348	mg/l	1	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG359491-4 QC Sample: L0904518-03 Client ID: DUP Sample					
Total Organic Carbon	31	31	mg/l	0	20

**Project Name:** RAYTHEON WAYLAND**Project Number:** 0095922**Lab Number:** L0904664**Report Date:** 04/21/09**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

**Cooler Information**

Cooler	Custody Seal
A	Absent

**Container Information**

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904664-01A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904664-01B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904664-01C	Vial H2SO4 preserved	A	N/A	3.4	Y	Absent	TOC-9060(28)
L0904664-01D	Vial H2SO4 preserved	A	N/A	3.4	Y	Absent	TOC-9060(28)
L0904664-01E	Plastic 500ml unpreserved	A	6	3.4	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904664-01F	Plastic 250ml unpreserved	A	6	3.4	Y	Absent	ALK-T-2320(14)
L0904664-01G	Plastic 250ml H2SO4 preserved	A	<2	3.4	Y	Absent	TPHOS-4500(28)
L0904664-01H	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)

\*Hold days indicated by values in parentheses

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904664  
**Report Date:** 04/21/09

## GLOSSARY

### Acronyms

- EPA** - Environmental Protection Agency.
- LCS** - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD** - Laboratory Control Sample Duplicate: Refer to LCS.
- MS** - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD** - Matrix Spike Sample Duplicate: Refer to MS.
- NA** - Not Applicable.
- NC** - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
- ND** - Not detected at the reported detection limit for the sample.
- 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

- \*** - The batch duplicate RPD exceeds the acceptance criteria. This flag is not applicable when the sample concentrations are less than 5x the RDL. (Metals only.)
- 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.
- 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.
- N** - The matrix spike recovery exceeds the acceptance criteria. This flag is not applicable when the sample concentration is greater than 4x the spike added. (Metals only.)
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- 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).

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904664  
**Report Date:** 04/21/09

## REFERENCES

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

## LIMITATION OF LIABILITIES

Alpha 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 February 18, 2009 - 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.

*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.)

*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), 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: MA0086.

*Drinking Water* (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 150.1, 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, Nitrite-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, EPA 150.1, SM4500H-B.

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

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), SM6251B, 314.0.

#### *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, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Nitrate-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, 4500CN-CE, 2540D, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1

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

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCB-Water) 600/4-81-045-PCB-Oil



**Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.***Drinking Water*

Microbiology Parameters: SM9215B; MF-SM9222B; ENZ. SUB. SM9223; EC-SM9221E; MF-SM9222D; ENZ. SUB. SM9223;

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

*Drinking Water (Inorganic Parameters:* SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 110.2, 120.1, 150.1, 300.0, 325.2, 314.0, SM4500CN-E, 4500H+B, 4500NO<sub>3</sub>-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, 150.1, 300.0, 305.1, 310.1, 325.2, 340.2, 350.1, 350.2, 351.1, 353.2, 354.1, 365.2, 375.4, 376.2, 405.1, 415.1, 420.1, 425.1, 1664A, SW-846 9010, 9030, 9040B, EPA 160.1, 160.2, 160.3, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH<sub>3</sub>-H, 4500NH<sub>3</sub>-E, 4500NO<sub>2</sub>-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.**

*Drinking Water (Inorganic Parameters:* SM9222B, 9221E, 9223B, 9215B, 4500NO<sub>3</sub>-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, 331.0, 110.2, SM2120B, 2510B, 5310C, EPA 150.1, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

*Non-Potable Water (Inorganic Parameters:* SM5210B, EPA 410.1, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO<sub>3</sub>-F, 4500NO<sub>2</sub>-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, 4500NH<sub>3</sub>-H, EPA 350.2/1, 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.)

*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, 3540C, 3545, 3550B, 3580A, 5035L, 5035H.)

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

*Drinking Water (Inorganic Parameters:* SM9223B, 9222B, 8215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 331.0, SM2320B, EPA 300.0, 325.2, 110.2, SM2120B, 4500CN-E, 4500F-C, EPA 150.1, SM4500H-B, 4500NO<sub>3</sub>-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1, SM6251B.)

*Non-Potable Water (Inorganic Parameters:* SM9221E, 9222D, 9221B, 9222B, 9215B, EPA 405.1, SM5210B, EPA 410.4, SM5220D, EPA 305.1, SM2310B-4a, EPA 310.1, SM2320B, EPA 200.7, 300.0, 325.2, LACHAT 10-117-07-1A or B, SM4500CI-E, EPA 340.2, SM4500F-C, EPA 375.4, SM15 426C, EPA 350.1, 350.2, LACHAT 10-107-06-1-B, SM4500NH<sub>3</sub>-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO<sub>3</sub>F, EPA 354.1, SM4500-NO<sub>2</sub>-B, EPA 365.2, SM4500P-E, EPA 160.3, SM2540B, EPA 160.1, SM2540C, EPA 160.2, SM2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, 110.2, SM2120B, 335.2, LACHAT 10-204-00-1-A, EPA 150.1, 9040B, SM4500-HB, EPA 1664A, EPA 415.1, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, EPA 376.2, SM4500S-D, EPA 425.1, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, 8021B, EPA 3510C, 5030B, 9010B, 9030B.)

*Solid & Hazardous Waste (Inorganic Parameters:* EPA 9040B, 9045C, 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 3005A, 3050B, 3051, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 8021B, 3540C, 3545, 3580, 5030B, 5035.)

*Analytical Services Protocol:* CLP Volatile Organics, CLP Inorganics, CLP PCB/Pesticides.

**Rhode Island Department of Health Certificate/Lab ID: LAO00065.**

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

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

**Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. Registered Laboratory.**



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

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

# CHAIN OF CUSTODY

PAGE 1 OF 1

### Client Information

Client: **ERM**

Address: **399 Boylston St.  
6th Floor Boston, MA**

Phone: **(617) 646-7800**

Fax: **(617) 67-6447**

Email: **barbar.frost@erm.com**

These samples have been previously analyzed by Alpha  
Other Project Specific Requirements/Comments/Detection Limits:

### Project Information

Project Name: **Raytheon Wayland**

Project Location: **Wayland, MA**

Project #: **0095922**

Project Manager: **Jason Flattery**

ALPHA Quote #:

Turn-Around Time

Standard  RUSH (only confirmed if pre-approved!)

Date Due: **4/22/09** Time:

Date Rec'd in Lab: **4/15/09**

### Report Information - Data Deliverables

FAX  EMAIL

ADEX  Add'l Deliverables

Regulatory Requirements/Report Limits

State/Fed Program: **MA MCP** Criteria: **GW1**

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

### Billing Information

Same as Client info PO #:

ALPHA Job #: **L0904664**

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
04664-01	IW-2-20090415-01	4/15/09	0940	GW	EW

**ANALYSIS**  
 80210 by 8260  
 TOC  
 Diss, Fe+Mn (FP)  
 NO3, SO4, Cl  
 ALKALINITY  
 T. PHOS.

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

Sample Specific Comments

### PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
MAMCP or CT RCP?

Container Type	Preservative	Date/Time	Received By:	Date/Time
V	V	4/15/09 16:45	Don Bouda	4/15/09 17:30
B	D	4/15/09 17:30	Don Bouda	4/15/09 17:30
C	A			
A	A			
D	D			

**ERM**



## ANALYTICAL REPORT

Lab Number:	L0904518
Client:	ERM Consulting & Engineering, Inc. 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Project Name:	RAYTHEON-WAYLAND
Project Number:	0095922
Report Date:	05/07/09

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:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L0904518-01	MW-560-20090413-01	WAYLAND, MA	04/13/09 15:10
L0904518-02	MW-269MA-20090413-01	WAYLAND, MA	04/13/09 14:15
L0904518-03	DUP-010-20090413-01	WAYLAND, MA	04/13/09 11:11
L0904518-04	MW-265M-200904013-01	WAYLAND, MA	04/13/09 14:30
L0904518-05	TB-001-20090413-01	WAYLAND, MA	04/13/09 00:00
L0904518-06	MW-268D-20090413-01	WAYLAND, MA	04/13/09 14:30
L0904518-07	MW-553-20090413-01	WAYLAND, MA	04/13/09 15:35
L0904518-08	MW-261S-20090413-01	WAYLAND, MA	04/13/09 13:40

Project Name: RAYTHEON-WAYLAND

Lab Number: L0904518

Project Number: 0095922

Report Date: 05/07/09

### MADEP MCP Response Action Analytical Report Certification

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

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

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



**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

### 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.

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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#### Report Submission

This report replaces the report issued on April 20, 2009. Samples L0904518-09 and -10 have been removed.

#### MCP Related Narratives

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

Per client, L0904518-02 was placed on hold and the analysis of 1,4-Dioxane should not have been requested on the chain-of-custody for sample L0904518-03.

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

### Case Narrative (continued)

#### Volatile Organics

L0904518-04, -07 and -08 have elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the samples.

In reference to question F:

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

#### Metals

In reference to question F:

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

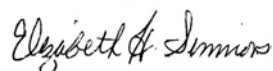
#### Non-MCP Related Narratives

#### TOC

L0904518-01 and -03 have elevated detection limits due to the dilutions required by the elevated concentrations present in the samples.

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

Authorized Signature:



Title: Technical Director/Representative

Date: 05/07/09

# ORGANICS



# VOLATILES

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

**Lab ID:** L0904518-01  
**Client ID:** MW-560-20090413-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/16/09 17:50  
**Analyst:** GK

**Date Collected:** 04/13/09 15:10  
**Date Received:** 04/13/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	2.1		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	6.7		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.6		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

Lab ID: L0904518-01  
 Client ID: MW-560-20090413-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/13/09 15:10  
 Date Received: 04/13/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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**MCP Volatile Organics - Westborough Lab**

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	115		70-130

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

**Lab ID:** L0904518-03  
**Client ID:** DUP-010-20090413-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/16/09 18:22  
**Analyst:** GK

**Date Collected:** 04/13/09 11:11  
**Date Received:** 04/13/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	2.2		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	7.0		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.8		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

Lab ID: L0904518-03

Date Collected: 04/13/09 11:11

Client ID: DUP-010-20090413-01

Date Received: 04/13/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	119		70-130

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

**Lab ID:** L0904518-04  
**Client ID:** MW-265M-200904013-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/17/09 15:44  
**Analyst:** GK

**Date Collected:** 04/13/09 14:30  
**Date Received:** 04/13/09  
**Field Prep:** Field Filtered

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	7.5	10
Chloroform	ND		ug/l	7.5	10
Carbon tetrachloride	ND		ug/l	5.0	10
1,2-Dichloropropane	ND		ug/l	18	10
Dibromochloromethane	ND		ug/l	5.0	10
1,1,2-Trichloroethane	ND		ug/l	7.5	10
Tetrachloroethene	34		ug/l	5.0	10
Chlorobenzene	ND		ug/l	5.0	10
1,2-Dichloroethane	ND		ug/l	5.0	10
1,1,1-Trichloroethane	ND		ug/l	5.0	10
Bromodichloromethane	ND		ug/l	5.0	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	10
Bromoform	ND		ug/l	20	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	10
Chloromethane	ND		ug/l	25	10
Vinyl chloride	47		ug/l	10	10
Chloroethane	ND		ug/l	10	10
1,1-Dichloroethene	ND		ug/l	5.0	10
trans-1,2-Dichloroethene	ND		ug/l	7.5	10
Trichloroethene	320		ug/l	5.0	10
1,2-Dichlorobenzene	ND		ug/l	25	10
1,3-Dichlorobenzene	ND		ug/l	25	10
1,4-Dichlorobenzene	ND		ug/l	25	10
cis-1,2-Dichloroethene	290		ug/l	5.0	10
Dichlorodifluoromethane	ND		ug/l	50	10
1,2-Dibromoethane	ND		ug/l	20	10
1,3-Dichloropropane	ND		ug/l	25	10
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	10

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

Lab ID: L0904518-04

Date Collected: 04/13/09 14:30

Client ID: MW-265M-200904013-01

Date Received: 04/13/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	25	10
p-Chlorotoluene	ND		ug/l	25	10
Hexachlorobutadiene	ND		ug/l	6.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	107		70-130

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

**Lab ID:** L0904518-05  
**Client ID:** TB-001-20090413-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/16/09 19:27  
**Analyst:** GK

**Date Collected:** 04/13/09 00:00  
**Date Received:** 04/13/09  
**Field Prep:** None

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

Lab ID: L0904518-05  
 Client ID: TB-001-20090413-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/13/09 00:00  
 Date Received: 04/13/09  
 Field Prep: None

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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**MCP Volatile Organics - Westborough Lab**

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	119		70-130

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

**Lab ID:** L0904518-06  
**Client ID:** MW-268D-20090413-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/16/09 19:59  
**Analyst:** GK

**Date Collected:** 04/13/09 14:30  
**Date Received:** 04/13/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	9.8		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	10		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

Lab ID: L0904518-06

Date Collected: 04/13/09 14:30

Client ID: MW-268D-20090413-01

Date Received: 04/13/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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**MCP Volatile Organics - Westborough Lab**

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	115		70-130

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

**Lab ID:** L0904518-07  
**Client ID:** MW-553-20090413-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/16/09 20:31  
**Analyst:** GK

**Date Collected:** 04/13/09 15:35  
**Date Received:** 04/13/09  
**Field Prep:** Field Filtered

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	7.5	10
Chloroform	ND		ug/l	7.5	10
Carbon tetrachloride	ND		ug/l	5.0	10
1,2-Dichloropropane	ND		ug/l	18	10
Dibromochloromethane	ND		ug/l	5.0	10
1,1,2-Trichloroethane	ND		ug/l	7.5	10
Tetrachloroethene	70		ug/l	5.0	10
Chlorobenzene	ND		ug/l	5.0	10
1,2-Dichloroethane	ND		ug/l	5.0	10
1,1,1-Trichloroethane	ND		ug/l	5.0	10
Bromodichloromethane	ND		ug/l	5.0	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	10
Bromoform	ND		ug/l	20	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	10
Chloromethane	ND		ug/l	25	10
Vinyl chloride	ND		ug/l	10	10
Chloroethane	ND		ug/l	10	10
1,1-Dichloroethene	ND		ug/l	5.0	10
trans-1,2-Dichloroethene	ND		ug/l	7.5	10
Trichloroethene	470		ug/l	5.0	10
1,2-Dichlorobenzene	ND		ug/l	25	10
1,3-Dichlorobenzene	ND		ug/l	25	10
1,4-Dichlorobenzene	ND		ug/l	25	10
cis-1,2-Dichloroethene	82		ug/l	5.0	10
Dichlorodifluoromethane	ND		ug/l	50	10
1,2-Dibromoethane	ND		ug/l	20	10
1,3-Dichloropropane	ND		ug/l	25	10
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	10

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

Lab ID: L0904518-07  
 Client ID: MW-553-20090413-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/13/09 15:35  
 Date Received: 04/13/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	25	10
p-Chlorotoluene	ND		ug/l	25	10
Hexachlorobutadiene	ND		ug/l	6.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	115		70-130

Project Name: RAYTHEON-WAYLAND

Lab Number: L0904518

Project Number: 0095922

Report Date: 05/07/09

## SAMPLE RESULTS

Lab ID: L0904518-08  
 Client ID: MW-261S-20090413-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 04/17/09 14:55  
 Analyst: GK

Date Collected: 04/13/09 13:40  
 Date Received: 04/13/09  
 Field Prep: Field Filtered

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	38	50
Chloroform	ND		ug/l	38	50
Carbon tetrachloride	ND		ug/l	25	50
1,2-Dichloropropane	ND		ug/l	88	50
Dibromochloromethane	ND		ug/l	25	50
1,1,2-Trichloroethane	ND		ug/l	38	50
Tetrachloroethene	40		ug/l	25	50
Chlorobenzene	ND		ug/l	25	50
1,2-Dichloroethane	ND		ug/l	25	50
1,1,1-Trichloroethane	ND		ug/l	25	50
Bromodichloromethane	ND		ug/l	25	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	25	50
Chloromethane	ND		ug/l	120	50
Vinyl chloride	ND		ug/l	50	50
Chloroethane	ND		ug/l	50	50
1,1-Dichloroethene	ND		ug/l	25	50
trans-1,2-Dichloroethene	ND		ug/l	38	50
Trichloroethene	1500		ug/l	25	50
1,2-Dichlorobenzene	ND		ug/l	120	50
1,3-Dichlorobenzene	ND		ug/l	120	50
1,4-Dichlorobenzene	ND		ug/l	120	50
cis-1,2-Dichloroethene	33		ug/l	25	50
Dichlorodifluoromethane	ND		ug/l	250	50
1,2-Dibromoethane	ND		ug/l	100	50
1,3-Dichloropropane	ND		ug/l	120	50
1,1,1,2-Tetrachloroethane	ND		ug/l	25	50

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

Lab ID: L0904518-08

Date Collected: 04/13/09 13:40

Client ID: MW-261S-20090413-01

Date Received: 04/13/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	120	50
p-Chlorotoluene	ND		ug/l	120	50
Hexachlorobutadiene	ND		ug/l	30	50
1,2,4-Trichlorobenzene	ND		ug/l	120	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/16/09 16:13  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01,03,05-07 Batch: WG359259-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5



**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/16/09 16:13  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01,03,05-07 Batch: WG359259-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

**Method Blank Analysis  
 Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 04/16/09 16:13  
 Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01,03,05-07 Batch: WG359259-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	117		70-130

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/17/09 12:13  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 08 Batch: WG359314-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/17/09 12:13  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 08 Batch: WG359314-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 04/17/09 12:13  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 08 Batch: WG359314-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	107		70-130

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/17/09 12:29  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 04 Batch: WG359454-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/17/09 12:29  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 04 Batch: WG359454-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 04/17/09 12:29  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 04 Batch: WG359454-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	107		70-130



## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON-WAYLAND

Lab Number: L0904518

Project Number: 0095922

Report Date: 05/07/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,03,05-07 Batch: WG359259-1 WG359259-2					
Methylene chloride	104	108	70-130	4	25
1,1-Dichloroethane	106	110	70-130	4	25
Chloroform	108	110	70-130	2	25
Carbon tetrachloride	102	107	70-130	5	25
1,2-Dichloropropane	102	102	70-130	0	25
Dibromochloromethane	104	101	70-130	3	25
1,1,2-Trichloroethane	100	97	70-130	3	25
Tetrachloroethene	119	120	70-130	1	25
Chlorobenzene	100	104	70-130	4	25
Trichlorofluoromethane	133	140	70-130	5	25
1,2-Dichloroethane	113	114	70-130	1	25
1,1,1-Trichloroethane	108	111	70-130	3	25
Bromodichloromethane	109	112	70-130	3	25
trans-1,3-Dichloropropene	91	91	70-130	0	25
cis-1,3-Dichloropropene	87	89	70-130	2	25
1,1-Dichloropropene	105	108	70-130	3	25
Bromoform	120	120	70-130	0	50
1,1,2,2-Tetrachloroethane	89	88	70-130	1	25
Benzene	100	103	70-130	3	25
Toluene	95	101	70-130	6	25
Ethylbenzene	103	106	70-130	3	25

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON-WAYLAND

Lab Number: L0904518

Project Number: 0095922

Report Date: 05/07/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,03,05-07 Batch: WG359259-1 WG359259-2					
Chloromethane	87	86	70-130	1	50
Bromomethane	103	104	70-130	1	50
Vinyl chloride	92	94	70-130	2	25
Chloroethane	103	107	70-130	4	25
1,1-Dichloroethene	110	110	70-130	0	25
trans-1,2-Dichloroethene	112	126	70-130	12	25
Trichloroethene	108	109	70-130	1	25
1,2-Dichlorobenzene	97	99	70-130	2	25
1,3-Dichlorobenzene	98	101	70-130	3	25
1,4-Dichlorobenzene	98	101	70-130	3	25
Methyl tert butyl ether	102	104	70-130	2	25
p/m-Xylene	101	105	70-130	4	25
o-Xylene	104	105	70-130	1	25
cis-1,2-Dichloroethene	108	108	70-130	0	25
Dibromomethane	107	108	70-130	1	25
1,2,3-Trichloropropane	95	98	70-130	3	25
Styrene	102	104	70-130	2	25
Dichlorodifluoromethane	88	95	70-130	8	50
Acetone	<b>133</b>	128	70-130	4	50
Carbon disulfide	78	79	70-130	1	50
2-Butanone	92	90	70-130	2	50

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON-WAYLAND

Lab Number: L0904518

Project Number: 0095922

Report Date: 05/07/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,03,05-07 Batch: WG359259-1 WG359259-2					
4-Methyl-2-pentanone	87	84	70-130	4	50
2-Hexanone	80	82	70-130	2	50
Bromochloromethane	111	114	70-130	3	25
Tetrahydrofuran	101	99	70-130	2	25
2,2-Dichloropropane	90	95	70-130	5	50
1,2-Dibromoethane	101	103	70-130	2	25
1,3-Dichloropropane	99	101	70-130	2	25
1,1,1,2-Tetrachloroethane	100	100	70-130	0	25
Bromobenzene	100	104	70-130	4	25
n-Butylbenzene	95	100	70-130	5	25
sec-Butylbenzene	92	97	70-130	5	25
tert-Butylbenzene	91	94	70-130	3	25
o-Chlorotoluene	90	93	70-130	3	25
p-Chlorotoluene	94	97	70-130	3	25
1,2-Dibromo-3-chloropropane	87	90	70-130	3	50
Hexachlorobutadiene	114	124	70-130	8	25
Isopropylbenzene	99	104	70-130	5	25
p-Isopropyltoluene	95	100	70-130	5	25
Naphthalene	92	93	70-130	1	25
n-Propylbenzene	90	95	70-130	5	25
1,2,3-Trichlorobenzene	114	115	70-130	1	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON-WAYLAND

**Lab Number:** L0904518

**Project Number:** 0095922

**Report Date:** 05/07/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,03,05-07 Batch: WG359259-1 WG359259-2					
1,2,4-Trichlorobenzene	107	110	70-130	3	25
1,3,5-Trimethylbenzene	92	96	70-130	4	25
1,2,4-Trimethylbenzene	93	96	70-130	3	25
Ethyl ether	113	114	70-130	1	25
Isopropyl Ether	91	94	70-130	3	25
Ethyl-Tert-Butyl-Ether	94	97	70-130	3	25
Tertiary-Amyl Methyl Ether	91	90	70-130	1	25
1,4-Dioxane	114	113	70-130	1	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		110		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	91		94		70-130
Dibromofluoromethane	115		114		70-130

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON-WAYLAND

**Lab Number:** L0904518

**Project Number:** 0095922

**Report Date:** 05/07/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 08 Batch: WG359314-1 WG359314-2					
Methylene chloride	92	91	70-130	1	25
1,1-Dichloroethane	94	92	70-130	2	25
Chloroform	97	92	70-130	5	25
Carbon tetrachloride	97	92	70-130	5	25
1,2-Dichloropropane	90	89	70-130	1	25
Dibromochloromethane	107	101	70-130	6	25
1,1,2-Trichloroethane	99	97	70-130	2	25
Tetrachloroethene	115	109	70-130	5	25
Chlorobenzene	100	96	70-130	4	25
Trichlorofluoromethane	118	118	70-130	0	25
1,2-Dichloroethane	103	100	70-130	3	25
1,1,1-Trichloroethane	98	94	70-130	4	25
Bromodichloromethane	99	97	70-130	2	25
trans-1,3-Dichloropropene	92	88	70-130	4	25
cis-1,3-Dichloropropene	80	78	70-130	3	25
1,1-Dichloropropene	93	90	70-130	3	25
Bromoform	126	128	70-130	2	50
1,1,2,2-Tetrachloroethane	94	100	70-130	6	25
Benzene	91	88	70-130	3	25
Toluene	97	92	70-130	5	25
Ethylbenzene	101	97	70-130	4	25

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON-WAYLAND

Lab Number: L0904518

Project Number: 0095922

Report Date: 05/07/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 08 Batch: WG359314-1 WG359314-2					
Chloromethane	76	84	70-130	10	50
Bromomethane	91	86	70-130	6	50
Vinyl chloride	81	85	70-130	5	25
Chloroethane	93	92	70-130	1	25
1,1-Dichloroethene	96	95	70-130	1	25
trans-1,2-Dichloroethene	101	95	70-130	6	25
Trichloroethene	96	96	70-130	0	25
1,2-Dichlorobenzene	100	102	70-130	2	25
1,3-Dichlorobenzene	104	100	70-130	4	25
1,4-Dichlorobenzene	102	102	70-130	0	25
Methyl tert butyl ether	90	104	70-130	14	25
p/m-Xylene	101	95	70-130	6	25
o-Xylene	102	102	70-130	0	25
cis-1,2-Dichloroethene	94	91	70-130	3	25
Dibromomethane	95	97	70-130	2	25
1,2,3-Trichloropropane	98	106	70-130	8	25
Styrene	98	100	70-130	2	25
Dichlorodifluoromethane	78	98	70-130	23	50
Acetone	120	143	70-130	17	50
Carbon disulfide	65	72	70-130	10	50
2-Butanone	81	101	70-130	22	50

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON-WAYLAND

Lab Number: L0904518

Project Number: 0095922

Report Date: 05/07/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 08 Batch: WG359314-1 WG359314-2					
4-Methyl-2-pentanone	72	96	70-130	29	50
2-Hexanone	82	98	70-130	18	50
Bromochloromethane	98	97	70-130	1	25
Tetrahydrofuran	90	97	70-130	7	25
2,2-Dichloropropane	82	79	70-130	4	50
1,2-Dibromoethane	100	99	70-130	1	25
1,3-Dichloropropane	98	98	70-130	0	25
1,1,1,2-Tetrachloroethane	98	95	70-130	3	25
Bromobenzene	104	106	70-130	2	25
n-Butylbenzene	97	96	70-130	1	25
sec-Butylbenzene	97	95	70-130	2	25
tert-Butylbenzene	96	94	70-130	2	25
o-Chlorotoluene	96	93	70-130	3	25
p-Chlorotoluene	98	95	70-130	3	25
1,2-Dibromo-3-chloropropane	94	104	70-130	10	50
Hexachlorobutadiene	116	120	70-130	3	25
Isopropylbenzene	100	95	70-130	5	25
p-Isopropyltoluene	101	99	70-130	2	25
Naphthalene	94	100	70-130	6	25
n-Propylbenzene	96	92	70-130	4	25
1,2,3-Trichlorobenzene	117	120	70-130	3	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON-WAYLAND

**Lab Number:** L0904518

**Project Number:** 0095922

**Report Date:** 05/07/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 08 Batch: WG359314-1 WG359314-2					
1,2,4-Trichlorobenzene	105	107	70-130	2	25
1,3,5-Trimethylbenzene	95	93	70-130	2	25
1,2,4-Trimethylbenzene	96	95	70-130	1	25
Ethyl ether	99	116	70-130	16	25
Isopropyl Ether	80	90	70-130	12	25
Ethyl-Tert-Butyl-Ether	83	94	70-130	12	25
Tertiary-Amyl Methyl Ether	77	87	70-130	12	25
1,4-Dioxane	105	105	70-130	0	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		114		70-130
Toluene-d8	108		110		70-130
4-Bromofluorobenzene	94		93		70-130
Dibromofluoromethane	111		110		70-130



## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON-WAYLAND

Lab Number: L0904518

Project Number: 0095922

Report Date: 05/07/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 04 Batch: WG359454-1 WG359454-2					
Methylene chloride	94	91	70-130	3	25
1,1-Dichloroethane	95	95	70-130	0	25
Chloroform	94	89	70-130	5	25
Carbon tetrachloride	101	100	70-130	1	25
1,2-Dichloropropane	91	88	70-130	3	25
Dibromochloromethane	104	101	70-130	3	25
1,1,2-Trichloroethane	99	93	70-130	6	25
Tetrachloroethene	113	114	70-130	1	25
Chlorobenzene	99	97	70-130	2	25
Trichlorofluoromethane	120	125	70-130	4	25
1,2-Dichloroethane	102	97	70-130	5	25
1,1,1-Trichloroethane	99	99	70-130	0	25
Bromodichloromethane	104	97	70-130	7	25
trans-1,3-Dichloropropene	89	86	70-130	3	25
cis-1,3-Dichloropropene	81	78	70-130	4	25
1,1-Dichloropropene	94	95	70-130	1	25
Bromoform	117	112	70-130	4	50
1,1,2,2-Tetrachloroethane	94	90	70-130	4	25
Benzene	92	91	70-130	1	25
Toluene	96	95	70-130	1	25
Ethylbenzene	102	99	70-130	3	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON-WAYLAND

**Lab Number:** L0904518

**Project Number:** 0095922

**Report Date:** 05/07/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 04 Batch: WG359454-1 WG359454-2					
Chloromethane	78	86	70-130	10	50
Bromomethane	87	90	70-130	3	50
Vinyl chloride	83	90	70-130	8	25
Chloroethane	95	101	70-130	6	25
1,1-Dichloroethene	98	100	70-130	2	25
trans-1,2-Dichloroethene	98	100	70-130	2	25
Trichloroethene	99	94	70-130	5	25
1,2-Dichlorobenzene	103	100	70-130	3	25
1,3-Dichlorobenzene	102	103	70-130	1	25
1,4-Dichlorobenzene	102	101	70-130	1	25
Methyl tert butyl ether	91	103	70-130	12	25
p/m-Xylene	101	99	70-130	2	25
o-Xylene	103	106	70-130	3	25
cis-1,2-Dichloroethene	93	93	70-130	0	25
Dibromomethane	100	93	70-130	7	25
1,2,3-Trichloropropane	103	100	70-130	3	25
Styrene	102	105	70-130	3	25
Dichlorodifluoromethane	80	105	70-130	27	50
Acetone	119	116	70-130	3	50
Carbon disulfide	65	72	70-130	10	50
2-Butanone	85	89	70-130	5	50

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON-WAYLAND

Lab Number: L0904518

Project Number: 0095922

Report Date: 05/07/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 04 Batch: WG359454-1 WG359454-2					
4-Methyl-2-pentanone	82	86	70-130	5	50
2-Hexanone	78	87	70-130	11	50
Bromochloromethane	103	97	70-130	6	25
Tetrahydrofuran	93	96	70-130	3	25
2,2-Dichloropropane	80	85	70-130	6	50
1,2-Dibromoethane	99	94	70-130	5	25
1,3-Dichloropropane	97	96	70-130	1	25
1,1,1,2-Tetrachloroethane	101	98	70-130	3	25
Bromobenzene	106	104	70-130	2	25
n-Butylbenzene	95	95	70-130	0	25
sec-Butylbenzene	96	97	70-130	1	25
tert-Butylbenzene	93	94	70-130	1	25
o-Chlorotoluene	96	94	70-130	2	25
p-Chlorotoluene	97	97	70-130	0	25
1,2-Dibromo-3-chloropropane	95	86	70-130	10	50
Hexachlorobutadiene	116	117	70-130	1	25
Isopropylbenzene	100	101	70-130	1	25
p-Isopropyltoluene	101	101	70-130	0	25
Naphthalene	84	82	70-130	2	25
n-Propylbenzene	95	95	70-130	0	25
1,2,3-Trichlorobenzene	119	117	70-130	2	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON-WAYLAND

**Lab Number:** L0904518

**Project Number:** 0095922

**Report Date:** 05/07/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 04 Batch: WG359454-1 WG359454-2					
1,2,4-Trichlorobenzene	109	106	70-130	3	25
1,3,5-Trimethylbenzene	93	92	70-130	1	25
1,2,4-Trimethylbenzene	96	96	70-130	0	25
Ethyl ether	104	106	70-130	2	25
Isopropyl Ether	84	91	70-130	8	25
Ethyl-Tert-Butyl-Ether	89	94	70-130	5	25
Tertiary-Amyl Methyl Ether	82	85	70-130	4	25
1,4-Dioxane	118	108	70-130	9	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		111		70-130
Toluene-d8	106		111		70-130
4-Bromofluorobenzene	89		93		70-130
Dibromofluoromethane	108		107		70-130

# SEMIVOLATILES

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

**Lab ID:** L0904518-04  
**Client ID:** MW-265M-200904013-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 1,8270C-SIM  
**Analytical Date:** 04/17/09 12:04  
**Analyst:** JS

**Date Collected:** 04/13/09 14:30  
**Date Received:** 04/13/09  
**Field Prep:** Field Filtered  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/15/09 15:11

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
1,4 Dioxane by 8270C-SIM - Mansfield Lab					
1,4-Dioxane	2720		ng/l	500	1

**Surrogate****% Recovery****Qualifier****Acceptance  
Criteria**

1,4-Dioxane-d8

44

15-110

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

**Lab ID:** L0904518-08  
**Client ID:** MW-261S-20090413-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 1,8270C-SIM  
**Analytical Date:** 04/17/09 12:48  
**Analyst:** JS

**Date Collected:** 04/13/09 13:40  
**Date Received:** 04/13/09  
**Field Prep:** Field Filtered  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/15/09 15:11

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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1,4 Dioxane by 8270C-SIM - Mansfield Lab					
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1,4-Dioxane	2990		ng/l	521	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	42		15-110

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

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

**Analytical Method:** 1,8270C-SIM  
**Analytical Date:** 04/17/09 09:54  
**Analyst:** JS

**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/15/09 15:11

Parameter	Result	Qualifier	Units	RDL
1,4 Dioxane by 8270C-SIM - Mansfield Lab for sample(s): 04,08 Batch: WG358969-1				
1,4-Dioxane	ND		ng/l	500

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	39		15-110



## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON-WAYLAND

**Lab Number:** L0904518

**Project Number:** 0095922

**Report Date:** 05/07/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
1,4 Dioxane by 8270C-SIM - Mansfield Lab Associated sample(s): 04,08 Batch: WG358969-2 WG358969-3					
1,4-Dioxane	94	98	40-140	4	30

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	36		34		15-110

# METALS

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

**SAMPLE RESULTS**

Lab ID: L0904518-01  
 Client ID: MW-560-20090413-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/13/09 15:10  
 Date Received: 04/13/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	ND		mg/l	0.05	1	04/14/09 11:30	04/16/09 15:27	EPA 3005A	60,6010B	AI
Manganese, Dissolved	ND		mg/l	0.010	1	04/14/09 11:30	04/16/09 15:27	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

**SAMPLE RESULTS**

Lab ID: L0904518-03  
 Client ID: DUP-010-20090413-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/13/09 11:11  
 Date Received: 04/13/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	ND		mg/l	0.05	1	04/14/09 11:30	04/16/09 15:32	EPA 3005A	60,6010B	AI
Manganese, Dissolved	ND		mg/l	0.010	1	04/14/09 11:30	04/16/09 15:32	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON-WAYLAND**Lab Number:** L0904518**Project Number:** 0095922**Report Date:** 05/07/09**SAMPLE RESULTS**

Lab ID: L0904518-04

Date Collected: 04/13/09 14:30

Client ID: MW-265M-200904013-01

Date Received: 04/13/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	1.4		mg/l	0.05	1	04/14/09 11:30	04/16/09 15:35	EPA 3005A	60,6010B	AI
Manganese, Dissolved	0.258		mg/l	0.010	1	04/14/09 11:30	04/16/09 15:35	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

**SAMPLE RESULTS**

Lab ID: L0904518-06  
 Client ID: MW-268D-20090413-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/13/09 14:30  
 Date Received: 04/13/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	0.09		mg/l	0.05	1	04/14/09 11:30	04/16/09 15:38	EPA 3005A	60,6010B	AI
Manganese, Dissolved	0.300		mg/l	0.010	1	04/14/09 11:30	04/16/09 15:38	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

**SAMPLE RESULTS**

Lab ID: L0904518-07  
 Client ID: MW-553-20090413-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/13/09 15:35  
 Date Received: 04/13/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	1.1		mg/l	0.05	1	04/14/09 11:30	04/16/09 15:41	EPA 3005A	60,6010B	AI
Manganese, Dissolved	0.047		mg/l	0.010	1	04/14/09 11:30	04/16/09 15:41	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

**SAMPLE RESULTS**

Lab ID: L0904518-08  
 Client ID: MW-261S-20090413-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/13/09 13:40  
 Date Received: 04/13/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	5.0		mg/l	0.05	1	04/14/09 11:30	04/16/09 15:44	EPA 3005A	60,6010B	AI
Manganese, Dissolved	0.182		mg/l	0.010	1	04/14/09 11:30	04/16/09 15:44	EPA 3005A	60,6010B	AI



**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

## 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): 01,03-04,06-08 Batch: WG358828-1								
Iron, Dissolved	ND	mg/l	0.05	1	04/14/09 11:30	04/16/09 14:48	60,6010B	AI
Manganese, Dissolved	ND	mg/l	0.010	1	04/14/09 11:30	04/16/09 14:48	60,6010B	AI

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON-WAYLAND

**Lab Number:** L0904518

**Project Number:** 0095922

**Report Date:** 05/07/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01,03-04,06-08 Batch: WG358828-2 WG358828-3					
Iron, Dissolved	110	120	80-120	9	20
Manganese, Dissolved	104	106	80-120	2	20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

### SAMPLE RESULTS

**Lab ID:** L0904518-01  
**Client ID:** MW-560-20090413-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/13/09 15:10  
**Date Received:** 04/13/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	280		mg CaCO3/L	2.0	1	-	04/14/09 10:00	30,2320B	SD
Chloride	16		mg/l	1.0	1	-	04/15/09 18:44	1,9251	DD
Nitrogen, Nitrate	2.0		mg/l	0.10	1	-	04/15/09 00:03	30,4500NO3-F	DD
Phosphorus, Total	0.019		mg/l	0.010	1	-	04/15/09 17:33	30,4500P-E	NM
Sulfate	12		mg/l	10	1	04/15/09 10:30	04/15/09 10:30	1,9038	SD
Total Organic Carbon	32		mg/l	5.0	10	-	04/20/09 05:37	1,9060	DW



**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

### SAMPLE RESULTS

**Lab ID:** L0904518-03  
**Client ID:** DUP-010-20090413-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/13/09 11:11  
**Date Received:** 04/13/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	280		mg CaCO3/L	2.0	1	-	04/14/09 10:00	30,2320B	SD
Chloride	17		mg/l	1.0	1	-	04/15/09 18:44	1,9251	DD
Nitrogen, Nitrate	1.9		mg/l	0.10	1	-	04/15/09 00:03	30,4500NO3-F	DD
Phosphorus, Total	0.021		mg/l	0.010	1	-	04/15/09 17:34	30,4500P-E	NM
Sulfate	12		mg/l	10	1	04/15/09 10:30	04/15/09 10:30	1,9038	SD
Total Organic Carbon	31		mg/l	5.0	10	-	04/20/09 05:37	1,9060	DW



**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

### SAMPLE RESULTS

**Lab ID:** L0904518-04  
**Client ID:** MW-265M-200904013-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/13/09 14:30  
**Date Received:** 04/13/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	76		mg CaCO3/L	2.0	1	-	04/14/09 10:00	30,2320B	SD
Chloride	17		mg/l	1.0	1	-	04/15/09 18:48	1,9251	DD
Nitrogen, Nitrate	ND		mg/l	0.10	1	-	04/15/09 00:04	30,4500NO3-F	DD
Phosphorus, Total	ND		mg/l	0.010	1	-	04/15/09 17:35	30,4500P-E	NM
Sulfate	35		mg/l	10	1	04/15/09 10:30	04/15/09 10:30	1,9038	SD
Total Organic Carbon	2.0		mg/l	0.50	1	-	04/20/09 05:37	1,9060	DW



**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

### SAMPLE RESULTS

**Lab ID:** L0904518-06  
**Client ID:** MW-268D-20090413-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/13/09 14:30  
**Date Received:** 04/13/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	62		mg CaCO3/L	2.0	1	-	04/14/09 10:00	30,2320B	SD
Chloride	41		mg/l	1.0	1	-	04/15/09 18:49	1,9251	DD
Nitrogen, Nitrate	ND		mg/l	0.10	1	-	04/15/09 00:05	30,4500NO3-F	DD
Phosphorus, Total	0.039		mg/l	0.010	1	-	04/15/09 17:35	30,4500P-E	NM
Sulfate	37		mg/l	10	1	04/15/09 10:30	04/15/09 10:30	1,9038	SD
Total Organic Carbon	ND		mg/l	0.50	1	-	04/20/09 05:37	1,9060	DW



**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

### SAMPLE RESULTS

**Lab ID:** L0904518-07  
**Client ID:** MW-553-20090413-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/13/09 15:35  
**Date Received:** 04/13/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	80		mg CaCO3/L	2.0	1	-	04/14/09 10:00	30,2320B	SD
Chloride	2.4		mg/l	1.0	1	-	04/15/09 18:49	1,9251	DD
Nitrogen, Nitrate	ND		mg/l	0.10	1	-	04/15/09 00:05	30,4500NO3-F	DD
Phosphorus, Total	0.093		mg/l	0.010	1	-	04/15/09 17:36	30,4500P-E	NM
Sulfate	26		mg/l	10	1	04/15/09 10:30	04/15/09 10:30	1,9038	SD
Total Organic Carbon	0.81		mg/l	0.50	1	-	04/20/09 05:37	1,9060	DW





**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

### SAMPLE RESULTS

**Lab ID:** L0904518-08  
**Client ID:** MW-261S-20090413-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/13/09 13:40  
**Date Received:** 04/13/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	41		mg CaCO3/L	2.0	1	-	04/14/09 10:00	30,2320B	SD
Chloride	4.5		mg/l	1.0	1	-	04/15/09 18:50	1,9251	DD
Nitrogen, Nitrate	ND		mg/l	0.10	1	-	04/15/09 00:06	30,4500NO3-F	DD
Phosphorus, Total	0.111		mg/l	0.010	1	-	04/15/09 17:37	30,4500P-E	MN
Sulfate	33		mg/l	10	1	04/15/09 10:30	04/15/09 10:30	1,9038	SD
Total Organic Carbon	0.86		mg/l	0.50	1	-	04/20/09 05:37	1,9060	DW



Project Name: RAYTHEON-WAYLAND

Lab Number: L0904518

Project Number: 0095922

Report Date: 05/07/09

**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): 01,03-04,06-08 Batch: WG358867-1								
Alkalinity, Total	ND	mg CaCO3/L	2.0	1	-	04/14/09 10:00	30,2320B	SD
General Chemistry - Westborough Lab for sample(s): 01,03-04,06-08 Batch: WG358884-2								
Nitrogen, Nitrate	ND	mg/l	0.10	1	-	04/14/09 23:37	30,4500NO3-F	DD
General Chemistry - Westborough Lab for sample(s): 01,03-04,06-07 Batch: WG358958-1								
Phosphorus, Total	ND	mg/l	0.010	1	-	04/15/09 17:31	30,4500P-E	NM
General Chemistry - Westborough Lab for sample(s): 01,03-04,06-08 Batch: WG358981-4								
Chloride	ND	mg/l	1.0	1	-	04/15/09 18:38	1,9251	DD
General Chemistry - Westborough Lab for sample(s): 01,03-04,06-08 Batch: WG358991-1								
Sulfate	ND	mg/l	10	1	04/15/09 10:30	04/15/09 10:30	1,9038	SD
General Chemistry - Westborough Lab for sample(s): 01,03-04,06-08 Batch: WG359491-1								
Total Organic Carbon	ND	mg/l	0.50	1	-	04/20/09 05:37	1,9060	DW
General Chemistry - Westborough Lab for sample(s): 08 Batch: WG361212-1								
Phosphorus, Total	ND	mg/l	0.010	1	-	04/15/09 17:31	30,4500P-E	MN

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON-WAYLAND

**Project Number:** 0095922

**Lab Number:** L0904518

**Report Date:** 05/07/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-08 Batch: WG358867-2					
Alkalinity, Total	101	-	80-115	-	4
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-08 Batch: WG358884-1					
Nitrogen, Nitrate	98	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-07 Batch: WG358958-2					
Phosphorus, Total	107	-	85-115	-	
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-08 Batch: WG358981-1					
Chloride	100	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-08 Batch: WG358991-2					
Sulfate	110	-	90-115	-	
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-08 Batch: WG359491-2					
Total Organic Carbon	101	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 08 Batch: WG361212-2					
Phosphorus, Total	107	-	85-115	-	

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON-WAYLAND

**Lab Number:** L0904518

**Project Number:** 0095922

**Report Date:** 05/07/09

Parameter	Native Sample	MS Added	MS Found	MS	MSD Found	MSD	Recovery	RPD	RPD Limits
				%Recovery		%Recovery	Limits		
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-08 QC Batch ID: WG358867-4 QC Sample: L0904443-01 Client ID: MS Sample									
Alkalinity, Total	6.2	100	110	100	-	-	86-116	-	4
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-08 QC Batch ID: WG358884-3 QC Sample: L0904495-03 Client ID: MS Sample									
Nitrogen, Nitrate	4.7	4	8.7	100	-	-	83-120	-	6
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-07 QC Batch ID: WG358958-4 QC Sample: L0904518-01 Client ID: MW-560-20090413-01									
Phosphorus, Total	0.019	0.5	0.522	101	-	-	80-120	-	20
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-08 QC Batch ID: WG358981-2 QC Sample: L0904518-03 Client ID: DUP-010-20090413-01									
Chloride	17	20	36	95	-	-	58-140	-	7
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-08 QC Batch ID: WG358991-3 QC Sample: L0904518-03 Client ID: DUP-010-20090413-01									
Sulfate	12	20	37	125	-	-	55-147	-	14
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-08 QC Batch ID: WG359491-3 QC Sample: L0904518-03 Client ID: DUP-010-20090413-01									
Total Organic Carbon	31	40	69	96	-	-	80-120	-	20
General Chemistry - Westborough Lab Associated sample(s): 08 QC Batch ID: WG361212-3 QC Sample: L0905492-11 Client ID: MS Sample									
Phosphorus, Total	0.019	0.5	0.522	101	-	-	80-120	-	20

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RAYTHEON-WAYLAND

Project Number: 0095922

Lab Number: L0904518

Report Date: 05/07/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-08 QC Batch ID: WG358884-4 QC Sample: L0904495-03 Client ID: DUP Sample					
Nitrogen, Nitrate	4.7	4.7	mg/l	0	6
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-07 QC Batch ID: WG358958-3 QC Sample: L0904518-01 Client ID: MW-560-20090413-01					
Phosphorus, Total	0.019	0.021	mg/l	10	20
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-08 QC Batch ID: WG358981-3 QC Sample: L0904518-03 Client ID: DUP-010-20090413-01					
Chloride	17	16	mg/l	6	7
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-08 QC Batch ID: WG358991-4 QC Sample: L0904518-03 Client ID: DUP-010-20090413-01					
Sulfate	12	12	mg/l	0	14
General Chemistry - Westborough Lab Associated sample(s): 01,03-04,06-08 QC Batch ID: WG359491-4 QC Sample: L0904518-03 Client ID: DUP-010-20090413-01					
Total Organic Carbon	31	31	mg/l	0	20
General Chemistry - Westborough Lab Associated sample(s): 08 QC Batch ID: WG361212-4 QC Sample: L0905492-11 Client ID: DUP Sample					
Phosphorus, Total	0.019	0.021	mg/l	10	20

Project Name: RAYTHEON-WAYLAND

Lab Number: L0904518

Project Number: 0095922

Report Date: 05/07/09

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

## Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904518-01A	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-04(14)
L0904518-01B	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-04(14)
L0904518-01C	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	TOC-9060(28)
L0904518-01D	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	TOC-9060(28)
L0904518-01E	Plastic 500ml unpreserved	A	7	2.9	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904518-01F	Plastic 250ml H2SO4 preserved	A	<2	2.9	Y	Absent	TPHOS-4500(28)
L0904518-01G	Plastic 250ml HNO3 preserved	A	<2	2.9	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)
L0904518-01H	Plastic 250ml unpreserved	A	7	2.9	Y	Absent	ALK-T-2320(14)
L0904518-02A	Amber 1000ml unpreserved	A	7	2.9	Y	Absent	HOLD(14)
L0904518-02B	Amber 1000ml unpreserved	A	7	2.9	Y	Absent	HOLD(14)
L0904518-03A	Vial HCl preserved	B	N/A	2.3	Y	Absent	MCP-8260-04(14)
L0904518-03B	Vial HCl preserved	B	N/A	2.3	Y	Absent	MCP-8260-04(14)
L0904518-03C	Vial H2SO4 preserved	B	N/A	2.3	Y	Absent	TOC-9060(28)
L0904518-03D	Vial H2SO4 preserved	B	N/A	2.3	Y	Absent	TOC-9060(28)
L0904518-03E	Plastic 500ml unpreserved	B	7	2.3	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904518-03F	Plastic 250ml H2SO4 preserved	B	<2	2.3	Y	Absent	TPHOS-4500(28)
L0904518-03G	Plastic 250ml HNO3 preserved	B	<2	2.3	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)
L0904518-03H	Plastic 250ml unpreserved	B	7	2.3	Y	Absent	ALK-T-2320(14)
L0904518-04A	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-04(14)
L0904518-04B	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-04(14)
L0904518-04C	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	TOC-9060(28)
L0904518-04D	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	TOC-9060(28)
L0904518-04E	Plastic 500ml unpreserved	A	7	2.9	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904518-04F	Plastic 250ml H2SO4 preserved	A	<2	2.9	Y	Absent	TPHOS-4500(28)
L0904518-04G	Plastic 250ml HNO3 preserved	A	<2	2.9	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)
L0904518-04H	Plastic 250ml unpreserved	A	7	2.9	Y	Absent	ALK-T-2320(14)

\*Hold days indicated by values in parentheses



Project Name: RAYTHEON-WAYLAND

Project Number: 0095922

Lab Number: L0904518

Report Date: 05/07/09

## Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904518-04I	Amber 1000ml unpreserved	C	7	4	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904518-04J	Amber 1000ml unpreserved	C	7	4	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904518-05A	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-04(14)
L0904518-05B	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-04(14)
L0904518-06A	Vial HCl preserved	B	N/A	2.3	Y	Absent	MCP-8260-04(14)
L0904518-06B	Vial HCl preserved	B	N/A	2.3	Y	Absent	MCP-8260-04(14)
L0904518-06C	Vial H2SO4 preserved	B	N/A	2.3	Y	Absent	TOC-9060(28)
L0904518-06D	Vial H2SO4 preserved	B	N/A	2.3	Y	Absent	TOC-9060(28)
L0904518-06E	Plastic 500ml unpreserved	B	7	2.3	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904518-06F	Plastic 250ml H2SO4 preserved	B	<2	2.3	Y	Absent	TPHOS-4500(28)
L0904518-06G	Plastic 250ml HNO3 preserved	B	<2	2.3	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)
L0904518-06H	Plastic 250ml unpreserved	B	7	2.3	Y	Absent	ALK-T-2320(14)
L0904518-07A	Vial HCl preserved	B	N/A	2.3	Y	Absent	MCP-8260-04(14)
L0904518-07B	Vial HCl preserved	B	N/A	2.3	Y	Absent	MCP-8260-04(14)
L0904518-07C	Vial H2SO4 preserved	B	N/A	2.3	Y	Absent	TOC-9060(28)
L0904518-07D	Vial H2SO4 preserved	B	N/A	2.3	Y	Absent	TOC-9060(28)
L0904518-07E	Plastic 500ml unpreserved	B	7	2.3	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904518-07F	Plastic 250ml H2SO4 preserved	B	<2	2.3	Y	Absent	TPHOS-4500(28)
L0904518-07G	Plastic 250ml HNO3 preserved	B	<2	2.3	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)
L0904518-07H	Plastic 250ml unpreserved	B	7	2.3	Y	Absent	ALK-T-2320(14)
L0904518-08A	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-04(14)
L0904518-08B	Vial HCl preserved	A	N/A	2.9	Y	Absent	MCP-8260-04(14)
L0904518-08C	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	TOC-9060(28)
L0904518-08D	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	TOC-9060(28)
L0904518-08E	Plastic 500ml unpreserved	A	7	2.9	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904518-08F	Plastic 250ml H2SO4 preserved	A	<2	2.9	Y	Absent	TPHOS-4500(28)
L0904518-08G	Plastic 250ml HNO3 preserved	A	<2	2.9	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)
L0904518-08H	Plastic 250ml unpreserved	A	7	2.9	Y	Absent	ALK-T-2320(14),A2-1,4-DIOXANE-SIM(7)
L0904518-08I	Amber 1000ml unpreserved	C	7	4	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904518-09A	Vial HCl preserved	A	N/A	2.9	Y	Absent	-
L0904518-09B	Vial HCl preserved	A	N/A	2.9	Y	Absent	-
L0904518-09C	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	-
L0904518-09D	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	-

\*Hold days indicated by values in parentheses



Project Name: RAYTHEON-WAYLAND

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**Container Information**

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904518-09E	Plastic 500ml unpreserved	A	7	2.9	Y	Absent	-
L0904518-09F	Plastic 250ml H2SO4 preserved	A	<2	2.9	Y	Absent	-
L0904518-09G	Plastic 250ml HNO3 preserved	A	<2	2.9	Y	Absent	-
L0904518-09H	Plastic 250ml unpreserved	A	7	2.9	Y	Absent	-
L0904518-10A	Vial HCl preserved	A	N/A	2.9	Y	Absent	-
L0904518-10B	Vial HCl preserved	A	N/A	2.9	Y	Absent	-
L0904518-10C	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	-
L0904518-10D	Vial H2SO4 preserved	A	N/A	2.9	Y	Absent	-
L0904518-10E	Plastic 500ml unpreserved	A	7	2.9	Y	Absent	-
L0904518-10F	Plastic 250ml H2SO4 preserved	A	<2	2.9	Y	Absent	-
L0904518-10G	Plastic 250ml HNO3 preserved	A	<2	2.9	Y	Absent	-
L0904518-10H	Plastic 250ml unpreserved	A	7	2.9	Y	Absent	-

\*Hold days indicated by values in parentheses



**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

## GLOSSARY

### Acronyms

- EPA** - Environmental Protection Agency.
- LCS** - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD** - Laboratory Control Sample Duplicate: Refer to LCS.
- MS** - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD** - Matrix Spike Sample Duplicate: Refer to MS.
- NA** - Not Applicable.
- NC** - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
- ND** - Not detected at the reported detection limit for the sample.
- 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

- \*** - The batch duplicate RPD exceeds the acceptance criteria. This flag is not applicable when the sample concentrations are less than 5x the RDL. (Metals only.)
- 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.
- 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.
- N** - The matrix spike recovery exceeds the acceptance criteria. This flag is not applicable when the sample concentration is greater than 4x the spike added. (Metals only.)
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- 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).

**Project Name:** RAYTHEON-WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904518  
**Report Date:** 05/07/09

## REFERENCES

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

## LIMITATION OF LIABILITIES

Alpha 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 February 18, 2009 - 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.

*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.)

*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), 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: MA0086.

*Drinking Water* (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 150.1, 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, Nitrite-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, EPA 150.1, SM4500H-B.

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

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), SM6251B, 314.0.

#### *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,Ti,V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Nitrate-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, 4500CN-CE, 2540D, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1

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

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCB-Water) 600/4-81-045-PCB-Oil

**Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.***Drinking Water*

Microbiology Parameters: SM9215B; MF-SM9222B; ENZ. SUB. SM9223; EC-SM9221E; MF-SM9222D; ENZ. SUB. SM9223;

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

*Drinking Water (Inorganic Parameters:* SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 110.2, 120.1, 150.1, 300.0, 325.2, 314.0, SM4500CN-E, 4500H+B, 4500NO<sub>3</sub>-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, 150.1, 300.0, 305.1, 310.1, 325.2, 340.2, 350.1, 350.2, 351.1, 353.2, 354.1, 365.2, 375.4, 376.2, 405.1, 415.1, 420.1, 425.1, 1664A, SW-846 9010, 9030, 9040B, EPA 160.1, 160.2, 160.3, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH<sub>3</sub>-H, 4500NH<sub>3</sub>-E, 4500NO<sub>2</sub>-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.**

*Drinking Water (Inorganic Parameters:* SM9222B, 9221E, 9223B, 9215B, 4500NO<sub>3</sub>-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, 331.0, 110.2, SM2120B, 2510B, 5310C, EPA 150.1, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

*Non-Potable Water (Inorganic Parameters:* SM5210B, EPA 410.1, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO<sub>3</sub>-F, 4500NO<sub>2</sub>-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, 4500NH<sub>3</sub>-H, EPA 350.2/1, 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.)

*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, 3540C, 3545, 3550B, 3580A, 5035L, 5035H.)

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

*Drinking Water (Inorganic Parameters:* SM9223B, 9222B, 8215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 331.0, SM2320B, EPA 300.0, 325.2, 110.2, SM2120B, 4500CN-E, 4500F-C, EPA 150.1, SM4500H-B, 4500NO<sub>3</sub>-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1, SM6251B.)

*Non-Potable Water (Inorganic Parameters:* SM9221E, 9222D, 9221B, 9222B, 9215B, EPA 405.1, SM5210B, EPA 410.4, SM5220D, EPA 305.1, SM2310B-4a, EPA 310.1, SM2320B, EPA 200.7, 300.0, 325.2, LACHAT 10-117-07-1A or B, SM4500CI-E, EPA 340.2, SM4500F-C, EPA 375.4, SM15 426C, EPA 350.1, 350.2, LACHAT 10-107-06-1-B, SM4500NH<sub>3</sub>-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO<sub>3</sub>F, EPA 354.1, SM4500-NO<sub>2</sub>-B, EPA 365.2, SM4500P-E, EPA 160.3, SM2540B, EPA 160.1, SM2540C, EPA 160.2, SM2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, 110.2, SM2120B, 335.2, LACHAT 10-204-00-1-A, EPA 150.1, 9040B, SM4500-HB, EPA 1664A, EPA 415.1, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, EPA 376.2, SM4500S-D, EPA 425.1, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, 8021B, EPA 3510C, 5030B, 9010B, 9030B.)

*Solid & Hazardous Waste (Inorganic Parameters:* EPA 9040B, 9045C, 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 3005A, 3050B, 3051, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 8021B, 3540C, 3545, 3580, 5030B, 5035.)

*Analytical Services Protocol:* CLP Volatile Organics, CLP Inorganics, CLP PCB/Pesticides.

**Rhode Island Department of Health Certificate/Lab ID: LAO00065.**

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

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

**Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. Registered Laboratory.**

## Certificate/Approval Program Summary

Last revised February 18, 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, Chloride, Fluoride, Sulfate, Sulfite, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, 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 Dissolved Solids, Total Suspended Solids (non-filterable), Total Cyanide, Bromide. 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, Ignitability, Corrosivity, TCLP 1311, Reactivity. 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.**

*Non-Potable Water* (Inorganic Parameters: SM2320B, 4500NH3-F, EPA 120.1, SM2510B, 2340B, EPA 245.1, EPA 365.2, EPA 150.1, 160.1, SM2540C, EPA 160.2, SM2540D, EPA 335.2, 420.1, SM2540G, EPA 180.1. Organic Parameters: EPA 624, 625, 608.)

*Solid & Chemical Materials* (Inorganic Parameters: 6020, 9050, 7470, 7471, 9045, EPA 7.3.3.2, EPA 7.3.4.2, 9014, 9065. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

*Air & Emissions* (EPA TO-15.)

### **Louisiana Department of Environmental Quality Certificate/Lab ID: 03090.**

*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.**

*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.

*Non-Potable Water* (Inorganic Parameters: SW-846 3010, 3020A, 3015, 6020, SM2320B, EPA 200.8, SM2540C, 2540D, 2540G, EPA 120.1, SM2510B, EPA 180.1, 245.1, 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, 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)

**New York Department of Health** Certificate/Lab ID: 11627.

*Non-Potable Water* (Inorganic Parameters: EPA 310.1, SM2320B, EPA 365.2, 160.1, SM2540C, 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.)

*Air & Emissions* (EPA TO-15.)

**Rhode Island Department of Health** Certificate/Lab ID: LAO00299.

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.

*Solid & Chemical Materials* (Inorganic Parameters: EPA 6020, 7471. Organic Parameters: EPA 8015, 8270.)

**Pennsylvania Department of Environmental Protection** Certificate/Lab ID: 68-02089. Registered Laboratory.

**U.S. Army Corps of Engineers**





## ANALYTICAL REPORT

Lab Number:	L0904586
Client:	ERM Consulting & Engineering, Inc. 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Project Name:	RAYTHEON WAYLAND
Project Number:	0095922
Report Date:	05/04/09

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:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L0904586-01	IW-5-00090414-01	WAYLAND, MA	04/14/09 10:35
L0904586-02	IW-8-00090414-01	WAYLAND, MA	04/14/09 12:50
L0904586-03	MW-267S-20090414-01	WAYLAND, MA	04/14/09 10:05
L0904586-04	MW-267M-20090414-01	WAYLAND, MA	04/14/09 12:10
L0904586-05	MW-268M-20090414-01	WAYLAND, MA	04/14/09 09:20
L0904586-06	MW-552-20090414-01	WAYLAND, MA	04/14/09 11:45
L0904586-07	MW-269MA-20090414-01	WAYLAND, MA	04/14/09 15:20
L0904586-08	DUP-009-20090414-01	WAYLAND, MA	04/14/09 00:00
L0904586-09	DUP-008-20090414-01	WAYLAND, MA	04/14/09 00:00
L0904586-10	MW-266MB-20090414-01	WAYLAND, MA	04/14/09 15:15
L0904586-11	MW-266MA-20090414-01	WAYLAND, MA	04/14/09 16:40
L0904586-13	MW-551-20090414-01	WAYLAND, MA	04/14/09 14:00

Project Name: RAYTHEON WAYLAND

Lab Number: L0904586

Project Number: 0095922

Report Date: 05/04/09

### MADEP MCP Response Action Analytical Report Certification

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

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

### 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.

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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#### Report Submission

This report replaces the report issued on April 21, 2009. Sample L0904586-12 has been removed.

#### MCP Related Narratives

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

L0904586-01, -03 through -06, -08, -09, -10, -13 and the WG359443-7/-8 MS/MSD have elevated

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

### Case Narrative (continued)

detection limits due to the dilutions required by the elevated concentrations of target compounds in the samples.

In reference to question E:

The WG359443-7/-8 MS/MSD recoveries associated with L0904586-10 were above the acceptance criteria for Bromoform (140%/136%), trans-1,2-Dichloroethene (139%/132%), Hexachlorobutadiene (137%/131%) and 1,2,4-Trichlorobenzene (MS at 131%); however, the associated LCS/LCSD recoveries were within criteria. The results of the sample utilized for the MS/MSD are considered to have a potentially high bias for these compounds.

The WG359443-8 MSD recovery associated with L0904586-10 is outside the acceptance criteria Trichloroethene (65%). The unacceptable percent recovery is attributed to the elevated concentration of target compound present in the sample utilized for the MS/MSD. In addition, the WG359443-7/-8 MS/MSD RPD associated with L0904586-10 is above the acceptance criteria for Trichloroethene (32%). The results of the associated samples are reported.

In reference to question F:

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

#### Metals

In reference to question F:

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

#### Non-MCP Related Narratives

##### Alkalinity, Total

L0904586-01 has an elevated detection limit due to the sample reduction required by the high alkalinity of the sample.

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

### Case Narrative (continued)

#### Nitrogen, Nitrate

L0904586-02 through -05, -10 and -11 have elevated detection limits due to the dilutions required by the samples matrices.

#### Phosphorus, Total

L0904586-03 and -05 have elevated detection limits due to the dilutions required to quantitate the results within the calibration range.

L0904586-04 has an elevated detection limit due to the dilution required by the sample matrix.

#### Sulfate

L0904586-03, -04, -05 and -13 have elevated detection limits due to the dilutions required to quantitate the results within the calibration range.

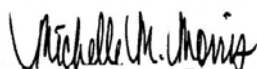
#### Total Organic Carbon

L0904586-01 and -02 have elevated detection limits due to the dilutions required by the elevated concentration present in the samples.

L0904586-03 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:



Title: Technical Director/Representative

Date: 05/04/09

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

### SAMPLE RESULTS

**Lab ID:** L0904586-01  
**Client ID:** IW-5-00090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/17/09 17:05  
**Analyst:** GK

**Date Collected:** 04/14/09 10:35  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	62	12.5
1,1-Dichloroethane	ND		ug/l	9.4	12.5
Chloroform	ND		ug/l	9.4	12.5
Carbon tetrachloride	ND		ug/l	6.2	12.5
1,2-Dichloropropane	ND		ug/l	22	12.5
Dibromochloromethane	ND		ug/l	6.2	12.5
1,1,2-Trichloroethane	ND		ug/l	9.4	12.5
Tetrachloroethene	30		ug/l	6.2	12.5
Chlorobenzene	ND		ug/l	6.2	12.5
1,2-Dichloroethane	ND		ug/l	6.2	12.5
1,1,1-Trichloroethane	ND		ug/l	6.2	12.5
Bromodichloromethane	ND		ug/l	6.2	12.5
trans-1,3-Dichloropropene	ND		ug/l	6.2	12.5
cis-1,3-Dichloropropene	ND		ug/l	6.2	12.5
Bromoform	ND		ug/l	25	12.5
1,1,2,2-Tetrachloroethane	ND		ug/l	6.2	12.5
Chloromethane	ND		ug/l	31	12.5
Vinyl chloride	50		ug/l	12	12.5
Chloroethane	ND		ug/l	12	12.5
1,1-Dichloroethene	ND		ug/l	6.2	12.5
trans-1,2-Dichloroethene	ND		ug/l	9.4	12.5
Trichloroethene	1200		ug/l	6.2	12.5
1,2-Dichlorobenzene	ND		ug/l	31	12.5
1,3-Dichlorobenzene	ND		ug/l	31	12.5
1,4-Dichlorobenzene	ND		ug/l	31	12.5
cis-1,2-Dichloroethene	430		ug/l	6.2	12.5
Dichlorodifluoromethane	ND		ug/l	62	12.5
1,2-Dibromoethane	ND		ug/l	25	12.5
1,3-Dichloropropane	ND		ug/l	31	12.5
1,1,1,2-Tetrachloroethane	ND		ug/l	6.2	12.5



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-01  
 Client ID: IW-5-00090414-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/14/09 10:35  
 Date Received: 04/14/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	31	12.5
p-Chlorotoluene	ND		ug/l	31	12.5
Hexachlorobutadiene	ND		ug/l	7.5	12.5
1,2,4-Trichlorobenzene	ND		ug/l	31	12.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-02  
**Client ID:** IW-8-00090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/17/09 17:37  
**Analyst:** GK

**Date Collected:** 04/14/09 12:50  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	3.3		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.73		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	16		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-02  
 Client ID: IW-8-00090414-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/14/09 12:50  
 Date Received: 04/14/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	110		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-03  
**Client ID:** MW-267S-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/17/09 18:10  
**Analyst:** GK

**Date Collected:** 04/14/09 10:05  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

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	3.8	5
Chloroform	ND		ug/l	3.8	5
Carbon tetrachloride	ND		ug/l	2.5	5
1,2-Dichloropropane	ND		ug/l	8.8	5
Dibromochloromethane	ND		ug/l	2.5	5
1,1,2-Trichloroethane	ND		ug/l	3.8	5
Tetrachloroethene	16		ug/l	2.5	5
Chlorobenzene	ND		ug/l	2.5	5
1,2-Dichloroethane	ND		ug/l	2.5	5
1,1,1-Trichloroethane	ND		ug/l	2.5	5
Bromodichloromethane	ND		ug/l	2.5	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	5
Bromoform	ND		ug/l	10	5
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	5
Chloromethane	ND		ug/l	12	5
Vinyl chloride	ND		ug/l	5.0	5
Chloroethane	ND		ug/l	5.0	5
1,1-Dichloroethene	ND		ug/l	2.5	5
trans-1,2-Dichloroethene	ND		ug/l	3.8	5
Trichloroethene	540		ug/l	2.5	5
1,2-Dichlorobenzene	ND		ug/l	12	5
1,3-Dichlorobenzene	ND		ug/l	12	5
1,4-Dichlorobenzene	ND		ug/l	12	5
cis-1,2-Dichloroethene	79		ug/l	2.5	5
Dichlorodifluoromethane	ND		ug/l	25	5
1,2-Dibromoethane	ND		ug/l	10	5
1,3-Dichloropropane	ND		ug/l	12	5
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	5

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-03

Date Collected: 04/14/09 10:05

Client ID: MW-267S-20090414-01

Date Received: 04/14/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	12	5
p-Chlorotoluene	ND		ug/l	12	5
Hexachlorobutadiene	ND		ug/l	3.0	5
1,2,4-Trichlorobenzene	ND		ug/l	12	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-04  
**Client ID:** MW-267M-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/17/09 18:42  
**Analyst:** GK

**Date Collected:** 04/14/09 12:10  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

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	7.5	10
Chloroform	ND		ug/l	7.5	10
Carbon tetrachloride	ND		ug/l	5.0	10
1,2-Dichloropropane	ND		ug/l	18	10
Dibromochloromethane	ND		ug/l	5.0	10
1,1,2-Trichloroethane	ND		ug/l	7.5	10
Tetrachloroethene	45		ug/l	5.0	10
Chlorobenzene	ND		ug/l	5.0	10
1,2-Dichloroethane	ND		ug/l	5.0	10
1,1,1-Trichloroethane	ND		ug/l	5.0	10
Bromodichloromethane	ND		ug/l	5.0	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	10
Bromoform	ND		ug/l	20	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	10
Chloromethane	ND		ug/l	25	10
Vinyl chloride	36		ug/l	10	10
Chloroethane	ND		ug/l	10	10
1,1-Dichloroethene	ND		ug/l	5.0	10
trans-1,2-Dichloroethene	ND		ug/l	7.5	10
Trichloroethene	630		ug/l	5.0	10
1,2-Dichlorobenzene	ND		ug/l	25	10
1,3-Dichlorobenzene	ND		ug/l	25	10
1,4-Dichlorobenzene	ND		ug/l	25	10
cis-1,2-Dichloroethene	740		ug/l	5.0	10
Dichlorodifluoromethane	ND		ug/l	50	10
1,2-Dibromoethane	ND		ug/l	20	10
1,3-Dichloropropane	ND		ug/l	25	10
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	10

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-04

Date Collected: 04/14/09 12:10

Client ID: MW-267M-20090414-01

Date Received: 04/14/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	25	10
p-Chlorotoluene	ND		ug/l	25	10
Hexachlorobutadiene	ND		ug/l	6.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	110		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-05  
**Client ID:** MW-268M-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/17/09 19:14  
**Analyst:** GK

**Date Collected:** 04/14/09 09:20  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	200	40
1,1-Dichloroethane	ND		ug/l	30	40
Chloroform	ND		ug/l	30	40
Carbon tetrachloride	ND		ug/l	20	40
1,2-Dichloropropane	ND		ug/l	70	40
Dibromochloromethane	ND		ug/l	20	40
1,1,2-Trichloroethane	ND		ug/l	30	40
Tetrachloroethene	72		ug/l	20	40
Chlorobenzene	ND		ug/l	20	40
1,2-Dichloroethane	ND		ug/l	20	40
1,1,1-Trichloroethane	ND		ug/l	20	40
Bromodichloromethane	ND		ug/l	20	40
trans-1,3-Dichloropropene	ND		ug/l	20	40
cis-1,3-Dichloropropene	ND		ug/l	20	40
Bromoform	ND		ug/l	80	40
1,1,2,2-Tetrachloroethane	ND		ug/l	20	40
Chloromethane	ND		ug/l	100	40
Vinyl chloride	110		ug/l	40	40
Chloroethane	ND		ug/l	40	40
1,1-Dichloroethene	ND		ug/l	20	40
trans-1,2-Dichloroethene	ND		ug/l	30	40
Trichloroethene	2000		ug/l	20	40
1,2-Dichlorobenzene	ND		ug/l	100	40
1,3-Dichlorobenzene	ND		ug/l	100	40
1,4-Dichlorobenzene	ND		ug/l	100	40
cis-1,2-Dichloroethene	3000		ug/l	20	40
Dichlorodifluoromethane	ND		ug/l	200	40
1,2-Dibromoethane	ND		ug/l	80	40
1,3-Dichloropropane	ND		ug/l	100	40
1,1,1,2-Tetrachloroethane	ND		ug/l	20	40



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-05

Date Collected: 04/14/09 09:20

Client ID: MW-268M-20090414-01

Date Received: 04/14/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	100	40
p-Chlorotoluene	ND		ug/l	100	40
Hexachlorobutadiene	ND		ug/l	24	40
1,2,4-Trichlorobenzene	ND		ug/l	100	40

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	113		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-06  
**Client ID:** MW-552-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/17/09 19:47  
**Analyst:** GK

**Date Collected:** 04/14/09 11:45  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

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	75	100
Chloroform	ND		ug/l	75	100
Carbon tetrachloride	ND		ug/l	50	100
1,2-Dichloropropane	ND		ug/l	180	100
Dibromochloromethane	ND		ug/l	50	100
1,1,2-Trichloroethane	ND		ug/l	75	100
Tetrachloroethene	680		ug/l	50	100
Chlorobenzene	ND		ug/l	50	100
1,2-Dichloroethane	ND		ug/l	50	100
1,1,1-Trichloroethane	ND		ug/l	50	100
Bromodichloromethane	ND		ug/l	50	100
trans-1,3-Dichloropropene	ND		ug/l	50	100
cis-1,3-Dichloropropene	ND		ug/l	50	100
Bromoform	ND		ug/l	200	100
1,1,2,2-Tetrachloroethane	ND		ug/l	50	100
Chloromethane	ND		ug/l	250	100
Vinyl chloride	ND		ug/l	100	100
Chloroethane	ND		ug/l	100	100
1,1-Dichloroethene	ND		ug/l	50	100
trans-1,2-Dichloroethene	ND		ug/l	75	100
Trichloroethene	9000		ug/l	50	100
1,2-Dichlorobenzene	ND		ug/l	250	100
1,3-Dichlorobenzene	ND		ug/l	250	100
1,4-Dichlorobenzene	ND		ug/l	250	100
cis-1,2-Dichloroethene	890		ug/l	50	100
Dichlorodifluoromethane	ND		ug/l	500	100
1,2-Dibromoethane	ND		ug/l	200	100
1,3-Dichloropropane	ND		ug/l	250	100
1,1,1,2-Tetrachloroethane	ND		ug/l	50	100

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-06  
 Client ID: MW-552-20090414-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/14/09 11:45  
 Date Received: 04/14/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-08  
**Client ID:** DUP-009-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/17/09 20:19  
**Analyst:** GK

**Date Collected:** 04/14/09 00:00  
**Date Received:** 04/14/09  
**Field Prep:** Not Specified

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	75	100
Chloroform	ND		ug/l	75	100
Carbon tetrachloride	ND		ug/l	50	100
1,2-Dichloropropane	ND		ug/l	180	100
Dibromochloromethane	ND		ug/l	50	100
1,1,2-Trichloroethane	ND		ug/l	75	100
Tetrachloroethene	660		ug/l	50	100
Chlorobenzene	ND		ug/l	50	100
1,2-Dichloroethane	ND		ug/l	50	100
1,1,1-Trichloroethane	ND		ug/l	50	100
Bromodichloromethane	ND		ug/l	50	100
trans-1,3-Dichloropropene	ND		ug/l	50	100
cis-1,3-Dichloropropene	ND		ug/l	50	100
Bromoform	ND		ug/l	200	100
1,1,2,2-Tetrachloroethane	ND		ug/l	50	100
Chloromethane	ND		ug/l	250	100
Vinyl chloride	ND		ug/l	100	100
Chloroethane	ND		ug/l	100	100
1,1-Dichloroethene	ND		ug/l	50	100
trans-1,2-Dichloroethene	ND		ug/l	75	100
Trichloroethene	8800		ug/l	50	100
1,2-Dichlorobenzene	ND		ug/l	250	100
1,3-Dichlorobenzene	ND		ug/l	250	100
1,4-Dichlorobenzene	ND		ug/l	250	100
cis-1,2-Dichloroethene	870		ug/l	50	100
Dichlorodifluoromethane	ND		ug/l	500	100
1,2-Dibromoethane	ND		ug/l	200	100
1,3-Dichloropropane	ND		ug/l	250	100
1,1,1,2-Tetrachloroethane	ND		ug/l	50	100

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-08

Date Collected: 04/14/09 00:00

Client ID: DUP-009-20090414-01

Date Received: 04/14/09

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	250	100
p-Chlorotoluene	ND		ug/l	250	100
Hexachlorobutadiene	ND		ug/l	60	100
1,2,4-Trichlorobenzene	ND		ug/l	250	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	108		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-09  
**Client ID:** DUP-008-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/17/09 20:51  
**Analyst:** GK

**Date Collected:** 04/14/09 00:00  
**Date Received:** 04/14/09  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	200	40
1,1-Dichloroethane	ND		ug/l	30	40
Chloroform	ND		ug/l	30	40
Carbon tetrachloride	ND		ug/l	20	40
1,2-Dichloropropane	ND		ug/l	70	40
Dibromochloromethane	ND		ug/l	20	40
1,1,2-Trichloroethane	ND		ug/l	30	40
Tetrachloroethene	72		ug/l	20	40
Chlorobenzene	ND		ug/l	20	40
1,2-Dichloroethane	ND		ug/l	20	40
1,1,1-Trichloroethane	ND		ug/l	20	40
Bromodichloromethane	ND		ug/l	20	40
trans-1,3-Dichloropropene	ND		ug/l	20	40
cis-1,3-Dichloropropene	ND		ug/l	20	40
Bromoform	ND		ug/l	80	40
1,1,2,2-Tetrachloroethane	ND		ug/l	20	40
Chloromethane	ND		ug/l	100	40
Vinyl chloride	110		ug/l	40	40
Chloroethane	ND		ug/l	40	40
1,1-Dichloroethene	ND		ug/l	20	40
trans-1,2-Dichloroethene	ND		ug/l	30	40
Trichloroethene	2000		ug/l	20	40
1,2-Dichlorobenzene	ND		ug/l	100	40
1,3-Dichlorobenzene	ND		ug/l	100	40
1,4-Dichlorobenzene	ND		ug/l	100	40
cis-1,2-Dichloroethene	3000		ug/l	20	40
Dichlorodifluoromethane	ND		ug/l	200	40
1,2-Dibromoethane	ND		ug/l	80	40
1,3-Dichloropropane	ND		ug/l	100	40
1,1,1,2-Tetrachloroethane	ND		ug/l	20	40

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-09

Date Collected: 04/14/09 00:00

Client ID: DUP-008-20090414-01

Date Received: 04/14/09

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	100	40
p-Chlorotoluene	ND		ug/l	100	40
Hexachlorobutadiene	ND		ug/l	24	40
1,2,4-Trichlorobenzene	ND		ug/l	100	40

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	113		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-10  
**Client ID:** MW-266MB-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/17/09 21:24  
**Analyst:** GK

**Date Collected:** 04/14/09 15:15  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

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	1.9	2.5
Chloroform	ND		ug/l	1.9	2.5
Carbon tetrachloride	ND		ug/l	1.2	2.5
1,2-Dichloropropane	ND		ug/l	4.4	2.5
Dibromochloromethane	ND		ug/l	1.2	2.5
1,1,2-Trichloroethane	ND		ug/l	1.9	2.5
Tetrachloroethene	29		ug/l	1.2	2.5
Chlorobenzene	ND		ug/l	1.2	2.5
1,2-Dichloroethane	ND		ug/l	1.2	2.5
1,1,1-Trichloroethane	ND		ug/l	1.2	2.5
Bromodichloromethane	ND		ug/l	1.2	2.5
trans-1,3-Dichloropropene	ND		ug/l	1.2	2.5
cis-1,3-Dichloropropene	ND		ug/l	1.2	2.5
Bromoform	ND		ug/l	5.0	2.5
1,1,2,2-Tetrachloroethane	ND		ug/l	1.2	2.5
Chloromethane	ND		ug/l	6.2	2.5
Vinyl chloride	29		ug/l	2.5	2.5
Chloroethane	ND		ug/l	2.5	2.5
1,1-Dichloroethene	ND		ug/l	1.2	2.5
trans-1,2-Dichloroethene	ND		ug/l	1.9	2.5
Trichloroethene	130		ug/l	1.2	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	2.5
1,3-Dichlorobenzene	ND		ug/l	6.2	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	2.5
cis-1,2-Dichloroethene	280		ug/l	1.2	2.5
Dichlorodifluoromethane	ND		ug/l	12	2.5
1,2-Dibromoethane	ND		ug/l	5.0	2.5
1,3-Dichloropropane	ND		ug/l	6.2	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	1.2	2.5



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-10

Date Collected: 04/14/09 15:15

Client ID: MW-266MB-20090414-01

Date Received: 04/14/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	6.2	2.5
p-Chlorotoluene	ND		ug/l	6.2	2.5
Hexachlorobutadiene	ND		ug/l	1.5	2.5
1,2,4-Trichlorobenzene	ND		ug/l	6.2	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-11  
**Client ID:** MW-266MA-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/17/09 20:03  
**Analyst:** GK

**Date Collected:** 04/14/09 16:40  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.58		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	14		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	4.3		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-11

Date Collected: 04/14/09 16:40

Client ID: MW-266MA-20090414-01

Date Received: 04/14/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	106		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-13  
**Client ID:** MW-551-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/20/09 11:53  
**Analyst:** GK

**Date Collected:** 04/14/09 14:00  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

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	3.0	4
Chloroform	ND		ug/l	3.0	4
Carbon tetrachloride	ND		ug/l	2.0	4
1,2-Dichloropropane	ND		ug/l	7.0	4
Dibromochloromethane	ND		ug/l	2.0	4
1,1,2-Trichloroethane	ND		ug/l	3.0	4
Tetrachloroethene	9.9		ug/l	2.0	4
Chlorobenzene	ND		ug/l	2.0	4
1,2-Dichloroethane	ND		ug/l	2.0	4
1,1,1-Trichloroethane	ND		ug/l	2.0	4
Bromodichloromethane	ND		ug/l	2.0	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	2.0	4
Chloromethane	ND		ug/l	10	4
Vinyl chloride	ND		ug/l	4.0	4
Chloroethane	ND		ug/l	4.0	4
1,1-Dichloroethene	ND		ug/l	2.0	4
trans-1,2-Dichloroethene	ND		ug/l	3.0	4
Trichloroethene	350		ug/l	2.0	4
1,2-Dichlorobenzene	ND		ug/l	10	4
1,3-Dichlorobenzene	ND		ug/l	10	4
1,4-Dichlorobenzene	ND		ug/l	10	4
cis-1,2-Dichloroethene	3.4		ug/l	2.0	4
Dichlorodifluoromethane	ND		ug/l	20	4
1,2-Dibromoethane	ND		ug/l	8.0	4
1,3-Dichloropropane	ND		ug/l	10	4
1,1,1,2-Tetrachloroethane	ND		ug/l	2.0	4

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-13  
 Client ID: MW-551-20090414-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/14/09 14:00  
 Date Received: 04/14/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	10	4
p-Chlorotoluene	ND		ug/l	10	4
Hexachlorobutadiene	ND		ug/l	2.4	4
1,2,4-Trichlorobenzene	ND		ug/l	10	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	110		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/17/09 12:13  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-06,08-10 Batch: WG359443-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/17/09 12:13  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-06,08-10 Batch: WG359443-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
 Analytical Date: 04/17/09 12:13  
 Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-06,08-10 Batch: WG359443-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	107		70-130



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 04/17/09 12:29  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 11 Batch: WG359454-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/17/09 12:29  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 11 Batch: WG359454-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/17/09 12:29  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 11 Batch: WG359454-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	107		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/20/09 11:20  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 13 Batch: WG359567-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/20/09 11:20  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 13 Batch: WG359567-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 04/20/09 11:20  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 13 Batch: WG359567-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	107		70-130

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904586

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-06,08-10 Batch: WG359443-1 WG359443-2					
Methylene chloride	92	91	70-130	1	25
1,1-Dichloroethane	94	92	70-130	2	25
Chloroform	97	92	70-130	5	25
Carbon tetrachloride	97	92	70-130	5	25
1,2-Dichloropropane	90	89	70-130	1	25
Dibromochloromethane	107	101	70-130	6	25
1,1,2-Trichloroethane	99	97	70-130	2	25
Tetrachloroethene	115	109	70-130	5	25
Chlorobenzene	100	96	70-130	4	25
Trichlorofluoromethane	118	118	70-130	0	25
1,2-Dichloroethane	103	100	70-130	3	25
1,1,1-Trichloroethane	98	94	70-130	4	25
Bromodichloromethane	99	97	70-130	2	25
trans-1,3-Dichloropropene	92	88	70-130	4	25
cis-1,3-Dichloropropene	80	78	70-130	3	25
1,1-Dichloropropene	93	90	70-130	3	25
Bromoform	126	128	70-130	2	50
1,1,2,2-Tetrachloroethane	94	100	70-130	6	25
Benzene	91	88	70-130	3	25
Toluene	97	92	70-130	5	25
Ethylbenzene	101	97	70-130	4	25

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0904586

Project Number: 0095922

Report Date: 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-06,08-10 Batch: WG359443-1 WG359443-2					
Chloromethane	76	84	70-130	10	50
Bromomethane	91	86	70-130	6	50
Vinyl chloride	81	85	70-130	5	25
Chloroethane	93	92	70-130	1	25
1,1-Dichloroethene	96	95	70-130	1	25
trans-1,2-Dichloroethene	101	95	70-130	6	25
Trichloroethene	96	96	70-130	0	25
1,2-Dichlorobenzene	100	102	70-130	2	25
1,3-Dichlorobenzene	104	100	70-130	4	25
1,4-Dichlorobenzene	102	102	70-130	0	25
Methyl tert butyl ether	90	104	70-130	14	25
p/m-Xylene	101	95	70-130	6	25
o-Xylene	102	102	70-130	0	25
cis-1,2-Dichloroethene	94	91	70-130	3	25
Dibromomethane	95	97	70-130	2	25
1,2,3-Trichloropropane	98	106	70-130	8	25
Styrene	98	100	70-130	2	25
Dichlorodifluoromethane	78	98	70-130	23	50
Acetone	120	143	70-130	17	50
Carbon disulfide	65	72	70-130	10	50
2-Butanone	81	101	70-130	22	50



## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0904586

Project Number: 0095922

Report Date: 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-06,08-10 Batch: WG359443-1 WG359443-2					
4-Methyl-2-pentanone	72	96	70-130	29	50
2-Hexanone	82	98	70-130	18	50
Bromochloromethane	98	97	70-130	1	25
Tetrahydrofuran	90	97	70-130	7	25
2,2-Dichloropropane	82	79	70-130	4	50
1,2-Dibromoethane	100	99	70-130	1	25
1,3-Dichloropropane	98	98	70-130	0	25
1,1,1,2-Tetrachloroethane	98	95	70-130	3	25
Bromobenzene	104	106	70-130	2	25
n-Butylbenzene	97	96	70-130	1	25
sec-Butylbenzene	97	95	70-130	2	25
tert-Butylbenzene	96	94	70-130	2	25
o-Chlorotoluene	96	93	70-130	3	25
p-Chlorotoluene	98	95	70-130	3	25
1,2-Dibromo-3-chloropropane	94	104	70-130	10	50
Hexachlorobutadiene	116	120	70-130	3	25
Isopropylbenzene	100	95	70-130	5	25
p-Isopropyltoluene	101	99	70-130	2	25
Naphthalene	94	100	70-130	6	25
n-Propylbenzene	96	92	70-130	4	25
1,2,3-Trichlorobenzene	117	120	70-130	3	25

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904586

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-06,08-10 Batch: WG359443-1 WG359443-2					
1,2,4-Trichlorobenzene	105	107	70-130	2	25
1,3,5-Trimethylbenzene	95	93	70-130	2	25
1,2,4-Trimethylbenzene	96	95	70-130	1	25
Ethyl ether	99	116	70-130	16	25
Isopropyl Ether	80	90	70-130	12	25
Ethyl-Tert-Butyl-Ether	83	94	70-130	12	25
Tertiary-Amyl Methyl Ether	77	87	70-130	12	25
1,4-Dioxane	105	105	70-130	0	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		114		70-130
Toluene-d8	108		110		70-130
4-Bromofluorobenzene	94		93		70-130
Dibromofluoromethane	111		110		70-130

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904586

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 11 Batch: WG359454-1 WG359454-2					
Methylene chloride	94	91	70-130	3	25
1,1-Dichloroethane	95	95	70-130	0	25
Chloroform	94	89	70-130	5	25
Carbon tetrachloride	101	100	70-130	1	25
1,2-Dichloropropane	91	88	70-130	3	25
Dibromochloromethane	104	101	70-130	3	25
1,1,2-Trichloroethane	99	93	70-130	6	25
Tetrachloroethene	113	114	70-130	1	25
Chlorobenzene	99	97	70-130	2	25
Trichlorofluoromethane	120	125	70-130	4	25
1,2-Dichloroethane	102	97	70-130	5	25
1,1,1-Trichloroethane	99	99	70-130	0	25
Bromodichloromethane	104	97	70-130	7	25
trans-1,3-Dichloropropene	89	86	70-130	3	25
cis-1,3-Dichloropropene	81	78	70-130	4	25
1,1-Dichloropropene	94	95	70-130	1	25
Bromoform	117	112	70-130	4	50
1,1,2,2-Tetrachloroethane	94	90	70-130	4	25
Benzene	92	91	70-130	1	25
Toluene	96	95	70-130	1	25
Ethylbenzene	102	99	70-130	3	25

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0904586

Project Number: 0095922

Report Date: 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 11 Batch: WG359454-1 WG359454-2					
Chloromethane	78	86	70-130	10	50
Bromomethane	87	90	70-130	3	50
Vinyl chloride	83	90	70-130	8	25
Chloroethane	95	101	70-130	6	25
1,1-Dichloroethene	98	100	70-130	2	25
trans-1,2-Dichloroethene	98	100	70-130	2	25
Trichloroethene	99	94	70-130	5	25
1,2-Dichlorobenzene	103	100	70-130	3	25
1,3-Dichlorobenzene	102	103	70-130	1	25
1,4-Dichlorobenzene	102	101	70-130	1	25
Methyl tert butyl ether	91	103	70-130	12	25
p/m-Xylene	101	99	70-130	2	25
o-Xylene	103	106	70-130	3	25
cis-1,2-Dichloroethene	93	93	70-130	0	25
Dibromomethane	100	93	70-130	7	25
1,2,3-Trichloropropane	103	100	70-130	3	25
Styrene	102	105	70-130	3	25
Dichlorodifluoromethane	80	105	70-130	27	50
Acetone	119	116	70-130	3	50
Carbon disulfide	65	72	70-130	10	50
2-Butanone	85	89	70-130	5	50

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0904586

Project Number: 0095922

Report Date: 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 11 Batch: WG359454-1 WG359454-2					
4-Methyl-2-pentanone	82	86	70-130	5	50
2-Hexanone	78	87	70-130	11	50
Bromochloromethane	103	97	70-130	6	25
Tetrahydrofuran	93	96	70-130	3	25
2,2-Dichloropropane	80	85	70-130	6	50
1,2-Dibromoethane	99	94	70-130	5	25
1,3-Dichloropropane	97	96	70-130	1	25
1,1,1,2-Tetrachloroethane	101	98	70-130	3	25
Bromobenzene	106	104	70-130	2	25
n-Butylbenzene	95	95	70-130	0	25
sec-Butylbenzene	96	97	70-130	1	25
tert-Butylbenzene	93	94	70-130	1	25
o-Chlorotoluene	96	94	70-130	2	25
p-Chlorotoluene	97	97	70-130	0	25
1,2-Dibromo-3-chloropropane	95	86	70-130	10	50
Hexachlorobutadiene	116	117	70-130	1	25
Isopropylbenzene	100	101	70-130	1	25
p-Isopropyltoluene	101	101	70-130	0	25
Naphthalene	84	82	70-130	2	25
n-Propylbenzene	95	95	70-130	0	25
1,2,3-Trichlorobenzene	119	117	70-130	2	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904586

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 11 Batch: WG359454-1 WG359454-2					
1,2,4-Trichlorobenzene	109	106	70-130	3	25
1,3,5-Trimethylbenzene	93	92	70-130	1	25
1,2,4-Trimethylbenzene	96	96	70-130	0	25
Ethyl ether	104	106	70-130	2	25
Isopropyl Ether	84	91	70-130	8	25
Ethyl-Tert-Butyl-Ether	89	94	70-130	5	25
Tertiary-Amyl Methyl Ether	82	85	70-130	4	25
1,4-Dioxane	118	108	70-130	9	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		111		70-130
Toluene-d8	106		111		70-130
4-Bromofluorobenzene	89		93		70-130
Dibromofluoromethane	108		107		70-130

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904586

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 13 Batch: WG359567-1 WG359567-2					
Methylene chloride	95	95	70-130	0	25
1,1-Dichloroethane	95	99	70-130	4	25
Chloroform	91	95	70-130	4	25
Carbon tetrachloride	107	108	70-130	1	25
1,2-Dichloropropane	89	94	70-130	5	25
Dibromochloromethane	98	106	70-130	8	25
1,1,2-Trichloroethane	88	96	70-130	9	25
Tetrachloroethene	114	125	70-130	9	25
Chlorobenzene	97	103	70-130	6	25
Trichlorofluoromethane	127	128	70-130	1	25
1,2-Dichloroethane	98	100	70-130	2	25
1,1,1-Trichloroethane	105	108	70-130	3	25
Bromodichloromethane	97	100	70-130	3	25
trans-1,3-Dichloropropene	89	94	70-130	5	25
cis-1,3-Dichloropropene	80	82	70-130	2	25
1,1-Dichloropropene	97	98	70-130	1	25
Bromoform	109	115	70-130	5	50
1,1,2,2-Tetrachloroethane	80	85	70-130	6	25
Benzene	91	96	70-130	5	25
Toluene	98	101	70-130	3	25
Ethylbenzene	99	106	70-130	7	25

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0904586

Project Number: 0095922

Report Date: 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 13 Batch: WG359567-1 WG359567-2					
Chloromethane	88	87	70-130	1	50
Bromomethane	93	95	70-130	2	50
Vinyl chloride	91	92	70-130	1	25
Chloroethane	104	105	70-130	1	25
1,1-Dichloroethene	102	106	70-130	4	25
trans-1,2-Dichloroethene	104	104	70-130	0	25
Trichloroethene	98	100	70-130	2	25
1,2-Dichlorobenzene	94	103	70-130	9	25
1,3-Dichlorobenzene	97	104	70-130	7	25
1,4-Dichlorobenzene	96	102	70-130	6	25
Methyl tert butyl ether	94	93	70-130	1	25
p/m-Xylene	100	105	70-130	5	25
o-Xylene	98	104	70-130	6	25
cis-1,2-Dichloroethene	96	98	70-130	2	25
Dibromomethane	87	95	70-130	9	25
1,2,3-Trichloropropane	88	92	70-130	4	25
Styrene	96	103	70-130	7	25
Dichlorodifluoromethane	97	101	70-130	4	50
Acetone	110	110	70-130	0	50
Carbon disulfide	70	72	70-130	3	50
2-Butanone	79	86	70-130	8	50



## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904586

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 13 Batch: WG359567-1 WG359567-2					
4-Methyl-2-pentanone	71	83	70-130	16	50
2-Hexanone	71	80	70-130	12	50
Bromochloromethane	98	101	70-130	3	25
Tetrahydrofuran	76	88	70-130	15	25
2,2-Dichloropropane	90	92	70-130	2	50
1,2-Dibromoethane	92	98	70-130	6	25
1,3-Dichloropropane	90	98	70-130	9	25
1,1,1,2-Tetrachloroethane	100	108	70-130	8	25
Bromobenzene	102	104	70-130	2	25
n-Butylbenzene	90	97	70-130	7	25
sec-Butylbenzene	93	98	70-130	5	25
tert-Butylbenzene	92	97	70-130	5	25
o-Chlorotoluene	91	95	70-130	4	25
p-Chlorotoluene	96	100	70-130	4	25
1,2-Dibromo-3-chloropropane	79	81	70-130	3	50
Hexachlorobutadiene	113	120	70-130	6	25
Isopropylbenzene	100	106	70-130	6	25
p-Isopropyltoluene	98	104	70-130	6	25
Naphthalene	71	78	70-130	9	25
n-Propylbenzene	91	97	70-130	6	25
1,2,3-Trichlorobenzene	109	116	70-130	6	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904586

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 13 Batch: WG359567-1 WG359567-2					
1,2,4-Trichlorobenzene	104	110	70-130	6	25
1,3,5-Trimethylbenzene	90	97	70-130	7	25
1,2,4-Trimethylbenzene	91	95	70-130	4	25
Ethyl ether	94	98	70-130	4	25
Isopropyl Ether	78	82	70-130	5	25
Ethyl-Tert-Butyl-Ether	83	86	70-130	4	25
Tertiary-Amyl Methyl Ether	74	80	70-130	8	25
1,4-Dioxane	99	104	70-130	5	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		108		70-130
Toluene-d8	109		110		70-130
4-Bromofluorobenzene	88		90		70-130
Dibromofluoromethane	108		109		70-130

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
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MCP Volatile Organics - Westborough Lab Associated sample(s): 01-06,08-10 QC Batch ID: WG359443-7 WG359443-8 QC Sample: L0904586-10 Client ID: MW-266MB-20090414-01

Methylene chloride	ND	25	29	118	29	116	70-130	2	30
1,1-Dichloroethane	ND	25	31	123	30	119	70-130	3	30
Chloroform	ND	25	30	120	30	119	70-130	1	30
Carbon tetrachloride	ND	25	29	118	29	118	70-130	0	30
1,2-Dichloropropane	ND	25	28	111	26	105	70-130	6	30
Dibromochloromethane	ND	25	32	127	31	124	70-130	2	30
1,1,2-Trichloroethane	ND	25	30	120	29	115	70-130	4	30
Tetrachloroethene	29	25	61	127	59	120	70-130	6	30
Chlorobenzene	ND	25	30	119	30	119	70-130	0	30
1,2-Dichloroethane	ND	25	32	126	30	122	70-130	3	30
1,1,1-Trichloroethane	ND	25	30	120	29	116	70-130	3	30
Bromodichloromethane	ND	25	31	125	31	124	70-130	1	30
trans-1,3-Dichloropropene	ND	25	27	108	27	109	70-130	1	30
cis-1,3-Dichloropropene	ND	25	23	93	23	91	70-130	2	30
Bromoform	ND	25	35	140	34	136	70-130	3	30
1,1,2,2-Tetrachloroethane	ND	25	29	116	28	112	70-130	4	30
Chloromethane	ND	25	25	100	24	97	70-130	3	30
Vinyl chloride	29	25	56	110	54	99	70-130	11	30
Chloroethane	ND	25	31	123	30	118	70-130	4	30
1,1-Dichloroethene	ND	25	32	127	30	119	70-130	7	30
trans-1,2-Dichloroethene	ND	25	35	139	33	132	70-130	5	30

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
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MCP Volatile Organics - Westborough Lab Associated sample(s): 01-06,08-10 QC Batch ID: WG359443-7 WG359443-8 QC Sample: L0904586-10 Client ID: MW-266MB-20090414-01

Trichloroethene	130	25	150	90	140	65	70-130	32	30
1,2-Dichlorobenzene	ND	25	30	122	29	117	70-130	4	30
1,3-Dichlorobenzene	ND	25	31	123	30	118	70-130	4	30
1,4-Dichlorobenzene	ND	25	30	122	29	117	70-130	4	30
cis-1,2-Dichloroethene	280	25	310	127	310	109	70-130	15	30
Dichlorodifluoromethane	ND	25	28	112	26	106	70-130	6	30
1,2-Dibromoethane	ND	25	31	122	30	121	70-130	1	30
1,3-Dichloropropane	ND	25	30	121	30	118	70-130	3	30
1,1,1,2-Tetrachloroethane	ND	25	30	119	29	115	70-130	3	30
o-Chlorotoluene	ND	25	28	114	27	107	70-130	6	30
p-Chlorotoluene	ND	25	29	116	28	112	70-130	4	30
Hexachlorobutadiene	ND	25	34	137	33	131	70-130	4	30
1,2,4-Trichlorobenzene	ND	25	33	131	30	120	70-130	9	30

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		115		70-130
4-Bromofluorobenzene	95		90		70-130
Dibromofluoromethane	111		111		70-130
Toluene-d8	108		107		70-130

# SEMIVOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-03  
**Client ID:** MW-267S-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 1,8270C-SIM  
**Analytical Date:** 04/17/09 14:15  
**Analyst:** JS

**Date Collected:** 04/14/09 10:05  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/15/09 15:11

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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1,4 Dioxane by 8270C-SIM - Mansfield Lab					
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1,4-Dioxane	8690		ng/l	556	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	48		15-110

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-04  
**Client ID:** MW-267M-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 1,8270C-SIM  
**Analytical Date:** 04/17/09 14:58  
**Analyst:** JS

**Date Collected:** 04/14/09 12:10  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/15/09 15:11

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
1,4 Dioxane by 8270C-SIM - Mansfield Lab					
1,4-Dioxane	6460		ng/l	562	1

**Surrogate****% Recovery****Qualifier****Acceptance  
Criteria**

1,4-Dioxane-d8

53

15-110

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-05  
**Client ID:** MW-268M-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 1,8270C-SIM  
**Analytical Date:** 04/17/09 15:42  
**Analyst:** JS

**Date Collected:** 04/14/09 09:20  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/15/09 15:11

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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1,4 Dioxane by 8270C-SIM - Mansfield Lab					
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1,4-Dioxane	28000		ng/l	500	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	41		15-110



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-06  
**Client ID:** MW-552-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 1,8270C-SIM  
**Analytical Date:** 04/17/09 16:25  
**Analyst:** JS

**Date Collected:** 04/14/09 11:45  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/15/09 15:11

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
1,4 Dioxane by 8270C-SIM - Mansfield Lab					
1,4-Dioxane	18000		ng/l	500	1

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-07  
**Client ID:** MW-269MA-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 1,8270C-SIM  
**Analytical Date:** 04/17/09 17:09  
**Analyst:** JS

**Date Collected:** 04/14/09 15:20  
**Date Received:** 04/14/09  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/15/09 15:11

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
1,4 Dioxane by 8270C-SIM - Mansfield Lab					
1,4-Dioxane	2210		ng/l	515	1

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

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-08

Date Collected: 04/14/09 00:00

Client ID: DUP-009-20090414-01

Date Received: 04/14/09

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Matrix: Water

Extraction Method: EPA 3510C

Analytical Method: 1,8270C-SIM

Extraction Date: 04/15/09 15:11

Analytical Date: 04/17/09 17:52

Analyst: JS

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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1,4 Dioxane by 8270C-SIM - Mansfield Lab

1,4-Dioxane	18200		ng/l	510	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	48		15-110

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-09

Date Collected: 04/14/09 00:00

Client ID: DUP-008-20090414-01

Date Received: 04/14/09

Sample Location: WAYLAND, MA

Field Prep: Not Specified

Matrix: Water

Extraction Method: EPA 3510C

Analytical Method: 1,8270C-SIM

Extraction Date: 04/15/09 15:11

Analytical Date: 04/17/09 18:36

Analyst: JS

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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1,4 Dioxane by 8270C-SIM - Mansfield Lab

1,4-Dioxane	28200		ng/l	500	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	42		15-110

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904586-11  
**Client ID:** MW-266MA-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 1,8270C-SIM  
**Analytical Date:** 04/17/09 19:19  
**Analyst:** JS

**Date Collected:** 04/14/09 16:40  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/15/09 15:11

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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1,4 Dioxane by 8270C-SIM - Mansfield Lab					
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1,4-Dioxane	2250		ng/l	510	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	41		15-110

Project Name: RAYTHEON WAYLAND

Lab Number: L0904586

Project Number: 0095922

Report Date: 05/04/09

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

Analytical Method: 1,8270C-SIM

Extraction Method: EPA 3510C

Analytical Date: 04/17/09 09:54

Extraction Date: 04/15/09 15:11

Analyst: JS

Parameter	Result	Qualifier	Units	RDL
1,4 Dioxane by 8270C-SIM - Mansfield Lab for sample(s): 03-09,11 Batch: WG358969-1				
1,4-Dioxane	ND		ng/l	500

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	39		15-110

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904586

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
1,4 Dioxane by 8270C-SIM - Mansfield Lab Associated sample(s): 03-09,11 Batch: WG358969-2 WG358969-3					
1,4-Dioxane	94	98	40-140	4	30

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	36		34		15-110

# METALS



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-01

Date Collected: 04/14/09 10:35

Client ID: IW-5-00090414-01

Date Received: 04/14/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	ND		mg/l	0.05	1	04/17/09 12:20	04/21/09 09:53	EPA 3005A	60,6010B	AI
Manganese, Dissolved	ND		mg/l	0.010	1	04/17/09 12:20	04/21/09 09:53	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-02  
 Client ID: IW-8-00090414-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/14/09 12:50  
 Date Received: 04/14/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	6.5		mg/l	0.05	1	04/17/09 12:20	04/21/09 09:59	EPA 3005A	60,6010B	AI
Manganese, Dissolved	0.564		mg/l	0.010	1	04/17/09 12:20	04/21/09 09:59	EPA 3005A	60,6010B	AI



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-03

Date Collected: 04/14/09 10:05

Client ID: MW-267S-20090414-01

Date Received: 04/14/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	18		mg/l	0.05	1	04/17/09 12:20	04/21/09 10:02	EPA 3005A	60,6010B	AI
Manganese, Dissolved	1.23		mg/l	0.010	1	04/17/09 12:20	04/21/09 10:02	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-04

Date Collected: 04/14/09 12:10

Client ID: MW-267M-20090414-01

Date Received: 04/14/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	22		mg/l	0.05	1	04/17/09 12:20	04/21/09 10:14	EPA 3005A	60,6010B	AI
Manganese, Dissolved	0.528		mg/l	0.010	1	04/17/09 12:20	04/21/09 10:14	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-05

Date Collected: 04/14/09 09:20

Client ID: MW-268M-20090414-01

Date Received: 04/14/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	20		mg/l	0.05	1	04/17/09 12:20	04/21/09 10:17	EPA 3005A	60,6010B	AI
Manganese, Dissolved	0.355		mg/l	0.010	1	04/17/09 12:20	04/21/09 10:17	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-06

Date Collected: 04/14/09 11:45

Client ID: MW-552-20090414-01

Date Received: 04/14/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	0.08		mg/l	0.05	1	04/17/09 12:20	04/21/09 10:20	EPA 3005A	60,6010B	AI
Manganese, Dissolved	0.224		mg/l	0.010	1	04/17/09 12:20	04/21/09 10:20	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-10

Date Collected: 04/14/09 15:15

Client ID: MW-266MB-20090414-01

Date Received: 04/14/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	23		mg/l	0.05	1	04/17/09 12:20	04/21/09 10:23	EPA 3005A	60,6010B	AI
Manganese, Dissolved	0.140		mg/l	0.010	1	04/17/09 12:20	04/21/09 10:23	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-11

Date Collected: 04/14/09 16:40

Client ID: MW-266MA-20090414-01

Date Received: 04/14/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	8.1		mg/l	0.05	1	04/17/09 12:20	04/21/09 10:26	EPA 3005A	60,6010B	AI
Manganese, Dissolved	0.605		mg/l	0.010	1	04/17/09 12:20	04/21/09 10:26	EPA 3005A	60,6010B	AI



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904586**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904586-13

Date Collected: 04/14/09 14:00

Client ID: MW-551-20090414-01

Date Received: 04/14/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Iron, Dissolved	4.0		mg/l	0.05	1	04/17/09 12:20	04/21/09 10:29	EPA 3005A	60,6010B	AI
Manganese, Dissolved	0.167		mg/l	0.010	1	04/17/09 12:20	04/21/09 10:29	EPA 3005A	60,6010B	AI

Project Name: RAYTHEON WAYLAND

Lab Number: L0904586

Project Number: 0095922

Report Date: 05/04/09

## 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): 01-06,10-11,13 Batch: WG359306-1								
Iron, Dissolved	ND	mg/l	0.05	1	04/17/09 12:20	04/21/09 09:42	60,6010B	AI
Manganese, Dissolved	ND	mg/l	0.010	1	04/17/09 12:20	04/21/09 09:42	60,6010B	AI

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904586

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01-06,10-11,13 Batch: WG359306-2 WG359306-3					
Iron, Dissolved	100	100	80-120	0	20
Manganese, Dissolved	100	97	80-120	3	20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

### SAMPLE RESULTS

**Lab ID:** L0904586-01  
**Client ID:** IW-5-00090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/14/09 10:35  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	840		mg CaCO3/L	5.0	2.5	-	04/16/09 10:13	30,2320B	SD
Chloride	23		mg/l	1.0	1	-	04/15/09 18:51	1,9251	DD
Nitrogen, Nitrate	ND		mg/l	0.10	1	-	04/15/09 00:11	30,4500NO3-F	DD
Phosphorus, Total	ND		mg/l	0.010	1	-	04/15/09 17:39	30,4500P-E	NM
Sulfate	ND		mg/l	10	1	04/15/09 10:30	04/15/09 10:30	1,9038	SD
Total Organic Carbon	73		mg/l	5.0	10	-	04/20/09 05:37	1,9060	DW



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

### SAMPLE RESULTS

**Lab ID:** L0904586-02  
**Client ID:** IW-8-00090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/14/09 12:50  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	360		mg CaCO3/L	2.0	1	-	04/16/09 10:13	30,2320B	SD
Chloride	48		mg/l	1.0	1	-	04/15/09 18:52	1,9251	DD
Nitrogen, Nitrate	ND		mg/l	0.50	5	-	04/15/09 00:38	30,4500NO3-F	DD
Phosphorus, Total	0.124		mg/l	0.010	1	-	04/15/09 17:39	30,4500P-E	NM
Sulfate	ND		mg/l	10	1	04/15/09 10:30	04/15/09 10:30	1,9038	SD
Total Organic Carbon	220		mg/l	50	100	-	04/20/09 05:37	1,9060	DW



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

### SAMPLE RESULTS

**Lab ID:** L0904586-03  
**Client ID:** MW-267S-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/14/09 10:05  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	56		mg CaCO3/L	2.0	1	-	04/16/09 10:13	30,2320B	SD
Chloride	59		mg/l	1.0	1	-	04/15/09 18:52	1,9251	DD
Nitrogen, Nitrate	ND		mg/l	0.50	5	-	04/15/09 00:42	30,4500NO3-F	DD
Phosphorus, Total	18.5		mg/l	0.250	25	-	04/15/09 17:40	30,4500P-E	NM
Sulfate	63		mg/l	20	2	04/15/09 10:30	04/15/09 10:30	1,9038	SD
Total Organic Carbon	1.6		mg/l	1.0	2	-	04/20/09 05:37	1,9060	DW



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

### SAMPLE RESULTS

**Lab ID:** L0904586-04  
**Client ID:** MW-267M-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/14/09 12:10  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	81		mg CaCO3/L	2.0	1	-	04/16/09 10:13	30,2320B	SD
Chloride	15		mg/l	1.0	1	-	04/15/09 18:55	1,9251	DD
Nitrogen, Nitrate	ND		mg/l	0.50	5	-	04/15/09 00:43	30,4500NO3-F	DD
Phosphorus, Total	0.499		mg/l	0.050	5	-	04/15/09 17:41	30,4500P-E	NM
Sulfate	57		mg/l	20	2	04/15/09 10:30	04/15/09 10:30	1,9038	SD
Total Organic Carbon	1.1		mg/l	0.50	1	-	04/20/09 05:37	1,9060	DW





**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

### SAMPLE RESULTS

**Lab ID:** L0904586-05  
**Client ID:** MW-268M-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/14/09 09:20  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	81		mg CaCO3/L	2.0	1	-	04/16/09 10:13	30,2320B	SD
Chloride	19		mg/l	1.0	1	-	04/15/09 18:56	1,9251	DD
Nitrogen, Nitrate	ND		mg/l	0.50	5	-	04/15/09 00:47	30,4500NO3-F	DD
Phosphorus, Total	1.02		mg/l	0.050	5	-	04/15/09 17:41	30,4500P-E	NM
Sulfate	59		mg/l	20	2	04/15/09 10:30	04/15/09 10:30	1,9038	SD
Total Organic Carbon	1.7		mg/l	0.50	1	-	04/20/09 05:37	1,9060	DW



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

### SAMPLE RESULTS

**Lab ID:** L0904586-06  
**Client ID:** MW-552-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/14/09 11:45  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	68		mg CaCO3/L	2.0	1	-	04/16/09 10:13	30,2320B	SD
Chloride	6.4		mg/l	1.0	1	-	04/15/09 18:56	1,9251	DD
Nitrogen, Nitrate	ND		mg/l	0.10	1	-	04/15/09 00:15	30,4500NO3-F	DD
Phosphorus, Total	0.031		mg/l	0.010	1	-	04/15/09 17:42	30,4500P-E	NM
Sulfate	33		mg/l	10	1	04/15/09 10:30	04/15/09 10:30	1,9038	SD
Total Organic Carbon	1.4		mg/l	0.50	1	-	04/20/09 05:37	1,9060	DW



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

### SAMPLE RESULTS

**Lab ID:** L0904586-10  
**Client ID:** MW-266MB-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/14/09 15:15  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	92		mg CaCO3/L	2.0	1	-	04/16/09 10:13	30,2320B	SD
Chloride	7.5		mg/l	1.0	1	-	04/15/09 18:57	1,9251	DD
Nitrogen, Nitrate	ND		mg/l	1.0	10	-	04/15/09 00:48	30,4500NO3-F	DD
Phosphorus, Total	0.055		mg/l	0.010	1	-	04/15/09 17:42	30,4500P-E	NM
Sulfate	31		mg/l	10	1	04/15/09 10:30	04/15/09 10:30	1,9038	SD
Total Organic Carbon	1.0		mg/l	0.50	1	-	04/20/09 05:37	1,9060	DW



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

### SAMPLE RESULTS

**Lab ID:** L0904586-11  
**Client ID:** MW-266MA-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/14/09 16:40  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	28		mg CaCO3/L	2.0	1	-	04/16/09 10:13	30,2320B	SD
Chloride	76		mg/l	1.0	1	-	04/15/09 18:57	1,9251	DD
Nitrogen, Nitrate	ND		mg/l	0.50	5	-	04/15/09 00:50	30,4500NO3-F	DD
Phosphorus, Total	0.101		mg/l	0.010	1	-	04/18/09 14:34	30,4500P-E	ST
Sulfate	26		mg/l	10	1	04/15/09 10:30	04/15/09 10:30	1,9038	SD
Total Organic Carbon	0.56		mg/l	0.50	1	-	04/20/09 05:37	1,9060	DW



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

### SAMPLE RESULTS

**Lab ID:** L0904586-13  
**Client ID:** MW-551-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water

**Date Collected:** 04/14/09 14:00  
**Date Received:** 04/14/09  
**Field Prep:** Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>									
Alkalinity, Total	44		mg CaCO3/L	2.0	1	-	04/16/09 10:13	30,2320B	SD
Chloride	7.9		mg/l	1.0	1	-	04/15/09 18:58	1,9251	DD
Nitrogen, Nitrate	ND		mg/l	0.10	1	-	04/15/09 00:58	30,4500NO3-F	DD
Phosphorus, Total	0.320		mg/l	0.010	1	-	04/18/09 14:34	30,4500P-E	ST
Sulfate	36		mg/l	20	2	04/15/09 10:30	04/15/09 10:30	1,9038	SD
Total Organic Carbon	0.53		mg/l	0.50	1	-	04/20/09 05:37	1,9060	DW



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

**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): 01-06,10-11,13 Batch: WG358885-2								
Nitrogen, Nitrate	ND	mg/l	0.10	1	-	04/14/09 23:39	30,4500NO3-F	DD
General Chemistry - Westborough Lab for sample(s): 01-06,10 Batch: WG358958-1								
Phosphorus, Total	ND	mg/l	0.010	1	-	04/15/09 17:31	30,4500P-E	NM
General Chemistry - Westborough Lab for sample(s): 01-06,10-11,13 Batch: WG358981-4								
Chloride	ND	mg/l	1.0	1	-	04/15/09 18:38	1,9251	DD
General Chemistry - Westborough Lab for sample(s): 01-06,10-11,13 Batch: WG358991-1								
Sulfate	ND	mg/l	10	1	04/15/09 10:30	04/15/09 10:30	1,9038	SD
General Chemistry - Westborough Lab for sample(s): 01-06,10-11,13 Batch: WG359173-1								
Alkalinity, Total	ND	mg CaCO3/L	2.0	1	-	04/16/09 10:13	30,2320B	SD
General Chemistry - Westborough Lab for sample(s): 11,13 Batch: WG359381-1								
Phosphorus, Total	ND	mg/l	0.010	1	-	04/18/09 14:28	30,4500P-E	ST
General Chemistry - Westborough Lab for sample(s): 01-06,10-11,13 Batch: WG359491-1								
Total Organic Carbon	ND	mg/l	0.50	1	-	04/20/09 05:37	1,9060	DW

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0095922

**Lab Number:** L0904586

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06,10-11,13 Batch: WG358885-1					
Nitrogen, Nitrate	98	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01-06,10 Batch: WG358958-2					
Phosphorus, Total	107	-	85-115	-	
General Chemistry - Westborough Lab Associated sample(s): 01-06,10-11,13 Batch: WG358981-1					
Chloride	100	-	90-110	-	
General Chemistry - Westborough Lab Associated sample(s): 01-06,10-11,13 Batch: WG358991-2					
Sulfate	110	-	90-115	-	
General Chemistry - Westborough Lab Associated sample(s): 01-06,10-11,13 Batch: WG359173-2					
Alkalinity, Total	107	-	80-115	-	4
General Chemistry - Westborough Lab Associated sample(s): 11,13 Batch: WG359381-2					
Phosphorus, Total	108	-	85-115	-	
General Chemistry - Westborough Lab Associated sample(s): 01-06,10-11,13 Batch: WG359491-2					
Total Organic Carbon	101	-	90-110	-	

## Matrix Spike Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904586

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	Native Sample	MS Added	MS Found	MS		MSD		Recovery Limits	RPD	RPD Limits
				%Recovery	MSD Found	%Recovery				
General Chemistry - Westborough Lab Associated sample(s): 01-06,10-11,13 QC Batch ID: WG358885-3 QC Sample: L0904586-04 Client ID: MW-267M-20090414-01										
Nitrogen, Nitrate	ND	4	3.6	90	-	-	83-120	-	6	
General Chemistry - Westborough Lab Associated sample(s): 01-06,10 QC Batch ID: WG358958-4 QC Sample: L0904518-01 Client ID: MS Sample										
Phosphorus, Total	0.019	0.5	0.522	101	-	-	80-120	-	20	
General Chemistry - Westborough Lab Associated sample(s): 01-06,10-11,13 QC Batch ID: WG358981-2 QC Sample: L0904518-03 Client ID: MS Sample										
Chloride	17	20	36	95	-	-	58-140	-	7	
General Chemistry - Westborough Lab Associated sample(s): 01-06,10-11,13 QC Batch ID: WG358991-3 QC Sample: L0904518-03 Client ID: MS Sample										
Sulfate	12	20	37	125	-	-	55-147	-	14	
General Chemistry - Westborough Lab Associated sample(s): 01-06,10-11,13 QC Batch ID: WG359173-3 QC Sample: L0904588-01 Client ID: MS Sample										
Alkalinity, Total	5.3	100	100	99	-	-	86-116	-	4	
General Chemistry - Westborough Lab Associated sample(s): 11,13 QC Batch ID: WG359381-3 QC Sample: L0904664-01 Client ID: MS Sample										
Phosphorus, Total	0.352	0.5	0.864	102	-	-	80-120	-	20	
General Chemistry - Westborough Lab Associated sample(s): 01-06,10-11,13 QC Batch ID: WG359491-3 QC Sample: L0904518-03 Client ID: MS Sample										
Total Organic Carbon	31	40	69	96	-	-	80-120	-	20	



## Lab Duplicate Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0095922

**Lab Number:** L0904586

**Report Date:** 05/04/09

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06,10-11,13 QC Batch ID: WG358885-4 QC Sample: L0904586-04 Client ID: MW-267M-20090414-01					
Nitrogen, Nitrate	ND	ND	mg/l	NC	6
General Chemistry - Westborough Lab Associated sample(s): 01-06,10 QC Batch ID: WG358958-3 QC Sample: L0904518-01 Client ID: DUP Sample					
Phosphorus, Total	0.019	0.021	mg/l	10	20
General Chemistry - Westborough Lab Associated sample(s): 01-06,10-11,13 QC Batch ID: WG358981-3 QC Sample: L0904518-03 Client ID: DUP Sample					
Chloride	17	16	mg/l	6	7
General Chemistry - Westborough Lab Associated sample(s): 01-06,10-11,13 QC Batch ID: WG358991-4 QC Sample: L0904518-03 Client ID: DUP Sample					
Sulfate	12	12	mg/l	0	14
General Chemistry - Westborough Lab Associated sample(s): 01-06,10-11,13 QC Batch ID: WG359173-4 QC Sample: L0904586-10 Client ID: MW-266MB-20090414-01					
Alkalinity, Total	92	92	mg CaCO3/L	0	4
General Chemistry - Westborough Lab Associated sample(s): 11,13 QC Batch ID: WG359381-4 QC Sample: L0904664-01 Client ID: DUP Sample					
Phosphorus, Total	0.352	0.348	mg/l	1	20
General Chemistry - Westborough Lab Associated sample(s): 01-06,10-11,13 QC Batch ID: WG359491-4 QC Sample: L0904518-03 Client ID: DUP Sample					
Total Organic Carbon	31	31	mg/l	0	20

Project Name: RAYTHEON WAYLAND

Lab Number: L0904586

Project Number: 0095922

Report Date: 05/04/09

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

## Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904586-01A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-01B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-01C	Plastic 250ml unpreserved	A	7	2	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904586-01D	Plastic 250ml H2SO4 preserved	A	<2	2	Y	Absent	TPHOS-4500(28)
L0904586-01E	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)
L0904586-01F	Plastic 250ml unpreserved	A	7	2	Y	Absent	ALK-T-2320(14)
L0904586-01G	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L0904586-01H	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L0904586-02A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-02B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-02C	Plastic 250ml unpreserved	A	7	2	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904586-02D	Plastic 250ml H2SO4 preserved	A	<2	2	Y	Absent	TPHOS-4500(28)
L0904586-02E	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)
L0904586-02F	Plastic 250ml unpreserved	A	7	2	Y	Absent	ALK-T-2320(14)
L0904586-02G	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L0904586-02H	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L0904586-03A	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-03B	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-03C	Plastic 250ml unpreserved	B	7	2	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904586-03D	Plastic 250ml H2SO4 preserved	B	<2	2	Y	Absent	TPHOS-4500(28)
L0904586-03E	Plastic 250ml HNO3 preserved	B	<2	2	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)
L0904586-03F	Plastic 250ml unpreserved	B	7	2	Y	Absent	ALK-T-2320(14)
L0904586-03G	Vial H2SO4 preserved	B	N/A	2	Y	Absent	TOC-9060(28)
L0904586-03H	Vial H2SO4 preserved	B	N/A	2	Y	Absent	TOC-9060(28)
L0904586-03X	Amber 1000ml unpreserved	B	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904586-03Y	Amber 1000ml unpreserved	B	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)

\*Hold days indicated by values in parentheses

Project Name: RAYTHEON WAYLAND

Project Number: 0095922

Lab Number: L0904586

Report Date: 05/04/09

## Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904586-04A	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-04B	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-04C	Plastic 250ml unpreserved	B	7	2	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904586-04D	Plastic 250ml H2SO4 preserved	B	<2	2	Y	Absent	TPHOS-4500(28)
L0904586-04E	Plastic 250ml HNO3 preserved	B	<2	2	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)
L0904586-04F	Plastic 250ml unpreserved	B	7	2	Y	Absent	ALK-T-2320(14)
L0904586-04G	Vial H2SO4 preserved	B	N/A	2	Y	Absent	TOC-9060(28)
L0904586-04H	Vial H2SO4 preserved	B	N/A	2	Y	Absent	TOC-9060(28)
L0904586-04X	Amber 1000ml unpreserved	B	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904586-04Y	Amber 1000ml unpreserved	B	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904586-05A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-05B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-05C	Plastic 250ml unpreserved	A	7	2	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904586-05D	Plastic 250ml H2SO4 preserved	A	<2	2	Y	Absent	TPHOS-4500(28)
L0904586-05E	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)
L0904586-05F	Plastic 250ml unpreserved	A	7	2	Y	Absent	ALK-T-2320(14)
L0904586-05G	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L0904586-05H	Vial H2SO4 preserved	A	N/A	2	Y	Absent	TOC-9060(28)
L0904586-05M	Vial other preserved	A	N/A	2	Y	Absent	-
L0904586-05N	Vial other preserved	A	N/A	2	Y	Absent	-
L0904586-05X	Amber 1000ml unpreserved	A	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904586-05Y	Amber 1000ml unpreserved	A	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904586-06A	Vial HCl preserved	C	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-06B	Vial HCl preserved	C	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-06C	Plastic 250ml unpreserved	C	7	2	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904586-06D	Plastic 250ml H2SO4 preserved	C	<2	2	Y	Absent	TPHOS-4500(28)
L0904586-06E	Plastic 250ml HNO3 preserved	C	<2	2	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)
L0904586-06F	Plastic 250ml unpreserved	C	7	2	Y	Absent	ALK-T-2320(14)
L0904586-06G	Vial H2SO4 preserved	C	N/A	2	Y	Absent	TOC-9060(28)
L0904586-06H	Vial H2SO4 preserved	C	N/A	2	Y	Absent	TOC-9060(28)
L0904586-06M	Vial other preserved	C	N/A	2	Y	Absent	-
L0904586-06N	Vial other preserved	C	N/A	2	Y	Absent	-
L0904586-06X	Amber 1000ml unpreserved	C	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904586-06Y	Amber 1000ml unpreserved	C	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)

\*Hold days indicated by values in parentheses

Project Name: RAYTHEON WAYLAND

Project Number: 0095922

Lab Number: L0904586

Report Date: 05/04/09

## Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904586-07A	Amber 1000ml unpreserved	B	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904586-07B	Amber 1000ml unpreserved	B	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904586-08A	Vial HCl preserved	C	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-08B	Vial HCl preserved	C	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-08C	Amber 1000ml unpreserved	C	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904586-08D	Amber 1000ml unpreserved	C	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904586-09A	Vial HCl preserved	C	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-09B	Vial HCl preserved	C	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-09C	Amber 1000ml unpreserved	C	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904586-09D	Amber 1000ml unpreserved	C	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904586-10A	Vial HCl preserved	C	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-10B	Vial HCl preserved	C	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-10C	Plastic 250ml unpreserved	C	7	2	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904586-10D	Plastic 250ml H2SO4 preserved	C	<2	2	Y	Absent	TPHOS-4500(28)
L0904586-10E	Plastic 250ml HNO3 preserved	C	<2	2	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)
L0904586-10F	Plastic 250ml unpreserved	C	7	2	Y	Absent	ALK-T-2320(14)
L0904586-10G	Vial H2SO4 preserved	C	N/A	2	Y	Absent	TOC-9060(28)
L0904586-10H	Vial H2SO4 preserved	C	N/A	2	Y	Absent	TOC-9060(28)
L0904586-10W	Vial HCl preserved	C	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-10X	Vial HCl preserved	C	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-10Y	Vial HCl preserved	C	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-10Z	Vial HCl preserved	C	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-11A	Vial HCl preserved	C	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-11B	Vial HCl preserved	C	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-11C	Plastic 250ml unpreserved	C	7	2	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904586-11D	Plastic 250ml H2SO4 preserved	C	<2	2	Y	Absent	TPHOS-4500(28)
L0904586-11E	Plastic 250ml HNO3 preserved	C	<2	2	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)
L0904586-11F	Plastic 250ml unpreserved	C	7	2	Y	Absent	ALK-T-2320(14)
L0904586-11G	Vial H2SO4 preserved	C	N/A	2	Y	Absent	TOC-9060(28)
L0904586-11H	Vial H2SO4 preserved	C	N/A	2	Y	Absent	TOC-9060(28)
L0904586-11X	Amber 1000ml unpreserved	C	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904586-11Y	Amber 1000ml unpreserved	C	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904586-12A	Vial HCl preserved	C	N/A	2	Y	Absent	-
L0904586-12B	Vial HCl preserved	C	N/A	2	Y	Absent	-

\*Hold days indicated by values in parentheses

Project Name: RAYTHEON WAYLAND

Project Number: 0095922

Lab Number: L0904586

Report Date: 05/04/09

**Container Information**

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904586-13A	Vial HCl preserved	C	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-13B	Vial HCl preserved	B	N/A	2	Y	Absent	MCP-8260-04(14)
L0904586-13C	Plastic 250ml unpreserved	B	7	2	Y	Absent	CL-9251(28),SO4-9038(28),NO3-4500(2)
L0904586-13D	Plastic 250ml H2SO4 preserved	B	<2	2	Y	Absent	TPHOS-4500(28)
L0904586-13E	Plastic 250ml HNO3 preserved	B	<2	2	Y	Absent	MCP-FE-6010S(180),MCP-MN-6010S(180)
L0904586-13F	Plastic 250ml unpreserved	B	7	2	Y	Absent	ALK-T-2320(14)
L0904586-13G	Vial H2SO4 preserved	B	N/A	2	Y	Absent	TOC-9060(28)
L0904586-13H	Vial H2SO4 preserved	B	N/A	2	Y	Absent	TOC-9060(28)
L0904586-13M	Vial other preserved	B	N/A	2	Y	Absent	-
L0904586-13N	Vial other preserved	B	N/A	2	Y	Absent	-

\*Hold days indicated by values in parentheses

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

## GLOSSARY

### Acronyms

- EPA** - Environmental Protection Agency.
- LCS** - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD** - Laboratory Control Sample Duplicate: Refer to LCS.
- MS** - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD** - Matrix Spike Sample Duplicate: Refer to MS.
- NA** - Not Applicable.
- NC** - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
- ND** - Not detected at the reported detection limit for the sample.
- 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

- \*** - The batch duplicate RPD exceeds the acceptance criteria. This flag is not applicable when the sample concentrations are less than 5x the RDL. (Metals only.)
- 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.
- 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.
- N** - The matrix spike recovery exceeds the acceptance criteria. This flag is not applicable when the sample concentration is greater than 4x the spike added. (Metals only.)
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- 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).

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904586  
**Report Date:** 05/04/09

## REFERENCES

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

## LIMITATION OF LIABILITIES

Alpha 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 February 18, 2009 - 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.

*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.)

*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), 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: MA0086.

*Drinking Water* (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 150.1, 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, Nitrite-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, EPA 150.1, SM4500H-B.

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

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), SM6251B, 314.0.

#### *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, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Nitrate-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, 4500CN-CE, 2540D, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1

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

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCB-Water) 600/4-81-045-PCB-Oil



**Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.***Drinking Water*

Microbiology Parameters: SM9215B; MF-SM9222B; ENZ. SUB. SM9223; EC-SM9221E; MF-SM9222D; ENZ. SUB. SM9223;

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

*Drinking Water (Inorganic Parameters:* SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 110.2, 120.1, 150.1, 300.0, 325.2, 314.0, SM4500CN-E, 4500H+B, 4500NO<sub>3</sub>-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, 150.1, 300.0, 305.1, 310.1, 325.2, 340.2, 350.1, 350.2, 351.1, 353.2, 354.1, 365.2, 375.4, 376.2, 405.1, 415.1, 420.1, 425.1, 1664A, SW-846 9010, 9030, 9040B, EPA 160.1, 160.2, 160.3, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH<sub>3</sub>-H, 4500NH<sub>3</sub>-E, 4500NO<sub>2</sub>-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.**

*Drinking Water (Inorganic Parameters:* SM9222B, 9221E, 9223B, 9215B, 4500NO<sub>3</sub>-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, 331.0, 110.2, SM2120B, 2510B, 5310C, EPA 150.1, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

*Non-Potable Water (Inorganic Parameters:* SM5210B, EPA 410.1, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO<sub>3</sub>-F, 4500NO<sub>2</sub>-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, 4500NH<sub>3</sub>-H, EPA 350.2/1, 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.)

*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, 3540C, 3545, 3550B, 3580A, 5035L, 5035H.)

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

*Drinking Water (Inorganic Parameters:* SM9223B, 9222B, 8215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 331.0, SM2320B, EPA 300.0, 325.2, 110.2, SM2120B, 4500CN-E, 4500F-C, EPA 150.1, SM4500H-B, 4500NO<sub>3</sub>-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1, SM6251B.)

*Non-Potable Water (Inorganic Parameters:* SM9221E, 9222D, 9221B, 9222B, 9215B, EPA 405.1, SM5210B, EPA 410.4, SM5220D, EPA 305.1, SM2310B-4a, EPA 310.1, SM2320B, EPA 200.7, 300.0, 325.2, LACHAT 10-117-07-1A or B, SM4500CI-E, EPA 340.2, SM4500F-C, EPA 375.4, SM15 426C, EPA 350.1, 350.2, LACHAT 10-107-06-1-B, SM4500NH<sub>3</sub>-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO<sub>3</sub>F, EPA 354.1, SM4500-NO<sub>2</sub>-B, EPA 365.2, SM4500P-E, EPA 160.3, SM2540B, EPA 160.1, SM2540C, EPA 160.2, SM2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, 110.2, SM2120B, 335.2, LACHAT 10-204-00-1-A, EPA 150.1, 9040B, SM4500-HB, EPA 1664A, EPA 415.1, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, EPA 376.2, SM4500S-D, EPA 425.1, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, 8021B, EPA 3510C, 5030B, 9010B, 9030B.)

*Solid & Hazardous Waste (Inorganic Parameters:* EPA 9040B, 9045C, 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 3005A, 3050B, 3051, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 8021B, 3540C, 3545, 3580, 5030B, 5035.)

*Analytical Services Protocol:* CLP Volatile Organics, CLP Inorganics, CLP PCB/Pesticides.

**Rhode Island Department of Health Certificate/Lab ID: LAO00065.**

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

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

**Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. Registered Laboratory.**

## Certificate/Approval Program Summary

Last revised February 18, 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, Chloride, Fluoride, Sulfate, Sulfite, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, 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 Dissolved Solids, Total Suspended Solids (non-filterable), Total Cyanide, Bromide. 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, Ignitability, Corrosivity, TCLP 1311, Reactivity. 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.

*Non-Potable Water* (Inorganic Parameters: SM2320B, 4500NH3-F, EPA 120.1, SM2510B, 2340B, EPA 245.1, EPA 365.2, EPA 150.1, 160.1, SM2540C, EPA 160.2, SM2540D, EPA 335.2, 420.1, SM2540G, EPA 180.1. Organic Parameters: EPA 624, 625, 608.)

*Solid & Chemical Materials* (Inorganic Parameters: 6020, 9050, 7470, 7471, 9045, EPA 7.3.3.2, EPA 7.3.4.2, 9014, 9065. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

*Air & Emissions* (EPA TO-15.)

### **Louisiana Department of Environmental Quality** Certificate/Lab ID: 03090.

*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.

*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.

*Non-Potable Water* (Inorganic Parameters: SW-846 3010, 3020A, 3015, 6020, SM2320B, EPA 200.8, SM2540C, 2540D, 2540G, EPA 120.1, SM2510B, EPA 180.1, 245.1, 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, 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)

**New York Department of Health** Certificate/Lab ID: 11627.

*Non-Potable Water* (Inorganic Parameters: EPA 310.1, SM2320B, EPA 365.2, 160.1, SM2540C, 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.)

*Air & Emissions* (EPA TO-15.)

**Rhode Island Department of Health** Certificate/Lab ID: LAO00299.

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.

*Solid & Chemical Materials* (Inorganic Parameters: EPA 6020, 7471. Organic Parameters: EPA 8015, 8270.)

**Pennsylvania Department of Environmental Protection** Certificate/Lab ID: 68-02089. Registered Laboratory.

**U.S. Army Corps of Engineers**



# CHAIN OF CUSTODY

PAGE 1 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: **ERM**  
Address: **399 Boylston St. Boston MA 6th Floor**  
Phone: **(617) 646-7800**  
Fax: **(617) 267-6447**  
Email: **balmar.frost@erm.com**

Project Name: **Raytheon Weyland**  
Project Location: **Weyland, MA**  
Project #: **0095942**  
Project Manager: **Jason Flattery**  
ALPHA Quote #:  
Turn-Around Time  
 Standard  RUSH (only confirmed if pre-approved)  
Date Due: **4/21/09** Time:

Other Project Specific Requirements/Comments/Detection Limits:  
**Please collect MW-269Ma from 4/13/09 CAC + report and use today's sample. Thanks!**

Data Rec'd In Lab: **4/14/09** ALPHA Job #: **109091580**  
Report Information - Data Deliverables  
 FAX  EMAIL  
 INDEX  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 Are CT RCP (Reasonable Confidence Protocols) Required?

**ANALYSIS**  
8021B by 8260  
1,4 Dioxane  
Diss. Fe + Mn (Fe)  
T. Phos  
TOC  
Alkalinity  
Cl, NO<sub>3</sub>, SO<sub>4</sub>

**SAMPLE HANDLING**  
Filtration:  Done for Fe+Mn  
 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	Container Type	Preservative	Date/Time	Received By	Date/Time	Sample Specific Comments
		Date	Time								
09586	EW-5	4/14/09	10:35	GW	EW	V	A	4/14/09 16:55	Don Lewis	4/14/09 16:55	
	IW-8-20090414-01		12:50		EW	2	1				
	MW-269S-20090414-01		10:05		SPD	2	1				
	MW-267M-20090414-01		12:10		SPD	2	1				
	MW-268M-20090414-01		09:20		HEA	2	1				
	MW-552-20090414-01		11:45		HEA	2	1				
	MW-269Ma-20090414-01		15:20		EW	2	1				
	DUP-009-20090414-01		24:00		HEA	2	2				
	DUP-008-20090414-01		24:00		HEA	2	2				
	MW-266M-20090414-01		15:15		SPD	2	1				

**PLEASE ANSWER QUESTIONS ABOVE!**

IS YOUR PROJECT  
MAMCP or CT RCP?

FORM NO. 01-01 (Rev. 14-OCT-07)

Relinquished By: **Emily Vega** Date/Time: **4/14/09 16:55**  
Received By: **Don Lewis** Date/Time: **4/14/09 16:55**  
Don Lewis

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.



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

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

# CHAIN OF CUSTODY

PAGE 2 OF 2

### Client Information

Client: **ERM**  
 Address: **399 Boylston St.  
 6th Floor Boston, MA**  
 Phone: **(617) 646-7800**  
 Fax: **(617) 267-6447**  
 Email: **balmar.frost@erm.com**

Project Name: **Raytheon Wayland**  
 Project Location: **Wayland, MA**  
 Project #: **0095922**  
 Project Manager: **Jason Flaherty**  
 ALPHA Quote #:  
 Turn-Around Time  
 Standard  RUSH (only confirmed if pre-approved)  
 Date Due: **4/11/09** Time:

Other Project Specific Requirements/Comments/Detection Limits:

Date Rec'd in Lab: **4/12/09** ALPHA Job #: **10904586**  
 Report Information - Data Deliverables  
 FAX  EMAIL  
 XADEx  Add'l Deliverables  
 Regulatory Requirements/Report Limits  
 State/Fed Program **MA MCP** Criteria **GW4**  
**MA MCP PRESUMPTIVE CERTAINTY - CT REASONABLE CONFIDENCE PROTO.**  
 Billing Information  
 Same as Client info PO #:

**ANALYSIS**  
 8021 B by 8260  
 1,4 Dioxane  
 Diss, Fct+Mn (FE)  
 Total Phos.  
 TOC  
 Alkalinity  
 NO<sub>3</sub>, SO<sub>4</sub>, Cl

**SAMPLE HANDLING**  
 Filtration  
 Done for Fe+Mn  
 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	Container Type	Preservative	Date/Time	Received By	Date/Time	Sample Specific Comments
		Date	Time								
D4586.11	MW-246-M6-20090414-01	4/11/09	1640	GW	JPD	V	A	4/11/09 1635	Don Barber	4/11/09 1655	
10	MW-246-M6-20090414-01-TMS		1515			V	A				
10	MW-246-M6-20090414-01-TMSD		1515			V	A				
12	MW-TP-3-20090414-01	4/11/09	1700		HEA	V	A				
13	MW-551-20090414-01		1400		HEA	V	A				

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
 MAMCP or CT RCP?

Relinquished By: **Don Barber** Date/Time: **4/11/09 1635**  
 Received By: **Don Barber** Date/Time: **4/11/09 1655**

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:	L0904807
Client:	ERM Consulting & Engineering, Inc. 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Project Name:	RAYTHEON
Project Number:	0095922
Report Date:	04/27/09

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  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L0904807-01	MW-214-20090417-01	WAYLAND, MA	04/17/09 08:05
L0904807-02	MW-403-20090417-01	WAYLAND, MA	04/17/09 08:50
L0904807-03	MW-102-20090417-01	WAYLAND, MA	04/17/09 09:30
L0904807-04	MW-101-20090417-01	WAYLAND, MA	04/17/09 10:00
L0904807-05	MW-203M-20090417-01	WAYLAND, MA	04/17/09 08:55
L0904807-06	DUP-005-20090417	WAYLAND, MA	04/17/09 11:11
L0904807-07	MW-203S-20090417-01	WAYLAND, MA	04/17/09 10:20
L0904807-08	TB-003-20090417-01	WAYLAND, MA	04/17/09 00:00
L0904807-09	MW-46M-20090417-01	WAYLAND, MA	04/17/09 10:50
L0904807-10	DUP-017-20090417-01	WAYLAND, MA	04/17/09 12:00
L0904807-11	MW-201D-20090417-01	WAYLAND, MA	04/17/09 11:55
L0904807-12	MW-208S-20090417-01	WAYLAND, MA	04/17/09 09:55
L0904807-13	MW-208M-20090417-01	WAYLAND, MA	04/17/09 10:20
L0904807-14	MW-208D-20090417-01	WAYLAND, MA	04/17/09 09:00
L0904807-15	MW-202S-20090417-01	WAYLAND, MA	04/17/09 12:10
L0904807-16	MW-202M-20090417-01	WAYLAND, MA	04/17/09 10:55
L0904807-17	DUP-007-20090417-01	WAYLAND, MA	04/17/09 12:00
L0904807-18	TB-004-20090417-01	WAYLAND, MA	04/17/09 00:00

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

### MADEP MCP Response Action Analytical Report Certification

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

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

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





**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

### 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.

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

In reference to question C:

L0904807-10, -13, -16: The pH of the samples was determined to be greater than two for the Volatile Organics analysis. Samples that have a pH of greater than two should be analyzed within 7 days of collection; therefore, the Aromatic Compounds were analyzed with the method required holding time exceeded.

#### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

### Case Narrative (continued)

#### Volatile Organics

L0904807-02 has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L0904807-03, -05: The pH of the samples was greater than two; however, the samples were analyzed within the method required holding time.

In reference to question E:

The WG360092-1/-2 LCS/LCSD recoveries associated with L0904807-03, -04, -06, and -07 were above the acceptance criteria for Bromoform (135%/133%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported; however, all positive detects are considered to have a potentially high bias for this compound.

The WG360221-1/-2 LCS/LCSD recoveries associated with L0904807-05 were above the acceptance criteria for Bromoform (135%/133%); however, it has been identified as a "difficult" analyte. The results of the associated sample are reported; however, all positive detects are considered to have a potentially high bias for this compound.

The WG360221-7 MS recovery was above the acceptance criteria for Bromoform (138%). No further action was required.

The WG360221-7/-8 MS/MSD recoveries were outside the acceptance criteria for several compounds; however, the associated LCS/LCSD recoveries were within criteria. The results of the sample utilized for the MS/MSD are considered to have a potentially high bias for Tetrachloroethene (145%/139%), trans-1,2-Dichloroethene (134%/137%) and a potentially low bias for cis-1,3-Dichloropropene (MSD at 63%).

The WG360228-1/-2 LCS/LCSD recoveries associated with L0904807-02, -08, and -09 are below the acceptance criteria for Dichlorodifluoromethane (43%/41%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported; however, all results are considered to have a potentially low bias for this compound.

The WG360253-1/-2 LCS/LCSD recoveries associated with L0904807-17 and -18 are above the acceptance criteria for Bromoform (135%/138%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported; however, all positive detects are considered to have a potentially high bias for this compound.

**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

**Case Narrative (continued)**

In reference to question F:

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

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

Authorized Signature:



Title: Technical Director/Representative

Date: 04/27/09

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

**Lab ID:** L0904807-01  
**Client ID:** MW-214-20090417-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/25/09 12:54  
**Analyst:** MM

**Date Collected:** 04/17/09 08:05  
**Date Received:** 04/17/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	0.83		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	23		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.4		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-01

Date Collected: 04/17/09 08:05

Client ID: MW-214-20090417-01

Date Received: 04/17/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	108		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

## SAMPLE RESULTS

Lab ID: L0904807-02  
 Client ID: MW-403-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 04/24/09 20:40  
 Analyst: MM

Date Collected: 04/17/09 08:50  
 Date Received: 04/17/09  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	10	2
1,1-Dichloroethane	ND		ug/l	1.5	2
Chloroform	ND		ug/l	1.5	2
Carbon tetrachloride	ND		ug/l	1.0	2
1,2-Dichloropropane	ND		ug/l	3.5	2
Dibromochloromethane	ND		ug/l	1.0	2
1,1,2-Trichloroethane	ND		ug/l	1.5	2
Tetrachloroethene	4.1		ug/l	1.0	2
Chlorobenzene	ND		ug/l	1.0	2
1,2-Dichloroethane	ND		ug/l	1.0	2
1,1,1-Trichloroethane	ND		ug/l	1.0	2
Bromodichloromethane	ND		ug/l	1.0	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	2
Bromoform	ND		ug/l	4.0	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	2
Chloromethane	ND		ug/l	5.0	2
Vinyl chloride	ND		ug/l	2.0	2
Chloroethane	ND		ug/l	2.0	2
1,1-Dichloroethene	1.1		ug/l	1.0	2
trans-1,2-Dichloroethene	ND		ug/l	1.5	2
Trichloroethene	110		ug/l	1.0	2
1,2-Dichlorobenzene	ND		ug/l	5.0	2
1,3-Dichlorobenzene	ND		ug/l	5.0	2
1,4-Dichlorobenzene	ND		ug/l	5.0	2
cis-1,2-Dichloroethene	5.0		ug/l	1.0	2
Dichlorodifluoromethane	ND		ug/l	10	2
1,2-Dibromoethane	ND		ug/l	4.0	2
1,3-Dichloropropane	ND		ug/l	5.0	2
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	2



**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-02  
 Client ID: MW-403-20090417-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/17/09 08:50  
 Date Received: 04/17/09  
 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
p-Chlorotoluene	ND		ug/l	5.0	2
Hexachlorobutadiene	ND		ug/l	1.2	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

**Lab ID:** L0904807-03  
**Client ID:** MW-102-20090417-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/24/09 18:25  
**Analyst:** GK

**Date Collected:** 04/17/09 09:30  
**Date Received:** 04/17/09  
**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	1.4		ug/l	0.75	1
Chloroform	1.1		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	5.4		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-03  
 Client ID: MW-102-20090417-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/17/09 09:30  
 Date Received: 04/17/09  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	114		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	109		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

## SAMPLE RESULTS

Lab ID: L0904807-04  
 Client ID: MW-101-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 04/24/09 18:58  
 Analyst: GK

Date Collected: 04/17/09 10:00  
 Date Received: 04/17/09  
 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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.83		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-04  
 Client ID: MW-101-20090417-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/17/09 10:00  
 Date Received: 04/17/09  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	117		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

## SAMPLE RESULTS

Lab ID: L0904807-05  
 Client ID: MW-203M-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 04/24/09 19:30  
 Analyst: GK

Date Collected: 04/17/09 08:55  
 Date Received: 04/17/09  
 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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.82		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-05

Date Collected: 04/17/09 08:55

Client ID: MW-203M-20090417-01

Date Received: 04/17/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	113		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

## SAMPLE RESULTS

Lab ID: L0904807-06  
 Client ID: DUP-005-20090417  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 04/24/09 20:02  
 Analyst: GK

Date Collected: 04/17/09 11:11  
 Date Received: 04/17/09  
 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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	3.5		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-06  
 Client ID: DUP-005-20090417  
 Sample Location: WAYLAND, MA

Date Collected: 04/17/09 11:11  
 Date Received: 04/17/09  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	102		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

## SAMPLE RESULTS

Lab ID: L0904807-07  
 Client ID: MW-203S-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 04/24/09 20:35  
 Analyst: GK

Date Collected: 04/17/09 10:20  
 Date Received: 04/17/09  
 Field Prep: Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	2.8		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-07

Date Collected: 04/17/09 10:20

Client ID: MW-203S-20090417-01

Date Received: 04/17/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	106		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

## SAMPLE RESULTS

Lab ID: L0904807-08  
 Client ID: TB-003-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 04/24/09 21:18  
 Analyst: MM

Date Collected: 04/17/09 00:00  
 Date Received: 04/17/09  
 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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

## SAMPLE RESULTS

Lab ID: L0904807-08  
 Client ID: TB-003-20090417-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/17/09 00:00  
 Date Received: 04/17/09  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	88		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	121		70-130

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

**Lab ID:** L0904807-09  
**Client ID:** MW-46M-20090417-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/24/09 21:56  
**Analyst:** MM

**Date Collected:** 04/17/09 10:50  
**Date Received:** 04/17/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.51		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	1.5		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.0		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-09

Date Collected: 04/17/09 10:50

Client ID: MW-46M-20090417-01

Date Received: 04/17/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	87		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	116		70-130

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

**Lab ID:** L0904807-10  
**Client ID:** DUP-017-20090417-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/25/09 16:41  
**Analyst:** MM

**Date Collected:** 04/17/09 12:00  
**Date Received:** 04/17/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.59		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	1.0		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	1.3		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.1		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-10

Date Collected: 04/17/09 12:00

Client ID: DUP-017-20090417-01

Date Received: 04/17/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	112		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

## SAMPLE RESULTS

Lab ID: L0904807-11  
 Client ID: MW-201D-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 04/25/09 17:13  
 Analyst: MM

Date Collected: 04/17/09 11:55  
 Date Received: 04/17/09  
 Field Prep: Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	2.4		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-11

Date Collected: 04/17/09 11:55

Client ID: MW-201D-20090417-01

Date Received: 04/17/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	109		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

## SAMPLE RESULTS

Lab ID: L0904807-12  
 Client ID: MW-208S-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 04/25/09 17:45  
 Analyst: MM

Date Collected: 04/17/09 09:55  
 Date Received: 04/17/09  
 Field Prep: Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	3.7		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	3.1		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-12

Date Collected: 04/17/09 09:55

Client ID: MW-208S-20090417-01

Date Received: 04/17/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	105		70-130

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

**Lab ID:** L0904807-13  
**Client ID:** MW-208M-20090417-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/25/09 18:18  
**Analyst:** MM

**Date Collected:** 04/17/09 10:20  
**Date Received:** 04/17/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	0.91		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	15		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.3		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-13

Date Collected: 04/17/09 10:20

Client ID: MW-208M-20090417-01

Date Received: 04/17/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	89		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

## SAMPLE RESULTS

Lab ID: L0904807-14  
 Client ID: MW-208D-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 04/25/09 18:50  
 Analyst: MM

Date Collected: 04/17/09 09:00  
 Date Received: 04/17/09  
 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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	6.1		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-14

Date Collected: 04/17/09 09:00

Client ID: MW-208D-20090417-01

Date Received: 04/17/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	115		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

## SAMPLE RESULTS

Lab ID: L0904807-15  
 Client ID: MW-202S-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 04/25/09 19:23  
 Analyst: MM

Date Collected: 04/17/09 12:10  
 Date Received: 04/17/09  
 Field Prep: Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-15

Date Collected: 04/17/09 12:10

Client ID: MW-202S-20090417-01

Date Received: 04/17/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	111		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

## SAMPLE RESULTS

Lab ID: L0904807-16  
 Client ID: MW-202M-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 04/25/09 19:56  
 Analyst: MM

Date Collected: 04/17/09 10:55  
 Date Received: 04/17/09  
 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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	13		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	18		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-16

Date Collected: 04/17/09 10:55

Client ID: MW-202M-20090417-01

Date Received: 04/17/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	108		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

## SAMPLE RESULTS

Lab ID: L0904807-17  
 Client ID: DUP-007-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water  
 Analytical Method: 60,8260B  
 Analytical Date: 04/25/09 13:43  
 Analyst: MM

Date Collected: 04/17/09 12:00  
 Date Received: 04/17/09  
 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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	6.0		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-17

Date Collected: 04/17/09 12:00

Client ID: DUP-007-20090417-01

Date Received: 04/17/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	105		70-130

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

**Lab ID:** L0904807-18  
**Client ID:** TB-004-20090417-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/25/09 14:15  
**Analyst:** MM

**Date Collected:** 04/17/09 00:00  
**Date Received:** 04/17/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

Lab ID: L0904807-18  
 Client ID: TB-004-20090417-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/17/09 00:00  
 Date Received: 04/17/09  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	105		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/24/09 10:52  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 03-04,06-07 Batch: WG360092-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 04/24/09 10:52  
 Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 03-04,06-07 Batch: WG360092-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 04/24/09 10:52  
 Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 03-04,06-07 Batch: WG360092-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	108		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 04/24/09 10:52  
 Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 05 Batch: WG360221-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dichlorodifluoromethane	ND		ug/l	5.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
o-Chlorotoluene	ND		ug/l	2.5

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 04/24/09 10:52  
 Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 05 Batch: WG360221-3				
p-Chlorotoluene	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	108		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/24/09 12:26  
Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 02,08-09 Batch: WG360228-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dichlorodifluoromethane	ND		ug/l	5.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
o-Chlorotoluene	ND		ug/l	2.5

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 04/24/09 12:26  
 Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 02,08-09 Batch: WG360228-3				
p-Chlorotoluene	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	110		70-130



Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 04/25/09 09:57  
 Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 17-18 Batch: WG360253-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 04/25/09 09:57  
 Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 17-18 Batch: WG360253-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 04/25/09 09:57  
 Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 17-18 Batch: WG360253-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	113		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	104		70-130

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 04/25/09 10:13  
 Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01,10-16 Batch: WG360267-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 04/25/09 10:13  
 Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01,10-16 Batch: WG360267-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
 Analytical Date: 04/25/09 10:13  
 Analyst: MM

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01,10-16 Batch: WG360267-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	109		70-130

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03-04,06-07 Batch: WG360092-1 WG360092-2					
Methylene chloride	111	109	70-130	2	25
1,1-Dichloroethane	104	102	70-130	2	25
Chloroform	107	109	70-130	2	25
Carbon tetrachloride	108	108	70-130	0	25
1,2-Dichloropropane	98	97	70-130	1	25
Dibromochloromethane	120	114	70-130	5	25
1,1,2-Trichloroethane	108	106	70-130	2	25
Tetrachloroethene	129	125	70-130	3	25
Chlorobenzene	107	105	70-130	2	25
Trichlorofluoromethane	139	135	70-130	3	25
1,2-Dichloroethane	110	107	70-130	3	25
1,1,1-Trichloroethane	109	107	70-130	2	25
Bromodichloromethane	112	110	70-130	2	25
trans-1,3-Dichloropropene	105	101	70-130	4	25
cis-1,3-Dichloropropene	86	85	70-130	1	25
1,1-Dichloropropene	105	101	70-130	4	25
Bromoform	135	133	70-130	1	50
1,1,2,2-Tetrachloroethane	103	102	70-130	1	25
Benzene	99	97	70-130	2	25
Toluene	108	101	70-130	7	25
Ethylbenzene	109	107	70-130	2	25

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03-04,06-07 Batch: WG360092-1 WG360092-2					
Chloromethane	103	100	70-130	3	50
Bromomethane	77	80	70-130	4	50
Vinyl chloride	96	93	70-130	3	25
Chloroethane	105	103	70-130	2	25
1,1-Dichloroethene	109	105	70-130	4	25
trans-1,2-Dichloroethene	127	121	70-130	5	25
Trichloroethene	106	104	70-130	2	25
1,2-Dichlorobenzene	109	104	70-130	5	25
1,3-Dichlorobenzene	107	106	70-130	1	25
1,4-Dichlorobenzene	108	106	70-130	2	25
Methyl tert butyl ether	101	100	70-130	1	25
p/m-Xylene	104	104	70-130	0	25
o-Xylene	110	107	70-130	3	25
cis-1,2-Dichloroethene	101	99	70-130	2	25
Dibromomethane	103	100	70-130	3	25
1,2,3-Trichloropropane	113	107	70-130	5	25
Styrene	108	105	70-130	3	25
Dichlorodifluoromethane	110	106	70-130	4	50
Acetone	<b>142</b>	<b>152</b>	70-130	7	50
Carbon disulfide	100	96	70-130	4	50
2-Butanone	96	90	70-130	6	50



## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03-04,06-07 Batch: WG360092-1 WG360092-2					
4-Methyl-2-pentanone	93	88	70-130	6	50
2-Hexanone	84	84	70-130	0	50
Bromochloromethane	104	104	70-130	0	25
Tetrahydrofuran	99	88	70-130	12	25
2,2-Dichloropropane	96	91	70-130	5	50
1,2-Dibromoethane	112	108	70-130	4	25
1,3-Dichloropropane	110	107	70-130	3	25
1,1,1,2-Tetrachloroethane	113	110	70-130	3	25
Bromobenzene	112	113	70-130	1	25
n-Butylbenzene	103	103	70-130	0	25
sec-Butylbenzene	107	103	70-130	4	25
tert-Butylbenzene	105	101	70-130	4	25
o-Chlorotoluene	106	99	70-130	7	25
p-Chlorotoluene	106	104	70-130	2	25
1,2-Dibromo-3-chloropropane	95	95	70-130	0	50
Hexachlorobutadiene	116	118	70-130	2	25
Isopropylbenzene	107	103	70-130	4	25
p-Isopropyltoluene	109	105	70-130	4	25
Naphthalene	83	88	70-130	6	25
n-Propylbenzene	104	101	70-130	3	25
1,2,3-Trichlorobenzene	101	106	70-130	5	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 03-04,06-07 Batch: WG360092-1 WG360092-2					
1,2,4-Trichlorobenzene	100	98	70-130	2	25
1,3,5-Trimethylbenzene	103	101	70-130	2	25
1,2,4-Trimethylbenzene	103	102	70-130	1	25
Ethyl ether	118	111	70-130	6	25
Isopropyl Ether	94	94	70-130	0	25
Ethyl-Tert-Butyl-Ether	97	94	70-130	3	25
Tertiary-Amyl Methyl Ether	88	88	70-130	0	25
1,4-Dioxane	106	99	70-130	7	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		106		70-130
Toluene-d8	112		110		70-130
4-Bromofluorobenzene	96		95		70-130
Dibromofluoromethane	113		110		70-130

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 05 Batch: WG360221-1 WG360221-2					
Methylene chloride	111	109	70-130	2	25
1,1-Dichloroethane	104	102	70-130	2	25
Chloroform	107	109	70-130	2	25
Carbon tetrachloride	108	108	70-130	0	25
1,2-Dichloropropane	98	97	70-130	1	25
Dibromochloromethane	120	114	70-130	5	25
1,1,2-Trichloroethane	108	106	70-130	2	25
Tetrachloroethene	129	125	70-130	3	25
Chlorobenzene	107	105	70-130	2	25
1,2-Dichloroethane	110	107	70-130	3	25
1,1,1-Trichloroethane	109	107	70-130	2	25
Bromodichloromethane	112	110	70-130	2	25
trans-1,3-Dichloropropene	105	101	70-130	4	25
cis-1,3-Dichloropropene	86	85	70-130	1	25
Bromoform	135	133	70-130	1	50
1,1,2,2-Tetrachloroethane	103	102	70-130	1	25
Chloromethane	103	100	70-130	3	50
Vinyl chloride	96	93	70-130	3	25
Chloroethane	105	103	70-130	2	25
1,1-Dichloroethene	109	105	70-130	4	25
trans-1,2-Dichloroethene	127	121	70-130	5	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 05 Batch: WG360221-1 WG360221-2					
Trichloroethene	106	104	70-130	2	25
1,2-Dichlorobenzene	109	104	70-130	5	25
1,3-Dichlorobenzene	107	106	70-130	1	25
1,4-Dichlorobenzene	108	106	70-130	2	25
cis-1,2-Dichloroethene	101	99	70-130	2	25
Dichlorodifluoromethane	110	106	70-130	4	50
1,2-Dibromoethane	112	108	70-130	4	25
1,3-Dichloropropane	110	107	70-130	3	25
1,1,1,2-Tetrachloroethane	113	110	70-130	3	25
o-Chlorotoluene	106	99	70-130	7	25
p-Chlorotoluene	106	104	70-130	2	25
Hexachlorobutadiene	116	118	70-130	2	25
1,2,4-Trichlorobenzene	100	98	70-130	2	25

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		106		70-130
Toluene-d8	112		110		70-130
4-Bromofluorobenzene	96		95		70-130
Dibromofluoromethane	113		110		70-130

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02,08-09 Batch: WG360228-1 WG360228-2					
Methylene chloride	106	106	70-130	0	25
1,1-Dichloroethane	99	100	70-130	1	25
Chloroform	105	109	70-130	4	25
Carbon tetrachloride	93	93	70-130	0	25
1,2-Dichloropropane	97	99	70-130	2	25
Dibromochloromethane	78	84	70-130	7	25
1,1,2-Trichloroethane	81	84	70-130	4	25
Tetrachloroethene	89	90	70-130	1	25
Chlorobenzene	87	88	70-130	1	25
1,2-Dichloroethane	96	101	70-130	5	25
1,1,1-Trichloroethane	99	100	70-130	1	25
Bromodichloromethane	104	108	70-130	4	25
trans-1,3-Dichloropropene	84	87	70-130	4	25
cis-1,3-Dichloropropene	90	93	70-130	3	25
Bromoform	81	83	70-130	2	50
1,1,2,2-Tetrachloroethane	89	91	70-130	2	25
Chloromethane	72	71	70-130	1	50
Vinyl chloride	82	83	70-130	1	25
Chloroethane	92	90	70-130	2	25
1,1-Dichloroethene	96	95	70-130	1	25
trans-1,2-Dichloroethene	100	100	70-130	0	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 02,08-09 Batch: WG360228-1 WG360228-2					
Trichloroethene	95	95	70-130	0	25
1,2-Dichlorobenzene	86	88	70-130	2	25
1,3-Dichlorobenzene	91	91	70-130	0	25
1,4-Dichlorobenzene	90	91	70-130	1	25
cis-1,2-Dichloroethene	100	100	70-130	0	25
Dichlorodifluoromethane	43	41	70-130	5	50
1,2-Dibromoethane	82	84	70-130	2	25
1,3-Dichloropropane	83	86	70-130	4	25
1,1,1,2-Tetrachloroethane	86	85	70-130	1	25
o-Chlorotoluene	80	78	70-130	3	25
p-Chlorotoluene	92	90	70-130	2	25
Hexachlorobutadiene	95	92	70-130	3	25
1,2,4-Trichlorobenzene	86	90	70-130	5	25

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		105		70-130
Toluene-d8	94		93		70-130
4-Bromofluorobenzene	100		99		70-130
Dibromofluoromethane	102		105		70-130

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 17-18 Batch: WG360253-1 WG360253-2					
Methylene chloride	98	108	70-130	10	25
1,1-Dichloroethane	96	96	70-130	0	25
Chloroform	100	100	70-130	0	25
Carbon tetrachloride	101	105	70-130	4	25
1,2-Dichloropropane	94	93	70-130	1	25
Dibromochloromethane	114	115	70-130	1	25
1,1,2-Trichloroethane	106	103	70-130	3	25
Tetrachloroethene	121	127	70-130	5	25
Chlorobenzene	104	104	70-130	0	25
Trichlorofluoromethane	124	125	70-130	1	25
1,2-Dichloroethane	98	97	70-130	1	25
1,1,1-Trichloroethane	101	102	70-130	1	25
Bromodichloromethane	104	106	70-130	2	25
trans-1,3-Dichloropropene	102	102	70-130	0	25
cis-1,3-Dichloropropene	83	83	70-130	0	25
1,1-Dichloropropene	97	97	70-130	0	25
Bromoform	135	138	70-130	2	50
1,1,2,2-Tetrachloroethane	96	93	70-130	3	25
Benzene	92	94	70-130	2	25
Toluene	102	103	70-130	1	25
Ethylbenzene	105	105	70-130	0	25

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 17-18 Batch: WG360253-1 WG360253-2					
Chloromethane	94	99	70-130	5	50
Bromomethane	78	83	70-130	6	50
Vinyl chloride	89	88	70-130	1	25
Chloroethane	95	95	70-130	0	25
1,1-Dichloroethene	100	100	70-130	0	25
trans-1,2-Dichloroethene	117	119	70-130	2	25
Trichloroethene	100	105	70-130	5	25
1,2-Dichlorobenzene	101	102	70-130	1	25
1,3-Dichlorobenzene	104	109	70-130	5	25
1,4-Dichlorobenzene	104	107	70-130	3	25
Methyl tert butyl ether	85	83	70-130	2	25
p/m-Xylene	102	102	70-130	0	25
o-Xylene	102	102	70-130	0	25
cis-1,2-Dichloroethene	94	97	70-130	3	25
Dibromomethane	95	96	70-130	1	25
1,2,3-Trichloropropane	108	110	70-130	2	25
Styrene	100	101	70-130	1	25
Dichlorodifluoromethane	100	102	70-130	2	50
Acetone	124	121	70-130	2	50
Carbon disulfide	95	95	70-130	0	50
2-Butanone	82	79	70-130	4	50



## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 17-18 Batch: WG360253-1 WG360253-2					
4-Methyl-2-pentanone	81	80	70-130	1	50
2-Hexanone	76	77	70-130	1	50
Bromochloromethane	94	97	70-130	3	25
Tetrahydrofuran	83	84	70-130	1	25
2,2-Dichloropropane	87	91	70-130	4	50
1,2-Dibromoethane	106	106	70-130	0	25
1,3-Dichloropropane	104	105	70-130	1	25
1,1,1,2-Tetrachloroethane	112	113	70-130	1	25
Bromobenzene	109	111	70-130	2	25
n-Butylbenzene	97	103	70-130	6	25
sec-Butylbenzene	100	106	70-130	6	25
tert-Butylbenzene	100	102	70-130	2	25
o-Chlorotoluene	87	89	70-130	2	25
p-Chlorotoluene	101	105	70-130	4	25
1,2-Dibromo-3-chloropropane	94	90	70-130	4	50
Hexachlorobutadiene	110	115	70-130	4	25
Isopropylbenzene	102	104	70-130	2	25
p-Isopropyltoluene	104	108	70-130	4	25
Naphthalene	76	78	70-130	3	25
n-Propylbenzene	100	104	70-130	4	25
1,2,3-Trichlorobenzene	92	94	70-130	2	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 17-18 Batch: WG360253-1 WG360253-2					
1,2,4-Trichlorobenzene	92	93	70-130	1	25
1,3,5-Trimethylbenzene	99	102	70-130	3	25
1,2,4-Trimethylbenzene	100	103	70-130	3	25
Ethyl ether	96	97	70-130	1	25
Isopropyl Ether	83	81	70-130	2	25
Ethyl-Tert-Butyl-Ether	83	81	70-130	2	25
Tertiary-Amyl Methyl Ether	77	75	70-130	3	25
1,4-Dioxane	95	86	70-130	10	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		103		70-130
Toluene-d8	113		112		70-130
4-Bromofluorobenzene	93		94		70-130
Dibromofluoromethane	109		106		70-130

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,10-16 Batch: WG360267-1 WG360267-2					
Methylene chloride	92	94	70-130	2	25
1,1-Dichloroethane	94	97	70-130	3	25
Chloroform	92	94	70-130	2	25
Carbon tetrachloride	102	106	70-130	4	25
1,2-Dichloropropane	91	95	70-130	4	25
Dibromochloromethane	109	115	70-130	5	25
1,1,2-Trichloroethane	102	105	70-130	3	25
Tetrachloroethene	110	109	70-130	1	25
Chlorobenzene	99	101	70-130	2	25
Trichlorofluoromethane	119	120	70-130	1	25
1,2-Dichloroethane	101	106	70-130	5	25
1,1,1-Trichloroethane	96	99	70-130	3	25
Bromodichloromethane	103	110	70-130	7	25
trans-1,3-Dichloropropene	94	96	70-130	2	25
cis-1,3-Dichloropropene	85	89	70-130	5	25
1,1-Dichloropropene	91	96	70-130	5	25
Bromoform	122	130	70-130	6	50
1,1,2,2-Tetrachloroethane	94	99	70-130	5	25
Benzene	90	94	70-130	4	25
Toluene	95	94	70-130	1	25
Ethylbenzene	100	100	70-130	0	25

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,10-16 Batch: WG360267-1 WG360267-2					
Chloromethane	80	81	70-130	1	50
Bromomethane	78	81	70-130	4	50
Vinyl chloride	86	88	70-130	2	25
Chloroethane	97	103	70-130	6	25
1,1-Dichloroethene	95	100	70-130	5	25
trans-1,2-Dichloroethene	96	97	70-130	1	25
Trichloroethene	97	101	70-130	4	25
1,2-Dichlorobenzene	98	104	70-130	6	25
1,3-Dichlorobenzene	101	103	70-130	2	25
1,4-Dichlorobenzene	102	103	70-130	1	25
Methyl tert butyl ether	96	96	70-130	0	25
p/m-Xylene	99	99	70-130	0	25
o-Xylene	100	100	70-130	0	25
cis-1,2-Dichloroethene	92	95	70-130	3	25
Dibromomethane	97	101	70-130	4	25
1,2,3-Trichloropropane	107	112	70-130	5	25
Styrene	99	99	70-130	0	25
Dichlorodifluoromethane	99	101	70-130	2	50
Acetone	103	108	70-130	5	50
Carbon disulfide	92	95	70-130	3	50
2-Butanone	87	98	70-130	12	50

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,10-16 Batch: WG360267-1 WG360267-2					
4-Methyl-2-pentanone	84	94	70-130	11	50
2-Hexanone	78	86	70-130	10	50
Bromochloromethane	101	103	70-130	2	25
Tetrahydrofuran	86	100	70-130	15	25
2,2-Dichloropropane	81	85	70-130	5	50
1,2-Dibromoethane	98	107	70-130	9	25
1,3-Dichloropropane	101	102	70-130	1	25
1,1,1,2-Tetrachloroethane	104	106	70-130	2	25
Bromobenzene	106	107	70-130	1	25
n-Butylbenzene	91	93	70-130	2	25
sec-Butylbenzene	94	97	70-130	3	25
tert-Butylbenzene	93	95	70-130	2	25
o-Chlorotoluene	83	83	70-130	0	25
p-Chlorotoluene	98	99	70-130	1	25
1,2-Dibromo-3-chloropropane	93	111	70-130	18	50
Hexachlorobutadiene	106	106	70-130	0	25
Isopropylbenzene	99	100	70-130	1	25
p-Isopropyltoluene	97	101	70-130	4	25
Naphthalene	82	86	70-130	5	25
n-Propylbenzene	93	96	70-130	3	25
1,2,3-Trichlorobenzene	111	118	70-130	6	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON

**Lab Number:** L0904807

**Project Number:** 0095922

**Report Date:** 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01,10-16 Batch: WG360267-1 WG360267-2					
1,2,4-Trichlorobenzene	103	108	70-130	5	25
1,3,5-Trimethylbenzene	93	94	70-130	1	25
1,2,4-Trimethylbenzene	95	97	70-130	2	25
Ethyl ether	101	106	70-130	5	25
Isopropyl Ether	84	88	70-130	5	25
Ethyl-Tert-Butyl-Ether	87	91	70-130	4	25
Tertiary-Amyl Methyl Ether	79	84	70-130	6	25
1,4-Dioxane	109	113	70-130	4	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		113		70-130
Toluene-d8	107		105		70-130
4-Bromofluorobenzene	91		91		70-130
Dibromofluoromethane	110		112		70-130

## Matrix Spike Analysis

### Batch Quality Control

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

Parameter	Native Sample	MS Added	MS Found	MS		MSD		Recovery Limits	RPD	RPD Limits
				%Recovery	MSD Found	%Recovery				
MCP Volatile Organics - Westborough Lab Associated sample(s): 05 QC Batch ID: WG360221-7 WG360221-8 QC Sample: L0904807-05 Client ID: MW-203M-20090417-01										
Methylene chloride	ND	10	11	108	10	104	70-130	4	30	
1,1-Dichloroethane	ND	10	11	111	11	108	70-130	3	30	
Chloroform	ND	10	11	110	11	110	70-130	0	30	
Carbon tetrachloride	ND	10	12	121	12	115	70-130	5	30	
1,2-Dichloropropane	ND	10	10	102	9.8	98	70-130	4	30	
Dibromochloromethane	ND	10	12	117	11	114	70-130	3	30	
1,1,2-Trichloroethane	ND	10	11	107	10	102	70-130	5	30	
Tetrachloroethene	ND	10	14	145	14	139	70-130	4	30	
Chlorobenzene	ND	10	11	113	11	110	70-130	3	30	
1,2-Dichloroethane	ND	10	10	103	10	102	70-130	1	30	
1,1,1-Trichloroethane	ND	10	12	124	12	119	70-130	4	30	
Bromodichloromethane	ND	10	11	113	11	109	70-130	4	30	
trans-1,3-Dichloropropene	ND	10	10	101	9.0	90	70-130	12	30	
cis-1,3-Dichloropropene	ND	10	8.3	83	6.3	63	70-130	27	30	
Bromoform	ND	10	14	138	13	129	70-130	7	30	
1,1,2,2-Tetrachloroethane	ND	10	10	105	9.8	98	70-130	7	30	
Chloromethane	ND	10	10	102	9.6	96	70-130	6	30	
Vinyl chloride	ND	10	10	106	10	101	70-130	5	30	
Chloroethane	ND	10	11	111	11	109	70-130	2	30	
1,1-Dichloroethene	ND	10	12	119	12	116	70-130	3	30	
trans-1,2-Dichloroethene	ND	10	13	134	14	137	70-130	2	30	

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
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MCP Volatile Organics - Westborough Lab Associated sample(s): 05 QC Batch ID: WG360221-7 WG360221-8 QC Sample: L0904807-05 Client ID: MW-203M-20090417-01

Trichloroethene	0.82	10	12	110	12	110	70-130	0	30
1,2-Dichlorobenzene	ND	10	11	113	11	107	70-130	5	30
1,3-Dichlorobenzene	ND	10	12	117	11	112	70-130	4	30
1,4-Dichlorobenzene	ND	10	12	116	11	112	70-130	4	30
cis-1,2-Dichloroethene	ND	10	11	107	10	104	70-130	3	30
Dichlorodifluoromethane	ND	10	12	118	12	117	70-130	1	30
1,2-Dibromoethane	ND	10	11	110	10	103	70-130	7	30
1,3-Dichloropropane	ND	10	11	110	10	102	70-130	8	30
1,1,1,2-Tetrachloroethane	ND	10	12	117	11	113	70-130	3	30
o-Chlorotoluene	ND	10	9.9	99	9.6	96	70-130	3	30
p-Chlorotoluene	ND	10	12	116	11	111	70-130	4	30
Hexachlorobutadiene	ND	10	12	118	12	121	70-130	3	30
1,2,4-Trichlorobenzene	ND	10	9.6	96	9.4	94	70-130	2	30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		102		70-130
4-Bromofluorobenzene	98		95		70-130
Dibromofluoromethane	107		106		70-130
Toluene-d8	113		110		70-130



# SEMIVOLATILES

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

**Lab ID:** L0904807-02  
**Client ID:** MW-403-20090417-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 1,8270C-SIM  
**Analytical Date:** 04/22/09 18:46  
**Analyst:** JS

**Date Collected:** 04/17/09 08:50  
**Date Received:** 04/17/09  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/21/09 09:40

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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1,4 Dioxane by 8270C-SIM - Mansfield Lab					
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1,4-Dioxane	1200		ng/l	521	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	35		15-110

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

**Lab ID:** L0904807-09  
**Client ID:** MW-46M-20090417-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 1,8270C-SIM  
**Analytical Date:** 04/22/09 19:25  
**Analyst:** JS

**Date Collected:** 04/17/09 10:50  
**Date Received:** 04/17/09  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/21/09 09:40

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
1,4 Dioxane by 8270C-SIM - Mansfield Lab					
1,4-Dioxane	1220		ng/l	510	1

**Surrogate****% Recovery****Qualifier****Acceptance  
Criteria**

1,4-Dioxane-d8

30

15-110

**Project Name:** RAYTHEON**Lab Number:** L0904807**Project Number:** 0095922**Report Date:** 04/27/09**SAMPLE RESULTS**

**Lab ID:** L0904807-16  
**Client ID:** MW-202M-20090417-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 1,8270C-SIM  
**Analytical Date:** 04/22/09 20:04  
**Analyst:** JS

**Date Collected:** 04/17/09 10:55  
**Date Received:** 04/17/09  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/21/09 09:40

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
1,4 Dioxane by 8270C-SIM - Mansfield Lab					
1,4-Dioxane	965		ng/l	526	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	36		15-110

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

**Method Blank Analysis**  
Batch Quality Control

Analytical Method: 1,8270C-SIM  
 Analytical Date: 04/22/09 16:14  
 Analyst: JS

Extraction Method: EPA 3510C  
 Extraction Date: 04/21/09 09:40

Parameter	Result	Qualifier	Units	RDL
1,4 Dioxane by 8270C-SIM - Mansfield Lab for sample(s): 02,09,16 Batch: WG359553-1				
1,4-Dioxane	ND		ng/l	500

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

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON

**Lab Number:** L0904807

**Project Number:** 0095922

**Report Date:** 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
1,4 Dioxane by 8270C-SIM - Mansfield Lab Associated sample(s): 02,09,16 Batch: WG359553-2 WG359553-3					
1,4-Dioxane	95	94	40-140	1	30

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	44		47		15-110

# METALS

**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

**SAMPLE RESULTS**

Lab ID: L0904807-01  
 Client ID: MW-214-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/17/09 08:05  
 Date Received: 04/17/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	43		mg/l	2.0	1	04/18/09 14:30	04/22/09 11:48	EPA 3005A	60,6010B	AI



**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

**SAMPLE RESULTS**

Lab ID: L0904807-07  
 Client ID: MW-203S-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/17/09 10:20  
 Date Received: 04/17/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Sodium, Dissolved	35		mg/l	2.0	1	04/18/09 14:30	04/22/09 11:51	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

**SAMPLE RESULTS**

Lab ID: L0904807-11  
 Client ID: MW-201D-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/17/09 11:55  
 Date Received: 04/17/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	19		mg/l	2.0	1	04/18/09 14:30	04/22/09 12:25	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

**SAMPLE RESULTS**

Lab ID: L0904807-12  
 Client ID: MW-208S-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/17/09 09:55  
 Date Received: 04/17/09  
 Field Prep: Field Filtered

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	04/18/09 14:30	04/22/09 12:28	EPA 3005A	60,6010B	AI
Sodium, Dissolved	39		mg/l	2.0	1	04/18/09 14:30	04/22/09 12:28	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

**SAMPLE RESULTS**

Lab ID: L0904807-15  
 Client ID: MW-202S-20090417-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/17/09 12:10  
 Date Received: 04/17/09  
 Field Prep: Field Filtered

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	04/18/09 14:30	04/22/09 12:31	EPA 3005A	60,6010B	AI
Sodium, Dissolved	35		mg/l	2.0	1	04/18/09 14:30	04/22/09 12:31	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

## 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): 01,07,11-12,15 Batch: WG359397-1								
Potassium, Dissolved	ND	mg/l	2.5	1	04/18/09 14:30	04/22/09 10:48	60,6010B	AI
Sodium, Dissolved	ND	mg/l	2.0	1	04/18/09 14:30	04/22/09 10:48	60,6010B	AI

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON

Project Number: 0095922

Lab Number: L0904807

Report Date: 04/27/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01,07,11-12,15 Batch: WG359397-2 WG359397-3					
Potassium, Dissolved	110	110	80-120	0	20
Sodium, Dissolved	110	100	80-120	10	20

Project Name: RAYTHEON

Lab Number: L0904807

Project Number: 0095922

Report Date: 04/27/09

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

## Cooler Information

Cooler	Custody Seal
A	Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904807-01A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-01B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-01C	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180)
L0904807-02A	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-02B	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-02C	Amber 1000ml Na2S2O3	A	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904807-02D	Amber 1000ml Na2S2O3	A	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904807-03A	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-03B	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-04A	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-04B	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-05A	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-05B	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-05C	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-05D	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-05E	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-05F	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-06A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-06B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-07A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-07B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-07C	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180)
L0904807-08A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-09A	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-09B	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-09C	Amber 1000ml unpreserved	A	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904807-09D	Amber 1000ml unpreserved	A	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904807-10A	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-10B	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-11A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)

\*Hold days indicated by values in parentheses

Project Name: RAYTHEON

Project Number: 0095922

Lab Number: L0904807

Report Date: 04/27/09

**Container Information**

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904807-11B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-11C	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180)
L0904807-12A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-12B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-12C	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180),MCP-K-6010S(180)
L0904807-13A	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-13B	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-14A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-14B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-15A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-15B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-15C	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180),MCP-K-6010S(180)
L0904807-16A	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-16B	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-16C	Amber 1000ml unpreserved	A	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904807-16D	Amber 1000ml unpreserved	A	7	2	Y	Absent	A2-1,4-DIOXANE-SIM(7)
L0904807-17A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-17B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904807-18A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)

**Container Comments**

L0904807-01B

\*Hold days indicated by values in parentheses





**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

## 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.
- ND** - Not detected at the reported detection limit for the sample.
- 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

- \*** - The batch duplicate RPD exceeds the acceptance criteria. This flag is not applicable when the sample concentrations are less than 5x the RDL. (Metals only.)
- 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.
- 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.
- N** - The matrix spike recovery exceeds the acceptance criteria. This flag is not applicable when the sample concentration is greater than 4x the spike added. (Metals only.)
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- 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).

**Project Name:** RAYTHEON  
**Project Number:** 0095922

**Lab Number:** L0904807  
**Report Date:** 04/27/09

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 60 Quality Assurance and Quality Control Requirements and Performance Standards for SW-846 Methods. MADEP BWSC. WSC-CAM-IIA (Revision 4), WSC-CAM-V C (Revision 2), WSC-CAM-IIIA (Revision 5). May 2004.

## LIMITATION OF LIABILITIES

Alpha 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 February 18, 2009 - 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.

*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.)

*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), 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: MA0086.

*Drinking Water* (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 150.1, 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, Nitrite-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, EPA 150.1, SM4500H-B.

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

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), SM6251B, 314.0.

#### *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, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Nitrate-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, 4500CN-CE, 2540D, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1

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

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCB-Water) 600/4-81-045-PCB-Oil

**Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.***Drinking Water*

Microbiology Parameters: SM9215B; MF-SM9222B; ENZ. SUB. SM9223; EC-SM9221E; MF-SM9222D; ENZ. SUB. SM9223;

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

*Drinking Water (Inorganic Parameters:* SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 110.2, 120.1, 150.1, 300.0, 325.2, 314.0, SM4500CN-E, 4500H+B, 4500NO<sub>3</sub>-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, 150.1, 300.0, 305.1, 310.1, 325.2, 340.2, 350.1, 350.2, 351.1, 353.2, 354.1, 365.2, 375.4, 376.2, 405.1, 415.1, 420.1, 425.1, 1664A, SW-846 9010, 9030, 9040B, EPA 160.1, 160.2, 160.3, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH<sub>3</sub>-H, 4500NH<sub>3</sub>-E, 4500NO<sub>2</sub>-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.**

*Drinking Water (Inorganic Parameters:* SM9222B, 9221E, 9223B, 9215B, 4500NO<sub>3</sub>-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, 331.0, 110.2, SM2120B, 2510B, 5310C, EPA 150.1, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

*Non-Potable Water (Inorganic Parameters:* SM5210B, EPA 410.1, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO<sub>3</sub>-F, 4500NO<sub>2</sub>-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, 4500NH<sub>3</sub>-H, EPA 350.2/1, 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.)

*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, 3540C, 3545, 3550B, 3580A, 5035L, 5035H.)

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

*Drinking Water (Inorganic Parameters:* SM9223B, 9222B, 8215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 331.0, SM2320B, EPA 300.0, 325.2, 110.2, SM2120B, 4500CN-E, 4500F-C, EPA 150.1, SM4500H-B, 4500NO<sub>3</sub>-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1, SM6251B.)

*Non-Potable Water (Inorganic Parameters:* SM9221E, 9222D, 9221B, 9222B, 9215B, EPA 405.1, SM5210B, EPA 410.4, SM5220D, EPA 305.1, SM2310B-4a, EPA 310.1, SM2320B, EPA 200.7, 300.0, 325.2, LACHAT 10-117-07-1A or B, SM4500CI-E, EPA 340.2, SM4500F-C, EPA 375.4, SM15 426C, EPA 350.1, 350.2, LACHAT 10-107-06-1-B, SM4500NH<sub>3</sub>-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO<sub>3</sub>F, EPA 354.1, SM4500-NO<sub>2</sub>-B, EPA 365.2, SM4500P-E, EPA 160.3, SM2540B, EPA 160.1, SM2540C, EPA 160.2, SM2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, 110.2, SM2120B, 335.2, LACHAT 10-204-00-1-A, EPA 150.1, 9040B, SM4500-HB, EPA 1664A, EPA 415.1, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, EPA 376.2, SM4500S-D, EPA 425.1, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, 8021B, EPA 3510C, 5030B, 9010B, 9030B.)

*Solid & Hazardous Waste (Inorganic Parameters:* EPA 9040B, 9045C, 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 3005A, 3050B, 3051, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 8021B, 3540C, 3545, 3580, 5030B, 5035.)

*Analytical Services Protocol:* CLP Volatile Organics, CLP Inorganics, CLP PCB/Pesticides.

**Rhode Island Department of Health Certificate/Lab ID: LAO00065.**

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

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

**Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. Registered Laboratory.**

## Certificate/Approval Program Summary

Last revised February 18, 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, Chloride, Fluoride, Sulfate, Sulfite, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, 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 Dissolved Solids, Total Suspended Solids (non-filterable), Total Cyanide, Bromide. 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, Ignitability, Corrosivity, TCLP 1311, Reactivity. 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.

*Non-Potable Water* (Inorganic Parameters: SM2320B, 4500NH3-F, EPA 120.1, SM2510B, 2340B, EPA 245.1, EPA 365.2, EPA 150.1, 160.1, SM2540C, EPA 160.2, SM2540D, EPA 335.2, 420.1, SM2540G, EPA 180.1. Organic Parameters: EPA 624, 625, 608.)

*Solid & Chemical Materials* (Inorganic Parameters: 6020, 9050, 7470, 7471, 9045, EPA 7.3.3.2, EPA 7.3.4.2, 9014, 9065. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

*Air & Emissions* (EPA TO-15.)

### **Louisiana Department of Environmental Quality** Certificate/Lab ID: 03090.

*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.

*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.

*Non-Potable Water* (Inorganic Parameters: SW-846 3010, 3020A, 3015, 6020, SM2320B, EPA 200.8, SM2540C, 2540D, 2540G, EPA 120.1, SM2510B, EPA 180.1, 245.1, 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, 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)

**New York Department of Health** Certificate/Lab ID: 11627.

*Non-Potable Water* (Inorganic Parameters: EPA 310.1, SM2320B, EPA 365.2, 160.1, SM2540C, 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.)

*Air & Emissions* (EPA TO-15.)

**Rhode Island Department of Health** Certificate/Lab ID: LAO00299.

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.

*Solid & Chemical Materials* (Inorganic Parameters: EPA 6020, 7471. Organic Parameters: EPA 8015, 8270.)

**Pennsylvania Department of Environmental Protection** Certificate/Lab ID: 68-02089. Registered Laboratory.

**U.S. Army Corps of Engineers**



# CHAIN OF CUSTODY

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

MANFIELD, MA  
TEL: 508-822-5300  
FAX: 508-822-3288

**Client Information**

Client: ERM  
Address: 291 Bayberry St  
Boston MA  
Project Manager: Jason Flaherty  
ALPHA Quote #: \_\_\_\_\_

Phone: 617-416-7808

Fax: 617-267-1447

Email: Jason.Flaherty@ERM.com

Standard  RUSH (only confirmed if pre-approved)  
Date Due: 4/24/09 Time: \_\_\_\_\_  
Other Project Specific Requirements/Comments/Detection Limits:  
please email bahar, fast@erm.com or call E.Winter w/ questions

**Project Information**

Project Name: Reg Haven  
Project Location: Dorland MA  
Project #: 005922

**Turn-Around Time**

Date Rec'd in Lab: 4/17/09

ALPHA Job #: L0904887

**Report Information - Data Deliverables**

FAX  EMAIL  
 PAPER  Add'l Deliverables

**Billing Information**

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

**Regulatory Requirements/Report Limits**

State/Fed Program \_\_\_\_\_ Criteria MA MCP Cu-1

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

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

**ANALYSIS**  
80218 by 8260  
Dissolved Ni (F)  
Dioxine 14  
80213 by 8260

**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	Container Type	Preservative	Date/Time	Received By:	Date/Time	Sample Specific Comments
		Date	Time								
04807	MW-214-20090417-01	4/17/09	0805	GW	CC	V	PAV	4/17/09	Don Bourke	4/17/09	
	MW-403-20090417-01	4/17/09	0850	GW	CC	V	PAV	4/17/09	Don Bourke	4/17/09	
	MW-102-20090417-01	4/17/09	0930	GW	CC	V	PAV	4/17/09	Don Bourke	4/17/09	
	MW-101-20090417-01	4/17/09	1000	GW	CC	V	PAV	4/17/09	Don Bourke	4/17/09	
	MW-203M-20090417-01		0855	GW	CC	V	PAV	4/17/09	Don Bourke	4/17/09	
	DUP-005-20090417-01		1111	GW	CC	V	PAV	4/17/09	Don Bourke	4/17/09	
	MW-2035-20090417-01		1020	GW	CC	V	PAV	4/17/09	Don Bourke	4/17/09	
	MW-203M-20090417-01		0855	GW	CC	V	PAV	4/17/09	Don Bourke	4/17/09	
	MW-203M-20090417-01		0855	GW	CC	V	PAV	4/17/09	Don Bourke	4/17/09	
	MTB-003-20090417-01	4/17/09	1010	GW	CC	V	PAV	4/17/09	Don Bourke	4/17/09	

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
MA MCP or CT RCP?

FORM NO: 01-01 (rev. 14-OCT-07)

Relinquish to By: \_\_\_\_\_  
Date/Time: \_\_\_\_\_

Received By: \_\_\_\_\_  
Date/Time: \_\_\_\_\_

Date/Time: \_\_\_\_\_

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



# CHAIN OF CUSTODY

WESTBORO, MA  
 TEL: 508-898-8220  
 FAX: 508-898-9183

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

**Client Information**

Client: ERM  
 Project #: 0095922

Address: 399 Boylston St.  
6th Floor Boston, MA  
 Project Manager: Josm Flattery

Phone: (617) 644-7880  
 ALPHA Quote #:

Fax: (617) 263-6447  
 Turn-Around Time

Email: Valvaar.Rost@erm.com  
 Standard  RUSH (only confirmed if pre-approved)  
 Date Due: 4/24/09 Time:

These samples have been previously analyzed by Alpha  
 Other Project Specific Requirements/Comments/Detection Limits:

**Project Information**

Project Name: Raytheon Wayland

Project Location: Wayland, MA

Date Rec'd in Lab: 4/17/09

**Report Information - Date Deliverables**

FAX  EMAIL  
 ADDEX  Add'l Deliverables

**Billing Information**

Same as Client info PO #:

State/Fed Program: MAMCP Criteria: GW 2

**MAMCP PRESUMPTIVE CERTAINTY - CT REASONABLE CONFIDENCE PROTO-**

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

**ANALYSIS**  
 8021B by 8260  
 8021B by 8260  
 1,4 Dioxane  
 Diss. Na (FF)  
 1,4 Dioxane  
 Diss. Na + K (FF)

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	ANALYSIS		Filtration
		Date	Time			Done	Not needed	
04801.6	MW-46M-20090417-01	9/17/09	1050	GW	CC	2	2	GW Na
	10 DUP-017-20090417-01		1200		CC	2	2	
	11 MW-201D-20090417-01		1155		CC	2	1	
	12 MW-208S-20090417-01		955		JN	2	1	
	13 MW-208M-20090417-01		1020		JN	2		
	14 MW-208D-20090417-01		0900		JN	2		
	15 MW-202S-20090417-01		1210		JN	2		
	16 MW-202M-20090417-01		1055		JN	2	2	
	17 DR-007-20090417-01		1200		JN	2		
	18 TB-004-20090417-01	4/15/09	1215		KR	2		

Container Type	Preservative	Date/Time	Received By:	Date/Time
V	V	4/17/09 12:40	Don B...	4/17/09 12:40
B	H	4/17/09 12:40	Don B...	4/17/09 12:40
H	H	4/17/09 12:40	Don B...	4/17/09 12:40
A	A	4/17/09 12:40	Don B...	4/17/09 12:40

**PLEASE ANSWER QUESTIONS ABOVE!**

Relinquished By: Clayton...

Date/Time: 4/17/09 12:40

Received By: Don B...

Date/Time: 4/17/09 12:40

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



# CHAIN OF CUSTODY

Date Rec'd in Lab 4/17/09

ALPHA Job #: L0904857



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. Eisenhower St Floor 618**  
**Ishtar Inc.**  
Phone: **617-267-7806**  
Fax: **617-267-6447**  
Email: **Jason Flaherty @ ERM.com**

Project Name: **Reg Haven**  
Project Location: **Devereux Mr.**  
Project #: **0095922**  
Project Manager: **Jason Flaherty**  
ALPHA Quote #:  
Turn-Around Time

These samples have been previously analyzed by Alpha  
Other Project Specific Requirements/Comments/Detection Limits:

*please email bahar.fast@erm.com or call E. Winer w/ questions*

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
04807	1 MW-214-20090417-01	4/17/09	0805	GW	CC
	2 MW-403-20090417-01	4/17/09	0850	GW	CC
	3 MW-102-20090417-01	4/17/09	0930	GW	CC
	4 MW-101-20090417-01	4/17/09	1000	GW	CC
	5 MW-203M-20090417-01		0855		EW
	6 DUP-005-20090417-01		1111		EW
	7 MW-203S-20090417-01		1020		EW
	5 MW-203M-20090417-01		0855		EW
	8 TB-003-20090417-01	4/9/09	1616		KR

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
MAMCP or CT RCP?

Container Type	Preservative	Date/Time	Received By:	Date/Time
V	PA	4/17/09	Donna...	4/17/09
B	CH	4/17/09	...	4/17/09

Report Information - Data Deliverables  
 FAX  EMAIL  
 ADEX  Add'l Deliverables  
 Regulatory Requirements/Report Limits  
 State/Fed Program Criteria **MA MCP GW-1**  
**MA MCP PRESUMPTIVE CERTAINTY ... CT REASONABLE CONFIDENCE PROTO.**  
 Yes  No Are MCP Analytical Methods Required?  
 Yes  No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS  
~~Solids by 806~~  
~~Absorbance (67)~~  
~~Dioxine 14~~  
~~80210 by 8010~~

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

Sample Specific Comments	TOTAL #
	3
	4
	2
	2
	2
	2
	2
	2
	2
	1

Relinquish to: [Signature] Date/Time: 4/17/09  
 Received By: [Signature] Date/Time: 4/17/09  
 [Signature] Date/Time: 4/20/09 12:00

Please print clearly, legibly and completely. Samples cannot 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 2 OF 2

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 St.  
6th Floor Boston, MA  
 Phone: (617) 646-7880  
 Fax: (617) 262-6447  
 Email: valvaar.frost@erm.com

Project Name: Raytheon Wayland  
 Project Location: Wayland, MA  
 Project #: 0095922  
 Project Manager: Jason Plathmy  
 ALPHA Quote #:

Turn-Around Time

Standard  RUSH (only confirmed if pre-approved)  
 Date Due 4/24/09 Time:

Other Project Specific Requirements/Comments/Detection Limits:

Date Rec'd in Lab: 4/17/09  
 ALPHA Job #: L09104807

Report Information - Data Deliverables  
 FAX  EMAIL  
 ADEX  Add'l Deliverables

Regulatory Requirements/Report Limits  
 State/Fed Program: MA MCP Criteria: GW 1

Regulatory Requirements/Report Limits  
 MA MCP PRESUMPTIVE CERTAINTY ... CT REASONABLE CONFIDENCE PROTO.

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

Billing Information  
 Same as Client info PO #:

ANALYSIS  
~~8021B by 8260~~  
~~8021B by 8260~~  
~~1,4 Dioxane~~  
~~DISSINIA (P)~~  
~~1,4 Dioxane~~  
~~DISSINIA (P)~~

SAMPLE HANDLING  
 Filtration GW NA  
 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	SAMPLE HANDLING	Sample Specific Comments
		Date	Time					
<u>09807-9</u>	<u>MW-46M-20090417-61</u>	<u>4/17/09</u>	<u>1050</u>	<u>GW</u>	<u>CC</u>	<u>2</u>	<u>2</u>	<u>4</u>
	<u>DUP-017-20090417-01</u>		<u>1200</u>		<u>CC</u>	<u>2</u>		<u>2</u>
	<u>11 MW-201D-20090417-01</u>		<u>1155</u>		<u>CC</u>	<u>2</u>		<u>3</u>
	<u>12 MW-208S-20090417-01</u>		<u>955</u>		<u>JN</u>	<u>2</u>		<u>3</u>
	<u>13 MW-208M-20090417-01</u>		<u>1020</u>		<u>JN</u>	<u>2</u>		<u>2</u>
	<u>14 MW-208D-20090417-01</u>		<u>0900</u>		<u>JN</u>	<u>2</u>		<u>2</u>
	<u>15 MW-202S-20090417-01</u>		<u>1210</u>		<u>JN</u>	<u>2</u>		<u>3</u>
	<u>16 MW-202M-20090417-01</u>		<u>1055</u>		<u>JN</u>	<u>2</u>		<u>4</u>
	<u>17 DUP-007-20090417-01</u>		<u>1200</u>		<u>JN</u>	<u>2</u>		<u>2</u>
	<u>TB-004-20090417-01</u>	<u>4/16/09</u>	<u>1245</u>		<u>KR</u>	<u>2</u>		<u>2</u>

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
 MA MCP or CT RCP?

Relinquished By: [Signature] Date/Time: 4/17/09 12:40  
 Received By: [Signature] Date/Time: 4/17/09 12:40

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



## ANALYTICAL REPORT

Lab Number:	L0904766
Client:	ERM Consulting & Engineering, Inc. 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Project Name:	RAYTHEON WAYLAND
Project Number:	0095922
Report Date:	04/23/09

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

---

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L0904766-01	IP-16S-20090416-01	WAYLAND, MA	04/16/09 09:10
L0904766-02	IP-16D-20090416-01	WAYLAND, MA	04/16/09 10:00
L0904766-03	IP-17D-20090416-01	WAYLAND, MA	04/16/09 10:40
L0904766-04	MW-405S-20090416-01	WAYLAND, MA	04/16/09 11:15
L0904766-05	MW-117-20090416-01	WAYLAND, MA	04/16/09 11:10
L0904766-06	MW-118-20090416-01	WAYLAND, MA	04/16/09 10:00
L0904766-07	MW-404-20090416-01	WAYLAND, MA	04/16/09 09:10
L0904766-08	MW-103-20090416-01	WAYLAND, MA	04/16/09 10:15
L0904766-09	MW-204S-20090416-01	WAYLAND, MA	04/16/09 10:55
L0904766-10	MW-204M-20090416-01	WAYLAND, MA	04/16/09 11:40
L0904766-11	MW-106-20090416-01	WAYLAND, MA	04/16/09 08:45
L0904766-12	MW-106M-20090416-01	WAYLAND, MA	04/16/09 09:25
L0904766-13	MW-213-20090416-01	WAYLAND, MA	04/16/09 11:10
L0904766-14	MW-109-20090416-01	WAYLAND, MA	04/16/09 09:30
L0904766-15	MW-107-20090416-01	WAYLAND, MA	04/16/09 10:40
L0904766-16	MW-111-20090416-01	WAYLAND, MA	04/16/09 12:00
L0904766-17	MW-115-20090416-01	WAYLAND, MA	04/16/09 14:00
L0904766-18	TB-002-20090416-01	WAYLAND, MA	04/16/09 00:00
L0904766-19	MW-204D-20090416-01	WAYLAND, MA	04/16/09 10:00

Project Name: RAYTHEON WAYLAND

Lab Number: L0904766

Project Number: 0095922

Report Date: 04/23/09

### MADEP MCP Response Action Analytical Report Certification

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

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

### 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.

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.

---

#### MCP Related Narratives

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

##### Volatile Organics

L0904766-01 through -04, -06, -07, and -13: The pH of the samples was greater than two; however, the samples were analyzed within the method required holding time.

L0904766-03 has elevated detection limits due to the dilution required by the sample matrix.

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

**Case Narrative (continued)**

In reference to question F:

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

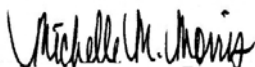
Metals

In reference to question F:

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

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

Authorized Signature:



Title: Technical Director/Representative

Date: 04/23/09

# ORGANICS



# VOLATILES

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

### SAMPLE RESULTS

**Lab ID:** L0904766-01  
**Client ID:** IP-16S-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 13:46  
**Analyst:** GK

**Date Collected:** 04/16/09 09:10  
**Date Received:** 04/16/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.7		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-01  
 Client ID: IP-16S-20090416-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/16/09 09:10  
 Date Received: 04/16/09  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	114		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-02  
**Client ID:** IP-16D-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 14:19  
**Analyst:** GK

**Date Collected:** 04/16/09 10:00  
**Date Received:** 04/16/09  
**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	0.75	1
Chloroform	0.92		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.94		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-02  
 Client ID: IP-16D-20090416-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/16/09 10:00  
 Date Received: 04/16/09  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

### SAMPLE RESULTS

**Lab ID:** L0904766-03  
**Client ID:** IP-17D-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 14:51  
**Analyst:** GK

**Date Collected:** 04/16/09 10:40  
**Date Received:** 04/16/09  
**Field Prep:** Not Specified

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	7.5	10
Chloroform	ND		ug/l	7.5	10
Carbon tetrachloride	ND		ug/l	5.0	10
1,2-Dichloropropane	ND		ug/l	18	10
Dibromochloromethane	ND		ug/l	5.0	10
1,1,2-Trichloroethane	ND		ug/l	7.5	10
Tetrachloroethene	ND		ug/l	5.0	10
Chlorobenzene	ND		ug/l	5.0	10
1,2-Dichloroethane	ND		ug/l	5.0	10
1,1,1-Trichloroethane	ND		ug/l	5.0	10
Bromodichloromethane	ND		ug/l	5.0	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	10
Bromoform	ND		ug/l	20	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	10
Chloromethane	ND		ug/l	25	10
Vinyl chloride	ND		ug/l	10	10
Chloroethane	ND		ug/l	10	10
1,1-Dichloroethene	ND		ug/l	5.0	10
trans-1,2-Dichloroethene	ND		ug/l	7.5	10
Trichloroethene	ND		ug/l	5.0	10
1,2-Dichlorobenzene	ND		ug/l	25	10
1,3-Dichlorobenzene	ND		ug/l	25	10
1,4-Dichlorobenzene	ND		ug/l	25	10
cis-1,2-Dichloroethene	ND		ug/l	5.0	10
Dichlorodifluoromethane	ND		ug/l	50	10
1,2-Dibromoethane	ND		ug/l	20	10
1,3-Dichloropropane	ND		ug/l	25	10
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	10

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-03  
 Client ID: IP-17D-20090416-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/16/09 10:40  
 Date Received: 04/16/09  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
o-Chlorotoluene	ND		ug/l	25	10
p-Chlorotoluene	ND		ug/l	25	10
Hexachlorobutadiene	ND		ug/l	6.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	109		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-04  
**Client ID:** MW-405S-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 15:24  
**Analyst:** GK

**Date Collected:** 04/16/09 11:15  
**Date Received:** 04/16/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.63		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-04

Date Collected: 04/16/09 11:15

Client ID: MW-405S-20090416-01

Date Received: 04/16/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	115		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-05  
**Client ID:** MW-117-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 15:56  
**Analyst:** GK

**Date Collected:** 04/16/09 11:10  
**Date Received:** 04/16/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.2		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	3.1		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	7.4		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-05  
 Client ID: MW-117-20090416-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/16/09 11:10  
 Date Received: 04/16/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	118		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-06  
**Client ID:** MW-118-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 16:28  
**Analyst:** GK

**Date Collected:** 04/16/09 10:00  
**Date Received:** 04/16/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.0		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	31		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-06  
 Client ID: MW-118-20090416-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/16/09 10:00  
 Date Received: 04/16/09  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-07  
**Client ID:** MW-404-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 17:00  
**Analyst:** GK

**Date Collected:** 04/16/09 09:10  
**Date Received:** 04/16/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.5		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	15		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-07  
 Client ID: MW-404-20090416-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/16/09 09:10  
 Date Received: 04/16/09  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	108		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-08  
**Client ID:** MW-103-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 17:33  
**Analyst:** GK

**Date Collected:** 04/16/09 10:15  
**Date Received:** 04/16/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.51		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-08  
 Client ID: MW-103-20090416-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/16/09 10:15  
 Date Received: 04/16/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	115		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-09  
**Client ID:** MW-204S-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 18:05  
**Analyst:** GK

**Date Collected:** 04/16/09 10:55  
**Date Received:** 04/16/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	8.2		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-09

Date Collected: 04/16/09 10:55

Client ID: MW-204S-20090416-01

Date Received: 04/16/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-10  
**Client ID:** MW-204M-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 18:37  
**Analyst:** GK

**Date Collected:** 04/16/09 11:40  
**Date Received:** 04/16/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	35		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	3.8		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	96		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-10

Date Collected: 04/16/09 11:40

Client ID: MW-204M-20090416-01

Date Received: 04/16/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	115		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-11  
**Client ID:** MW-106-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 19:10  
**Analyst:** GK

**Date Collected:** 04/16/09 08:45  
**Date Received:** 04/16/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	2.6		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	8.9		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-11  
 Client ID: MW-106-20090416-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/16/09 08:45  
 Date Received: 04/16/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	116		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-12  
**Client ID:** MW-106M-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 19:42  
**Analyst:** GK

**Date Collected:** 04/16/09 09:25  
**Date Received:** 04/16/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	2.1		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	8.8		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	0.57		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-12

Date Collected: 04/16/09 09:25

Client ID: MW-106M-20090416-01

Date Received: 04/16/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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**MCP Volatile Organics - Westborough Lab**

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-13  
**Client ID:** MW-213-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 20:14  
**Analyst:** GK

**Date Collected:** 04/16/09 11:10  
**Date Received:** 04/16/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.66		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.1		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-13  
 Client ID: MW-213-20090416-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/16/09 11:10  
 Date Received: 04/16/09  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	114		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-14  
**Client ID:** MW-109-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 19:26  
**Analyst:** GK

**Date Collected:** 04/16/09 09:30  
**Date Received:** 04/16/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	28		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	6.8		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-14  
 Client ID: MW-109-20090416-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/16/09 09:30  
 Date Received: 04/16/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-15  
**Client ID:** MW-107-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 19:58  
**Analyst:** GK

**Date Collected:** 04/16/09 10:40  
**Date Received:** 04/16/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	4.8		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	24		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-15  
 Client ID: MW-107-20090416-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/16/09 10:40  
 Date Received: 04/16/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	109		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-16  
**Client ID:** MW-111-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 20:30  
**Analyst:** GK

**Date Collected:** 04/16/09 12:00  
**Date Received:** 04/16/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	21		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	0.72		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	79		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	0.69		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-16  
 Client ID: MW-111-20090416-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/16/09 12:00  
 Date Received: 04/16/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	113		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-17  
**Client ID:** MW-115-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 21:02  
**Analyst:** GK

**Date Collected:** 04/16/09 14:00  
**Date Received:** 04/16/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	32		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	1.2		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	110		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-17  
 Client ID: MW-115-20090416-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/16/09 14:00  
 Date Received: 04/16/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	110		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

### SAMPLE RESULTS

**Lab ID:** L0904766-18  
**Client ID:** TB-002-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 20:46  
**Analyst:** GK

**Date Collected:** 04/16/09 00:00  
**Date Received:** 04/16/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-18  
 Client ID: TB-002-20090416-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/16/09 00:00  
 Date Received: 04/16/09  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	119		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

**Lab ID:** L0904766-19  
**Client ID:** MW-204D-20090416-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/23/09 13:45  
**Analyst:** GK

**Date Collected:** 04/16/09 10:00  
**Date Received:** 04/16/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	5.8		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	18		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-19

Date Collected: 04/16/09 10:00

Client ID: MW-204D-20090416-01

Date Received: 04/16/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	107		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

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

Analytical Method: 60,8260B  
 Analytical Date: 04/22/09 11:20  
 Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 14-17 Batch: WG359761-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/22/09 11:20  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 14-17 Batch: WG359761-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/22/09 11:20  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 14-17 Batch: WG359761-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/22/09 11:04  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-13,18 Batch: WG359897-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/22/09 11:04  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-13,18 Batch: WG359897-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/22/09 11:04  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-13,18 Batch: WG359897-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/23/09 11:05  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 19 Batch: WG359949-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/23/09 11:05  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 19 Batch: WG359949-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/23/09 11:05  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 19 Batch: WG359949-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	113		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	110		70-130



## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: 0095922

Lab Number: L0904766

Report Date: 04/23/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 14-17 Batch: WG359761-1 WG359761-2					
Methylene chloride	96	99	70-130	3	25
1,1-Dichloroethane	94	100	70-130	6	25
Chloroform	89	96	70-130	8	25
Carbon tetrachloride	94	108	70-130	14	25
1,2-Dichloropropane	86	95	70-130	10	25
Dibromochloromethane	97	104	70-130	7	25
1,1,2-Trichloroethane	92	96	70-130	4	25
Tetrachloroethene	112	119	70-130	6	25
Chlorobenzene	97	102	70-130	5	25
Trichlorofluoromethane	118	130	70-130	10	25
1,2-Dichloroethane	96	104	70-130	8	25
1,1,1-Trichloroethane	95	104	70-130	9	25
Bromodichloromethane	92	104	70-130	12	25
trans-1,3-Dichloropropene	84	91	70-130	8	25
cis-1,3-Dichloropropene	76	81	70-130	6	25
1,1-Dichloropropene	90	97	70-130	7	25
Bromoform	102	114	70-130	11	50
1,1,2,2-Tetrachloroethane	80	88	70-130	10	25
Benzene	88	98	70-130	11	25
Toluene	94	102	70-130	8	25
Ethylbenzene	98	108	70-130	10	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904766

**Project Number:** 0095922

**Report Date:** 04/23/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 14-17 Batch: WG359761-1 WG359761-2					
Chloromethane	80	86	70-130	7	50
Bromomethane	82	84	70-130	2	50
Vinyl chloride	85	95	70-130	11	25
Chloroethane	102	106	70-130	4	25
1,1-Dichloroethene	92	105	70-130	13	25
trans-1,2-Dichloroethene	94	102	70-130	8	25
Trichloroethene	92	104	70-130	12	25
1,2-Dichlorobenzene	96	103	70-130	7	25
1,3-Dichlorobenzene	96	106	70-130	10	25
1,4-Dichlorobenzene	98	104	70-130	6	25
Methyl tert butyl ether	108	104	70-130	4	25
p/m-Xylene	97	104	70-130	7	25
o-Xylene	107	114	70-130	6	25
cis-1,2-Dichloroethene	92	98	70-130	6	25
Dibromomethane	92	94	70-130	2	25
1,2,3-Trichloropropane	88	100	70-130	13	25
Styrene	106	112	70-130	6	25
Dichlorodifluoromethane	91	97	70-130	6	50
Acetone	112	113	70-130	1	50
Carbon disulfide	94	104	70-130	10	50
2-Butanone	85	87	70-130	2	50

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0904766

Project Number: 0095922

Report Date: 04/23/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 14-17 Batch: WG359761-1 WG359761-2					
4-Methyl-2-pentanone	85	91	70-130	7	50
2-Hexanone	76	80	70-130	5	50
Bromochloromethane	100	104	70-130	4	25
Tetrahydrofuran	96	100	70-130	4	25
2,2-Dichloropropane	81	87	70-130	7	50
1,2-Dibromoethane	93	97	70-130	4	25
1,3-Dichloropropane	94	98	70-130	4	25
1,1,1,2-Tetrachloroethane	97	105	70-130	8	25
Bromobenzene	99	106	70-130	7	25
n-Butylbenzene	88	100	70-130	13	25
sec-Butylbenzene	89	102	70-130	14	25
tert-Butylbenzene	88	99	70-130	12	25
o-Chlorotoluene	89	96	70-130	8	25
p-Chlorotoluene	92	100	70-130	8	25
1,2-Dibromo-3-chloropropane	77	82	70-130	6	50
Hexachlorobutadiene	105	122	70-130	15	25
Isopropylbenzene	99	106	70-130	7	25
p-Isopropyltoluene	94	107	70-130	13	25
Naphthalene	73	76	70-130	4	25
n-Propylbenzene	87	98	70-130	12	25
1,2,3-Trichlorobenzene	110	120	70-130	9	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904766

**Project Number:** 0095922

**Report Date:** 04/23/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 14-17 Batch: WG359761-1 WG359761-2					
1,2,4-Trichlorobenzene	103	115	70-130	11	25
1,3,5-Trimethylbenzene	88	98	70-130	11	25
1,2,4-Trimethylbenzene	90	100	70-130	11	25
Ethyl ether	114	119	70-130	4	25
Isopropyl Ether	91	97	70-130	6	25
Ethyl-Tert-Butyl-Ether	95	99	70-130	4	25
Tertiary-Amyl Methyl Ether	87	91	70-130	4	25
1,4-Dioxane	111	116	70-130	4	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		111		70-130
Toluene-d8	111		109		70-130
4-Bromofluorobenzene	88		89		70-130
Dibromofluoromethane	107		109		70-130

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904766

**Project Number:** 0095922

**Report Date:** 04/23/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-13,18 Batch: WG359897-1 WG359897-2					
Methylene chloride	98	95	70-130	3	25
1,1-Dichloroethane	95	94	70-130	1	25
Chloroform	98	99	70-130	1	25
Carbon tetrachloride	98	100	70-130	2	25
1,2-Dichloropropane	90	90	70-130	0	25
Dibromochloromethane	107	107	70-130	0	25
1,1,2-Trichloroethane	97	98	70-130	1	25
Tetrachloroethene	115	116	70-130	1	25
Chlorobenzene	100	99	70-130	1	25
Trichlorofluoromethane	123	121	70-130	2	25
1,2-Dichloroethane	104	103	70-130	1	25
1,1,1-Trichloroethane	98	100	70-130	2	25
Bromodichloromethane	102	104	70-130	2	25
trans-1,3-Dichloropropene	93	93	70-130	0	25
cis-1,3-Dichloropropene	79	80	70-130	1	25
1,1-Dichloropropene	93	93	70-130	0	25
Bromoform	126	125	70-130	1	50
1,1,2,2-Tetrachloroethane	89	89	70-130	0	25
Benzene	89	93	70-130	4	25
Toluene	96	96	70-130	0	25
Ethylbenzene	100	101	70-130	1	25

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0904766

Project Number: 0095922

Report Date: 04/23/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-13,18 Batch: WG359897-1 WG359897-2					
Chloromethane	77	80	70-130	4	50
Bromomethane	100	102	70-130	2	50
Vinyl chloride	84	84	70-130	0	25
Chloroethane	94	97	70-130	3	25
1,1-Dichloroethene	98	96	70-130	2	25
trans-1,2-Dichloroethene	99	99	70-130	0	25
Trichloroethene	98	99	70-130	1	25
1,2-Dichlorobenzene	100	100	70-130	0	25
1,3-Dichlorobenzene	102	101	70-130	1	25
1,4-Dichlorobenzene	102	103	70-130	1	25
Methyl tert butyl ether	106	105	70-130	1	25
p/m-Xylene	98	99	70-130	1	25
o-Xylene	107	107	70-130	0	25
cis-1,2-Dichloroethene	90	94	70-130	4	25
Dibromomethane	97	98	70-130	1	25
1,2,3-Trichloropropane	100	103	70-130	3	25
Styrene	104	104	70-130	0	25
Dichlorodifluoromethane	90	89	70-130	1	50
Acetone	114	118	70-130	3	50
Carbon disulfide	97	98	70-130	1	50
2-Butanone	94	90	70-130	4	50

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904766

**Project Number:** 0095922

**Report Date:** 04/23/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-13,18 Batch: WG359897-1 WG359897-2					
4-Methyl-2-pentanone	91	95	70-130	4	50
2-Hexanone	90	92	70-130	2	50
Bromochloromethane	100	104	70-130	4	25
Tetrahydrofuran	106	102	70-130	4	25
2,2-Dichloropropane	85	79	70-130	7	50
1,2-Dibromoethane	104	103	70-130	1	25
1,3-Dichloropropane	101	98	70-130	3	25
1,1,1,2-Tetrachloroethane	99	100	70-130	1	25
Bromobenzene	103	103	70-130	0	25
n-Butylbenzene	97	99	70-130	2	25
sec-Butylbenzene	96	96	70-130	0	25
tert-Butylbenzene	92	94	70-130	2	25
o-Chlorotoluene	93	93	70-130	0	25
p-Chlorotoluene	95	94	70-130	1	25
1,2-Dibromo-3-chloropropane	86	98	70-130	13	50
Hexachlorobutadiene	121	121	70-130	0	25
Isopropylbenzene	97	97	70-130	0	25
p-Isopropyltoluene	100	100	70-130	0	25
Naphthalene	91	94	70-130	3	25
n-Propylbenzene	93	92	70-130	1	25
1,2,3-Trichlorobenzene	117	116	70-130	1	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904766

**Project Number:** 0095922

**Report Date:** 04/23/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-13,18 Batch: WG359897-1 WG359897-2					
1,2,4-Trichlorobenzene	106	107	70-130	1	25
1,3,5-Trimethylbenzene	93	94	70-130	1	25
1,2,4-Trimethylbenzene	95	95	70-130	0	25
Ethyl ether	120	125	70-130	4	25
Isopropyl Ether	93	92	70-130	1	25
Ethyl-Tert-Butyl-Ether	99	97	70-130	2	25
Tertiary-Amyl Methyl Ether	91	90	70-130	1	25
1,4-Dioxane	115	107	70-130	7	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		110		70-130
Toluene-d8	109		110		70-130
4-Bromofluorobenzene	91		93		70-130
Dibromofluoromethane	109		110		70-130



## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904766

**Project Number:** 0095922

**Report Date:** 04/23/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 19 Batch: WG359949-1 WG359949-2					
Methylene chloride	96	94	70-130	2	25
1,1-Dichloroethane	96	90	70-130	6	25
Chloroform	98	92	70-130	6	25
Carbon tetrachloride	104	93	70-130	11	25
1,2-Dichloropropane	88	88	70-130	0	25
Dibromochloromethane	106	104	70-130	2	25
1,1,2-Trichloroethane	100	98	70-130	2	25
Tetrachloroethene	115	110	70-130	4	25
Chlorobenzene	97	95	70-130	2	25
Trichlorofluoromethane	127	115	70-130	10	25
1,2-Dichloroethane	105	101	70-130	4	25
1,1,1-Trichloroethane	99	90	70-130	10	25
Bromodichloromethane	100	98	70-130	2	25
trans-1,3-Dichloropropene	92	91	70-130	1	25
cis-1,3-Dichloropropene	80	77	70-130	4	25
1,1-Dichloropropene	96	90	70-130	6	25
Bromoform	125	123	70-130	2	50
1,1,2,2-Tetrachloroethane	93	91	70-130	2	25
Benzene	92	86	70-130	7	25
Toluene	95	92	70-130	3	25
Ethylbenzene	101	94	70-130	7	25

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0904766

Project Number: 0095922

Report Date: 04/23/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 19 Batch: WG359949-1 WG359949-2					
Chloromethane	76	72	70-130	5	50
Bromomethane	101	93	70-130	8	50
Vinyl chloride	86	78	70-130	10	25
Chloroethane	97	90	70-130	7	25
1,1-Dichloroethene	97	89	70-130	9	25
trans-1,2-Dichloroethene	100	94	70-130	6	25
Trichloroethene	99	93	70-130	6	25
1,2-Dichlorobenzene	99	96	70-130	3	25
1,3-Dichlorobenzene	99	97	70-130	2	25
1,4-Dichlorobenzene	100	98	70-130	2	25
Methyl tert butyl ether	108	106	70-130	2	25
p/m-Xylene	97	95	70-130	2	25
o-Xylene	104	102	70-130	2	25
cis-1,2-Dichloroethene	95	89	70-130	7	25
Dibromomethane	98	97	70-130	1	25
1,2,3-Trichloropropane	102	100	70-130	2	25
Styrene	102	100	70-130	2	25
Dichlorodifluoromethane	88	80	70-130	10	50
Acetone	125	115	70-130	8	50
Carbon disulfide	93	86	70-130	8	50
2-Butanone	96	95	70-130	1	50

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904766

**Project Number:** 0095922

**Report Date:** 04/23/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 19 Batch: WG359949-1 WG359949-2					
4-Methyl-2-pentanone	95	94	70-130	1	50
2-Hexanone	88	90	70-130	2	50
Bromochloromethane	102	97	70-130	5	25
Tetrahydrofuran	108	100	70-130	8	25
2,2-Dichloropropane	83	77	70-130	8	50
1,2-Dibromoethane	104	104	70-130	0	25
1,3-Dichloropropane	102	99	70-130	3	25
1,1,1,2-Tetrachloroethane	99	95	70-130	4	25
Bromobenzene	103	99	70-130	4	25
n-Butylbenzene	97	92	70-130	5	25
sec-Butylbenzene	97	91	70-130	6	25
tert-Butylbenzene	94	89	70-130	5	25
o-Chlorotoluene	93	91	70-130	2	25
p-Chlorotoluene	94	90	70-130	4	25
1,2-Dibromo-3-chloropropane	89	95	70-130	7	50
Hexachlorobutadiene	120	118	70-130	2	25
Isopropylbenzene	98	94	70-130	4	25
p-Isopropyltoluene	100	94	70-130	6	25
Naphthalene	94	93	70-130	1	25
n-Propylbenzene	94	89	70-130	5	25
1,2,3-Trichlorobenzene	114	114	70-130	0	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904766

**Project Number:** 0095922

**Report Date:** 04/23/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 19 Batch: WG359949-1 WG359949-2					
1,2,4-Trichlorobenzene	104	105	70-130	1	25
1,3,5-Trimethylbenzene	92	89	70-130	3	25
1,2,4-Trimethylbenzene	93	90	70-130	3	25
Ethyl ether	117	118	70-130	1	25
Isopropyl Ether	94	90	70-130	4	25
Ethyl-Tert-Butyl-Ether	98	94	70-130	4	25
Tertiary-Amyl Methyl Ether	91	87	70-130	4	25
1,4-Dioxane	118	113	70-130	4	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		111		70-130
Toluene-d8	110		112		70-130
4-Bromofluorobenzene	91		91		70-130
Dibromofluoromethane	112		112		70-130

# METALS

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-05

Date Collected: 04/16/09 11:10

Client ID: MW-117-20090416-01

Date Received: 04/16/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	87		mg/l	2.0	1	04/20/09 11:15	04/22/09 17:15	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-08

Date Collected: 04/16/09 10:15

Client ID: MW-103-20090416-01

Date Received: 04/16/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	64		mg/l	2.0	1	04/20/09 11:15	04/22/09 17:20	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-09

Date Collected: 04/16/09 10:55

Client ID: MW-204S-20090416-01

Date Received: 04/16/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	23		mg/l	2.0	1	04/20/09 11:15	04/22/09 17:23	EPA 3005A	60,6010B	AI



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-10

Date Collected: 04/16/09 11:40

Client ID: MW-204M-20090416-01

Date Received: 04/16/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	34		mg/l	2.0	1	04/20/09 11:15	04/22/09 17:26	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-11

Date Collected: 04/16/09 08:45

Client ID: MW-106-20090416-01

Date Received: 04/16/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	83		mg/l	2.0	1	04/20/09 11:15	04/22/09 17:29	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-12

Date Collected: 04/16/09 09:25

Client ID: MW-106M-20090416-01

Date Received: 04/16/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	160		mg/l	2.0	1	04/20/09 11:15	04/22/09 17:39	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-14

Date Collected: 04/16/09 09:30

Client ID: MW-109-20090416-01

Date Received: 04/16/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	47		mg/l	2.5	1	04/20/09 11:15	04/22/09 17:42	EPA 3005A	60,6010B	AI
Sodium, Dissolved	24		mg/l	2.0	1	04/20/09 11:15	04/22/09 17:42	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-15

Date Collected: 04/16/09 10:40

Client ID: MW-107-20090416-01

Date Received: 04/16/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	28		mg/l	2.5	1	04/20/09 11:15	04/22/09 17:45	EPA 3005A	60,6010B	AI
Sodium, Dissolved	41		mg/l	2.0	1	04/20/09 11:15	04/22/09 17:45	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-16

Date Collected: 04/16/09 12:00

Client ID: MW-111-20090416-01

Date Received: 04/16/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	5.2		mg/l	2.5	1	04/20/09 11:15	04/22/09 17:48	EPA 3005A	60,6010B	AI
Sodium, Dissolved	32		mg/l	2.0	1	04/20/09 11:15	04/22/09 17:48	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-17

Date Collected: 04/16/09 14:00

Client ID: MW-115-20090416-01

Date Received: 04/16/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	7.6		mg/l	2.5	1	04/20/09 11:15	04/22/09 17:50	EPA 3005A	60,6010B	AI
Sodium, Dissolved	48		mg/l	2.0	1	04/20/09 11:15	04/22/09 17:50	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904766**Project Number:** 0095922**Report Date:** 04/23/09**SAMPLE RESULTS**

Lab ID: L0904766-19

Date Collected: 04/16/09 10:00

Client ID: MW-204D-20090416-01

Date Received: 04/16/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	83		mg/l	2.0	1	04/20/09 11:15	04/22/09 17:53	EPA 3005A	60,6010B	AI



Project Name: RAYTHEON WAYLAND

Lab Number: L0904766

Project Number: 0095922

Report Date: 04/23/09

## 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): 05,08-12,14-17,19 Batch: WG359480-1								
Potassium, Dissolved	ND	mg/l	2.5	1	04/20/09 11:15	04/22/09 17:04	60,6010B	AI
Sodium, Dissolved	ND	mg/l	2.0	1	04/20/09 11:15	04/22/09 17:04	60,6010B	AI

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Project Number:** 0095922

**Lab Number:** L0904766

**Report Date:** 04/23/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 05,08-12,14-17,19 Batch: WG359480-2 WG359480-3					
Potassium, Dissolved	100	98	80-120	2	20
Sodium, Dissolved	100	97	80-120	3	20

Project Name: RAYTHEON WAYLAND

Lab Number: L0904766

Project Number: 0095922

Report Date: 04/23/09

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

## Cooler Information

Cooler	Custody Seal
A	Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904766-01A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-01B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-02A	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-02B	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-03A	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-03B	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-04A	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-04B	Vial Na2S2O3 preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-05A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-05B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-05C	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180)
L0904766-06A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-06B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-07A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-07B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-08A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-08B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-08C	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180)
L0904766-09A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-09B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-09C	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180)
L0904766-10A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-10B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-10C	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180)
L0904766-11A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-11B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-11C	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180)
L0904766-12A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-12B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-12C	Plastic 250ml HNO3 preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180)

\*Hold days indicated by values in parentheses

Project Name: RAYTHEON WAYLAND

Project Number: 0095922

Lab Number: L0904766

Report Date: 04/23/09

## Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904766-13A	Vial Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-13B	Vial Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-14A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-14B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-14C	Plastic 250ml HNO <sub>3</sub> preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180),MCP-K-6010S(180)
L0904766-15A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-15B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-15C	Plastic 250ml HNO <sub>3</sub> preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180),MCP-K-6010S(180)
L0904766-16A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-16B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-16C	Plastic 250ml HNO <sub>3</sub> preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180),MCP-K-6010S(180)
L0904766-17A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-17B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-17C	Plastic 250ml HNO <sub>3</sub> preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180),MCP-K-6010S(180)
L0904766-18A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-19A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-19B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904766-19C	Plastic 250ml HNO <sub>3</sub> preserved	A	<2	2	Y	Absent	MCP-NA-6010S(180)

\*Hold days indicated by values in parentheses



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

## GLOSSARY

### Acronyms

- EPA** - Environmental Protection Agency.
- LCS** - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD** - Laboratory Control Sample Duplicate: Refer to LCS.
- MS** - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD** - Matrix Spike Sample Duplicate: Refer to MS.
- NA** - Not Applicable.
- NC** - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
- ND** - Not detected at the reported detection limit for the sample.
- 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

- \*** - The batch duplicate RPD exceeds the acceptance criteria. This flag is not applicable when the sample concentrations are less than 5x the RDL. (Metals only.)
- 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.
- 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.
- N** - The matrix spike recovery exceeds the acceptance criteria. This flag is not applicable when the sample concentration is greater than 4x the spike added. (Metals only.)
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- 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).

Report Format: Data Usability Report



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904766  
**Report Date:** 04/23/09

## REFERENCES

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

## LIMITATION OF LIABILITIES

Alpha 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 February 18, 2009 - 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.

*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.)

*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), 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: MA0086.

*Drinking Water* (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 150.1, 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, Nitrite-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, EPA 150.1, SM4500H-B.

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

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), SM6251B, 314.0.

#### *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,Ti,V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Nitrate-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, 4500CN-CE, 2540D, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1

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

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCB-Water) 600/4-81-045-PCB-Oil

**Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.***Drinking Water*

Microbiology Parameters: SM9215B; MF-SM9222B; ENZ. SUB. SM9223; EC-SM9221E; MF-SM9222D; ENZ. SUB. SM9223;

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

*Drinking Water (Inorganic Parameters:* SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 110.2, 120.1, 150.1, 300.0, 325.2, 314.0, SM4500CN-E, 4500H+B, 4500NO<sub>3</sub>-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, 150.1, 300.0, 305.1, 310.1, 325.2, 340.2, 350.1, 350.2, 351.1, 353.2, 354.1, 365.2, 375.4, 376.2, 405.1, 415.1, 420.1, 425.1, 1664A, SW-846 9010, 9030, 9040B, EPA 160.1, 160.2, 160.3, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH<sub>3</sub>-H, 4500NH<sub>3</sub>-E, 4500NO<sub>2</sub>-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.**

*Drinking Water (Inorganic Parameters:* SM9222B, 9221E, 9223B, 9215B, 4500NO<sub>3</sub>-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, 331.0, 110.2, SM2120B, 2510B, 5310C, EPA 150.1, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

*Non-Potable Water (Inorganic Parameters:* SM5210B, EPA 410.1, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO<sub>3</sub>-F, 4500NO<sub>2</sub>-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, 4500NH<sub>3</sub>-H, EPA 350.2/1, 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.)

*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, 3540C, 3545, 3550B, 3580A, 5035L, 5035H.)

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

*Drinking Water (Inorganic Parameters:* SM9223B, 9222B, 8215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 331.0, SM2320B, EPA 300.0, 325.2, 110.2, SM2120B, 4500CN-E, 4500F-C, EPA 150.1, SM4500H-B, 4500NO<sub>3</sub>-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1, SM6251B.)

*Non-Potable Water (Inorganic Parameters:* SM9221E, 9222D, 9221B, 9222B, 9215B, EPA 405.1, SM5210B, EPA 410.4, SM5220D, EPA 305.1, SM2310B-4a, EPA 310.1, SM2320B, EPA 200.7, 300.0, 325.2, LACHAT 10-117-07-1A or B, SM4500CI-E, EPA 340.2, SM4500F-C, EPA 375.4, SM15 426C, EPA 350.1, 350.2, LACHAT 10-107-06-1-B, SM4500NH<sub>3</sub>-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO<sub>3</sub>F, EPA 354.1, SM4500-NO<sub>2</sub>-B, EPA 365.2, SM4500P-E, EPA 160.3, SM2540B, EPA 160.1, SM2540C, EPA 160.2, SM2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, 110.2, SM2120B, 335.2, LACHAT 10-204-00-1-A, EPA 150.1, 9040B, SM4500-HB, EPA 1664A, EPA 415.1, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, EPA 376.2, SM4500S-D, EPA 425.1, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, 8021B, EPA 3510C, 5030B, 9010B, 9030B.)

*Solid & Hazardous Waste (Inorganic Parameters:* EPA 9040B, 9045C, 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 3005A, 3050B, 3051, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 8021B, 3540C, 3545, 3580, 5030B, 5035.)

*Analytical Services Protocol:* CLP Volatile Organics, CLP Inorganics, CLP PCB/Pesticides.

**Rhode Island Department of Health Certificate/Lab ID: LAO00065.**

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

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

**Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. Registered Laboratory.**





# CHAIN OF CUSTODY

PAGE 1 OF 2

WESTBORO, MA  
TEL: 508-898-9220  
FAX: 508-899-9193

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

**Client Information**

Client: ERM

Address: 399 Baylston St.

6th Floor Boston, MA

Phone: (617) 646-7800

Fax: (617) 267-6447

Email: vaivavar.frost@erm.com

Other Project Specific Requirements/Comments/Detection Limits:

**Project Information**

Project Name: Kaytheon Wayland

Project Location: Wayland, MA

Project #: 0095922

Project Manager: Jason Flattery

ALPHA Quote #:

Turn-Around Time

Standard  RUSH (only confirmed if pre-approved)

Date Due: 4/23/09 Time:

**Report Information - Data Deliverables**

FAX  EMAIL

Add'l Deliverables

**Regulatory Requirements/Report Limits**

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 Are CT RCP (Reasonable Confidence Protocols) Required?

**Billing Information**

Same as Client info

PO #:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Time	Sample Matrix	Sampler's Initials
04966-01	IP-165-20090416-01	4/16/09	0910	GW	EW
-02	IP-16D-20090416-01		1000	GW	EW
-03	IP-17D-20090416-01		1040	GW	EW
-04	MW-4055-20090416-01		1115	GW	EW
-05	MW-117-20090416-01		1110	GW	JPD
-06	MW-118-20090416-01		1000	GW	JPD
-07	MW-404-20090416-01		0910	GW	JPD
-08	MW-103-20090416-01	4/16/09	1015	GW	CC
-09	MW-104-20090416-01	4/16/09	1055	GW	JN
-10	MW-105-20090416-01	4/16/09	1140	GW	JN

**ANALYSIS**  
8021B by 8260  
Diss. Na (FF)  
8021B by 8260

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

**PLEASE ANSWER QUESTIONS ABOVE!**

IS YOUR PROJECT  
MAMCP or CT RCP?

Relinquished By:

*[Signature]*

Date/Time

4/16/09 16:30

Received By:

*[Signature]*

Date/Time

4/16/09 13:30

Container Type	Preservative
V	H
P	C
V	B

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



# 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: **ERM**  
 Address: **399 Brighton St. 5th floor**  
**Sobon Mr.**

Project Name: **Raytheon**  
 Project Location: **Raytheon Mr.**  
 Project #: **0085922**  
 Project Manager: **Sason Fattery**  
 ALPHA Quote #:

Phone: **617-646-7400**

Turn-Around Time

Fax: **617-267-6447**

Standard  RUSH (only confirmed if pre-approved)

Email: **Sason.Fattery@ERM.com**

Date Due: **4/23/09** Time:

These samples have been previously analyzed by Alpha  
 Other Project Specific Requirements/Comments/Detection Limits:

Date Rec'd in Lab: **4/16/09**

ALPHA Job #: **60404944**

**Report Information - Data Deliverables**

FAX  EMAIL  
 DEX  Add'l Deliverables

**Billing Information**

Same as Client info PO #:

**Regulatory Requirements/Report Limits**

State/Fed Program: **MA/MCP**  
 MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO.

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

**ANALYSIS**  
 80213 by 8260  
 Diss. Na (FF)  
 80210 by 8260  
 Diss. K (FF)

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Date	Time	Container Type	Preservative	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time	
		Date	Time												
09166	-11 MW-106-20090416-01	4/16/09	0845	EAU	CC	2	1	HEA	2	1	1	4/16/09 10:00	JN	2	1
	-12 MWS-106M-20090416-01		0925		CC	2	1	HEA	2	1	1				
	-08 MW-103-20090416-01		1015		CC	2	1	HEA	2	1	1				
	-13 MW-217-20090416-01		1110		CC	2	1	HEA	2	1	1				
	-14 MW-109-20090416-01		09:30		CC	2	1	HEA	2	1	1				
	-15 MW-107-20090416-01		10:40		CC	2	1	HEA	2	1	1				
	-16 MW-111-20090416-01		12:00		CC	2	1	HEA	2	1	1				
	-17 MW-115-20090416-01		15:00		CC	2	1	HEA	2	1	1				
	-18 TB-002-20090416-01		4/16/09 01:00		CC	2	1	KR	1	1	1				
	-19 MW-204D-20090416-01		4/16/09 10:00		CC	2	1	JN	2	1	1				

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
 MAMCP or CT RCP?

FORM NO: 01-01 (REV. 14-OCT-07)

Relinquished By: **[Signature]**

Date/Time: **4/16/09 13:30**

Received By: **[Signature]**  
 Date/Time: **4/16/09 17:30**

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:	L0904670
Client:	ERM Consulting & Engineering, Inc. 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Project Name:	RAYTHEON WAYLAND
Project Number:	0095922
Report Date:	05/04/09

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:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L0904670-01	DUP-002-20090415-01	WAYLAND, MA	04/15/09 00:00
L0904670-02	MW-207S-20090415-01	WAYLAND, MA	04/15/09 09:30
L0904670-03	MW-47D-20090415-01	WAYLAND, MA	04/15/09 12:40
L0904670-04	MW-47M-20090415-01	WAYLAND, MA	04/15/09 13:55
L0904670-05	MW-47S-20090415-01	WAYLAND, MA	04/15/09 14:30
L0904670-06	MW-201S-20090415-01	WAYLAND, MA	04/15/09 15:40
L0904670-07	MW-201M-20090415-01	WAYLAND, MA	04/15/09 14:30
L0904670-08	MW-33S-20090415-01	WAYLAND, MA	04/15/09 09:55
L0904670-09	MW-33M-20090415-01	WAYLAND, MA	04/15/09 11:50
L0904670-10	MW-40S-20090415-01	WAYLAND, MA	04/15/09 09:10
L0904670-11	MW-45D-20090415-01	WAYLAND, MA	04/15/09 12:35
L0904670-12	MW-45M-20090415-01	WAYLAND, MA	04/15/09 11:20
L0904670-13	MW-45B-20090415-01	WAYLAND, MA	04/15/09 10:30
L0904670-14	MW-203D-20090415-01	WAYLAND, MA	04/15/09 09:20
L0904670-15	DUP-004-20090415-01	WAYLAND, MA	04/15/09 10:30
L0904670-16	MW-206M-20090415-01	WAYLAND, MA	04/15/09 13:40
L0904670-17	MW-206D-20090415-01	WAYLAND, MA	04/15/09 12:00
L0904670-18	MW-207M-20090415-01	WAYLAND, MA	04/15/09 10:15
L0904670-19	MW-212-20090415-01	WAYLAND, MA	04/15/09 08:15
L0904670-20	MW-212M-20090415-01	WAYLAND, MA	04/15/09 09:05
L0904670-21	MW-105-20090415-01	WAYLAND, MA	04/15/09 09:20
L0904670-22	MW-105M-20090415-01	WAYLAND, MA	04/15/09 10:35
L0904670-23	MW-209-20090415-01	WAYLAND, MA	04/15/09 11:50
L0904670-24	MW-104-20090415-01	WAYLAND, MA	04/15/09 13:05
L0904670-25	MW-43S-20090415-01	WAYLAND, MA	04/15/09 14:05
L0904670-26	MW-211-20090415-01	WAYLAND, MA	04/15/09 14:40
L0904670-27	DUP-006-20090415-01	WAYLAND, MA	04/15/09 00:00
L0904670-28	HA-102-20090415-01	WAYLAND, MA	04/15/09 15:00
L0904670-29	MW-113-20090415-01	WAYLAND, MA	04/15/09 14:35
L0904670-30	MW-40-20090415-01	WAYLAND, MA	04/15/09 09:50
L0904670-31	MW-216D-20090415-01	WAYLAND, MA	04/15/09 11:10

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L0904670-32	DUP-001-20090415-01	WAYLAND, MA	04/15/09 15:00
L0904670-33	MW-113-20090415-01	WAYLAND, MA	04/15/09 14:35

Project Name: RAYTHEON WAYLAND

Lab Number: L0904670

Project Number: 0095922

Report Date: 05/04/09

### MADEP MCP Response Action Analytical Report Certification

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

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

### 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.

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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#### Report Submission

This report replaces the report issued on April 22, 2009. The client identification has been changed on L0904670-33.

#### MCP Related Narratives

##### Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

At the client's request:

The sample identified as "MW-DUP-20090415-01" on the chain of custody is reported as "DUP-006-

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

### Case Narrative (continued)

20090415-01".

Dissolved Sodium was added to the analysis request for samples "MW-40-20090415-01", "MW-203D-20090415-01", and "MW-103-20090415-01."

The collection time was changed on sample "MW-40-20090415-01".

#### Volatile Organics

L0904670-05: The pH of the sample was greater than two; however, the sample was analyzed within the method required holding time.

L0904670-18 has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

In reference to question E:

The WG359556-1 LCS recovery associated with L0904670-01 through -04 is above the acceptance criteria for Bromoform (133%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported; however, all positive detects are considered to have a potentially high bias for this compound.

The WG359733-2 LCSD recovery associated with L0904670-05, -06, -07 and -09 through -21 is above the acceptance criteria for Bromoform (131%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported; however, all positive detects are considered to have a potentially high bias for this compound.

The WG359729-7/-8 MS/MSD recoveries associated with L0904670-31 were above the acceptance criteria for Dibromochloromethane (MSD at 131%), Tetrachloroethene (138%/147%), Bromoform (133%/144%), trans-1,2-Dichloroethene (MSD at 140%), Hexachlorobutadiene (132%/152%) and 1,2,4-Trichlorobenzene (MSD at 131%); however, the associated LCS/LCSD recoveries were within criteria. The results of the sample utilized for the MS/MSD are considered to have a potentially high bias for these compounds.

The WG359733-7/-8 MS/MSD recoveries associated with L0904670-17 were above the acceptance criteria for Tetrachloroethene (131%/137%), Bromoform (MSD at 132%), Hexachlorobutadiene (MSD at 146%), and 1,2,4-Trichlorobenzene (MSD at 132%); however, the associated LCS/LCSD recoveries were within criteria for all compounds, except Bromoform. The results of the sample utilized for the MS/MSD are considered to have a



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

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### Case Narrative (continued)

potentially high bias for these compounds.

In reference to question F:

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

Metals

In reference to question F:

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

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

Authorized Signature:



Title: Technical Director/Representative

Date: 05/04/09

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-01  
**Client ID:** DUP-002-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/20/09 18:05  
**Analyst:** GK

**Date Collected:** 04/15/09 00:00  
**Date Received:** 04/15/09  
**Field Prep:** None

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	2.8		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.7		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-01

Date Collected: 04/15/09 00:00

Client ID: DUP-002-20090415-01

Date Received: 04/15/09

Sample Location: WAYLAND, MA

Field Prep: None

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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**MCP Volatile Organics - Westborough Lab**

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	110		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-02  
**Client ID:** MW-207S-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/20/09 18:37  
**Analyst:** GK

**Date Collected:** 04/15/09 09:30  
**Date Received:** 04/15/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	3.0		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.8		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-02

Date Collected: 04/15/09 09:30

Client ID: MW-207S-20090415-01

Date Received: 04/15/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-03  
**Client ID:** MW-47D-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/20/09 19:09  
**Analyst:** GK

**Date Collected:** 04/15/09 12:40  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.9		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	15		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.3		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-03  
 Client ID: MW-47D-20090415-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/15/09 12:40  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-04  
**Client ID:** MW-47M-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/20/09 19:42  
**Analyst:** GK

**Date Collected:** 04/15/09 13:55  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.88		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	56		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	6.5		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-04

Date Collected: 04/15/09 13:55

Client ID: MW-47M-20090415-01

Date Received: 04/15/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-05  
**Client ID:** MW-47S-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 12:11  
**Analyst:** GK

**Date Collected:** 04/15/09 14:30  
**Date Received:** 04/15/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	0.55		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-05  
 Client ID: MW-47S-20090415-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/15/09 14:30  
 Date Received: 04/15/09  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	110		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-06  
**Client ID:** MW-201S-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 12:44  
**Analyst:** GK

**Date Collected:** 04/15/09 15:40  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.54		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	5.8		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-06

Date Collected: 04/15/09 15:40

Client ID: MW-201S-20090415-01

Date Received: 04/15/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	107		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-07  
**Client ID:** MW-201M-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 13:16  
**Analyst:** GK

**Date Collected:** 04/15/09 14:30  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	1.9		ug/l	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	3.0		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	100		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	50		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-07

Date Collected: 04/15/09 14:30

Client ID: MW-201M-20090415-01

Date Received: 04/15/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-08  
**Client ID:** MW-33S-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/22/09 11:53  
**Analyst:** GK

**Date Collected:** 04/15/09 09:55  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	11		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	38		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-08  
 Client ID: MW-33S-20090415-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/15/09 09:55  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-09  
**Client ID:** MW-33M-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 14:20  
**Analyst:** GK

**Date Collected:** 04/15/09 11:50  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	5.1		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	2.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-09

Date Collected: 04/15/09 11:50

Client ID: MW-33M-20090415-01

Date Received: 04/15/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-10  
**Client ID:** MW-40S-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 14:52  
**Analyst:** GK

**Date Collected:** 04/15/09 09:10  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	14		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	4.9		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-10  
 Client ID: MW-40S-20090415-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/15/09 09:10  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	117		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-11  
**Client ID:** MW-45D-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 15:25  
**Analyst:** GK

**Date Collected:** 04/15/09 12:35  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	14		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.1		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-11

Date Collected: 04/15/09 12:35

Client ID: MW-45D-20090415-01

Date Received: 04/15/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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**MCP Volatile Organics - Westborough Lab**

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	115		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-12  
**Client ID:** MW-45M-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 15:57  
**Analyst:** GK

**Date Collected:** 04/15/09 11:20  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.65		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	10		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	2.5		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	58		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-12

Date Collected: 04/15/09 11:20

Client ID: MW-45M-20090415-01

Date Received: 04/15/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	113		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-13  
**Client ID:** MW-45B-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 16:29  
**Analyst:** GK

**Date Collected:** 04/15/09 10:30  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	1.4		ug/l	0.75	1
Trichloroethene	92		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	10		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-13  
 Client ID: MW-45B-20090415-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/15/09 10:30  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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**MCP Volatile Organics - Westborough Lab**

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-14  
**Client ID:** MW-203D-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 17:01  
**Analyst:** GK

**Date Collected:** 04/15/09 09:20  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	4.2		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	87		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	6.8		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-14

Date Collected: 04/15/09 09:20

Client ID: MW-203D-20090415-01

Date Received: 04/15/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	113		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-15  
**Client ID:** DUP-004-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 17:34  
**Analyst:** GK

**Date Collected:** 04/15/09 10:30  
**Date Received:** 04/15/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	1.5		ug/l	0.75	1
Trichloroethene	93		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	10		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-15

Date Collected: 04/15/09 10:30

Client ID: DUP-004-20090415-01

Date Received: 04/15/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	108		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-16  
**Client ID:** MW-206M-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 18:06  
**Analyst:** GK

**Date Collected:** 04/15/09 13:40  
**Date Received:** 04/15/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	2.8		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	23		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	0.84		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-16

Date Collected: 04/15/09 13:40

Client ID: MW-206M-20090415-01

Date Received: 04/15/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	110		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-17  
**Client ID:** MW-206D-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 18:38  
**Analyst:** GK

**Date Collected:** 04/15/09 12:00  
**Date Received:** 04/15/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	45		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	5.5		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-17

Date Collected: 04/15/09 12:00

Client ID: MW-206D-20090415-01

Date Received: 04/15/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	116		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-18  
**Client ID:** MW-207M-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 19:10  
**Analyst:** GK

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

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
<b>MCP Volatile Organics - Westborough Lab</b>					
Methylene chloride	ND		ug/l	10	2
1,1-Dichloroethane	2.4		ug/l	1.5	2
Chloroform	ND		ug/l	1.5	2
Carbon tetrachloride	ND		ug/l	1.0	2
1,2-Dichloropropane	ND		ug/l	3.5	2
Dibromochloromethane	ND		ug/l	1.0	2
1,1,2-Trichloroethane	ND		ug/l	1.5	2
Tetrachloroethene	ND		ug/l	1.0	2
Chlorobenzene	ND		ug/l	1.0	2
1,2-Dichloroethane	ND		ug/l	1.0	2
1,1,1-Trichloroethane	2.0		ug/l	1.0	2
Bromodichloromethane	ND		ug/l	1.0	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	2
Bromoform	ND		ug/l	4.0	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	2
Chloromethane	ND		ug/l	5.0	2
Vinyl chloride	ND		ug/l	2.0	2
Chloroethane	ND		ug/l	2.0	2
1,1-Dichloroethene	4.7		ug/l	1.0	2
trans-1,2-Dichloroethene	ND		ug/l	1.5	2
Trichloroethene	72		ug/l	1.0	2
1,2-Dichlorobenzene	ND		ug/l	5.0	2
1,3-Dichlorobenzene	ND		ug/l	5.0	2
1,4-Dichlorobenzene	ND		ug/l	5.0	2
cis-1,2-Dichloroethene	1.9		ug/l	1.0	2
Dichlorodifluoromethane	ND		ug/l	10	2
1,2-Dibromoethane	ND		ug/l	4.0	2
1,3-Dichloropropane	ND		ug/l	5.0	2
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	2

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-18

Date Collected: 04/15/09 10:15

Client ID: MW-207M-20090415-01

Date Received: 04/15/09

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	5.0	2
p-Chlorotoluene	ND		ug/l	5.0	2
Hexachlorobutadiene	ND		ug/l	1.2	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	115		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-19  
**Client ID:** MW-212-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 19:43  
**Analyst:** GK

**Date Collected:** 04/15/09 08:15  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.91		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-19  
 Client ID: MW-212-20090415-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/15/09 08:15  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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**MCP Volatile Organics - Westborough Lab**

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	114		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-20  
**Client ID:** MW-212M-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 20:15  
**Analyst:** GK

**Date Collected:** 04/15/09 09:05  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	0.74		ug/l	0.50	1
Chlorobenzene	0.81		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	3.2		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	1.1		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-20

Date Collected: 04/15/09 09:05

Client ID: MW-212M-20090415-01

Date Received: 04/15/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	111		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-21  
**Client ID:** MW-105-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 20:47  
**Analyst:** GK

**Date Collected:** 04/15/09 09:20  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	2.8		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	20		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-21

Date Collected: 04/15/09 09:20

Client ID: MW-105-20090415-01

Date Received: 04/15/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-22  
**Client ID:** MW-105M-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 13:00  
**Analyst:** GK

**Date Collected:** 04/15/09 10:35  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.6		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	12		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	0.61		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-22

Date Collected: 04/15/09 10:35

Client ID: MW-105M-20090415-01

Date Received: 04/15/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	108		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-23  
**Client ID:** MW-209-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 13:32  
**Analyst:** GK

**Date Collected:** 04/15/09 11:50  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	1.0		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-23  
 Client ID: MW-209-20090415-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/15/09 11:50  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	108		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-24  
**Client ID:** MW-104-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 14:04  
**Analyst:** GK

**Date Collected:** 04/15/09 13:05  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	2.7		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	15		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-24  
 Client ID: MW-104-20090415-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/15/09 13:05  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	110		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-25  
**Client ID:** MW-43S-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 14:36  
**Analyst:** GK

**Date Collected:** 04/15/09 14:05  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	3.0		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	15		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-25  
 Client ID: MW-43S-20090415-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/15/09 14:05  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	105		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-26  
**Client ID:** MW-211-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 15:08  
**Analyst:** GK

**Date Collected:** 04/15/09 14:40  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	ND		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-26  
 Client ID: MW-211-20090415-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/15/09 14:40  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-27  
**Client ID:** DUP-006-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 15:41  
**Analyst:** GK

**Date Collected:** 04/15/09 00:00  
**Date Received:** 04/15/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	2.3		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.96		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-27

Date Collected: 04/15/09 00:00

Client ID: DUP-006-20090415-01

Date Received: 04/15/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	109		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-28  
**Client ID:** HA-102-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 16:13  
**Analyst:** GK

**Date Collected:** 04/15/09 15:00  
**Date Received:** 04/15/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	2.3		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	0.93		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-28  
 Client ID: HA-102-20090415-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/15/09 15:00  
 Date Received: 04/15/09  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	109		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-29  
**Client ID:** MW-113-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 16:45  
**Analyst:** GK

**Date Collected:** 04/15/09 14:35  
**Date Received:** 04/15/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	6.3		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	27		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	0.84		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-29  
 Client ID: MW-113-20090415-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/15/09 14:35  
 Date Received: 04/15/09  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-30  
**Client ID:** MW-40-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 17:18  
**Analyst:** GK

**Date Collected:** 04/15/09 09:50  
**Date Received:** 04/15/09  
**Field Prep:** Field Filtered

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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	1.0		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	3.8		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-30  
 Client ID: MW-40-20090415-01  
 Sample Location: WAYLAND, MA

Date Collected: 04/15/09 09:50  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor
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**MCP Volatile Organics - Westborough Lab**

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	109		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-31  
**Client ID:** MW-216D-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 17:50  
**Analyst:** GK

**Date Collected:** 04/15/09 11:10  
**Date Received:** 04/15/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	15		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	2.3		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-31

Date Collected: 04/15/09 11:10

Client ID: MW-216D-20090415-01

Date Received: 04/15/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	114		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

**Lab ID:** L0904670-32  
**Client ID:** DUP-001-20090415-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/21/09 18:22  
**Analyst:** GK

**Date Collected:** 04/15/09 15:00  
**Date Received:** 04/15/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	15		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	2.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-32

Date Collected: 04/15/09 15:00

Client ID: DUP-001-20090415-01

Date Received: 04/15/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	110		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
 Analytical Date: 04/20/09 11:04  
 Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-04 Batch: WG359556-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/20/09 11:04  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-04 Batch: WG359556-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/20/09 11:04  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-04 Batch: WG359556-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	112		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/21/09 11:23  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 22-32 Batch: WG359729-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dichlorodifluoromethane	ND		ug/l	5.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
o-Chlorotoluene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/21/09 11:23  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 22-32 Batch: WG359729-3				
p-Chlorotoluene	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	106		70-130



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/21/09 11:07  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 05-07,09-21 Batch: WG359733-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dichlorodifluoromethane	ND		ug/l	5.0
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
o-Chlorotoluene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
 Analytical Date: 04/21/09 11:07  
 Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 05-07,09-21 Batch: WG359733-3				
p-Chlorotoluene	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
1,2,4-Trichlorobenzene	ND		ug/l	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	110		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/22/09 11:20  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 08 Batch: WG359761-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/22/09 11:20  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 08 Batch: WG359761-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 60,8260B  
Analytical Date: 04/22/09 11:20  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 08 Batch: WG359761-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	111		70-130

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0904670

Project Number: 0095922

Report Date: 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-04 Batch: WG359556-1 WG359556-2					
Methylene chloride	100	94	70-130	6	25
1,1-Dichloroethane	98	94	70-130	4	25
Chloroform	100	98	70-130	2	25
Carbon tetrachloride	108	102	70-130	6	25
1,2-Dichloropropane	93	91	70-130	2	25
Dibromochloromethane	110	105	70-130	5	25
1,1,2-Trichloroethane	96	96	70-130	0	25
Tetrachloroethene	120	116	70-130	3	25
Chlorobenzene	101	98	70-130	3	25
Trichlorofluoromethane	129	120	70-130	7	25
1,2-Dichloroethane	104	102	70-130	2	25
1,1,1-Trichloroethane	106	99	70-130	7	25
Bromodichloromethane	102	101	70-130	1	25
trans-1,3-Dichloropropene	97	94	70-130	3	25
cis-1,3-Dichloropropene	84	82	70-130	2	25
1,1-Dichloropropene	99	91	70-130	8	25
Bromoform	133	124	70-130	7	50
1,1,2,2-Tetrachloroethane	96	87	70-130	10	25
Benzene	94	91	70-130	3	25
Toluene	99	95	70-130	4	25
Ethylbenzene	102	99	70-130	3	25

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0904670

Project Number: 0095922

Report Date: 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-04 Batch: WG359556-1 WG359556-2					
Chloromethane	90	83	70-130	8	50
Bromomethane	95	94	70-130	1	50
Vinyl chloride	93	85	70-130	9	25
Chloroethane	104	96	70-130	8	25
1,1-Dichloroethene	106	99	70-130	7	25
trans-1,2-Dichloroethene	105	107	70-130	2	25
Trichloroethene	101	97	70-130	4	25
1,2-Dichlorobenzene	104	98	70-130	6	25
1,3-Dichlorobenzene	106	100	70-130	6	25
1,4-Dichlorobenzene	107	102	70-130	5	25
Methyl tert butyl ether	94	90	70-130	4	25
p/m-Xylene	101	98	70-130	3	25
o-Xylene	102	98	70-130	4	25
cis-1,2-Dichloroethene	96	94	70-130	2	25
Dibromomethane	101	95	70-130	6	25
1,2,3-Trichloropropane	104	95	70-130	9	25
Styrene	100	96	70-130	4	25
Dichlorodifluoromethane	99	91	70-130	8	50
Acetone	134	108	70-130	21	50
Carbon disulfide	72	68	70-130	6	50
2-Butanone	88	86	70-130	2	50

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904670

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-04 Batch: WG359556-1 WG359556-2					
4-Methyl-2-pentanone	90	87	70-130	3	50
2-Hexanone	88	84	70-130	5	50
Bromochloromethane	105	100	70-130	5	25
Tetrahydrofuran	88	96	70-130	9	25
2,2-Dichloropropane	95	89	70-130	7	50
1,2-Dibromoethane	104	100	70-130	4	25
1,3-Dichloropropane	101	99	70-130	2	25
1,1,1,2-Tetrachloroethane	103	98	70-130	5	25
Bromobenzene	112	103	70-130	8	25
n-Butylbenzene	104	95	70-130	9	25
sec-Butylbenzene	100	95	70-130	5	25
tert-Butylbenzene	98	93	70-130	5	25
o-Chlorotoluene	98	92	70-130	6	25
p-Chlorotoluene	98	95	70-130	3	25
1,2-Dibromo-3-chloropropane	101	94	70-130	7	50
Hexachlorobutadiene	128	119	70-130	7	25
Isopropylbenzene	102	97	70-130	5	25
p-Isopropyltoluene	104	99	70-130	5	25
Naphthalene	98	94	70-130	4	25
n-Propylbenzene	98	91	70-130	7	25
1,2,3-Trichlorobenzene	122	115	70-130	6	25



## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904670

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-04 Batch: WG359556-1 WG359556-2					
1,2,4-Trichlorobenzene	115	106	70-130	8	25
1,3,5-Trimethylbenzene	98	94	70-130	4	25
1,2,4-Trimethylbenzene	98	93	70-130	5	25
Ethyl ether	105	102	70-130	3	25
Isopropyl Ether	82	79	70-130	4	25
Ethyl-Tert-Butyl-Ether	88	84	70-130	5	25
Tertiary-Amyl Methyl Ether	83	80	70-130	4	25
1,4-Dioxane	103	97	70-130	6	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		112		70-130
Toluene-d8	107		108		70-130
4-Bromofluorobenzene	94		93		70-130
Dibromofluoromethane	108		110		70-130

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904670

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 22-32 Batch: WG359729-1 WG359729-2					
Methylene chloride	102	96	70-130	6	25
1,1-Dichloroethane	100	102	70-130	2	25
Chloroform	96	94	70-130	2	25
Carbon tetrachloride	106	105	70-130	1	25
1,2-Dichloropropane	93	93	70-130	0	25
Dibromochloromethane	106	102	70-130	4	25
1,1,2-Trichloroethane	95	90	70-130	5	25
Tetrachloroethene	115	116	70-130	1	25
Chlorobenzene	101	99	70-130	2	25
1,2-Dichloroethane	102	103	70-130	1	25
1,1,1-Trichloroethane	103	105	70-130	2	25
Bromodichloromethane	105	101	70-130	4	25
trans-1,3-Dichloropropene	92	88	70-130	4	25
cis-1,3-Dichloropropene	82	81	70-130	1	25
Bromoform	113	111	70-130	2	50
1,1,2,2-Tetrachloroethane	84	82	70-130	2	25
Chloromethane	85	86	70-130	1	50
Vinyl chloride	89	90	70-130	1	25
Chloroethane	110	111	70-130	1	25
1,1-Dichloroethene	102	105	70-130	3	25
trans-1,2-Dichloroethene	103	106	70-130	3	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904670

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 22-32 Batch: WG359729-1 WG359729-2					
Trichloroethene	103	102	70-130	1	25
1,2-Dichlorobenzene	100	96	70-130	4	25
1,3-Dichlorobenzene	100	99	70-130	1	25
1,4-Dichlorobenzene	103	98	70-130	5	25
cis-1,2-Dichloroethene	97	97	70-130	0	25
Dichlorodifluoromethane	91	93	70-130	2	50
1,2-Dibromoethane	100	93	70-130	7	25
1,3-Dichloropropane	99	95	70-130	4	25
1,1,1,2-Tetrachloroethane	105	102	70-130	3	25
o-Chlorotoluene	82	81	70-130	1	25
p-Chlorotoluene	97	94	70-130	3	25
Hexachlorobutadiene	115	112	70-130	3	25
1,2,4-Trichlorobenzene	108	105	70-130	3	25

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		108		70-130
Toluene-d8	109		108		70-130
4-Bromofluorobenzene	88		90		70-130
Dibromofluoromethane	110		109		70-130

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0904670

Project Number: 0095922

Report Date: 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 05-07,09-21 Batch: WG359733-1 WG359733-2					
Methylene chloride	105	98	70-130	7	25
1,1-Dichloroethane	104	97	70-130	7	25
Chloroform	105	99	70-130	6	25
Carbon tetrachloride	106	98	70-130	8	25
1,2-Dichloropropane	99	90	70-130	10	25
Dibromochloromethane	111	109	70-130	2	25
1,1,2-Trichloroethane	97	99	70-130	2	25
Tetrachloroethene	125	112	70-130	11	25
Chlorobenzene	105	100	70-130	5	25
1,2-Dichloroethane	106	102	70-130	4	25
1,1,1-Trichloroethane	109	98	70-130	11	25
Bromodichloromethane	108	99	70-130	9	25
trans-1,3-Dichloropropene	95	95	70-130	0	25
cis-1,3-Dichloropropene	86	81	70-130	6	25
Bromoform	129	131	70-130	2	50
1,1,2,2-Tetrachloroethane	92	96	70-130	4	25
Chloromethane	85	79	70-130	7	50
Vinyl chloride	92	82	70-130	11	25
Chloroethane	108	96	70-130	12	25
1,1-Dichloroethene	106	97	70-130	9	25
trans-1,2-Dichloroethene	111	98	70-130	12	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904670

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 05-07,09-21 Batch: WG359733-1 WG359733-2					
Trichloroethene	107	98	70-130	9	25
1,2-Dichlorobenzene	106	104	70-130	2	25
1,3-Dichlorobenzene	108	104	70-130	4	25
1,4-Dichlorobenzene	107	105	70-130	2	25
cis-1,2-Dichloroethene	99	95	70-130	4	25
Dichlorodifluoromethane	96	85	70-130	12	50
1,2-Dibromoethane	105	104	70-130	1	25
1,3-Dichloropropane	102	102	70-130	0	25
1,1,1,2-Tetrachloroethane	105	101	70-130	4	25
o-Chlorotoluene	89	84	70-130	6	25
p-Chlorotoluene	101	98	70-130	3	25
Hexachlorobutadiene	128	115	70-130	11	25
1,2,4-Trichlorobenzene	114	110	70-130	4	25

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		110		70-130
Toluene-d8	106		108		70-130
4-Bromofluorobenzene	93		98		70-130
Dibromofluoromethane	112		109		70-130

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904670

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 08 Batch: WG359761-1 WG359761-2					
Methylene chloride	96	99	70-130	3	25
1,1-Dichloroethane	94	100	70-130	6	25
Chloroform	89	96	70-130	8	25
Carbon tetrachloride	94	108	70-130	14	25
1,2-Dichloropropane	86	95	70-130	10	25
Dibromochloromethane	97	104	70-130	7	25
1,1,2-Trichloroethane	92	96	70-130	4	25
Tetrachloroethene	112	119	70-130	6	25
Chlorobenzene	97	102	70-130	5	25
Trichlorofluoromethane	118	130	70-130	10	25
1,2-Dichloroethane	96	104	70-130	8	25
1,1,1-Trichloroethane	95	104	70-130	9	25
Bromodichloromethane	92	104	70-130	12	25
trans-1,3-Dichloropropene	84	91	70-130	8	25
cis-1,3-Dichloropropene	76	81	70-130	6	25
1,1-Dichloropropene	90	97	70-130	7	25
Bromoform	102	114	70-130	11	50
1,1,2,2-Tetrachloroethane	80	88	70-130	10	25
Benzene	88	98	70-130	11	25
Toluene	94	102	70-130	8	25
Ethylbenzene	98	108	70-130	10	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904670

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 08 Batch: WG359761-1 WG359761-2					
Chloromethane	80	86	70-130	7	50
Bromomethane	82	84	70-130	2	50
Vinyl chloride	85	95	70-130	11	25
Chloroethane	102	106	70-130	4	25
1,1-Dichloroethene	92	105	70-130	13	25
trans-1,2-Dichloroethene	94	102	70-130	8	25
Trichloroethene	92	104	70-130	12	25
1,2-Dichlorobenzene	96	103	70-130	7	25
1,3-Dichlorobenzene	96	106	70-130	10	25
1,4-Dichlorobenzene	98	104	70-130	6	25
Methyl tert butyl ether	108	104	70-130	4	25
p/m-Xylene	97	104	70-130	7	25
o-Xylene	107	114	70-130	6	25
cis-1,2-Dichloroethene	92	98	70-130	6	25
Dibromomethane	92	94	70-130	2	25
1,2,3-Trichloropropane	88	100	70-130	13	25
Styrene	106	112	70-130	6	25
Dichlorodifluoromethane	91	97	70-130	6	50
Acetone	112	113	70-130	1	50
Carbon disulfide	94	104	70-130	10	50
2-Butanone	85	87	70-130	2	50

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904670

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 08 Batch: WG359761-1 WG359761-2					
4-Methyl-2-pentanone	85	91	70-130	7	50
2-Hexanone	76	80	70-130	5	50
Bromochloromethane	100	104	70-130	4	25
Tetrahydrofuran	96	100	70-130	4	25
2,2-Dichloropropane	81	87	70-130	7	50
1,2-Dibromoethane	93	97	70-130	4	25
1,3-Dichloropropane	94	98	70-130	4	25
1,1,1,2-Tetrachloroethane	97	105	70-130	8	25
Bromobenzene	99	106	70-130	7	25
n-Butylbenzene	88	100	70-130	13	25
sec-Butylbenzene	89	102	70-130	14	25
tert-Butylbenzene	88	99	70-130	12	25
o-Chlorotoluene	89	96	70-130	8	25
p-Chlorotoluene	92	100	70-130	8	25
1,2-Dibromo-3-chloropropane	77	82	70-130	6	50
Hexachlorobutadiene	105	122	70-130	15	25
Isopropylbenzene	99	106	70-130	7	25
p-Isopropyltoluene	94	107	70-130	13	25
Naphthalene	73	76	70-130	4	25
n-Propylbenzene	87	98	70-130	12	25
1,2,3-Trichlorobenzene	110	120	70-130	9	25



## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904670

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 08 Batch: WG359761-1 WG359761-2					
1,2,4-Trichlorobenzene	103	115	70-130	11	25
1,3,5-Trimethylbenzene	88	98	70-130	11	25
1,2,4-Trimethylbenzene	90	100	70-130	11	25
Ethyl ether	114	119	70-130	4	25
Isopropyl Ether	91	97	70-130	6	25
Ethyl-Tert-Butyl-Ether	95	99	70-130	4	25
Tertiary-Amyl Methyl Ether	87	91	70-130	4	25
1,4-Dioxane	111	116	70-130	4	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		111		70-130
Toluene-d8	111		109		70-130
4-Bromofluorobenzene	88		89		70-130
Dibromofluoromethane	107		109		70-130

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

Parameter	Native Sample	MS Added	MS Found	MS		MSD		Recovery Limits	RPD	RPD Limits
				%Recovery	MSD Found	%Recovery				
MCP Volatile Organics - Westborough Lab Associated sample(s): 22-32 QC Batch ID: WG359729-7 WG359729-8 QC Sample: L0904670-31 Client ID: MW-216D-20090415-01										
Methylene chloride	ND	10	10	106	12	117	70-130	10	30	
1,1-Dichloroethane	ND	10	11	107	12	118	70-130	10	30	
Chloroform	ND	10	11	114	12	122	70-130	7	30	
Carbon tetrachloride	ND	10	11	114	13	128	70-130	12	30	
1,2-Dichloropropane	ND	10	9.9	99	11	112	70-130	12	30	
Dibromochloromethane	ND	10	11	113	13	131	70-130	15	30	
1,1,2-Trichloroethane	ND	10	11	108	12	118	70-130	9	30	
Tetrachloroethene	ND	10	14	138	15	147	70-130	6	30	
Chlorobenzene	ND	10	11	110	12	122	70-130	10	30	
1,2-Dichloroethane	ND	10	12	118	13	130	70-130	10	30	
1,1,1-Trichloroethane	ND	10	12	116	13	127	70-130	9	30	
Bromodichloromethane	ND	10	11	114	12	126	70-130	10	30	
trans-1,3-Dichloropropene	ND	10	10	101	11	115	70-130	13	30	
cis-1,3-Dichloropropene	ND	10	8.6	86	9.6	96	70-130	11	30	
Bromoform	ND	10	13	133	14	144	70-130	8	30	
1,1,2,2-Tetrachloroethane	ND	10	10	102	12	118	70-130	15	30	
Chloromethane	ND	10	9.1	91	9.9	99	70-130	8	30	
Vinyl chloride	ND	10	9.8	98	11	109	70-130	11	30	
Chloroethane	ND	10	11	110	12	121	70-130	10	30	
1,1-Dichloroethene	ND	10	12	116	13	127	70-130	9	30	
trans-1,2-Dichloroethene	ND	10	12	116	14	140	70-130	19	30	

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

Parameter	Native Sample	MS Added	MS Found	MS		MSD		Recovery Limits	RPD	RPD Limits
				%Recovery	MSD Found	%Recovery				
MCP Volatile Organics - Westborough Lab Associated sample(s): 22-32 QC Batch ID: WG359729-7 WG359729-8 QC Sample: L0904670-31 Client ID: MW-216D-20090415-01										
Trichloroethene	15	10	26	104	27	119	70-130	13	30	
1,2-Dichlorobenzene	ND	10	11	108	13	126	70-130	15	30	
1,3-Dichlorobenzene	ND	10	11	109	12	125	70-130	14	30	
1,4-Dichlorobenzene	ND	10	11	113	12	126	70-130	11	30	
cis-1,2-Dichloroethene	2.3	10	13	108	14	117	70-130	8	30	
Dichlorodifluoromethane	ND	10	10	104	12	116	70-130	11	30	
1,2-Dibromoethane	ND	10	11	110	13	126	70-130	14	30	
1,3-Dichloropropane	ND	10	11	112	12	119	70-130	6	30	
1,1,1,2-Tetrachloroethane	ND	10	11	110	12	125	70-130	13	30	
o-Chlorotoluene	ND	10	9.2	92	10	101	70-130	9	30	
p-Chlorotoluene	ND	10	11	108	12	118	70-130	9	30	
Hexachlorobutadiene	ND	10	13	132	15	152	70-130	14	30	
1,2,4-Trichlorobenzene	ND	10	11	112	13	131	70-130	16	30	

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	113		116		70-130
4-Bromofluorobenzene	92		96		70-130
Dibromofluoromethane	112		111		70-130
Toluene-d8	108		108		70-130

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
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MCP Volatile Organics - Westborough Lab Associated sample(s): 05-07,09-21    QC Batch ID: WG359733-7    WG359733-8    QC Sample: L0904670-17    Client ID: MW-206D-20090415-01

Methylene chloride	ND	10	11	110	11	111	70-130	1	30
1,1-Dichloroethane	ND	10	11	113	12	117	70-130	3	30
Chloroform	ND	10	11	109	11	110	70-130	1	30
Carbon tetrachloride	ND	10	12	123	13	127	70-130	3	30
1,2-Dichloropropane	ND	10	10	104	11	107	70-130	3	30
Dibromochloromethane	ND	10	12	117	12	120	70-130	3	30
1,1,2-Trichloroethane	ND	10	11	107	11	110	70-130	3	30
Tetrachloroethene	ND	10	13	131	14	137	70-130	4	30
Chlorobenzene	ND	10	11	112	12	115	70-130	3	30
1,2-Dichloroethane	ND	10	12	115	12	118	70-130	3	30
1,1,1-Trichloroethane	ND	10	12	121	12	124	70-130	2	30
Bromodichloromethane	ND	10	12	117	12	121	70-130	3	30
trans-1,3-Dichloropropene	ND	10	10	101	10	104	70-130	3	30
cis-1,3-Dichloropropene	ND	10	9.0	90	9.3	93	70-130	3	30
Bromoform	ND	10	13	129	13	132	70-130	2	30
1,1,2,2-Tetrachloroethane	ND	10	9.9	99	11	107	70-130	8	30
Chloromethane	ND	10	9.6	96	9.7	97	70-130	1	30
Vinyl chloride	ND	10	10	103	10	106	70-130	3	30
Chloroethane	ND	10	12	119	12	122	70-130	2	30
1,1-Dichloroethene	ND	10	12	121	12	125	70-130	3	30
trans-1,2-Dichloroethene	ND	10	12	120	12	124	70-130	3	30

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
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MCP Volatile Organics - Westborough Lab Associated sample(s): 05-07,09-21    QC Batch ID: WG359733-7    WG359733-8    QC Sample: L0904670-17    Client ID: MW-206D-20090415-01

Trichloroethene	45	10	55	104	55	98	70-130	6	30
1,2-Dichlorobenzene	ND	10	11	107	12	119	70-130	11	30
1,3-Dichlorobenzene	ND	10	11	110	12	122	70-130	10	30
1,4-Dichlorobenzene	ND	10	11	110	12	119	70-130	8	30
cis-1,2-Dichloroethene	5.5	10	16	107	16	110	70-130	3	30
Dichlorodifluoromethane	ND	10	11	109	11	109	70-130	0	30
1,2-Dibromoethane	ND	10	11	108	11	112	70-130	4	30
1,3-Dichloropropane	ND	10	11	108	11	112	70-130	4	30
1,1,1,2-Tetrachloroethane	ND	10	12	115	12	121	70-130	5	30
o-Chlorotoluene	ND	10	9.2	92	9.9	99	70-130	7	30
p-Chlorotoluene	ND	10	11	107	12	116	70-130	8	30
Hexachlorobutadiene	ND	10	12	124	15	146	70-130	16	30
1,2,4-Trichlorobenzene	ND	10	11	110	13	132	70-130	18	30

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		113		70-130
4-Bromofluorobenzene	89		93		70-130
Dibromofluoromethane	111		112		70-130
Toluene-d8	106		106		70-130

# METALS

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-03  
 Client ID: MW-47D-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 12:40  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	96		mg/l	2.0	1	04/18/09 17:30	04/21/09 12:51	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-04  
 Client ID: MW-47M-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 13:55  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	21		mg/l	2.0	1	04/18/09 17:30	04/21/09 12:56	EPA 3005A	60,6010B	AI



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-06  
 Client ID: MW-201S-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 15:40  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	45		mg/l	2.0	1	04/18/09 17:30	04/21/09 12:59	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-07  
 Client ID: MW-201M-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 14:30  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	150		mg/l	2.0	1	04/18/09 17:30	04/21/09 13:02	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-08  
 Client ID: MW-33S-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 09:55  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

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	20		mg/l	2.5	1	04/18/09 17:30	04/21/09 13:05	EPA 3005A	60,6010B	AI
Sodium, Dissolved	5.3		mg/l	2.0	1	04/18/09 17:30	04/21/09 13:05	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904670**Project Number:** 0095922**Report Date:** 05/04/09**SAMPLE RESULTS**

Lab ID: L0904670-09

Date Collected: 04/15/09 11:50

Client ID: MW-33M-20090415-01

Date Received: 04/15/09

Sample Location: WAYLAND, MA

Field Prep: Field Filtered

Matrix: Water

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>MCP Dissolved Metals - Westborough Lab</b>										
Potassium, Dissolved	86		mg/l	2.5	1	04/18/09 17:30	04/21/09 13:17	EPA 3005A	60,6010B	AI
Sodium, Dissolved	13		mg/l	2.0	1	04/18/09 17:30	04/21/09 13:17	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-10  
 Client ID: MW-40S-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 09:10  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	120		mg/l	2.0	1	04/18/09 17:30	04/21/09 13:20	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-11  
 Client ID: MW-45D-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 12:35  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	53		mg/l	2.0	1	04/18/09 17:30	04/21/09 13:23	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-12  
 Client ID: MW-45M-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 11:20  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	50		mg/l	2.0	1	04/18/09 17:30	04/21/09 13:26	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-13  
 Client ID: MW-45B-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 10:30  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	44		mg/l	2.0	1	04/18/09 17:30	04/21/09 13:29	EPA 3005A	60,6010B	AI



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-14  
 Client ID: MW-203D-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 09:20  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	100		mg/l	2.0	1	04/18/09 17:30	04/21/09 13:31	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-19  
 Client ID: MW-212-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 08:15  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	30		mg/l	2.0	1	04/18/09 17:30	04/21/09 13:34	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-20  
 Client ID: MW-212M-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 09:05  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	94		mg/l	2.0	1	04/18/09 17:30	04/21/09 13:37	EPA 3005A	60,6010B	AI



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-21  
 Client ID: MW-105-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 09:20  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	92		mg/l	2.0	1	04/18/09 17:30	04/21/09 13:40	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-22  
 Client ID: MW-105M-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 10:35  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	160		mg/l	2.0	1	04/18/09 17:30	04/21/09 13:43	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-23  
 Client ID: MW-209-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 11:50  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	27		mg/l	2.0	1	04/18/09 17:30	04/21/09 13:58	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-24  
 Client ID: MW-104-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 13:05  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	42		mg/l	2.0	1	04/18/09 17:30	04/21/09 14:01	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-25  
 Client ID: MW-43S-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 14:05  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	50		mg/l	2.0	1	04/18/09 17:30	04/21/09 14:04	EPA 3005A	60,6010B	AI



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-26  
 Client ID: MW-211-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 14:40  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	20		mg/l	2.0	1	04/18/09 17:30	04/21/09 14:07	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-30  
 Client ID: MW-40-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 09:50  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	38		mg/l	2.0	1	04/18/09 17:30	04/21/09 14:10	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

**SAMPLE RESULTS**

Lab ID: L0904670-33  
 Client ID: MW-113-20090415-01  
 Sample Location: WAYLAND, MA  
 Matrix: Water

Date Collected: 04/15/09 14:35  
 Date Received: 04/15/09  
 Field Prep: Field Filtered

Parameter	Result	Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab										
Sodium, Dissolved	35		mg/l	2.0	1	04/18/09 17:30	04/21/09 14:25	EPA 3005A	60,6010B	AI

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

## 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): 03-04,06-14,19-26,30 Batch: WG359403-1								
Potassium, Dissolved	ND	mg/l	2.5	1	04/18/09 17:30	04/21/09 12:39	60,6010B	AI
Sodium, Dissolved	ND	mg/l	2.0	1	04/18/09 17:30	04/21/09 12:39	60,6010B	AI

### Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 33 Batch: WG359404-1								
Sodium, Dissolved	ND	mg/l	2.0	1	04/18/09 17:30	04/21/09 14:13	60,6010B	AI

### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904670

**Project Number:** 0095922

**Report Date:** 05/04/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 03-04,06-14,19-26,30 Batch: WG359403-2 WG359403-3					
Potassium, Dissolved	100	100	80-120	0	20
Sodium, Dissolved	100	100	80-120	0	20
MCP Dissolved Metals - Westborough Lab Associated sample(s): 33 Batch: WG359404-2 WG359404-3					
Sodium, Dissolved	100	100	80-120	0	20

Project Name: RAYTHEON WAYLAND

Lab Number: L0904670

Project Number: 0095922

Report Date: 05/04/09

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

## Cooler Information

Cooler	Custody Seal
A	Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904670-01A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-01B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-02A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-02B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-03A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-03B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-03C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-04A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-04B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-04C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-05A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-05B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-06A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-06B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-06C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-07A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-07B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-07C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-08A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-08B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-08C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180),MCP-K-6010S(180)
L0904670-09A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-09B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-09C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180),MCP-K-6010S(180)
L0904670-10A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-10B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-10C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-11A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-11B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-11C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)

\*Hold days indicated by values in parentheses

Project Name: RAYTHEON WAYLAND

Lab Number: L0904670

Project Number: 0095922

Report Date: 05/04/09

## Container Information

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904670-12A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-12B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-12C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-13A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-13B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-13C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-14A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-14B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-14C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-15A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-15B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-16A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-16B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-17A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-17B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-17C	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-17D	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-17E	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-17F	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-18A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-18B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-19A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-19B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-19C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-20A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-20B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-20C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-21A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-21B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-21C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-22A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-22B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-22C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-23A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-23B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-23C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)

\*Hold days indicated by values in parentheses



Project Name: RAYTHEON WAYLAND

Project Number: 0095922

Lab Number: L0904670

Report Date: 05/04/09

**Container Information**

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904670-24A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-24B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-24C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-25A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-25B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-25C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-26A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-26B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-26C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-27A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-27B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-28A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-28B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-29A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-29B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-30A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-30B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-30C	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)
L0904670-31A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-31B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-31C	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-31D	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-31E	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-31F	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-32A	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-32B	Vial HCl preserved	A	N/A	3.4	Y	Absent	MCP-8260-04(14)
L0904670-33A	Plastic 250ml HNO3 preserved	A	<2	3.4	Y	Absent	MCP-NA-6010S(180)

\*Hold days indicated by values in parentheses





**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

## GLOSSARY

### Acronyms

- EPA** - Environmental Protection Agency.
- LCS** - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD** - Laboratory Control Sample Duplicate: Refer to LCS.
- MS** - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD** - Matrix Spike Sample Duplicate: Refer to MS.
- NA** - Not Applicable.
- NC** - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
- ND** - Not detected at the reported detection limit for the sample.
- 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

- \*** - The batch duplicate RPD exceeds the acceptance criteria. This flag is not applicable when the sample concentrations are less than 5x the RDL. (Metals only.)
- 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.
- 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.
- N** - The matrix spike recovery exceeds the acceptance criteria. This flag is not applicable when the sample concentration is greater than 4x the spike added. (Metals only.)
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- 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).

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904670  
**Report Date:** 05/04/09

## REFERENCES

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

## LIMITATION OF LIABILITIES

Alpha 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 February 18, 2009 - 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.

*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.)

*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), 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: MA0086.

*Drinking Water* (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 150.1, 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, Nitrite-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, EPA 150.1, SM4500H-B.

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

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), SM6251B, 314.0.

#### *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,Ti,V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Nitrate-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, 4500CN-CE, 2540D, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1

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

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCB-Water) 600/4-81-045-PCB-Oil

**Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.***Drinking Water*

Microbiology Parameters: SM9215B; MF-SM9222B; ENZ. SUB. SM9223; EC-SM9221E; MF-SM9222D; ENZ. SUB. SM9223;

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

*Drinking Water (Inorganic Parameters:* SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 110.2, 120.1, 150.1, 300.0, 325.2, 314.0, SM4500CN-E, 4500H+B, 4500NO<sub>3</sub>-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, 150.1, 300.0, 305.1, 310.1, 325.2, 340.2, 350.1, 350.2, 351.1, 353.2, 354.1, 365.2, 375.4, 376.2, 405.1, 415.1, 420.1, 425.1, 1664A, SW-846 9010, 9030, 9040B, EPA 160.1, 160.2, 160.3, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH<sub>3</sub>-H, 4500NH<sub>3</sub>-E, 4500NO<sub>2</sub>-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.**

*Drinking Water (Inorganic Parameters:* SM9222B, 9221E, 9223B, 9215B, 4500NO<sub>3</sub>-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, 331.0, 110.2, SM2120B, 2510B, 5310C, EPA 150.1, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

*Non-Potable Water (Inorganic Parameters:* SM5210B, EPA 410.1, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO<sub>3</sub>-F, 4500NO<sub>2</sub>-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, 4500NH<sub>3</sub>-H, EPA 350.2/1, 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.)

*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, 3540C, 3545, 3550B, 3580A, 5035L, 5035H.)

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

*Drinking Water (Inorganic Parameters:* SM9223B, 9222B, 8215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 331.0, SM2320B, EPA 300.0, 325.2, 110.2, SM2120B, 4500CN-E, 4500F-C, EPA 150.1, SM4500H-B, 4500NO<sub>3</sub>-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1, SM6251B.)

*Non-Potable Water (Inorganic Parameters:* SM9221E, 9222D, 9221B, 9222B, 9215B, EPA 405.1, SM5210B, EPA 410.4, SM5220D, EPA 305.1, SM2310B-4a, EPA 310.1, SM2320B, EPA 200.7, 300.0, 325.2, LACHAT 10-117-07-1A or B, SM4500CI-E, EPA 340.2, SM4500F-C, EPA 375.4, SM15 426C, EPA 350.1, 350.2, LACHAT 10-107-06-1-B, SM4500NH<sub>3</sub>-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO<sub>3</sub>F, EPA 354.1, SM4500-NO<sub>2</sub>-B, EPA 365.2, SM4500P-E, EPA 160.3, SM2540B, EPA 160.1, SM2540C, EPA 160.2, SM2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, 110.2, SM2120B, 335.2, LACHAT 10-204-00-1-A, EPA 150.1, 9040B, SM4500-HB, EPA 1664A, EPA 415.1, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, EPA 376.2, SM4500S-D, EPA 425.1, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, 8021B, EPA 3510C, 5030B, 9010B, 9030B.)

*Solid & Hazardous Waste (Inorganic Parameters:* EPA 9040B, 9045C, 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 3005A, 3050B, 3051, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 8021B, 3540C, 3545, 3580, 5030B, 5035.)

*Analytical Services Protocol:* CLP Volatile Organics, CLP Inorganics, CLP PCB/Pesticides.

**Rhode Island Department of Health Certificate/Lab ID: LAO00065.**

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

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

**Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. Registered Laboratory.**



# CHAIN OF CUSTODY

PAGE 1 OF 4

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

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

**Client Information**

Client: ERM  
 Address: 399 Baylsten St.  
4th floor Boston, MA  
 Phone: (617) 646-7800  
 Fax: (617) 217-6447  
 Email: bahaar.frost@erm.com  
 These samples have been previously analyzed by Alpha  
 Other Project Specific Requirements/Comments/Detection Limits:

**Project Information**

Project Name: Raytheon Wayland  
 Project Location: Wayland, MA  
 Project #: 0095922  
 Project Manager: TASON FLETCHER  
 ALPHA Quote #:  
 Turn-Around Time  
 Standard  RUSH (only confirmed if pre-approved)  
 Date Due: 4/22/09 Time:

Date Rec'd in Lab: 4/15/09

Alpha Job #: 10104670

**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 GW1  
**MA MCP PRESUMPTIVE CERTAINTY ... CT REASONABLE CONFIDENCE PROTO.**

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

**ANALYSIS**  
8021 B by 8260  
Diss. Nr. (FF)  
Diss. K (FF)

**SAMPLE HANDLING**

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

**Sample Specific Comments**

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Z	PP	CC	Date/Time	Received By:	Date/Time
		Date	Time								
04670-01	DUP-002-20090415-01	4/15/09	29:00	GW	HEA	2					
-02	MW-2075-20090415-01	4/15/09	09:30	GW	HEA	2					
-03	MW-47D-20090415-01	4/15/09	12:40	GW	JN	2					
-04	MW-97M-20090415-01	4/15/09	13:55	GW	JN	2					
-05	MW-47S-20090415-01	4/15/09	14:30	GW	JN	2					
-06	MW-201S-20090415-01	4/15/09	15:40	GW	JPD	2					
-07	MW-201M-20090415-01	4/15/09	19:30	GW	JPD	2					
-08	MW-33S-20090415-01	4/15/09	9:55	GW	JPD	2					
-09	MW-33M-20090415-01	4/15/09	11:50	GW	JPD	2					
-10	MW-40S-20090415-01	4/15/09	09:10	GW	JN	2					

**PLEASE ANSWER QUESTIONS ABOVE!**

**IS YOUR PROJECT  
 MAMCP or CT RCP?**

Container Type  
 Preservative

Relinquished By: [Signature] Date/Time: 4/15/09 10:45  
 Received By: Don Frank Date/Time: 4/15/09 13:30

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 4 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 St.**  
**4th Floor Boston, MA**  
 Phone: **(617) 646-7800**  
 Fax: **(617) 267-6447**  
 Email: **barbar.frost@erm.com**

These samples have been previously analyzed by Alpha  
 Other Project Specific Requirements/Comments/Detection Limits:

**Project Information**

Project Name: **Raytheon Wayland**  
 Project Location: **Wayland, MA**  
 Project #: **069S922**  
 Project Manager: **Jason Pattery**  
 ALPHA Quote #:  
 Turn-Around Time

Standard  RUSH (only confirmed if pre-approved)  
 Date Due: **4/22/09** Time:

**Report Information - Data Deliverables**

FAX  EMAIL  
 ADEX  Add'l Deliverables

**Billing Information**

Same as Client info PO #:

**Regulatory Requirements/Report Limits**

State / Fed Program: **MA/MCP** Criteria: **GMJ**  
**MA MCP PRESUMPTIVE CERTAINTY ... CT REASONABLE CONFIDENCE PROTO.**

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

**ANALYSIS**  
 8021B by 8260

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Date	Time	Date/Time	Container Type	Preservative	Date/Time	Received By:	Date/Time	Sample Specific Comments
		Date	Time											
04670-29	MW-113-20090415-01	4/15/09	14:35	GW	EW	4/15/09	14:35	4/15/09 16:45	V		4/15/09 13:30	Den Bank	4/15/09 13:30	
-30	MW-40-20090415-01	4/15/09	09:15	GW	JN	4/15/09	09:15	4/15/09 16:45	B		4/15/09 13:30	Den Bank	4/15/09 13:30	
-31	MW-216D-20090415-01	4/15/09	11:10	GW	JN	4/15/09	11:10	4/15/09 16:45	B		4/15/09 13:30	Den Bank	4/15/09 13:30	
-31	MW-216D-20090415-01	4/15/09	11:10	GW	JN	4/15/09	11:10	4/15/09 16:45	B		4/15/09 13:30	Den Bank	4/15/09 13:30	
-32	DUP-001-20090415-01	4/15/09	15:00	GW	JN	4/15/09	15:00	4/15/09 16:45	B		4/15/09 13:30	Den Bank	4/15/09 13:30	
-31	MW-216D-20090415-01	4/15/09	11:10	GW	JN	4/15/09	11:10	4/15/09 16:45	B		4/15/09 13:30	Den Bank	4/15/09 13:30	

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
 MA MCP or CT RCP?

Relinquished By: *[Signature]*

Date/Time: **4/15/09 13:30**

Received By: *[Signature]*

Date/Time: **4/15/09 13:30**

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:	L0904587
Client:	ERM Consulting & Engineering, Inc. 399 Boylston Street 6th Floor Boston, MA 02116
ATTN:	Jason Flattery
Project Name:	RAYTHEON WAYLAND
Project Number:	0095922
Report Date:	04/20/09

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:** 0095922

**Lab Number:** L0904587  
**Report Date:** 04/20/09

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L0904587-01	MW-205M-20090414-01	WAYLAND, MA	04/14/09 13:40
L0904587-02	MW-205D-20090414-01	WAYLAND, MA	04/14/09 15:10

Project Name: RAYTHEON WAYLAND

Lab Number: L0904587

Project Number: 0095922

Report Date: 04/20/09

### MADEP MCP Response Action Analytical Report Certification

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

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

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



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904587  
**Report Date:** 04/20/09

### 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.

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

##### Volatile Organics

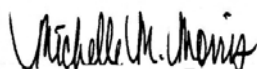
L0904587-01 has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

In reference to question F:

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

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

Authorized Signature:



Title: Technical Director/Representative

Date: 04/20/09

# ORGANICS

# VOLATILES

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904587**Project Number:** 0095922**Report Date:** 04/20/09**SAMPLE RESULTS**

**Lab ID:** L0904587-01  
**Client ID:** MW-205M-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/17/09 00:01  
**Analyst:** GK

**Date Collected:** 04/14/09 13:40  
**Date Received:** 04/14/09  
**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	1.9	2.5
Chloroform	ND		ug/l	1.9	2.5
Carbon tetrachloride	ND		ug/l	1.2	2.5
1,2-Dichloropropane	ND		ug/l	4.4	2.5
Dibromochloromethane	ND		ug/l	1.2	2.5
1,1,2-Trichloroethane	ND		ug/l	1.9	2.5
Tetrachloroethene	ND		ug/l	1.2	2.5
Chlorobenzene	ND		ug/l	1.2	2.5
1,2-Dichloroethane	ND		ug/l	1.2	2.5
1,1,1-Trichloroethane	23		ug/l	1.2	2.5
Bromodichloromethane	ND		ug/l	1.2	2.5
trans-1,3-Dichloropropene	ND		ug/l	1.2	2.5
cis-1,3-Dichloropropene	ND		ug/l	1.2	2.5
Bromoform	ND		ug/l	5.0	2.5
1,1,2,2-Tetrachloroethane	ND		ug/l	1.2	2.5
Chloromethane	ND		ug/l	6.2	2.5
Vinyl chloride	ND		ug/l	2.5	2.5
Chloroethane	ND		ug/l	2.5	2.5
1,1-Dichloroethene	1.4		ug/l	1.2	2.5
trans-1,2-Dichloroethene	ND		ug/l	1.9	2.5
Trichloroethene	110		ug/l	1.2	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	2.5
1,3-Dichlorobenzene	ND		ug/l	6.2	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	2.5
cis-1,2-Dichloroethene	ND		ug/l	1.2	2.5
Dichlorodifluoromethane	ND		ug/l	12	2.5
1,2-Dibromoethane	ND		ug/l	5.0	2.5
1,3-Dichloropropane	ND		ug/l	6.2	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	1.2	2.5

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904587**Project Number:** 0095922**Report Date:** 04/20/09**SAMPLE RESULTS**

Lab ID: L0904587-01

Date Collected: 04/14/09 13:40

Client ID: MW-205M-20090414-01

Date Received: 04/14/09

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	6.2	2.5
p-Chlorotoluene	ND		ug/l	6.2	2.5
Hexachlorobutadiene	ND		ug/l	1.5	2.5
1,2,4-Trichlorobenzene	ND		ug/l	6.2	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	112		70-130



**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904587**Project Number:** 0095922**Report Date:** 04/20/09**SAMPLE RESULTS**

**Lab ID:** L0904587-02  
**Client ID:** MW-205D-20090414-01  
**Sample Location:** WAYLAND, MA  
**Matrix:** Water  
**Analytical Method:** 60,8260B  
**Analytical Date:** 04/17/09 00:33  
**Analyst:** GK

**Date Collected:** 04/14/09 15:10  
**Date Received:** 04/14/09  
**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	0.75	1
Chloroform	ND		ug/l	0.75	1
Carbon tetrachloride	ND		ug/l	0.50	1
1,2-Dichloropropane	ND		ug/l	1.8	1
Dibromochloromethane	ND		ug/l	0.50	1
1,1,2-Trichloroethane	ND		ug/l	0.75	1
Tetrachloroethene	ND		ug/l	0.50	1
Chlorobenzene	ND		ug/l	0.50	1
1,2-Dichloroethane	ND		ug/l	0.50	1
1,1,1-Trichloroethane	ND		ug/l	0.50	1
Bromodichloromethane	ND		ug/l	0.50	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	1
Bromoform	ND		ug/l	2.0	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	1
Chloromethane	ND		ug/l	2.5	1
Vinyl chloride	ND		ug/l	1.0	1
Chloroethane	ND		ug/l	1.0	1
1,1-Dichloroethene	ND		ug/l	0.50	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	1
Trichloroethene	32		ug/l	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.5	1
1,3-Dichlorobenzene	ND		ug/l	2.5	1
1,4-Dichlorobenzene	ND		ug/l	2.5	1
cis-1,2-Dichloroethene	6.2		ug/l	0.50	1
Dichlorodifluoromethane	ND		ug/l	5.0	1
1,2-Dibromoethane	ND		ug/l	2.0	1
1,3-Dichloropropane	ND		ug/l	2.5	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	1

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904587**Project Number:** 0095922**Report Date:** 04/20/09**SAMPLE RESULTS**

Lab ID: L0904587-02

Date Collected: 04/14/09 15:10

Client ID: MW-205D-20090414-01

Date Received: 04/14/09

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	115		70-130

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904587  
**Report Date:** 04/20/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/16/09 15:57  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG359274-3				
Methylene chloride	ND		ug/l	5.0
1,1-Dichloroethane	ND		ug/l	0.75
Chloroform	ND		ug/l	0.75
Carbon tetrachloride	ND		ug/l	0.50
1,2-Dichloropropane	ND		ug/l	1.8
Dibromochloromethane	ND		ug/l	0.50
1,1,2-Trichloroethane	ND		ug/l	0.75
Tetrachloroethene	ND		ug/l	0.50
Chlorobenzene	ND		ug/l	0.50
Trichlorofluoromethane	ND		ug/l	2.5
1,2-Dichloroethane	ND		ug/l	0.50
1,1,1-Trichloroethane	ND		ug/l	0.50
Bromodichloromethane	ND		ug/l	0.50
trans-1,3-Dichloropropene	ND		ug/l	0.50
cis-1,3-Dichloropropene	ND		ug/l	0.50
1,1-Dichloropropene	ND		ug/l	2.5
Bromoform	ND		ug/l	2.0
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50
Benzene	ND		ug/l	0.50
Toluene	ND		ug/l	0.75
Ethylbenzene	ND		ug/l	0.50
Chloromethane	ND		ug/l	2.5
Bromomethane	ND		ug/l	1.0
Vinyl chloride	ND		ug/l	1.0
Chloroethane	ND		ug/l	1.0
1,1-Dichloroethene	ND		ug/l	0.50
trans-1,2-Dichloroethene	ND		ug/l	0.75
Trichloroethene	ND		ug/l	0.50
1,2-Dichlorobenzene	ND		ug/l	2.5
1,3-Dichlorobenzene	ND		ug/l	2.5
1,4-Dichlorobenzene	ND		ug/l	2.5

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904587  
**Report Date:** 04/20/09

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

Analytical Method: 60,8260B  
Analytical Date: 04/16/09 15:57  
Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG359274-3				
Methyl tert butyl ether	ND		ug/l	1.0
p/m-Xylene	ND		ug/l	1.0
o-Xylene	ND		ug/l	1.0
cis-1,2-Dichloroethene	ND		ug/l	0.50
Dibromomethane	ND		ug/l	5.0
1,2,3-Trichloropropane	ND		ug/l	5.0
Styrene	ND		ug/l	1.0
Dichlorodifluoromethane	ND		ug/l	5.0
Acetone	ND		ug/l	5.0
Carbon disulfide	ND		ug/l	5.0
2-Butanone	ND		ug/l	5.0
4-Methyl-2-pentanone	ND		ug/l	5.0
2-Hexanone	ND		ug/l	5.0
Bromochloromethane	ND		ug/l	2.5
Tetrahydrofuran	ND		ug/l	10
2,2-Dichloropropane	ND		ug/l	2.5
1,2-Dibromoethane	ND		ug/l	2.0
1,3-Dichloropropane	ND		ug/l	2.5
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50
Bromobenzene	ND		ug/l	2.5
n-Butylbenzene	ND		ug/l	0.50
sec-Butylbenzene	ND		ug/l	0.50
tert-Butylbenzene	ND		ug/l	2.5
o-Chlorotoluene	ND		ug/l	2.5
p-Chlorotoluene	ND		ug/l	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5
Hexachlorobutadiene	ND		ug/l	0.60
Isopropylbenzene	ND		ug/l	0.50
p-Isopropyltoluene	ND		ug/l	0.50
Naphthalene	ND		ug/l	2.5
n-Propylbenzene	ND		ug/l	0.50

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904587  
**Report Date:** 04/20/09

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

Analytical Method: 60,8260B  
 Analytical Date: 04/16/09 15:57  
 Analyst: GK

Parameter	Result	Qualifier	Units	RDL
MCP Volatile Organics - Westborough Lab for sample(s): 01-02 Batch: WG359274-3				
1,2,3-Trichlorobenzene	ND		ug/l	2.5
1,2,4-Trichlorobenzene	ND		ug/l	2.5
1,3,5-Trimethylbenzene	ND		ug/l	2.5
1,2,4-Trimethylbenzene	ND		ug/l	2.5
Ethyl ether	ND		ug/l	2.5
Isopropyl Ether	ND		ug/l	2.0
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0
1,4-Dioxane	ND		ug/l	250

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	111		70-130

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0904587

Project Number: 0095922

Report Date: 04/20/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG359274-1 WG359274-2					
Methylene chloride	101	103	70-130	2	25
1,1-Dichloroethane	98	103	70-130	5	25
Chloroform	98	102	70-130	4	25
Carbon tetrachloride	101	109	70-130	8	25
1,2-Dichloropropane	95	100	70-130	5	25
Dibromochloromethane	103	102	70-130	1	25
1,1,2-Trichloroethane	96	96	70-130	0	25
Tetrachloroethene	110	117	70-130	6	25
Chlorobenzene	98	100	70-130	2	25
Trichlorofluoromethane	124	136	70-130	9	25
1,2-Dichloroethane	109	113	70-130	4	25
1,1,1-Trichloroethane	103	109	70-130	6	25
Bromodichloromethane	107	112	70-130	5	25
trans-1,3-Dichloropropene	90	91	70-130	1	25
cis-1,3-Dichloropropene	85	89	70-130	5	25
1,1-Dichloropropene	94	105	70-130	11	25
Bromoform	102	110	70-130	8	50
1,1,2,2-Tetrachloroethane	81	85	70-130	5	25
Benzene	98	101	70-130	3	25
Toluene	95	98	70-130	3	25
Ethylbenzene	99	104	70-130	5	25

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904587

**Project Number:** 0095922

**Report Date:** 04/20/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG359274-1 WG359274-2					
Chloromethane	80	86	70-130	7	50
Bromomethane	91	99	70-130	8	50
Vinyl chloride	83	92	70-130	10	25
Chloroethane	97	110	70-130	13	25
1,1-Dichloroethene	98	108	70-130	10	25
trans-1,2-Dichloroethene	106	109	70-130	3	25
Trichloroethene	103	109	70-130	6	25
1,2-Dichlorobenzene	92	98	70-130	6	25
1,3-Dichlorobenzene	94	98	70-130	4	25
1,4-Dichlorobenzene	94	99	70-130	5	25
Methyl tert butyl ether	103	111	70-130	7	25
p/m-Xylene	97	101	70-130	4	25
o-Xylene	104	104	70-130	0	25
cis-1,2-Dichloroethene	102	103	70-130	1	25
Dibromomethane	106	108	70-130	2	25
1,2,3-Trichloropropane	87	90	70-130	3	25
Styrene	102	104	70-130	2	25
Dichlorodifluoromethane	82	92	70-130	11	50
Acetone	104	123	70-130	17	50
Carbon disulfide	71	75	70-130	5	50
2-Butanone	90	93	70-130	3	50

## Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Lab Number: L0904587

Project Number: 0095922

Report Date: 04/20/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG359274-1 WG359274-2					
4-Methyl-2-pentanone	86	89	70-130	3	50
2-Hexanone	77	80	70-130	4	50
Bromochloromethane	108	113	70-130	5	25
Tetrahydrofuran	96	99	70-130	3	25
2,2-Dichloropropane	84	92	70-130	9	50
1,2-Dibromoethane	100	100	70-130	0	25
1,3-Dichloropropane	98	100	70-130	2	25
1,1,1,2-Tetrachloroethane	100	102	70-130	2	25
Bromobenzene	94	102	70-130	8	25
n-Butylbenzene	84	95	70-130	12	25
sec-Butylbenzene	84	94	70-130	11	25
tert-Butylbenzene	83	92	70-130	10	25
o-Chlorotoluene	83	89	70-130	7	25
p-Chlorotoluene	86	94	70-130	9	25
1,2-Dibromo-3-chloropropane	82	83	70-130	1	50
Hexachlorobutadiene	98	118	70-130	19	25
Isopropylbenzene	98	102	70-130	4	25
p-Isopropyltoluene	88	98	70-130	11	25
Naphthalene	76	82	70-130	8	25
n-Propylbenzene	82	91	70-130	10	25
1,2,3-Trichlorobenzene	121	121	70-130	0	25



## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RAYTHEON WAYLAND

**Lab Number:** L0904587

**Project Number:** 0095922

**Report Date:** 04/20/09

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 01-02 Batch: WG359274-1 WG359274-2					
1,2,4-Trichlorobenzene	109	109	70-130	0	25
1,3,5-Trimethylbenzene	83	92	70-130	10	25
1,2,4-Trimethylbenzene	87	93	70-130	7	25
Ethyl ether	111	119	70-130	7	25
Isopropyl Ether	92	95	70-130	3	25
Ethyl-Tert-Butyl-Ether	97	100	70-130	3	25
Tertiary-Amyl Methyl Ether	89	93	70-130	4	25
1,4-Dioxane	111	114	70-130	3	50

Surrogate	LCS %Recovery	Qualifier	LCSD %Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		114		70-130
Toluene-d8	103		100		70-130
4-Bromofluorobenzene	90		94		70-130
Dibromofluoromethane	115		113		70-130

**Project Name:** RAYTHEON WAYLAND**Lab Number:** L0904587**Project Number:** 0095922**Report Date:** 04/20/09**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

**Cooler Information**

Cooler	Custody Seal
A	Absent

**Container Information**

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0904587-01A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904587-01B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904587-02A	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)
L0904587-02B	Vial HCl preserved	A	N/A	2	Y	Absent	MCP-8260-04(14)

\*Hold days indicated by values in parentheses

**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904587  
**Report Date:** 04/20/09

## GLOSSARY

### Acronyms

- EPA** - Environmental Protection Agency.
- LCS** - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD** - Laboratory Control Sample Duplicate: Refer to LCS.
- MS** - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD** - Matrix Spike Sample Duplicate: Refer to MS.
- NA** - Not Applicable.
- NC** - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
- ND** - Not detected at the reported detection limit for the sample.
- 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

- \*** - The batch duplicate RPD exceeds the acceptance criteria. This flag is not applicable when the sample concentrations are less than 5x the RDL. (Metals only.)
- 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.
- 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.
- N** - The matrix spike recovery exceeds the acceptance criteria. This flag is not applicable when the sample concentration is greater than 4x the spike added. (Metals only.)
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- 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).

Report Format: Data Usability Report



**Project Name:** RAYTHEON WAYLAND  
**Project Number:** 0095922

**Lab Number:** L0904587  
**Report Date:** 04/20/09

## REFERENCES

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

## LIMITATION OF LIABILITIES

Alpha 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 February 18, 2009 - 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.

*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.)

*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), 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: MA0086.

*Drinking Water* (Inorganic Parameters: SM9215B, 9221E, 9222B, 9222D, 9223B, EPA 150.1, 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, Nitrite-N, Fluoride, Sulfate)

353.2 for: Nitrate-N, Nitrite-N; SM4500NO3-F, 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, EPA 150.1, SM4500H-B.

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

(504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), SM6251B, 314.0.

#### *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,Ti,V,Zn,Ca,Mg,Na,K)

245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2540B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Nitrate-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, 4500CN-CE, 2540D, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1

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

(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCB-Water) 600/4-81-045-PCB-Oil

**Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.***Drinking Water*

Microbiology Parameters: SM9215B; MF-SM9222B; ENZ. SUB. SM9223; EC-SM9221E; MF-SM9222D; ENZ. SUB. SM9223;

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

*Drinking Water (Inorganic Parameters:* SM6215B, 9222B, 9223B Colilert, EPA 200.7, 200.8, 245.2, 110.2, 120.1, 150.1, 300.0, 325.2, 314.0, SM4500CN-E, 4500H+B, 4500NO<sub>3</sub>-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, 150.1, 300.0, 305.1, 310.1, 325.2, 340.2, 350.1, 350.2, 351.1, 353.2, 354.1, 365.2, 375.4, 376.2, 405.1, 415.1, 420.1, 425.1, 1664A, SW-846 9010, 9030, 9040B, EPA 160.1, 160.2, 160.3, SM426C, SM2310B, 2540B, 2540D, 4500H+B, 4500NH<sub>3</sub>-H, 4500NH<sub>3</sub>-E, 4500NO<sub>2</sub>-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.**

*Drinking Water (Inorganic Parameters:* SM9222B, 9221E, 9223B, 9215B, 4500NO<sub>3</sub>-F, 4500F-C, EPA 300.0, 200.7, 2540C, 2320B, 314.0, 331.0, 110.2, SM2120B, 2510B, 5310C, EPA 150.1, SM4500H-B, EPA 200.8, 245.2. Organic Parameters: 504.1, SM6251B, 524.2.)

*Non-Potable Water (Inorganic Parameters:* SM5210B, EPA 410.1, SM5220D, 4500CI-D, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO<sub>3</sub>-F, 4500NO<sub>2</sub>-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, 4500NH<sub>3</sub>-H, EPA 350.2/1, 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.)

*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, 3540C, 3545, 3550B, 3580A, 5035L, 5035H.)

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

*Drinking Water (Inorganic Parameters:* SM9223B, 9222B, 8215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 314.0, 331.0, SM2320B, EPA 300.0, 325.2, 110.2, SM2120B, 4500CN-E, 4500F-C, EPA 150.1, SM4500H-B, 4500NO<sub>3</sub>-F, 2540C, EPA 120.1, SM 2510B. Organic Parameters: EPA 524.2, 504.1, SM6251B.)

*Non-Potable Water (Inorganic Parameters:* SM9221E, 9222D, 9221B, 9222B, 9215B, EPA 405.1, SM5210B, EPA 410.4, SM5220D, EPA 305.1, SM2310B-4a, EPA 310.1, SM2320B, EPA 200.7, 300.0, 325.2, LACHAT 10-117-07-1A or B, SM4500CI-E, EPA 340.2, SM4500F-C, EPA 375.4, SM15 426C, EPA 350.1, 350.2, LACHAT 10-107-06-1-B, SM4500NH<sub>3</sub>-H, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-041-C, SM4500-NO<sub>3</sub>F, EPA 354.1, SM4500-NO<sub>2</sub>-B, EPA 365.2, SM4500P-E, EPA 160.3, SM2540B, EPA 160.1, SM2540C, EPA 160.2, SM2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, 110.2, SM2120B, 335.2, LACHAT 10-204-00-1-A, EPA 150.1, 9040B, SM4500-HB, EPA 1664A, EPA 415.1, SM5310C, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, EPA 376.2, SM4500S-D, EPA 425.1, SM5540C, EPA 3005A, 3015. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, 8021B, EPA 3510C, 5030B, 9010B, 9030B.)

*Solid & Hazardous Waste (Inorganic Parameters:* EPA 9040B, 9045C, 1010, 1030, SW-846 Ch 7 Sec 7.3, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 3005A, 3050B, 3051, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8151A, 8330, 8082, 8021B, 3540C, 3545, 3580, 5030B, 5035.)

*Analytical Services Protocol:* CLP Volatile Organics, CLP Inorganics, CLP PCB/Pesticides.

**Rhode Island Department of Health Certificate/Lab ID: LAO00065.**

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

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

**Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. Registered Laboratory.**



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

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

# CHAIN OF CUSTODY

PAGE 1 OF 1

### Client Information

Client: **ERM**  
Address: **399 Boylston St.  
6th Floor Boston, MA**  
Phone: **(617) 646-7806**  
Fax: **(617) 267-6447**  
Email: **balwan-frost@erm.com**

These samples have been previously analyzed by Alpha  
Other Project Specific Requirements/Comments/Detection Limits:

### Project Information

Project Name: **Raytheon Wayland**  
Project Location: **Wayland, MA**  
Project #: **0095922**  
Project Manager: **JASON FLATTERY**  
ALPHA Quote #:  
Turn-Around Time

Standard  RUSH (only confirmed if pre-approved)  
Date Due: **4/21/09** Time:

### Report Information - Data Deliverables

Date Rec'd in Lab: **4/14/09**  
 FAX  EMAIL  
 WADEx  Add'l Deliverables

### Billing Information

ALPHA Job #: **L0904597**  
 Same as Client info PO #:

### Regulatory Requirements/Report Limits

State / Fed Program: **MA MCP** Criteria: **GW1**  
MA MCP PRESUMPTIVE CERTAINTY ... CT REASONABLE CONFIDENCE PROTO.

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

**ANALYSIS OVER 80213 BY 8260**

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

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

<b>04587.1</b>	NW-205/M-20090414-01	4/14/09	1340	GW	BF
	2 NW-205/D-20090414-01	4/14/09	1510	L	L

### PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT  
MA MCP or CT RCP?

Relinquished By:

Date/Time

Received By:

Date/Time

Container Type	Preservative
V	B

*Relinquished By:*  
*4/14/09 17:55*

*Received By:*  
*4/14/09 17:45*

*Date/Time:*  
*4/14/09 17:45*

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



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

Page: Page 1 of 11  
Lab Proj #: P0904239  
Report Date: 04/23/09  
Client Proj Name: Wayland  
Client Proj #: Wayland

### Laboratory Results

Total pages in data package: 12

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0904239-01	MW-560-20090413-04
P0904239-02	MW-265M-20090413-04
P0904239-03	MW-268D-20090413-04
P0904239-04	DUP-010-20090413-04
P0904239-05	IW-2-20090415-04
P0904239-06	MW-552-20090414-04
P0904239-07	MW-551-20090414-04
P0904239-08	MW-268M-20090414-04
P0904239-09	MW-266MA-20090414-04
P0904239-10	MW-266MB-20090414-04

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

**Approved By:** Heather Hauser **Date:** 4/27/09

**Project Manager:** Heather Hauser

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.  
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

### Case Narrative:



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

Page: Page 2 of 11  
 Lab Proj #: P0904239  
 Report Date: 04/23/09  
 Client Proj Name: Wayland  
 Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
MW-560-20090413-04	Water	P0904239-01	13 Apr. 09 15:10	18 Apr. 09 11:05		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.033	0.025	ug/L	AM20GAX	4/22/09	rw
N Ethene	0.380	0.025	ug/L	AM20GAX	4/22/09	rw
N Methane	9.400	0.100	ug/L	AM20GAX	4/22/09	rw

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

Page: Page 3 of 11  
 Lab Proj #: P0904239  
 Report Date: 04/23/09  
 Client Proj Name: Wayland  
 Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
MW-265M-20090413-04	Water	P0904239-02	13 Apr. 09 14:30	18 Apr. 09 11:05		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	<0.025	0.025	ug/L	AM20GAX	4/22/09	rw
N Ethene	4.700	0.025	ug/L	AM20GAX	4/22/09	rw
N Methane	13.000	0.100	ug/L	AM20GAX	4/22/09	rw



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

Page: Page 4 of 11  
 Lab Proj #: P0904239  
 Report Date: 04/23/09  
 Client Proj Name: Wayland  
 Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
MW-268D-20090413-04	Water	P0904239-03	13 Apr. 09 14:30	18 Apr. 09 11:05		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	<0.025	0.025	ug/L	AM20GAX	4/22/09	rw
N Ethene	<0.025	0.025	ug/L	AM20GAX	4/22/09	rw
N Methane	25.000	0.100	ug/L	AM20GAX	4/22/09	rw



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

Page: Page 5 of 11  
 Lab Proj #: P0904239  
 Report Date: 04/23/09  
 Client Proj Name: Wayland  
 Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
DUP-010-20090413-04	Water	P0904239-04	13 Apr. 09 11:11	18 Apr. 09 11:05		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.031	0.025	ug/L	AM20GAX	4/22/09	rw
N Ethene	0.380	0.025	ug/L	AM20GAX	4/22/09	rw
N Methane	8.400	0.100	ug/L	AM20GAX	4/22/09	rw

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

Page: Page 6 of 11  
 Lab Proj #: P0904239  
 Report Date: 04/23/09  
 Client Proj Name: Wayland  
 Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
IW-2-20090415-04	Water	P0904239-05	15 Apr. 09 9:40	18 Apr. 09 11:05		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.098	0.025	ug/L	AM20GAX	4/22/09	rw
N Ethene	8.600	0.025	ug/L	AM20GAX	4/22/09	rw
N Methane	240.000	0.100	ug/L	AM20GAX	4/22/09	rw

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

Page: Page 7 of 11  
 Lab Proj #: P0904239  
 Report Date: 04/23/09  
 Client Proj Name: Wayland  
 Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
MW-552-20090414-04	Water	P0904239-06	14 Apr. 09 11:45	18 Apr. 09 11:05		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	<0.025	0.025	ug/L	AM20GAX	4/22/09	rw
N Ethene	0.250	0.025	ug/L	AM20GAX	4/22/09	rw
N Methane	7.500	0.100	ug/L	AM20GAX	4/22/09	rw

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

Page: Page 8 of 11  
Lab Proj #: P0904239  
Report Date: 04/23/09  
Client Proj Name: Wayland  
Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
MW-551-20090414-04	Water	P0904239-07	14 Apr. 09 14:00	18 Apr. 09 11:05		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	<0.025	0.025	ug/L	AM20GAX	4/22/09	rw
N Ethene	0.046	0.025	ug/L	AM20GAX	4/22/09	rw
N Methane	0.650	0.100	ug/L	AM20GAX	4/22/09	rw

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

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 Lab Proj #: P0904239  
 Report Date: 04/23/09  
 Client Proj Name: Wayland  
 Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
MW-268M-20090414-04	Water	P0904239-08	14 Apr. 09 9:20	18 Apr. 09 11:05		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	<0.025	0.025	ug/L	AM20GAX	4/22/09	rw
N Ethene	1.500	0.025	ug/L	AM20GAX	4/22/09	rw
N Methane	26.000	0.100	ug/L	AM20GAX	4/22/09	rw





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 Lab Proj #: P0904239  
 Report Date: 04/23/09  
 Client Proj Name: Wayland  
 Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>
MW-266MA-20090414-04	Water	P0904239-09	14 Apr. 09 16:40	18 Apr. 09 11:05

<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	<0.025	0.025	ug/L	AM20GAX	4/22/09	rw
N Ethene	<0.025	0.025	ug/L	AM20GAX	4/22/09	rw
N Methane	28.000	0.100	ug/L	AM20GAX	4/22/09	rw



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 Lab Proj #: P0904239  
 Report Date: 04/23/09  
 Client Proj Name: Wayland  
 Client Proj #: Wayland

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
MW-266MB-20090414-04	Water	P0904239-10	14 Apr. 09 15:15	18 Apr. 09 11:05		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	<0.025	0.025	ug/L	AM20GAX	4/22/09	rw
N Ethene	1.300	0.025	ug/L	AM20GAX	4/22/09	rw
N Methane	5.500	0.100	ug/L	AM20GAX	4/22/09	rw



