

3 May 2012

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



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

Dear Mr. DeLuca:

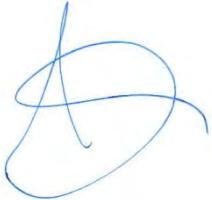
On behalf of Raytheon Company (Raytheon), Environmental Resources Management (ERM) is submitting the results of groundwater sample analyses related to the Former Raytheon Facility located at 430 Boston Post Road in Wayland, Massachusetts (Site). These results are submitted pursuant to 310 CMR 40.1403(10)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

Innovative Engineering Solutions, Inc. collected groundwater samples from 22 wells on portions of the Site within the boundaries of your property on 2 and 3 April 2012. Samples were submitted to TestAmerica Laboratories, Inc. of Westfield, Massachusetts and/or to Bioremediation & Treatability Center in Walpole, Massachusetts. Analytical results are attached to this letter. These analytical data will be provided to the Massachusetts Department of Environmental Protection in the next required MCP submittal.

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

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

Sincerely,



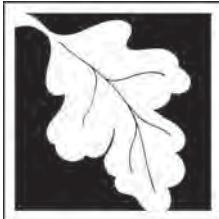
John C. Drobinski, P.G., LSP  
*Principal-in-Charge*



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

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

cc: Jonathan Hone, Raytheon Company  
Ben Gould, CMG Environmental  
PIP Repositories



## NOTICE OF ENVIRONMENTAL SAMPLING

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

**BWSC 123**

This Notice is Related to  
Release Tracking Number

3

13302

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

1. Street Address: 430 Boston Post Road

City/Town: Wayland Zip Code: 01778

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

1. Name: The Koffler Group

2. Street Address: 10 Memorial Boulevard, Suite 901

City/Town: Providence, RI Zip Code: 02903

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

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

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

1. Street Address: 430 Boston Post Road

City/Town: Wayland Zip Code: 01778

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

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

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

residential     commerical     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: 360-39842-1

Client Project/Site: IDS Wayland

For:

Innovative Engineering Solutions, Inc  
25 Spring Street  
Walpole, Massachusetts 02081

Attn: Vicki Pariyar

Authorized for release by:

4/11/2012 1:59:45 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)

### LINKS

Review your project  
results through

Total Access

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

NOTE: Sample MW-264M was not collected from the KGI property. This sample has been grayed out for ease of review.

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.

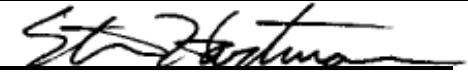
This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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

# Table of Contents

Cover Page .....	1
Table of Contents .....	2
Case Narrative .....	3
Detection Summary .....	5
Method Summary .....	9
Sample Summary .....	10
Client Sample Results .....	11
Definitions .....	55
QC Association .....	56
Surrogate Summary .....	57
QC Sample Results .....	58
Chronicle .....	75
Certification Summary .....	80
Receipt Checklists .....	82
Chain of Custody .....	83

# MassDEP Analytical Protocol Certification Form

Laboratory Name:	TestAmerica Westfield		Project #:	360-39842-1	
Project Location:	IDS Wayland		RTN:		
<b>This form provides certifications for the following data set: list Laboratory Sample ID Number(s): 360-39842-(1-27)</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 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:</b> 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>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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <sup>1</sup>	
<sup>1</sup> All negative responses must be addressed in an attached laboratory narrative.					
<i>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.</i>					
Signature:			Position:	Laboratory Director	
Printed Name:	Steven C. Hartmann		Date:	4/11/12 13:56	
This form has been electronically signed and approved					

## Case Narrative

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

### Job ID: 360-39842-1

#### Laboratory: TestAmerica Westfield

##### Narrative

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 samples were received on 04/04/12; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.6°C.

Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within the method's specified temperature range or for general analysis, ranging from 6°C to just above the freezing temperature of water. Samples that are hand delivered, immediately following collection, may not meet these criteria; however, they will be considered acceptable according to NELAC and State standards, if there is evidence that the chilling process has begun, such as stored and transported to the laboratory on ice.

##### GC/MS VOA

Method 8260C: For batch 89257and 89287, the calibration curve uses quadratic regressions for Bromoform, 1,2-Dibromo-3-Chloropropane as allowed by the method.

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 89257 exceeded control limits for several compounds. The data is flagged accordingly. Please reference the QC report for details.

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 89257 were outside control limits for a few compounds. The data is flagged accordingly. Please reference the report for details

Method 8260C: For batch 89257, the following samples were diluted due to the abundance of target analytes: IW-5 (360-39842-2), MW-261S (360-39842-4), MW-266Mb (360-39842-10), MW-267M (360-39842-12), MW--267S (360-39842-11). Elevated reporting limits (RLs) are provided.

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 89287 exceeded control limits for several compounds. The data is flagged accordingly. Please reference the QC report for details.

Method 8260C: For batch 98287, the following sample(s) was diluted due to the abundance of target analytes: DupX1 (360-39842-24), DupX3 (360-39842-26), MW-265M (360-39842-7), MW-268M (360-39842-13), MW-551 (360-39842-15), MW-552 (360-39842-16), MW-553 (360-39842-17), MW-561 (360-39842-19), MW-562 (360-39842-20), REW-1 (360-39842-21), REW-5 (360-39842-23). Elevated reporting limits (RLs) are provided.

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 89287 were outside control limits for a few compounds. The data is flagged accordingly. Please reference the report for details

No other analytical or quality issues were noted.

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Sample MW-264M was not collected from the KGI property. This sample has been grayed out for ease of review.

Client: Innovative Engineering Services Project/Site: IDS Wayland

StAmerica Job ID: 360-39842-1

**Client Sample ID: IW-4****Lab Sample ID: 360-39842-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.4		1.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	1.3		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	15		0.50		ug/L	1		8260C	Total/NA

**Client Sample ID: IW-5****Lab Sample ID: 360-39842-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	820		50		ug/L	50		8260C	Total/NA
Trichloroethene	1500		50		ug/L	50		8260C	Total/NA
Vinyl chloride	99		25		ug/L	50		8260C	Total/NA

**Client Sample ID: IW-15****Lab Sample ID: 360-39842-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.1		1.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	8.4		1.0		ug/L	1		8260C	Total/NA
Tetrachloroethene	1.5		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	13		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	49		0.50		ug/L	1		8260C	Total/NA

**Client Sample ID: MW-261S****Lab Sample ID: 360-39842-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	150000	*	25000		ug/L	500		8260C	Total/NA
cis-1,2-Dichloroethene	810		500		ug/L	500		8260C	Total/NA

**Client Sample ID: MW-264M****Lab Sample ID: 360-39842-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	13		1.0		ug/L	1		8260C	Total/NA
Tetrachloroethene	5.7		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	24		1.0		ug/L	1		8260C	Total/NA

**Client Sample ID: MW-265S****Lab Sample ID: 360-39842-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	390	*	50		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	44		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	6.8		0.50		ug/L	1		8260C	Total/NA

**Client Sample ID: MW-265M****Lab Sample ID: 360-39842-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.3		1.0		ug/L	1		8260C	Total/NA
1,1-Dichloroethene	1.2		1.0		ug/L	1		8260C	Total/NA
Tetrahydrofuran	11		10		ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	2.6		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	30		0.50		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene - DL	490		10		ug/L	10		8260C	Total/NA

**Client Sample ID: MW-265D****Lab Sample ID: 360-39842-8**

No Detections

## Detection Summary

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

### Client Sample ID: MW-266Ma

### Lab Sample ID: 360-39842-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.8		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	13		1.0		ug/L	1		8260C	Total/NA

### Client Sample ID: MW-266Mb

### Lab Sample ID: 360-39842-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	210		10		ug/L	10		8260C	Total/NA
Tetrachloroethene	15		10		ug/L	10		8260C	Total/NA
Trichloroethene	77		10		ug/L	10		8260C	Total/NA
Vinyl chloride	28		5.0		ug/L	10		8260C	Total/NA

### Client Sample ID: MW-267S

### Lab Sample ID: 360-39842-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	78		10		ug/L	10		8260C	Total/NA
Tetrachloroethene	12		10		ug/L	10		8260C	Total/NA
Trichloroethene	470		10		ug/L	10		8260C	Total/NA

### Client Sample ID: MW-267M

### Lab Sample ID: 360-39842-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	280		10		ug/L	10		8260C	Total/NA
Trichloroethene	170		10		ug/L	10		8260C	Total/NA
Vinyl chloride	15		5.0		ug/L	10		8260C	Total/NA

### Client Sample ID: MW-268M

### Lab Sample ID: 360-39842-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2600		100		ug/L	100		8260C	Total/NA
Trichloroethene	1300		100		ug/L	100		8260C	Total/NA
Vinyl chloride	120		50		ug/L	100		8260C	Total/NA

### Client Sample ID: MW-268D

### Lab Sample ID: 360-39842-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	10		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	8.1		1.0		ug/L	1		8260C	Total/NA

### Client Sample ID: MW-551

### Lab Sample ID: 360-39842-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	45000	*		10000	ug/L	200		8260C	Total/NA

### Client Sample ID: MW-552

### Lab Sample ID: 360-39842-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	38000	*		5000	ug/L	100		8260C	Total/NA
cis-1,2-Dichloroethene	2100		100		ug/L	100		8260C	Total/NA
Trichloroethene	130		100		ug/L	100		8260C	Total/NA

### Client Sample ID: MW-553

### Lab Sample ID: 360-39842-17

## Detection Summary

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

### Client Sample ID: MW-553 (Continued)

### Lab Sample ID: 360-39842-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	74000	*	13000		ug/L	250		8260C	Total/NA
cis-1,2-Dichloroethene	390		250		ug/L	250		8260C	Total/NA

### Client Sample ID: MW-560

### Lab Sample ID: 360-39842-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.7		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	3.2		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	0.60		0.50		ug/L	1		8260C	Total/NA

### Client Sample ID: MW-561

### Lab Sample ID: 360-39842-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1700		100		ug/L	100		8260C	Total/NA
Tetrachloroethene	170		100		ug/L	100		8260C	Total/NA
Trichloroethene	3100		100		ug/L	100		8260C	Total/NA
Vinyl chloride	160		50		ug/L	100		8260C	Total/NA

### Client Sample ID: MW-562

### Lab Sample ID: 360-39842-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	30000	*	5000		ug/L	100		8260C	Total/NA
cis-1,2-Dichloroethene	300		100		ug/L	100		8260C	Total/NA
Vinyl chloride	200		50		ug/L	100		8260C	Total/NA

### Client Sample ID: REW-1

### Lab Sample ID: 360-39842-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	37000	*	5000		ug/L	100		8260C	Total/NA
cis-1,2-Dichloroethene	390		100		ug/L	100		8260C	Total/NA
Vinyl chloride	170		50		ug/L	100		8260C	Total/NA

### Client Sample ID: REW-4

### Lab Sample ID: 360-39842-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.3		1.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	12		1.0		ug/L	1		8260C	Total/NA
Ethylbenzene	1.3		1.0		ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	6.0		2.0		ug/L	1		8260C	Total/NA
o-Xylene	1.6		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	7.7		1.0		ug/L	1		8260C	Total/NA

### Client Sample ID: REW-5

### Lab Sample ID: 360-39842-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	380		10		ug/L	10		8260C	Total/NA
Trichloroethene	140		10		ug/L	10		8260C	Total/NA
Vinyl chloride	54		5.0		ug/L	10		8260C	Total/NA

### Client Sample ID: DupX1

### Lab Sample ID: 360-39842-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2600		100		ug/L	100		8260C	Total/NA
Trichloroethene	1400		100		ug/L	100		8260C	Total/NA

## Detection Summary

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

### Client Sample ID: DupX1 (Continued)

Lab Sample ID: 360-39842-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	120		50		ug/L	100		8260C	Total/NA

### Client Sample ID: DupX2

Lab Sample ID: 360-39842-25

No Detections

### Client Sample ID: DupX3

Lab Sample ID: 360-39842-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	370		10		ug/L	10		8260C	Total/NA
Trichloroethene	140		10		ug/L	10		8260C	Total/NA
Vinyl chloride	53		5.0		ug/L	10		8260C	Total/NA

### Client Sample ID: Trip Blank

Lab Sample ID: 360-39842-27

No Detections

## Method Summary

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL WFD

**Protocol References:**

MA DEP = Massachusetts Department Of Environmental Protection

**Laboratory References:**

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

## Sample Summary

Client: Innovative Engineering Solutions, Inc  
 Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
360-39842-1	IW-4	Water	04/02/12 12:30	04/04/12 13:00
360-39842-2	IW-5	Water	04/02/12 11:25	04/04/12 13:00
360-39842-3	IW-15	Water	04/03/12 13:00	04/04/12 13:00
360-39842-4	MW-261S	Water	04/02/12 12:00	04/04/12 13:00
360-39842-5	MW-264M	Water	04/03/12 13:30	04/04/12 13:00
360-39842-6	MW-265S	Water	04/03/12 11:35	04/04/12 13:00
360-39842-7	MW-265M	Water	04/02/12 14:00	04/04/12 13:00
360-39842-8	MW-265D	Water	04/03/12 10:15	04/04/12 13:00
360-39842-9	MW-266Ma	Water	04/02/12 13:35	04/04/12 13:00
360-39842-10	MW-266Mb	Water	04/03/12 12:35	04/04/12 13:00
360-39842-11	MW-267S	Water	04/02/12 12:30	04/04/12 13:00
360-39842-12	MW-267M	Water	04/02/12 11:25	04/04/12 13:00
360-39842-13	MW-268M	Water	04/02/12 10:15	04/04/12 13:00
360-39842-14	MW-268D	Water	04/03/12 11:15	04/04/12 13:00
360-39842-15	MW-551	Water	04/02/12 13:00	04/04/12 13:00
360-39842-16	MW-552	Water	04/02/12 11:00	04/04/12 13:00
360-39842-17	MW-553	Water	04/02/12 10:00	04/04/12 13:00
360-39842-18	MW-560	Water	04/02/12 10:00	04/04/12 13:00
360-39842-19	MW-561	Water	04/02/12 13:40	04/04/12 13:00
360-39842-20	MW-562	Water	04/03/12 14:05	04/04/12 13:00
360-39842-21	REW-1	Water	04/03/12 10:00	04/04/12 13:00
360-39842-22	REW-4	Water	04/03/12 11:10	04/04/12 13:00
360-39842-23	REW-5	Water	04/03/12 12:35	04/04/12 13:00
360-39842-24	DupX1	Water	04/02/12 12:00	04/04/12 13:00
360-39842-25	DupX2	Water	04/02/12 12:00	04/04/12 13:00
360-39842-26	DupX3	Water	04/02/12 12:00	04/04/12 13:00
360-39842-27	Trip Blank	Water	04/02/12 10:00	04/04/12 13:00

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: IW-4**

**Date Collected: 04/02/12 12:30**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/06/12 02:01	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/06/12 02:01	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/06/12 02:01	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/06/12 02:01	1
<b>1,1-Dichloroethane</b>	<b>3.4</b>		1.0		ug/L			04/06/12 02:01	1
1,1-Dichloroethene	ND		1.0		ug/L			04/06/12 02:01	1
1,1-Dichloropropene	ND		1.0		ug/L			04/06/12 02:01	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/06/12 02:01	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/06/12 02:01	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/06/12 02:01	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/06/12 02:01	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/06/12 02:01	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/06/12 02:01	1
1,2-Dichloroethane	ND		1.0		ug/L			04/06/12 02:01	1
1,2-Dichloropropene	ND		1.0		ug/L			04/06/12 02:01	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/06/12 02:01	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/06/12 02:01	1
1,3-Dichloropropane	ND		1.0		ug/L			04/06/12 02:01	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/06/12 02:01	1
1,4-Dioxane	ND		50		ug/L			04/06/12 02:01	1
2,2-Dichloropropane	ND		1.0		ug/L			04/06/12 02:01	1
2-Butanone (MEK)	ND *		10		ug/L			04/06/12 02:01	1
2-Chlorotoluene	ND		1.0		ug/L			04/06/12 02:01	1
2-Hexanone	ND		10		ug/L			04/06/12 02:01	1
4-Chlorotoluene	ND		1.0		ug/L			04/06/12 02:01	1
4-Isopropyltoluene	ND		1.0		ug/L			04/06/12 02:01	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/06/12 02:01	1
Acetone	ND *		50		ug/L			04/06/12 02:01	1
Benzene	ND		1.0		ug/L			04/06/12 02:01	1
Bromobenzene	ND		1.0		ug/L			04/06/12 02:01	1
Bromoform	ND		1.0		ug/L			04/06/12 02:01	1
Bromomethane	ND		2.0		ug/L			04/06/12 02:01	1
Carbon disulfide	ND		10		ug/L			04/06/12 02:01	1
Carbon tetrachloride	ND		1.0		ug/L			04/06/12 02:01	1
Chlorobenzene	ND		1.0		ug/L			04/06/12 02:01	1
Chlorobromomethane	ND		1.0		ug/L			04/06/12 02:01	1
Chlorodibromomethane	ND		0.50		ug/L			04/06/12 02:01	1
Chloroethane	ND		2.0		ug/L			04/06/12 02:01	1
Chloroform	ND		1.0		ug/L			04/06/12 02:01	1
Chloromethane	ND		2.0		ug/L			04/06/12 02:01	1
<b>cis-1,2-Dichloroethene</b>	<b>1.3</b>		1.0		ug/L			04/06/12 02:01	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 02:01	1
Dibromomethane	ND		1.0		ug/L			04/06/12 02:01	1
Dichlorobromomethane	ND		0.50		ug/L			04/06/12 02:01	1
Dichlorodifluoromethane	ND *		1.0		ug/L			04/06/12 02:01	1
Ethyl ether	ND		1.0		ug/L			04/06/12 02:01	1
Ethylbenzene	ND		1.0		ug/L			04/06/12 02:01	1
Ethylene Dibromide	ND		1.0		ug/L			04/06/12 02:01	1
Hexachlorobutadiene	ND		0.40		ug/L			04/06/12 02:01	1
Isopropyl ether	ND		10		ug/L			04/06/12 02:01	1
Isopropylbenzene	ND		1.0		ug/L			04/06/12 02:01	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Client Sample ID: IW-4							Lab Sample ID: 360-39842-1		
Date Collected: 04/02/12 12:30							Matrix: Water		
Date Received: 04/04/12 13:00									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0	ug/L				04/06/12 02:01	1
Methyl tert-butyl ether	ND		1.0	ug/L				04/06/12 02:01	1
Methylene Chloride	ND		2.0	ug/L				04/06/12 02:01	1
n-Butylbenzene	ND		1.0	ug/L				04/06/12 02:01	1
N-Propylbenzene	ND		1.0	ug/L				04/06/12 02:01	1
Naphthalene	ND		5.0	ug/L				04/06/12 02:01	1
o-Xylene	ND		1.0	ug/L				04/06/12 02:01	1
sec-Butylbenzene	ND		1.0	ug/L				04/06/12 02:01	1
Styrene	ND		1.0	ug/L				04/06/12 02:01	1
Tert-amyl methyl ether	ND		5.0	ug/L				04/06/12 02:01	1
Tert-butyl ethyl ether	ND		5.0	ug/L				04/06/12 02:01	1
tert-Butylbenzene	ND		1.0	ug/L				04/06/12 02:01	1
Tetrachloroethene	ND		1.0	ug/L				04/06/12 02:01	1
Tetrahydrofuran	ND		10	ug/L				04/06/12 02:01	1
Toluene	ND		1.0	ug/L				04/06/12 02:01	1
trans-1,2-Dichloroethene	ND		1.0	ug/L				04/06/12 02:01	1
trans-1,3-Dichloropropene	ND		0.40	ug/L				04/06/12 02:01	1
Trichloroethene	ND		1.0	ug/L				04/06/12 02:01	1
Trichlorofluoromethane	ND		1.0	ug/L				04/06/12 02:01	1
Vinyl chloride	15		0.50	ug/L				04/06/12 02:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		70 - 130					04/06/12 02:01	1
Dibromofluoromethane	102		70 - 130					04/06/12 02:01	1
Toluene-d8 (Surrogate)	98		70 - 130					04/06/12 02:01	1

Client Sample ID: IW-5							Lab Sample ID: 360-39842-2		
Date Collected: 04/02/12 11:25							Matrix: Water		
Date Received: 04/04/12 13:00									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		50	ug/L				04/06/12 02:22	50
1,1,1-Trichloroethane	ND		50	ug/L				04/06/12 02:22	50
1,1,2,2-Tetrachloroethane	ND		25	ug/L				04/06/12 02:22	50
1,1,2-Trichloroethane	ND		50	ug/L				04/06/12 02:22	50
1,1-Dichloroethane	ND		50	ug/L				04/06/12 02:22	50
1,1-Dichloroethene	ND		50	ug/L				04/06/12 02:22	50
1,1-Dichloropropene	ND		50	ug/L				04/06/12 02:22	50
1,2,3-Trichlorobenzene	ND		50	ug/L				04/06/12 02:22	50
1,2,3-Trichloropropane	ND		50	ug/L				04/06/12 02:22	50
1,2,4-Trichlorobenzene	ND		50	ug/L				04/06/12 02:22	50
1,2,4-Trimethylbenzene	ND		50	ug/L				04/06/12 02:22	50
1,2-Dibromo-3-Chloropropane	ND		250	ug/L				04/06/12 02:22	50
1,2-Dichlorobenzene	ND		50	ug/L				04/06/12 02:22	50
1,2-Dichloroethane	ND		50	ug/L				04/06/12 02:22	50
1,2-Dichloropropane	ND		50	ug/L				04/06/12 02:22	50
1,3,5-Trimethylbenzene	ND		50	ug/L				04/06/12 02:22	50
1,3-Dichlorobenzene	ND		50	ug/L				04/06/12 02:22	50
1,3-Dichloropropane	ND		50	ug/L				04/06/12 02:22	50
1,4-Dichlorobenzene	ND		50	ug/L				04/06/12 02:22	50
1,4-Dioxane	ND		2500	ug/L				04/06/12 02:22	50
2,2-Dichloropropane	ND		50	ug/L				04/06/12 02:22	50

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: IW-5**

**Date Collected: 04/02/12 11:25**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND	*	500		ug/L			04/06/12 02:22	50
2-Chlorotoluene	ND		50		ug/L			04/06/12 02:22	50
2-Hexanone	ND		500		ug/L			04/06/12 02:22	50
4-Chlorotoluene	ND		50		ug/L			04/06/12 02:22	50
4-Isopropyltoluene	ND		50		ug/L			04/06/12 02:22	50
4-Methyl-2-pentanone (MIBK)	ND		500		ug/L			04/06/12 02:22	50
Acetone	ND	*	2500		ug/L			04/06/12 02:22	50
Benzene	ND		50		ug/L			04/06/12 02:22	50
Bromobenzene	ND		50		ug/L			04/06/12 02:22	50
Bromoform	ND		50		ug/L			04/06/12 02:22	50
Bromomethane	ND		100		ug/L			04/06/12 02:22	50
Carbon disulfide	ND		500		ug/L			04/06/12 02:22	50
Carbon tetrachloride	ND		50		ug/L			04/06/12 02:22	50
Chlorobenzene	ND		50		ug/L			04/06/12 02:22	50
Chlorobromomethane	ND		50		ug/L			04/06/12 02:22	50
Chlorodibromomethane	ND		25		ug/L			04/06/12 02:22	50
Chloroethane	ND		100		ug/L			04/06/12 02:22	50
Chloroform	ND		50		ug/L			04/06/12 02:22	50
Chloromethane	ND		100		ug/L			04/06/12 02:22	50
<b>cis-1,2-Dichloroethene</b>	<b>820</b>		50		ug/L			04/06/12 02:22	50
cis-1,3-Dichloropropene	ND		20		ug/L			04/06/12 02:22	50
Dibromomethane	ND		50		ug/L			04/06/12 02:22	50
Dichlorobromomethane	ND		25		ug/L			04/06/12 02:22	50
Dichlorodifluoromethane	ND	*	50		ug/L			04/06/12 02:22	50
Ethyl ether	ND		50		ug/L			04/06/12 02:22	50
Ethylbenzene	ND		50		ug/L			04/06/12 02:22	50
Ethylene Dibromide	ND		50		ug/L			04/06/12 02:22	50
Hexachlorobutadiene	ND		20		ug/L			04/06/12 02:22	50
Isopropyl ether	ND		500		ug/L			04/06/12 02:22	50
Isopropylbenzene	ND		50		ug/L			04/06/12 02:22	50
m-Xylene & p-Xylene	ND		100		ug/L			04/06/12 02:22	50
Methyl tert-butyl ether	ND		50		ug/L			04/06/12 02:22	50
Methylene Chloride	ND		100		ug/L			04/06/12 02:22	50
n-Butylbenzene	ND		50		ug/L			04/06/12 02:22	50
N-Propylbenzene	ND		50		ug/L			04/06/12 02:22	50
Naphthalene	ND		250		ug/L			04/06/12 02:22	50
o-Xylene	ND		50		ug/L			04/06/12 02:22	50
sec-Butylbenzene	ND		50		ug/L			04/06/12 02:22	50
Styrene	ND		50		ug/L			04/06/12 02:22	50
Tert-amyl methyl ether	ND		250		ug/L			04/06/12 02:22	50
Tert-butyl ethyl ether	ND		250		ug/L			04/06/12 02:22	50
tert-Butylbenzene	ND		50		ug/L			04/06/12 02:22	50
Tetrachloroethene	ND		50		ug/L			04/06/12 02:22	50
Tetrahydrofuran	ND		500		ug/L			04/06/12 02:22	50
Toluene	ND		50		ug/L			04/06/12 02:22	50
trans-1,2-Dichloroethene	ND		50		ug/L			04/06/12 02:22	50
trans-1,3-Dichloropropene	ND		20		ug/L			04/06/12 02:22	50
<b>Trichloroethene</b>	<b>1500</b>		50		ug/L			04/06/12 02:22	50
Trichlorofluoromethane	ND		50		ug/L			04/06/12 02:22	50
<b>Vinyl chloride</b>	<b>99</b>		25		ug/L			04/06/12 02:22	50

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		70 - 130		04/06/12 02:22	50
Dibromofluoromethane	102		70 - 130		04/06/12 02:22	50
Toluene-d8 (Surrogate)	101		70 - 130		04/06/12 02:22	50

**Client Sample ID: IW-15**

**Date Collected: 04/03/12 13:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/06/12 02:44	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/06/12 02:44	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/06/12 02:44	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/06/12 02:44	1
<b>1,1-Dichloroethane</b>	<b>1.1</b>		1.0		ug/L			04/06/12 02:44	1
1,1-Dichloroethene	ND		1.0		ug/L			04/06/12 02:44	1
1,1-Dichloropropene	ND		1.0		ug/L			04/06/12 02:44	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/06/12 02:44	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/06/12 02:44	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/06/12 02:44	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/06/12 02:44	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/06/12 02:44	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/06/12 02:44	1
1,2-Dichloroethane	ND		1.0		ug/L			04/06/12 02:44	1
1,2-Dichloropropane	ND		1.0		ug/L			04/06/12 02:44	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/06/12 02:44	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/06/12 02:44	1
1,3-Dichloropropane	ND		1.0		ug/L			04/06/12 02:44	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/06/12 02:44	1
1,4-Dioxane	ND		50		ug/L			04/06/12 02:44	1
2,2-Dichloropropane	ND		1.0		ug/L			04/06/12 02:44	1
2-Butanone (MEK)	ND *		10		ug/L			04/06/12 02:44	1
2-Chlorotoluene	ND		1.0		ug/L			04/06/12 02:44	1
2-Hexanone	ND		10		ug/L			04/06/12 02:44	1
4-Chlorotoluene	ND		1.0		ug/L			04/06/12 02:44	1
4-Isopropyltoluene	ND		1.0		ug/L			04/06/12 02:44	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/06/12 02:44	1
Acetone	ND *		50		ug/L			04/06/12 02:44	1
Benzene	ND		1.0		ug/L			04/06/12 02:44	1
Bromobenzene	ND		1.0		ug/L			04/06/12 02:44	1
Bromoform	ND		1.0		ug/L			04/06/12 02:44	1
Bromomethane	ND		2.0		ug/L			04/06/12 02:44	1
Carbon disulfide	ND		10		ug/L			04/06/12 02:44	1
Carbon tetrachloride	ND		1.0		ug/L			04/06/12 02:44	1
Chlorobenzene	ND		1.0		ug/L			04/06/12 02:44	1
Chlorobromomethane	ND		1.0		ug/L			04/06/12 02:44	1
Chlorodibromomethane	ND		0.50		ug/L			04/06/12 02:44	1
Chloroethane	ND		2.0		ug/L			04/06/12 02:44	1
Chloroform	ND		1.0		ug/L			04/06/12 02:44	1
Chloromethane	ND		2.0		ug/L			04/06/12 02:44	1
<b>cis-1,2-Dichloroethene</b>	<b>8.4</b>		1.0		ug/L			04/06/12 02:44	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 02:44	1
Dibromomethane	ND		1.0		ug/L			04/06/12 02:44	1
Dichlorobromomethane	ND		0.50		ug/L			04/06/12 02:44	1
Dichlorodifluoromethane	ND *		1.0		ug/L			04/06/12 02:44	1
Ethyl ether	ND		1.0		ug/L			04/06/12 02:44	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Client Sample ID: IW-15							Lab Sample ID: 360-39842-3		
Date Collected: 04/03/12 13:00							Matrix: Water		
Date Received: 04/04/12 13:00									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0		ug/L			04/06/12 02:44	1
Ethylene Dibromide	ND		1.0		ug/L			04/06/12 02:44	1
Hexachlorobutadiene	ND		0.40		ug/L			04/06/12 02:44	1
Isopropyl ether	ND		10		ug/L			04/06/12 02:44	1
Isopropylbenzene	ND		1.0		ug/L			04/06/12 02:44	1
m-Xylene & p-Xylene	ND		2.0		ug/L			04/06/12 02:44	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/06/12 02:44	1
Methylene Chloride	ND		2.0		ug/L			04/06/12 02:44	1
n-Butylbenzene	ND		1.0		ug/L			04/06/12 02:44	1
N-Propylbenzene	ND		1.0		ug/L			04/06/12 02:44	1
Naphthalene	ND		5.0		ug/L			04/06/12 02:44	1
o-Xylene	ND		1.0		ug/L			04/06/12 02:44	1
sec-Butylbenzene	ND		1.0		ug/L			04/06/12 02:44	1
Styrene	ND		1.0		ug/L			04/06/12 02:44	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/06/12 02:44	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/06/12 02:44	1
tert-Butylbenzene	ND		1.0		ug/L			04/06/12 02:44	1
<b>Tetrachloroethene</b>	<b>1.5</b>		1.0		ug/L			04/06/12 02:44	1
Tetrahydrofuran	ND		10		ug/L			04/06/12 02:44	1
Toluene	ND		1.0		ug/L			04/06/12 02:44	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/06/12 02:44	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 02:44	1
<b>Trichloroethene</b>	<b>13</b>		1.0		ug/L			04/06/12 02:44	1
Trichlorofluoromethane	ND		1.0		ug/L			04/06/12 02:44	1
<b>Vinyl chloride</b>	<b>49</b>		0.50		ug/L			04/06/12 02:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		70 - 130					04/06/12 02:44	1
Dibromofluoromethane	101		70 - 130					04/06/12 02:44	1
Toluene-d8 (Surr)	100		70 - 130					04/06/12 02:44	1

Client Sample ID: MW-261S  
Date Collected: 04/02/12 12:00  
Date Received: 04/04/12 13:00

Lab Sample ID: 360-39842-4  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		500		ug/L			04/06/12 03:05	500
1,1,1-Trichloroethane	ND		500		ug/L			04/06/12 03:05	500
1,1,2,2-Tetrachloroethane	ND		250		ug/L			04/06/12 03:05	500
1,1,2-Trichloroethane	ND		500		ug/L			04/06/12 03:05	500
1,1-Dichloroethane	ND		500		ug/L			04/06/12 03:05	500
1,1-Dichloroethene	ND		500		ug/L			04/06/12 03:05	500
1,1-Dichloropropene	ND		500		ug/L			04/06/12 03:05	500
1,2,3-Trichlorobenzene	ND		500		ug/L			04/06/12 03:05	500
1,2,3-Trichloropropane	ND		500		ug/L			04/06/12 03:05	500
1,2,4-Trichlorobenzene	ND		500		ug/L			04/06/12 03:05	500
1,2,4-Trimethylbenzene	ND		500		ug/L			04/06/12 03:05	500
1,2-Dibromo-3-Chloropropane	ND		2500		ug/L			04/06/12 03:05	500
1,2-Dichlorobenzene	ND		500		ug/L			04/06/12 03:05	500
1,2-Dichloroethane	ND		500		ug/L			04/06/12 03:05	500
1,2-Dichloropropane	ND		500		ug/L			04/06/12 03:05	500
1,3,5-Trimethylbenzene	ND		500		ug/L			04/06/12 03:05	500

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-261S**

**Date Collected: 04/02/12 12:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		500		ug/L			04/06/12 03:05	500
1,3-Dichloropropane	ND		500		ug/L			04/06/12 03:05	500
1,4-Dichlorobenzene	ND		500		ug/L			04/06/12 03:05	500
1,4-Dioxane	ND		25000		ug/L			04/06/12 03:05	500
2,2-Dichloropropane	ND		500		ug/L			04/06/12 03:05	500
2-Butanone (MEK)	ND *		5000		ug/L			04/06/12 03:05	500
2-Chlorotoluene	ND		500		ug/L			04/06/12 03:05	500
2-Hexanone	ND		5000		ug/L			04/06/12 03:05	500
4-Chlorotoluene	ND		500		ug/L			04/06/12 03:05	500
4-Isopropyltoluene	ND		500		ug/L			04/06/12 03:05	500
4-Methyl-2-pentanone (MIBK)	ND		5000		ug/L			04/06/12 03:05	500
<b>Acetone</b>	<b>150000 *</b>		25000		ug/L			04/06/12 03:05	500
Benzene	ND		500		ug/L			04/06/12 03:05	500
Bromobenzene	ND		500		ug/L			04/06/12 03:05	500
Bromoform	ND		500		ug/L			04/06/12 03:05	500
Bromomethane	ND		1000		ug/L			04/06/12 03:05	500
Carbon disulfide	ND		5000		ug/L			04/06/12 03:05	500
Carbon tetrachloride	ND		500		ug/L			04/06/12 03:05	500
Chlorobenzene	ND		500		ug/L			04/06/12 03:05	500
Chlorobromomethane	ND		500		ug/L			04/06/12 03:05	500
Chlorodibromomethane	ND		250		ug/L			04/06/12 03:05	500
Chloroethane	ND		1000		ug/L			04/06/12 03:05	500
Chloroform	ND		500		ug/L			04/06/12 03:05	500
Chloromethane	ND		1000		ug/L			04/06/12 03:05	500
<b>cis-1,2-Dichloroethene</b>	<b>810</b>		500		ug/L			04/06/12 03:05	500
cis-1,3-Dichloropropene	ND		200		ug/L			04/06/12 03:05	500
Dibromomethane	ND		500		ug/L			04/06/12 03:05	500
Dichlorobromomethane	ND		250		ug/L			04/06/12 03:05	500
Dichlorodifluoromethane	ND *		500		ug/L			04/06/12 03:05	500
Ethyl ether	ND		500		ug/L			04/06/12 03:05	500
Ethylbenzene	ND		500		ug/L			04/06/12 03:05	500
Ethylene Dibromide	ND		500		ug/L			04/06/12 03:05	500
Hexachlorobutadiene	ND		200		ug/L			04/06/12 03:05	500
Isopropyl ether	ND		5000		ug/L			04/06/12 03:05	500
Isopropylbenzene	ND		500		ug/L			04/06/12 03:05	500
m-Xylene & p-Xylene	ND		1000		ug/L			04/06/12 03:05	500
Methyl tert-butyl ether	ND		500		ug/L			04/06/12 03:05	500
Methylene Chloride	ND		1000		ug/L			04/06/12 03:05	500
n-Butylbenzene	ND		500		ug/L			04/06/12 03:05	500
N-Propylbenzene	ND		500		ug/L			04/06/12 03:05	500
Naphthalene	ND		2500		ug/L			04/06/12 03:05	500
o-Xylene	ND		500		ug/L			04/06/12 03:05	500
sec-Butylbenzene	ND		500		ug/L			04/06/12 03:05	500
Styrene	ND		500		ug/L			04/06/12 03:05	500
Tert-amyl methyl ether	ND		2500		ug/L			04/06/12 03:05	500
Tert-butyl ethyl ether	ND		2500		ug/L			04/06/12 03:05	500
tert-Butylbenzene	ND		500		ug/L			04/06/12 03:05	500
Tetrachloroethene	ND		500		ug/L			04/06/12 03:05	500
Tetrahydrofuran	ND		5000		ug/L			04/06/12 03:05	500
Toluene	ND		500		ug/L			04/06/12 03:05	500
trans-1,2-Dichloroethene	ND		500		ug/L			04/06/12 03:05	500

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-261S**

**Date Collected: 04/02/12 12:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		200		ug/L			04/06/12 03:05	500
Trichloroethene	ND		500		ug/L			04/06/12 03:05	500
Trichlorofluoromethane	ND		500		ug/L			04/06/12 03:05	500
Vinyl chloride	ND		250		ug/L			04/06/12 03:05	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		70 - 130					04/06/12 03:05	500
Dibromofluoromethane	101		70 - 130					04/06/12 03:05	500
Toluene-d8 (Surr)	102		70 - 130					04/06/12 03:05	500

**Client Sample ID: MW-264M**

**Date Collected: 04/03/12 13:30**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/06/12 03:27	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/06/12 03:27	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/06/12 03:27	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/06/12 03:27	1
1,1-Dichloroethane	ND		1.0		ug/L			04/06/12 03:27	1
1,1-Dichloroethene	ND		1.0		ug/L			04/06/12 03:27	1
1,1-Dichloropropene	ND		1.0		ug/L			04/06/12 03:27	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/06/12 03:27	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/06/12 03:27	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/06/12 03:27	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/06/12 03:27	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/06/12 03:27	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/06/12 03:27	1
1,2-Dichloroethane	ND		1.0		ug/L			04/06/12 03:27	1
1,2-Dichloropropane	ND		1.0		ug/L			04/06/12 03:27	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/06/12 03:27	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/06/12 03:27	1
1,3-Dichloropropane	ND		1.0		ug/L			04/06/12 03:27	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/06/12 03:27	1
1,4-Dioxane	ND		50		ug/L			04/06/12 03:27	1
2,2-Dichloropropane	ND		1.0		ug/L			04/06/12 03:27	1
2-Butanone (MEK)	ND *		10		ug/L			04/06/12 03:27	1
2-Chlorotoluene	ND		1.0		ug/L			04/06/12 03:27	1
2-Hexanone	ND		10		ug/L			04/06/12 03:27	1
4-Chlorotoluene	ND		1.0		ug/L			04/06/12 03:27	1
4-Isopropyltoluene	ND		1.0		ug/L			04/06/12 03:27	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/06/12 03:27	1
Acetone	ND *		50		ug/L			04/06/12 03:27	1
Benzene	ND		1.0		ug/L			04/06/12 03:27	1
Bromobenzene	ND		1.0		ug/L			04/06/12 03:27	1
Bromoform	ND		1.0		ug/L			04/06/12 03:27	1
Bromomethane	ND		2.0		ug/L			04/06/12 03:27	1
Carbon disulfide	ND		10		ug/L			04/06/12 03:27	1
Carbon tetrachloride	ND		1.0		ug/L			04/06/12 03:27	1
Chlorobenzene	ND		1.0		ug/L			04/06/12 03:27	1
Chlorobromomethane	ND		1.0		ug/L			04/06/12 03:27	1
Chlorodibromomethane	ND		0.50		ug/L			04/06/12 03:27	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Client Sample ID: MW-264M							Lab Sample ID: 360-39842-5		
							Matrix: Water		
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		2.0		ug/L			04/06/12 03:27	1
Chloroform	ND		1.0		ug/L			04/06/12 03:27	1
Chloromethane	ND		2.0		ug/L			04/06/12 03:27	1
<b>cis-1,2-Dichloroethene</b>	<b>13</b>		1.0		ug/L			04/06/12 03:27	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 03:27	1
Dibromomethane	ND		1.0		ug/L			04/06/12 03:27	1
Dichlorobromomethane	ND		0.50		ug/L			04/06/12 03:27	1
Dichlorodifluoromethane	ND *		1.0		ug/L			04/06/12 03:27	1
Ethyl ether	ND		1.0		ug/L			04/06/12 03:27	1
Ethylbenzene	ND		1.0		ug/L			04/06/12 03:27	1
Ethylene Dibromide	ND		1.0		ug/L			04/06/12 03:27	1
Hexachlorobutadiene	ND		0.40		ug/L			04/06/12 03:27	1
Isopropyl ether	ND		10		ug/L			04/06/12 03:27	1
Isopropylbenzene	ND		1.0		ug/L			04/06/12 03:27	1
m-Xylene & p-Xylene	ND		2.0		ug/L			04/06/12 03:27	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/06/12 03:27	1
Methylene Chloride	ND		2.0		ug/L			04/06/12 03:27	1
n-Butylbenzene	ND		1.0		ug/L			04/06/12 03:27	1
N-Propylbenzene	ND		1.0		ug/L			04/06/12 03:27	1
Naphthalene	ND		5.0		ug/L			04/06/12 03:27	1
o-Xylene	ND		1.0		ug/L			04/06/12 03:27	1
sec-Butylbenzene	ND		1.0		ug/L			04/06/12 03:27	1
Styrene	ND		1.0		ug/L			04/06/12 03:27	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/06/12 03:27	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/06/12 03:27	1
tert-Butylbenzene	ND		1.0		ug/L			04/06/12 03:27	1
<b>Tetrachloroethene</b>	<b>5.7</b>		1.0		ug/L			04/06/12 03:27	1
Tetrahydrofuran	ND		10		ug/L			04/06/12 03:27	1
Toluene	ND		1.0		ug/L			04/06/12 03:27	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/06/12 03:27	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 03:27	1
<b>Trichloroethene</b>	<b>24</b>		1.0		ug/L			04/06/12 03:27	1
Trichlorofluoromethane	ND		1.0		ug/L			04/06/12 03:27	1
Vinyl chloride	ND		0.50		ug/L			04/06/12 03:27	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		70 - 130					04/06/12 03:27	1
Dibromofluoromethane	103		70 - 130					04/06/12 03:27	1
Toluene-d8 (Surrogate)	98		70 - 130					04/06/12 03:27	1

Client Sample ID: MW-265S  
Date Collected: 04/03/12 11:35  
Date Received: 04/04/12 13:00

Lab Sample ID: 360-39842-6  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/06/12 03:49	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/06/12 03:49	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/06/12 03:49	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/06/12 03:49	1
1,1-Dichloroethane	ND		1.0		ug/L			04/06/12 03:49	1
1,1-Dichloroethene	ND		1.0		ug/L			04/06/12 03:49	1
1,1-Dichloropropene	ND		1.0		ug/L			04/06/12 03:49	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-265S**

**Date Collected: 04/03/12 11:35**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-6**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/06/12 03:49	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/06/12 03:49	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/06/12 03:49	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/06/12 03:49	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/06/12 03:49	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/06/12 03:49	1
1,2-Dichloroethane	ND		1.0		ug/L			04/06/12 03:49	1
1,2-Dichloropropane	ND		1.0		ug/L			04/06/12 03:49	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/06/12 03:49	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/06/12 03:49	1
1,3-Dichloropropane	ND		1.0		ug/L			04/06/12 03:49	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/06/12 03:49	1
1,4-Dioxane	ND		50		ug/L			04/06/12 03:49	1
2,2-Dichloropropane	ND		1.0		ug/L			04/06/12 03:49	1
2-Butanone (MEK)	ND *		10		ug/L			04/06/12 03:49	1
2-Chlorotoluene	ND		1.0		ug/L			04/06/12 03:49	1
2-Hexanone	ND		10		ug/L			04/06/12 03:49	1
4-Chlorotoluene	ND		1.0		ug/L			04/06/12 03:49	1
4-Isopropyltoluene	ND		1.0		ug/L			04/06/12 03:49	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/06/12 03:49	1
<b>Acetone</b>	<b>390 *</b>		50		ug/L			04/06/12 03:49	1
Benzene	ND		1.0		ug/L			04/06/12 03:49	1
Bromobenzene	ND		1.0		ug/L			04/06/12 03:49	1
Bromoform	ND		1.0		ug/L			04/06/12 03:49	1
Bromomethane	ND		2.0		ug/L			04/06/12 03:49	1
Carbon disulfide	ND		10		ug/L			04/06/12 03:49	1
Carbon tetrachloride	ND		1.0		ug/L			04/06/12 03:49	1
Chlorobenzene	ND		1.0		ug/L			04/06/12 03:49	1
Chlorobromomethane	ND		1.0		ug/L			04/06/12 03:49	1
Chlorodibromomethane	ND		0.50		ug/L			04/06/12 03:49	1
Chloroethane	ND		2.0		ug/L			04/06/12 03:49	1
Chloroform	ND		1.0		ug/L			04/06/12 03:49	1
Chloromethane	ND		2.0		ug/L			04/06/12 03:49	1
<b>cis-1,2-Dichloroethene</b>	<b>44</b>		1.0		ug/L			04/06/12 03:49	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 03:49	1
Dibromomethane	ND		1.0		ug/L			04/06/12 03:49	1
Dichlorobromomethane	ND		0.50		ug/L			04/06/12 03:49	1
Dichlorodifluoromethane	ND *		1.0		ug/L			04/06/12 03:49	1
Ethyl ether	ND		1.0		ug/L			04/06/12 03:49	1
Ethylbenzene	ND		1.0		ug/L			04/06/12 03:49	1
Ethylene Dibromide	ND		1.0		ug/L			04/06/12 03:49	1
Hexachlorobutadiene	ND		0.40		ug/L			04/06/12 03:49	1
Isopropyl ether	ND		10		ug/L			04/06/12 03:49	1
Isopropylbenzene	ND		1.0		ug/L			04/06/12 03:49	1
m-Xylene & p-Xylene	ND		2.0		ug/L			04/06/12 03:49	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/06/12 03:49	1
Methylene Chloride	ND		2.0		ug/L			04/06/12 03:49	1
n-Butylbenzene	ND		1.0		ug/L			04/06/12 03:49	1
N-Propylbenzene	ND		1.0		ug/L			04/06/12 03:49	1
Naphthalene	ND		5.0		ug/L			04/06/12 03:49	1
o-Xylene	ND		1.0		ug/L			04/06/12 03:49	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Client Sample ID: MW-265S							Lab Sample ID: 360-39842-6		
Date Collected: 04/03/12 11:35							Matrix: Water		
Date Received: 04/04/12 13:00									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			04/06/12 03:49	1
Styrene	ND		1.0		ug/L			04/06/12 03:49	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/06/12 03:49	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/06/12 03:49	1
tert-Butylbenzene	ND		1.0		ug/L			04/06/12 03:49	1
Tetrachloroethene	ND		1.0		ug/L			04/06/12 03:49	1
Tetrahydrofuran	ND		10		ug/L			04/06/12 03:49	1
Toluene	ND		1.0		ug/L			04/06/12 03:49	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/06/12 03:49	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 03:49	1
Trichloroethene	ND		1.0		ug/L			04/06/12 03:49	1
Trichlorofluoromethane	ND		1.0		ug/L			04/06/12 03:49	1
Vinyl chloride	6.8		0.50		ug/L			04/06/12 03:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		70 - 130					04/06/12 03:49	1
Dibromofluoromethane	103		70 - 130					04/06/12 03:49	1
Toluene-d8 (Surrogate)	100		70 - 130					04/06/12 03:49	1

Client Sample ID: MW-265M							Lab Sample ID: 360-39842-7		
Date Collected: 04/02/12 14:00							Matrix: Water		
Date Received: 04/04/12 13:00									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/06/12 04:10	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/06/12 04:10	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/06/12 04:10	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/06/12 04:10	1
<b>1,1-Dichloroethane</b>	<b>1.3</b>		1.0		ug/L			04/06/12 04:10	1
<b>1,1-Dichloroethene</b>	<b>1.2</b>		1.0		ug/L			04/06/12 04:10	1
1,1-Dichloropropene	ND		1.0		ug/L			04/06/12 04:10	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/06/12 04:10	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/06/12 04:10	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/06/12 04:10	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/06/12 04:10	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/06/12 04:10	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/06/12 04:10	1
1,2-Dichloroethane	ND		1.0		ug/L			04/06/12 04:10	1
1,2-Dichloropropane	ND		1.0		ug/L			04/06/12 04:10	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/06/12 04:10	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/06/12 04:10	1
1,3-Dichloropropane	ND		1.0		ug/L			04/06/12 04:10	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/06/12 04:10	1
1,4-Dioxane	ND		50		ug/L			04/06/12 04:10	1
2,2-Dichloropropane	ND		1.0		ug/L			04/06/12 04:10	1
2-Butanone (MEK)	ND *		10		ug/L			04/06/12 04:10	1
2-Chlorotoluene	ND		1.0		ug/L			04/06/12 04:10	1
2-Hexanone	ND		10		ug/L			04/06/12 04:10	1
4-Chlorotoluene	ND		1.0		ug/L			04/06/12 04:10	1
4-Isopropyltoluene	ND		1.0		ug/L			04/06/12 04:10	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/06/12 04:10	1
Acetone	ND *		50		ug/L			04/06/12 04:10	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-265M**

**Date Collected: 04/02/12 14:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-7**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L		04/06/12 04:10		1
Bromobenzene	ND		1.0		ug/L		04/06/12 04:10		1
Bromoform	ND		1.0		ug/L		04/06/12 04:10		1
Bromomethane	ND		2.0		ug/L		04/06/12 04:10		1
Carbon disulfide	ND		10		ug/L		04/06/12 04:10		1
Carbon tetrachloride	ND		1.0		ug/L		04/06/12 04:10		1
Chlorobenzene	ND		1.0		ug/L		04/06/12 04:10		1
Chlorobromomethane	ND		1.0		ug/L		04/06/12 04:10		1
Chlorodibromomethane	ND		0.50		ug/L		04/06/12 04:10		1
Chloroethane	ND		2.0		ug/L		04/06/12 04:10		1
Chloroform	ND		1.0		ug/L		04/06/12 04:10		1
Chloromethane	ND		2.0		ug/L		04/06/12 04:10		1
cis-1,3-Dichloropropene	ND		0.40		ug/L		04/06/12 04:10		1
Dibromomethane	ND		1.0		ug/L		04/06/12 04:10		1
Dichlorobromomethane	ND		0.50		ug/L		04/06/12 04:10		1
Dichlorodifluoromethane	ND *		1.0		ug/L		04/06/12 04:10		1
Ethyl ether	ND		1.0		ug/L		04/06/12 04:10		1
Ethylbenzene	ND		1.0		ug/L		04/06/12 04:10		1
Ethylene Dibromide	ND		1.0		ug/L		04/06/12 04:10		1
Hexachlorobutadiene	ND		0.40		ug/L		04/06/12 04:10		1
Isopropyl ether	ND		10		ug/L		04/06/12 04:10		1
Isopropylbenzene	ND		1.0		ug/L		04/06/12 04:10		1
m-Xylene & p-Xylene	ND		2.0		ug/L		04/06/12 04:10		1
Methyl tert-butyl ether	ND		1.0		ug/L		04/06/12 04:10		1
Methylene Chloride	ND		2.0		ug/L		04/06/12 04:10		1
n-Butylbenzene	ND		1.0		ug/L		04/06/12 04:10		1
N-Propylbenzene	ND		1.0		ug/L		04/06/12 04:10		1
Naphthalene	ND		5.0		ug/L		04/06/12 04:10		1
o-Xylene	ND		1.0		ug/L		04/06/12 04:10		1
sec-Butylbenzene	ND		1.0		ug/L		04/06/12 04:10		1
Styrene	ND		1.0		ug/L		04/06/12 04:10		1
Tert-amyl methyl ether	ND		5.0		ug/L		04/06/12 04:10		1
Tert-butyl ethyl ether	ND		5.0		ug/L		04/06/12 04:10		1
tert-Butylbenzene	ND		1.0		ug/L		04/06/12 04:10		1
Tetrachloroethene	ND		1.0		ug/L		04/06/12 04:10		1
<b>Tetrahydrofuran</b>	<b>11</b>		10		ug/L		04/06/12 04:10		1
Toluene	ND		1.0		ug/L		04/06/12 04:10		1
<b>trans-1,2-Dichloroethene</b>	<b>2.6</b>		1.0		ug/L		04/06/12 04:10		1
trans-1,3-Dichloropropene	ND		0.40		ug/L		04/06/12 04:10		1
Trichloroethene	ND		1.0		ug/L		04/06/12 04:10		1
Trichlorofluoromethane	ND		1.0		ug/L		04/06/12 04:10		1
<b>Vinyl chloride</b>	<b>30</b>		0.50		ug/L		04/06/12 04:10		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	102		70 - 130				04/06/12 04:10		1
Dibromofluoromethane	103		70 - 130				04/06/12 04:10		1
Toluene-d8 (Surr)	99		70 - 130				04/06/12 04:10		1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-265D**

**Date Collected: 04/03/12 10:15**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/06/12 04:32	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/06/12 04:32	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/06/12 04:32	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/06/12 04:32	1
1,1-Dichloroethane	ND		1.0		ug/L			04/06/12 04:32	1
1,1-Dichloroethene	ND		1.0		ug/L			04/06/12 04:32	1
1,1-Dichloropropene	ND		1.0		ug/L			04/06/12 04:32	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/06/12 04:32	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/06/12 04:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/06/12 04:32	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/06/12 04:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/06/12 04:32	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/06/12 04:32	1
1,2-Dichloroethane	ND		1.0		ug/L			04/06/12 04:32	1
1,2-Dichloropropane	ND		1.0		ug/L			04/06/12 04:32	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/06/12 04:32	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/06/12 04:32	1
1,3-Dichloropropane	ND		1.0		ug/L			04/06/12 04:32	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/06/12 04:32	1
1,4-Dioxane	ND		50		ug/L			04/06/12 04:32	1
2,2-Dichloropropene	ND		1.0		ug/L			04/06/12 04:32	1
2-Butanone (MEK)	ND *		10		ug/L			04/06/12 04:32	1
2-Chlorotoluene	ND		1.0		ug/L			04/06/12 04:32	1
2-Hexanone	ND		10		ug/L			04/06/12 04:32	1
4-Chlorotoluene	ND		1.0		ug/L			04/06/12 04:32	1
4-Isopropyltoluene	ND		1.0		ug/L			04/06/12 04:32	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/06/12 04:32	1
Acetone	ND *		50		ug/L			04/06/12 04:32	1
Benzene	ND		1.0		ug/L			04/06/12 04:32	1
Bromobenzene	ND		1.0		ug/L			04/06/12 04:32	1
Bromoform	ND		1.0		ug/L			04/06/12 04:32	1
Bromomethane	ND		2.0		ug/L			04/06/12 04:32	1
Carbon disulfide	ND		10		ug/L			04/06/12 04:32	1
Carbon tetrachloride	ND		1.0		ug/L			04/06/12 04:32	1
Chlorobenzene	ND		1.0		ug/L			04/06/12 04:32	1
Chlorobromomethane	ND		1.0		ug/L			04/06/12 04:32	1
Chlorodibromomethane	ND		0.50		ug/L			04/06/12 04:32	1
Chloroethane	ND		2.0		ug/L			04/06/12 04:32	1
Chloroform	ND		1.0		ug/L			04/06/12 04:32	1
Chloromethane	ND		2.0		ug/L			04/06/12 04:32	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/06/12 04:32	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 04:32	1
Dibromomethane	ND		1.0		ug/L			04/06/12 04:32	1
Dichlorobromomethane	ND		0.50		ug/L			04/06/12 04:32	1
Dichlorodifluoromethane	ND *		1.0		ug/L			04/06/12 04:32	1
Ethyl ether	ND		1.0		ug/L			04/06/12 04:32	1
Ethylbenzene	ND		1.0		ug/L			04/06/12 04:32	1
Ethylene Dibromide	ND		1.0		ug/L			04/06/12 04:32	1
Hexachlorobutadiene	ND		0.40		ug/L			04/06/12 04:32	1
Isopropyl ether	ND		10		ug/L			04/06/12 04:32	1
Isopropylbenzene	ND		1.0		ug/L			04/06/12 04:32	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-265D**

**Date Collected: 04/03/12 10:15**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		2.0		ug/L			04/06/12 04:32	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/06/12 04:32	1
Methylene Chloride	ND		2.0		ug/L			04/06/12 04:32	1
n-Butylbenzene	ND		1.0		ug/L			04/06/12 04:32	1
N-Propylbenzene	ND		1.0		ug/L			04/06/12 04:32	1
Naphthalene	ND		5.0		ug/L			04/06/12 04:32	1
o-Xylene	ND		1.0		ug/L			04/06/12 04:32	1
sec-Butylbenzene	ND		1.0		ug/L			04/06/12 04:32	1
Styrene	ND		1.0		ug/L			04/06/12 04:32	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/06/12 04:32	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/06/12 04:32	1
tert-Butylbenzene	ND		1.0		ug/L			04/06/12 04:32	1
Tetrachloroethene	ND		1.0		ug/L			04/06/12 04:32	1
Tetrahydrofuran	ND		10		ug/L			04/06/12 04:32	1
Toluene	ND		1.0		ug/L			04/06/12 04:32	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/06/12 04:32	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 04:32	1
Trichloroethene	ND		1.0		ug/L			04/06/12 04:32	1
Trichlorofluoromethane	ND		1.0		ug/L			04/06/12 04:32	1
Vinyl chloride	ND		0.50		ug/L			04/06/12 04:32	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	97		70 - 130					04/06/12 04:32	1
Dibromofluoromethane	102		70 - 130					04/06/12 04:32	1
Toluene-d8 (Surr)	101		70 - 130					04/06/12 04:32	1

**Client Sample ID: MW-266Ma**

**Date Collected: 04/02/12 13:35**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-9**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/06/12 04:54	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/06/12 04:54	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/06/12 04:54	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/06/12 04:54	1
1,1-Dichloroethane	ND		1.0		ug/L			04/06/12 04:54	1
1,1-Dichloroethene	ND		1.0		ug/L			04/06/12 04:54	1
1,1-Dichloropropene	ND		1.0		ug/L			04/06/12 04:54	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/06/12 04:54	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/06/12 04:54	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/06/12 04:54	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/06/12 04:54	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/06/12 04:54	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/06/12 04:54	1
1,2-Dichloroethane	ND		1.0		ug/L			04/06/12 04:54	1
1,2-Dichloropropane	ND		1.0		ug/L			04/06/12 04:54	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/06/12 04:54	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/06/12 04:54	1
1,3-Dichloropropane	ND		1.0		ug/L			04/06/12 04:54	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/06/12 04:54	1
1,4-Dioxane	ND		50		ug/L			04/06/12 04:54	1
2,2-Dichloropropane	ND		1.0		ug/L			04/06/12 04:54	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-266Ma**

**Date Collected: 04/02/12 13:35**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-9**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND	*	10		ug/L			04/06/12 04:54	1
2-Chlorotoluene	ND		1.0		ug/L			04/06/12 04:54	1
2-Hexanone	ND		10		ug/L			04/06/12 04:54	1
4-Chlorotoluene	ND		1.0		ug/L			04/06/12 04:54	1
4-Isopropyltoluene	ND		1.0		ug/L			04/06/12 04:54	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/06/12 04:54	1
Acetone	ND	*	50		ug/L			04/06/12 04:54	1
Benzene	ND		1.0		ug/L			04/06/12 04:54	1
Bromobenzene	ND		1.0		ug/L			04/06/12 04:54	1
Bromoform	ND		1.0		ug/L			04/06/12 04:54	1
Bromomethane	ND		2.0		ug/L			04/06/12 04:54	1
Carbon disulfide	ND		10		ug/L			04/06/12 04:54	1
Carbon tetrachloride	ND		1.0		ug/L			04/06/12 04:54	1
Chlorobenzene	ND		1.0		ug/L			04/06/12 04:54	1
Chlorobromomethane	ND		1.0		ug/L			04/06/12 04:54	1
Chlorodibromomethane	ND		0.50		ug/L			04/06/12 04:54	1
Chloroethane	ND		2.0		ug/L			04/06/12 04:54	1
Chloroform	ND		1.0		ug/L			04/06/12 04:54	1
Chloromethane	ND		2.0		ug/L			04/06/12 04:54	1
<b>cis-1,2-Dichloroethene</b>	<b>4.8</b>		1.0		ug/L			04/06/12 04:54	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 04:54	1
Dibromomethane	ND		1.0		ug/L			04/06/12 04:54	1
Dichlorobromomethane	ND		0.50		ug/L			04/06/12 04:54	1
Dichlorodifluoromethane	ND	*	1.0		ug/L			04/06/12 04:54	1
Ethyl ether	ND		1.0		ug/L			04/06/12 04:54	1
Ethylbenzene	ND		1.0		ug/L			04/06/12 04:54	1
Ethylene Dibromide	ND		1.0		ug/L			04/06/12 04:54	1
Hexachlorobutadiene	ND		0.40		ug/L			04/06/12 04:54	1
Isopropyl ether	ND		10		ug/L			04/06/12 04:54	1
Isopropylbenzene	ND		1.0		ug/L			04/06/12 04:54	1
m-Xylene & p-Xylene	ND		2.0		ug/L			04/06/12 04:54	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/06/12 04:54	1
Methylene Chloride	ND		2.0		ug/L			04/06/12 04:54	1
n-Butylbenzene	ND		1.0		ug/L			04/06/12 04:54	1
N-Propylbenzene	ND		1.0		ug/L			04/06/12 04:54	1
Naphthalene	ND		5.0		ug/L			04/06/12 04:54	1
o-Xylene	ND		1.0		ug/L			04/06/12 04:54	1
sec-Butylbenzene	ND		1.0		ug/L			04/06/12 04:54	1
Styrene	ND		1.0		ug/L			04/06/12 04:54	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/06/12 04:54	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/06/12 04:54	1
tert-Butylbenzene	ND		1.0		ug/L			04/06/12 04:54	1
Tetrachloroethene	ND		1.0		ug/L			04/06/12 04:54	1
Tetrahydrofuran	ND		10		ug/L			04/06/12 04:54	1
Toluene	ND		1.0		ug/L			04/06/12 04:54	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/06/12 04:54	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 04:54	1
<b>Trichloroethene</b>	<b>13</b>		1.0		ug/L			04/06/12 04:54	1
Trichlorofluoromethane	ND		1.0		ug/L			04/06/12 04:54	1
Vinyl chloride	ND		0.50		ug/L			04/06/12 04:54	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		70 - 130		04/06/12 04:54	1
Dibromofluoromethane	102		70 - 130		04/06/12 04:54	1
Toluene-d8 (Surrogate)	100		70 - 130		04/06/12 04:54	1

**Client Sample ID: MW-266Mb**

**Lab Sample ID: 360-39842-10**

**Date Collected: 04/03/12 12:35**

**Matrix: Water**

**Date Received: 04/04/12 13:00**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10		ug/L			04/06/12 05:15	10
1,1,1-Trichloroethane	ND		10		ug/L			04/06/12 05:15	10
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			04/06/12 05:15	10
1,1,2-Trichloroethane	ND		10		ug/L			04/06/12 05:15	10
1,1-Dichloroethane	ND		10		ug/L			04/06/12 05:15	10
1,1-Dichloroethene	ND		10		ug/L			04/06/12 05:15	10
1,1-Dichloropropene	ND		10		ug/L			04/06/12 05:15	10
1,2,3-Trichlorobenzene	ND		10		ug/L			04/06/12 05:15	10
1,2,3-Trichloropropane	ND		10		ug/L			04/06/12 05:15	10
1,2,4-Trichlorobenzene	ND		10		ug/L			04/06/12 05:15	10
1,2,4-Trimethylbenzene	ND		10		ug/L			04/06/12 05:15	10
1,2-Dibromo-3-Chloropropane	ND		50		ug/L			04/06/12 05:15	10
1,2-Dichlorobenzene	ND		10		ug/L			04/06/12 05:15	10
1,2-Dichloroethane	ND		10		ug/L			04/06/12 05:15	10
1,2-Dichloropropane	ND		10		ug/L			04/06/12 05:15	10
1,3,5-Trimethylbenzene	ND		10		ug/L			04/06/12 05:15	10
1,3-Dichlorobenzene	ND		10		ug/L			04/06/12 05:15	10
1,3-Dichloropropane	ND		10		ug/L			04/06/12 05:15	10
1,4-Dichlorobenzene	ND		10		ug/L			04/06/12 05:15	10
1,4-Dioxane	ND		500		ug/L			04/06/12 05:15	10
2,2-Dichloropropane	ND		10		ug/L			04/06/12 05:15	10
2-Butanone (MEK)	ND *		100		ug/L			04/06/12 05:15	10
2-Chlorotoluene	ND		10		ug/L			04/06/12 05:15	10
2-Hexanone	ND		100		ug/L			04/06/12 05:15	10
4-Chlorotoluene	ND		10		ug/L			04/06/12 05:15	10
4-Isopropyltoluene	ND		10		ug/L			04/06/12 05:15	10
4-Methyl-2-pentanone (MIBK)	ND		100		ug/L			04/06/12 05:15	10
Acetone	ND *		500		ug/L			04/06/12 05:15	10
Benzene	ND		10		ug/L			04/06/12 05:15	10
Bromobenzene	ND		10		ug/L			04/06/12 05:15	10
Bromoform	ND		10		ug/L			04/06/12 05:15	10
Bromomethane	ND		20		ug/L			04/06/12 05:15	10
Carbon disulfide	ND		100		ug/L			04/06/12 05:15	10
Carbon tetrachloride	ND		10		ug/L			04/06/12 05:15	10
Chlorobenzene	ND		10		ug/L			04/06/12 05:15	10
Chlorobromomethane	ND		10		ug/L			04/06/12 05:15	10
Chlorodibromomethane	ND		5.0		ug/L			04/06/12 05:15	10
Chloroethane	ND		20		ug/L			04/06/12 05:15	10
Chloroform	ND		10		ug/L			04/06/12 05:15	10
Chloromethane	ND		20		ug/L			04/06/12 05:15	10
<b>cis-1,2-Dichloroethene</b>	<b>210</b>		10		ug/L			04/06/12 05:15	10
cis-1,3-Dichloropropene	ND		4.0		ug/L			04/06/12 05:15	10
Dibromomethane	ND		10		ug/L			04/06/12 05:15	10
Dichlorobromomethane	ND		5.0		ug/L			04/06/12 05:15	10
Dichlorodifluoromethane	ND *		10		ug/L			04/06/12 05:15	10
Ethyl ether	ND		10		ug/L			04/06/12 05:15	10

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Client Sample ID: MW-266Mb							Lab Sample ID: 360-39842-10		
Date Collected: 04/03/12 12:35							Matrix: Water		
Date Received: 04/04/12 13:00									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		10		ug/L			04/06/12 05:15	10
Ethylene Dibromide	ND		10		ug/L			04/06/12 05:15	10
Hexachlorobutadiene	ND		4.0		ug/L			04/06/12 05:15	10
Isopropyl ether	ND		100		ug/L			04/06/12 05:15	10
Isopropylbenzene	ND		10		ug/L			04/06/12 05:15	10
m-Xylene & p-Xylene	ND		20		ug/L			04/06/12 05:15	10
Methyl tert-butyl ether	ND		10		ug/L			04/06/12 05:15	10
Methylene Chloride	ND		20		ug/L			04/06/12 05:15	10
n-Butylbenzene	ND		10		ug/L			04/06/12 05:15	10
N-Propylbenzene	ND		10		ug/L			04/06/12 05:15	10
Naphthalene	ND		50		ug/L			04/06/12 05:15	10
o-Xylene	ND		10		ug/L			04/06/12 05:15	10
sec-Butylbenzene	ND		10		ug/L			04/06/12 05:15	10
Styrene	ND		10		ug/L			04/06/12 05:15	10
Tert-amyl methyl ether	ND		50		ug/L			04/06/12 05:15	10
Tert-butyl ethyl ether	ND		50		ug/L			04/06/12 05:15	10
tert-Butylbenzene	ND		10		ug/L			04/06/12 05:15	10
<b>Tetrachloroethene</b>	<b>15</b>		10		ug/L			04/06/12 05:15	10
Tetrahydrofuran	ND		100		ug/L			04/06/12 05:15	10
Toluene	ND		10		ug/L			04/06/12 05:15	10
trans-1,2-Dichloroethene	ND		10		ug/L			04/06/12 05:15	10
trans-1,3-Dichloropropene	ND		4.0		ug/L			04/06/12 05:15	10
<b>Trichloroethene</b>	<b>77</b>		10		ug/L			04/06/12 05:15	10
Trichlorofluoromethane	ND		10		ug/L			04/06/12 05:15	10
<b>Vinyl chloride</b>	<b>28</b>		5.0		ug/L			04/06/12 05:15	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		70 - 130					04/06/12 05:15	10
Dibromofluoromethane	101		70 - 130					04/06/12 05:15	10
Toluene-d8 (Surr)	101		70 - 130					04/06/12 05:15	10

Client Sample ID: MW-267S  
Date Collected: 04/02/12 12:30  
Date Received: 04/04/12 13:00

Lab Sample ID: 360-39842-11  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10		ug/L			04/06/12 05:37	10
1,1,1-Trichloroethane	ND		10		ug/L			04/06/12 05:37	10
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			04/06/12 05:37	10
1,1,2-Trichloroethane	ND		10		ug/L			04/06/12 05:37	10
1,1-Dichloroethane	ND		10		ug/L			04/06/12 05:37	10
1,1-Dichloroethene	ND		10		ug/L			04/06/12 05:37	10
1,1-Dichloropropene	ND		10		ug/L			04/06/12 05:37	10
1,2,3-Trichlorobenzene	ND		10		ug/L			04/06/12 05:37	10
1,2,3-Trichloropropane	ND		10		ug/L			04/06/12 05:37	10
1,2,4-Trichlorobenzene	ND		10		ug/L			04/06/12 05:37	10
1,2,4-Trimethylbenzene	ND		10		ug/L			04/06/12 05:37	10
1,2-Dibromo-3-Chloropropane	ND		50		ug/L			04/06/12 05:37	10
1,2-Dichlorobenzene	ND		10		ug/L			04/06/12 05:37	10
1,2-Dichloroethane	ND		10		ug/L			04/06/12 05:37	10
1,2-Dichloropropane	ND		10		ug/L			04/06/12 05:37	10
1,3,5-Trimethylbenzene	ND		10		ug/L			04/06/12 05:37	10

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-267S**

**Date Collected: 04/02/12 12:30**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		10		ug/L			04/06/12 05:37	10
1,3-Dichloropropane	ND		10		ug/L			04/06/12 05:37	10
1,4-Dichlorobenzene	ND		10		ug/L			04/06/12 05:37	10
1,4-Dioxane	ND		500		ug/L			04/06/12 05:37	10
2,2-Dichloropropane	ND		10		ug/L			04/06/12 05:37	10
2-Butanone (MEK)	ND *		100		ug/L			04/06/12 05:37	10
2-Chlorotoluene	ND		10		ug/L			04/06/12 05:37	10
2-Hexanone	ND		100		ug/L			04/06/12 05:37	10
4-Chlorotoluene	ND		10		ug/L			04/06/12 05:37	10
4-Isopropyltoluene	ND		10		ug/L			04/06/12 05:37	10
4-Methyl-2-pentanone (MIBK)	ND		100		ug/L			04/06/12 05:37	10
Acetone	ND *		500		ug/L			04/06/12 05:37	10
Benzene	ND		10		ug/L			04/06/12 05:37	10
Bromobenzene	ND		10		ug/L			04/06/12 05:37	10
Bromoform	ND		10		ug/L			04/06/12 05:37	10
Bromomethane	ND		20		ug/L			04/06/12 05:37	10
Carbon disulfide	ND		100		ug/L			04/06/12 05:37	10
Carbon tetrachloride	ND		10		ug/L			04/06/12 05:37	10
Chlorobenzene	ND		10		ug/L			04/06/12 05:37	10
Chlorobromomethane	ND		10		ug/L			04/06/12 05:37	10
Chlorodibromomethane	ND		5.0		ug/L			04/06/12 05:37	10
Chloroethane	ND		20		ug/L			04/06/12 05:37	10
Chloroform	ND		10		ug/L			04/06/12 05:37	10
Chloromethane	ND		20		ug/L			04/06/12 05:37	10
<b>cis-1,2-Dichloroethene</b>	<b>78</b>		10		ug/L			04/06/12 05:37	10
cis-1,3-Dichloropropene	ND		4.0		ug/L			04/06/12 05:37	10
Dibromomethane	ND		10		ug/L			04/06/12 05:37	10
Dichlorobromomethane	ND		5.0		ug/L			04/06/12 05:37	10
Dichlorodifluoromethane	ND *		10		ug/L			04/06/12 05:37	10
Ethyl ether	ND		10		ug/L			04/06/12 05:37	10
Ethylbenzene	ND		10		ug/L			04/06/12 05:37	10
Ethylene Dibromide	ND		10		ug/L			04/06/12 05:37	10
Hexachlorobutadiene	ND		4.0		ug/L			04/06/12 05:37	10
Isopropyl ether	ND		100		ug/L			04/06/12 05:37	10
Isopropylbenzene	ND		10		ug/L			04/06/12 05:37	10
m-Xylene & p-Xylene	ND		20		ug/L			04/06/12 05:37	10
Methyl tert-butyl ether	ND		10		ug/L			04/06/12 05:37	10
Methylene Chloride	ND		20		ug/L			04/06/12 05:37	10
n-Butylbenzene	ND		10		ug/L			04/06/12 05:37	10
N-Propylbenzene	ND		10		ug/L			04/06/12 05:37	10
Naphthalene	ND		50		ug/L			04/06/12 05:37	10
o-Xylene	ND		10		ug/L			04/06/12 05:37	10
sec-Butylbenzene	ND		10		ug/L			04/06/12 05:37	10
Styrene	ND		10		ug/L			04/06/12 05:37	10
Tert-amyl methyl ether	ND		50		ug/L			04/06/12 05:37	10
Tert-butyl ethyl ether	ND		50		ug/L			04/06/12 05:37	10
tert-Butylbenzene	ND		10		ug/L			04/06/12 05:37	10
<b>Tetrachloroethene</b>	<b>12</b>		10		ug/L			04/06/12 05:37	10
Tetrahydrofuran	ND		100		ug/L			04/06/12 05:37	10
Toluene	ND		10		ug/L			04/06/12 05:37	10
trans-1,2-Dichloroethene	ND		10		ug/L			04/06/12 05:37	10

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Client Sample ID: MW-267S							Lab Sample ID: 360-39842-11			
Date Collected: 04/02/12 12:30							Matrix: Water			
Date Received: 04/04/12 13:00										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
trans-1,3-Dichloropropene	ND		4.0		ug/L			04/06/12 05:37	10	
<b>Trichloroethene</b>	<b>470</b>		10		ug/L			04/06/12 05:37	10	
Trichlorofluoromethane	ND		10		ug/L			04/06/12 05:37	10	
Vinyl chloride	ND		5.0		ug/L			04/06/12 05:37	10	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene	98		70 - 130					04/06/12 05:37	10	
Dibromofluoromethane	100		70 - 130					04/06/12 05:37	10	
Toluene-d8 (Surr)	101		70 - 130					04/06/12 05:37	10	
Client Sample ID: MW-267M							Lab Sample ID: 360-39842-12			
Date Collected: 04/02/12 11:25							Matrix: Water			
Date Received: 04/04/12 13:00										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
1,1,1,2-Tetrachloroethane	ND		10		ug/L			04/06/12 05:58	10	
1,1,1-Trichloroethane	ND		10		ug/L			04/06/12 05:58	10	
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			04/06/12 05:58	10	
1,1,2-Trichloroethane	ND		10		ug/L			04/06/12 05:58	10	
1,1-Dichloroethane	ND		10		ug/L			04/06/12 05:58	10	
1,1-Dichloroethene	ND		10		ug/L			04/06/12 05:58	10	
1,1-Dichloropropene	ND		10		ug/L			04/06/12 05:58	10	
1,2,3-Trichlorobenzene	ND		10		ug/L			04/06/12 05:58	10	
1,2,3-Trichloropropane	ND		10		ug/L			04/06/12 05:58	10	
1,2,4-Trichlorobenzene	ND		10		ug/L			04/06/12 05:58	10	
1,2,4-Trimethylbenzene	ND		10		ug/L			04/06/12 05:58	10	
1,2-Dibromo-3-Chloropropane	ND		50		ug/L			04/06/12 05:58	10	
1,2-Dichlorobenzene	ND		10		ug/L			04/06/12 05:58	10	
1,2-Dichloroethane	ND		10		ug/L			04/06/12 05:58	10	
1,2-Dichloropropane	ND		10		ug/L			04/06/12 05:58	10	
1,3,5-Trimethylbenzene	ND		10		ug/L			04/06/12 05:58	10	
1,3-Dichlorobenzene	ND		10		ug/L			04/06/12 05:58	10	
1,3-Dichloropropane	ND		10		ug/L			04/06/12 05:58	10	
1,4-Dichlorobenzene	ND		10		ug/L			04/06/12 05:58	10	
1,4-Dioxane	ND		500		ug/L			04/06/12 05:58	10	
2,2-Dichloropropane	ND		10		ug/L			04/06/12 05:58	10	
2-Butanone (MEK)	ND *		100		ug/L			04/06/12 05:58	10	
2-Chlorotoluene	ND		10		ug/L			04/06/12 05:58	10	
2-Hexanone	ND		100		ug/L			04/06/12 05:58	10	
4-Chlorotoluene	ND		10		ug/L			04/06/12 05:58	10	
4-Isopropyltoluene	ND		10		ug/L			04/06/12 05:58	10	
4-Methyl-2-pentanone (MIBK)	ND		100		ug/L			04/06/12 05:58	10	
Acetone	ND *		500		ug/L			04/06/12 05:58	10	
Benzene	ND		10		ug/L			04/06/12 05:58	10	
Bromobenzene	ND		10		ug/L			04/06/12 05:58	10	
Bromoform	ND		10		ug/L			04/06/12 05:58	10	
Bromomethane	ND		20		ug/L			04/06/12 05:58	10	
Carbon disulfide	ND		100		ug/L			04/06/12 05:58	10	
Carbon tetrachloride	ND		10		ug/L			04/06/12 05:58	10	
Chlorobenzene	ND		10		ug/L			04/06/12 05:58	10	
Chlorobromomethane	ND		10		ug/L			04/06/12 05:58	10	
Chlorodibromomethane	ND		5.0		ug/L			04/06/12 05:58	10	

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-267M**

**Date Collected: 04/02/12 11:25**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-12**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		20		ug/L			04/06/12 05:58	10
Chloroform	ND		10		ug/L			04/06/12 05:58	10
Chloromethane	ND		20		ug/L			04/06/12 05:58	10
<b>cis-1,2-Dichloroethene</b>	<b>280</b>		10		ug/L			04/06/12 05:58	10
cis-1,3-Dichloropropene	ND		4.0		ug/L			04/06/12 05:58	10
Dibromomethane	ND		10		ug/L			04/06/12 05:58	10
Dichlorobromomethane	ND		5.0		ug/L			04/06/12 05:58	10
Dichlorodifluoromethane	ND *		10		ug/L			04/06/12 05:58	10
Ethyl ether	ND		10		ug/L			04/06/12 05:58	10
Ethylbenzene	ND		10		ug/L			04/06/12 05:58	10
Ethylene Dibromide	ND		10		ug/L			04/06/12 05:58	10
Hexachlorobutadiene	ND		4.0		ug/L			04/06/12 05:58	10
Isopropyl ether	ND		100		ug/L			04/06/12 05:58	10
Isopropylbenzene	ND		10		ug/L			04/06/12 05:58	10
m-Xylene & p-Xylene	ND		20		ug/L			04/06/12 05:58	10
Methyl tert-butyl ether	ND		10		ug/L			04/06/12 05:58	10
Methylene Chloride	ND		20		ug/L			04/06/12 05:58	10
n-Butylbenzene	ND		10		ug/L			04/06/12 05:58	10
N-Propylbenzene	ND		10		ug/L			04/06/12 05:58	10
Naphthalene	ND		50		ug/L			04/06/12 05:58	10
o-Xylene	ND		10		ug/L			04/06/12 05:58	10
sec-Butylbenzene	ND		10		ug/L			04/06/12 05:58	10
Styrene	ND		10		ug/L			04/06/12 05:58	10
Tert-amyl methyl ether	ND		50		ug/L			04/06/12 05:58	10
Tert-butyl ethyl ether	ND		50		ug/L			04/06/12 05:58	10
tert-Butylbenzene	ND		10		ug/L			04/06/12 05:58	10
Tetrachloroethene	ND		10		ug/L			04/06/12 05:58	10
Tetrahydrofuran	ND		100		ug/L			04/06/12 05:58	10
Toluene	ND		10		ug/L			04/06/12 05:58	10
trans-1,2-Dichloroethene	ND		10		ug/L			04/06/12 05:58	10
trans-1,3-Dichloropropene	ND		4.0		ug/L			04/06/12 05:58	10
<b>Trichloroethene</b>	<b>170</b>		10		ug/L			04/06/12 05:58	10
Trichlorofluoromethane	ND		10		ug/L			04/06/12 05:58	10
<b>Vinyl chloride</b>	<b>15</b>		5.0		ug/L			04/06/12 05:58	10
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		70 - 130					04/06/12 05:58	10
Dibromofluoromethane	104		70 - 130					04/06/12 05:58	10
Toluene-d8 (Sur)	100		70 - 130					04/06/12 05:58	10

**Client Sample ID: MW-268M**

**Date Collected: 04/02/12 10:15**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-13**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		100		ug/L			04/06/12 18:10	100
1,1,1-Trichloroethane	ND		100		ug/L			04/06/12 18:10	100
1,1,2,2-Tetrachloroethane	ND		50		ug/L			04/06/12 18:10	100
1,1,2-Trichloroethane	ND		100		ug/L			04/06/12 18:10	100
1,1-Dichloroethane	ND		100		ug/L			04/06/12 18:10	100
1,1-Dichloroethene	ND		100		ug/L			04/06/12 18:10	100
1,1-Dichloropropene	ND		100		ug/L			04/06/12 18:10	100

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-268M**

**Date Collected: 04/02/12 10:15**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-13**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		100		ug/L			04/06/12 18:10	100
1,2,3-Trichloropropane	ND		100		ug/L			04/06/12 18:10	100
1,2,4-Trichlorobenzene	ND		100		ug/L			04/06/12 18:10	100
1,2,4-Trimethylbenzene	ND		100		ug/L			04/06/12 18:10	100
1,2-Dibromo-3-Chloropropane	ND		500		ug/L			04/06/12 18:10	100
1,2-Dichlorobenzene	ND		100		ug/L			04/06/12 18:10	100
1,2-Dichloroethane	ND		100		ug/L			04/06/12 18:10	100
1,2-Dichloropropane	ND		100		ug/L			04/06/12 18:10	100
1,3,5-Trimethylbenzene	ND		100		ug/L			04/06/12 18:10	100
1,3-Dichlorobenzene	ND		100		ug/L			04/06/12 18:10	100
1,3-Dichloropropane	ND		100		ug/L			04/06/12 18:10	100
1,4-Dichlorobenzene	ND		100		ug/L			04/06/12 18:10	100
1,4-Dioxane	ND		5000		ug/L			04/06/12 18:10	100
2,2-Dichloropropane	ND		100		ug/L			04/06/12 18:10	100
2-Butanone (MEK)	ND *		1000		ug/L			04/06/12 18:10	100
2-Chlorotoluene	ND		100		ug/L			04/06/12 18:10	100
2-Hexanone	ND		1000		ug/L			04/06/12 18:10	100
4-Chlorotoluene	ND		100		ug/L			04/06/12 18:10	100
4-Isopropyltoluene	ND		100		ug/L			04/06/12 18:10	100
4-Methyl-2-pentanone (MIBK)	ND		1000		ug/L			04/06/12 18:10	100
Acetone	ND *		5000		ug/L			04/06/12 18:10	100
Benzene	ND		100		ug/L			04/06/12 18:10	100
Bromobenzene	ND		100		ug/L			04/06/12 18:10	100
Bromoform	ND		100		ug/L			04/06/12 18:10	100
Bromomethane	ND		200		ug/L			04/06/12 18:10	100
Carbon disulfide	ND		1000		ug/L			04/06/12 18:10	100
Carbon tetrachloride	ND		100		ug/L			04/06/12 18:10	100
Chlorobenzene	ND		100		ug/L			04/06/12 18:10	100
Chlorobromomethane	ND		100		ug/L			04/06/12 18:10	100
Chlorodibromomethane	ND		50		ug/L			04/06/12 18:10	100
Chloroethane	ND		200		ug/L			04/06/12 18:10	100
Chloroform	ND		100		ug/L			04/06/12 18:10	100
Chloromethane	ND		200		ug/L			04/06/12 18:10	100
<b>cis-1,2-Dichloroethene</b>	<b>2600</b>		100		ug/L			04/06/12 18:10	100
cis-1,3-Dichloropropene	ND		40		ug/L			04/06/12 18:10	100
Dibromomethane	ND		100		ug/L			04/06/12 18:10	100
Dichlorobromomethane	ND		50		ug/L			04/06/12 18:10	100
Dichlorodifluoromethane	ND		100		ug/L			04/06/12 18:10	100
Ethyl ether	ND		100		ug/L			04/06/12 18:10	100
Ethylbenzene	ND		100		ug/L			04/06/12 18:10	100
Ethylene Dibromide	ND		100		ug/L			04/06/12 18:10	100
Hexachlorobutadiene	ND		40		ug/L			04/06/12 18:10	100
Isopropyl ether	ND		1000		ug/L			04/06/12 18:10	100
Isopropylbenzene	ND		100		ug/L			04/06/12 18:10	100
m-Xylene & p-Xylene	ND		200		ug/L			04/06/12 18:10	100
Methyl tert-butyl ether	ND		100		ug/L			04/06/12 18:10	100
Methylene Chloride	ND		200		ug/L			04/06/12 18:10	100
n-Butylbenzene	ND		100		ug/L			04/06/12 18:10	100
N-Propylbenzene	ND		100		ug/L			04/06/12 18:10	100
Naphthalene	ND		500		ug/L			04/06/12 18:10	100
o-Xylene	ND		100		ug/L			04/06/12 18:10	100

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Client Sample ID: MW-268M							Lab Sample ID: 360-39842-13		
Date Collected: 04/02/12 10:15							Matrix: Water		
Date Received: 04/04/12 13:00									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		100		ug/L			04/06/12 18:10	100
Styrene	ND		100		ug/L			04/06/12 18:10	100
Tert-amyl methyl ether	ND		500		ug/L			04/06/12 18:10	100
Tert-butyl ethyl ether	ND		500		ug/L			04/06/12 18:10	100
tert-Butylbenzene	ND		100		ug/L			04/06/12 18:10	100
Tetrachloroethene	ND		100		ug/L			04/06/12 18:10	100
Tetrahydrofuran	ND		1000		ug/L			04/06/12 18:10	100
Toluene	ND		100		ug/L			04/06/12 18:10	100
trans-1,2-Dichloroethene	ND		100		ug/L			04/06/12 18:10	100
trans-1,3-Dichloropropene	ND		40		ug/L			04/06/12 18:10	100
Trichloroethene	1300		100		ug/L			04/06/12 18:10	100
Trichlorofluoromethane	ND		100		ug/L			04/06/12 18:10	100
Vinyl chloride	120		50		ug/L			04/06/12 18:10	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		70 - 130					04/06/12 18:10	100
Dibromofluoromethane	103		70 - 130					04/06/12 18:10	100
Toluene-d8 (Surrogate)	101		70 - 130					04/06/12 18:10	100

## Client Sample ID: MW-268D

Date Collected: 04/03/12 11:15

Date Received: 04/04/12 13:00

## Lab Sample ID: 360-39842-14

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/06/12 18:32	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/06/12 18:32	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/06/12 18:32	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/06/12 18:32	1
1,1-Dichloroethane	ND		1.0		ug/L			04/06/12 18:32	1
1,1-Dichloroethene	ND		1.0		ug/L			04/06/12 18:32	1
1,1-Dichloropropene	ND		1.0		ug/L			04/06/12 18:32	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/06/12 18:32	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/06/12 18:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/06/12 18:32	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/06/12 18:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/06/12 18:32	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/06/12 18:32	1
1,2-Dichloroethane	ND		1.0		ug/L			04/06/12 18:32	1
1,2-Dichloropropane	ND		1.0		ug/L			04/06/12 18:32	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/06/12 18:32	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/06/12 18:32	1
1,3-Dichloropropane	ND		1.0		ug/L			04/06/12 18:32	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/06/12 18:32	1
1,4-Dioxane	ND		50		ug/L			04/06/12 18:32	1
2,2-Dichloropropane	ND		1.0		ug/L			04/06/12 18:32	1
2-Butanone (MEK)	ND *		10		ug/L			04/06/12 18:32	1
2-Chlorotoluene	ND		1.0		ug/L			04/06/12 18:32	1
2-Hexanone	ND		10		ug/L			04/06/12 18:32	1
4-Chlorotoluene	ND		1.0		ug/L			04/06/12 18:32	1
4-Isopropyltoluene	ND		1.0		ug/L			04/06/12 18:32	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/06/12 18:32	1
Acetone	ND *		50		ug/L			04/06/12 18:32	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-268D**

**Date Collected: 04/03/12 11:15**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-14**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L		04/06/12 18:32		1
Bromobenzene	ND		1.0		ug/L		04/06/12 18:32		1
Bromoform	ND		1.0		ug/L		04/06/12 18:32		1
Bromomethane	ND		2.0		ug/L		04/06/12 18:32		1
Carbon disulfide	ND		10		ug/L		04/06/12 18:32		1
Carbon tetrachloride	ND		1.0		ug/L		04/06/12 18:32		1
Chlorobenzene	ND		1.0		ug/L		04/06/12 18:32		1
Chlorobromomethane	ND		1.0		ug/L		04/06/12 18:32		1
Chlorodibromomethane	ND		0.50		ug/L		04/06/12 18:32		1
Chloroethane	ND		2.0		ug/L		04/06/12 18:32		1
Chloroform	ND		1.0		ug/L		04/06/12 18:32		1
Chloromethane	ND		2.0		ug/L		04/06/12 18:32		1
<b>cis-1,2-Dichloroethene</b>	<b>10</b>		1.0		ug/L		04/06/12 18:32		1
cis-1,3-Dichloropropene	ND		0.40		ug/L		04/06/12 18:32		1
Dibromomethane	ND		1.0		ug/L		04/06/12 18:32		1
Dichlorobromomethane	ND		0.50		ug/L		04/06/12 18:32		1
Dichlorodifluoromethane	ND		1.0		ug/L		04/06/12 18:32		1
Ethyl ether	ND		1.0		ug/L		04/06/12 18:32		1
Ethylbenzene	ND		1.0		ug/L		04/06/12 18:32		1
Ethylene Dibromide	ND		1.0		ug/L		04/06/12 18:32		1
Hexachlorobutadiene	ND		0.40		ug/L		04/06/12 18:32		1
Isopropyl ether	ND		10		ug/L		04/06/12 18:32		1
Isopropylbenzene	ND		1.0		ug/L		04/06/12 18:32		1
m-Xylene & p-Xylene	ND		2.0		ug/L		04/06/12 18:32		1
Methyl tert-butyl ether	ND		1.0		ug/L		04/06/12 18:32		1
Methylene Chloride	ND		2.0		ug/L		04/06/12 18:32		1
n-Butylbenzene	ND		1.0		ug/L		04/06/12 18:32		1
N-Propylbenzene	ND		1.0		ug/L		04/06/12 18:32		1
Naphthalene	ND		5.0		ug/L		04/06/12 18:32		1
o-Xylene	ND		1.0		ug/L		04/06/12 18:32		1
sec-Butylbenzene	ND		1.0		ug/L		04/06/12 18:32		1
Styrene	ND		1.0		ug/L		04/06/12 18:32		1
Tert-amyl methyl ether	ND		5.0		ug/L		04/06/12 18:32		1
Tert-butyl ethyl ether	ND		5.0		ug/L		04/06/12 18:32		1
tert-Butylbenzene	ND		1.0		ug/L		04/06/12 18:32		1
Tetrachloroethene	ND		1.0		ug/L		04/06/12 18:32		1
Tetrahydrofuran	ND		10		ug/L		04/06/12 18:32		1
Toluene	ND		1.0		ug/L		04/06/12 18:32		1
trans-1,2-Dichloroethene	ND		1.0		ug/L		04/06/12 18:32		1
trans-1,3-Dichloropropene	ND		0.40		ug/L		04/06/12 18:32		1
<b>Trichloroethene</b>	<b>8.1</b>		1.0		ug/L		04/06/12 18:32		1
Trichlorofluoromethane	ND		1.0		ug/L		04/06/12 18:32		1
Vinyl chloride	ND		0.50		ug/L		04/06/12 18:32		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene	99		70 - 130			04/06/12 18:32		1	
Dibromofluoromethane	100		70 - 130			04/06/12 18:32		1	
Toluene-d8 (Surr)	100		70 - 130			04/06/12 18:32		1	

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-551**

**Date Collected: 04/02/12 13:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-15**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		200		ug/L			04/06/12 18:54	200
1,1,1-Trichloroethane	ND		200		ug/L			04/06/12 18:54	200
1,1,2,2-Tetrachloroethane	ND		100		ug/L			04/06/12 18:54	200
1,1,2-Trichloroethane	ND		200		ug/L			04/06/12 18:54	200
1,1-Dichloroethane	ND		200		ug/L			04/06/12 18:54	200
1,1-Dichloroethene	ND		200		ug/L			04/06/12 18:54	200
1,1-Dichloropropene	ND		200		ug/L			04/06/12 18:54	200
1,2,3-Trichlorobenzene	ND		200		ug/L			04/06/12 18:54	200
1,2,3-Trichloropropane	ND		200		ug/L			04/06/12 18:54	200
1,2,4-Trichlorobenzene	ND		200		ug/L			04/06/12 18:54	200
1,2,4-Trimethylbenzene	ND		200		ug/L			04/06/12 18:54	200
1,2-Dibromo-3-Chloropropane	ND		1000		ug/L			04/06/12 18:54	200
1,2-Dichlorobenzene	ND		200		ug/L			04/06/12 18:54	200
1,2-Dichloroethane	ND		200		ug/L			04/06/12 18:54	200
1,2-Dichloropropane	ND		200		ug/L			04/06/12 18:54	200
1,3,5-Trimethylbenzene	ND		200		ug/L			04/06/12 18:54	200
1,3-Dichlorobenzene	ND		200		ug/L			04/06/12 18:54	200
1,3-Dichloropropane	ND		200		ug/L			04/06/12 18:54	200
1,4-Dichlorobenzene	ND		200		ug/L			04/06/12 18:54	200
1,4-Dioxane	ND		10000		ug/L			04/06/12 18:54	200
2,2-Dichloropropane	ND		200		ug/L			04/06/12 18:54	200
2-Butanone (MEK)	ND *		2000		ug/L			04/06/12 18:54	200
2-Chlorotoluene	ND		200		ug/L			04/06/12 18:54	200
2-Hexanone	ND		2000		ug/L			04/06/12 18:54	200
4-Chlorotoluene	ND		200		ug/L			04/06/12 18:54	200
4-Isopropyltoluene	ND		200		ug/L			04/06/12 18:54	200
4-Methyl-2-pentanone (MIBK)	ND		2000		ug/L			04/06/12 18:54	200
<b>Acetone</b>	<b>45000 *</b>		10000		ug/L			04/06/12 18:54	200
Benzene	ND		200		ug/L			04/06/12 18:54	200
Bromobenzene	ND		200		ug/L			04/06/12 18:54	200
Bromoform	ND		200		ug/L			04/06/12 18:54	200
Bromomethane	ND		400		ug/L			04/06/12 18:54	200
Carbon disulfide	ND		2000		ug/L			04/06/12 18:54	200
Carbon tetrachloride	ND		200		ug/L			04/06/12 18:54	200
Chlorobenzene	ND		200		ug/L			04/06/12 18:54	200
Chlorobromomethane	ND		200		ug/L			04/06/12 18:54	200
Chlorodibromomethane	ND		100		ug/L			04/06/12 18:54	200
Chloroethane	ND		400		ug/L			04/06/12 18:54	200
Chloroform	ND		200		ug/L			04/06/12 18:54	200
Chloromethane	ND		400		ug/L			04/06/12 18:54	200
cis-1,2-Dichloroethene	ND		200		ug/L			04/06/12 18:54	200
cis-1,3-Dichloropropene	ND		80		ug/L			04/06/12 18:54	200
Dibromomethane	ND		200		ug/L			04/06/12 18:54	200
Dichlorobromomethane	ND		100		ug/L			04/06/12 18:54	200
Dichlorodifluoromethane	ND		200		ug/L			04/06/12 18:54	200
Ethyl ether	ND		200		ug/L			04/06/12 18:54	200
Ethylbenzene	ND		200		ug/L			04/06/12 18:54	200
Ethylene Dibromide	ND		200		ug/L			04/06/12 18:54	200
Hexachlorobutadiene	ND		80		ug/L			04/06/12 18:54	200
Isopropyl ether	ND		2000		ug/L			04/06/12 18:54	200
Isopropylbenzene	ND		200		ug/L			04/06/12 18:54	200

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-551**

**Date Collected: 04/02/12 13:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-15**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		400		ug/L			04/06/12 18:54	200
Methyl tert-butyl ether	ND		200		ug/L			04/06/12 18:54	200
Methylene Chloride	ND		400		ug/L			04/06/12 18:54	200
n-Butylbenzene	ND		200		ug/L			04/06/12 18:54	200
N-Propylbenzene	ND		200		ug/L			04/06/12 18:54	200
Naphthalene	ND		1000		ug/L			04/06/12 18:54	200
o-Xylene	ND		200		ug/L			04/06/12 18:54	200
sec-Butylbenzene	ND		200		ug/L			04/06/12 18:54	200
Styrene	ND		200		ug/L			04/06/12 18:54	200
Tert-amyl methyl ether	ND		1000		ug/L			04/06/12 18:54	200
Tert-butyl ethyl ether	ND		1000		ug/L			04/06/12 18:54	200
tert-Butylbenzene	ND		200		ug/L			04/06/12 18:54	200
Tetrachloroethene	ND		200		ug/L			04/06/12 18:54	200
Tetrahydrofuran	ND		2000		ug/L			04/06/12 18:54	200
Toluene	ND		200		ug/L			04/06/12 18:54	200
trans-1,2-Dichloroethene	ND		200		ug/L			04/06/12 18:54	200
trans-1,3-Dichloropropene	ND		80		ug/L			04/06/12 18:54	200
Trichloroethene	ND		200		ug/L			04/06/12 18:54	200
Trichlorofluoromethane	ND		200		ug/L			04/06/12 18:54	200
Vinyl chloride	ND		100		ug/L			04/06/12 18:54	200
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	98			70 - 130				04/06/12 18:54	200
Dibromofluoromethane	100			70 - 130				04/06/12 18:54	200
Toluene-d8 (Surr)	101			70 - 130				04/06/12 18:54	200

**Client Sample ID: MW-552**

**Date Collected: 04/02/12 11:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-16**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		100		ug/L			04/06/12 19:16	100
1,1,1-Trichloroethane	ND		100		ug/L			04/06/12 19:16	100
1,1,2,2-Tetrachloroethane	ND		50		ug/L			04/06/12 19:16	100
1,1,2-Trichloroethane	ND		100		ug/L			04/06/12 19:16	100
1,1-Dichloroethane	ND		100		ug/L			04/06/12 19:16	100
1,1-Dichloroethene	ND		100		ug/L			04/06/12 19:16	100
1,1-Dichloropropene	ND		100		ug/L			04/06/12 19:16	100
1,2,3-Trichlorobenzene	ND		100		ug/L			04/06/12 19:16	100
1,2,3-Trichloropropane	ND		100		ug/L			04/06/12 19:16	100
1,2,4-Trichlorobenzene	ND		100		ug/L			04/06/12 19:16	100
1,2,4-Trimethylbenzene	ND		100		ug/L			04/06/12 19:16	100
1,2-Dibromo-3-Chloropropane	ND		500		ug/L			04/06/12 19:16	100
1,2-Dichlorobenzene	ND		100		ug/L			04/06/12 19:16	100
1,2-Dichloroethane	ND		100		ug/L			04/06/12 19:16	100
1,2-Dichloropropane	ND		100		ug/L			04/06/12 19:16	100
1,3,5-Trimethylbenzene	ND		100		ug/L			04/06/12 19:16	100
1,3-Dichlorobenzene	ND		100		ug/L			04/06/12 19:16	100
1,3-Dichloropropane	ND		100		ug/L			04/06/12 19:16	100
1,4-Dichlorobenzene	ND		100		ug/L			04/06/12 19:16	100
1,4-Dioxane	ND		5000		ug/L			04/06/12 19:16	100
2,2-Dichloropropane	ND		100		ug/L			04/06/12 19:16	100

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-552**

**Date Collected: 04/02/12 11:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-16**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND	*	1000		ug/L			04/06/12 19:16	100
2-Chlorotoluene	ND		100		ug/L			04/06/12 19:16	100
2-Hexanone	ND		1000		ug/L			04/06/12 19:16	100
4-Chlorotoluene	ND		100		ug/L			04/06/12 19:16	100
4-Isopropyltoluene	ND		100		ug/L			04/06/12 19:16	100
4-Methyl-2-pentanone (MIBK)	ND		1000		ug/L			04/06/12 19:16	100
<b>Acetone</b>	<b>38000</b>	*	5000		ug/L			04/06/12 19:16	100
Benzene	ND		100		ug/L			04/06/12 19:16	100
Bromobenzene	ND		100		ug/L			04/06/12 19:16	100
Bromoform	ND		100		ug/L			04/06/12 19:16	100
Bromomethane	ND		200		ug/L			04/06/12 19:16	100
Carbon disulfide	ND		1000		ug/L			04/06/12 19:16	100
Carbon tetrachloride	ND		100		ug/L			04/06/12 19:16	100
Chlorobenzene	ND		100		ug/L			04/06/12 19:16	100
Chlorobromomethane	ND		100		ug/L			04/06/12 19:16	100
Chlorodibromomethane	ND		50		ug/L			04/06/12 19:16	100
Chloroethane	ND		200		ug/L			04/06/12 19:16	100
Chloroform	ND		100		ug/L			04/06/12 19:16	100
Chloromethane	ND		200		ug/L			04/06/12 19:16	100
<b>cis-1,2-Dichloroethene</b>	<b>2100</b>		100		ug/L			04/06/12 19:16	100
cis-1,3-Dichloropropene	ND		40		ug/L			04/06/12 19:16	100
Dibromomethane	ND		100		ug/L			04/06/12 19:16	100
Dichlorobromomethane	ND		50		ug/L			04/06/12 19:16	100
Dichlorodifluoromethane	ND		100		ug/L			04/06/12 19:16	100
Ethyl ether	ND		100		ug/L			04/06/12 19:16	100
Ethylbenzene	ND		100		ug/L			04/06/12 19:16	100
Ethylene Dibromide	ND		100		ug/L			04/06/12 19:16	100
Hexachlorobutadiene	ND		40		ug/L			04/06/12 19:16	100
Isopropyl ether	ND		1000		ug/L			04/06/12 19:16	100
Isopropylbenzene	ND		100		ug/L			04/06/12 19:16	100
m-Xylene & p-Xylene	ND		200		ug/L			04/06/12 19:16	100
Methyl tert-butyl ether	ND		100		ug/L			04/06/12 19:16	100
Methylene Chloride	ND		200		ug/L			04/06/12 19:16	100
n-Butylbenzene	ND		100		ug/L			04/06/12 19:16	100
N-Propylbenzene	ND		100		ug/L			04/06/12 19:16	100
Naphthalene	ND		500		ug/L			04/06/12 19:16	100
o-Xylene	ND		100		ug/L			04/06/12 19:16	100
sec-Butylbenzene	ND		100		ug/L			04/06/12 19:16	100
Styrene	ND		100		ug/L			04/06/12 19:16	100
Tert-amyl methyl ether	ND		500		ug/L			04/06/12 19:16	100
Tert-butyl ethyl ether	ND		500		ug/L			04/06/12 19:16	100
tert-Butylbenzene	ND		100		ug/L			04/06/12 19:16	100
Tetrachloroethene	ND		100		ug/L			04/06/12 19:16	100
Tetrahydrofuran	ND		1000		ug/L			04/06/12 19:16	100
Toluene	ND		100		ug/L			04/06/12 19:16	100
trans-1,2-Dichloroethene	ND		100		ug/L			04/06/12 19:16	100
trans-1,3-Dichloropropene	ND		40		ug/L			04/06/12 19:16	100
<b>Trichloroethene</b>	<b>130</b>		100		ug/L			04/06/12 19:16	100
Trichlorofluoromethane	ND		100		ug/L			04/06/12 19:16	100
Vinyl chloride	ND		50		ug/L			04/06/12 19:16	100

# Client Sample Results

Client: Innovative Engineering Solutions, Inc

Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		70 - 130		04/06/12 19:16	100
Dibromofluoromethane	99		70 - 130		04/06/12 19:16	100
Toluene-d8 (Surrogate)	101		70 - 130		04/06/12 19:16	100

**Client Sample ID: MW-553**

**Lab Sample ID: 360-39842-17**

**Date Collected: 04/02/12 10:00**

**Matrix: Water**

**Date Received: 04/04/12 13:00**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		250		ug/L			04/06/12 19:37	250
1,1,1-Trichloroethane	ND		250		ug/L			04/06/12 19:37	250
1,1,2,2-Tetrachloroethane	ND		130		ug/L			04/06/12 19:37	250
1,1,2-Trichloroethane	ND		250		ug/L			04/06/12 19:37	250
1,1-Dichloroethane	ND		250		ug/L			04/06/12 19:37	250
1,1-Dichloroethene	ND		250		ug/L			04/06/12 19:37	250
1,1-Dichloropropene	ND		250		ug/L			04/06/12 19:37	250
1,2,3-Trichlorobenzene	ND		250		ug/L			04/06/12 19:37	250
1,2,3-Trichloropropane	ND		250		ug/L			04/06/12 19:37	250
1,2,4-Trichlorobenzene	ND		250		ug/L			04/06/12 19:37	250
1,2,4-Trimethylbenzene	ND		250		ug/L			04/06/12 19:37	250
1,2-Dibromo-3-Chloropropane	ND		1300		ug/L			04/06/12 19:37	250
1,2-Dichlorobenzene	ND		250		ug/L			04/06/12 19:37	250
1,2-Dichloroethane	ND		250		ug/L			04/06/12 19:37	250
1,2-Dichloropropane	ND		250		ug/L			04/06/12 19:37	250
1,3,5-Trimethylbenzene	ND		250		ug/L			04/06/12 19:37	250
1,3-Dichlorobenzene	ND		250		ug/L			04/06/12 19:37	250
1,3-Dichloropropane	ND		250		ug/L			04/06/12 19:37	250
1,4-Dichlorobenzene	ND		250		ug/L			04/06/12 19:37	250
1,4-Dioxane	ND		13000		ug/L			04/06/12 19:37	250
2,2-Dichloropropane	ND		250		ug/L			04/06/12 19:37	250
2-Butanone (MEK)	ND *		2500		ug/L			04/06/12 19:37	250
2-Chlorotoluene	ND		250		ug/L			04/06/12 19:37	250
2-Hexanone	ND		2500		ug/L			04/06/12 19:37	250
4-Chlorotoluene	ND		250		ug/L			04/06/12 19:37	250
4-Isopropyltoluene	ND		250		ug/L			04/06/12 19:37	250
4-Methyl-2-pentanone (MIBK)	ND		2500		ug/L			04/06/12 19:37	250
<b>Acetone</b>	<b>74000 *</b>		13000		ug/L			04/06/12 19:37	250
Benzene	ND		250		ug/L			04/06/12 19:37	250
Bromobenzene	ND		250		ug/L			04/06/12 19:37	250
Bromoform	ND		250		ug/L			04/06/12 19:37	250
Bromomethane	ND		500		ug/L			04/06/12 19:37	250
Carbon disulfide	ND		2500		ug/L			04/06/12 19:37	250
Carbon tetrachloride	ND		250		ug/L			04/06/12 19:37	250
Chlorobenzene	ND		250		ug/L			04/06/12 19:37	250
Chlorobromomethane	ND		250		ug/L			04/06/12 19:37	250
Chlorodibromomethane	ND		130		ug/L			04/06/12 19:37	250
Chloroethane	ND		500		ug/L			04/06/12 19:37	250
Chloroform	ND		250		ug/L			04/06/12 19:37	250
Chloromethane	ND		500		ug/L			04/06/12 19:37	250
<b>cis-1,2-Dichloroethene</b>	<b>390</b>		250		ug/L			04/06/12 19:37	250
cis-1,3-Dichloropropene	ND		100		ug/L			04/06/12 19:37	250
Dibromomethane	ND		250		ug/L			04/06/12 19:37	250
Dichlorobromomethane	ND		130		ug/L			04/06/12 19:37	250
Dichlorodifluoromethane	ND		250		ug/L			04/06/12 19:37	250
Ethyl ether	ND		250		ug/L			04/06/12 19:37	250

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Client Sample ID: MW-553							Lab Sample ID: 360-39842-17		
Date Collected: 04/02/12 10:00							Matrix: Water		
Date Received: 04/04/12 13:00									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		250		ug/L			04/06/12 19:37	250
Ethylene Dibromide	ND		250		ug/L			04/06/12 19:37	250
Hexachlorobutadiene	ND		100		ug/L			04/06/12 19:37	250
Isopropyl ether	ND		2500		ug/L			04/06/12 19:37	250
Isopropylbenzene	ND		250		ug/L			04/06/12 19:37	250
m-Xylene & p-Xylene	ND		500		ug/L			04/06/12 19:37	250
Methyl tert-butyl ether	ND		250		ug/L			04/06/12 19:37	250
Methylene Chloride	ND		500		ug/L			04/06/12 19:37	250
n-Butylbenzene	ND		250		ug/L			04/06/12 19:37	250
N-Propylbenzene	ND		250		ug/L			04/06/12 19:37	250
Naphthalene	ND		1300		ug/L			04/06/12 19:37	250
o-Xylene	ND		250		ug/L			04/06/12 19:37	250
sec-Butylbenzene	ND		250		ug/L			04/06/12 19:37	250
Styrene	ND		250		ug/L			04/06/12 19:37	250
Tert-amyl methyl ether	ND		1300		ug/L			04/06/12 19:37	250
Tert-butyl ethyl ether	ND		1300		ug/L			04/06/12 19:37	250
tert-Butylbenzene	ND		250		ug/L			04/06/12 19:37	250
Tetrachloroethene	ND		250		ug/L			04/06/12 19:37	250
Tetrahydrofuran	ND		2500		ug/L			04/06/12 19:37	250
Toluene	ND		250		ug/L			04/06/12 19:37	250
trans-1,2-Dichloroethene	ND		250		ug/L			04/06/12 19:37	250
trans-1,3-Dichloropropene	ND		100		ug/L			04/06/12 19:37	250
Trichloroethene	ND		250		ug/L			04/06/12 19:37	250
Trichlorofluoromethane	ND		250		ug/L			04/06/12 19:37	250
Vinyl chloride	ND		130		ug/L			04/06/12 19:37	250
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		70 - 130					04/06/12 19:37	250
Dibromofluoromethane	100		70 - 130					04/06/12 19:37	250
Toluene-d8 (Surr)	101		70 - 130					04/06/12 19:37	250

Client Sample ID: MW-560  
Date Collected: 04/02/12 10:00  
Date Received: 04/04/12 13:00

Lab Sample ID: 360-39842-18  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/06/12 19:59	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/06/12 19:59	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/06/12 19:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/06/12 19:59	1
1,1-Dichloroethane	ND		1.0		ug/L			04/06/12 19:59	1
1,1-Dichloroethene	ND		1.0		ug/L			04/06/12 19:59	1
1,1-Dichloropropene	ND		1.0		ug/L			04/06/12 19:59	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/06/12 19:59	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/06/12 19:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/06/12 19:59	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/06/12 19:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/06/12 19:59	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/06/12 19:59	1
1,2-Dichloroethane	ND		1.0		ug/L			04/06/12 19:59	1
1,2-Dichloropropane	ND		1.0		ug/L			04/06/12 19:59	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/06/12 19:59	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-560**

**Date Collected: 04/02/12 10:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-18**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			04/06/12 19:59	1
1,3-Dichloropropane	ND		1.0		ug/L			04/06/12 19:59	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/06/12 19:59	1
1,4-Dioxane	ND		50		ug/L			04/06/12 19:59	1
2,2-Dichloropropane	ND		1.0		ug/L			04/06/12 19:59	1
2-Butanone (MEK)	ND *		10		ug/L			04/06/12 19:59	1
2-Chlorotoluene	ND		1.0		ug/L			04/06/12 19:59	1
2-Hexanone	ND		10		ug/L			04/06/12 19:59	1
4-Chlorotoluene	ND		1.0		ug/L			04/06/12 19:59	1
4-Isopropyltoluene	ND		1.0		ug/L			04/06/12 19:59	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/06/12 19:59	1
Acetone	ND *		50		ug/L			04/06/12 19:59	1
Benzene	ND		1.0		ug/L			04/06/12 19:59	1
Bromobenzene	ND		1.0		ug/L			04/06/12 19:59	1
Bromoform	ND		1.0		ug/L			04/06/12 19:59	1
Bromomethane	ND		2.0		ug/L			04/06/12 19:59	1
Carbon disulfide	ND		10		ug/L			04/06/12 19:59	1
Carbon tetrachloride	ND		1.0		ug/L			04/06/12 19:59	1
Chlorobenzene	ND		1.0		ug/L			04/06/12 19:59	1
Chlorobromomethane	ND		1.0		ug/L			04/06/12 19:59	1
Chlorodibromomethane	ND		0.50		ug/L			04/06/12 19:59	1
Chloroethane	ND		2.0		ug/L			04/06/12 19:59	1
Chloroform	ND		1.0		ug/L			04/06/12 19:59	1
Chloromethane	ND		2.0		ug/L			04/06/12 19:59	1
<b>cis-1,2-Dichloroethene</b>	<b>1.7</b>		1.0		ug/L			04/06/12 19:59	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 19:59	1
Dibromomethane	ND		1.0		ug/L			04/06/12 19:59	1
Dichlorobromomethane	ND		0.50		ug/L			04/06/12 19:59	1
Dichlorodifluoromethane	ND		1.0		ug/L			04/06/12 19:59	1
Ethyl ether	ND		1.0		ug/L			04/06/12 19:59	1
Ethylbenzene	ND		1.0		ug/L			04/06/12 19:59	1
Ethylene Dibromide	ND		1.0		ug/L			04/06/12 19:59	1
Hexachlorobutadiene	ND		0.40		ug/L			04/06/12 19:59	1
Isopropyl ether	ND		10		ug/L			04/06/12 19:59	1
Isopropylbenzene	ND		1.0		ug/L			04/06/12 19:59	1
m-Xylene & p-Xylene	ND		2.0		ug/L			04/06/12 19:59	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/06/12 19:59	1
Methylene Chloride	ND		2.0		ug/L			04/06/12 19:59	1
n-Butylbenzene	ND		1.0		ug/L			04/06/12 19:59	1
N-Propylbenzene	ND		1.0		ug/L			04/06/12 19:59	1
Naphthalene	ND		5.0		ug/L			04/06/12 19:59	1
o-Xylene	ND		1.0		ug/L			04/06/12 19:59	1
sec-Butylbenzene	ND		1.0		ug/L			04/06/12 19:59	1
Styrene	ND		1.0		ug/L			04/06/12 19:59	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/06/12 19:59	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/06/12 19:59	1
tert-Butylbenzene	ND		1.0		ug/L			04/06/12 19:59	1
Tetrachloroethene	ND		1.0		ug/L			04/06/12 19:59	1
Tetrahydrofuran	ND		10		ug/L			04/06/12 19:59	1
Toluene	ND		1.0		ug/L			04/06/12 19:59	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/06/12 19:59	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Client Sample ID: MW-560							Lab Sample ID: 360-39842-18		
Date Collected: 04/02/12 10:00							Matrix: Water		
Date Received: 04/04/12 13:00									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 19:59	1
<b>Trichloroethene</b>	<b>3.2</b>		1.0		ug/L			04/06/12 19:59	1
Trichlorofluoromethane	ND		1.0		ug/L			04/06/12 19:59	1
<b>Vinyl chloride</b>	<b>0.60</b>		0.50		ug/L			04/06/12 19:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		70 - 130					04/06/12 19:59	1
Dibromofluoromethane	102		70 - 130					04/06/12 19:59	1
Toluene-d8 (Surr)	97		70 - 130					04/06/12 19:59	1
Client Sample ID: MW-561							Lab Sample ID: 360-39842-19		
Date Collected: 04/02/12 13:40							Matrix: Water		
Date Received: 04/04/12 13:00									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		100		ug/L			04/06/12 20:21	100
1,1,1-Trichloroethane	ND		100		ug/L			04/06/12 20:21	100
1,1,2,2-Tetrachloroethane	ND		50		ug/L			04/06/12 20:21	100
1,1,2-Trichloroethane	ND		100		ug/L			04/06/12 20:21	100
1,1-Dichloroethane	ND		100		ug/L			04/06/12 20:21	100
1,1-Dichloroethene	ND		100		ug/L			04/06/12 20:21	100
1,1-Dichloropropene	ND		100		ug/L			04/06/12 20:21	100
1,2,3-Trichlorobenzene	ND		100		ug/L			04/06/12 20:21	100
1,2,3-Trichloropropane	ND		100		ug/L			04/06/12 20:21	100
1,2,4-Trichlorobenzene	ND		100		ug/L			04/06/12 20:21	100
1,2,4-Trimethylbenzene	ND		100		ug/L			04/06/12 20:21	100
1,2-Dibromo-3-Chloropropane	ND		500		ug/L			04/06/12 20:21	100
1,2-Dichlorobenzene	ND		100		ug/L			04/06/12 20:21	100
1,2-Dichloroethane	ND		100		ug/L			04/06/12 20:21	100
1,2-Dichloropropane	ND		100		ug/L			04/06/12 20:21	100
1,3,5-Trimethylbenzene	ND		100		ug/L			04/06/12 20:21	100
1,3-Dichlorobenzene	ND		100		ug/L			04/06/12 20:21	100
1,3-Dichloropropane	ND		100		ug/L			04/06/12 20:21	100
1,4-Dichlorobenzene	ND		100		ug/L			04/06/12 20:21	100
1,4-Dioxane	ND		5000		ug/L			04/06/12 20:21	100
2,2-Dichloropropane	ND		100		ug/L			04/06/12 20:21	100
2-Butanone (MEK)	ND *		1000		ug/L			04/06/12 20:21	100
2-Chlorotoluene	ND		100		ug/L			04/06/12 20:21	100
2-Hexanone	ND		1000		ug/L			04/06/12 20:21	100
4-Chlorotoluene	ND		100		ug/L			04/06/12 20:21	100
4-Isopropyltoluene	ND		100		ug/L			04/06/12 20:21	100
4-Methyl-2-pentanone (MIBK)	ND		1000		ug/L			04/06/12 20:21	100
Acetone	ND *		5000		ug/L			04/06/12 20:21	100
Benzene	ND		100		ug/L			04/06/12 20:21	100
Bromobenzene	ND		100		ug/L			04/06/12 20:21	100
Bromoform	ND		100		ug/L			04/06/12 20:21	100
Bromomethane	ND		200		ug/L			04/06/12 20:21	100
Carbon disulfide	ND		1000		ug/L			04/06/12 20:21	100
Carbon tetrachloride	ND		100		ug/L			04/06/12 20:21	100
Chlorobenzene	ND		100		ug/L			04/06/12 20:21	100
Chlorobromomethane	ND		100		ug/L			04/06/12 20:21	100
Chlorodibromomethane	ND		50		ug/L			04/06/12 20:21	100

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-561**

**Date Collected: 04/02/12 13:40**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-19**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		200		ug/L			04/06/12 20:21	100
Chloroform	ND		100		ug/L			04/06/12 20:21	100
Chloromethane	ND		200		ug/L			04/06/12 20:21	100
<b>cis-1,2-Dichloroethene</b>	<b>1700</b>		100		ug/L			04/06/12 20:21	100
cis-1,3-Dichloropropene	ND		40		ug/L			04/06/12 20:21	100
Dibromomethane	ND		100		ug/L			04/06/12 20:21	100
Dichlorobromomethane	ND		50		ug/L			04/06/12 20:21	100
Dichlorodifluoromethane	ND		100		ug/L			04/06/12 20:21	100
Ethyl ether	ND		100		ug/L			04/06/12 20:21	100
Ethylbenzene	ND		100		ug/L			04/06/12 20:21	100
Ethylene Dibromide	ND		100		ug/L			04/06/12 20:21	100
Hexachlorobutadiene	ND		40		ug/L			04/06/12 20:21	100
Isopropyl ether	ND		1000		ug/L			04/06/12 20:21	100
Isopropylbenzene	ND		100		ug/L			04/06/12 20:21	100
m-Xylene & p-Xylene	ND		200		ug/L			04/06/12 20:21	100
Methyl tert-butyl ether	ND		100		ug/L			04/06/12 20:21	100
Methylene Chloride	ND		200		ug/L			04/06/12 20:21	100
n-Butylbenzene	ND		100		ug/L			04/06/12 20:21	100
N-Propylbenzene	ND		100		ug/L			04/06/12 20:21	100
Naphthalene	ND		500		ug/L			04/06/12 20:21	100
o-Xylene	ND		100		ug/L			04/06/12 20:21	100
sec-Butylbenzene	ND		100		ug/L			04/06/12 20:21	100
Styrene	ND		100		ug/L			04/06/12 20:21	100
Tert-amyl methyl ether	ND		500		ug/L			04/06/12 20:21	100
Tert-butyl ethyl ether	ND		500		ug/L			04/06/12 20:21	100
tert-Butylbenzene	ND		100		ug/L			04/06/12 20:21	100
<b>Tetrachloroethene</b>	<b>170</b>		100		ug/L			04/06/12 20:21	100
Tetrahydrofuran	ND		1000		ug/L			04/06/12 20:21	100
Toluene	ND		100		ug/L			04/06/12 20:21	100
trans-1,2-Dichloroethene	ND		100		ug/L			04/06/12 20:21	100
trans-1,3-Dichloropropene	ND		40		ug/L			04/06/12 20:21	100
<b>Trichloroethene</b>	<b>3100</b>		100		ug/L			04/06/12 20:21	100
Trichlorofluoromethane	ND		100		ug/L			04/06/12 20:21	100
<b>Vinyl chloride</b>	<b>160</b>		50		ug/L			04/06/12 20:21	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		70 - 130					04/06/12 20:21	100
Dibromofluoromethane	100		70 - 130					04/06/12 20:21	100
Toluene-d8 (Sur)	101		70 - 130					04/06/12 20:21	100

**Client Sample ID: MW-562**

**Date Collected: 04/03/12 14:05**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-20**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		100		ug/L			04/06/12 20:43	100
1,1,1-Trichloroethane	ND		100		ug/L			04/06/12 20:43	100
1,1,2,2-Tetrachloroethane	ND		50		ug/L			04/06/12 20:43	100
1,1,2-Trichloroethane	ND		100		ug/L			04/06/12 20:43	100
1,1-Dichloroethane	ND		100		ug/L			04/06/12 20:43	100
1,1-Dichloroethene	ND		100		ug/L			04/06/12 20:43	100
1,1-Dichloropropene	ND		100		ug/L			04/06/12 20:43	100

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: MW-562**

**Date Collected: 04/03/12 14:05**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-20**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		100		ug/L			04/06/12 20:43	100
1,2,3-Trichloropropane	ND		100		ug/L			04/06/12 20:43	100
1,2,4-Trichlorobenzene	ND		100		ug/L			04/06/12 20:43	100
1,2,4-Trimethylbenzene	ND		100		ug/L			04/06/12 20:43	100
1,2-Dibromo-3-Chloropropane	ND		500		ug/L			04/06/12 20:43	100
1,2-Dichlorobenzene	ND		100		ug/L			04/06/12 20:43	100
1,2-Dichloroethane	ND		100		ug/L			04/06/12 20:43	100
1,2-Dichloropropane	ND		100		ug/L			04/06/12 20:43	100
1,3,5-Trimethylbenzene	ND		100		ug/L			04/06/12 20:43	100
1,3-Dichlorobenzene	ND		100		ug/L			04/06/12 20:43	100
1,3-Dichloropropane	ND		100		ug/L			04/06/12 20:43	100
1,4-Dichlorobenzene	ND		100		ug/L			04/06/12 20:43	100
1,4-Dioxane	ND		5000		ug/L			04/06/12 20:43	100
2,2-Dichloropropane	ND		100		ug/L			04/06/12 20:43	100
2-Butanone (MEK)	ND *		1000		ug/L			04/06/12 20:43	100
2-Chlorotoluene	ND		100		ug/L			04/06/12 20:43	100
2-Hexanone	ND		1000		ug/L			04/06/12 20:43	100
4-Chlorotoluene	ND		100		ug/L			04/06/12 20:43	100
4-Isopropyltoluene	ND		100		ug/L			04/06/12 20:43	100
4-Methyl-2-pentanone (MIBK)	ND		1000		ug/L			04/06/12 20:43	100
<b>Acetone</b>	<b>30000 *</b>		5000		ug/L			04/06/12 20:43	100
Benzene	ND		100		ug/L			04/06/12 20:43	100
Bromobenzene	ND		100		ug/L			04/06/12 20:43	100
Bromoform	ND		100		ug/L			04/06/12 20:43	100
Bromomethane	ND		200		ug/L			04/06/12 20:43	100
Carbon disulfide	ND		1000		ug/L			04/06/12 20:43	100
Carbon tetrachloride	ND		100		ug/L			04/06/12 20:43	100
Chlorobenzene	ND		100		ug/L			04/06/12 20:43	100
Chlorobromomethane	ND		100		ug/L			04/06/12 20:43	100
Chlorodibromomethane	ND		50		ug/L			04/06/12 20:43	100
Chloroethane	ND		200		ug/L			04/06/12 20:43	100
Chloroform	ND		100		ug/L			04/06/12 20:43	100
Chloromethane	ND		200		ug/L			04/06/12 20:43	100
<b>cis-1,2-Dichloroethene</b>	<b>300</b>		100		ug/L			04/06/12 20:43	100
cis-1,3-Dichloropropene	ND		40		ug/L			04/06/12 20:43	100
Dibromomethane	ND		100		ug/L			04/06/12 20:43	100
Dichlorobromomethane	ND		50		ug/L			04/06/12 20:43	100
Dichlorodifluoromethane	ND		100		ug/L			04/06/12 20:43	100
Ethyl ether	ND		100		ug/L			04/06/12 20:43	100
Ethylbenzene	ND		100		ug/L			04/06/12 20:43	100
Ethylene Dibromide	ND		100		ug/L			04/06/12 20:43	100
Hexachlorobutadiene	ND		40		ug/L			04/06/12 20:43	100
Isopropyl ether	ND		1000		ug/L			04/06/12 20:43	100
Isopropylbenzene	ND		100		ug/L			04/06/12 20:43	100
m-Xylene & p-Xylene	ND		200		ug/L			04/06/12 20:43	100
Methyl tert-butyl ether	ND		100		ug/L			04/06/12 20:43	100
Methylene Chloride	ND		200		ug/L			04/06/12 20:43	100
n-Butylbenzene	ND		100		ug/L			04/06/12 20:43	100
N-Propylbenzene	ND		100		ug/L			04/06/12 20:43	100
Naphthalene	ND		500		ug/L			04/06/12 20:43	100
o-Xylene	ND		100		ug/L			04/06/12 20:43	100

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Client Sample ID: MW-562							Lab Sample ID: 360-39842-20		
Date Collected: 04/03/12 14:05							Matrix: Water		
Date Received: 04/04/12 13:00									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		100		ug/L			04/06/12 20:43	100
Styrene	ND		100		ug/L			04/06/12 20:43	100
Tert-amyl methyl ether	ND		500		ug/L			04/06/12 20:43	100
Tert-butyl ethyl ether	ND		500		ug/L			04/06/12 20:43	100
tert-Butylbenzene	ND		100		ug/L			04/06/12 20:43	100
Tetrachloroethene	ND		100		ug/L			04/06/12 20:43	100
Tetrahydrofuran	ND		1000		ug/L			04/06/12 20:43	100
Toluene	ND		100		ug/L			04/06/12 20:43	100
trans-1,2-Dichloroethene	ND		100		ug/L			04/06/12 20:43	100
trans-1,3-Dichloropropene	ND		40		ug/L			04/06/12 20:43	100
Trichloroethene	ND		100		ug/L			04/06/12 20:43	100
Trichlorofluoromethane	ND		100		ug/L			04/06/12 20:43	100
Vinyl chloride	200		50		ug/L			04/06/12 20:43	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		70 - 130					04/06/12 20:43	100
Dibromofluoromethane	101		70 - 130					04/06/12 20:43	100
Toluene-d8 (Surrogate)	101		70 - 130					04/06/12 20:43	100

Client Sample ID: REW-1  
Date Collected: 04/03/12 10:00  
Date Received: 04/04/12 13:00

Lab Sample ID: 360-39842-21  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		100		ug/L			04/06/12 21:04	100
1,1,1-Trichloroethane	ND		100		ug/L			04/06/12 21:04	100
1,1,2,2-Tetrachloroethane	ND		50		ug/L			04/06/12 21:04	100
1,1,2-Trichloroethane	ND		100		ug/L			04/06/12 21:04	100
1,1-Dichloroethane	ND		100		ug/L			04/06/12 21:04	100
1,1-Dichloroethene	ND		100		ug/L			04/06/12 21:04	100
1,1-Dichloropropene	ND		100		ug/L			04/06/12 21:04	100
1,2,3-Trichlorobenzene	ND		100		ug/L			04/06/12 21:04	100
1,2,3-Trichloropropane	ND		100		ug/L			04/06/12 21:04	100
1,2,4-Trichlorobenzene	ND		100		ug/L			04/06/12 21:04	100
1,2,4-Trimethylbenzene	ND		100		ug/L			04/06/12 21:04	100
1,2-Dibromo-3-Chloropropane	ND		500		ug/L			04/06/12 21:04	100
1,2-Dichlorobenzene	ND		100		ug/L			04/06/12 21:04	100
1,2-Dichloroethane	ND		100		ug/L			04/06/12 21:04	100
1,2-Dichloropropane	ND		100		ug/L			04/06/12 21:04	100
1,3,5-Trimethylbenzene	ND		100		ug/L			04/06/12 21:04	100
1,3-Dichlorobenzene	ND		100		ug/L			04/06/12 21:04	100
1,3-Dichloropropane	ND		100		ug/L			04/06/12 21:04	100
1,4-Dichlorobenzene	ND		100		ug/L			04/06/12 21:04	100
1,4-Dioxane	ND		5000		ug/L			04/06/12 21:04	100
2,2-Dichloropropane	ND		100		ug/L			04/06/12 21:04	100
2-Butanone (MEK)	ND *		1000		ug/L			04/06/12 21:04	100
2-Chlorotoluene	ND		100		ug/L			04/06/12 21:04	100
2-Hexanone	ND		1000		ug/L			04/06/12 21:04	100
4-Chlorotoluene	ND		100		ug/L			04/06/12 21:04	100
4-Isopropyltoluene	ND		100		ug/L			04/06/12 21:04	100
4-Methyl-2-pentanone (MIBK)	ND		1000		ug/L			04/06/12 21:04	100
Acetone	37000 *		5000		ug/L			04/06/12 21:04	100

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: REW-1**

**Date Collected: 04/03/12 10:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-21**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		100		ug/L			04/06/12 21:04	100
Bromobenzene	ND		100		ug/L			04/06/12 21:04	100
Bromoform	ND		100		ug/L			04/06/12 21:04	100
Bromomethane	ND		200		ug/L			04/06/12 21:04	100
Carbon disulfide	ND		1000		ug/L			04/06/12 21:04	100
Carbon tetrachloride	ND		100		ug/L			04/06/12 21:04	100
Chlorobenzene	ND		100		ug/L			04/06/12 21:04	100
Chlorobromomethane	ND		100		ug/L			04/06/12 21:04	100
Chlorodibromomethane	ND		50		ug/L			04/06/12 21:04	100
Chloroethane	ND		200		ug/L			04/06/12 21:04	100
Chloroform	ND		100		ug/L			04/06/12 21:04	100
Chloromethane	ND		200		ug/L			04/06/12 21:04	100
<b>cis-1,2-Dichloroethene</b>	<b>390</b>		100		ug/L			04/06/12 21:04	100
cis-1,3-Dichloropropene	ND		40		ug/L			04/06/12 21:04	100
Dibromomethane	ND		100		ug/L			04/06/12 21:04	100
Dichlorobromomethane	ND		50		ug/L			04/06/12 21:04	100
Dichlorodifluoromethane	ND		100		ug/L			04/06/12 21:04	100
Ethyl ether	ND		100		ug/L			04/06/12 21:04	100
Ethylbenzene	ND		100		ug/L			04/06/12 21:04	100
Ethylene Dibromide	ND		100		ug/L			04/06/12 21:04	100
Hexachlorobutadiene	ND		40		ug/L			04/06/12 21:04	100
Isopropyl ether	ND		1000		ug/L			04/06/12 21:04	100
Isopropylbenzene	ND		100		ug/L			04/06/12 21:04	100
m-Xylene & p-Xylene	ND		200		ug/L			04/06/12 21:04	100
Methyl tert-butyl ether	ND		100		ug/L			04/06/12 21:04	100
Methylene Chloride	ND		200		ug/L			04/06/12 21:04	100
n-Butylbenzene	ND		100		ug/L			04/06/12 21:04	100
N-Propylbenzene	ND		100		ug/L			04/06/12 21:04	100
Naphthalene	ND		500		ug/L			04/06/12 21:04	100
o-Xylene	ND		100		ug/L			04/06/12 21:04	100
sec-Butylbenzene	ND		100		ug/L			04/06/12 21:04	100
Styrene	ND		100		ug/L			04/06/12 21:04	100
Tert-amyl methyl ether	ND		500		ug/L			04/06/12 21:04	100
Tert-butyl ethyl ether	ND		500		ug/L			04/06/12 21:04	100
tert-Butylbenzene	ND		100		ug/L			04/06/12 21:04	100
Tetrachloroethene	ND		100		ug/L			04/06/12 21:04	100
Tetrahydrofuran	ND		1000		ug/L			04/06/12 21:04	100
Toluene	ND		100		ug/L			04/06/12 21:04	100
trans-1,2-Dichloroethene	ND		100		ug/L			04/06/12 21:04	100
trans-1,3-Dichloropropene	ND		40		ug/L			04/06/12 21:04	100
Trichloroethene	ND		100		ug/L			04/06/12 21:04	100
Trichlorofluoromethane	ND		100		ug/L			04/06/12 21:04	100
<b>Vinyl chloride</b>	<b>170</b>		50		ug/L			04/06/12 21:04	100
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	98		70 - 130					04/06/12 21:04	100
Dibromofluoromethane	102		70 - 130					04/06/12 21:04	100
Toluene-d8 (Surr)	101		70 - 130					04/06/12 21:04	100

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: REW-4**

**Date Collected: 04/03/12 11:10**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-22**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/06/12 21:26	1
<b>1,1,1-Trichloroethane</b>	<b>1.3</b>		1.0		ug/L			04/06/12 21:26	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/06/12 21:26	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/06/12 21:26	1
1,1-Dichloroethane	ND		1.0		ug/L			04/06/12 21:26	1
1,1-Dichloroethene	ND		1.0		ug/L			04/06/12 21:26	1
1,1-Dichloropropene	ND		1.0		ug/L			04/06/12 21:26	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/06/12 21:26	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/06/12 21:26	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/06/12 21:26	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/06/12 21:26	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/06/12 21:26	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/06/12 21:26	1
1,2-Dichloroethane	ND		1.0		ug/L			04/06/12 21:26	1
1,2-Dichloropropane	ND		1.0		ug/L			04/06/12 21:26	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/06/12 21:26	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/06/12 21:26	1
1,3-Dichloropropane	ND		1.0		ug/L			04/06/12 21:26	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/06/12 21:26	1
1,4-Dioxane	ND		50		ug/L			04/06/12 21:26	1
2,2-Dichloropropane	ND		1.0		ug/L			04/06/12 21:26	1
2-Butanone (MEK)	ND *		10		ug/L			04/06/12 21:26	1
2-Chlorotoluene	ND		1.0		ug/L			04/06/12 21:26	1
2-Hexanone	ND		10		ug/L			04/06/12 21:26	1
4-Chlorotoluene	ND		1.0		ug/L			04/06/12 21:26	1
4-Isopropyltoluene	ND		1.0		ug/L			04/06/12 21:26	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/06/12 21:26	1
Acetone	ND *		50		ug/L			04/06/12 21:26	1
Benzene	ND		1.0		ug/L			04/06/12 21:26	1
Bromobenzene	ND		1.0		ug/L			04/06/12 21:26	1
Bromoform	ND		1.0		ug/L			04/06/12 21:26	1
Bromomethane	ND		2.0		ug/L			04/06/12 21:26	1
Carbon disulfide	ND		10		ug/L			04/06/12 21:26	1
Carbon tetrachloride	ND		1.0		ug/L			04/06/12 21:26	1
Chlorobenzene	ND		1.0		ug/L			04/06/12 21:26	1
Chlorobromomethane	ND		1.0		ug/L			04/06/12 21:26	1
Chlorodibromomethane	ND		0.50		ug/L			04/06/12 21:26	1
Chloroethane	ND		2.0		ug/L			04/06/12 21:26	1
Chloroform	ND		1.0		ug/L			04/06/12 21:26	1
Chloromethane	ND		2.0		ug/L			04/06/12 21:26	1
<b>cis-1,2-Dichloroethene</b>	<b>12</b>		1.0		ug/L			04/06/12 21:26	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 21:26	1
Dibromomethane	ND		1.0		ug/L			04/06/12 21:26	1
Dichlorobromomethane	ND		0.50		ug/L			04/06/12 21:26	1
Dichlorodifluoromethane	ND		1.0		ug/L			04/06/12 21:26	1
Ethyl ether	ND		1.0		ug/L			04/06/12 21:26	1
<b>Ethylbenzene</b>	<b>1.3</b>		1.0		ug/L			04/06/12 21:26	1
Ethylene Dibromide	ND		1.0		ug/L			04/06/12 21:26	1
Hexachlorobutadiene	ND		0.40		ug/L			04/06/12 21:26	1
Isopropyl ether	ND		10		ug/L			04/06/12 21:26	1
Isopropylbenzene	ND		1.0		ug/L			04/06/12 21:26	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Client Sample ID: REW-4							Lab Sample ID: 360-39842-22		
Date Collected: 04/03/12 11:10							Matrix: Water		
Date Received: 04/04/12 13:00									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	6.0		2.0		ug/L			04/06/12 21:26	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/06/12 21:26	1
Methylene Chloride	ND		2.0		ug/L			04/06/12 21:26	1
n-Butylbenzene	ND		1.0		ug/L			04/06/12 21:26	1
N-Propylbenzene	ND		1.0		ug/L			04/06/12 21:26	1
Naphthalene	ND		5.0		ug/L			04/06/12 21:26	1
o-Xylene	1.6		1.0		ug/L			04/06/12 21:26	1
sec-Butylbenzene	ND		1.0		ug/L			04/06/12 21:26	1
Styrene	ND		1.0		ug/L			04/06/12 21:26	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/06/12 21:26	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/06/12 21:26	1
tert-Butylbenzene	ND		1.0		ug/L			04/06/12 21:26	1
Tetrachloroethene	ND		1.0		ug/L			04/06/12 21:26	1
Tetrahydrofuran	ND		10		ug/L			04/06/12 21:26	1
Toluene	ND		1.0		ug/L			04/06/12 21:26	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/06/12 21:26	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 21:26	1
Trichloroethene	7.7		1.0		ug/L			04/06/12 21:26	1
Trichlorofluoromethane	ND		1.0		ug/L			04/06/12 21:26	1
Vinyl chloride	ND		0.50		ug/L			04/06/12 21:26	1
<b>Surrogate</b>		%Recovery	Qualifier	<b>Limits</b>			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene		100		70 - 130				04/06/12 21:26	1
Dibromofluoromethane		102		70 - 130				04/06/12 21:26	1
Toluene-d8 (Surr)		100		70 - 130				04/06/12 21:26	1

Client Sample ID: REW-5  
Date Collected: 04/03/12 12:35  
Date Received: 04/04/12 13:00

Lab Sample ID: 360-39842-23  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10		ug/L			04/06/12 21:48	10
1,1,1-Trichloroethane	ND		10		ug/L			04/06/12 21:48	10
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			04/06/12 21:48	10
1,1,2-Trichloroethane	ND		10		ug/L			04/06/12 21:48	10
1,1-Dichloroethane	ND		10		ug/L			04/06/12 21:48	10
1,1-Dichloroethene	ND		10		ug/L			04/06/12 21:48	10
1,1-Dichloropropene	ND		10		ug/L			04/06/12 21:48	10
1,2,3-Trichlorobenzene	ND		10		ug/L			04/06/12 21:48	10
1,2,3-Trichloropropane	ND		10		ug/L			04/06/12 21:48	10
1,2,4-Trichlorobenzene	ND		10		ug/L			04/06/12 21:48	10
1,2,4-Trimethylbenzene	ND		10		ug/L			04/06/12 21:48	10
1,2-Dibromo-3-Chloropropane	ND		50		ug/L			04/06/12 21:48	10
1,2-Dichlorobenzene	ND		10		ug/L			04/06/12 21:48	10
1,2-Dichloroethane	ND		10		ug/L			04/06/12 21:48	10
1,2-Dichloropropane	ND		10		ug/L			04/06/12 21:48	10
1,3,5-Trimethylbenzene	ND		10		ug/L			04/06/12 21:48	10
1,3-Dichlorobenzene	ND		10		ug/L			04/06/12 21:48	10
1,3-Dichloropropane	ND		10		ug/L			04/06/12 21:48	10
1,4-Dichlorobenzene	ND		10		ug/L			04/06/12 21:48	10
1,4-Dioxane	ND		500		ug/L			04/06/12 21:48	10
2,2-Dichloropropane	ND		10		ug/L			04/06/12 21:48	10

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: REW-5**

**Date Collected: 04/03/12 12:35**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-23**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND	*	100		ug/L			04/06/12 21:48	10
2-Chlorotoluene	ND		10		ug/L			04/06/12 21:48	10
2-Hexanone	ND		100		ug/L			04/06/12 21:48	10
4-Chlorotoluene	ND		10		ug/L			04/06/12 21:48	10
4-Isopropyltoluene	ND		10		ug/L			04/06/12 21:48	10
4-Methyl-2-pentanone (MIBK)	ND		100		ug/L			04/06/12 21:48	10
Acetone	ND	*	500		ug/L			04/06/12 21:48	10
Benzene	ND		10		ug/L			04/06/12 21:48	10
Bromobenzene	ND		10		ug/L			04/06/12 21:48	10
Bromoform	ND		10		ug/L			04/06/12 21:48	10
Bromomethane	ND		20		ug/L			04/06/12 21:48	10
Carbon disulfide	ND		100		ug/L			04/06/12 21:48	10
Carbon tetrachloride	ND		10		ug/L			04/06/12 21:48	10
Chlorobenzene	ND		10		ug/L			04/06/12 21:48	10
Chlorobromomethane	ND		10		ug/L			04/06/12 21:48	10
Chlorodibromomethane	ND		5.0		ug/L			04/06/12 21:48	10
Chloroethane	ND		20		ug/L			04/06/12 21:48	10
Chloroform	ND		10		ug/L			04/06/12 21:48	10
Chloromethane	ND		20		ug/L			04/06/12 21:48	10
<b>cis-1,2-Dichloroethene</b>	<b>380</b>		10		ug/L			04/06/12 21:48	10
cis-1,3-Dichloropropene	ND		4.0		ug/L			04/06/12 21:48	10
Dibromomethane	ND		10		ug/L			04/06/12 21:48	10
Dichlorobromomethane	ND		5.0		ug/L			04/06/12 21:48	10
Dichlorodifluoromethane	ND		10		ug/L			04/06/12 21:48	10
Ethyl ether	ND		10		ug/L			04/06/12 21:48	10
Ethylbenzene	ND		10		ug/L			04/06/12 21:48	10
Ethylene Dibromide	ND		10		ug/L			04/06/12 21:48	10
Hexachlorobutadiene	ND		4.0		ug/L			04/06/12 21:48	10
Isopropyl ether	ND		100		ug/L			04/06/12 21:48	10
Isopropylbenzene	ND		10		ug/L			04/06/12 21:48	10
m-Xylene & p-Xylene	ND		20		ug/L			04/06/12 21:48	10
Methyl tert-butyl ether	ND		10		ug/L			04/06/12 21:48	10
Methylene Chloride	ND		20		ug/L			04/06/12 21:48	10
n-Butylbenzene	ND		10		ug/L			04/06/12 21:48	10
N-Propylbenzene	ND		10		ug/L			04/06/12 21:48	10
Naphthalene	ND		50		ug/L			04/06/12 21:48	10
o-Xylene	ND		10		ug/L			04/06/12 21:48	10
sec-Butylbenzene	ND		10		ug/L			04/06/12 21:48	10
Styrene	ND		10		ug/L			04/06/12 21:48	10
Tert-amyl methyl ether	ND		50		ug/L			04/06/12 21:48	10
Tert-butyl ethyl ether	ND		50		ug/L			04/06/12 21:48	10
tert-Butylbenzene	ND		10		ug/L			04/06/12 21:48	10
Tetrachloroethene	ND		10		ug/L			04/06/12 21:48	10
Tetrahydrofuran	ND		100		ug/L			04/06/12 21:48	10
Toluene	ND		10		ug/L			04/06/12 21:48	10
trans-1,2-Dichloroethene	ND		10		ug/L			04/06/12 21:48	10
trans-1,3-Dichloropropene	ND		4.0		ug/L			04/06/12 21:48	10
<b>Trichloroethene</b>	<b>140</b>		10		ug/L			04/06/12 21:48	10
Trichlorofluoromethane	ND		10		ug/L			04/06/12 21:48	10
<b>Vinyl chloride</b>	<b>54</b>		5.0		ug/L			04/06/12 21:48	10

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		70 - 130		04/06/12 21:48	10
Dibromofluoromethane	100		70 - 130		04/06/12 21:48	10
Toluene-d8 (Surrogate)	101		70 - 130		04/06/12 21:48	10

**Client Sample ID: DupX1**

**Date Collected: 04/02/12 12:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-24**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		100		ug/L			04/06/12 22:09	100
1,1,1-Trichloroethane	ND		100		ug/L			04/06/12 22:09	100
1,1,2,2-Tetrachloroethane	ND		50		ug/L			04/06/12 22:09	100
1,1,2-Trichloroethane	ND		100		ug/L			04/06/12 22:09	100
1,1-Dichloroethane	ND		100		ug/L			04/06/12 22:09	100
1,1-Dichloroethene	ND		100		ug/L			04/06/12 22:09	100
1,1-Dichloropropene	ND		100		ug/L			04/06/12 22:09	100
1,2,3-Trichlorobenzene	ND		100		ug/L			04/06/12 22:09	100
1,2,3-Trichloropropane	ND		100		ug/L			04/06/12 22:09	100
1,2,4-Trichlorobenzene	ND		100		ug/L			04/06/12 22:09	100
1,2,4-Trimethylbenzene	ND		100		ug/L			04/06/12 22:09	100
1,2-Dibromo-3-Chloropropane	ND		500		ug/L			04/06/12 22:09	100
1,2-Dichlorobenzene	ND		100		ug/L			04/06/12 22:09	100
1,2-Dichloroethane	ND		100		ug/L			04/06/12 22:09	100
1,2-Dichloropropane	ND		100		ug/L			04/06/12 22:09	100
1,3,5-Trimethylbenzene	ND		100		ug/L			04/06/12 22:09	100
1,3-Dichlorobenzene	ND		100		ug/L			04/06/12 22:09	100
1,3-Dichloropropane	ND		100		ug/L			04/06/12 22:09	100
1,4-Dichlorobenzene	ND		100		ug/L			04/06/12 22:09	100
1,4-Dioxane	ND		5000		ug/L			04/06/12 22:09	100
2,2-Dichloropropane	ND		100		ug/L			04/06/12 22:09	100
2-Butanone (MEK)	ND *		1000		ug/L			04/06/12 22:09	100
2-Chlorotoluene	ND		100		ug/L			04/06/12 22:09	100
2-Hexanone	ND		1000		ug/L			04/06/12 22:09	100
4-Chlorotoluene	ND		100		ug/L			04/06/12 22:09	100
4-Isopropyltoluene	ND		100		ug/L			04/06/12 22:09	100
4-Methyl-2-pentanone (MIBK)	ND		1000		ug/L			04/06/12 22:09	100
Acetone	ND *		5000		ug/L			04/06/12 22:09	100
Benzene	ND		100		ug/L			04/06/12 22:09	100
Bromobenzene	ND		100		ug/L			04/06/12 22:09	100
Bromoform	ND		100		ug/L			04/06/12 22:09	100
Bromomethane	ND		200		ug/L			04/06/12 22:09	100
Carbon disulfide	ND		1000		ug/L			04/06/12 22:09	100
Carbon tetrachloride	ND		100		ug/L			04/06/12 22:09	100
Chlorobenzene	ND		100		ug/L			04/06/12 22:09	100
Chlorobromomethane	ND		100		ug/L			04/06/12 22:09	100
Chlorodibromomethane	ND		50		ug/L			04/06/12 22:09	100
Chloroethane	ND		200		ug/L			04/06/12 22:09	100
Chloroform	ND		100		ug/L			04/06/12 22:09	100
Chloromethane	ND		200		ug/L			04/06/12 22:09	100
<b>cis-1,2-Dichloroethene</b>	<b>2600</b>		100		ug/L			04/06/12 22:09	100
cis-1,3-Dichloropropene	ND		40		ug/L			04/06/12 22:09	100
Dibromomethane	ND		100		ug/L			04/06/12 22:09	100
Dichlorobromomethane	ND		50		ug/L			04/06/12 22:09	100
Dichlorodifluoromethane	ND		100		ug/L			04/06/12 22:09	100
Ethyl ether	ND		100		ug/L			04/06/12 22:09	100

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Client Sample ID: DupX1							Lab Sample ID: 360-39842-24		
Date Collected: 04/02/12 12:00							Matrix: Water		
Date Received: 04/04/12 13:00									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		100		ug/L			04/06/12 22:09	100
Ethylene Dibromide	ND		100		ug/L			04/06/12 22:09	100
Hexachlorobutadiene	ND		40		ug/L			04/06/12 22:09	100
Isopropyl ether	ND		1000		ug/L			04/06/12 22:09	100
Isopropylbenzene	ND		100		ug/L			04/06/12 22:09	100
m-Xylene & p-Xylene	ND		200		ug/L			04/06/12 22:09	100
Methyl tert-butyl ether	ND		100		ug/L			04/06/12 22:09	100
Methylene Chloride	ND		200		ug/L			04/06/12 22:09	100
n-Butylbenzene	ND		100		ug/L			04/06/12 22:09	100
N-Propylbenzene	ND		100		ug/L			04/06/12 22:09	100
Naphthalene	ND		500		ug/L			04/06/12 22:09	100
o-Xylene	ND		100		ug/L			04/06/12 22:09	100
sec-Butylbenzene	ND		100		ug/L			04/06/12 22:09	100
Styrene	ND		100		ug/L			04/06/12 22:09	100
Tert-amyl methyl ether	ND		500		ug/L			04/06/12 22:09	100
Tert-butyl ethyl ether	ND		500		ug/L			04/06/12 22:09	100
tert-Butylbenzene	ND		100		ug/L			04/06/12 22:09	100
Tetrachloroethene	ND		100		ug/L			04/06/12 22:09	100
Tetrahydrofuran	ND		1000		ug/L			04/06/12 22:09	100
Toluene	ND		100		ug/L			04/06/12 22:09	100
trans-1,2-Dichloroethene	ND		100		ug/L			04/06/12 22:09	100
trans-1,3-Dichloropropene	ND		40		ug/L			04/06/12 22:09	100
<b>Trichloroethene</b>	<b>1400</b>		100		ug/L			04/06/12 22:09	100
Trichlorofluoromethane	ND		100		ug/L			04/06/12 22:09	100
<b>Vinyl chloride</b>	<b>120</b>		50		ug/L			04/06/12 22:09	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		70 - 130					04/06/12 22:09	100
Dibromofluoromethane	101		70 - 130					04/06/12 22:09	100
Toluene-d8 (Surr)	102		70 - 130					04/06/12 22:09	100

Client Sample ID: DupX2  
Date Collected: 04/02/12 12:00  
Date Received: 04/04/12 13:00

Lab Sample ID: 360-39842-25  
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/06/12 22:31	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/06/12 22:31	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/06/12 22:31	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/06/12 22:31	1
1,1-Dichloroethane	ND		1.0		ug/L			04/06/12 22:31	1
1,1-Dichloroethene	ND		1.0		ug/L			04/06/12 22:31	1
1,1-Dichloropropene	ND		1.0		ug/L			04/06/12 22:31	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/06/12 22:31	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/06/12 22:31	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/06/12 22:31	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/06/12 22:31	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/06/12 22:31	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/06/12 22:31	1
1,2-Dichloroethane	ND		1.0		ug/L			04/06/12 22:31	1
1,2-Dichloropropane	ND		1.0		ug/L			04/06/12 22:31	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/06/12 22:31	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: DupX2**

**Date Collected: 04/02/12 12:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-25**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			04/06/12 22:31	1
1,3-Dichloropropane	ND		1.0		ug/L			04/06/12 22:31	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/06/12 22:31	1
1,4-Dioxane	ND		50		ug/L			04/06/12 22:31	1
2,2-Dichloropropane	ND		1.0		ug/L			04/06/12 22:31	1
2-Butanone (MEK)	ND *		10		ug/L			04/06/12 22:31	1
2-Chlorotoluene	ND		1.0		ug/L			04/06/12 22:31	1
2-Hexanone	ND		10		ug/L			04/06/12 22:31	1
4-Chlorotoluene	ND		1.0		ug/L			04/06/12 22:31	1
4-Isopropyltoluene	ND		1.0		ug/L			04/06/12 22:31	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/06/12 22:31	1
Acetone	ND *		50		ug/L			04/06/12 22:31	1
Benzene	ND		1.0		ug/L			04/06/12 22:31	1
Bromobenzene	ND		1.0		ug/L			04/06/12 22:31	1
Bromoform	ND		1.0		ug/L			04/06/12 22:31	1
Bromomethane	ND		2.0		ug/L			04/06/12 22:31	1
Carbon disulfide	ND		10		ug/L			04/06/12 22:31	1
Carbon tetrachloride	ND		1.0		ug/L			04/06/12 22:31	1
Chlorobenzene	ND		1.0		ug/L			04/06/12 22:31	1
Chlorobromomethane	ND		1.0		ug/L			04/06/12 22:31	1
Chlorodibromomethane	ND		0.50		ug/L			04/06/12 22:31	1
Chloroethane	ND		2.0		ug/L			04/06/12 22:31	1
Chloroform	ND		1.0		ug/L			04/06/12 22:31	1
Chloromethane	ND		2.0		ug/L			04/06/12 22:31	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/06/12 22:31	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 22:31	1
Dibromomethane	ND		1.0		ug/L			04/06/12 22:31	1
Dichlorobromomethane	ND		0.50		ug/L			04/06/12 22:31	1
Dichlorodifluoromethane	ND		1.0		ug/L			04/06/12 22:31	1
Ethyl ether	ND		1.0		ug/L			04/06/12 22:31	1
Ethylbenzene	ND		1.0		ug/L			04/06/12 22:31	1
Ethylene Dibromide	ND		1.0		ug/L			04/06/12 22:31	1
Hexachlorobutadiene	ND		0.40		ug/L			04/06/12 22:31	1
Isopropyl ether	ND		10		ug/L			04/06/12 22:31	1
Isopropylbenzene	ND		1.0		ug/L			04/06/12 22:31	1
m-Xylene & p-Xylene	ND		2.0		ug/L			04/06/12 22:31	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/06/12 22:31	1
Methylene Chloride	ND		2.0		ug/L			04/06/12 22:31	1
n-Butylbenzene	ND		1.0		ug/L			04/06/12 22:31	1
N-Propylbenzene	ND		1.0		ug/L			04/06/12 22:31	1
Naphthalene	ND		5.0		ug/L			04/06/12 22:31	1
o-Xylene	ND		1.0		ug/L			04/06/12 22:31	1
sec-Butylbenzene	ND		1.0		ug/L			04/06/12 22:31	1
Styrene	ND		1.0		ug/L			04/06/12 22:31	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/06/12 22:31	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/06/12 22:31	1
tert-Butylbenzene	ND		1.0		ug/L			04/06/12 22:31	1
Tetrachloroethene	ND		1.0		ug/L			04/06/12 22:31	1
Tetrahydrofuran	ND		10		ug/L			04/06/12 22:31	1
Toluene	ND		1.0		ug/L			04/06/12 22:31	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/06/12 22:31	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: DupX2**

**Date Collected: 04/02/12 12:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-25**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 22:31	1
Trichloroethene	ND		1.0		ug/L			04/06/12 22:31	1
Trichlorofluoromethane	ND		1.0		ug/L			04/06/12 22:31	1
Vinyl chloride	ND		0.50		ug/L			04/06/12 22:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		70 - 130					04/06/12 22:31	1
Dibromofluoromethane	102		70 - 130					04/06/12 22:31	1
Toluene-d8 (Surr)	102		70 - 130					04/06/12 22:31	1

**Client Sample ID: DupX3**

**Date Collected: 04/02/12 12:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-26**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10		ug/L			04/06/12 22:53	10
1,1,1-Trichloroethane	ND		10		ug/L			04/06/12 22:53	10
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			04/06/12 22:53	10
1,1,2-Trichloroethane	ND		10		ug/L			04/06/12 22:53	10
1,1-Dichloroethane	ND		10		ug/L			04/06/12 22:53	10
1,1-Dichloroethene	ND		10		ug/L			04/06/12 22:53	10
1,1-Dichloropropene	ND		10		ug/L			04/06/12 22:53	10
1,2,3-Trichlorobenzene	ND		10		ug/L			04/06/12 22:53	10
1,2,3-Trichloropropane	ND		10		ug/L			04/06/12 22:53	10
1,2,4-Trichlorobenzene	ND		10		ug/L			04/06/12 22:53	10
1,2,4-Trimethylbenzene	ND		10		ug/L			04/06/12 22:53	10
1,2-Dibromo-3-Chloropropane	ND		50		ug/L			04/06/12 22:53	10
1,2-Dichlorobenzene	ND		10		ug/L			04/06/12 22:53	10
1,2-Dichloroethane	ND		10		ug/L			04/06/12 22:53	10
1,2-Dichloropropane	ND		10		ug/L			04/06/12 22:53	10
1,3,5-Trimethylbenzene	ND		10		ug/L			04/06/12 22:53	10
1,3-Dichlorobenzene	ND		10		ug/L			04/06/12 22:53	10
1,3-Dichloropropane	ND		10		ug/L			04/06/12 22:53	10
1,4-Dichlorobenzene	ND		10		ug/L			04/06/12 22:53	10
1,4-Dioxane	ND		500		ug/L			04/06/12 22:53	10
2,2-Dichloropropane	ND		10		ug/L			04/06/12 22:53	10
2-Butanone (MEK)	ND *		100		ug/L			04/06/12 22:53	10
2-Chlorotoluene	ND		10		ug/L			04/06/12 22:53	10
2-Hexanone	ND		100		ug/L			04/06/12 22:53	10
4-Chlorotoluene	ND		10		ug/L			04/06/12 22:53	10
4-Isopropyltoluene	ND		10		ug/L			04/06/12 22:53	10
4-Methyl-2-pentanone (MIBK)	ND		100		ug/L			04/06/12 22:53	10
Acetone	ND *		500		ug/L			04/06/12 22:53	10
Benzene	ND		10		ug/L			04/06/12 22:53	10
Bromobenzene	ND		10		ug/L			04/06/12 22:53	10
Bromoform	ND		10		ug/L			04/06/12 22:53	10
Bromomethane	ND		20		ug/L			04/06/12 22:53	10
Carbon disulfide	ND		100		ug/L			04/06/12 22:53	10
Carbon tetrachloride	ND		10		ug/L			04/06/12 22:53	10
Chlorobenzene	ND		10		ug/L			04/06/12 22:53	10
Chlorobromomethane	ND		10		ug/L			04/06/12 22:53	10
Chlorodibromomethane	ND		5.0		ug/L			04/06/12 22:53	10

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Client Sample ID: DupX3**

**Date Collected: 04/02/12 12:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-26**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		20		ug/L			04/06/12 22:53	10
Chloroform	ND		10		ug/L			04/06/12 22:53	10
Chloromethane	ND		20		ug/L			04/06/12 22:53	10
<b>cis-1,2-Dichloroethene</b>	<b>370</b>		10		ug/L			04/06/12 22:53	10
cis-1,3-Dichloropropene	ND		4.0		ug/L			04/06/12 22:53	10
Dibromomethane	ND		10		ug/L			04/06/12 22:53	10
Dichlorobromomethane	ND		5.0		ug/L			04/06/12 22:53	10
Dichlorodifluoromethane	ND		10		ug/L			04/06/12 22:53	10
Ethyl ether	ND		10		ug/L			04/06/12 22:53	10
Ethylbenzene	ND		10		ug/L			04/06/12 22:53	10
Ethylene Dibromide	ND		10		ug/L			04/06/12 22:53	10
Hexachlorobutadiene	ND		4.0		ug/L			04/06/12 22:53	10
Isopropyl ether	ND		100		ug/L			04/06/12 22:53	10
Isopropylbenzene	ND		10		ug/L			04/06/12 22:53	10
m-Xylene & p-Xylene	ND		20		ug/L			04/06/12 22:53	10
Methyl tert-butyl ether	ND		10		ug/L			04/06/12 22:53	10
Methylene Chloride	ND		20		ug/L			04/06/12 22:53	10
n-Butylbenzene	ND		10		ug/L			04/06/12 22:53	10
N-Propylbenzene	ND		10		ug/L			04/06/12 22:53	10
Naphthalene	ND		50		ug/L			04/06/12 22:53	10
o-Xylene	ND		10		ug/L			04/06/12 22:53	10
sec-Butylbenzene	ND		10		ug/L			04/06/12 22:53	10
Styrene	ND		10		ug/L			04/06/12 22:53	10
Tert-amyl methyl ether	ND		50		ug/L			04/06/12 22:53	10
Tert-butyl ethyl ether	ND		50		ug/L			04/06/12 22:53	10
tert-Butylbenzene	ND		10		ug/L			04/06/12 22:53	10
Tetrachloroethene	ND		10		ug/L			04/06/12 22:53	10
Tetrahydrofuran	ND		100		ug/L			04/06/12 22:53	10
Toluene	ND		10		ug/L			04/06/12 22:53	10
trans-1,2-Dichloroethene	ND		10		ug/L			04/06/12 22:53	10
trans-1,3-Dichloropropene	ND		4.0		ug/L			04/06/12 22:53	10
<b>Trichloroethene</b>	<b>140</b>		10		ug/L			04/06/12 22:53	10
Trichlorofluoromethane	ND		10		ug/L			04/06/12 22:53	10
<b>Vinyl chloride</b>	<b>53</b>		5.0		ug/L			04/06/12 22:53	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		70 - 130					04/06/12 22:53	10
Dibromofluoromethane	100		70 - 130					04/06/12 22:53	10
Toluene-d8 (Sur)	101		70 - 130					04/06/12 22:53	10

**Client Sample ID: Trip Blank**

**Date Collected: 04/02/12 10:00**

**Date Received: 04/04/12 13:00**

**Lab Sample ID: 360-39842-27**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/06/12 17:27	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/06/12 17:27	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/06/12 17:27	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/06/12 17:27	1
1,1-Dichloroethane	ND		1.0		ug/L			04/06/12 17:27	1
1,1-Dichloroethene	ND		1.0		ug/L			04/06/12 17:27	1
1,1-Dichloropropene	ND		1.0		ug/L			04/06/12 17:27	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Client Sample ID: Trip Blank		Lab Sample ID: 360-39842-27							
		Matrix: Water							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/06/12 17:27	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/06/12 17:27	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/06/12 17:27	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/06/12 17:27	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/06/12 17:27	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/06/12 17:27	1
1,2-Dichloroethane	ND		1.0		ug/L			04/06/12 17:27	1
1,2-Dichloropropane	ND		1.0		ug/L			04/06/12 17:27	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/06/12 17:27	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/06/12 17:27	1
1,3-Dichloropropane	ND		1.0		ug/L			04/06/12 17:27	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/06/12 17:27	1
1,4-Dioxane	ND		50		ug/L			04/06/12 17:27	1
2,2-Dichloropropane	ND		1.0		ug/L			04/06/12 17:27	1
2-Butanone (MEK)	ND *		10		ug/L			04/06/12 17:27	1
2-Chlorotoluene	ND		1.0		ug/L			04/06/12 17:27	1
2-Hexanone	ND		10		ug/L			04/06/12 17:27	1
4-Chlorotoluene	ND		1.0		ug/L			04/06/12 17:27	1
4-Isopropyltoluene	ND		1.0		ug/L			04/06/12 17:27	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/06/12 17:27	1
Acetone	ND *		50		ug/L			04/06/12 17:27	1
Benzene	ND		1.0		ug/L			04/06/12 17:27	1
Bromobenzene	ND		1.0		ug/L			04/06/12 17:27	1
Bromoform	ND		1.0		ug/L			04/06/12 17:27	1
Bromomethane	ND		2.0		ug/L			04/06/12 17:27	1
Carbon disulfide	ND		10		ug/L			04/06/12 17:27	1
Carbon tetrachloride	ND		1.0		ug/L			04/06/12 17:27	1
Chlorobenzene	ND		1.0		ug/L			04/06/12 17:27	1
Chlorobromomethane	ND		1.0		ug/L			04/06/12 17:27	1
Chlorodibromomethane	ND		0.50		ug/L			04/06/12 17:27	1
Chloroethane	ND		2.0		ug/L			04/06/12 17:27	1
Chloroform	ND		1.0		ug/L			04/06/12 17:27	1
Chloromethane	ND		2.0		ug/L			04/06/12 17:27	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/06/12 17:27	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 17:27	1
Dibromomethane	ND		1.0		ug/L			04/06/12 17:27	1
Dichlorobromomethane	ND		0.50		ug/L			04/06/12 17:27	1
Dichlorodifluoromethane	ND		1.0		ug/L			04/06/12 17:27	1
Ethyl ether	ND		1.0		ug/L			04/06/12 17:27	1
Ethylbenzene	ND		1.0		ug/L			04/06/12 17:27	1
Ethylene Dibromide	ND		1.0		ug/L			04/06/12 17:27	1
Hexachlorobutadiene	ND		0.40		ug/L			04/06/12 17:27	1
Isopropyl ether	ND		10		ug/L			04/06/12 17:27	1
Isopropylbenzene	ND		1.0		ug/L			04/06/12 17:27	1
m-Xylene & p-Xylene	ND		2.0		ug/L			04/06/12 17:27	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/06/12 17:27	1
Methylene Chloride	ND		2.0		ug/L			04/06/12 17:27	1
n-Butylbenzene	ND		1.0		ug/L			04/06/12 17:27	1
N-Propylbenzene	ND		1.0		ug/L			04/06/12 17:27	1
Naphthalene	ND		5.0		ug/L			04/06/12 17:27	1
o-Xylene	ND		1.0		ug/L			04/06/12 17:27	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Client Sample ID: Trip Blank							Lab Sample ID: 360-39842-27		
Date Collected: 04/02/12 10:00							Matrix: Water		
Date Received: 04/04/12 13:00									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			04/06/12 17:27	1
Styrene	ND		1.0		ug/L			04/06/12 17:27	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/06/12 17:27	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/06/12 17:27	1
tert-Butylbenzene	ND		1.0		ug/L			04/06/12 17:27	1
Tetrachloroethene	ND		1.0		ug/L			04/06/12 17:27	1
Tetrahydrofuran	ND		10		ug/L			04/06/12 17:27	1
Toluene	ND		1.0		ug/L			04/06/12 17:27	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/06/12 17:27	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/06/12 17:27	1
Trichloroethene	ND		1.0		ug/L			04/06/12 17:27	1
Trichlorofluoromethane	ND		1.0		ug/L			04/06/12 17:27	1
Vinyl chloride	ND		0.50		ug/L			04/06/12 17:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		70 - 130					04/06/12 17:27	1
Dibromofluoromethane	102		70 - 130					04/06/12 17:27	1
Toluene-d8 (Surr)	101		70 - 130					04/06/12 17:27	1

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Client Sample ID: MW-265M

Date Collected: 04/02/12 14:00

Date Received: 04/04/12 13:00

Lab Sample ID: 360-39842-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	490		10		ug/L			04/06/12 17:49	10
<hr/>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		70 - 130					04/06/12 17:49	10
Dibromofluoromethane	102		70 - 130					04/06/12 17:49	10
Toluene-d8 (Surr)	102		70 - 130					04/06/12 17:49	10

## Definitions/Glossary

Client: Innovative Engineering Solutions, Inc

Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
F	MS or MSD 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: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

## GC/MS VOA

### Analysis Batch: 89257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
360-39842-1	IW-4	Total/NA	Water	8260C	5
360-39842-2	IW-5	Total/NA	Water	8260C	5
360-39842-3	IW-15	Total/NA	Water	8260C	5
360-39842-4	MW-261S	Total/NA	Water	8260C	6
360-39842-5	MW-264M	Total/NA	Water	8260C	7
360-39842-6	MW-265S	Total/NA	Water	8260C	7
360-39842-7	MW-265M	Total/NA	Water	8260C	8
360-39842-8	MW-265D	Total/NA	Water	8260C	8
360-39842-9	MW-266Ma	Total/NA	Water	8260C	9
360-39842-10	MW-266Mb	Total/NA	Water	8260C	9
360-39842-11	MW-267S	Total/NA	Water	8260C	10
360-39842-12	MW-267M	Total/NA	Water	8260C	10
360-39842-12 MS	MW-267M	Total/NA	Water	8260C	11
360-39842-12 MSD	MW-267M	Total/NA	Water	8260C	11
LCS 360-89257/3	Lab Control Sample	Total/NA	Water	8260C	12
LCSD 360-89257/4	Lab Control Sample Dup	Total/NA	Water	8260C	12
MB 360-89257/6	Method Blank	Total/NA	Water	8260C	13

### Analysis Batch: 89287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
360-39842-7 - DL	MW-265M	Total/NA	Water	8260C	14
360-39842-13	MW-268M	Total/NA	Water	8260C	15
360-39842-14	MW-268D	Total/NA	Water	8260C	15
360-39842-15	MW-551	Total/NA	Water	8260C	15
360-39842-16	MW-552	Total/NA	Water	8260C	15
360-39842-17	MW-553	Total/NA	Water	8260C	15
360-39842-18	MW-560	Total/NA	Water	8260C	15
360-39842-19	MW-561	Total/NA	Water	8260C	15
360-39842-20	MW-562	Total/NA	Water	8260C	15
360-39842-21	REW-1	Total/NA	Water	8260C	15
360-39842-22	REW-4	Total/NA	Water	8260C	15
360-39842-23	REW-5	Total/NA	Water	8260C	15
360-39842-23 MS	REW-5	Total/NA	Water	8260C	15
360-39842-23 MSD	REW-5	Total/NA	Water	8260C	15
360-39842-24	DupX1	Total/NA	Water	8260C	15
360-39842-25	DupX2	Total/NA	Water	8260C	15
360-39842-26	DupX3	Total/NA	Water	8260C	15
360-39842-27	Trip Blank	Total/NA	Water	8260C	15
LCS 360-89287/3	Lab Control Sample	Total/NA	Water	8260C	15
LCSD 360-89287/4	Lab Control Sample Dup	Total/NA	Water	8260C	15
MB 360-89287/6	Method Blank	Total/NA	Water	8260C	15

# Surrogate Summary

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (70-130)	DBFM (70-130)	TOL (70-130)
360-39842-1	IW-4	100	102	98
360-39842-2	IW-5	99	102	101
360-39842-3	IW-15	99	101	100
360-39842-4	MW-261S	98	101	102
360-39842-5	MW-264M	100	103	98
360-39842-6	MW-265S	98	103	100
360-39842-7	MW-265M	102	103	99
360-39842-7 - DL	MW-265M	101	102	102
360-39842-8	MW-265D	97	102	101
360-39842-9	MW-266Ma	98	102	100
360-39842-10	MW-266Mb	97	101	101
360-39842-11	MW-267S	98	100	101
360-39842-12	MW-267M	100	104	100
360-39842-12 MS	MW-267M	100	103	102
360-39842-12 MSD	MW-267M	102	103	102
360-39842-13	MW-268M	100	103	101
360-39842-14	MW-268D	99	100	100
360-39842-15	MW-551	98	100	101
360-39842-16	MW-552	99	99	101
360-39842-17	MW-553	99	100	101
360-39842-18	MW-560	99	102	97
360-39842-19	MW-561	99	100	101
360-39842-20	MW-562	99	101	101
360-39842-21	REW-1	98	102	101
360-39842-22	REW-4	100	102	100
360-39842-23	REW-5	98	100	101
360-39842-23 MS	REW-5	101	101	102
360-39842-23 MSD	REW-5	100	101	102
360-39842-24	DupX1	98	101	102
360-39842-25	DupX2	100	102	102
360-39842-26	DupX3	99	100	101
360-39842-27	Trip Blank	100	102	101
LCS 360-89257/3	Lab Control Sample	102	100	102
LCS 360-89287/3	Lab Control Sample	99	101	103
LCSD 360-89257/4	Lab Control Sample Dup	100	100	102
LCSD 360-89287/4	Lab Control Sample Dup	102	100	103
MB 360-89257/6	Method Blank	101	102	101
MB 360-89287/6	Method Blank	98	100	101

### Surrogate Legend

BFB = 4-Bromofluorobenzene

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: MB 360-89257/6**

**Matrix: Water**

**Analysis Batch: 89257**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/05/12 23:50	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/05/12 23:50	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/05/12 23:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/05/12 23:50	1
1,1-Dichloroethane	ND		1.0		ug/L			04/05/12 23:50	1
1,1-Dichloroethene	ND		1.0		ug/L			04/05/12 23:50	1
1,1-Dichloropropene	ND		1.0		ug/L			04/05/12 23:50	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/05/12 23:50	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/05/12 23:50	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/05/12 23:50	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/05/12 23:50	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/05/12 23:50	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/05/12 23:50	1
1,2-Dichloroethane	ND		1.0		ug/L			04/05/12 23:50	1
1,2-Dichloropropane	ND		1.0		ug/L			04/05/12 23:50	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/05/12 23:50	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/05/12 23:50	1
1,3-Dichloropropane	ND		1.0		ug/L			04/05/12 23:50	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/05/12 23:50	1
1,4-Dioxane	ND		50		ug/L			04/05/12 23:50	1
2,2-Dichloropropane	ND		1.0		ug/L			04/05/12 23:50	1
2-Butanone (MEK)	ND		10		ug/L			04/05/12 23:50	1
2-Chlorotoluene	ND		1.0		ug/L			04/05/12 23:50	1
2-Hexanone	ND		10		ug/L			04/05/12 23:50	1
4-Chlorotoluene	ND		1.0		ug/L			04/05/12 23:50	1
4-Isopropyltoluene	ND		1.0		ug/L			04/05/12 23:50	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/05/12 23:50	1
Acetone	ND		50		ug/L			04/05/12 23:50	1
Benzene	ND		1.0		ug/L			04/05/12 23:50	1
Bromobenzene	ND		1.0		ug/L			04/05/12 23:50	1
Bromoform	ND		1.0		ug/L			04/05/12 23:50	1
Bromomethane	ND		2.0		ug/L			04/05/12 23:50	1
Carbon disulfide	ND		10		ug/L			04/05/12 23:50	1
Carbon tetrachloride	ND		1.0		ug/L			04/05/12 23:50	1
Chlorobenzene	ND		1.0		ug/L			04/05/12 23:50	1
Chlorobromomethane	ND		1.0		ug/L			04/05/12 23:50	1
Chlorodibromomethane	ND		0.50		ug/L			04/05/12 23:50	1
Chloroethane	ND		2.0		ug/L			04/05/12 23:50	1
Chloroform	ND		1.0		ug/L			04/05/12 23:50	1
Chloromethane	ND		2.0		ug/L			04/05/12 23:50	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/05/12 23:50	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/05/12 23:50	1
Dibromomethane	ND		1.0		ug/L			04/05/12 23:50	1
Dichlorobromomethane	ND		0.50		ug/L			04/05/12 23:50	1
Dichlorodifluoromethane	ND		1.0		ug/L			04/05/12 23:50	1
Ethyl ether	ND		1.0		ug/L			04/05/12 23:50	1
Ethylbenzene	ND		1.0		ug/L			04/05/12 23:50	1
Ethylene Dibromide	ND		1.0		ug/L			04/05/12 23:50	1
Hexachlorobutadiene	ND		0.40		ug/L			04/05/12 23:50	1

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: MB 360-89257/6**

**Matrix: Water**

**Analysis Batch: 89257**

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

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Isopropyl ether	ND		10		ug/L			04/05/12 23:50	1
Isopropylbenzene	ND		1.0		ug/L			04/05/12 23:50	1
m-Xylene & p-Xylene	ND		2.0		ug/L			04/05/12 23:50	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/05/12 23:50	1
Methylene Chloride	ND		2.0		ug/L			04/05/12 23:50	1
n-Butylbenzene	ND		1.0		ug/L			04/05/12 23:50	1
N-Propylbenzene	ND		1.0		ug/L			04/05/12 23:50	1
Naphthalene	ND		5.0		ug/L			04/05/12 23:50	1
o-Xylene	ND		1.0		ug/L			04/05/12 23:50	1
sec-Butylbenzene	ND		1.0		ug/L			04/05/12 23:50	1
Styrene	ND		1.0		ug/L			04/05/12 23:50	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/05/12 23:50	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/05/12 23:50	1
tert-Butylbenzene	ND		1.0		ug/L			04/05/12 23:50	1
Tetrachloroethene	ND		1.0		ug/L			04/05/12 23:50	1
Tetrahydrofuran	ND		10		ug/L			04/05/12 23:50	1
Toluene	ND		1.0		ug/L			04/05/12 23:50	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/05/12 23:50	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/05/12 23:50	1
Trichloroethene	ND		1.0		ug/L			04/05/12 23:50	1
Trichlorofluoromethane	ND		1.0		ug/L			04/05/12 23:50	1
Vinyl chloride	ND		0.50		ug/L			04/05/12 23:50	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	101		70 - 130		04/05/12 23:50	1
Dibromofluoromethane	102		70 - 130		04/05/12 23:50	1
Toluene-d8 (Surrogate)	101		70 - 130		04/05/12 23:50	1

**Lab Sample ID: LCS 360-89257/3**

**Matrix: Water**

**Analysis Batch: 89257**

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

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
	Added								
1,1,1,2-Tetrachloroethane	20.0		19.1		ug/L		96	70 - 130	
1,1,1-Trichloroethane	20.0		20.7		ug/L		104	70 - 130	
1,1,2,2-Tetrachloroethane	20.0		17.9		ug/L		90	70 - 130	
1,1,2-Trichloroethane	20.0		19.8		ug/L		99	70 - 130	
1,1-Dichloroethane	20.0		19.6		ug/L		98	70 - 130	
1,1-Dichloroethene	20.0		19.4		ug/L		97	70 - 130	
1,1-Dichloropropene	20.0		18.4		ug/L		92	70 - 130	
1,2,3-Trichlorobenzene	20.0		19.1		ug/L		96	70 - 130	
1,2,3-Trichloropropane	20.0		19.0		ug/L		95	70 - 130	
1,2,4-Trichlorobenzene	20.0		17.3		ug/L		87	70 - 130	
1,2,4-Trimethylbenzene	20.0		20.3		ug/L		102	70 - 130	
1,2-Dibromo-3-Chloropropane	20.0		18.5		ug/L		93	70 - 130	
1,2-Dichlorobenzene	20.0		17.7		ug/L		89	70 - 130	
1,2-Dichloroethane	20.0		20.3		ug/L		102	70 - 130	
1,2-Dichloropropane	20.0		19.6		ug/L		98	70 - 130	
1,3,5-Trimethylbenzene	20.0		19.9		ug/L		100	70 - 130	

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

Lab Sample ID: LCS 360-89257/3

Matrix: Water

Analysis Batch: 89257

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

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
1,3-Dichlorobenzene	20.0	17.9		ug/L		90	70 - 130	
1,3-Dichloropropane	20.0	18.9		ug/L		95	70 - 130	
1,4-Dichlorobenzene	20.0	18.0		ug/L		90	70 - 130	
1,4-Dioxane	200	192		ug/L		96	70 - 130	
2,2-Dichloropropane	20.0	19.4		ug/L		97	70 - 130	
2-Butanone (MEK)	200	122 *		ug/L		61	70 - 130	
2-Chlorotoluene	20.0	19.3		ug/L		97	70 - 130	
2-Hexanone	200	159		ug/L		79	70 - 130	
4-Chlorotoluene	20.0	19.3		ug/L		97	70 - 130	
4-Isopropyltoluene	20.0	20.8		ug/L		104	70 - 130	
4-Methyl-2-pentanone (MIBK)	200	186		ug/L		93	70 - 130	
Acetone	200	120 *		ug/L		60	70 - 130	
Benzene	20.0	19.4		ug/L		97	70 - 130	
Bromobenzene	20.0	19.4		ug/L		97	70 - 130	
Bromoform	20.0	18.6		ug/L		93	70 - 130	
Bromomethane	20.0	20.3		ug/L		102	70 - 130	
Carbon disulfide	20.0	22.6		ug/L		113	70 - 130	
Carbon tetrachloride	20.0	19.9		ug/L		100	70 - 130	
Chlorobenzene	20.0	19.5		ug/L		98	70 - 130	
Chlorobromomethane	20.0	19.0		ug/L		95	70 - 130	
Chlorodibromomethane	20.0	20.6		ug/L		103	70 - 130	
Chloroethane	20.0	18.8		ug/L		94	70 - 130	
Chloroform	20.0	19.2		ug/L		96	70 - 130	
Chloromethane	20.0	15.6		ug/L		78	70 - 130	
cis-1,2-Dichloroethene	20.0	19.4		ug/L		97	70 - 130	
cis-1,3-Dichloropropene	20.0	17.7		ug/L		89	70 - 130	
Dibromomethane	20.0	19.9		ug/L		100	70 - 130	
Dichlorobromomethane	20.0	18.6		ug/L		93	70 - 130	
Dichlorodifluoromethane	20.0	14.4		ug/L		72	70 - 130	
Ethyl ether	20.0	19.2		ug/L		96	70 - 130	
Ethylbenzene	20.0	18.2		ug/L		91	70 - 130	
Ethylene Dibromide	20.0	18.8		ug/L		94	70 - 130	
Hexachlorobutadiene	20.0	18.8		ug/L		94	70 - 130	
Isopropyl ether	20.0	18.9		ug/L		95	70 - 130	
Isopropylbenzene	20.0	19.0		ug/L		95	70 - 130	
m-Xylene & p-Xylene	40.0	36.3		ug/L		91	70 - 130	
Methyl tert-butyl ether	20.0	19.3		ug/L		97	70 - 130	
Methylene Chloride	20.0	18.1		ug/L		91	70 - 130	
n-Butylbenzene	20.0	19.1		ug/L		96	70 - 130	
N-Propylbenzene	20.0	20.1		ug/L		101	70 - 130	
Naphthalene	20.0	18.5		ug/L		93	70 - 130	
o-Xylene	20.0	19.6		ug/L		98	70 - 130	
sec-Butylbenzene	20.0	20.1		ug/L		101	70 - 130	
Styrene	20.0	18.0		ug/L		90	70 - 130	
Tert-amyl methyl ether	20.0	19.7		ug/L		99	70 - 130	
Tert-butyl ethyl ether	20.0	19.7		ug/L		99	70 - 130	
tert-Butylbenzene	20.0	20.6		ug/L		103	70 - 130	
Tetrachloroethene	20.0	19.9		ug/L		100	70 - 130	
Tetrahydrofuran	200	193		ug/L		97	70 - 130	
Toluene	20.0	18.7		ug/L		94	70 - 130	

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: LCS 360-89257/3**

**Matrix: Water**

**Analysis Batch: 89257**

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

Analyte	Spike	LCS	LCS	%Rec.			
	Added	Result	Qualifier	Unit	D	%Rec	Limits
trans-1,2-Dichloroethene	20.0	18.6		ug/L		93	70 - 130
trans-1,3-Dichloropropene	20.0	18.2		ug/L		91	70 - 130
Trichloroethene	20.0	19.5		ug/L		98	70 - 130
Trichlorofluoromethane	20.0	20.1		ug/L		101	70 - 130
Vinyl chloride	20.0	18.3		ug/L		92	70 - 130

Surrogate	LCS	LCS	%Rec.		
	%Recovery	Qualifier	Limits	RPD	Limit
4-Bromofluorobenzene	102		70 - 130		
Dibromofluoromethane	100		70 - 130		
Toluene-d8 (Surr)	102		70 - 130		

**Lab Sample ID: LCSD 360-89257/4**

**Matrix: Water**

**Analysis Batch: 89257**

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

Analyte	Spike	LCSD	LCSD	%Rec.			RPD	Limit
	Added	Result	Qualifier	Unit	D	%Rec		
1,1,1,2-Tetrachloroethane	20.0	18.5		ug/L		93	70 - 130	3 20
1,1,1-Trichloroethane	20.0	19.4		ug/L		97	70 - 130	6 20
1,1,2,2-Tetrachloroethane	20.0	17.8		ug/L		89	70 - 130	1 20
1,1,2-Trichloroethane	20.0	19.2		ug/L		96	70 - 130	3 20
1,1-Dichloroethane	20.0	18.9		ug/L		95	70 - 130	4 20
1,1-Dichloroethene	20.0	17.4		ug/L		87	70 - 130	11 20
1,1-Dichloropropene	20.0	17.2		ug/L		86	70 - 130	7 20
1,2,3-Trichlorobenzene	20.0	18.1		ug/L		91	70 - 130	5 20
1,2,3-Trichloropropane	20.0	18.4		ug/L		92	70 - 130	3 20
1,2,4-Trichlorobenzene	20.0	16.7		ug/L		84	70 - 130	4 20
1,2,4-Trimethylbenzene	20.0	18.9		ug/L		95	70 - 130	7 20
1,2-Dibromo-3-Chloropropane	20.0	18.2		ug/L		91	70 - 130	2 20
1,2-Dichlorobenzene	20.0	17.3		ug/L		87	70 - 130	2 20
1,2-Dichloroethane	20.0	19.8		ug/L		99	70 - 130	2 20
1,2-Dichloropropane	20.0	18.7		ug/L		94	70 - 130	5 20
1,3,5-Trimethylbenzene	20.0	18.6		ug/L		93	70 - 130	7 20
1,3-Dichlorobenzene	20.0	18.0		ug/L		90	70 - 130	1 20
1,3-Dichloropropane	20.0	18.5		ug/L		93	70 - 130	2 20
1,4-Dichlorobenzene	20.0	17.6		ug/L		88	70 - 130	2 20
1,4-Dioxane	200	173		ug/L		87	70 - 130	11 20
2,2-Dichloropropane	20.0	17.1		ug/L		86	70 - 130	13 20
2-Butanone (MEK)	200	120 *		ug/L		60	70 - 130	2 20
2-Chlorotoluene	20.0	18.5		ug/L		93	70 - 130	4 20
2-Hexanone	200	158		ug/L		79	70 - 130	0 20
4-Chlorotoluene	20.0	18.4		ug/L		92	70 - 130	5 20
4-Isopropyltoluene	20.0	19.2		ug/L		96	70 - 130	8 20
4-Methyl-2-pentanone (MIBK)	200	183		ug/L		91	70 - 130	2 20
Acetone	200	120 *		ug/L		60	70 - 130	0 20
Benzene	20.0	18.6		ug/L		93	70 - 130	4 20
Bromobenzene	20.0	18.8		ug/L		94	70 - 130	3 20
Bromoform	20.0	18.5		ug/L		93	70 - 130	1 20
Bromomethane	20.0	17.1		ug/L		86	70 - 130	17 20
Carbon disulfide	20.0	19.0		ug/L		95	70 - 130	17 20

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: LCSD 360-89257/4**

**Matrix: Water**

**Analysis Batch: 89257**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Added	Result	Qualifier				Limits		
Carbon tetrachloride	20.0	18.3		ug/L	92	70 - 130	8	20	
Chlorobenzene	20.0	18.8		ug/L	94	70 - 130	4	20	
Chlorobromomethane	20.0	18.5		ug/L	93	70 - 130	3	20	
Chlorodibromomethane	20.0	19.5		ug/L	98	70 - 130	5	20	
Chloroethane	20.0	16.0		ug/L	80	70 - 130	16	20	
Chloroform	20.0	18.7		ug/L	94	70 - 130	3	20	
Chloromethane	20.0	14.1		ug/L	71	70 - 130	10	20	
cis-1,2-Dichloroethene	20.0	18.5		ug/L	93	70 - 130	5	20	
cis-1,3-Dichloropropene	20.0	17.0		ug/L	85	70 - 130	4	20	
Dibromomethane	20.0	19.1		ug/L	96	70 - 130	4	20	
Dichlorobromomethane	20.0	18.2		ug/L	91	70 - 130	2	20	
Dichlorodifluoromethane	20.0	13.0 *		ug/L	65	70 - 130	10	20	
Ethyl ether	20.0	18.8		ug/L	94	70 - 130	2	20	
Ethylbenzene	20.0	17.5		ug/L	88	70 - 130	4	20	
Ethylene Dibromide	20.0	18.4		ug/L	92	70 - 130	2	20	
Hexachlorobutadiene	20.0	17.2		ug/L	86	70 - 130	9	20	
Isopropyl ether	20.0	18.6		ug/L	93	70 - 130	2	20	
Isopropylbenzene	20.0	17.9		ug/L	90	70 - 130	6	20	
m-Xylene & p-Xylene	40.0	34.6		ug/L	87	70 - 130	5	20	
Methyl tert-butyl ether	20.0	19.3		ug/L	97	70 - 130	0	20	
Methylene Chloride	20.0	17.7		ug/L	89	70 - 130	2	20	
n-Butylbenzene	20.0	18.1		ug/L	91	70 - 130	5	20	
N-Propylbenzene	20.0	18.9		ug/L	95	70 - 130	6	20	
Naphthalene	20.0	17.8		ug/L	89	70 - 130	4	20	
o-Xylene	20.0	19.0		ug/L	95	70 - 130	3	20	
sec-Butylbenzene	20.0	18.8		ug/L	94	70 - 130	7	20	
Styrene	20.0	17.6		ug/L	88	70 - 130	2	20	
Tert-amyl methyl ether	20.0	19.3		ug/L	97	70 - 130	2	20	
Tert-butyl ethyl ether	20.0	19.3		ug/L	97	70 - 130	2	20	
tert-Butylbenzene	20.0	19.0		ug/L	95	70 - 130	8	20	
Tetrachloroethene	20.0	18.5		ug/L	93	70 - 130	7	20	
Tetrahydrofuran	200	188		ug/L	94	70 - 130	3	20	
Toluene	20.0	17.9		ug/L	90	70 - 130	4	20	
trans-1,2-Dichloroethene	20.0	17.6		ug/L	88	70 - 130	6	20	
trans-1,3-Dichloropropene	20.0	17.6		ug/L	88	70 - 130	3	20	
Trichloroethene	20.0	18.8		ug/L	94	70 - 130	4	20	
Trichlorofluoromethane	20.0	17.7		ug/L	89	70 - 130	13	20	
Vinyl chloride	20.0	16.7		ug/L	84	70 - 130	9	20	

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	100		70 - 130
Dibromofluoromethane	100		70 - 130
Toluene-d8 (Surr)	102		70 - 130

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: 360-39842-12 MS**

**Matrix: Water**

**Analysis Batch: 89257**

**Client Sample ID: MW-267M**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
1,1,1,2-Tetrachloroethane	ND		2000	1880		ug/L	94	70 - 130	
1,1,1-Trichloroethane	ND		2000	2100		ug/L	105	70 - 130	
1,1,2,2-Tetrachloroethane	ND		2000	1810		ug/L	91	70 - 130	
1,1,2-Trichloroethane	ND		2000	1960		ug/L	98	70 - 130	
1,1-Dichloroethane	ND		2000	2010		ug/L	101	70 - 130	
1,1-Dichloroethene	ND		2000	2020		ug/L	101	70 - 130	
1,1-Dichloropropene	ND		2000	1830		ug/L	92	70 - 130	
1,2,3-Trichlorobenzene	ND		2000	1780		ug/L	89	70 - 130	
1,2,3-Trichloropropane	ND		2000	1870		ug/L	94	70 - 130	
1,2,4-Trichlorobenzene	ND		2000	1600		ug/L	80	70 - 130	
1,2,4-Trimethylbenzene	ND		2000	1940		ug/L	97	70 - 130	
1,2-Dibromo-3-Chloropropane	ND		2000	1740		ug/L	87	70 - 130	
1,2-Dichlorobenzene	ND		2000	1770		ug/L	89	70 - 130	
1,2-Dichloroethane	ND		2000	2080		ug/L	104	70 - 130	
1,2-Dichloropropane	ND		2000	1940		ug/L	97	70 - 130	
1,3,5-Trimethylbenzene	ND		2000	1900		ug/L	95	70 - 130	
1,3-Dichlorobenzene	ND		2000	1830		ug/L	92	70 - 130	
1,3-Dichloropropane	ND		2000	1880		ug/L	94	70 - 130	
1,4-Dichlorobenzene	ND		2000	1760		ug/L	88	70 - 130	
1,4-Dioxane	ND		20000	17200		ug/L	86	70 - 130	
2,2-Dichloropropane	ND		2000	1750		ug/L	88	70 - 130	
2-Butanone (MEK)	ND *		20000	11600 F		ug/L	58	70 - 130	
2-Chlorotoluene	ND		2000	1890		ug/L	95	70 - 130	
2-Hexanone	ND		20000	15400		ug/L	77	70 - 130	
4-Chlorotoluene	ND		2000	1870		ug/L	94	70 - 130	
4-Isopropyltoluene	ND		2000	1930		ug/L	97	70 - 130	
4-Methyl-2-pentanone (MIBK)	ND		20000	18300		ug/L	92	70 - 130	
Acetone	ND *		20000	11700 F		ug/L	59	70 - 130	
Benzene	ND		2000	1980		ug/L	99	70 - 130	
Bromobenzene	ND		2000	1830		ug/L	92	70 - 130	
Bromoform	ND		2000	1460		ug/L	73	70 - 130	
Bromomethane	ND		2000	1900		ug/L	95	70 - 130	
Carbon disulfide	ND		2000	2210		ug/L	111	70 - 130	
Carbon tetrachloride	ND		2000	1940		ug/L	97	70 - 130	
Chlorobenzene	ND		2000	1920		ug/L	96	70 - 130	
Chlorobromomethane	ND		2000	1930		ug/L	97	70 - 130	
Chlorodibromomethane	ND		2000	1800		ug/L	90	70 - 130	
Chloroethane	ND		2000	1820		ug/L	91	70 - 130	
Chloroform	ND		2000	1990		ug/L	100	70 - 130	
Chloromethane	ND		2000	1510		ug/L	76	70 - 130	
cis-1,2-Dichloroethene	280		2000	2260		ug/L	99	70 - 130	
cis-1,3-Dichloropropene	ND		2000	1590		ug/L	80	70 - 130	
Dibromomethane	ND		2000	1980		ug/L	99	70 - 130	
Dichlorobromomethane	ND		2000	1820		ug/L	91	70 - 130	
Dichlorodifluoromethane	ND *		2000	1360 F		ug/L	68	70 - 130	
Ethyl ether	ND		2000	1960		ug/L	98	70 - 130	
Ethylbenzene	ND		2000	1800		ug/L	90	70 - 130	
Ethylene Dibromide	ND		2000	1890		ug/L	95	70 - 130	
Hexachlorobutadiene	ND		2000	1560		ug/L	78	70 - 130	

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: 360-39842-12 MS**

**Matrix: Water**

**Analysis Batch: 89257**

**Client Sample ID: MW-267M**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	
	Result	Qualifier	Added	Result	Qualifier			%Rec	Limits
Isopropyl ether	ND		2000	1930		ug/L	97	70 - 130	
Isopropylbenzene	ND		2000	1840		ug/L	92	70 - 130	
m-Xylene & p-Xylene	ND		4000	3550		ug/L	89	70 - 130	
Methyl tert-butyl ether	ND		2000	1990		ug/L	100	70 - 130	
Methylene Chloride	ND		2000	1910		ug/L	96	70 - 130	
n-Butylbenzene	ND		2000	1760		ug/L	88	70 - 130	
N-Propylbenzene	ND		2000	1920		ug/L	96	70 - 130	
Naphthalene	ND		2000	1760		ug/L	88	70 - 130	
o-Xylene	ND		2000	1930		ug/L	97	70 - 130	
sec-Butylbenzene	ND		2000	1870		ug/L	94	70 - 130	
Styrene	ND		2000	1790		ug/L	90	70 - 130	
Tert-amyl methyl ether	ND		2000	2010		ug/L	101	70 - 130	
Tert-butyl ethyl ether	ND		2000	2000		ug/L	100	70 - 130	
tert-Butylbenzene	ND		2000	1920		ug/L	96	70 - 130	
Tetrachloroethene	ND		2000	2020		ug/L	101	70 - 130	
Tetrahydrofuran	ND		20000	19000		ug/L	95	70 - 130	
Toluene	ND		2000	1870		ug/L	94	70 - 130	
trans-1,2-Dichloroethene	ND		2000	1880		ug/L	94	70 - 130	
trans-1,3-Dichloropropene	ND		2000	1620		ug/L	81	70 - 130	
Trichloroethene	170		2000	2110		ug/L	97	70 - 130	
Trichlorofluoromethane	ND		2000	2000		ug/L	100	70 - 130	
Vinyl chloride	15		2000	1800		ug/L	89	70 - 130	
<b>Surrogate</b>		<b>MS</b>	<b>MS</b>						
		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
4-Bromofluorobenzene	100			70 - 130					
Dibromofluoromethane	103			70 - 130					
Toluene-d8 (Sur)	102			70 - 130					

**Lab Sample ID: 360-39842-12 MSD**

**Matrix: Water**

**Analysis Batch: 89257**

**Client Sample ID: MW-267M**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier			%Rec	Limits		
1,1,1,2-Tetrachloroethane	ND		2000	1840		ug/L	92	70 - 130		2	20
1,1,1-Trichloroethane	ND		2000	1980		ug/L	99	70 - 130		6	20
1,1,2,2-Tetrachloroethane	ND		2000	1840		ug/L	92	70 - 130		2	20
1,1,2-Trichloroethane	ND		2000	1930		ug/L	97	70 - 130		2	20
1,1-Dichloroethane	ND		2000	1920		ug/L	96	70 - 130		5	20
1,1-Dichloroethene	ND		2000	1870		ug/L	94	70 - 130		8	20
1,1-Dichloropropene	ND		2000	1740		ug/L	87	70 - 130		5	20
1,2,3-Trichlorobenzene	ND		2000	1800		ug/L	90	70 - 130		1	20
1,2,3-Trichloropropane	ND		2000	1970		ug/L	99	70 - 130		5	20
1,2,4-Trichlorobenzene	ND		2000	1630		ug/L	82	70 - 130		2	20
1,2,4-Trimethylbenzene	ND		2000	1890		ug/L	95	70 - 130		3	20
1,2-Dibromo-3-Chloropropane	ND		2000	1860		ug/L	93	70 - 130		7	20
1,2-Dichlorobenzene	ND		2000	1790		ug/L	90	70 - 130		1	20
1,2-Dichloroethane	ND		2000	2000		ug/L	100	70 - 130		4	20
1,2-Dichloropropane	ND		2000	1880		ug/L	94	70 - 130		3	20
1,3,5-Trimethylbenzene	ND		2000	1850		ug/L	93	70 - 130		3	20

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: 360-39842-12 MSD**

**Matrix: Water**

**Analysis Batch: 89257**

**Client Sample ID: MW-267M**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.		RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier			%Rec	Limits		
1,3-Dichlorobenzene	ND		2000	1780		ug/L	89	70 - 130		3	20
1,3-Dichloropropane	ND		2000	1860		ug/L	93	70 - 130		1	20
1,4-Dichlorobenzene	ND		2000	1730		ug/L	87	70 - 130		2	20
1,4-Dioxane	ND		20000	20300		ug/L	101	70 - 130		16	20
2,2-Dichloropropane	ND		2000	1650		ug/L	83	70 - 130		6	20
2-Butanone (MEK)	ND *		20000	11600 F		ug/L	58	70 - 130		0	20
2-Chlorotoluene	ND		2000	1870		ug/L	94	70 - 130		1	20
2-Hexanone	ND		20000	15900		ug/L	80	70 - 130		3	20
4-Chlorotoluene	ND		2000	1850		ug/L	93	70 - 130		1	20
4-Isopropyltoluene	ND		2000	1880		ug/L	94	70 - 130		3	20
4-Methyl-2-pentanone (MIBK)	ND		20000	18000		ug/L	90	70 - 130		2	20
Acetone	ND *		20000	11800 F		ug/L	59	70 - 130		1	20
Benzene	ND		2000	1900		ug/L	95	70 - 130		4	20
Bromobenzene	ND		2000	1840		ug/L	92	70 - 130		1	20
Bromoform	ND		2000	1710		ug/L	86	70 - 130		16	20
Bromomethane	ND		2000	1900		ug/L	95	70 - 130		0	20
Carbon disulfide	ND		2000	2160		ug/L	108	70 - 130		2	20
Carbon tetrachloride	ND		2000	1870		ug/L	94	70 - 130		4	20
Chlorobenzene	ND		2000	1880		ug/L	94	70 - 130		2	20
Chlorobromomethane	ND		2000	1890		ug/L	95	70 - 130		2	20
Chlorodibromomethane	ND		2000	1900		ug/L	95	70 - 130		5	20
Chloroethane	ND		2000	1800		ug/L	90	70 - 130		1	20
Chloroform	ND		2000	1910		ug/L	96	70 - 130		4	20
Chloromethane	ND		2000	1440		ug/L	72	70 - 130		5	20
cis-1,2-Dichloroethene	280		2000	2170		ug/L	95	70 - 130		4	20
cis-1,3-Dichloropropene	ND		2000	1630		ug/L	82	70 - 130		2	20
Dibromomethane	ND		2000	1950		ug/L	98	70 - 130		2	20
Dichlorobromomethane	ND		2000	1820		ug/L	91	70 - 130		0	20
Dichlorodifluoromethane	ND *		2000	1330 F		ug/L	67	70 - 130		2	20
Ethyl ether	ND		2000	1960		ug/L	98	70 - 130		0	20
Ethylbenzene	ND		2000	1730		ug/L	87	70 - 130		4	20
Ethylene Dibromide	ND		2000	1880		ug/L	94	70 - 130		1	20
Hexachlorobutadiene	ND		2000	1540		ug/L	77	70 - 130		1	20
Isopropyl ether	ND		2000	1870		ug/L	94	70 - 130		3	20
Isopropylbenzene	ND		2000	1770		ug/L	89	70 - 130		4	20
m-Xylene & p-Xylene	ND		4000	3440		ug/L	86	70 - 130		3	20
Methyl tert-butyl ether	ND		2000	1990		ug/L	100	70 - 130		0	20
Methylene Chloride	ND		2000	1870		ug/L	94	70 - 130		2	20
n-Butylbenzene	ND		2000	1730		ug/L	87	70 - 130		2	20
N-Propylbenzene	ND		2000	1860		ug/L	93	70 - 130		3	20
Naphthalene	ND		2000	1780		ug/L	89	70 - 130		1	20
o-Xylene	ND		2000	1880		ug/L	94	70 - 130		3	20
sec-Butylbenzene	ND		2000	1830		ug/L	92	70 - 130		2	20
Styrene	ND		2000	1740		ug/L	87	70 - 130		3	20
Tert-amyl methyl ether	ND		2000	1980		ug/L	99	70 - 130		2	20
Tert-butyl ethyl ether	ND		2000	2000		ug/L	100	70 - 130		0	20
tert-Butylbenzene	ND		2000	1890		ug/L	95	70 - 130		2	20
Tetrachloroethene	ND		2000	1850		ug/L	92	70 - 130		9	20
Tetrahydrofuran	ND		20000	19400		ug/L	97	70 - 130		2	20
Toluene	ND		2000	1790		ug/L	90	70 - 130		4	20

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: 360-39842-12 MSD**

**Matrix: Water**

**Analysis Batch: 89257**

**Client Sample ID: MW-267M**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
trans-1,2-Dichloroethene	ND		2000	1770		ug/L		89	70 - 130	6	20
trans-1,3-Dichloropropene	ND		2000	1660		ug/L		83	70 - 130	2	20
Trichloroethene	170		2000	2030		ug/L		93	70 - 130	4	20
Trichlorofluoromethane	ND		2000	1900		ug/L		95	70 - 130	5	20
Vinyl chloride	15		2000	1710		ug/L		85	70 - 130	5	20
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Surrogate	MSD	MSD	Limits	%Recovery	Qualifier						
4-Bromofluorobenzene	102		70 - 130								
Dibromofluoromethane	103		70 - 130								
Toluene-d8 (Surr)	102		70 - 130								

**Lab Sample ID: MB 360-89287/6**

**Matrix: Water**

**Analysis Batch: 89287**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/06/12 16:22	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/06/12 16:22	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/06/12 16:22	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/06/12 16:22	1
1,1-Dichloroethane	ND		1.0		ug/L			04/06/12 16:22	1
1,1-Dichloroethene	ND		1.0		ug/L			04/06/12 16:22	1
1,1-Dichloropropene	ND		1.0		ug/L			04/06/12 16:22	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/06/12 16:22	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/06/12 16:22	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/06/12 16:22	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/06/12 16:22	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/06/12 16:22	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/06/12 16:22	1
1,2-Dichloroethane	ND		1.0		ug/L			04/06/12 16:22	1
1,2-Dichloropropane	ND		1.0		ug/L			04/06/12 16:22	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/06/12 16:22	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/06/12 16:22	1
1,3-Dichloropropane	ND		1.0		ug/L			04/06/12 16:22	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/06/12 16:22	1
1,4-Dioxane	ND		50		ug/L			04/06/12 16:22	1
2,2-Dichloropropane	ND		1.0		ug/L			04/06/12 16:22	1
2-Butanone (MEK)	ND		10		ug/L			04/06/12 16:22	1
2-Chlorotoluene	ND		1.0		ug/L			04/06/12 16:22	1
2-Hexanone	ND		10		ug/L			04/06/12 16:22	1
4-Chlorotoluene	ND		1.0		ug/L			04/06/12 16:22	1
4-Isopropyltoluene	ND		1.0		ug/L			04/06/12 16:22	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/06/12 16:22	1
Acetone	ND		50		ug/L			04/06/12 16:22	1
Benzene	ND		1.0		ug/L			04/06/12 16:22	1
Bromobenzene	ND		1.0		ug/L			04/06/12 16:22	1
Bromoform	ND		1.0		ug/L			04/06/12 16:22	1
Bromomethane	ND		2.0		ug/L			04/06/12 16:22	1
Carbon disulfide	ND		10		ug/L			04/06/12 16:22	1

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: MB 360-89287/6**

**Matrix: Water**

**Analysis Batch: 89287**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	ND	ND									
Carbon tetrachloride	ND	ND			1.0		ug/L			04/06/12 16:22	1
Chlorobenzene	ND	ND			1.0		ug/L			04/06/12 16:22	1
Chlorobromomethane	ND	ND			1.0		ug/L			04/06/12 16:22	1
Chlorodibromomethane	ND	ND			0.50		ug/L			04/06/12 16:22	1
Chloroethane	ND	ND			2.0		ug/L			04/06/12 16:22	1
Chloroform	ND	ND			1.0		ug/L			04/06/12 16:22	1
Chloromethane	ND	ND			2.0		ug/L			04/06/12 16:22	1
cis-1,2-Dichloroethene	ND	ND			1.0		ug/L			04/06/12 16:22	1
cis-1,3-Dichloropropene	ND	ND			0.40		ug/L			04/06/12 16:22	1
Dibromomethane	ND	ND			1.0		ug/L			04/06/12 16:22	1
Dichlorobromomethane	ND	ND			0.50		ug/L			04/06/12 16:22	1
Dichlorodifluoromethane	ND	ND			1.0		ug/L			04/06/12 16:22	1
Ethyl ether	ND	ND			1.0		ug/L			04/06/12 16:22	1
Ethylbenzene	ND	ND			1.0		ug/L			04/06/12 16:22	1
Ethylene Dibromide	ND	ND			1.0		ug/L			04/06/12 16:22	1
Hexachlorobutadiene	ND	ND			0.40		ug/L			04/06/12 16:22	1
Isopropyl ether	ND	ND			10		ug/L			04/06/12 16:22	1
Isopropylbenzene	ND	ND			1.0		ug/L			04/06/12 16:22	1
m-Xylene & p-Xylene	ND	ND			2.0		ug/L			04/06/12 16:22	1
Methyl tert-butyl ether	ND	ND			1.0		ug/L			04/06/12 16:22	1
Methylene Chloride	ND	ND			2.0		ug/L			04/06/12 16:22	1
n-Butylbenzene	ND	ND			1.0		ug/L			04/06/12 16:22	1
N-Propylbenzene	ND	ND			1.0		ug/L			04/06/12 16:22	1
Naphthalene	ND	ND			5.0		ug/L			04/06/12 16:22	1
o-Xylene	ND	ND			1.0		ug/L			04/06/12 16:22	1
sec-Butylbenzene	ND	ND			1.0		ug/L			04/06/12 16:22	1
Styrene	ND	ND			1.0		ug/L			04/06/12 16:22	1
Tert-amyl methyl ether	ND	ND			5.0		ug/L			04/06/12 16:22	1
Tert-butyl ethyl ether	ND	ND			5.0		ug/L			04/06/12 16:22	1
tert-Butylbenzene	ND	ND			1.0		ug/L			04/06/12 16:22	1
Tetrachloroethene	ND	ND			1.0		ug/L			04/06/12 16:22	1
Tetrahydrofuran	ND	ND			10		ug/L			04/06/12 16:22	1
Toluene	ND	ND			1.0		ug/L			04/06/12 16:22	1
trans-1,2-Dichloroethene	ND	ND			1.0		ug/L			04/06/12 16:22	1
trans-1,3-Dichloropropene	ND	ND			0.40		ug/L			04/06/12 16:22	1
Trichloroethene	ND	ND			1.0		ug/L			04/06/12 16:22	1
Trichlorofluoromethane	ND	ND			1.0		ug/L			04/06/12 16:22	1
Vinyl chloride	ND	ND			0.50		ug/L			04/06/12 16:22	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
	ND	ND							
4-Bromofluorobenzene	ND	ND	98		70 - 130			04/06/12 16:22	1
Dibromofluoromethane	ND	ND	100		70 - 130			04/06/12 16:22	1
Toluene-d8 (Surr)	ND	ND	101		70 - 130			04/06/12 16:22	1

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: LCS 360-89287/3**

**Matrix: Water**

**Analysis Batch: 89287**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
1,1,1,2-Tetrachloroethane	20.0	18.7		ug/L	94	70 - 130		
1,1,1-Trichloroethane	20.0	19.7		ug/L	99	70 - 130		
1,1,2,2-Tetrachloroethane	20.0	18.0		ug/L	90	70 - 130		
1,1,2-Trichloroethane	20.0	19.4		ug/L	97	70 - 130		
1,1-Dichloroethane	20.0	19.3		ug/L	97	70 - 130		
1,1-Dichloroethene	20.0	18.8		ug/L	94	70 - 130		
1,1-Dichloropropene	20.0	18.2		ug/L	91	70 - 130		
1,2,3-Trichlorobenzene	20.0	17.6		ug/L	88	70 - 130		
1,2,3-Trichloropropane	20.0	18.3		ug/L	92	70 - 130		
1,2,4-Trichlorobenzene	20.0	17.1		ug/L	86	70 - 130		
1,2,4-Trimethylbenzene	20.0	19.3		ug/L	97	70 - 130		
1,2-Dibromo-3-Chloropropane	20.0	18.5		ug/L	93	70 - 130		
1,2-Dichlorobenzene	20.0	17.8		ug/L	89	70 - 130		
1,2-Dichloroethane	20.0	19.8		ug/L	99	70 - 130		
1,2-Dichloropropane	20.0	19.7		ug/L	99	70 - 130		
1,3,5-Trimethylbenzene	20.0	18.9		ug/L	95	70 - 130		
1,3-Dichlorobenzene	20.0	18.2		ug/L	91	70 - 130		
1,3-Dichloropropane	20.0	18.5		ug/L	93	70 - 130		
1,4-Dichlorobenzene	20.0	17.8		ug/L	89	70 - 130		
1,4-Dioxane	200	187		ug/L	94	70 - 130		
2,2-Dichloropropane	20.0	19.7		ug/L	99	70 - 130		
2-Butanone (MEK)	200	119 *		ug/L	59	70 - 130		
2-Chlorotoluene	20.0	18.9		ug/L	95	70 - 130		
2-Hexanone	200	157		ug/L	78	70 - 130		
4-Chlorotoluene	20.0	18.6		ug/L	93	70 - 130		
4-Isopropyltoluene	20.0	19.7		ug/L	99	70 - 130		
4-Methyl-2-pentanone (MIBK)	200	179		ug/L	90	70 - 130		
Acetone	200	116 *		ug/L	58	70 - 130		
Benzene	20.0	19.4		ug/L	97	70 - 130		
Bromobenzene	20.0	18.7		ug/L	94	70 - 130		
Bromoform	20.0	18.4		ug/L	92	70 - 130		
Bromomethane	20.0	19.4		ug/L	97	70 - 130		
Carbon disulfide	20.0	19.5		ug/L	98	70 - 130		
Carbon tetrachloride	20.0	19.4		ug/L	97	70 - 130		
Chlorobenzene	20.0	19.2		ug/L	96	70 - 130		
Chlorobromomethane	20.0	18.8		ug/L	94	70 - 130		
Chlorodibromomethane	20.0	20.3		ug/L	102	70 - 130		
Chloroethane	20.0	18.7		ug/L	94	70 - 130		
Chloroform	20.0	19.1		ug/L	96	70 - 130		
Chloromethane	20.0	16.8		ug/L	84	70 - 130		
cis-1,2-Dichloroethene	20.0	18.7		ug/L	94	70 - 130		
cis-1,3-Dichloropropene	20.0	18.2		ug/L	91	70 - 130		
Dibromomethane	20.0	19.8		ug/L	99	70 - 130		
Dichlorobromomethane	20.0	18.6		ug/L	93	70 - 130		
Dichlorodifluoromethane	20.0	16.6		ug/L	83	70 - 130		
Ethyl ether	20.0	18.6		ug/L	93	70 - 130		
Ethylbenzene	20.0	18.0		ug/L	90	70 - 130		
Ethylene Dibromide	20.0	18.7		ug/L	94	70 - 130		
Hexachlorobutadiene	20.0	17.9		ug/L	90	70 - 130		

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: LCS 360-89287/3**

**Matrix: Water**

**Analysis Batch: 89287**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	5
	Added	Result	Qualifier				Limits		
Isopropyl ether	20.0	18.6		ug/L		93	70 - 130		6
Isopropylbenzene	20.0	18.3		ug/L		92	70 - 130		7
m-Xylene & p-Xylene	40.0	35.6		ug/L		89	70 - 130		8
Methyl tert-butyl ether	20.0	18.7		ug/L		94	70 - 130		9
Methylene Chloride	20.0	17.9		ug/L		90	70 - 130		10
n-Butylbenzene	20.0	18.7		ug/L		94	70 - 130		11
N-Propylbenzene	20.0	19.4		ug/L		97	70 - 130		12
Naphthalene	20.0	17.7		ug/L		89	70 - 130		13
o-Xylene	20.0	19.2		ug/L		96	70 - 130		14
sec-Butylbenzene	20.0	18.9		ug/L		95	70 - 130		15
Styrene	20.0	17.6		ug/L		88	70 - 130		
Tert-amyl methyl ether	20.0	19.1		ug/L		96	70 - 130		
Tert-butyl ethyl ether	20.0	19.0		ug/L		95	70 - 130		
tert-Butylbenzene	20.0	19.1		ug/L		96	70 - 130		
Tetrachloroethene	20.0	19.9		ug/L		100	70 - 130		
Tetrahydrofuran	200	188		ug/L		94	70 - 130		
Toluene	20.0	18.8		ug/L		94	70 - 130		
trans-1,2-Dichloroethene	20.0	18.1		ug/L		91	70 - 130		
trans-1,3-Dichloropropene	20.0	18.3		ug/L		92	70 - 130		
Trichloroethene	20.0	19.3		ug/L		97	70 - 130		
Trichlorofluoromethane	20.0	19.5		ug/L		98	70 - 130		
Vinyl chloride	20.0	19.3		ug/L		97	70 - 130		

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	99		70 - 130
Dibromofluoromethane	101		70 - 130
Toluene-d8 (Sur)	103		70 - 130

**Lab Sample ID: LCSD 360-89287/4**

**Matrix: Water**

**Analysis Batch: 89287**

**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		
1,1,1,2-Tetrachloroethane	20.0	18.5		ug/L		93	70 - 130	1	20
1,1,1-Trichloroethane	20.0	18.9		ug/L		95	70 - 130	4	20
1,1,2,2-Tetrachloroethane	20.0	18.0		ug/L		90	70 - 130	0	20
1,1,2-Trichloroethane	20.0	19.5		ug/L		98	70 - 130	1	20
1,1-Dichloroethane	20.0	18.7		ug/L		94	70 - 130	3	20
1,1-Dichloroethene	20.0	17.8		ug/L		89	70 - 130	5	20
1,1-Dichloropropene	20.0	17.0		ug/L		85	70 - 130	7	20
1,2,3-Trichlorobenzene	20.0	19.7		ug/L		99	70 - 130	11	20
1,2,3-Trichloropropane	20.0	19.5		ug/L		98	70 - 130	6	20
1,2,4-Trichlorobenzene	20.0	18.3		ug/L		92	70 - 130	7	20
1,2,4-Trimethylbenzene	20.0	19.4		ug/L		97	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	20.0	18.4		ug/L		92	70 - 130	1	20
1,2-Dichlorobenzene	20.0	17.6		ug/L		88	70 - 130	1	20
1,2-Dichloroethane	20.0	19.3		ug/L		97	70 - 130	3	20
1,2-Dichloropropane	20.0	18.6		ug/L		93	70 - 130	6	20
1,3,5-Trimethylbenzene	20.0	18.9		ug/L		95	70 - 130	0	20

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: LCSD 360-89287/4**

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

**Analysis Batch: 89287**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Added	Result	Qualifier				Limits		
1,3-Dichlorobenzene	20.0	17.6		ug/L	88	70 - 130	3	20	
1,3-Dichloropropane	20.0	18.3		ug/L	92	70 - 130	1	20	
1,4-Dichlorobenzene	20.0	17.7		ug/L	89	70 - 130	1	20	
1,4-Dioxane	200	192		ug/L	96	70 - 130	2	20	
2,2-Dichloropropane	20.0	19.7		ug/L	99	70 - 130	0	20	
2-Butanone (MEK)	200	119 *		ug/L	59	70 - 130	0	20	
2-Chlorotoluene	20.0	18.7		ug/L	94	70 - 130	1	20	
2-Hexanone	200	153		ug/L	76	70 - 130	3	20	
4-Chlorotoluene	20.0	18.5		ug/L	93	70 - 130	1	20	
4-Isopropyltoluene	20.0	20.2		ug/L	101	70 - 130	3	20	
4-Methyl-2-pentanone (MIBK)	200	180		ug/L	90	70 - 130	1	20	
Acetone	200	119 *		ug/L	59	70 - 130	3	20	
Benzene	20.0	18.5		ug/L	93	70 - 130	5	20	
Bromobenzene	20.0	18.9		ug/L	95	70 - 130	1	20	
Bromoform	20.0	18.4		ug/L	92	70 - 130	0	20	
Bromomethane	20.0	20.7		ug/L	104	70 - 130	6	20	
Carbon disulfide	20.0	19.3		ug/L	97	70 - 130	1	20	
Carbon tetrachloride	20.0	18.0		ug/L	90	70 - 130	7	20	
Chlorobenzene	20.0	18.6		ug/L	93	70 - 130	3	20	
Chlorodibromomethane	20.0	18.5		ug/L	93	70 - 130	2	20	
Chloroethane	20.0	20.0		ug/L	100	70 - 130	1	20	
Chloroethane	20.0	19.1		ug/L	96	70 - 130	2	20	
Chloroform	20.0	18.4		ug/L	92	70 - 130	4	20	
Chloromethane	20.0	16.1		ug/L	81	70 - 130	4	20	
cis-1,2-Dichloroethene	20.0	18.2		ug/L	91	70 - 130	3	20	
cis-1,3-Dichloropropene	20.0	17.7		ug/L	89	70 - 130	3	20	
Dibromomethane	20.0	19.2		ug/L	96	70 - 130	3	20	
Dichlorobromomethane	20.0	18.2		ug/L	91	70 - 130	2	20	
Dichlorodifluoromethane	20.0	15.7		ug/L	79	70 - 130	6	20	
Ethyl ether	20.0	18.6		ug/L	93	70 - 130	0	20	
Ethylbenzene	20.0	17.1		ug/L	86	70 - 130	5	20	
Ethylene Dibromide	20.0	18.6		ug/L	93	70 - 130	1	20	
Hexachlorobutadiene	20.0	19.2		ug/L	96	70 - 130	7	20	
Isopropyl ether	20.0	18.4		ug/L	92	70 - 130	1	20	
Isopropylbenzene	20.0	18.0		ug/L	90	70 - 130	2	20	
m-Xylene & p-Xylene	40.0	34.5		ug/L	86	70 - 130	3	20	
Methyl tert-butyl ether	20.0	18.7		ug/L	94	70 - 130	0	20	
Methylene Chloride	20.0	17.2		ug/L	86	70 - 130	4	20	
n-Butylbenzene	20.0	18.2		ug/L	91	70 - 130	3	20	
N-Propylbenzene	20.0	19.0		ug/L	95	70 - 130	2	20	
Naphthalene	20.0	19.2		ug/L	96	70 - 130	8	20	
o-Xylene	20.0	19.0		ug/L	95	70 - 130	1	20	
sec-Butylbenzene	20.0	18.8		ug/L	94	70 - 130	1	20	
Styrene	20.0	17.4		ug/L	87	70 - 130	1	20	
Tert-amyl methyl ether	20.0	19.1		ug/L	96	70 - 130	0	20	
Tert-butyl ethyl ether	20.0	18.8		ug/L	94	70 - 130	1	20	
tert-Butylbenzene	20.0	19.3		ug/L	97	70 - 130	1	20	
Tetrachloroethene	20.0	18.5		ug/L	93	70 - 130	7	20	
Tetrahydrofuran	200	189		ug/L	95	70 - 130	0	20	
Toluene	20.0	17.8		ug/L	89	70 - 130	5	20	

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: LCSD 360-89287/4**

**Matrix: Water**

**Analysis Batch: 89287**

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

Analyte	Spike Added	LCSD			Unit	D	%Rec.		RPD	RPD Limit
		Result	Qualifier	%Rec			Limits			
trans-1,2-Dichloroethene	20.0	17.2		86	ug/L		70 - 130		5	20
trans-1,3-Dichloropropene	20.0	18.2		91	ug/L		70 - 130		1	20
Trichloroethene	20.0	18.4		92	ug/L		70 - 130		5	20
Trichlorofluoromethane	20.0	19.2		96	ug/L		70 - 130		2	20
Vinyl chloride	20.0	17.9		90	ug/L		70 - 130		8	20

Surrogate	LCSD %Recovery	LCSD		Limits
		Qualifer	%Recovery	
4-Bromofluorobenzene	102			70 - 130
Dibromofluoromethane	100			70 - 130
Toluene-d8 (Surr)	103			70 - 130

**Lab Sample ID: 360-39842-23 MS**

**Matrix: Water**

**Analysis Batch: 89287**

**Client Sample ID: REW-5**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS			Unit	D	%Rec.	
				Result	Qualifier	%Rec			Limits	
1,1,1,2-Tetrachloroethane	ND		2000	2000		100	ug/L		70 - 130	
1,1,1-Trichloroethane	ND		2000	2140		107	ug/L		70 - 130	
1,1,2,2-Tetrachloroethane	ND		2000	1970		99	ug/L		70 - 130	
1,1,2-Trichloroethane	ND		2000	2110		106	ug/L		70 - 130	
1,1-Dichloroethane	ND		2000	2080		104	ug/L		70 - 130	
1,1-Dichloroethene	ND		2000	2050		103	ug/L		70 - 130	
1,1-Dichloropropene	ND		2000	1920		96	ug/L		70 - 130	
1,2,3-Trichlorobenzene	ND		2000	1880		94	ug/L		70 - 130	
1,2,3-Trichloropropane	ND		2000	2030		102	ug/L		70 - 130	
1,2,4-Trichlorobenzene	ND		2000	1770		89	ug/L		70 - 130	
1,2,4-Trimethylbenzene	ND		2000	2060		103	ug/L		70 - 130	
1,2-Dibromo-3-Chloropropane	ND		2000	1940		97	ug/L		70 - 130	
1,2-Dichlorobenzene	ND		2000	1900		95	ug/L		70 - 130	
1,2-Dichloroethane	ND		2000	2080		104	ug/L		70 - 130	
1,2-Dichloropropane	ND		2000	2040		102	ug/L		70 - 130	
1,3,5-Trimethylbenzene	ND		2000	2030		102	ug/L		70 - 130	
1,3-Dichlorobenzene	ND		2000	1950		98	ug/L		70 - 130	
1,3-Dichloropropane	ND		2000	1980		99	ug/L		70 - 130	
1,4-Dichlorobenzene	ND		2000	1900		95	ug/L		70 - 130	
1,4-Dioxane	ND		20000	19600		98	ug/L		70 - 130	
2,2-Dichloropropane	ND		2000	1960		98	ug/L		70 - 130	
2-Butanone (MEK)	ND *		20000	12600 F		63	ug/L		70 - 130	
2-Chlorotoluene	ND		2000	2020		101	ug/L		70 - 130	
2-Hexanone	ND		20000	16600		83	ug/L		70 - 130	
4-Chlorotoluene	ND		2000	1970		99	ug/L		70 - 130	
4-Isopropyltoluene	ND		2000	2120		106	ug/L		70 - 130	
4-Methyl-2-pentanone (MIBK)	ND		20000	19100		96	ug/L		70 - 130	
Acetone	ND *		20000	12800 F		62	ug/L		70 - 130	
Benzene	ND		2000	2040		102	ug/L		70 - 130	
Bromobenzene	ND		2000	1970		99	ug/L		70 - 130	
Bromoform	ND		2000	1870		94	ug/L		70 - 130	
Bromomethane	ND		2000	2030		102	ug/L		70 - 130	
Carbon disulfide	ND		2000	2170		108	ug/L		70 - 130	

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: 360-39842-23 MS**

**Matrix: Water**

**Analysis Batch: 89287**

**Client Sample ID: REW-5**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Carbon tetrachloride	ND		2000	2020		ug/L	101	70 - 130	
Chlorobenzene	ND		2000	2050		ug/L	103	70 - 130	
Chlorobromomethane	ND		2000	2010		ug/L	101	70 - 130	
Chlorodibromomethane	ND		2000	2090		ug/L	105	70 - 130	
Chloroethane	ND		2000	1920		ug/L	96	70 - 130	
Chloroform	ND		2000	2050		ug/L	103	70 - 130	
Chloromethane	ND		2000	1660		ug/L	83	70 - 130	
cis-1,2-Dichloroethene	380		2000	2400		ug/L	101	70 - 130	
cis-1,3-Dichloropropene	ND		2000	1850		ug/L	93	70 - 130	
Dibromomethane	ND		2000	2080		ug/L	104	70 - 130	
Dichlorobromomethane	ND		2000	1990		ug/L	100	70 - 130	
Dichlorodifluoromethane	ND		2000	1650		ug/L	83	70 - 130	
Ethyl ether	ND		2000	2020		ug/L	101	70 - 130	
Ethylbenzene	ND		2000	1890		ug/L	95	70 - 130	
Ethylene Dibromide	ND		2000	2030		ug/L	102	70 - 130	
Hexachlorobutadiene	ND		2000	1740		ug/L	87	70 - 130	
Isopropyl ether	ND		2000	1970		ug/L	99	70 - 130	
Isopropylbenzene	ND		2000	1950		ug/L	98	70 - 130	
m-Xylene & p-Xylene	ND		4000	3760		ug/L	94	70 - 130	
Methyl tert-butyl ether	ND		2000	2020		ug/L	101	70 - 130	
Methylene Chloride	ND		2000	1900		ug/L	95	70 - 130	
n-Butylbenzene	ND		2000	1940		ug/L	97	70 - 130	
N-Propylbenzene	ND		2000	2050		ug/L	103	70 - 130	
Naphthalene	ND		2000	1860		ug/L	93	70 - 130	
o-Xylene	ND		2000	2030		ug/L	102	70 - 130	
sec-Butylbenzene	ND		2000	2030		ug/L	102	70 - 130	
Styrene	ND		2000	1880		ug/L	94	70 - 130	
Tert-amyl methyl ether	ND		2000	2020		ug/L	101	70 - 130	
Tert-butyl ethyl ether	ND		2000	2050		ug/L	103	70 - 130	
tert-Butylbenzene	ND		2000	2050		ug/L	103	70 - 130	
Tetrachloroethene	ND		2000	2050		ug/L	102	70 - 130	
Tetrahydrofuran	ND		20000	20400		ug/L	102	70 - 130	
Toluene	ND		2000	1940		ug/L	97	70 - 130	
trans-1,2-Dichloroethene	ND		2000	1910		ug/L	96	70 - 130	
trans-1,3-Dichloropropene	ND		2000	1870		ug/L	94	70 - 130	
Trichloroethene	140		2000	2170		ug/L	101	70 - 130	
Trichlorofluoromethane	ND		2000	2130		ug/L	107	70 - 130	
Vinyl chloride	54		2000	2000		ug/L	97	70 - 130	
<b>Surrogate</b>		<b>MS</b>	<b>MS</b>						
		<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>				
4-Bromofluorobenzene		101			70 - 130				
Dibromofluoromethane		101			70 - 130				
Toluene-d8 (Surr)		102			70 - 130				

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: 360-39842-23 MSD**

**Matrix: Water**

**Analysis Batch: 89287**

**Client Sample ID: REW-5**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
1,1,1,2-Tetrachloroethane	ND		2000	1860		ug/L	93	70 - 130	7	20	
1,1,1-Trichloroethane	ND		2000	1970		ug/L	99	70 - 130	8	20	
1,1,2,2-Tetrachloroethane	ND		2000	1910		ug/L	96	70 - 130	3	20	
1,1,2-Trichloroethane	ND		2000	2050		ug/L	103	70 - 130	3	20	
1,1-Dichloroethane	ND		2000	1920		ug/L	96	70 - 130	8	20	
1,1-Dichloroethene	ND		2000	1870		ug/L	94	70 - 130	9	20	
1,1-Dichloropropene	ND		2000	1780		ug/L	89	70 - 130	8	20	
1,2,3-Trichlorobenzene	ND		2000	1780		ug/L	89	70 - 130	5	20	
1,2,3-Trichloropropane	ND		2000	2000		ug/L	100	70 - 130	1	20	
1,2,4-Trichlorobenzene	ND		2000	1680		ug/L	84	70 - 130	5	20	
1,2,4-Trimethylbenzene	ND		2000	1950		ug/L	98	70 - 130	5	20	
1,2-Dibromo-3-Chloropropane	ND		2000	1860		ug/L	93	70 - 130	4	20	
1,2-Dichlorobenzene	ND		2000	1800		ug/L	90	70 - 130	5	20	
1,2-Dichloroethane	ND		2000	2070		ug/L	104	70 - 130	0	20	
1,2-Dichloropropane	ND		2000	1980		ug/L	99	70 - 130	3	20	
1,3,5-Trimethylbenzene	ND		2000	1910		ug/L	96	70 - 130	6	20	
1,3-Dichlorobenzene	ND		2000	1840		ug/L	92	70 - 130	6	20	
1,3-Dichloropropane	ND		2000	1910		ug/L	96	70 - 130	4	20	
1,4-Dichlorobenzene	ND		2000	1820		ug/L	91	70 - 130	4	20	
1,4-Dioxane	ND		20000	19300		ug/L	97	70 - 130	1	20	
2,2-Dichloropropane	ND		2000	1830		ug/L	92	70 - 130	7	20	
2-Butanone (MEK)	ND *		20000	12200 F		ug/L	61	70 - 130	3	20	
2-Chlorotoluene	ND		2000	1880		ug/L	94	70 - 130	7	20	
2-Hexanone	ND		20000	16500		ug/L	83	70 - 130	1	20	
4-Chlorotoluene	ND		2000	1890		ug/L	95	70 - 130	4	20	
4-Isopropyltoluene	ND		2000	1950		ug/L	98	70 - 130	8	20	
4-Methyl-2-pentanone (MIBK)	ND		20000	19100		ug/L	95	70 - 130	0	20	
Acetone	ND *		20000	12300 F		ug/L	59	70 - 130	4	20	
Benzene	ND		2000	1920		ug/L	96	70 - 130	6	20	
Bromobenzene	ND		2000	1890		ug/L	95	70 - 130	4	20	
Bromoform	ND		2000	1840		ug/L	92	70 - 130	2	20	
Bromomethane	ND		2000	1850		ug/L	93	70 - 130	9	20	
Carbon disulfide	ND		2000	1990		ug/L	99	70 - 130	9	20	
Carbon tetrachloride	ND		2000	1900		ug/L	95	70 - 130	6	20	
Chlorobenzene	ND		2000	1950		ug/L	98	70 - 130	5	20	
Chlorobromomethane	ND		2000	1920		ug/L	96	70 - 130	5	20	
Chlorodibromomethane	ND		2000	2070		ug/L	104	70 - 130	1	20	
Chloroethane	ND		2000	1700		ug/L	85	70 - 130	12	20	
Chloroform	ND		2000	1930		ug/L	97	70 - 130	6	20	
Chloromethane	ND		2000	1490		ug/L	75	70 - 130	11	20	
cis-1,2-Dichloroethene	380		2000	2260		ug/L	94	70 - 130	6	20	
cis-1,3-Dichloropropene	ND		2000	1740		ug/L	87	70 - 130	6	20	
Dibromomethane	ND		2000	2040		ug/L	102	70 - 130	2	20	
Dichlorobromomethane	ND		2000	1890		ug/L	95	70 - 130	5	20	
Dichlorodifluoromethane	ND		2000	1480		ug/L	74	70 - 130	11	20	
Ethyl ether	ND		2000	1950		ug/L	98	70 - 130	4	20	
Ethylbenzene	ND		2000	1790		ug/L	90	70 - 130	5	20	
Ethylene Dibromide	ND		2000	1980		ug/L	99	70 - 130	2	20	
Hexachlorobutadiene	ND		2000	1640		ug/L	82	70 - 130	6	20	

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

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

**Lab Sample ID: 360-39842-23 MSD**

**Matrix: Water**

**Analysis Batch: 89287**

**Client Sample ID: REW-5**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.		RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier			%Rec	Limits		
Isopropyl ether	ND		2000	1900		ug/L	95	70 - 130	4	20	
Isopropylbenzene	ND		2000	1830		ug/L	92	70 - 130	6	20	
m-Xylene & p-Xylene	ND		4000	3560		ug/L	89	70 - 130	5	20	
Methyl tert-butyl ether	ND		2000	1970		ug/L	99	70 - 130	3	20	
Methylene Chloride	ND		2000	1840		ug/L	92	70 - 130	3	20	
n-Butylbenzene	ND		2000	1820		ug/L	91	70 - 130	6	20	
N-Propylbenzene	ND		2000	1920		ug/L	96	70 - 130	7	20	
Naphthalene	ND		2000	1810		ug/L	91	70 - 130	3	20	
o-Xylene	ND		2000	1880		ug/L	94	70 - 130	8	20	
sec-Butylbenzene	ND		2000	1870		ug/L	94	70 - 130	8	20	
Styrene	ND		2000	1800		ug/L	90	70 - 130	4	20	
Tert-amyl methyl ether	ND		2000	1990		ug/L	100	70 - 130	1	20	
Tert-butyl ethyl ether	ND		2000	1960		ug/L	98	70 - 130	4	20	
tert-Butylbenzene	ND		2000	1920		ug/L	96	70 - 130	7	20	
Tetrachloroethene	ND		2000	1920		ug/L	96	70 - 130	7	20	
Tetrahydrofuran	ND		20000	19700		ug/L	99	70 - 130	3	20	
Toluene	ND		2000	1870		ug/L	94	70 - 130	4	20	
trans-1,2-Dichloroethene	ND		2000	1790		ug/L	90	70 - 130	6	20	
trans-1,3-Dichloropropene	ND		2000	1840		ug/L	92	70 - 130	2	20	
Trichloroethene	140		2000	2060		ug/L	96	70 - 130	5	20	
Trichlorofluoromethane	ND		2000	1860		ug/L	93	70 - 130	14	20	
Vinyl chloride	54		2000	1750		ug/L	85	70 - 130	13	20	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	100		70 - 130
Dibromofluoromethane	101		70 - 130
Toluene-d8 (Surr)	102		70 - 130

## Lab Chronicle

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

### Client Sample ID: IW-4

Date Collected: 04/02/12 12:30  
Date Received: 04/04/12 13:00

Lab Sample ID: 360-39842-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	89257	04/06/12 02:01	TH	TAL WFD

### Client Sample ID: IW-5

Date Collected: 04/02/12 11:25  
Date Received: 04/04/12 13:00

Lab Sample ID: 360-39842-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	89257	04/06/12 02:22	TH	TAL WFD

### Client Sample ID: IW-15

Date Collected: 04/03/12 13:00  
Date Received: 04/04/12 13:00

Lab Sample ID: 360-39842-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	89257	04/06/12 02:44	TH	TAL WFD

### Client Sample ID: MW-261S

Date Collected: 04/02/12 12:00  
Date Received: 04/04/12 13:00

Lab Sample ID: 360-39842-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		500	89257	04/06/12 03:05	TH	TAL WFD

### Client Sample ID: MW-264M

Date Collected: 04/03/12 13:30  
Date Received: 04/04/12 13:00

Lab Sample ID: 360-39842-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	89257	04/06/12 03:27	TH	TAL WFD

### Client Sample ID: MW-265S

Date Collected: 04/03/12 11:35  
Date Received: 04/04/12 13:00

Lab Sample ID: 360-39842-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	89257	04/06/12 03:49	TH	TAL WFD

### Client Sample ID: MW-265M

Date Collected: 04/02/12 14:00  
Date Received: 04/04/12 13:00

Lab Sample ID: 360-39842-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	89257	04/06/12 04:10	TH	TAL WFD

# Lab Chronicle

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

## **Client Sample ID: MW-265M**

**Date Collected:** 04/02/12 14:00  
**Date Received:** 04/04/12 13:00

## **Lab Sample ID: 360-39842-7**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	10	89287	04/06/12 17:49	TH	TAL WFD

## **Client Sample ID: MW-265D**

**Date Collected:** 04/03/12 10:15  
**Date Received:** 04/04/12 13:00

## **Lab Sample ID: 360-39842-8**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	89257	04/06/12 04:32	TH	TAL WFD

## **Client Sample ID: MW-266Ma**

**Date Collected:** 04/02/12 13:35  
**Date Received:** 04/04/12 13:00

## **Lab Sample ID: 360-39842-9**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	89257	04/06/12 04:54	TH	TAL WFD

## **Client Sample ID: MW-266Mb**

**Date Collected:** 04/03/12 12:35  
**Date Received:** 04/04/12 13:00

## **Lab Sample ID: 360-39842-10**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	89257	04/06/12 05:15	TH	TAL WFD

## **Client Sample ID: MW-267S**

**Date Collected:** 04/02/12 12:30  
**Date Received:** 04/04/12 13:00

## **Lab Sample ID: 360-39842-11**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	89257	04/06/12 05:37	TH	TAL WFD

## **Client Sample ID: MW-267M**

**Date Collected:** 04/02/12 11:25  
**Date Received:** 04/04/12 13:00

## **Lab Sample ID: 360-39842-12**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	89257	04/06/12 05:58	TH	TAL WFD

## **Client Sample ID: MW-268M**

**Date Collected:** 04/02/12 10:15  
**Date Received:** 04/04/12 13:00

## **Lab Sample ID: 360-39842-13**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	89287	04/06/12 18:10	TH	TAL WFD

# Lab Chronicle

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

## **Client Sample ID: MW-268D**

**Date Collected:** 04/03/12 11:15  
**Date Received:** 04/04/12 13:00

## **Lab Sample ID: 360-39842-14**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	89287	04/06/12 18:32	TH	TAL WFD

## **Client Sample ID: MW-551**

**Date Collected:** 04/02/12 13:00  
**Date Received:** 04/04/12 13:00

## **Lab Sample ID: 360-39842-15**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		200	89287	04/06/12 18:54	TH	TAL WFD

## **Client Sample ID: MW-552**

**Date Collected:** 04/02/12 11:00  
**Date Received:** 04/04/12 13:00

## **Lab Sample ID: 360-39842-16**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	89287	04/06/12 19:16	TH	TAL WFD

## **Client Sample ID: MW-553**

**Date Collected:** 04/02/12 10:00  
**Date Received:** 04/04/12 13:00

## **Lab Sample ID: 360-39842-17**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		250	89287	04/06/12 19:37	TH	TAL WFD

## **Client Sample ID: MW-560**

**Date Collected:** 04/02/12 10:00  
**Date Received:** 04/04/12 13:00

## **Lab Sample ID: 360-39842-18**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	89287	04/06/12 19:59	TH	TAL WFD

## **Client Sample ID: MW-561**

**Date Collected:** 04/02/12 13:40  
**Date Received:** 04/04/12 13:00

## **Lab Sample ID: 360-39842-19**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	89287	04/06/12 20:21	TH	TAL WFD

## **Client Sample ID: MW-562**

**Date Collected:** 04/03/12 14:05  
**Date Received:** 04/04/12 13:00

## **Lab Sample ID: 360-39842-20**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	89287	04/06/12 20:43	TH	TAL WFD

## Lab Chronicle

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

### Client Sample ID: REW-1

Date Collected: 04/03/12 10:00  
Date Received: 04/04/12 13:00

### Lab Sample ID: 360-39842-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	89287	04/06/12 21:04	TH	TAL WFD

### Client Sample ID: REW-4

Date Collected: 04/03/12 11:10  
Date Received: 04/04/12 13:00

### Lab Sample ID: 360-39842-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	89287	04/06/12 21:26	TH	TAL WFD

### Client Sample ID: REW-5

Date Collected: 04/03/12 12:35  
Date Received: 04/04/12 13:00

### Lab Sample ID: 360-39842-23

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	89287	04/06/12 21:48	TH	TAL WFD

### Client Sample ID: DupX1

Date Collected: 04/02/12 12:00  
Date Received: 04/04/12 13:00

### Lab Sample ID: 360-39842-24

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	89287	04/06/12 22:09	TH	TAL WFD

### Client Sample ID: DupX2

Date Collected: 04/02/12 12:00  
Date Received: 04/04/12 13:00

### Lab Sample ID: 360-39842-25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	89287	04/06/12 22:31	TH	TAL WFD

### Client Sample ID: DupX3

Date Collected: 04/02/12 12:00  
Date Received: 04/04/12 13:00

### Lab Sample ID: 360-39842-26

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	89287	04/06/12 22:53	TH	TAL WFD

### Client Sample ID: Trip Blank

Date Collected: 04/02/12 10:00  
Date Received: 04/04/12 13:00

### Lab Sample ID: 360-39842-27

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	89287	04/06/12 17:27	TH	TAL WFD

## Lab Chronicle

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

### Laboratory References:

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

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## Certification Summary

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39842-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Westfield	Connecticut	State Program	1	PH-0494
TestAmerica Westfield	Maine	State Program	1	MA00014
TestAmerica Westfield	Massachusetts	State Program	1	M-MA014
TestAmerica Westfield	New Hampshire	NELAC	1	2539
TestAmerica Westfield	Rhode Island	State Program	1	LAO00057
TestAmerica Westfield	Vermont	State Program	1	VT-10843

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

# 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 CaCO <sub>3</sub> ) 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 CI F	Chlorine, Residual	NP	
SM 4500 H+ B	pH	NP/P	NP/P
SM 4500 NO <sub>2</sub> 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 (Colilert-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: Innovative Engineering Solutions, Inc

Job Number: 360-39842-1

**Login Number: 39842**

**List Source: TestAmerica Westfield**

**List Number: 1**

**Creator: Ard, Vanessa L**

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.	N/A	
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

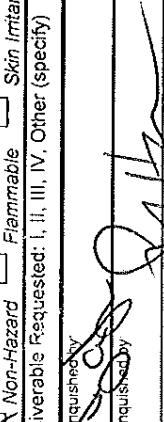
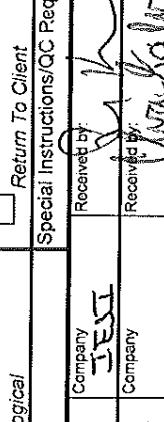
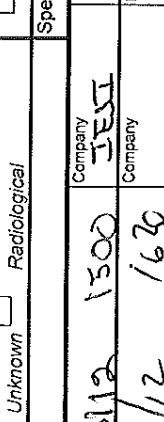
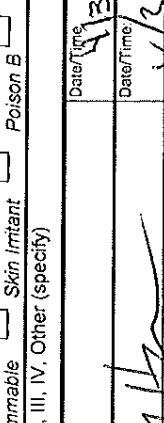
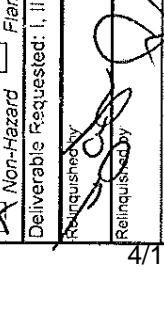
Boston Service Center  
240 Bear Hill Rd. Suite 104  
Waltham, MA 02451

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

240 Bear Hill Rd. Suite 104  
Waltham, MA 02451  
Phone (781) 466-6920 Fax (781) 466-6901

# Chain of Custody Record

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

Client Information		Sample#	Lab#	Carrier Tracking No(s):	COC No:
Client Contact:	Vicki Ruzin	Phone:	508-668-0833	E-mail:	Page:
Company:	Environmental Testing Solutions Inc.				Job #:
Address:	25 Spring St Wellesley MA 02401	Due Date Requested:	17 Aug 13	Analysis Requested	
City:		TAT Requested (days):			
State, Zip:					
Phone:	508-235-0008	Quote #:			
Email:		PO #:	RA-008		
Project Name/number:	RA-008	IWO #:			
Site:	Boathouse - Weyland	SSOW#:			
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Preservation Code:
MWS-5175	4/12/13	1230	S	3	A
MWS-5176	4/12/13	1135	S	3	B
MWS-5180	4/12/13	1015	S	3	B
MWS-5183	4/13/13	1115	G	2	X
MWS-551	4/13/13	1300	G	3	DB
MWS-552	4/13/13	1100	G	3	D
MWS-553	4/12/13	1000	G	3	D
MWS-560	4/12/13	1000	G	3	C
MWS-561	4/12/13	1340	S	3	C
MWS-562	4/13/13	1405	S	3	C
Possible Hazard Identification				Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	
<input checked="" type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Radiological
Deliverable Requested: I, II, III, IV, Other (specify)					
Relinquished by: 					
Custody Seals Intact: <input type="checkbox"/> Custody Seal No.: 					
Cooler Temperature(s) °C and Other Remarks: 0.6 ICE					
Special Instructions/QC Requirements:					
Date/Time	Company	Received by	Date/Time	Company	Received by
4/12/13 1500	Test		4/12/13 1500	TAC	
4/12/13 1630	Company		4/14/13 1350	Company	
Filing/Storage:					
Date/Time: 4/11/2012					
Page 84 of 85					

### **Chain of Custody Record**

240 Bear Hill Rd. Suite 104  
Waltham, MA 02451  
Phone (781) 466-6920 FAX (781) 4

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

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

# 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: 360-39816-1

Client Project/Site: IDS Wayland

For:

Innovative Engineering Solutions, Inc  
25 Spring Street  
Walpole, Massachusetts 02081

Attn: Vicki Pariyar

Authorized for release by:

4/12/2012 10:27:23 AM

Joe Chimi

Report Production Representative  
[joe.chimi@testamericainc.com](mailto:joe.chimi@testamericainc.com)

Designee for

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

### LINKS

Review your project  
results through

**Total Access**

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Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.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.

# Table of Contents

Cover Page .....	1
Table of Contents .....	2
Case Narrative .....	3
Detection Summary .....	4
Method Summary .....	5
Sample Summary .....	6
Client Sample Results .....	7
Definitions .....	8
QC Association .....	9
Surrogate Summary .....	10
QC Sample Results .....	11
Chronicle .....	12
Certification Summary .....	13
Receipt Checklists .....	14
Chain of Custody .....	15

## Case Narrative

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39816-1

### Job ID: 360-39816-1

#### Laboratory: TestAmerica Westfield

##### Narrative

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.

##### Receipt

The samples were received on 04/03/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.2°C.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): MW-261S (360-39816-1). The container labels list sample ID MW-216S. The COC lists sample ID as MW-261S. Sample logged in per the COC.

All samples were shipped directly from TestAmerica Boston Service Center to TestAmerica Burlington laboratory.

##### GC/MS Semi VOA

Method 522 MOD: Sample MW-261S (360-39816-1). Surrogate standard recovered marginally below the lower limit. Low recovery was confirmed by re-analysis. Due to time constraints the sample was not re-extracted.

No other analytical or quality issues were noted.

## Detection Summary

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39816-1

### Client Sample ID: MW-261S

### Lab Sample ID: 360-39816-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.9		0.20		ug/L	1		522 MOD	Total/NA

### Client Sample ID: MW-265M

### Lab Sample ID: 360-39816-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.2		0.20		ug/L	1		522 MOD	Total/NA

### Client Sample ID: MW-266MA

### Lab Sample ID: 360-39816-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.2		0.20		ug/L	1		522 MOD	Total/NA

### Client Sample ID: MW-267S

### Lab Sample ID: 360-39816-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.4		0.20		ug/L	1		522 MOD	Total/NA

### Client Sample ID: MW-267M

### Lab Sample ID: 360-39816-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.3		0.20		ug/L	1		522 MOD	Total/NA

### Client Sample ID: MW-268M

### Lab Sample ID: 360-39816-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	22		0.80		ug/L	4		522 MOD	Total/NA

### Client Sample ID: MW-552

### Lab Sample ID: 360-39816-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	9.2		0.40		ug/L	2		522 MOD	Total/NA

### Client Sample ID: DUPX1

### Lab Sample ID: 360-39816-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	23		0.80		ug/L	4		522 MOD	Total/NA

## Method Summary

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39816-1

Method	Method Description	Protocol	Laboratory
522 MOD	1,4 Dioxane (GC/MS SIM)	EPA	TAL BUR

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

## Sample Summary

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39816-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
360-39816-1	MW-261S	Water	04/02/12 12:00	04/03/12 10:15
360-39816-2	MW-265M	Water	04/02/12 14:00	04/03/12 10:15
360-39816-3	MW-266MA	Water	04/02/12 13:35	04/03/12 10:15
360-39816-4	MW-267S	Water	04/02/12 12:30	04/03/12 10:15
360-39816-5	MW-267M	Water	04/02/12 11:25	04/03/12 10:15
360-39816-6	MW-268M	Water	04/02/12 10:15	04/03/12 10:15
360-39816-7	MW-552	Water	04/02/12 11:00	04/03/12 10:15
360-39816-8	DUPX1	Water	04/02/12 12:00	04/03/12 10:15

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39816-1

## Method: 522 MOD - 1,4 Dioxane (GC/MS SIM)

**Client Sample ID: MW-261S**

**Date Collected: 04/02/12 12:00**

**Date Received: 04/03/12 10:15**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.9		0.20		ug/L	D	04/06/12 10:25	04/10/12 15:28	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,4-Dioxane-d8 (Surr)	58	X	70 - 130				04/06/12 10:25	04/10/12 15:28	1

**Client Sample ID: MW-265M**

**Date Collected: 04/02/12 14:00**

**Date Received: 04/03/12 10:15**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.2		0.20		ug/L	D	04/06/12 10:25	04/06/12 18:06	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,4-Dioxane-d8 (Surr)	100		70 - 130				04/06/12 10:25	04/06/12 18:06	1

**Client Sample ID: MW-266MA**

**Date Collected: 04/02/12 13:35**

**Date Received: 04/03/12 10:15**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.2		0.20		ug/L	D	04/06/12 10:25	04/06/12 18:22	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,4-Dioxane-d8 (Surr)	87		70 - 130				04/06/12 10:25	04/06/12 18:22	1

**Client Sample ID: MW-267S**

**Date Collected: 04/02/12 12:30**

**Date Received: 04/03/12 10:15**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	7.4		0.20		ug/L	D	04/06/12 10:25	04/06/12 18:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,4-Dioxane-d8 (Surr)	79		70 - 130				04/06/12 10:25	04/06/12 18:37	1

**Client Sample ID: MW-267M**

**Date Collected: 04/02/12 11:25**

**Date Received: 04/03/12 10:15**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.3		0.20		ug/L	D	04/06/12 10:25	04/06/12 18:53	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,4-Dioxane-d8 (Surr)	86		70 - 130				04/06/12 10:25	04/06/12 18:53	1

**Client Sample ID: MW-268M**

**Date Collected: 04/02/12 10:15**

**Date Received: 04/03/12 10:15**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	22		0.80		ug/L	D	04/06/12 10:25	04/10/12 15:44	4
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,4-Dioxane-d8 (Surr)	90		70 - 130				04/06/12 10:25	04/10/12 15:44	4

# Client Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39816-1

## Method: 522 MOD - 1,4 Dioxane (GC/MS SIM)

**Client Sample ID: MW-552**

**Date Collected: 04/02/12 11:00**

**Date Received: 04/03/12 10:15**

**Lab Sample ID: 360-39816-7**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	9.2		0.40		ug/L		04/06/12 10:25	04/10/12 16:00	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	79		70 - 130				04/06/12 10:25	04/10/12 16:00	2

**Client Sample ID: DUPX1**

**Date Collected: 04/02/12 12:00**

**Date Received: 04/03/12 10:15**

**Lab Sample ID: 360-39816-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	23		0.80		ug/L		04/06/12 10:25	04/10/12 16:16	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	104		70 - 130				04/06/12 10:25	04/10/12 16:16	4

## Definitions/Glossary

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39816-1

### Qualifiers

#### GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside 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: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39816-1

## GC/MS Semi VOA

### Prep Batch: 36343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
360-39816-1	MW-261S	Total/NA	Water	3535A	
360-39816-2	MW-265M	Total/NA	Water	3535A	
360-39816-3	MW-266MA	Total/NA	Water	3535A	
360-39816-4	MW-267S	Total/NA	Water	3535A	
360-39816-5	MW-267M	Total/NA	Water	3535A	
360-39816-6	MW-268M	Total/NA	Water	3535A	
360-39816-7	MW-552	Total/NA	Water	3535A	
360-39816-8	DUPX1	Total/NA	Water	3535A	
LCS 200-36343/2-A	Lab Control Sample	Total/NA	Water	3535A	
MB 200-36343/1-A	Method Blank	Total/NA	Water	3535A	

### Analysis Batch: 36373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
360-39816-2	MW-265M	Total/NA	Water	522 MOD	36343
360-39816-3	MW-266MA	Total/NA	Water	522 MOD	36343
360-39816-4	MW-267S	Total/NA	Water	522 MOD	36343
360-39816-5	MW-267M	Total/NA	Water	522 MOD	36343
LCS 200-36343/2-A	Lab Control Sample	Total/NA	Water	522 MOD	36343
MB 200-36343/1-A	Method Blank	Total/NA	Water	522 MOD	36343

### Analysis Batch: 36509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
360-39816-1	MW-261S	Total/NA	Water	522 MOD	36343
360-39816-6	MW-268M	Total/NA	Water	522 MOD	36343
360-39816-7	MW-552	Total/NA	Water	522 MOD	36343
360-39816-8	DUPX1	Total/NA	Water	522 MOD	36343

# Surrogate Summary

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39816-1

## Method: 522 MOD - 1,4 Dioxane (GC/MS SIM)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	14DD8 (70-130)
360-39816-1	MW-261S	58 X
360-39816-2	MW-265M	100
360-39816-3	MW-266MA	87
360-39816-4	MW-267S	79
360-39816-5	MW-267M	86
360-39816-6	MW-268M	90
360-39816-7	MW-552	79
360-39816-8	DUPX1	104
LCS 200-36343/2-A	Lab Control Sample	76
MB 200-36343/1-A	Method Blank	75

### Surrogate Legend

14DD8 = 1,4-Dioxane-d8 (Surr)

# QC Sample Results

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39816-1

## Method: 522 MOD - 1,4 Dioxane (GC/MS SIM)

Lab Sample ID: MB 200-36343/1-A

Matrix: Water

Analysis Batch: 36373

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36343

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		04/06/12 10:25	04/06/12 15:11	1
<hr/>									
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	75		70 - 130				04/06/12 10:25	04/06/12 15:11	1

Lab Sample ID: LCS 200-36343/2-A

Matrix: Water

Analysis Batch: 36373

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36343

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limts
1,4-Dioxane	2.00	1.51		ug/L		76	70 - 130
<hr/>							
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,4-Dioxane-d8 (Surr)	76		70 - 130				

## Lab Chronicle

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39816-1

### Client Sample ID: MW-261S

Date Collected: 04/02/12 12:00

Date Received: 04/03/12 10:15

### Lab Sample ID: 360-39816-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			36343	04/06/12 10:25	MLT	TAL BUR
Total/NA	Analysis	522 MOD		1	36509	04/10/12 15:28	BES	TAL BUR

### Client Sample ID: MW-265M

Date Collected: 04/02/12 14:00

Date Received: 04/03/12 10:15

### Lab Sample ID: 360-39816-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			36343	04/06/12 10:25	MLT	TAL BUR
Total/NA	Analysis	522 MOD		1	36373	04/06/12 18:06	MTW	TAL BUR

### Client Sample ID: MW-266MA

Date Collected: 04/02/12 13:35

Date Received: 04/03/12 10:15

### Lab Sample ID: 360-39816-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			36343	04/06/12 10:25	MLT	TAL BUR
Total/NA	Analysis	522 MOD		1	36373	04/06/12 18:22	MTW	TAL BUR

### Client Sample ID: MW-267S

Date Collected: 04/02/12 12:30

Date Received: 04/03/12 10:15

### Lab Sample ID: 360-39816-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			36343	04/06/12 10:25	MLT	TAL BUR
Total/NA	Analysis	522 MOD		1	36373	04/06/12 18:37	MTW	TAL BUR

### Client Sample ID: MW-267M

Date Collected: 04/02/12 11:25

Date Received: 04/03/12 10:15

### Lab Sample ID: 360-39816-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			36343	04/06/12 10:25	MLT	TAL BUR
Total/NA	Analysis	522 MOD		1	36373	04/06/12 18:53	MTW	TAL BUR

### Client Sample ID: MW-268M

Date Collected: 04/02/12 10:15

Date Received: 04/03/12 10:15

### Lab Sample ID: 360-39816-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			36343	04/06/12 10:25	MLT	TAL BUR
Total/NA	Analysis	522 MOD		4	36509	04/10/12 15:44	BES	TAL BUR

## Lab Chronicle

Client: Innovative Engineering Solutions, Inc  
Project/Site: IDS Wayland

TestAmerica Job ID: 360-39816-1

### Client Sample ID: MW-552

Date Collected: 04/02/12 11:00  
Date Received: 04/03/12 10:15

### Lab Sample ID: 360-39816-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			36343	04/06/12 10:25	MLT	TAL BUR
Total/NA	Analysis	522 MOD		2	36509	04/10/12 16:00	BES	TAL BUR

### Client Sample ID: DUPX1

Date Collected: 04/02/12 12:00  
Date Received: 04/03/12 10:15

### Lab Sample ID: 360-39816-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			36343	04/06/12 10:25	MLT	TAL BUR
Total/NA	Analysis	522 MOD		4	36509	04/10/12 16:16	BES	TAL BUR

#### Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

## Certification Summary

Client: Innovative Engineering Solutions, Inc  
 Project/Site: IDS Wayland

TestAmerica Job ID: 360-39816-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Westfield	Connecticut	State Program	1	PH-0494
TestAmerica Westfield	Maine	State Program	1	MA00014
TestAmerica Westfield	Massachusetts	State Program	1	M-MA014
TestAmerica Westfield	New Hampshire	NELAC	1	2539
TestAmerica Westfield	Rhode Island	State Program	1	LAO00057
TestAmerica Westfield	Vermont	State Program	1	VT-10843
TestAmerica Burlington	ACCLASS	DoD ELAP		ADE-1492
TestAmerica Burlington	Connecticut	State Program	1	PH-0751
TestAmerica Burlington	DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA
TestAmerica Burlington	Florida	NELAC Secondary AB	4	E87467
TestAmerica Burlington	Louisiana	NELAC Secondary AB	6	176292
TestAmerica Burlington	Maine	State Program	1	VT00008
TestAmerica Burlington	Minnesota	State Program	5	050-999-436
TestAmerica Burlington	New Hampshire	NELAC	1	200610
TestAmerica Burlington	New Jersey	NELAC	2	VT972
TestAmerica Burlington	Pennsylvania	NELAC	3	68-00489
TestAmerica Burlington	Rhode Island	State Program	1	LAO00298
TestAmerica Burlington	USDA	Federal		P330-11-00093
TestAmerica Burlington	Vermont	State Program	1	VT-4000
TestAmerica Burlington	Virginia	NELAC Secondary AB	3	460209

Accreditation may not be offered or required for all methods and analytes reported in this package . Please contact your project manager for the laboratory's current list of certified methods and analytes.

# 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 CaCO <sub>3</sub> ) 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 CI F	Chlorine, Residual		NP
SM 4500 H+ B	pH	NP/P	NP/P
SM 4500 NO <sub>2</sub> 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 (Colilert-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: Innovative Engineering Solutions, Inc

Job Number: 360-39816-1

**Login Number: 39816**

**List Source: TestAmerica Westfield**

**List Number: 1**

**Creator: Kolb, Chris M**

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

## Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 360-39816-1

**Login Number:** 39816

**List Source:** TestAmerica Burlington

**List Number:** 1

**List Creation:** 04/03/12 10:59 AM

**Creator:** Holt, Jamie

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	NO CUSTODY SEAL NUMBERS
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	2.2°C, IR GUN ID 154, CF 0
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.	False	IDs on containers do not match the COC. Logged in per COC.
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	Preservation labels on samples match COC
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.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



**Raytheon, Wayland, MA**  
**Analytical Report**

**Well Samples**



Prepared By:  
**BTC**  
25 Spring Street,  
Walpole, MA 02081-4301  
Phone (508) 668-0191 • Fax (508) 668-5175

Sampled: 04/02/12-04/03/12  
Analyzed: 04/03/12-04/04/12



25 Spring Street • Walpole, MA 02081-4301 • phone (508) 668-0191 • fax (508) 668-5175

April 5, 2012

IESI  
Sami Fam  
Innovative Engineering Solutions, Inc.  
25 Spring St.  
Walpole, MA 02081-4301

RE: Analytical Data Report  
Raytheon  
Wayland, MA

Dear Mr. Fam,

Enclosed are the results of the sample(s) submitted to our laboratory on April 2-3, 2012.

All analyses were performed to our laboratory's quality assurance program. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. You may also contact me via email at  
[G.Pon@Biotreatcenter.com](mailto:G.Pon@Biotreatcenter.com)

Respectfully submitted,  
Bioremediation Treatability Center

A handwritten signature in black ink, appearing to read "George Pon".

George Pon  
Laboratory Director

**---Dissolved Gasses---**



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<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** IW-4

**Sampler** dj/dr/cv

**Sample Date** 4/2/12

**Sample Time** 12:30 PM

**Sample Received** 4/2/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	7.4	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	0.6	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

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<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** IW-5

**Sampler** dj/dr/cv

**Sample Date** 4/2/12

**Sample Time** 11:25 AM

**Sample Received** 4/2/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	4823	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	9.7	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

**---Dissolved Gasses---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** IW-15

**Sampler** dj/dr/cv

**Sample Date** 4/3/12

**Sample Time** 12:00 AM

**Sample Received** 4/3/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	58.3	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	4.8	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-261S

**Sampler** dj/dr/cv

**Sample Date** 4/2/12

**Sample Time** 12:00 PM

**Sample Received** 4/2/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	20946	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	18.3	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

**---Dissolved Gasses---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-265M

**Sampler** dj/dr/cv

**Sample Date** 4/2/12

**Sample Time** 2:03 PM

**Sample Received** 4/2/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	1193	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	3.9	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-268M

**Sampler** dj/dr/cv

**Sample Date** 4/2/12

**Sample Time** 10:15 AM

**Sample Received** 4/2/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	32.6	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	3.2	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	1.9	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

**---Dissolved Gasses---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-551

**Sampler** dj/dr/cv

**Sample Date** 4/2/12

**Sample Time** 1:00 PM

**Sample Received** 4/2/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	19989	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-552

**Sampler** dj/dr/cv

**Sample Date** 4/2/12

**Sample Time** 11:00 AM

**Sample Received** 4/2/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	19950	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

**---Dissolved Gasses---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-553

**Sampler** dj/dr/cv

**Sample Date** 4/2/12

**Sample Time** 10:00 AM

**Sample Received** 4/2/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	13513	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	13.7	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-560

**Sampler** dj/dr/cv

**Sample Date** 4/2/12

**Sample Time** 10:00 AM

**Sample Received** 4/2/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	61.5	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	1.3	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

**---Dissolved Gasses---**



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<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** MW-561

**Sampler** dj/dr/cv

**Sample Date** 4/2/12

**Sample Time** 1:40 PM

**Sample Received** 4/2/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	130	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	13.3	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

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<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** MW-562

**Sampler** dj/dr/cv

**Sample Date** 4/3/12

**Sample Time** 12:00 AM

**Sample Received** 4/3/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	26737	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	40.4	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

**---Dissolved Gasses---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** REW-1

**Sampler** dj/dr/cv

**Sample Date** 4/3/12

**Sample Time** 12:00 AM

**Sample Received** 4/3/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	12538	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	171	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** REW-4

**Sampler** dj/dr/cv

**Sample Date** 4/3/12

**Sample Time** 12:00 AM

**Sample Received** 4/3/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	36.9	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

**---Dissolved Gasses---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** REW-5

**Sampler** dj/dr/cv

**Sample Date** 4/3/12

**Sample Time** 12:00 AM

**Sample Received** 4/3/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	385	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	3.7	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** Trip Blank

**Sampler** na

**Sample Date** na

**Sample Time** na

**Sample Received** 4/2/12

**Method** Modified EPA 5021 A

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
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**Dissolved Gasses**

Methane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Ethylene	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Ethane	<0.3	µg/L	0.3 µg/L	4/3/2012	swd
Acetylene	<2	µg/L	2µg/L	4/3/2012	swd

**---Anions---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** IW-4  
**Sampler** dj/dr/cv  
**Sample Date** 4/2/2012  
**Sample Time** 12:30 PM  
**Sample Received** 4/2/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	30	mg/L	1 mg/L	4/3/2012	swd
Nitrate	<1	mg/L	1 mg/L	4/3/2012	swd
Sulfate	29	mg/L	1 mg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** IW-5  
**Sampler** dj/dr/cv  
**Sample Date** 4/2/2012  
**Sample Time** 11:25 AM  
**Sample Received** 4/2/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	17	mg/L	1 mg/L	4/3/2012	swd
Nitrate	<1	mg/L	1 mg/L	4/3/2012	swd
Sulfate	29	mg/L	1 mg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** IW-15  
**Sampler** dj/dr/cv  
**Sample Date** 4/3/2012  
**Sample Time** 12:00 AM  
**Sample Received** 4/3/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	111	mg/L	1 mg/L	4/3/2012	swd
Nitrate	<1	mg/L	1 mg/L	4/3/2012	swd
Sulfate	64	mg/L	1 mg/L	4/3/2012	swd

**---Anions---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-261S  
**Sampler** dj/dr/cv  
**Sample Date** 4/2/2012  
**Sample Time** 12:00 PM  
**Sample Received** 4/2/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	19	mg/L	1 mg/L	4/3/2012	swd
Nitrate	<1	mg/L	1 mg/L	4/3/2012	swd
Sulfate	<1	mg/L	1 mg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-265M  
**Sampler** dj/dr/cv  
**Sample Date** 4/2/2012  
**Sample Time** 2:03 PM  
**Sample Received** 4/2/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	32	mg/L	1 mg/L	4/3/2012	swd
Nitrate	<1	mg/L	1 mg/L	4/3/2012	swd
Sulfate	<1	mg/L	1 mg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-268M  
**Sampler** dj/dr/cv  
**Sample Date** 4/2/2012  
**Sample Time** 10:15 AM  
**Sample Received** 4/2/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	na	mg/L	1 mg/L	4/3/2012	swd
Nitrate	na	mg/L	1 mg/L	4/3/2012	swd
Sulfate	na	mg/L	1 mg/L	4/3/2012	swd

**---Anions---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-551  
**Sampler** dj/dr/cv  
**Sample Date** 4/2/2012  
**Sample Time** 1:00 PM  
**Sample Received** 4/2/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	6	mg/L	1 mg/L	4/3/2012	swd
Nitrate	<1	mg/L	1 mg/L	4/3/2012	swd
Sulfate	3	mg/L	1 mg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-552  
**Sampler** dj/dr/cv  
**Sample Date** 4/2/2012  
**Sample Time** 11:00 AM  
**Sample Received** 4/2/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	10	mg/L	1 mg/L	4/3/2012	swd
Nitrate	<1	mg/L	1 mg/L	4/3/2012	swd
Sulfate	3	mg/L	1 mg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-553  
**Sampler** dj/dr/cv  
**Sample Date** 4/2/2012  
**Sample Time** 10:00 AM  
**Sample Received** 4/2/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	9	mg/L	1 mg/L	4/3/2012	swd
Nitrate	<1	mg/L	1 mg/L	4/3/2012	swd
Sulfate	3	mg/L	1 mg/L	4/3/2012	swd

**---Anions---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-560  
**Sampler** dj/dr/cv  
**Sample Date** 4/2/2012  
**Sample Time** 10:00 AM  
**Sample Received** 4/2/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	10	mg/L	1 mg/L	4/3/2012	swd
Nitrate	<1	mg/L	1 mg/L	4/3/2012	swd
Sulfate	23	mg/L	1 mg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-561  
**Sampler** dj/dr/cv  
**Sample Date** 4/2/2012  
**Sample Time** 1:40 PM  
**Sample Received** 4/2/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	20	mg/L	1 mg/L	4/3/2012	swd
Nitrate	<1	mg/L	1 mg/L	4/3/2012	swd
Sulfate	22	mg/L	1 mg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-562  
**Sampler** dj/dr/cv  
**Sample Date** 4/3/2012  
**Sample Time** 12:00 AM  
**Sample Received** 4/3/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	33	mg/L	1 mg/L	4/3/2012	swd
Nitrate	<1	mg/L	1 mg/L	4/3/2012	swd
Sulfate	<1	mg/L	1 mg/L	4/3/2012	swd

**---Anions---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** REW-1  
**Sampler** dj/dr/cv  
**Sample Date** 4/3/2012  
**Sample Time** 12:00 AM  
**Sample Received** 4/3/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	31	mg/L	1 mg/L	4/3/2012	swd
Nitrate	<1	mg/L	1 mg/L	4/3/2012	swd
Sulfate	4	mg/L	1 mg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** REW-4  
**Sampler** dj/dr/cv  
**Sample Date** 4/3/2012  
**Sample Time** 12:00 AM  
**Sample Received** 4/3/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	3	mg/L	1 mg/L	4/3/2012	swd
Nitrate	<1	mg/L	1 mg/L	4/3/2012	swd
Sulfate	14	mg/L	1 mg/L	4/3/2012	swd

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** REW-5  
**Sampler** dj/dr/cv  
**Sample Date** 4/3/2012  
**Sample Time** 12:00 AM  
**Sample Received** 4/3/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	39	mg/L	1 mg/L	4/3/2012	swd
Nitrate	<1	mg/L	1 mg/L	4/3/2012	swd
Sulfate	25	mg/L	1 mg/L	4/3/2012	swd

**---Anions---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** Trip Blank

**Sampler** na

**Sample Date** na

**Sample Time** na

**Sample Received** 4/2/2012

**Method** Modified EPA 300

<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Anions</b>					
Chloride	<1	mg/L	1 mg/L	4/3/2012	swd
Nitrate	<1	mg/L	1 mg/L	4/3/2012	swd
Sulfate	<1	mg/L	1 mg/L	4/3/2012	swd

**---Organic Acids---**



<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** IW-4

**Sampler** dj/dr/cv  
**Sample Date** 4/2/2012  
**Sample Time** 12:30 PM  
**Sample Received** 4/2/2012

<b>Method</b>	HPLC / Organic Acid Method					
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	
<b>Organic Acids</b>						
Lactate	<1	mg/L	1 mg/L	4/3/2012	swd	
Acetate	<1	mg/L	1 mg/L	4/3/2012	swd	
Propionate	<1	mg/L	1 mg/L	4/3/2012	swd	
Butyrate	<1	mg/L	1 mg/L	4/3/2012	swd	

<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** IW-5

**Sampler** dj/dr/cv  
**Sample Date** 4/2/12  
**Sample Time** 11:25 AM  
**Sample Received** 4/2/12

<b>Method</b>	HPLC / Organic Acid Method					
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	
<b>Organic Acids</b>						
Lactate	9	mg/L	1 mg/L	4/3/2012	swd	
Acetate	16	mg/L	1 mg/L	4/3/2012	swd	
Propionate	<1	mg/L	1 mg/L	4/3/2012	swd	
Butyrate	<1	mg/L	1 mg/L	4/3/2012	swd	

<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** IW-15

**Sampler** dj/dr/cv  
**Sample Date** 4/3/12  
**Sample Time** 12:00 AM  
**Sample Received** 4/3/12

<b>Method</b>	HPLC / Organic Acid Method					
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	
<b>Organic Acids</b>						
Lactate	<1	mg/L	1 mg/L	4/3/2012	swd	
Acetate	<1	mg/L	1 mg/L	4/3/2012	swd	
Propionate	<1	mg/L	1 mg/L	4/3/2012	swd	
Butyrate	<1	mg/L	1 mg/L	4/3/2012	swd	

**---Organic Acids---**



<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** MW-261S

**Sampler** dj/dr/cv  
**Sample Date** 4/2/12  
**Sample Time** 12:00 PM  
**Sample Received** 4/2/12

<b>Method</b>	HPLC / Organic Acid Method					
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	
<b>Organic Acids</b>						
Lactate	<1	mg/L	1 mg/L	4/3/2012	swd	
Acetate	94	mg/L	1 mg/L	4/3/2012	swd	
Propionate	<1	mg/L	1 mg/L	4/3/2012	swd	
Butyrate	<1	mg/L	1 mg/L	4/3/2012	swd	

<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** MW-265M

**Sampler** dj/dr/cv  
**Sample Date** 4/2/12  
**Sample Time** 2:03 PM  
**Sample Received** 4/2/12

<b>Method</b>	HPLC / Organic Acid Method					
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	
<b>Organic Acids</b>						
Lactate	<1	mg/L	1 mg/L	4/3/2012	swd	
Acetate	44	mg/L	1 mg/L	4/3/2012	swd	
Propionate	<1	mg/L	1 mg/L	4/3/2012	swd	
Butyrate	<1	mg/L	1 mg/L	4/3/2012	swd	

<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** MW-268M

**Sampler** dj/dr/cv  
**Sample Date** 4/2/12  
**Sample Time** 10:15 AM  
**Sample Received** 4/2/12

<b>Method</b>	HPLC / Organic Acid Method					
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	
<b>Organic Acids</b>						
Lactate	na	mg/L	1 mg/L	4/3/2012	swd	
Acetate	na	mg/L	1 mg/L	4/3/2012	swd	
Propionate	na	mg/L	1 mg/L	4/3/2012	swd	
Butyrate	na	mg/L	1 mg/L	4/3/2012	swd	

**---Organic Acids---**



<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** MW-551

**Sampler** dj/dr/cv  
**Sample Date** 4/2/12  
**Sample Time** 1:00 PM  
**Sample Received** 4/2/12

<b>Method</b>	HPLC / Organic Acid Method					
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	
<b>Organic Acids</b>						
Lactate	<1	mg/L	1 mg/L	4/3/2012	swd	
Acetate	10	mg/L	1 mg/L	4/3/2012	swd	
Propionate	<1	mg/L	1 mg/L	4/3/2012	swd	
Butyrate	<1	mg/L	1 mg/L	4/3/2012	swd	

<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** MW-552

**Sampler** dj/dr/cv  
**Sample Date** 4/2/12  
**Sample Time** 11:00 AM  
**Sample Received** 4/2/12

<b>Method</b>	HPLC / Organic Acid Method					
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	
<b>Organic Acids</b>						
Lactate	<1	mg/L	1 mg/L	4/3/2012	swd	
Acetate	70	mg/L	1 mg/L	4/3/2012	swd	
Propionate	<1	mg/L	1 mg/L	4/3/2012	swd	
Butyrate	<1	mg/L	1 mg/L	4/3/2012	swd	

<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** MW-553

**Sampler** dj/dr/cv  
**Sample Date** 4/2/12  
**Sample Time** 10:00:00 AM  
**Sample Received** 4/2/12

<b>Method</b>	HPLC / Organic Acid Method					
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	
<b>Organic Acids</b>						
Lactate	<1	mg/L	1 mg/L	4/3/2012	swd	
Acetate	81	mg/L	1 mg/L	4/3/2012	swd	
Propionate	<1	mg/L	1 mg/L	4/3/2012	swd	
Butyrate	<1	mg/L	1 mg/L	4/3/2012	swd	

**---Organic Acids---**



<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** MW-560

**Sampler** dj/dr/cv

**Sample Date** 4/2/12

**Sample Time** 10:00 AM

**Sample Received** 4/2/12

<b>Method</b>	HPLC / Organic Acid Method					
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Organic Acids</b>						
Lactate	5	mg/L	1 mg/L	4/3/2012	swd	
Acetate	<1	mg/L	1 mg/L	4/3/2012	swd	
Propionate	<1	mg/L	1 mg/L	4/3/2012	swd	
Butyrate	<1	mg/L	1 mg/L	4/3/2012	swd	

<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** MW-561

**Sampler** dj/dr/cv

**Sample Date** 4/2/12

**Sample Time** 1:40 PM

**Sample Received** 4/2/12

<b>Method</b>	HPLC / Organic Acid Method					
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Organic Acids</b>						
Lactate	<1	mg/L	1 mg/L	4/3/2012	swd	
Acetate	<1	mg/L	1 mg/L	4/3/2012	swd	
Propionate	<1	mg/L	1 mg/L	4/3/2012	swd	
Butyrate	<1	mg/L	1 mg/L	4/3/2012	swd	

<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** MW-562

**Sampler** dj/dr/cv

**Sample Date** 4/3/12

**Sample Time** 12:00 AM

**Sample Received** 4/3/12

<b>Method</b>	HPLC / Organic Acid Method					
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
<b>Organic Acids</b>						
Lactate	<1	mg/L	1 mg/L	4/3/2012	swd	
Acetate	467	mg/L	1 mg/L	4/3/2012	swd	
Propionate	<1	mg/L	1 mg/L	4/3/2012	swd	
Butyrate	8	mg/L	1 mg/L	4/3/2012	swd	

**---Organic Acids---**




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<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** REW-1

**Sampler** dj/dr/cv

**Sample Date** 4/3/12

**Sample Time** 12:00 AM

**Sample Received** 4/3/12

<b>Method</b>	HPLC / Organic Acid Method					
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	
<b>Organic Acids</b>						
Lactate	<1	mg/L	1 mg/L	4/3/2012	swd	
Acetate	419	mg/L	1 mg/L	4/3/2012	swd	
Propionate	<1	mg/L	1 mg/L	4/3/2012	swd	
Butyrate	5	mg/L	1 mg/L	4/3/2012	swd	

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<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** REW-4

**Sampler** dj/dr/cv

**Sample Date** 4/3/12

**Sample Time** 12:00 AM

**Sample Received** 4/3/12

<b>Method</b>	HPLC / Organic Acid Method					
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	
<b>Organic Acids</b>						
Lactate	<1	mg/L	1 mg/L	4/3/2012	swd	
Acetate	<1	mg/L	1 mg/L	4/3/2012	swd	
Propionate	<1	mg/L	1 mg/L	4/3/2012	swd	
Butyrate	<1	mg/L	1 mg/L	4/3/2012	swd	

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<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** REW-5

**Sampler** dj/dr/cv

**Sample Date** 4/3/12

**Sample Time** 12:00 AM

**Sample Received** 4/3/12

<b>Method</b>	HPLC / Organic Acid Method					
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	
<b>Organic Acids</b>						
Lactate	<1	mg/L	1 mg/L	4/3/2012	swd	
Acetate	49	mg/L	1 mg/L	4/3/2012	swd	
Propionate	<1	mg/L	1 mg/L	4/3/2012	swd	
Butyrate	<1	mg/L	1 mg/L	4/3/2012	swd	

**---Organic Acids---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** Trip Blank

**Sampler** na  
**Sample Date** na  
**Sample Time** na  
**Sample Received** 4/2/12

<b>Method</b>	HPLC / Organic Acid Method				
	<b>Compound</b>	<b>Test Value</b>	<b>Units</b>	<b>Detection Limit</b>	<b>Analysis Date</b>
<b>Organic Acids</b>					
Lactate	<1	mg/L	1 mg/L	4/3/2012	swd
Acetate	<1	mg/L	1 mg/L	4/3/2012	swd
Propionate	<1	mg/L	1 mg/L	4/3/2012	swd
Butyrate	<1	mg/L	1 mg/L	4/3/2012	swd

**---Chemistries---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** IW-4

**Sampler** dj/dr/cv

**Sample Date** 4/2/2012

**Sample Time** 12:30 PM

**Sample Received** 4/2/2012

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	140	mg/L	HACH 8203	5 mg/L	4/3/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	4.00	mg/L	HACH 8155	0.02 mg/L	4/3/2012	rdr
PO <sub>4</sub>	0.25	mg/L	HACH 8048	0.05 mg/L	4/3/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	1.88	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	3.8	mg/L	EPA 9060A	<0.3 mg/L	4/3/2012	swd
pH	7.11	pH units	pH probe	<0.01 pH units	4/3/2012	rdr

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** IW-5

**Sampler** dj/dr/cv

**Sample Date** 4/2/2012

**Sample Time** 11:25 AM

**Sample Received** 4/2/2012

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	200	mg/L	HACH 8203	5 mg/L	4/3/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	0.34	mg/L	HACH 8155	0.02 mg/L	4/3/2012	rdr
PO <sub>4</sub>	0.09	mg/L	HACH 8048	0.05 mg/L	4/3/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	1.66	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	17.6	mg/L	EPA 9060A	<0.3 mg/L	4/3/2012	swd
pH	11.53	pH units	pH probe	<0.01 pH units	4/3/2012	rdr

**---Chemistries---**



<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** IW-15

**Sampler** dj/dr/cv

**Sample Date** 4/3/2012

**Sample Time** 12:00 AM

**Sample Received** 4/3/2012

<b>Chemical Tests</b>	<b>Test Value</b>	<b>Units</b>	<b>Method</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
Alkalinity	120	mg/L	HACH 8203	5 mg/L	4/4/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	0.07	mg/L	HACH 8155	0.02 mg/L	4/4/2012	rdr
PO <sub>4</sub>	0.21	mg/L	HACH 8048	0.05 mg/L	4/4/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	5.10	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	1.5	mg/L	EPA 9060A	<0.3 mg/L	4/3/2012	swd
pH	6.61	pH units	pH probe	<0.01 pH units	4/4/2012	rdr

<b>Project Identification:</b>	Raytheon, Wayland, MA
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**Sample ID** MW-261S

**Sampler** dj/dr/cv

**Sample Date** 4/2/2012

**Sample Time** 12:00 PM

**Sample Received** 4/2/2012

<b>Chemical Tests</b>	<b>Test Value</b>	<b>Units</b>	<b>Method</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
Alkalinity	240	mg/L	HACH 8203	5 mg/L	4/3/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	0.05	mg/L	HACH 8155	0.02 mg/L	4/3/2012	rdr
PO <sub>4</sub>	0.06	mg/L	HACH 8048	0.05 mg/L	4/3/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	47.2	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	410	mg/L	EPA 9060A	<0.3 mg/L	4/3/2012	swd
pH	6.90	pH units	pH probe	<0.01 pH units	4/3/2012	rdr

**---Chemistries---**




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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-265M

**Sampler** dj/dr/cv

**Sample Date** 4/2/2012

**Sample Time** 2:03 PM

**Sample Received** 4/2/2012

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	260	mg/L	HACH 8203	5 mg/L	4/3/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	0.09	mg/L	HACH 8155	0.02 mg/L	4/3/2012	rdr
PO <sub>4</sub>	0.22	mg/L	HACH 8048	0.05 mg/L	4/3/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	5.04	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	29.3	mg/L	EPA 9060A	<0.3 mg/L	4/3/2012	swd
pH	7.01	pH units	pH probe	<0.01 pH units	4/3/2012	rdr

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-268M

**Sampler** dj/dr/cv

**Sample Date** 4/2/2012

**Sample Time** 10:15 AM

**Sample Received** 4/2/2012

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	100	mg/L	HACH 8203	5 mg/L	4/3/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	0.06	mg/L	HACH 8155	0.02 mg/L	4/3/2012	rdr
PO <sub>4</sub>	0.58	mg/L	HACH 8048	0.05 mg/L	4/3/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	na	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	2.0	mg/L	EPA 9060A	<0.3 mg/L	4/3/2012	swd
pH	6.94	pH units	pH probe	<0.01 pH units	4/3/2012	rdr

**---Chemistries---**




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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-551

**Sampler** dj/dr/cv

**Sample Date** 4/2/2012

**Sample Time** 1:00 PM

**Sample Received** 4/2/2012

<b>Chemical Tests</b>	<b>Test Value</b>	<b>Units</b>	<b>Method</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
Alkalinity	100	mg/L	HACH 8203	5 mg/L	4/3/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	0.05	mg/L	HACH 8155	0.02 mg/L	4/3/2012	rdr
PO <sub>4</sub>	0.46	mg/L	HACH 8048	0.05 mg/L	4/3/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	14.7	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	96.5	mg/L	EPA 9060A	<0.3 mg/L	4/3/2012	swd
pH	7.01	pH units	pH probe	<0.01 pH units	4/3/2012	rdr

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-552

**Sampler** dj/dr/cv

**Sample Date** 4/2/2012

**Sample Time** 11:00 AM

**Sample Received** 4/2/2012

<b>Chemical Tests</b>	<b>Test Value</b>	<b>Units</b>	<b>Method</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
Alkalinity	340	mg/L	HACH 8203	5 mg/L	4/3/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	0.08	mg/L	HACH 8155	0.02 mg/L	4/3/2012	rdr
PO <sub>4</sub>	1.04	mg/L	HACH 8048	0.05 mg/L	4/3/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	15.8	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	100	mg/L	EPA 9060A	<0.3 mg/L	4/3/2012	swd
pH	6.79	pH units	pH probe	<0.01 pH units	4/3/2012	rdr

**---Chemistries---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-553

**Sampler** dj/dr/cv

**Sample Date** 4/2/2012

**Sample Time** 10:00 AM

**Sample Received** 4/2/2012

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	180	mg/L	HACH 8203	5 mg/L	4/3/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	<0.02	mg/L	HACH 8155	0.02 mg/L	4/3/2012	rdr
PO <sub>4</sub>	0.16	mg/L	HACH 8048	0.05 mg/L	4/3/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	5.20	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	287	mg/L	EPA 9060A	<0.3 mg/L	4/3/2012	swd
pH	7.27	pH units	pH probe	<0.01 pH units	4/3/2012	rdr

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-560

**Sampler** dj/dr/cv

**Sample Date** 4/2/2012

**Sample Time** 10:00 AM

**Sample Received** 4/2/2012

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	180	mg/L	HACH 8203	5 mg/L	4/3/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	1.00	mg/L	HACH 8155	0.02 mg/L	4/3/2012	rdr
PO <sub>4</sub>	0.07	mg/L	HACH 8048	0.05 mg/L	4/3/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	0.43	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	1.8	mg/L	EPA 9060A	<0.3 mg/L	4/3/2012	swd
pH	11.55	pH units	pH probe	<0.01 pH units	4/3/2012	rdr

**---Chemistries---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-561

**Sampler** dj/dr/cv

**Sample Date** 4/2/2012

**Sample Time** 1:40 PM

**Sample Received** 4/2/2012

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	140	mg/L	HACH 8203	5 mg/L	4/3/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	0.03	mg/L	HACH 8155	0.02 mg/L	4/3/2012	rdr
PO <sub>4</sub>	0.15	mg/L	HACH 8048	0.05 mg/L	4/3/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	7.60	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	2.8	mg/L	EPA 9060A	<0.3 mg/L	4/3/2012	swd
pH	7.01	pH units	pH probe	<0.01 pH units	4/3/2012	rdr

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** MW-562

**Sampler** dj/dr/cv

**Sample Date** 4/3/2012

**Sample Time** 12:00 AM

**Sample Received** 4/3/2012

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	360	mg/L	HACH 8203	5 mg/L	4/4/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	2.00	mg/L	HACH 8155	0.02 mg/L	4/4/2012	rdr
PO <sub>4</sub>	3.74	mg/L	HACH 8048	0.05 mg/L	4/4/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	77.0	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	382	mg/L	EPA 9060A	<0.3 mg/L	4/4/2012	swd
pH	6.48	pH units	pH probe	<0.01 pH units	4/4/2012	rdr

**---Chemistries---**




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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** REW-1

**Sampler** dj/dr/cv

**Sample Date** 4/3/2012

**Sample Time** 12:00 AM

**Sample Received** 4/3/2012

<b>Chemical Tests</b>	<b>Test Value</b>	<b>Units</b>	<b>Method</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
Alkalinity	380	mg/L	HACH 8203	5 mg/L	4/4/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	4.00	mg/L	HACH 8155	0.02 mg/L	4/4/2012	rdr
PO <sub>4</sub>	0.45	mg/L	HACH 8048	0.05 mg/L	4/4/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	40.4	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	434	mg/L	EPA 9060A	<0.3 mg/L	4/4/2012	swd
pH	6.67	pH units	pH probe	<0.01 pH units	4/4/2012	rdr

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** REW-4

**Sampler** dj/dr/cv

**Sample Date** 4/3/2012

**Sample Time** 12:00 AM

**Sample Received** 4/3/2012

<b>Chemical Tests</b>	<b>Test Value</b>	<b>Units</b>	<b>Method</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
Alkalinity	100	mg/L	HACH 8203	5 mg/L	4/4/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	0.69	mg/L	HACH 8155	0.02 mg/L	4/4/2012	rdr
PO <sub>4</sub>	0.17	mg/L	HACH 8048	0.05 mg/L	4/4/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	4.58	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	1.4	mg/L	EPA 9060A	<0.3 mg/L	4/4/2012	swd
pH	6.95	pH units	pH probe	<0.01 pH units	4/4/2012	rdr

**---Chemistries---**



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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** REW-5

**Sampler** dj/dr/cv

**Sample Date** 4/3/2012

**Sample Time** 12:00 AM

**Sample Received** 4/3/2012

<b>Chemical Tests</b>	<b>Test Value</b>	<b>Units</b>	<b>Method</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
Alkalinity	160	mg/L	HACH 8203	5 mg/L	4/4/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	0.11	mg/L	HACH 8155	0.02 mg/L	4/4/2012	rdr
PO <sub>4</sub>	0.27	mg/L	HACH 8048	0.05 mg/L	4/4/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	14.2	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	51.1	mg/L	EPA 9060A	<0.3 mg/L	4/4/2012	swd
pH	6.56	pH units	pH probe	<0.01 pH units	4/4/2012	rdr

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**Project Identification:** Raytheon, Wayland, MA

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**Sample ID** Trip Blank

**Sampler** na

**Sample Date** na

**Sample Time** na

**Sample Received** 4/2/2012

<b>Chemical Tests</b>	<b>Test Value</b>	<b>Units</b>	<b>Method</b>	<b>Detection Limit</b>	<b>Analysis Date</b>	<b>Tech</b>
Alkalinity	10	mg/L	HACH 8203	5 mg/L	4/3/2012	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH <sub>3</sub> -N	<0.02	mg/L	HACH 8155	0.02 mg/L	4/3/2012	rdr
PO <sub>4</sub>	<0.05	mg/L	HACH 8048	0.05 mg/L	4/3/2012	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	<0.03	mg/L	HACH 8008	0.03 mg/L	4/4/2012	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	<0.3	mg/L	EPA 9060A	<0.3 mg/L	4/3/2012	swd
pH	7.60	pH units	pH probe	<0.01 pH units	4/3/2012	rdr

## ---Table-Summary of Analytical Report---

<u>Project</u>	Raytheon, Wayland, MA					
<u>Date Received</u>	4/2/12	4/2/12	4/3/12	4/2/12	4/2/12	4/2/12
<u>Sample ID</u>	IW-4	IW-5	IW-15	MW-261S	MW-265M	MW-268M
<u>Date Sampled</u>	4/2/12	4/2/12	4/3/12	4/2/12	4/2/12	4/2/12

<u>Dissolved Gasses</u>						
<b>Date Analyzed</b>		4/3/12	4/3/12	4/4/12	4/3/12	4/3/12
<b>Sample ID</b>	Units	IW-4	IW-5	IW-15	MW-261S	MW-265M
Methane	µg/L	7.4	4823	58.3	20946	1193
Ethylene	µg/L	0.6	9.7	4.8	18.3	3.9
Ethane	µg/L	<0.3	<0.3	<0.3	<0.3	1.9
Acetylene	µg/L	<2	<2	<2	<2	<2

<u>Anions</u>						
<b>Date Analyzed</b>		4/3/12	4/3/12	4/3/12	4/3/12	4/3/12
<b>Sample ID</b>	Units	IW-4	IW-5	IW-15	MW-261S	MW-265M
Chloride	mg/L	30	17	111	19	32
Nitrate	mg/L	<1	<1	<1	<1	<1
Sulfate	mg/L	29	29	64	<1	<1
<u>Organic Acids</u>						
<b>Date Analyzed</b>		4/3/12	4/3/12	4/3/12	4/3/12	4/3/12
Lactate	mg/L	<1	9	<1	<1	<1
Acetate	mg/L	<1	16	<1	94	44
Propionate	mg/L	<1	<1	<1	<1	<1
Butyrate	mg/L	<1	<1	<1	<1	na

<u>Chemistries</u>						
<b>Date Analyzed</b>	4/3/12-4/4/12					
<b>Sample ID</b>	Units	IW-4	IW-5	IW-15	MW-261S	MW-265M
Alkalinity	mg/L	140	200	120	240	260
Manganese	mg/L	na	na	na	na	na
NH <sub>3</sub> -N	mg/L	4.00	0.34	0.07	0.05	0.09
PO <sub>4</sub>	mg/L	0.25	0.09	0.21	0.06	0.22
Sulfide	mg/L	na	na	na	na	na
Total Iron	mg/L	1.88	1.66	5.10	47.2	5.04
COD	mg/L	na	na	na	na	na
TOC	mg/L	3.8	17.6	1.5	410	29.3
pH	pH units	7.11	11.53	6.61	6.90	7.01
						6.94

<u>H2/CO2 by TCD analysis</u>						
<b>Date Analyzed</b>		na	na	na	na	na
<b>Sample ID</b>	Units	IW-4	IW-5	IW-15	MW-261S	MW-265M
H2	µM	na	na	na	na	na
CO2	mg/L	na	na	na	na	na

## ---Table-Summary of Analytical Report---

<u>Project</u>	Raytheon, Wayland, MA					
<u>Date Received</u>	4/2/12	4/2/12	4/2/12	4/2/12	4/2/12	4/3/12
<u>Sample ID</u>	MW-551	MW-552	MW-553	MW-560	MW-561	MW-562
<u>Date Sampled</u>	4/2/12	4/2/12	4/2/12	4/2/12	4/2/12	4/3/12

<u>Dissolved Gasses</u>							
<b>Date Analyzed</b>		4/3/12	4/3/12	4/3/12	4/3/12	4/3/12	4/4/12
<b>Sample ID</b>	Units	MW-551	MW-552	MW-553	MW-560	MW-561	MW-562
Methane	µg/L	19989	19950	13513	61.5	130	26737
Ethylene	µg/L	<0.3	<0.3	13.7	1.3	13.3	40.4
Ethane	µg/L	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Acetylene	µg/L	<2	<2	<2	<2	<2	<2

<u>Anions</u>							
<b>Date Analyzed</b>		4/3/12	4/3/12	4/3/12	4/3/12	4/3/12	4/3/12
<b>Sample ID</b>	Units	MW-551	MW-552	MW-553	MW-560	MW-561	MW-562
Chloride	mg/L	6	10	9	10	20	33
Nitrate	mg/L	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	3	3	3	23	22	<1
<u>Organic Acids</u>							
<b>Date Analyzed</b>		4/3/12	4/3/12	4/3/12	4/3/12	4/3/12	4/3/12
Lactate	mg/L	<1	<1	<1	5	<1	<1
Acetate	mg/L	10	70	81	<1	<1	467
Propionate	mg/L	<1	<1	<1	<1	<1	<1
Butyrate	mg/L	<1	<1	<1	<1	<1	8

<u>Chemistries</u>							
<b>Date Analyzed</b>	4/3/12-4/4/12						
<b>Sample ID</b>	Units	MW-551	MW-552	MW-553	MW-560	MW-561	MW-562
Alkalinity	mg/L	100	340	180	180	140	360
Manganese	mg/L	na	na	na	na	na	na
NH <sub>3</sub> -N	mg/L	0.05	0.08	<0.02	1.00	0.03	2.00
PO <sub>4</sub>	mg/L	0.46	1.04	0.16	0.07	0.15	3.74
Sulfide	mg/L	na	na	na	na	na	na
Total Iron	mg/L	14.7	15.8	5.20	0.43	7.60	77.0
COD	mg/L	na	na	na	na	na	na
TOC	mg/L	96.5	100	287	1.8	2.8	382
pH	pH units	7.01	6.79	7.27	11.55	7.01	6.48

<u>H2/CO2 by TCD analysis</u>							
<b>Date Analyzed</b>		na	na	na	na	na	na
<b>Sample ID</b>	Units	MW-551	MW-552	MW-553	MW-560	MW-561	MW-562
H <sub>2</sub>	µM	na	na	na	na	na	na
CO <sub>2</sub>	mg/L	na	na	na	na	na	na

**---Table-Summary of Analytical Report---**

<b>Project</b>	Raytheon, Wayland, MA			
<b>Date Received</b>	4/3/12	4/3/12	4/3/12	4/2/12
<b>Sample ID</b>	REW-1	REW-4	REW-5	Trip Blank
<b>Date Sampled</b>	4/3/12	4/3/12	4/3/12	na

<b>Dissolved Gasses</b>					
<b>Date Analyzed</b>		4/4/12	4/4/12	4/4/12	4/3/12
<b>Sample ID</b>	Units	REW-1	REW-4	REW-5	Trip Blank
Methane	µg/L	12538	36.9	385	<0.3
Ethylene	µg/L	171	<0.3	3.7	<0.3
Ethane	µg/L	<0.3	<0.3	<0.3	<0.3
Acetylene	µg/L	<2	<2	<2	<2

<b>Anions</b>					
<b>Date Analyzed</b>		4/3/12	4/3/12	4/3/12	4/3/12
<b>Sample ID</b>	Units	REW-1	REW-4	REW-5	Trip Blank
Chloride	mg/L	31	3	39	<1
Nitrate	mg/L	<1	<1	<1	<1
Sulfate	mg/L	4	14	25	<1
<b>Organic Acids</b>					
<b>Date Analyzed</b>		4/3/12	4/3/12	4/3/12	4/3/12
Lactate	mg/L	<1	<1	<1	<1
Acetate	mg/L	419	<1	49	<1
Propionate	mg/L	<1	<1	<1	<1
Butyrate	mg/L	5	<1	<1	<1

<b>Chemistries</b>					
<b>Date Analyzed</b>	4/3/12-4/4/12				
<b>Sample ID</b>	Units	REW-1	REW-4	REW-5	Trip Blank
Alkalinity	mg/L	380	100	160	10
Manganese	mg/L	na	na	na	na
NH <sub>3</sub> -N	mg/L	4.00	0.69	0.11	<0.02
PO <sub>4</sub>	mg/L	0.45	0.17	0.27	<0.05
Sulfide	mg/L	na	na	na	na
Total Iron	mg/L	40.4	4.58	14.2	<0.03
COD	mg/L	na	na	na	na
TOC	mg/L	434	1.4	51.1	<0.3
pH	pH units	6.67	6.95	6.56	7.60

<b>H2/CO2 by TCD analysis</b>					
<b>Date Analyzed</b>		na	na	na	na
<b>Sample ID</b>	Units	REW-1	REW-4	REW-5	Trip Blank
H <sub>2</sub>	µM	na	na	na	na
CO <sub>2</sub>	mg/L	na	na	na	na

## TESTING METHODS

### **Ion Analysis**

Inorganic anions were analyzed on a Metrohm 761 IC system according to modified EPA Method 300. Organic acids were analyzed by HPLC method with an organic acid column for lactate, acetate, propionate, and butyrate. A sample to be analyzed for anions is diluted with ultra pure water as necessary to obtain the analytes in the working range of the method, and is placed into the instrument, where the sample is introduced by an automated sampling device. All samples were placed sequentially in the auto sampler and the samples were injected sequentially into the ion-exchange column. Flows from the column were directed to a conductivity detector and the peak responses were processed for quantification. Identification of analytes is based on retention times for individual analytes, and quantification is based on analysis of prepared standards.

### **Gas Chromatography**

Dissolved gasses were analyzed according to modified EPA Method 5021A. 10ml of the sample is transferred from the 40 ml VOA vials to a 20 ml sampling vial for a 1 to 1, headspace to liquid ratio. The headspace sample is analyzed by a HP 7694 Headspace Sampler, injected to a HP 5890 gas chromatograph. Gasses were detected by PID detector and followed by Flame Ionization Detector. Standards were prepared and analyzed in the same manner as samples.

### **Total Organic Carbon Analyzer**

Organic carbon is measured according to a modified EPA Method 9060A using a Shimadzu TOC-5050A carbonaceous analyzer. This instrument converts the organic carbon in a sample to carbon dioxide ( $\text{CO}_2$ ) by catalytic combustion. The  $\text{CO}_2$  formed is then measured directly by an infrared detector. The amount of  $\text{CO}_2$  in a sample is directly proportional to the concentration of carbonaceous material in the sample.

### **HACH Colorimeter**

Chemical Tests for, Iron (Total), Manganese, Nitrogen (Ammonia), Phosphorous (Orthophosphate), and Sulfide are analyzed with a DR/ 890 Colorimeter. Alkalinity is analyzed with a HACH Alkalinity Digital Titrator. VOA vials for the analysis of these chemical tests have no preservative. The methods used are EPA approved and are as follows:

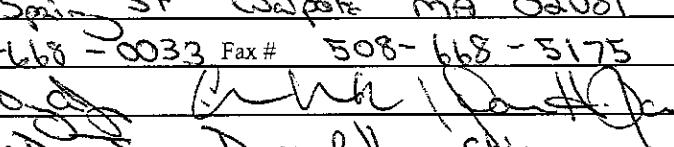
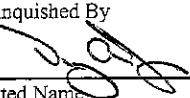
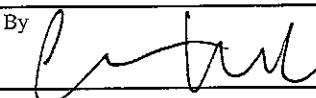
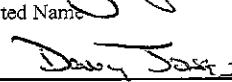
Alkalinity	Hach Titration
Ammonia Nitrogen	Hach 8155
COD	Hach 8000
Manganese	Hach 8034
Orthophosphate Phosphorous	Hach 8048
Sulfide	Hach 8131
Total Iron	Hach 8008

### **pH**

The pH of samples is determined using a Corning 313 ATC electrode.

# CHAIN OF CUSTODY RECORD

**B T C**
**Bioremediation Treatability Center • 25 Spring Street • Walpole, MA 02081-4301 • phone (508) 668-0191 • fax (508) 668-5175**

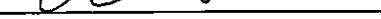
Project Name & Project Number		RA-008																
Project Manager		Vicki Parivar																
Company / Address		Innovative Engineering Solutions Inc 25 Spring St Walpole MA 02081																
Phone #		508-668-0033 Fax# 508-668-5175																
Sampler's Signature																		
Sampler's Printed Name		Vicki Parivar, Director, CHS																
Client Sample ID	Sampling		Date	Time	No. of Sample Bottles per Well													
	Alkalinity	Ammonia				Anions (Cl <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , SO <sub>4</sub> <sup>2-</sup> )	Biotank	Bromide	COD	Dissolved Gas	H <sub>2</sub> / CO <sub>2</sub>	Organic Acid	Orthophosphate	pH	Sulfide	TOC	Total Iron	Total Manganese
MW-268m	4/2/12	1015	5	X	X				X	X	X	X	X	X				
IW-4	4/2/12	1230	6	X	X	X			X		X	X	X	X	X	X		
IW-5	4/2/12	1125	6	X	X	X			X		X	X	X	X	X	X		
MW-560	4/2/12	1000	6	X	X	X			X		X	X	X	X	X	X		
MW-561	4/2/12	1340	6	X	X	X			X		X	X	X	X	X	X		
MW-265m	4/2/12	1403	6	X	X	X			X		X	X	X	X	X	X		
MW-2613	4/2/12	1200	6	X	X	X			X		X	X	X	X	X	X		
MW-551	4/2/12	1300	6	X	X	X			X		X	X	X	X	X	X		
MW-552	4/2/12	1100	6	X	X	X			X		X	X	X	X	X	X		
MW-553	4/2/12	1000	6	X	X	X			X		X	X	X	X	X	X		
Special Instructions / Comments																		
Relinquished By 	Received By Chris Varnes	Relinquished By 	Received By Susan Davis															
Printed Name 	Printed Name 	Printed Name Chris Varnes	Printed Name Susan Davis															
Firm IESI	Firm (ES)	Firm IESI	Firm BTC															
Date/Time 4/2/12 1430	Date/Time 4/2/12 1430	Date/Time 4/2/12 3:20 pm	Date/Time 4/2/12 3:20															

## **CHAIN OF CUSTODY RECORD**

B T C

**Bioremediation Treatability Center** • 25 Spring Street • Walpole, MA 02081-4301 • phone (508) 668-0191 • fax (508) 668-5175

### Special Instructions / Comments

Relinquished By 	Received By 	Relinquished By 	Received By 
Printed Name  Davy Jones	Printed Name  CHRIS VARUCHA	Printed Name  CHRIS VARUCHA	Printed Name  George Pon
Firm  IESI	Firm  IESI	Firm  IESI	Firm  BTC
Date/Time 4/3/12 1430	Date/Time 4/3/12 1430	Date/Time 4/3/12 16:13	Date/Time 4/3/12 16:14