

**Environmental  
Resources  
Management**

One Beacon Street, 5<sup>th</sup> Floor  
Boston, MA 02108  
+1 617 646 7800  
+1 617 267 6447 (fax)

<http://www.erm.com>

16 August 2012  
Reference: 0167058

Mr. Tim Skehan  
c/o Russell's Garden Center  
397 Boston Post Road  
Wayland, MA 01778



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

Dear Mr. Skehan:

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

ERM collected groundwater samples from an irrigation well on your property on 24 July 2012. Samples were submitted to TestAmerica Laboratories, Inc. of Westfield, Massachusetts. Analytical results are attached to this letter. These analytical data will be provided to the Massachusetts Department of Environmental Protection in the next MCP submittal.

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

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

Sincerely,



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



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

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

cc: Jonathan Hone, Raytheon Company  
PIP Repositories



**NOTICE OF ENVIRONMENTAL SAMPLING**

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

**BWSC 123**

This Notice is Related to Release Tracking Number

3 13302

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

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

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

1. Name: Russell's Garden Center  
2. Street Address: 397 Boston Post Road  
City/Town: Wayland Zip Code: 02903

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

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

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

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

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

- |   |   |
|---|---|
| <input type="checkbox"/> Immediate Response Action              | <input type="checkbox"/> Phase III Feasibility Evaluation                   |
| <input type="checkbox"/> Release Abatement Measure              | <input type="checkbox"/> Phase IV Remedy Implementation Plan                |
| <input type="checkbox"/> Utility-related Abatement Measure      | <input checked="" type="checkbox"/> Phase V/Remedy Operation Status         |
| <input type="checkbox"/> Phase I Initial Site Investigation     | <input type="checkbox"/> Post-Class C Operation, Maintenance and Monitoring |
| <input type="checkbox"/> Phase II Comprehensive Site Assessment | <input type="checkbox"/> Other _____<br>(specify)                           |

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

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

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

Collection of groundwater samples from existing monitoring wells.

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

Contact Name: Louis J. Burkhardt  
Street Address: 880 Technology Park Drive, T-3033  
City/Town: Billerica Zip Code: 01821  
Telephone: (978) 436-8238 Email: louis\_j\_burkhardt@raytheon.com

## **NOTICE OF ENVIRONMENTAL SAMPLING**

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

### MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

### THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the “disposal site”.)

### PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

**Section C** on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

**Section D** on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

### FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/dep/cleanup/oview.htm>. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See <http://mass.gov/dep/about/region/schedule.htm> if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Westfield  
Westfield Executive Park  
53 Southampton Road  
Westfield, MA 01085  
Tel: (413)572-4000

TestAmerica Job ID: 360-41816-1  
Client Project/Site: IDS Wayland

For:  
ERM-Northeast  
One Beacon Steet  
5th Floor  
Boston, Massachusetts 02108

Attn: Jason Flattery



Authorized for release by:  
7/30/2012 2:06:31 PM  
James Wickham  
Technology Manager  
[jamie.wickham@testamericainc.com](mailto:jamie.wickham@testamericainc.com)

Designee for  
Becky Mason  
Project Manager II  
[becky.mason@testamericainc.com](mailto:becky.mason@testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?




Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Detection Summary . . . . .	5
Method Summary . . . . .	6
Sample Summary . . . . .	7
Client Sample Results . . . . .	8
Definitions . . . . .	12
QC Association . . . . .	13
Surrogate Summary . . . . .	14
QC Sample Results . . . . .	15
Chronicle . . . . .	21
Certification Summary . . . . .	22
Receipt Checklists . . . . .	24
Chain of Custody . . . . .	25

<b>MassDEP Analytical Protocol Certification Form</b>					
Laboratory Name: <b>TestAmerica Westfield</b>		Project #: <b>360-41816-1</b>			
Project Location: <b>IDS Wayland</b>			RTN:		
<b>This form provides certifications for the following data set: list Laboratory Sample ID Number(s):</b>					
<b>360-41816-1</b>					
Matrices: <input checked="" type="checkbox"/> Groundwater/Surface Water <input type="checkbox"/> Soil/Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Air <input type="checkbox"/> Other:					
<b>CAM Protocols (check all that apply below):</b>					
8260 VOC CAM II A <input checked="" type="checkbox"/>	7470/7471 Hg CAM III B <input type="checkbox"/>	Mass DEP VPH CAM IV A <input type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	Mass DEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	7010 Metals CAM III C <input type="checkbox"/>	Mass DEP EPH CAM IV B <input type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input checked="" type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input type="checkbox"/>	9014 Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	
<b>Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status</b>					
<b>A</b>	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>B</b>	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>C</b>	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>D</b>	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>E</b>	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>F</b>	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Responses to Questions G, H and I below are required for "Presumptive Certainty" status</b>					
<b>G</b>	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <sup>1</sup>
<b>Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350</b>					
<b>H</b>	Were all QC performance standards specified in the CAM protocol(s) achieved?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <sup>1</sup>
<b>I</b>	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <sup>1</sup>
<sup>1</sup> All negative responses must be addressed in an attached laboratory narrative.					
<b>I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.</b>					
Signature: 		Position: <u>Technical Manager</u>			
Printed Name: <u>James Wickham</u>		Date: <u>7/30/12 14:03</u>			
<small>This form has been electronically signed and approved</small>					

# Case Narrative

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

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**Job ID: 360-41816-1**

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**Laboratory: TestAmerica Westfield**

## Narrative

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With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

TestAmerica's Reporting Limits (RLs) for this report may not always meet client specified method reporting limits due to various reasons such as methodology, dilutions, matrix or moisture content (soils). TestAmerica's pivot table EDD documents which compound(s) exceed certain regulatory standards. If not included with your deliverables, please contact your Project Manager about the availability of this EDD for your report.

## Receipt

The sample was received on 7/24/2012 3:30 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2° C.

## GC/MS VOA

Method 8260C: For batch 93476 the curve dated 7-25-12-12 uses quadratic regressions for Methylene Chloride

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 93476 exceeded control limits for one or more compounds. The data is flagged accordingly. Please reference the QC report for details.

No other analytical or quality issues were noted.

## Metals

At the request of the client, a non-MCP analyte list was reported for this job.

No analytical or quality issues were noted.

## General Chemistry

No analytical or quality issues were noted.



# Detection Summary

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

Client Sample ID: RUSSWELL-20120724-01

Lab Sample ID: 360-41816-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorodibromomethane	4.3		0.50		ug/L	1		8260C	Total/NA
Chloroform	28		1.0		ug/L	1		8260C	Total/NA
Dichlorobromomethane	9.6		0.50		ug/L	1		8260C	Total/NA
Sodium	33000		2000		ug/L	1		6010C	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Chloride	67		10		mg/L	10		300.0	Total/NA

## Method Summary

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL WFD
6010C	Metals (ICP)	SW846	TAL WFD
300.0	Anions, Ion Chromatography	MCAWW	TAL WFD

### Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL WFD = TestAmerica Westfield, Westfield Executive Park, 53 Southampton Road, Westfield, MA 01085, TEL (413)572-4000

# Sample Summary

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
360-41816-1	RUSSWELL-20120724-01	Water	07/24/12 11:30	07/24/12 15:30

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# Client Sample Results

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

## Method: 8260C - Volatile Organic Compounds (GC/MS)

**Client Sample ID: RUSSWELL-20120724-01**

**Lab Sample ID: 360-41816-1**

**Date Collected: 07/24/12 11:30**

**Matrix: Water**

**Date Received: 07/24/12 15:30**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/26/12 16:25	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/26/12 16:25	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/26/12 16:25	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/26/12 16:25	1
1,1-Dichloroethane	ND		1.0		ug/L			07/26/12 16:25	1
1,1-Dichloroethene	ND		1.0		ug/L			07/26/12 16:25	1
1,1-Dichloropropene	ND		1.0		ug/L			07/26/12 16:25	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/26/12 16:25	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/26/12 16:25	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/26/12 16:25	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/26/12 16:25	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/26/12 16:25	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/26/12 16:25	1
1,2-Dichloroethane	ND		1.0		ug/L			07/26/12 16:25	1
1,2-Dichloropropane	ND		1.0		ug/L			07/26/12 16:25	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/26/12 16:25	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/26/12 16:25	1
1,3-Dichloropropane	ND		1.0		ug/L			07/26/12 16:25	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/26/12 16:25	1
1,4-Dioxane	ND		50		ug/L			07/26/12 16:25	1
2,2-Dichloropropane	ND		1.0		ug/L			07/26/12 16:25	1
2-Butanone (MEK)	ND	*	10		ug/L			07/26/12 16:25	1
2-Chlorotoluene	ND		1.0		ug/L			07/26/12 16:25	1
2-Hexanone	ND		10		ug/L			07/26/12 16:25	1
4-Chlorotoluene	ND		1.0		ug/L			07/26/12 16:25	1
4-Isopropyltoluene	ND		1.0		ug/L			07/26/12 16:25	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/26/12 16:25	1
Acetone	ND		50		ug/L			07/26/12 16:25	1
Benzene	ND		1.0		ug/L			07/26/12 16:25	1
Bromobenzene	ND		1.0		ug/L			07/26/12 16:25	1
Bromoform	ND		1.0		ug/L			07/26/12 16:25	1
Bromomethane	ND		2.0		ug/L			07/26/12 16:25	1
Carbon disulfide	ND		10		ug/L			07/26/12 16:25	1
Carbon tetrachloride	ND		1.0		ug/L			07/26/12 16:25	1
Chlorobenzene	ND		1.0		ug/L			07/26/12 16:25	1
Chlorobromomethane	ND		1.0		ug/L			07/26/12 16:25	1
<b>Chlorodibromomethane</b>	<b>4.3</b>		0.50		ug/L			07/26/12 16:25	1
Chloroethane	ND		2.0		ug/L			07/26/12 16:25	1
<b>Chloroform</b>	<b>28</b>		1.0		ug/L			07/26/12 16:25	1
Chloromethane	ND		2.0		ug/L			07/26/12 16:25	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/26/12 16:25	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/26/12 16:25	1
Dibromomethane	ND		1.0		ug/L			07/26/12 16:25	1
<b>Dichlorobromomethane</b>	<b>9.6</b>		0.50		ug/L			07/26/12 16:25	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			07/26/12 16:25	1
Ethyl ether	ND		1.0		ug/L			07/26/12 16:25	1
Ethylbenzene	ND		1.0		ug/L			07/26/12 16:25	1
Ethylene Dibromide	ND		1.0		ug/L			07/26/12 16:25	1
Hexachlorobutadiene	ND		0.40		ug/L			07/26/12 16:25	1
Isopropyl ether	ND		10		ug/L			07/26/12 16:25	1
Isopropylbenzene	ND		1.0		ug/L			07/26/12 16:25	1

# Client Sample Results

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: RUSSWELL-20120724-01**

**Lab Sample ID: 360-41816-1**

**Date Collected: 07/24/12 11:30**

**Matrix: Water**

**Date Received: 07/24/12 15:30**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0		ug/L			07/26/12 16:25	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/26/12 16:25	1
Methylene Chloride	ND		2.0		ug/L			07/26/12 16:25	1
n-Butylbenzene	ND		1.0		ug/L			07/26/12 16:25	1
N-Propylbenzene	ND		1.0		ug/L			07/26/12 16:25	1
Naphthalene	ND		5.0		ug/L			07/26/12 16:25	1
o-Xylene	ND		1.0		ug/L			07/26/12 16:25	1
sec-Butylbenzene	ND		1.0		ug/L			07/26/12 16:25	1
Styrene	ND		1.0		ug/L			07/26/12 16:25	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/26/12 16:25	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/26/12 16:25	1
tert-Butylbenzene	ND		1.0		ug/L			07/26/12 16:25	1
Tetrachloroethene	ND		1.0		ug/L			07/26/12 16:25	1
Tetrahydrofuran	ND		10		ug/L			07/26/12 16:25	1
Toluene	ND		1.0		ug/L			07/26/12 16:25	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/26/12 16:25	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/26/12 16:25	1
Trichloroethene	ND		1.0		ug/L			07/26/12 16:25	1
Trichlorofluoromethane	ND		1.0		ug/L			07/26/12 16:25	1
Vinyl chloride	ND		0.50		ug/L			07/26/12 16:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		70 - 130					07/26/12 16:25	1
Dibromofluoromethane	103		70 - 130					07/26/12 16:25	1
Toluene-d8 (Surr)	98		70 - 130					07/26/12 16:25	1

# Client Sample Results

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

## Method: 6010C - Metals (ICP)

Client Sample ID: RUSSWELL-20120724-01

Lab Sample ID: 360-41816-1

Date Collected: 07/24/12 11:30

Matrix: Water

Date Received: 07/24/12 15:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	33000		2000		ug/L		07/25/12 10:25	07/25/12 16:57	1

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# Client Sample Results

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

## General Chemistry

Client Sample ID: RUSSWELL-20120724-01

Lab Sample ID: 360-41816-1

Date Collected: 07/24/12 11:30

Matrix: Water

Date Received: 07/24/12 15:30

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	67		10		mg/L			07/26/12 15:28	10

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# Definitions/Glossary

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)



# QC Association Summary

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

## GC/MS VOA

### Analysis Batch: 93476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
360-41816-1	RUSSWELL-20120724-01	Total/NA	Water	8260C	
LCS 360-93476/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 360-93476/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 360-93476/6	Method Blank	Total/NA	Water	8260C	

## Metals

### Prep Batch: 93422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
360-41816-1	RUSSWELL-20120724-01	Total/NA	Water	3010A	
LCS 360-93422/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 360-93422/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 360-93422/1-A	Method Blank	Total/NA	Water	3010A	

### Analysis Batch: 93462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
360-41816-1	RUSSWELL-20120724-01	Total/NA	Water	6010C	93422
LCS 360-93422/2-A	Lab Control Sample	Total/NA	Water	6010C	93422
LCSD 360-93422/3-A	Lab Control Sample Dup	Total/NA	Water	6010C	93422
MB 360-93422/1-A	Method Blank	Total/NA	Water	6010C	93422

## General Chemistry

### Analysis Batch: 93596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
360-41816-1	RUSSWELL-20120724-01	Total/NA	Water	300.0	
LCS 360-93596/4	Lab Control Sample	Total/NA	Water	300.0	
MB 360-93596/3	Method Blank	Total/NA	Water	300.0	

# Surrogate Summary

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

## Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB (70-130)	DBFM (70-130)	TOL (70-130)
360-41816-1	RUSSWELL-20120724-01	99	103	98
LCS 360-93476/3	Lab Control Sample	100	101	100
LCSD 360-93476/4	Lab Control Sample Dup	101	101	101
MB 360-93476/6	Method Blank	101	102	99

### Surrogate Legend

BFB = 4-Bromofluorobenzene

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

# QC Sample Results

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

## Method: 8260C - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 360-93476/6**

**Matrix: Water**

**Analysis Batch: 93476**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/26/12 14:10	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/26/12 14:10	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/26/12 14:10	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/26/12 14:10	1
1,1-Dichloroethane	ND		1.0		ug/L			07/26/12 14:10	1
1,1-Dichloroethene	ND		1.0		ug/L			07/26/12 14:10	1
1,1-Dichloropropene	ND		1.0		ug/L			07/26/12 14:10	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/26/12 14:10	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/26/12 14:10	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/26/12 14:10	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/26/12 14:10	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/26/12 14:10	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/26/12 14:10	1
1,2-Dichloroethane	ND		1.0		ug/L			07/26/12 14:10	1
1,2-Dichloropropane	ND		1.0		ug/L			07/26/12 14:10	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/26/12 14:10	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/26/12 14:10	1
1,3-Dichloropropane	ND		1.0		ug/L			07/26/12 14:10	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/26/12 14:10	1
1,4-Dioxane	ND		50		ug/L			07/26/12 14:10	1
2,2-Dichloropropane	ND		1.0		ug/L			07/26/12 14:10	1
2-Butanone (MEK)	ND		10		ug/L			07/26/12 14:10	1
2-Chlorotoluene	ND		1.0		ug/L			07/26/12 14:10	1
2-Hexanone	ND		10		ug/L			07/26/12 14:10	1
4-Chlorotoluene	ND		1.0		ug/L			07/26/12 14:10	1
4-Isopropyltoluene	ND		1.0		ug/L			07/26/12 14:10	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/26/12 14:10	1
Acetone	ND		50		ug/L			07/26/12 14:10	1
Benzene	ND		1.0		ug/L			07/26/12 14:10	1
Bromobenzene	ND		1.0		ug/L			07/26/12 14:10	1
Bromoform	ND		1.0		ug/L			07/26/12 14:10	1
Bromomethane	ND		2.0		ug/L			07/26/12 14:10	1
Carbon disulfide	ND		10		ug/L			07/26/12 14:10	1
Carbon tetrachloride	ND		1.0		ug/L			07/26/12 14:10	1
Chlorobenzene	ND		1.0		ug/L			07/26/12 14:10	1
Chlorobromomethane	ND		1.0		ug/L			07/26/12 14:10	1
Chlorodibromomethane	ND		0.50		ug/L			07/26/12 14:10	1
Chloroethane	ND		2.0		ug/L			07/26/12 14:10	1
Chloroform	ND		1.0		ug/L			07/26/12 14:10	1
Chloromethane	ND		2.0		ug/L			07/26/12 14:10	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/26/12 14:10	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/26/12 14:10	1
Dibromomethane	ND		1.0		ug/L			07/26/12 14:10	1
Dichlorobromomethane	ND		0.50		ug/L			07/26/12 14:10	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/26/12 14:10	1
Ethyl ether	ND		1.0		ug/L			07/26/12 14:10	1
Ethylbenzene	ND		1.0		ug/L			07/26/12 14:10	1
Ethylene Dibromide	ND		1.0		ug/L			07/26/12 14:10	1
Hexachlorobutadiene	ND		0.40		ug/L			07/26/12 14:10	1

# QC Sample Results

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 360-93476/6**

**Matrix: Water**

**Analysis Batch: 93476**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Isopropyl ether	ND		10		ug/L			07/26/12 14:10	1
Isopropylbenzene	ND		1.0		ug/L			07/26/12 14:10	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/26/12 14:10	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/26/12 14:10	1
Methylene Chloride	ND		2.0		ug/L			07/26/12 14:10	1
n-Butylbenzene	ND		1.0		ug/L			07/26/12 14:10	1
N-Propylbenzene	ND		1.0		ug/L			07/26/12 14:10	1
Naphthalene	ND		5.0		ug/L			07/26/12 14:10	1
o-Xylene	ND		1.0		ug/L			07/26/12 14:10	1
sec-Butylbenzene	ND		1.0		ug/L			07/26/12 14:10	1
Styrene	ND		1.0		ug/L			07/26/12 14:10	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/26/12 14:10	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/26/12 14:10	1
tert-Butylbenzene	ND		1.0		ug/L			07/26/12 14:10	1
Tetrachloroethene	ND		1.0		ug/L			07/26/12 14:10	1
Tetrahydrofuran	ND		10		ug/L			07/26/12 14:10	1
Toluene	ND		1.0		ug/L			07/26/12 14:10	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/26/12 14:10	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/26/12 14:10	1
Trichloroethene	ND		1.0		ug/L			07/26/12 14:10	1
Trichlorofluoromethane	ND		1.0		ug/L			07/26/12 14:10	1
Vinyl chloride	ND		0.50		ug/L			07/26/12 14:10	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	101		70 - 130		07/26/12 14:10	1
Dibromofluoromethane	102		70 - 130		07/26/12 14:10	1
Toluene-d8 (Surr)	99		70 - 130		07/26/12 14:10	1

**Lab Sample ID: LCS 360-93476/3**

**Matrix: Water**

**Analysis Batch: 93476**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,1,1,2-Tetrachloroethane	20.0	21.1		ug/L		106	70 - 130
1,1,1-Trichloroethane	20.0	21.2		ug/L		106	70 - 130
1,1,2,2-Tetrachloroethane	20.0	21.3		ug/L		107	70 - 130
1,1,2-Trichloroethane	20.0	20.3		ug/L		101	70 - 130
1,1-Dichloroethane	20.0	21.6		ug/L		108	70 - 130
1,1-Dichloroethane	20.0	19.6		ug/L		98	70 - 130
1,1-Dichloropropene	20.0	20.6		ug/L		103	70 - 130
1,2,3-Trichlorobenzene	20.0	20.7		ug/L		103	70 - 130
1,2,3-Trichloropropane	20.0	20.8		ug/L		104	70 - 130
1,2,4-Trichlorobenzene	20.0	22.0		ug/L		110	70 - 130
1,2,4-Trimethylbenzene	20.0	21.4		ug/L		107	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	19.2		ug/L		96	70 - 130
1,2-Dichlorobenzene	20.0	20.6		ug/L		103	70 - 130
1,2-Dichloroethane	20.0	21.2		ug/L		106	70 - 130
1,2-Dichloropropane	20.0	21.1		ug/L		105	70 - 130
1,3,5-Trimethylbenzene	20.0	21.1		ug/L		105	70 - 130

# QC Sample Results

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 360-93476/3**

**Matrix: Water**

**Analysis Batch: 93476**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	20.0	21.1		ug/L		105	70 - 130
1,3-Dichloropropane	20.0	20.6		ug/L		103	70 - 130
1,4-Dichlorobenzene	20.0	20.7		ug/L		104	70 - 130
1,4-Dioxane	200	216		ug/L		108	70 - 130
2,2-Dichloropropane	20.0	21.4		ug/L		107	70 - 130
2-Butanone (MEK)	200	137	*	ug/L		69	70 - 130
2-Chlorotoluene	20.0	20.6		ug/L		103	70 - 130
2-Hexanone	200	184		ug/L		92	70 - 130
4-Chlorotoluene	20.0	20.9		ug/L		104	70 - 130
4-Isopropyltoluene	20.0	22.4		ug/L		112	70 - 130
4-Methyl-2-pentanone (MIBK)	200	201		ug/L		100	70 - 130
Acetone	200	153		ug/L		77	70 - 130
Benzene	20.0	21.0		ug/L		105	70 - 130
Bromobenzene	20.0	20.7		ug/L		104	70 - 130
Bromoform	20.0	20.6		ug/L		103	70 - 130
Bromomethane	20.0	19.3		ug/L		96	70 - 130
Carbon disulfide	20.0	25.0		ug/L		125	70 - 130
Carbon tetrachloride	20.0	21.3		ug/L		106	70 - 130
Chlorobenzene	20.0	20.8		ug/L		104	70 - 130
Chlorobromomethane	20.0	20.5		ug/L		102	70 - 130
Chlorodibromomethane	20.0	20.2		ug/L		101	70 - 130
Chloroethane	20.0	19.4		ug/L		97	70 - 130
Chloroform	20.0	20.0		ug/L		100	70 - 130
Chloromethane	20.0	17.1		ug/L		86	70 - 130
cis-1,2-Dichloroethene	20.0	21.3		ug/L		106	70 - 130
cis-1,3-Dichloropropene	20.0	19.2		ug/L		96	70 - 130
Dibromomethane	20.0	20.7		ug/L		104	70 - 130
Dichlorobromomethane	20.0	20.4		ug/L		102	70 - 130
Dichlorodifluoromethane	20.0	13.1	*	ug/L		66	70 - 130
Ethyl ether	20.0	21.6		ug/L		108	70 - 130
Ethylbenzene	20.0	20.8		ug/L		104	70 - 130
Ethylene Dibromide	20.0	20.1		ug/L		101	70 - 130
Hexachlorobutadiene	20.0	21.2		ug/L		106	70 - 130
Isopropyl ether	20.0	21.1		ug/L		105	70 - 130
Isopropylbenzene	20.0	20.9		ug/L		104	70 - 130
m-Xylene & p-Xylene	40.0	41.1		ug/L		103	70 - 130
Methyl tert-butyl ether	20.0	21.4		ug/L		107	70 - 130
Methylene Chloride	20.0	20.5		ug/L		102	70 - 130
n-Butylbenzene	20.0	21.6		ug/L		108	70 - 130
N-Propylbenzene	20.0	21.3		ug/L		106	70 - 130
Naphthalene	20.0	20.5		ug/L		103	70 - 130
o-Xylene	20.0	20.7		ug/L		103	70 - 130
sec-Butylbenzene	20.0	21.4		ug/L		107	70 - 130
Styrene	20.0	21.1		ug/L		105	70 - 130
Tert-amyl methyl ether	20.0	20.8		ug/L		104	70 - 130
Tert-butyl ethyl ether	20.0	21.3		ug/L		106	70 - 130
tert-Butylbenzene	20.0	21.2		ug/L		106	70 - 130
Tetrachloroethene	20.0	20.7		ug/L		104	70 - 130
Tetrahydrofuran	200	209		ug/L		105	70 - 130
Toluene	20.0	20.1		ug/L		100	70 - 130

# QC Sample Results

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 360-93476/3**

**Matrix: Water**

**Analysis Batch: 93476**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	20.0	20.6		ug/L		103	70 - 130
trans-1,3-Dichloropropene	20.0	19.4		ug/L		97	70 - 130
Trichloroethene	20.0	20.2		ug/L		101	70 - 130
Trichlorofluoromethane	20.0	19.4		ug/L		97	70 - 130
Vinyl chloride	20.0	18.5		ug/L		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	100		70 - 130
Dibromofluoromethane	101		70 - 130
Toluene-d8 (Surr)	100		70 - 130

**Lab Sample ID: LCSD 360-93476/4**

**Matrix: Water**

**Analysis Batch: 93476**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	20.0	20.6		ug/L		103	70 - 130	3	20
1,1,1-Trichloroethane	20.0	20.2		ug/L		101	70 - 130	5	20
1,1,1,2,2-Tetrachloroethane	20.0	20.8		ug/L		104	70 - 130	2	20
1,1,2-Trichloroethane	20.0	20.3		ug/L		101	70 - 130	0	20
1,1-Dichloroethane	20.0	20.7		ug/L		103	70 - 130	4	20
1,1-Dichloroethene	20.0	18.7		ug/L		94	70 - 130	4	20
1,1-Dichloropropene	20.0	19.4		ug/L		97	70 - 130	6	20
1,2,3-Trichlorobenzene	20.0	20.4		ug/L		102	70 - 130	1	20
1,2,3-Trichloropropane	20.0	20.9		ug/L		104	70 - 130	0	20
1,2,4-Trichlorobenzene	20.0	21.5		ug/L		107	70 - 130	2	20
1,2,4-Trimethylbenzene	20.0	20.6		ug/L		103	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	20.0	19.6		ug/L		98	70 - 130	2	20
1,2-Dichlorobenzene	20.0	19.9		ug/L		100	70 - 130	3	20
1,2-Dichloroethane	20.0	20.8		ug/L		104	70 - 130	2	20
1,2-Dichloropropane	20.0	20.3		ug/L		102	70 - 130	4	20
1,3,5-Trimethylbenzene	20.0	20.3		ug/L		102	70 - 130	4	20
1,3-Dichlorobenzene	20.0	20.1		ug/L		101	70 - 130	5	20
1,3-Dichloropropane	20.0	20.4		ug/L		102	70 - 130	1	20
1,4-Dichlorobenzene	20.0	20.1		ug/L		100	70 - 130	3	20
1,4-Dioxane	200	214		ug/L		107	70 - 130	1	20
2,2-Dichloropropane	20.0	20.1		ug/L		101	70 - 130	6	20
2-Butanone (MEK)	200	145		ug/L		73	70 - 130	6	20
2-Chlorotoluene	20.0	20.1		ug/L		101	70 - 130	3	20
2-Hexanone	200	185		ug/L		93	70 - 130	1	20
4-Chlorotoluene	20.0	20.2		ug/L		101	70 - 130	3	20
4-Isopropyltoluene	20.0	21.6		ug/L		108	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	200	203		ug/L		102	70 - 130	1	20
Acetone	200	154		ug/L		77	70 - 130	0	20
Benzene	20.0	20.0		ug/L		100	70 - 130	5	20
Bromobenzene	20.0	20.2		ug/L		101	70 - 130	3	20
Bromoform	20.0	19.5		ug/L		98	70 - 130	5	20
Bromomethane	20.0	19.2		ug/L		96	70 - 130	1	20
Carbon disulfide	20.0	24.6		ug/L		123	70 - 130	1	20

# QC Sample Results

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 360-93476/4

Matrix: Water

Analysis Batch: 93476

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Added	Result	Qualifier				Limits		
Carbon tetrachloride	20.0	19.9		ug/L		99	70 - 130	7	20
Chlorobenzene	20.0	20.0		ug/L		100	70 - 130	4	20
Chlorobromomethane	20.0	20.1		ug/L		101	70 - 130	2	20
Chlorodibromomethane	20.0	20.0		ug/L		100	70 - 130	1	20
Chloroethane	20.0	18.8		ug/L		94	70 - 130	3	20
Chloroform	20.0	19.3		ug/L		96	70 - 130	4	20
Chloromethane	20.0	16.1		ug/L		81	70 - 130	6	20
cis-1,2-Dichloroethene	20.0	20.3		ug/L		102	70 - 130	5	20
cis-1,3-Dichloropropene	20.0	18.7		ug/L		93	70 - 130	3	20
Dibromomethane	20.0	20.8		ug/L		104	70 - 130	0	20
Dichlorobromomethane	20.0	20.0		ug/L		100	70 - 130	2	20
Dichlorodifluoromethane	20.0	12.7	*	ug/L		64	70 - 130	3	20
Ethyl ether	20.0	21.5		ug/L		107	70 - 130	1	20
Ethylbenzene	20.0	19.7		ug/L		99	70 - 130	5	20
Ethylene Dibromide	20.0	20.4		ug/L		102	70 - 130	1	20
Hexachlorobutadiene	20.0	19.9		ug/L		100	70 - 130	6	20
Isopropyl ether	20.0	20.5		ug/L		103	70 - 130	3	20
Isopropylbenzene	20.0	20.0		ug/L		100	70 - 130	4	20
m-Xylene & p-Xylene	40.0	39.1		ug/L		98	70 - 130	5	20
Methyl tert-butyl ether	20.0	21.0		ug/L		105	70 - 130	2	20
Methylene Chloride	20.0	19.8		ug/L		99	70 - 130	3	20
n-Butylbenzene	20.0	20.1		ug/L		101	70 - 130	7	20
N-Propylbenzene	20.0	20.2		ug/L		101	70 - 130	5	20
Naphthalene	20.0	20.5		ug/L		103	70 - 130	0	20
o-Xylene	20.0	20.0		ug/L		100	70 - 130	3	20
sec-Butylbenzene	20.0	20.4		ug/L		102	70 - 130	5	20
Styrene	20.0	20.4		ug/L		102	70 - 130	4	20
Tert-amyl methyl ether	20.0	20.8		ug/L		104	70 - 130	0	20
Tert-butyl ethyl ether	20.0	21.1		ug/L		105	70 - 130	1	20
tert-Butylbenzene	20.0	20.4		ug/L		102	70 - 130	4	20
Tetrachloroethene	20.0	19.8		ug/L		99	70 - 130	5	20
Tetrahydrofuran	200	213		ug/L		106	70 - 130	2	20
Toluene	20.0	19.1		ug/L		95	70 - 130	5	20
trans-1,2-Dichloroethene	20.0	19.3		ug/L		96	70 - 130	7	20
trans-1,3-Dichloropropene	20.0	18.9		ug/L		95	70 - 130	2	20
Trichloroethene	20.0	18.9		ug/L		95	70 - 130	7	20
Trichlorofluoromethane	20.0	18.7		ug/L		94	70 - 130	3	20
Vinyl chloride	20.0	17.6		ug/L		88	70 - 130	5	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	101		70 - 130
Dibromofluoromethane	101		70 - 130
Toluene-d8 (Surr)	101		70 - 130

# QC Sample Results

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

## Method: 6010C - Metals (ICP)

Lab Sample ID: MB 360-93422/1-A  
Matrix: Water  
Analysis Batch: 93462

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 93422

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	ND		2000		ug/L		07/25/12 10:25	07/25/12 16:17	1

Lab Sample ID: LCS 360-93422/2-A  
Matrix: Water  
Analysis Batch: 93462

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 93422

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	20000	19200		ug/L		96	80 - 120

Lab Sample ID: LCSD 360-93422/3-A  
Matrix: Water  
Analysis Batch: 93462

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 93422

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sodium	20000	20100		ug/L		100	80 - 120	5	20

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 360-93596/3  
Matrix: Water  
Analysis Batch: 93596

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			07/26/12 12:54	1

Lab Sample ID: LCS 360-93596/4  
Matrix: Water  
Analysis Batch: 93596

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	40.0	41.2		mg/L		103	85 - 115



# Lab Chronicle

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

**Client Sample ID: RUSSWELL-20120724-01**

**Lab Sample ID: 360-41816-1**

**Date Collected: 07/24/12 11:30**

**Matrix: Water**

**Date Received: 07/24/12 15:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	93476	07/26/12 16:25	TH	TAL WFD
Total/NA	Prep	3010A			93422	07/25/12 10:25	BH	TAL WFD
Total/NA	Analysis	6010C		1	93462	07/25/12 16:57	TJS	TAL WFD
Total/NA	Analysis	300.0		10	93596	07/26/12 15:28	AMS	TAL WFD

**Laboratory References:**

TAL WFD = TestAmerica Westfield, Westfield Executive Park, 53 Southampton Road, Westfield, MA 01085, TEL (413)572-4000



# Certification Summary

Client: ERM-Northeast  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-41816-1

## Laboratory: TestAmerica Westfield

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0494	09-30-12
Maine	State Program	1	MA00014	05-03-13
Massachusetts	State Program	1	M-MA014	06-30-13
New Hampshire	NELAC	1	2539	08-08-12
Rhode Island	State Program	1	LAO00057	12-30-12
Vermont	State Program	1	VT-10843	11-18-12

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## State Accreditation Matrix

Method Name	Description	Primary Accreditation	
		New Hampshire (NELAC)	Mass
180.1	Turbidity, Nephelometric	P	P
245.1	Mercury (CVAA)	NP/P	NP
300	Anions, Ion Chromatography	NP/P	NP/P
410.4	COD	NP	NP
524.2	Volatile Org Comp (GC/MS)(list upon request)	P	P
524.2	Trihalomethane compounds	P	P
608	Organochlorine Pest/PCBs (list upon request)	NP	NP
624	Volatile Org Comp (GC/MS)(list upon request)	NP	NP
625	Semivolatile Org Comp (GC/MS)(list upon request)	NP	NP
1010	Ignitability, Pensky-Martens Closed-Cup Method	SW	
1103.1	E.coli		ambient/source
3546	Microwave Extraction	SW	
5035	Closed System Purge and Trap	SW	
6020	Metals (ICP/MS) (list upon request)	NP	
10-107-06-2	Nitrogen, Total Kjeldahl	NP	NP
200.7 Rev 4.4	Metals (ICP)(list upon request)	NP/P	NP/P
200.8 Rev 5.4	Metals (ICP/MS) (list upon request)	NP/P	NP/P
3005A	Preparation, Total Recoverable or Dissolved Metals	NP/P	
3010A	Preparation, Total Metals	NP/P	
3020A	Preparation, Total Metals	NP/P	
3050B	Preparation, Metals	SW	
3510C	Liquid-Liquid Extraction (Separatory Funnel)	NP	
5030B	Purge and Trap	NP	
6010C	Metals (ICP)(list upon request)	NP/SW	
7196A	Chromium, Hexavalent	NP/SW	
7470A	Mercury (CVAA)	NP	
7471A	Mercury (CVAA)	SW	
8081B	Organochlorine Pesticides (GC)(list upon request)	NP/SW	
8082A	PCBs by Gas Chromatography(list upon request)	NP/SW	
8260C	Volatile Org Comp. (GC/MS)(list upon request)	NP/SW	
8270D	Semivolatile Comp.(GC/MS)(list upon request)	NP/SW	
9012A	Cyanide, Total and/or Amenable	NP/SW	
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	NP	
9045C	pH	SW	
CT ETPH	Conn - Ext. Total petroleum Hydrocarbons (GC)	NP/SW	
Enterolert	Enterococcus		ambient/source
L107041C	Nitrogen, Nitrate	NP	
L107-06-1B	Nitrogen Ammonia	NP	NP
L204001A CN	Cyanide, Total	P	NP/P
L210-001A	Phenolics, Total Recoverable	NP	NP
MA-EPH	Mass - Extractable Petroleum Hydrocarbons (GC)	NP/SW	
MAVPH	Mass - Volatile Petroleum Hydrocarbons (GC)	NP/SW	
SM 2320B	Alkalinity	NP/P	NP/P
SM 2340B	Total Hardness (as CaCO3) by calculation	NP/P	NP
SM 2510B	Conductivity, Specific Conductance	NP/P	NP/P
SM 2540C	Solids, Total Dissolved (TDS)	NP/P	NP/P
SM 2540D	Solids, Total Suspended (TSS)	NP	NP
SM 3500 CR D	Chromium, Hexavalent	NP	
SM 4500 Cl F	Chlorine, Residual		NP
SM 4500 H+ B	pH	NP/P	NP/P
SM 4500 NO2 B	Nitrogen, Nitrite	NP	P
SM 4500 P E	Phosphorus, Orthophosphate	NP/P	NP
SM 4500 P E	Phosphorus, Total	NP	NP
SM 4500 S2 D	Sulfide, Total	NP	
SM 5210B	BOD, 5-Day	NP	NP
SM 5310B	Organic Carbon, Total (TOC)	NP/P	NP
SM 9215E	Heterotrophic Plate Count (SimPlate)		P
SM 9222D	Coliforms, Fecal (Membrane Filter)		NP
SM 9223	Coliforms, Total, and E.Coli (Collert-P/A)		P
SM 9223	Coliforms, Total, and E.Coli (Enumeration)		P

Not all organic compounds are accredited under YNI  
 For methods with multiple compounds all compounds may not meet TNI criteria, a listing should be obtained from the laboratory  
 The lab carries additional accreditations with several states. This is the laboratories typical listing but is subject to change based on the laboratories current certification standing.

## Login Sample Receipt Checklist

Client: ERM-Northeast

Job Number: 360-41816-1

**Login Number: 41816**

**List Number: 1**

**Creator: Kolb, Chris M**

**List Source: TestAmerica Westfield**

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica Westfield

Westfield Executive Park 53 Southampton Road  
Westfield, MA 01085  
Phone (413) 572-4000 Fax (413) 572-3707

Boston Service Center

240 Bear Hill Rd. Suite 104  
Waltham, MA 02451  
Phone (781) 466-6900 Fax (781) 466-6901

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

COC No. \_\_\_\_\_

Page: \_\_\_\_\_

Job # 366-41816

Preservation Codes:

- A - HCL
- B - NaOH
- C - Zn Acetate
- D - Nitric Acid
- E - NaHSO4
- F - MeOH
- H - Ascorbic Acid
- I - Ice
- J - DI Water
- M - Hexane
- N - None
- P - Na2O4S
- Q - Na2SO3
- R - Na2S2O3
- S - H2SO4
- Z - other (specify)

- Regulatory programs:
- MCP  GW1/S1
- RCP  CT RSR
- DEP Form  EDD Required

Special Instructions/Note:

Analysis Requested

Sampler's Initials:

Field Filtered Sample?

Perform MS/MSD?

8260 MCP, SWB46 8260C MCP  
6010C - Sodium  
300.0 - 88D - chloride

Total Number of containers

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	MATRIX (Water, Seawater, Commercial, etc.)	Preservation Code	Carrier Tracking No(s)
ROSSWELL-00180724-01	07/24/12	1130	G	W		

Possible Hazard Identification

- Non-Hazard
- Flammable
- Skin Irritant
- Poison B
- Unknown
- Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

- Return To Client
- Disposal By Lab
- Archive For \_\_\_\_\_ Months

Relinquished by: <i>[Signature]</i>	Date/Time: 2012/07/24	1206	Company: <i>[Signature]</i>	Relinquished by: <i>[Signature]</i>	Date/Time: 2012/07/24	1205	Company: <i>[Signature]</i>
Relinquished by: <i>[Signature]</i>	Date/Time: 7/24/12	1230	Company: <i>[Signature]</i>	Relinquished by: <i>[Signature]</i>	Date/Time: 7/24/12	1230	Company: <i>[Signature]</i>
Relinquished by: <i>[Signature]</i>	Date/Time: 7/24/12	1530	Company: <i>[Signature]</i>	Relinquished by: <i>[Signature]</i>	Date/Time: 7/24/12	1530	Company: <i>[Signature]</i>

Custody Seals Intact:  Custody Seal No.: \_\_\_\_\_

Cooler Temperature(s) °C and Other Remarks: *3.0 ppb*

TAL-8245-360 1111