

**Environmental  
Resources  
Management**

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

<http://www.erm.com>

9 May 2017

Reference: 0377766

Wayland Meadows Development, Inc.  
Attn: Mr. Richard Gass  
145 Rosemary Street, Suite E  
Needham, MA 02494



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

Dear Mr. Gass:

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

Innovative Engineering Solutions, Inc. (IESI) collected groundwater samples from one monitoring well located on Wayland Meadows Development, Inc. property in April 2017. These samples were submitted to TestAmerica Laboratories, Inc. of Amherst, NY for analysis. All analytical results are attached to this letter.

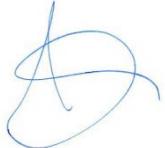
Raytheon has implemented the Public Involvement Process in accordance with 310 CMR 40.1405. Documents pertaining to the Site can be found at the Board of Health Public Involvement Plan files, or at <http://raytheon.erm.com/home.htm>.

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

Mr. Gass  
9 May 2017  
Page 2

Environmental  
Resources  
Management

Sincerely,



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



Lyndsey Colburn, P.G.  
*Principal Consultant*

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

cc: Jonathan Hone, Raytheon Company  
PIP Repositories



**Massachusetts Department of Environmental Protection**  
*Bureau of Waste Site Cleanup*

**BWSC123**

This Notice is Related to:  
Release Tracking Number

[ ] - [ ]

**NOTICE OF ENVIRONMENTAL SAMPLING**

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

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

1. Street Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ Zip Code: \_\_\_\_\_

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

1. Name: \_\_\_\_\_

2. Street Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ Zip Code: \_\_\_\_\_

**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: \_\_\_\_\_

City/Town: \_\_\_\_\_ Zip Code: \_\_\_\_\_

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

Immediate Response Action

Phase III Feasibility Evaluation

Release Abatement Measure

Phase IV Remedy Implementation Plan

Utility-related Abatement Measure

Phase V/Remedy Operation Status

Phase I Initial Site Investigation

Post-Temporary Solution Operation, Maintenance and Monitoring

Phase II Comprehensive Site Assessment

Other \_\_\_\_\_

(specify)

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

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

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

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

Contact Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_



**Massachusetts Department of Environmental Protection**  
*Bureau of Waste Site Cleanup*

**BWSC123**

This Notice is Related to:  
Release Tracking Number  
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**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 of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) 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/eea/agencies/massdep/cleanup>. 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://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. 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 Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-116033-1

Client Project/Site: IDS Wayland

Revision: 1

For:

Innovative Engineering Solutions, Inc

25 Spring Street

Walpole, Massachusetts 02081

Attn: Vicki Pariyar



Authorized for release by:

4/25/2017 1:03:15 PM

Becky Mason, Project Manager II

(413)572-4000

[becky.mason@testamericainc.com](mailto:becky.mason@testamericainc.com)

One sample was collected from one well on Wayland Meadows property.  
All other samples have been grayed out for ease of review.

### LINKS

Review your project  
results through

TotalAccess

Have a Question?

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.

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# Definitions/Glossary

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

TestAmerica Job ID: 480-116033-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
F1	MS and/or MSD Recovery is outside acceptance 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
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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# Case Narrative

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

TestAmerica Job ID: 480-116033-1

## Job ID: 480-116033-1

### Laboratory: TestAmerica Buffalo

#### Narrative

#### Job Narrative 480-116033-1

Revised report: Per client request updated IDs for the following samples: MW-266Ma-20170411 (480-116033-2) and REW-12-20170411 (480-116033-13).

#### Receipt

The samples were received on 4/12/2017 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0° C.

#### Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): REW-11-20170411 (480-116033-13). The container labels list REW-12-20170411, while the COC lists REW-11-20170411. Logged in as per the COC pending PM/client resolution.

#### GC/MS VOA

Method 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-dibromo-3-chloropropane, Carbon Disulfide, Isopropyl Ether, Naphthalene, tert-Amyl Methyl Ether and Tetrahydrofuran.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-352253 recovered above the upper MCP control limit but less than 40% (less than 60% for poor performing analytes) for Acetone and Bromoform. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples are impacted:

MW-264M-20170411 (480-116033-3), MW-553-20170411 (480-116033-5), MW-560-20170411 (480-116033-6), MW-562-20170411 (480-116033-8), MW-563-20170411 (480-116033-9), REW-8-20170411 (480-116033-10), REW-9-20170411 (480-116033-11), REW-10-20170411 (480-116033-12) and TRIP BLANKS (480-116033-15).

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-352253 recovered outside control limits but were greater than 10% for the following analytes: Acetone and Bromoform . MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples are impacted:

MW-264M-20170411 (480-116033-3), MW-553-20170411 (480-116033-5), MW-560-20170411 (480-116033-6), MW-562-20170411 (480-116033-8), MW-563-20170411 (480-116033-9), REW-8-20170411 (480-116033-10), REW-9-20170411 (480-116033-11), REW-10-20170411 (480-116033-12) and TRIP BLANKS (480-116033-15).

Method 8260C: Due to the co-elution of Ethyl Acetate with 2-Butanone and Methacrylonitrile with Tetrahydrofuran in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) associated with batch 352253: MW-264M-20170411 (480-116033-3), MW-553-20170411 (480-116033-5), MW-560-20170411 (480-116033-6), MW-563-20170411 (480-116033-9), REW-8-20170411 (480-116033-10), REW-9-20170411 (480-116033-11), REW-10-20170411 (480-116033-12) and TRIP BLANKS (480-116033-15).

Method 8260C: The initial calibration curve RSD was greater than the 20% acceptance criteria for Bromoform, however the RSD was less than 40%. MCP protocol allows for 10% of the target compounds to be outside of the 20% RSD limit for the calibration provided the RSDs do not exceed 40%. The following samples are impacted: MW-264M-20170411 (480-116033-3), MW-553-20170411 (480-116033-5), MW-560-20170411 (480-116033-6), MW-562-20170411 (480-116033-8), MW-563-20170411 (480-116033-9), REW-8-20170411 (480-116033-10), REW-9-20170411 (480-116033-11), REW-10-20170411 (480-116033-12) and TRIP BLANKS (480-116033-15).

Method 8260C: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: MW-562-20170411 (480-116033-8). The sample was analyzed within 7 days per EPA recommendation.

Method 8260C: The continuing calibration verification (CCV) for Carbon tetrachloride, Acetone, Bromoform, and 2-Butanone associated with batch 480-352315 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following samples were affected : MW-261S-20170411 (480-116033-1), MW-264Ma-20170411 (480-116033-2), MW-552-20170411 (480-116033-4), MW-561-20170411 (480-116033-7), REW-11-20170411 (480-116033-13) and DUP3-20170411

# Case Narrative

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

TestAmerica Job ID: 480-116033-1

## Job ID: 480-116033-1 (Continued)

### Laboratory: TestAmerica Buffalo (Continued)

(480-116033-14).

Method 8260C: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch 480-352315 exceeded control limits for the following analytes: Bromoform and Acetone. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-261S-20170411 (480-116033-1), MW-264Ma-20170411 (480-116033-2), MW-552-20170411 (480-116033-4), MW-561-20170411 (480-116033-7), REW-11-20170411 (480-116033-13) and DUP3-20170411 (480-116033-14).

Method 8260C: The laboratory control sample (LCS) and/or the laboratory control sample duplicate (LCSD) for batch 480-352315 exceeded control limits for the following analytes: 2-Butanone and Tetrahydrofuran. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate and Methacrylonitrile in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : MW-261S-20170411 (480-116033-1), MW-264Ma-20170411 (480-116033-2), MW-552-20170411 (480-116033-4), MW-561-20170411 (480-116033-7), REW-11-20170411 (480-116033-13) and DUP3-20170411 (480-116033-14).

Method 8260C: The initial calibration curve RSD was greater than the 20% acceptance criteria for Bromoform, however the RSD was less than 40%. MCP protocol allows for 10% of the target compounds to be outside of the 20% RSD limit for the calibration provided the RSDs do not exceed 40%. The following samples are impacted: MW-261S-20170411 (480-116033-1), MW-266Ma-20170411 (480-116033-2), MW-552-20170411 (480-116033-4), MW-561-20170411 (480-116033-7), REW-11-20170411 (480-116033-13) and DUP3-20170411 (480-116033-14).

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: REW-11-20170411 (480-116033-13). Elevated reporting limits (RLs) are provided.

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-562-20170411 (480-116033-8). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-352449 recovered above the upper MCP control limit but less than 40% for Acetone and 2-Butanone. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference, 60% for poor performing compounds. The following sample is impacted: MW-562-20170411 (480-116033-8).

Method 8260C: The laboratory control sample (LCS) and/or the laboratory control sample duplicate (LCSD) for batch 480-352449 recovered outside control limits but were greater than 10% for the following analyte: Acetone . MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following sample is impacted: MW-562-20170411 (480-116033-8).

Method 8260C: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: MW-562-20170411 (480-116033-8). The sample was analyzed within 7 days per EPA recommendation.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### GC/MS Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

### HPLC/IC

Method 300.0: The following samples was reported with elevated reporting limits for all analytes: MW-261S-20170411 (480-116033-1), MW-552-20170411 (480-116033-4) and MW-553-20170411 (480-116033-5). The sample was analyzed at a dilution based on screening results.

Method 300.0: The following sample was diluted due to the nature of the sample matrix: MW-562-20170411 (480-116033-8) and REW-12-20170411 (480-116033-13). Elevated reporting limits (RLs) are provided.

## Case Narrative

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

TestAmerica Job ID: 480-116033-1

### Job ID: 480-116033-1 (Continued)

#### Laboratory: TestAmerica Buffalo (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

Method 6010: At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### General Chemistry

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples have been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: MW-261S-20170411 (480-116033-1), MW-552-20170411 (480-116033-4), MW-553-20170411 (480-116033-5), MW-560-20170411 (480-116033-6), MW-561-20170411 (480-116033-7), MW-562-20170411 (480-116033-8), MW-563-20170411 (480-116033-9), REW-8-20170411 (480-116033-10), REW-9-20170411 (480-116033-11) and REW-10-20170411 (480-116033-12).

Method 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: REW-12-20170411 (480-116033-13).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# MassDEP Analytical Protocol Certification Form

Laboratory Name:	TestAmerica Buffalo		Project #:	480-116033	
Project Location:	IDS Wayland		RTN:		
<b>This form provides certifications for the following data set: list Laboratory Sample ID Number(s):</b>					
<b>480-116033[1-15]</b>					
Matrices:	<input checked="" type="checkbox"/> Groundwater/Surface Water	<input type="checkbox"/> Soil/Sediment	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> Air	<input type="checkbox"/> Other:
<b>CAM Protocols (check all that apply below):</b>					
8260 VOC CAM II A <input checked="" type="checkbox"/>	7470/7471 Hg CAM III B <input type="checkbox"/>	Mass DEP VPH CAM IV A <input type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	Mass DEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	7010 Metals CAM III C <input type="checkbox"/>	Mass DEP EPH CAM IV B <input type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input checked="" type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input type="checkbox"/>	9014 Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	
<b>Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status</b>					
<b>A</b>	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>B</b>	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>C</b>	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>D</b>	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>E</b>	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>F</b>	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Responses to Questions G, H and I below are required for "Presumptive Certainty" status</b>					
<b>G</b>	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <sup>1</sup>
<b>Data User Note:</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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No <sup>1</sup>
<sup>1</sup> All negative responses must be addressed in an attached laboratory narrative.					
<b>I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.</b>					
Signature:			Position:	Project Manager Assistant II	
Printed Name:	Denise L. Giglia		Date:	4/19/17 20:40	

## Detection Summary

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

TestAmerica Job ID: 480-116033-1

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**Client Sample ID: MW-264M-20170411**

**Lab Sample ID: 480-116033-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.5		1.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	11		1.0		ug/L	1		8260C	Total/NA
Trichloroethene	9.1		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	18		1.0		ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

## Detection Summary

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

TestAmerica Job ID: 480-116033-1

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This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

## Detection Summary

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

TestAmerica Job ID: 480-116033-1

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This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

## Detection Summary

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

TestAmerica Job ID: 480-116033-1

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This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

## Detection Summary

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

TestAmerica Job ID: 480-116033-1

**Client Sample ID: TRIP BLANKS**

**Lab Sample ID: 480-116033-15**

No Detections.

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This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

# Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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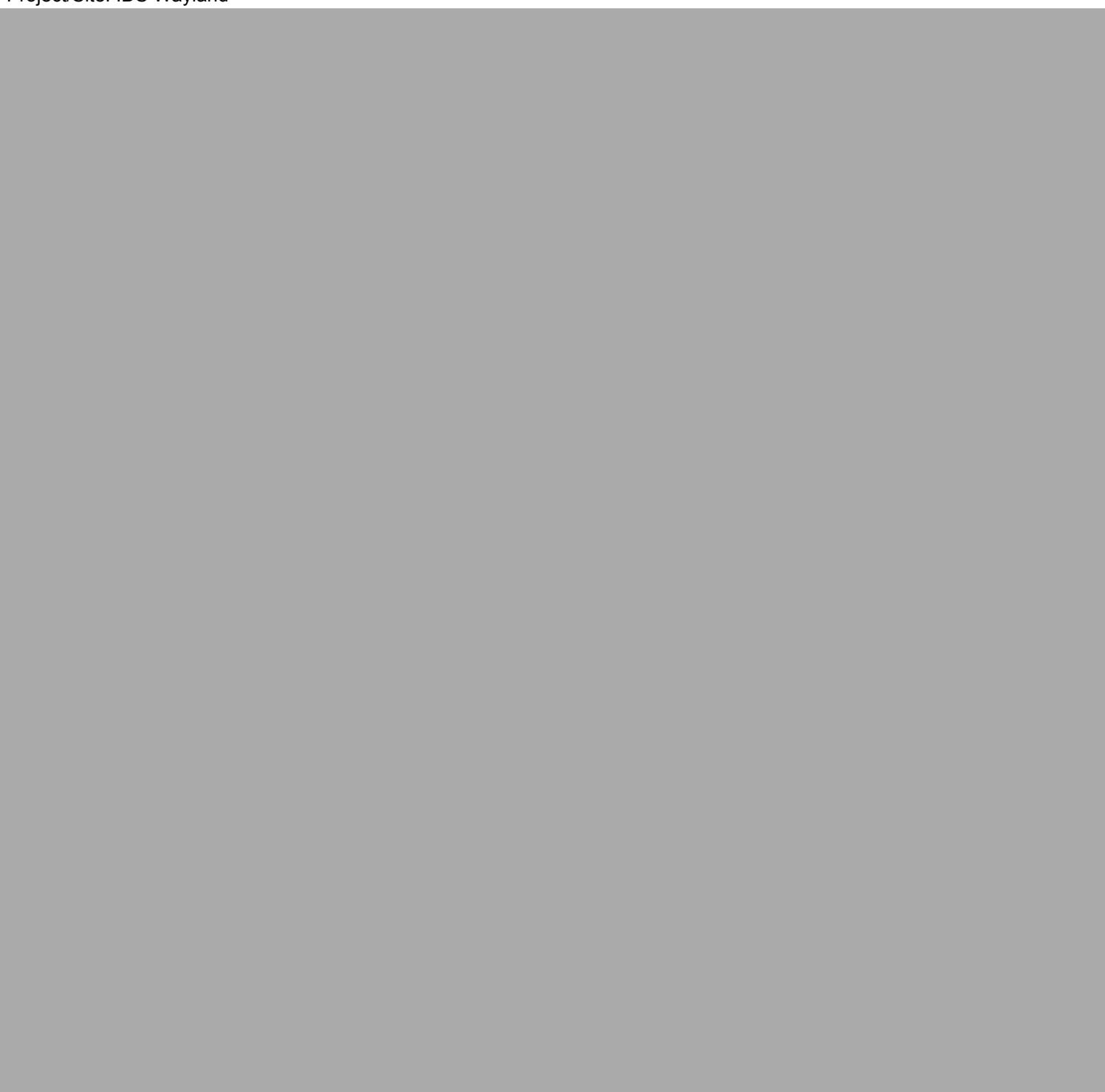
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Client Sample ID: MW-264M-20170411

Date Collected: 04/11/17 14:30

Date Received: 04/12/17 10:00

Lab Sample ID: 480-116033-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/16/17 16:49	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/16/17 16:49	1

TestAmerica Buffalo

# Client Sample Results

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

TestAmerica Job ID: 480-116033-1

**Client Sample ID: MW-264M-20170411**

**Lab Sample ID: 480-116033-3**

Date Collected: 04/11/17 14:30

Matrix: Water

Date Received: 04/12/17 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L		04/16/17 16:49		1
1,1,2-Trichloroethane	ND		1.0		ug/L		04/16/17 16:49		1
<b>1,1-Dichloroethane</b>	<b>1.5</b>		1.0		ug/L		04/16/17 16:49		1
1,1-Dichloroethene	ND		1.0		ug/L		04/16/17 16:49		1
1,1-Dichloropropene	ND		1.0		ug/L		04/16/17 16:49		1
1,2,3-Trichlorobenzene	ND		1.0		ug/L		04/16/17 16:49		1
1,2,3-Trichloropropane	ND		1.0		ug/L		04/16/17 16:49		1
1,2,4-Trichlorobenzene	ND		1.0		ug/L		04/16/17 16:49		1
1,2,4-Trimethylbenzene	ND		1.0		ug/L		04/16/17 16:49		1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L		04/16/17 16:49		1
1,2-Dichlorobenzene	ND		1.0		ug/L		04/16/17 16:49		1
1,2-Dichloroethane	ND		1.0		ug/L		04/16/17 16:49		1
1,2-Dichloropropane	ND		1.0		ug/L		04/16/17 16:49		1
1,3,5-Trimethylbenzene	ND		1.0		ug/L		04/16/17 16:49		1
1,3-Dichlorobenzene	ND		1.0		ug/L		04/16/17 16:49		1
1,3-Dichloropropane	ND		1.0		ug/L		04/16/17 16:49		1
1,4-Dichlorobenzene	ND		1.0		ug/L		04/16/17 16:49		1
1,4-Dioxane	ND		50		ug/L		04/16/17 16:49		1
2,2-Dichloropropane	ND		1.0		ug/L		04/16/17 16:49		1
2-Butanone (MEK)	ND *		10		ug/L		04/16/17 16:49		1
2-Chlorotoluene	ND		1.0		ug/L		04/16/17 16:49		1
2-Hexanone	ND		10		ug/L		04/16/17 16:49		1
4-Chlorotoluene	ND		1.0		ug/L		04/16/17 16:49		1
4-Isopropyltoluene	ND		1.0		ug/L		04/16/17 16:49		1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L		04/16/17 16:49		1
Acetone	ND *		50		ug/L		04/16/17 16:49		1
Benzene	ND		1.0		ug/L		04/16/17 16:49		1
Bromobenzene	ND		1.0		ug/L		04/16/17 16:49		1
Bromoform	ND *		1.0		ug/L		04/16/17 16:49		1
Bromomethane	ND		2.0		ug/L		04/16/17 16:49		1
Carbon disulfide	ND		10		ug/L		04/16/17 16:49		1
Carbon tetrachloride	ND		1.0		ug/L		04/16/17 16:49		1
Chlorobenzene	ND		1.0		ug/L		04/16/17 16:49		1
Chlorobromomethane	ND		1.0		ug/L		04/16/17 16:49		1
Chlorodibromomethane	ND		0.50		ug/L		04/16/17 16:49		1
Chloroethane	ND		2.0		ug/L		04/16/17 16:49		1
Chloroform	ND		1.0		ug/L		04/16/17 16:49		1
Chloromethane	ND		2.0		ug/L		04/16/17 16:49		1
<b>cis-1,2-Dichloroethene</b>	<b>11</b>		1.0		ug/L		04/16/17 16:49		1
cis-1,3-Dichloropropene	ND		0.40		ug/L		04/16/17 16:49		1
Dichlorobromomethane	ND		0.50		ug/L		04/16/17 16:49		1
Dichlorodifluoromethane	ND		1.0		ug/L		04/16/17 16:49		1
Ethyl ether	ND		1.0		ug/L		04/16/17 16:49		1
Ethylbenzene	ND		1.0		ug/L		04/16/17 16:49		1
Ethylene Dibromide	ND		1.0		ug/L		04/16/17 16:49		1
Hexachlorobutadiene	ND		0.40		ug/L		04/16/17 16:49		1
Isopropyl ether	ND		10		ug/L		04/16/17 16:49		1
Isopropylbenzene	ND		1.0		ug/L		04/16/17 16:49		1
Methyl tert-butyl ether	ND		1.0		ug/L		04/16/17 16:49		1

TestAmerica Buffalo

# Client Sample Results

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

TestAmerica Job ID: 480-116033-1

**Client Sample ID: MW-264M-20170411**

**Lab Sample ID: 480-116033-3**

Date Collected: 04/11/17 14:30

Matrix: Water

Date Received: 04/12/17 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0		ug/L		04/16/17 16:49		1
m-Xylene & p-Xylene	ND		2.0		ug/L		04/16/17 16:49		1
Naphthalene	ND		5.0		ug/L		04/16/17 16:49		1
n-Butylbenzene	ND		1.0		ug/L		04/16/17 16:49		1
N-Propylbenzene	ND		1.0		ug/L		04/16/17 16:49		1
o-Xylene	ND		1.0		ug/L		04/16/17 16:49		1
sec-Butylbenzene	ND		1.0		ug/L		04/16/17 16:49		1
Styrene	ND		1.0		ug/L		04/16/17 16:49		1
Tert-amyl methyl ether	ND		5.0		ug/L		04/16/17 16:49		1
Tert-butyl ethyl ether	ND		5.0		ug/L		04/16/17 16:49		1
tert-Butylbenzene	ND		1.0		ug/L		04/16/17 16:49		1
Tetrachloroethene	ND		1.0		ug/L		04/16/17 16:49		1
Tetrahydrofuran	ND *		10		ug/L		04/16/17 16:49		1
Toluene	ND		1.0		ug/L		04/16/17 16:49		1
trans-1,2-Dichloroethene	ND		1.0		ug/L		04/16/17 16:49		1
trans-1,3-Dichloropropene	ND		0.40		ug/L		04/16/17 16:49		1
<b>Trichloroethene</b>	<b>9.1</b>		1.0		ug/L		04/16/17 16:49		1
Trichlorofluoromethane	ND		1.0		ug/L		04/16/17 16:49		1
<b>Vinyl chloride</b>	<b>18</b>		1.0		ug/L		04/16/17 16:49		1
Dibromomethane	ND		1.0		ug/L		04/16/17 16:49		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		70 - 130				04/16/17 16:49		1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130				04/16/17 16:49		1
4-Bromofluorobenzene (Surr)	101		70 - 130				04/16/17 16:49		1

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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# Client Sample Results

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

TestAmerica Job ID: 480-116033-1

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**Client Sample ID: TRIP BLANKS**

**Lab Sample ID: 480-116033-15**

**Matrix: Water**

Date Collected: 04/11/17 00:00

Date Received: 04/12/17 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/16/17 21:32	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/16/17 21:32	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/16/17 21:32	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/16/17 21:32	1
1,1-Dichloroethane	ND		1.0		ug/L			04/16/17 21:32	1
1,1-Dichloroethene	ND		1.0		ug/L			04/16/17 21:32	1
1,1-Dichloropropene	ND		1.0		ug/L			04/16/17 21:32	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/16/17 21:32	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/16/17 21:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/16/17 21:32	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/16/17 21:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/16/17 21:32	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/16/17 21:32	1
1,2-Dichloroethane	ND		1.0		ug/L			04/16/17 21:32	1
1,2-Dichloropropane	ND		1.0		ug/L			04/16/17 21:32	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/16/17 21:32	1

TestAmerica Buffalo

# Client Sample Results

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

TestAmerica Job ID: 480-116033-1

## Client Sample ID: TRIP BLANKS

Date Collected: 04/11/17 00:00  
Date Received: 04/12/17 10:00

## Lab Sample ID: 480-116033-15

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			04/16/17 21:32	1
1,3-Dichloropropane	ND		1.0		ug/L			04/16/17 21:32	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/16/17 21:32	1
1,4-Dioxane	ND		50		ug/L			04/16/17 21:32	1
2,2-Dichloropropane	ND		1.0		ug/L			04/16/17 21:32	1
2-Butanone (MEK)	ND *		10		ug/L			04/16/17 21:32	1
2-Chlorotoluene	ND		1.0		ug/L			04/16/17 21:32	1
2-Hexanone	ND		10		ug/L			04/16/17 21:32	1
4-Chlorotoluene	ND		1.0		ug/L			04/16/17 21:32	1
4-Isopropyltoluene	ND		1.0		ug/L			04/16/17 21:32	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/16/17 21:32	1
Acetone	ND *		50		ug/L			04/16/17 21:32	1
Benzene	ND		1.0		ug/L			04/16/17 21:32	1
Bromobenzene	ND		1.0		ug/L			04/16/17 21:32	1
Bromoform	ND *		1.0		ug/L			04/16/17 21:32	1
Bromomethane	ND		2.0		ug/L			04/16/17 21:32	1
Carbon disulfide	ND		10		ug/L			04/16/17 21:32	1
Carbon tetrachloride	ND		1.0		ug/L			04/16/17 21:32	1
Chlorobenzene	ND		1.0		ug/L			04/16/17 21:32	1
Chlorobromomethane	ND		1.0		ug/L			04/16/17 21:32	1
Chlorodibromomethane	ND		0.50		ug/L			04/16/17 21:32	1
Chloroethane	ND		2.0		ug/L			04/16/17 21:32	1
Chloroform	ND		1.0		ug/L			04/16/17 21:32	1
Chloromethane	ND		2.0		ug/L			04/16/17 21:32	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/16/17 21:32	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/16/17 21:32	1
Dichlorobromomethane	ND		0.50		ug/L			04/16/17 21:32	1
Dichlorodifluoromethane	ND		1.0		ug/L			04/16/17 21:32	1
Ethyl ether	ND		1.0		ug/L			04/16/17 21:32	1
Ethylbenzene	ND		1.0		ug/L			04/16/17 21:32	1
Ethylene Dibromide	ND		1.0		ug/L			04/16/17 21:32	1
Hexachlorobutadiene	ND		0.40		ug/L			04/16/17 21:32	1
Isopropyl ether	ND		10		ug/L			04/16/17 21:32	1
Isopropylbenzene	ND		1.0		ug/L			04/16/17 21:32	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/16/17 21:32	1
Methylene Chloride	ND		1.0		ug/L			04/16/17 21:32	1
m-Xylene & p-Xylene	ND		2.0		ug/L			04/16/17 21:32	1
Naphthalene	ND		5.0		ug/L			04/16/17 21:32	1
n-Butylbenzene	ND		1.0		ug/L			04/16/17 21:32	1
N-Propylbenzene	ND		1.0		ug/L			04/16/17 21:32	1
o-Xylene	ND		1.0		ug/L			04/16/17 21:32	1
sec-Butylbenzene	ND		1.0		ug/L			04/16/17 21:32	1
Styrene	ND		1.0		ug/L			04/16/17 21:32	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/16/17 21:32	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/16/17 21:32	1
tert-Butylbenzene	ND		1.0		ug/L			04/16/17 21:32	1
Tetrachloroethene	ND		1.0		ug/L			04/16/17 21:32	1
Tetrahydrofuran	ND *		10		ug/L			04/16/17 21:32	1
Toluene	ND		1.0		ug/L			04/16/17 21:32	1

TestAmerica Buffalo

# Client Sample Results

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

TestAmerica Job ID: 480-116033-1

## **Client Sample ID: TRIP BLANKS**

Date Collected: 04/11/17 00:00  
 Date Received: 04/12/17 10:00

## **Lab Sample ID: 480-116033-15**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/16/17 21:32	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/16/17 21:32	1
Trichloroethene	ND		1.0		ug/L			04/16/17 21:32	1
Trichlorofluoromethane	ND		1.0		ug/L			04/16/17 21:32	1
Vinyl chloride	ND		1.0		ug/L			04/16/17 21:32	1
Dibromomethane	ND		1.0		ug/L			04/16/17 21:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	94		70 - 130					04/16/17 21:32	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130					04/16/17 21:32	1
4-Bromofluorobenzene (Surr)	98		70 - 130					04/16/17 21:32	1

# Surrogate Summary

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

TestAmerica Job ID: 480-116033-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (70-130)	12DCE (70-130)	BFB (70-130)
480-116033-3	MW-264M-20170411	95	100	101
480-116033-15	TRIP BLANKS	94	100	98
LCS 480-352253/5	Lab Control Sample	95	98	100
LCS 480-352315/5	Lab Control Sample	96	100	101
LCS 480-352449/5	Lab Control Sample	93	96	97
LCSD 480-352253/6	Lab Control Sample Dup	97	98	102
LCSD 480-352315/6	Lab Control Sample Dup	95	99	98
LCSD 480-352449/6	Lab Control Sample Dup	93	96	98
MB 480-352253/8	Method Blank	96	104	101
MB 480-352315/8	Method Blank	95	99	98
MB 480-352449/8	Method Blank	92	97	98

### Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			—	—	—	—	—	—	—	—
		14DD8 (46-130)	97	—	—	—	—	—	—	—	—	—
480-116033-1	MW-261S-20170411	—	—	—	—	—	—	—	—	—	—	—
LCS 200-115834/2-A	Lab Control Sample	99	—	—	—	—	—	—	—	—	—	—
LCSD 200-115834/3-A	Lab Control Sample Dup	97	—	—	—	—	—	—	—	—	—	—
MB 200-115834/1-A	Method Blank	95	—	—	—	—	—	—	—	—	—	—

### Surrogate Legend

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

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

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

**Lab Sample ID: MB 480-352253/8**

**Matrix: Water**

**Analysis Batch: 352253**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/16/17 13:57	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/16/17 13:57	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/16/17 13:57	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/16/17 13:57	1
1,1-Dichloroethane	ND		1.0		ug/L			04/16/17 13:57	1
1,1-Dichloroethene	ND		1.0		ug/L			04/16/17 13:57	1
1,1-Dichloropropene	ND		1.0		ug/L			04/16/17 13:57	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/16/17 13:57	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/16/17 13:57	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/16/17 13:57	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/16/17 13:57	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/16/17 13:57	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/16/17 13:57	1
1,2-Dichloroethane	ND		1.0		ug/L			04/16/17 13:57	1
1,2-Dichloropropane	ND		1.0		ug/L			04/16/17 13:57	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/16/17 13:57	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/16/17 13:57	1
1,3-Dichloropropane	ND		1.0		ug/L			04/16/17 13:57	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/16/17 13:57	1
1,4-Dioxane	ND		50		ug/L			04/16/17 13:57	1
2,2-Dichloropropane	ND		1.0		ug/L			04/16/17 13:57	1
2-Butanone (MEK)	ND		10		ug/L			04/16/17 13:57	1
2-Chlorotoluene	ND		1.0		ug/L			04/16/17 13:57	1
2-Hexanone	ND		10		ug/L			04/16/17 13:57	1
4-Chlorotoluene	ND		1.0		ug/L			04/16/17 13:57	1
4-Isopropyltoluene	ND		1.0		ug/L			04/16/17 13:57	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/16/17 13:57	1
Acetone	ND		50		ug/L			04/16/17 13:57	1
Benzene	ND		1.0		ug/L			04/16/17 13:57	1
Bromobenzene	ND		1.0		ug/L			04/16/17 13:57	1
Bromoform	ND		1.0		ug/L			04/16/17 13:57	1
Bromomethane	ND		2.0		ug/L			04/16/17 13:57	1
Carbon disulfide	ND		10		ug/L			04/16/17 13:57	1
Carbon tetrachloride	ND		1.0		ug/L			04/16/17 13:57	1
Chlorobenzene	ND		1.0		ug/L			04/16/17 13:57	1
Chlorobromomethane	ND		1.0		ug/L			04/16/17 13:57	1
Chlorodibromomethane	ND		0.50		ug/L			04/16/17 13:57	1
Chloroethane	ND		2.0		ug/L			04/16/17 13:57	1
Chloroform	ND		1.0		ug/L			04/16/17 13:57	1
Chloromethane	ND		2.0		ug/L			04/16/17 13:57	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/16/17 13:57	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/16/17 13:57	1
Dichlorobromomethane	ND		0.50		ug/L			04/16/17 13:57	1
Dichlorodifluoromethane	ND		1.0		ug/L			04/16/17 13:57	1
Ethyl ether	ND		1.0		ug/L			04/16/17 13:57	1
Ethylbenzene	ND		1.0		ug/L			04/16/17 13:57	1
Ethylene Dibromide	ND		1.0		ug/L			04/16/17 13:57	1
Hexachlorobutadiene	ND		0.40		ug/L			04/16/17 13:57	1

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

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

**Lab Sample ID:** MB 480-352253/8

**Matrix:** Water

**Analysis Batch:** 352253

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Isopropyl ether	ND		10		ug/L			04/16/17 13:57	1
Isopropylbenzene	ND		1.0		ug/L			04/16/17 13:57	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/16/17 13:57	1
Methylene Chloride	ND		1.0		ug/L			04/16/17 13:57	1
m-Xylene & p-Xylene	ND		2.0		ug/L			04/16/17 13:57	1
Naphthalene	ND		5.0		ug/L			04/16/17 13:57	1
n-Butylbenzene	ND		1.0		ug/L			04/16/17 13:57	1
N-Propylbenzene	ND		1.0		ug/L			04/16/17 13:57	1
o-Xylene	ND		1.0		ug/L			04/16/17 13:57	1
sec-Butylbenzene	ND		1.0		ug/L			04/16/17 13:57	1
Styrene	ND		1.0		ug/L			04/16/17 13:57	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/16/17 13:57	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/16/17 13:57	1
tert-Butylbenzene	ND		1.0		ug/L			04/16/17 13:57	1
Tetrachloroethene	ND		1.0		ug/L			04/16/17 13:57	1
Tetrahydrofuran	ND		10		ug/L			04/16/17 13:57	1
Toluene	ND		1.0		ug/L			04/16/17 13:57	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/16/17 13:57	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/16/17 13:57	1
Trichloroethene	ND		1.0		ug/L			04/16/17 13:57	1
Trichlorofluoromethane	ND		1.0		ug/L			04/16/17 13:57	1
Vinyl chloride	ND		1.0		ug/L			04/16/17 13:57	1
Dibromomethane	ND		1.0		ug/L			04/16/17 13:57	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	96		70 - 130		04/16/17 13:57	1
1,2-Dichloroethane-d4 (Surr)	104		70 - 130		04/16/17 13:57	1
4-Bromofluorobenzene (Surr)	101		70 - 130		04/16/17 13:57	1

**Lab Sample ID:** LCS 480-352253/5

**Matrix:** Water

**Analysis Batch:** 352253

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

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
1,1,1,2-Tetrachloroethane	25.0	25.9		ug/L		104	70 - 130
1,1,1-Trichloroethane	25.0	26.7		ug/L		107	70 - 130
1,1,2,2-Tetrachloroethane	25.0	27.8		ug/L		111	70 - 130
1,1,2-Trichloroethane	25.0	25.7		ug/L		103	70 - 130
1,1-Dichloroethane	25.0	27.6		ug/L		110	70 - 130
1,1-Dichloroethene	25.0	25.5		ug/L		102	70 - 130
1,1-Dichloropropene	25.0	26.3		ug/L		105	70 - 130
1,2,3-Trichlorobenzene	25.0	27.4		ug/L		110	70 - 130
1,2,3-Trichloropropane	25.0	25.3		ug/L		101	70 - 130
1,2,4-Trichlorobenzene	25.0	26.9		ug/L		108	70 - 130
1,2,4-Trimethylbenzene	25.0	24.8		ug/L		99	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	26.8		ug/L		107	70 - 130
1,2-Dichlorobenzene	25.0	25.4		ug/L		102	70 - 130
1,2-Dichloroethane	25.0	26.0		ug/L		104	70 - 130

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

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

**Lab Sample ID: LCS 480-352253/5**

**Matrix: Water**

**Analysis Batch: 352253**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
1,2-Dichloropropane	25.0	27.2		ug/L		109	70 - 130	
1,3,5-Trimethylbenzene	25.0	25.2		ug/L		101	70 - 130	
1,3-Dichlorobenzene	25.0	26.3		ug/L		105	70 - 130	
1,3-Dichloropropane	25.0	25.1		ug/L		101	70 - 130	
1,4-Dichlorobenzene	25.0	25.6		ug/L		102	70 - 130	
1,4-Dioxane	500	477		ug/L		95	70 - 130	
2,2-Dichloropropane	25.0	26.1		ug/L		104	70 - 130	
2-Butanone (MEK)	125	184	*	ug/L		147	70 - 130	
2-Chlorotoluene	25.0	24.9		ug/L		100	70 - 130	
2-Hexanone	125	146		ug/L		117	70 - 130	
4-Chlorotoluene	25.0	27.0		ug/L		108	70 - 130	
4-Isopropyltoluene	25.0	24.9		ug/L		100	70 - 130	
4-Methyl-2-pentanone (MIBK)	125	139		ug/L		111	70 - 130	
Acetone	125	177	*	ug/L		142	70 - 130	
Benzene	25.0	26.5		ug/L		106	70 - 130	
Bromobenzene	25.0	25.4		ug/L		101	70 - 130	
Bromoform	25.0	40.2	*	ug/L		161	70 - 130	
Bromomethane	25.0	24.7		ug/L		99	70 - 130	
Carbon disulfide	25.0	25.6		ug/L		102	70 - 130	
Carbon tetrachloride	25.0	30.3		ug/L		121	70 - 130	
Chlorobenzene	25.0	25.4		ug/L		101	70 - 130	
Chlorobromomethane	25.0	28.2		ug/L		113	70 - 130	
Chlorodibromomethane	25.0	29.4		ug/L		118	70 - 130	
Chloroethane	25.0	23.8		ug/L		95	70 - 130	
Chloroform	25.0	26.1		ug/L		104	70 - 130	
Chloromethane	25.0	25.4		ug/L		102	70 - 130	
cis-1,2-Dichloroethylene	25.0	26.5		ug/L		106	70 - 130	
cis-1,3-Dichloropropene	25.0	28.4		ug/L		114	70 - 130	
Dichlorobromomethane	25.0	30.6		ug/L		122	70 - 130	
Dichlorodifluoromethane	25.0	22.3		ug/L		89	70 - 130	
Ethyl ether	25.0	26.3		ug/L		105	70 - 130	
Ethylbenzene	25.0	24.7		ug/L		99	70 - 130	
Ethylene Dibromide	25.0	25.8		ug/L		103	70 - 130	
Hexachlorobutadiene	25.0	24.4		ug/L		98	70 - 130	
Isopropyl ether	25.0	24.7		ug/L		99	70 - 130	
Isopropylbenzene	25.0	25.0		ug/L		100	70 - 130	
Methyl tert-butyl ether	25.0	26.2		ug/L		105	70 - 130	
Methylene Chloride	25.0	23.6		ug/L		94	70 - 130	
m-Xylene & p-Xylene	25.0	25.4		ug/L		102	70 - 130	
Naphthalene	25.0	26.7		ug/L		107	70 - 130	
n-Butylbenzene	25.0	24.6		ug/L		98	70 - 130	
N-Propylbenzene	25.0	25.0		ug/L		100	70 - 130	
o-Xylene	25.0	25.4		ug/L		102	70 - 130	
sec-Butylbenzene	25.0	24.8		ug/L		99	70 - 130	
Styrene	25.0	25.3		ug/L		101	70 - 130	
Tert-amyl methyl ether	25.0	23.1		ug/L		92	70 - 130	
Tert-butyl ethyl ether	25.0	23.1		ug/L		92	70 - 130	
tert-Butylbenzene	25.0	25.9		ug/L		103	70 - 130	

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

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

Lab Sample ID: LCS 480-352253/5

Matrix: Water

Analysis Batch: 352253

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Tetrachloroethene	25.0	26.8		ug/L		107	70 - 130	
Tetrahydrofuran	50.0	70.4	*	ug/L		141	70 - 130	
Toluene	25.0	25.1		ug/L		100	70 - 130	
trans-1,2-Dichloroethene	25.0	26.7		ug/L		107	70 - 130	
trans-1,3-Dichloropropene	25.0	27.0		ug/L		108	70 - 130	
Trichloroethene	25.0	27.2		ug/L		109	70 - 130	
Trichlorofluoromethane	25.0	25.4		ug/L		102	70 - 130	
Vinyl chloride	25.0	25.3		ug/L		101	70 - 130	
Dibromomethane	25.0	27.1		ug/L		108	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Toluene-d8 (Surr)	95		70 - 130					
1,2-Dichloroethane-d4 (Surr)	98		70 - 130					
4-Bromofluorobenzene (Surr)	100		70 - 130					

Lab Sample ID: LCSD 480-352253/6

Matrix: Water

Analysis Batch: 352253

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	25.7		ug/L		103	70 - 130	1	20
1,1,1-Trichloroethane	25.0	25.9		ug/L		103	70 - 130	3	20
1,1,2,2-Tetrachloroethane	25.0	28.1		ug/L		113	70 - 130	1	20
1,1,2-Trichloroethane	25.0	26.3		ug/L		105	70 - 130	2	20
1,1-Dichloroethane	25.0	26.9		ug/L		108	70 - 130	3	20
1,1-Dichloroethene	25.0	24.4		ug/L		98	70 - 130	4	20
1,1-Dichloropropene	25.0	25.5		ug/L		102	70 - 130	3	20
1,2,3-Trichlorobenzene	25.0	27.9		ug/L		112	70 - 130	2	20
1,2,3-Trichloropropane	25.0	25.9		ug/L		104	70 - 130	3	20
1,2,4-Trichlorobenzene	25.0	27.2		ug/L		109	70 - 130	1	20
1,2,4-Trimethylbenzene	25.0	24.8		ug/L		99	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	25.0	28.4		ug/L		113	70 - 130	6	20
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	70 - 130	0	20
1,2-Dichloroethane	25.0	25.8		ug/L		103	70 - 130	1	20
1,2-Dichloropropane	25.0	26.8		ug/L		107	70 - 130	1	20
1,3,5-Trimethylbenzene	25.0	24.3		ug/L		97	70 - 130	4	20
1,3-Dichlorobenzene	25.0	26.3		ug/L		105	70 - 130	0	20
1,3-Dichloropropane	25.0	25.3		ug/L		101	70 - 130	1	20
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130	1	20
1,4-Dioxane	500	568		ug/L		114	70 - 130	17	20
2,2-Dichloropropane	25.0	25.4		ug/L		102	70 - 130	2	20
2-Butanone (MEK)	125	190	*	ug/L		152	70 - 130	3	20
2-Chlorotoluene	25.0	24.8		ug/L		99	70 - 130	1	20
2-Hexanone	125	150		ug/L		120	70 - 130	3	20
4-Chlorotoluene	25.0	26.9		ug/L		108	70 - 130	0	20
4-Isopropyltoluene	25.0	24.9		ug/L		100	70 - 130	0	20
4-Methyl-2-pentanone (MIBK)	125	145		ug/L		116	70 - 130	4	20
Acetone	125	180	*	ug/L		144	70 - 130	2	20

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

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

**Lab Sample ID: LCSD 480-352253/6**

**Matrix: Water**

**Analysis Batch: 352253**

**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		
Benzene	25.0	26.1		ug/L	104	70 - 130	2	20	
Bromobenzene	25.0	25.3		ug/L	101	70 - 130	0	20	
Bromoform	25.0	40.6 *		ug/L	162	70 - 130	1	20	
Bromomethane	25.0	24.3		ug/L	97	70 - 130	2	20	
Carbon disulfide	25.0	24.8		ug/L	99	70 - 130	3	20	
Carbon tetrachloride	25.0	29.3		ug/L	117	70 - 130	3	20	
Chlorobenzene	25.0	25.4		ug/L	101	70 - 130	0	20	
Chlorobromomethane	25.0	28.4		ug/L	113	70 - 130	0	20	
Chlorodibromomethane	25.0	30.6		ug/L	122	70 - 130	4	20	
Chloroethane	25.0	22.4		ug/L	90	70 - 130	6	20	
Chloroform	25.0	25.7		ug/L	103	70 - 130	2	20	
Chloromethane	25.0	24.2		ug/L	97	70 - 130	5	20	
cis-1,2-Dichloroethene	25.0	26.2		ug/L	105	70 - 130	1	20	
cis-1,3-Dichloropropene	25.0	28.3		ug/L	113	70 - 130	0	20	
Dichlorobromomethane	25.0	31.6		ug/L	127	70 - 130	3	20	
Dichlorodifluoromethane	25.0	20.7		ug/L	83	70 - 130	7	20	
Ethyl ether	25.0	26.3		ug/L	105	70 - 130	0	20	
Ethylbenzene	25.0	24.4		ug/L	98	70 - 130	1	20	
Ethylene Dibromide	25.0	27.0		ug/L	108	70 - 130	5	20	
Hexachlorobutadiene	25.0	23.8		ug/L	95	70 - 130	2	20	
Isopropyl ether	25.0	24.7		ug/L	99	70 - 130	0	20	
Isopropylbenzene	25.0	24.2		ug/L	97	70 - 130	3	20	
Methyl tert-butyl ether	25.0	26.5		ug/L	106	70 - 130	1	20	
Methylene Chloride	25.0	23.3		ug/L	93	70 - 130	1	20	
m-Xylene & p-Xylene	25.0	24.7		ug/L	99	70 - 130	3	20	
Naphthalene	25.0	27.2		ug/L	109	70 - 130	2	20	
n-Butylbenzene	25.0	24.4		ug/L	98	70 - 130	1	20	
N-Propylbenzene	25.0	24.4		ug/L	98	70 - 130	2	20	
o-Xylene	25.0	25.1		ug/L	100	70 - 130	1	20	
sec-Butylbenzene	25.0	24.2		ug/L	97	70 - 130	3	20	
Styrene	25.0	25.3		ug/L	101	70 - 130	0	20	
Tert-amyl methyl ether	25.0	24.3		ug/L	97	70 - 130	5	20	
Tert-butyl ethyl ether	25.0	23.5		ug/L	94	70 - 130	1	20	
tert-Butylbenzene	25.0	25.2		ug/L	101	70 - 130	3	20	
Tetrachloroethene	25.0	25.6		ug/L	103	70 - 130	4	20	
Tetrahydrofuran	50.0	75.7 *		ug/L	151	70 - 130	7	20	
Toluene	25.0	24.6		ug/L	98	70 - 130	2	20	
trans-1,2-Dichloroethene	25.0	26.0		ug/L	104	70 - 130	3	20	
trans-1,3-Dichloropropene	25.0	27.4		ug/L	110	70 - 130	1	20	
Trichloroethene	25.0	25.6		ug/L	103	70 - 130	6	20	
Trichlorofluoromethane	25.0	23.6		ug/L	95	70 - 130	7	20	
Vinyl chloride	25.0	23.7		ug/L	95	70 - 130	7	20	
Dibromomethane	25.0	28.0		ug/L	112	70 - 130	3	20	

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	97		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
4-Bromofluorobenzene (Surr)	102		70 - 130

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

**Lab Sample ID:** MB 480-352315/8  
**Matrix:** Water  
**Analysis Batch:** 352315

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/17/17 12:55	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/17/17 12:55	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/17/17 12:55	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/17/17 12:55	1
1,1-Dichloroethane	ND		1.0		ug/L			04/17/17 12:55	1
1,1-Dichloroethene	ND		1.0		ug/L			04/17/17 12:55	1
1,1-Dichloropropene	ND		1.0		ug/L			04/17/17 12:55	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/17/17 12:55	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/17/17 12:55	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/17/17 12:55	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/17/17 12:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/17/17 12:55	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/17/17 12:55	1
1,2-Dichloroethane	ND		1.0		ug/L			04/17/17 12:55	1
1,2-Dichloropropane	ND		1.0		ug/L			04/17/17 12:55	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/17/17 12:55	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/17/17 12:55	1
1,3-Dichloropropane	ND		1.0		ug/L			04/17/17 12:55	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/17/17 12:55	1
1,4-Dioxane	ND		50		ug/L			04/17/17 12:55	1
2,2-Dichloropropane	ND		1.0		ug/L			04/17/17 12:55	1
2-Butanone (MEK)	ND		10		ug/L			04/17/17 12:55	1
2-Chlorotoluene	ND		1.0		ug/L			04/17/17 12:55	1
2-Hexanone	ND		10		ug/L			04/17/17 12:55	1
4-Chlorotoluene	ND		1.0		ug/L			04/17/17 12:55	1
4-Isopropyltoluene	ND		1.0		ug/L			04/17/17 12:55	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/17/17 12:55	1
Acetone	ND		50		ug/L			04/17/17 12:55	1
Benzene	ND		1.0		ug/L			04/17/17 12:55	1
Bromobenzene	ND		1.0		ug/L			04/17/17 12:55	1
Bromoform	ND		1.0		ug/L			04/17/17 12:55	1
Bromomethane	ND		2.0		ug/L			04/17/17 12:55	1
Carbon disulfide	ND		10		ug/L			04/17/17 12:55	1
Carbon tetrachloride	ND		1.0		ug/L			04/17/17 12:55	1
Chlorobenzene	ND		1.0		ug/L			04/17/17 12:55	1
Chlorobromomethane	ND		1.0		ug/L			04/17/17 12:55	1
Chlorodibromomethane	ND		0.50		ug/L			04/17/17 12:55	1
Chloroethane	ND		2.0		ug/L			04/17/17 12:55	1
Chloroform	ND		1.0		ug/L			04/17/17 12:55	1
Chloromethane	ND		2.0		ug/L			04/17/17 12:55	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/17/17 12:55	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/17/17 12:55	1
Dichlorobromomethane	ND		0.50		ug/L			04/17/17 12:55	1
Dichlorodifluoromethane	ND		1.0		ug/L			04/17/17 12:55	1
Ethyl ether	ND		1.0		ug/L			04/17/17 12:55	1
Ethylbenzene	ND		1.0		ug/L			04/17/17 12:55	1
Ethylene Dibromide	ND		1.0		ug/L			04/17/17 12:55	1
Hexachlorobutadiene	ND		0.40		ug/L			04/17/17 12:55	1
Isopropyl ether	ND		10		ug/L			04/17/17 12:55	1
Isopropylbenzene	ND		1.0		ug/L			04/17/17 12:55	1

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

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

**Lab Sample ID:** MB 480-352315/8

**Matrix:** Water

**Analysis Batch:** 352315

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			04/17/17 12:55	1
Methylene Chloride	ND		1.0		ug/L			04/17/17 12:55	1
m-Xylene & p-Xylene	ND		2.0		ug/L			04/17/17 12:55	1
Naphthalene	ND		5.0		ug/L			04/17/17 12:55	1
n-Butylbenzene	ND		1.0		ug/L			04/17/17 12:55	1
N-Propylbenzene	ND		1.0		ug/L			04/17/17 12:55	1
o-Xylene	ND		1.0		ug/L			04/17/17 12:55	1
sec-Butylbenzene	ND		1.0		ug/L			04/17/17 12:55	1
Styrene	ND		1.0		ug/L			04/17/17 12:55	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/17/17 12:55	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/17/17 12:55	1
tert-Butylbenzene	ND		1.0		ug/L			04/17/17 12:55	1
Tetrachloroethene	ND		1.0		ug/L			04/17/17 12:55	1
Tetrahydrofuran	ND		10		ug/L			04/17/17 12:55	1
Toluene	ND		1.0		ug/L			04/17/17 12:55	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/17/17 12:55	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/17/17 12:55	1
Trichloroethene	ND		1.0		ug/L			04/17/17 12:55	1
Trichlorofluoromethane	ND		1.0		ug/L			04/17/17 12:55	1
Vinyl chloride	ND		1.0		ug/L			04/17/17 12:55	1
Dibromomethane	ND		1.0		ug/L			04/17/17 12:55	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		70 - 130		04/17/17 12:55	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		04/17/17 12:55	1
4-Bromofluorobenzene (Surr)	98		70 - 130		04/17/17 12:55	1

**Lab Sample ID:** LCS 480-352315/5

**Matrix:** Water

**Analysis Batch:** 352315

**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	25.0	24.4		ug/L		98	70 - 130	
1,1,1-Trichloroethane	25.0	26.2		ug/L		105	70 - 130	
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	70 - 130	
1,1,2-Trichloroethane	25.0	24.6		ug/L		98	70 - 130	
1,1-Dichloroethane	25.0	27.1		ug/L		108	70 - 130	
1,1-Dichloroethene	25.0	26.4		ug/L		106	70 - 130	
1,1-Dichloropropene	25.0	26.3		ug/L		105	70 - 130	
1,2,3-Trichlorobenzene	25.0	25.7		ug/L		103	70 - 130	
1,2,3-Trichloropropane	25.0	24.2		ug/L		97	70 - 130	
1,2,4-Trichlorobenzene	25.0	25.1		ug/L		100	70 - 130	
1,2,4-Trimethylbenzene	25.0	23.8		ug/L		95	70 - 130	
1,2-Dibromo-3-Chloropropane	25.0	23.5		ug/L		94	70 - 130	
1,2-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130	
1,2-Dichloroethane	25.0	25.4		ug/L		102	70 - 130	
1,2-Dichloropropane	25.0	26.1		ug/L		104	70 - 130	
1,3,5-Trimethylbenzene	25.0	23.9		ug/L		96	70 - 130	

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

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

Lab Sample ID: LCS 480-352315/5

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

Matrix: Water

Analysis Batch: 352315

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
1,3-Dichlorobenzene	25.0	24.2		ug/L		97	70 - 130	
1,3-Dichloropropane	25.0	24.2		ug/L		97	70 - 130	
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	70 - 130	
1,4-Dioxane	500	471		ug/L		94	70 - 130	
2,2-Dichloropropane	25.0	25.6		ug/L		103	70 - 130	
2-Butanone (MEK)	125	155		ug/L		124	70 - 130	
2-Chlorotoluene	25.0	23.8		ug/L		95	70 - 130	
2-Hexanone	125	140		ug/L		112	70 - 130	
4-Chlorotoluene	25.0	25.7		ug/L		103	70 - 130	
4-Isopropyltoluene	25.0	24.6		ug/L		98	70 - 130	
4-Methyl-2-pentanone (MIBK)	125	133		ug/L		106	70 - 130	
Acetone	125	176	*	ug/L		141	70 - 130	
Benzene	25.0	25.7		ug/L		103	70 - 130	
Bromobenzene	25.0	24.0		ug/L		96	70 - 130	
Bromoform	25.0	33.9	*	ug/L		136	70 - 130	
Bromomethane	25.0	26.2		ug/L		105	70 - 130	
Carbon disulfide	25.0	24.8		ug/L		99	70 - 130	
Carbon tetrachloride	25.0	29.5		ug/L		118	70 - 130	
Chlorobenzene	25.0	24.8		ug/L		99	70 - 130	
Chlorobromomethane	25.0	26.6		ug/L		106	70 - 130	
Chlorodibromomethane	25.0	26.8		ug/L		107	70 - 130	
Chloroethane	25.0	23.4		ug/L		94	70 - 130	
Chloroform	25.0	25.0		ug/L		100	70 - 130	
Chloromethane	25.0	26.9		ug/L		108	70 - 130	
cis-1,2-Dichloroethene	25.0	25.3		ug/L		101	70 - 130	
cis-1,3-Dichloropropene	25.0	27.1		ug/L		108	70 - 130	
Dichlorobromomethane	25.0	29.1		ug/L		116	70 - 130	
Dichlorodifluoromethane	25.0	27.0		ug/L		108	70 - 130	
Ethyl ether	25.0	25.2		ug/L		101	70 - 130	
Ethylbenzene	25.0	24.0		ug/L		96	70 - 130	
Ethylene Dibromide	25.0	25.5		ug/L		102	70 - 130	
Hexachlorobutadiene	25.0	25.7		ug/L		103	70 - 130	
Isopropyl ether	25.0	25.1		ug/L		100	70 - 130	
Isopropylbenzene	25.0	23.8		ug/L		95	70 - 130	
Methyl tert-butyl ether	25.0	25.0		ug/L		100	70 - 130	
Methylene Chloride	25.0	23.3		ug/L		93	70 - 130	
m-Xylene & p-Xylene	25.0	24.1		ug/L		97	70 - 130	
Naphthalene	25.0	24.9		ug/L		100	70 - 130	
n-Butylbenzene	25.0	23.9		ug/L		95	70 - 130	
N-Propylbenzene	25.0	24.1		ug/L		96	70 - 130	
o-Xylene	25.0	23.9		ug/L		96	70 - 130	
sec-Butylbenzene	25.0	24.1		ug/L		96	70 - 130	
Styrene	25.0	25.0		ug/L		100	70 - 130	
Tert-amyl methyl ether	25.0	23.8		ug/L		95	70 - 130	
Tert-butyl ethyl ether	25.0	23.1		ug/L		93	70 - 130	
tert-Butylbenzene	25.0	24.8		ug/L		99	70 - 130	
Tetrachloroethene	25.0	26.2		ug/L		105	70 - 130	
Tetrahydrofuran	50.0	72.4	*	ug/L		145	70 - 130	

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

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

**Lab Sample ID: LCS 480-352315/5**

**Matrix: Water**

**Analysis Batch: 352315**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	%Limits				
	Added	Result	Qualifier			%Rec.					
Toluene	25.0	24.0		ug/L		96	70 - 130				
trans-1,2-Dichloroethene	25.0	25.3		ug/L		101	70 - 130				
trans-1,3-Dichloropropene	25.0	25.8		ug/L		103	70 - 130				
Trichloroethene	25.0	25.9		ug/L		104	70 - 130				
Trichlorofluoromethane	25.0	27.8		ug/L		111	70 - 130				
Vinyl chloride	25.0	27.5		ug/L		110	70 - 130				
Dibromomethane	25.0	26.4		ug/L		105	70 - 130				
<b>Surrogate</b>		<b>LCS</b>	<b>LCS</b>								
	<b>%Recovery</b>		<b>Qualifier</b>								
Toluene-d8 (Surr)	96			70 - 130							
1,2-Dichloroethane-d4 (Surr)	100			70 - 130							
4-Bromofluorobenzene (Surr)	101			70 - 130							

**Lab Sample ID: LCSD 480-352315/6**

**Matrix: Water**

**Analysis Batch: 352315**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	%Limits	RPD	Limit
	Added	Result	Qualifier			%Rec.			
1,1,1,2-Tetrachloroethane	25.0	24.1		ug/L		96	70 - 130	1	20
1,1,1-Trichloroethane	25.0	25.4		ug/L		102	70 - 130	3	20
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	70 - 130	0	20
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	70 - 130	2	20
1,1-Dichloroethane	25.0	25.6		ug/L		102	70 - 130	5	20
1,1-Dichloroethene	25.0	24.0		ug/L		96	70 - 130	9	20
1,1-Dichloropropene	25.0	25.0		ug/L		100	70 - 130	5	20
1,2,3-Trichlorobenzene	25.0	25.5		ug/L		102	70 - 130	1	20
1,2,3-Trichloropropane	25.0	23.5		ug/L		94	70 - 130	3	20
1,2,4-Trichlorobenzene	25.0	25.0		ug/L		100	70 - 130	0	20
1,2,4-Trimethylbenzene	25.0	22.4		ug/L		90	70 - 130	6	20
1,2-Dibromo-3-Chloropropane	25.0	23.9		ug/L		96	70 - 130	2	20
1,2-Dichlorobenzene	25.0	23.9		ug/L		96	70 - 130	3	20
1,2-Dichloroethane	25.0	24.4		ug/L		98	70 - 130	4	20
1,2-Dichloropropane	25.0	25.7		ug/L		103	70 - 130	2	20
1,3,5-Trimethylbenzene	25.0	22.8		ug/L		91	70 - 130	5	20
1,3-Dichlorobenzene	25.0	24.2		ug/L		97	70 - 130	0	20
1,3-Dichloropropane	25.0	23.3		ug/L		93	70 - 130	4	20
1,4-Dichlorobenzene	25.0	23.6		ug/L		94	70 - 130	2	20
1,4-Dioxane	500	531		ug/L		106	70 - 130	12	20
2,2-Dichloropropane	25.0	24.4		ug/L		98	70 - 130	5	20
2-Butanone (MEK)	125	172	*	ug/L		137	70 - 130	10	20
2-Chlorotoluene	25.0	23.2		ug/L		93	70 - 130	3	20
2-Hexanone	125	139		ug/L		111	70 - 130	1	20
4-Chlorotoluene	25.0	24.6		ug/L		98	70 - 130	4	20
4-Isopropyltoluene	25.0	24.0		ug/L		96	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	125	134		ug/L		107	70 - 130	1	20
Acetone	125	173	*	ug/L		138	70 - 130	2	20
Benzene	25.0	24.8		ug/L		99	70 - 130	4	20
Bromobenzene	25.0	24.1		ug/L		97	70 - 130	0	20

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

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

Lab Sample ID: LCSD 480-352315/6

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

Matrix: Water

Analysis Batch: 352315

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	%Rec.	RPD	RPD Limit
	Added	Result	Qualifier					ug/L		
Bromoform	25.0	35.5	*	ug/L	142	70 - 130		5	20	
Bromomethane	25.0	25.2		ug/L	101	70 - 130		4	20	
Carbon disulfide	25.0	24.0		ug/L	96	70 - 130		3	20	
Carbon tetrachloride	25.0	28.2		ug/L	113	70 - 130		5	20	
Chlorobenzene	25.0	24.4		ug/L	97	70 - 130		2	20	
Chlorobromomethane	25.0	26.7		ug/L	107	70 - 130		0	20	
Chlorodibromomethane	25.0	26.8		ug/L	107	70 - 130		0	20	
Chloroethane	25.0	23.0		ug/L	92	70 - 130		1	20	
Chloroform	25.0	24.5		ug/L	98	70 - 130		2	20	
Chloromethane	25.0	25.5		ug/L	102	70 - 130		6	20	
cis-1,2-Dichloroethene	25.0	24.8		ug/L	99	70 - 130		2	20	
cis-1,3-Dichloropropene	25.0	26.0		ug/L	104	70 - 130		4	20	
Dichlorobromomethane	25.0	28.6		ug/L	114	70 - 130		2	20	
Dichlorodifluoromethane	25.0	25.5		ug/L	102	70 - 130		6	20	
Ethyl ether	25.0	25.4		ug/L	101	70 - 130		1	20	
Ethylbenzene	25.0	23.3		ug/L	93	70 - 130		3	20	
Ethylene Dibromide	25.0	24.5		ug/L	98	70 - 130		4	20	
Hexachlorobutadiene	25.0	25.1		ug/L	100	70 - 130		3	20	
Isopropyl ether	25.0	24.3		ug/L	97	70 - 130		3	20	
Isopropylbenzene	25.0	22.8		ug/L	91	70 - 130		4	20	
Methyl tert-butyl ether	25.0	24.9		ug/L	100	70 - 130		0	20	
Methylene Chloride	25.0	22.9		ug/L	91	70 - 130		2	20	
m-Xylene & p-Xylene	25.0	24.0		ug/L	96	70 - 130		1	20	
Naphthalene	25.0	24.6		ug/L	98	70 - 130		1	20	
n-Butylbenzene	25.0	23.4		ug/L	94	70 - 130		2	20	
N-Propylbenzene	25.0	23.2		ug/L	93	70 - 130		4	20	
o-Xylene	25.0	23.6		ug/L	94	70 - 130		1	20	
sec-Butylbenzene	25.0	23.4		ug/L	94	70 - 130		3	20	
Styrene	25.0	24.0		ug/L	96	70 - 130		4	20	
Tert-amyl methyl ether	25.0	23.6		ug/L	94	70 - 130		1	20	
Tert-butyl ethyl ether	25.0	22.9		ug/L	92	70 - 130		1	20	
tert-Butylbenzene	25.0	24.0		ug/L	96	70 - 130		3	20	
Tetrachloroethene	25.0	25.3		ug/L	101	70 - 130		4	20	
Tetrahydrofuran	50.0	72.2	*	ug/L	144	70 - 130		0	20	
Toluene	25.0	23.2		ug/L	93	70 - 130		3	20	
trans-1,2-Dichloroethene	25.0	24.4		ug/L	98	70 - 130		4	20	
trans-1,3-Dichloropropene	25.0	24.9		ug/L	99	70 - 130		4	20	
Trichloroethene	25.0	25.4		ug/L	102	70 - 130		2	20	
Trichlorofluoromethane	25.0	27.0		ug/L	108	70 - 130		3	20	
Vinyl chloride	25.0	25.8		ug/L	103	70 - 130		6	20	
Dibromomethane	25.0	26.6		ug/L	106	70 - 130		1	20	

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	95		70 - 130
1,2-Dichloroethane-d4 (Surr)	99		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

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

**Lab Sample ID: MB 480-352449/8**

**Matrix: Water**

**Analysis Batch: 352449**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/17/17 22:21	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/17/17 22:21	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/17/17 22:21	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/17/17 22:21	1
1,1-Dichloroethane	ND		1.0		ug/L			04/17/17 22:21	1
1,1-Dichloroethene	ND		1.0		ug/L			04/17/17 22:21	1
1,1-Dichloropropene	ND		1.0		ug/L			04/17/17 22:21	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/17/17 22:21	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/17/17 22:21	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/17/17 22:21	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/17/17 22:21	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/17/17 22:21	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/17/17 22:21	1
1,2-Dichloroethane	ND		1.0		ug/L			04/17/17 22:21	1
1,2-Dichloropropane	ND		1.0		ug/L			04/17/17 22:21	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/17/17 22:21	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/17/17 22:21	1
1,3-Dichloropropane	ND		1.0		ug/L			04/17/17 22:21	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/17/17 22:21	1
1,4-Dioxane	ND		50		ug/L			04/17/17 22:21	1
2,2-Dichloropropane	ND		1.0		ug/L			04/17/17 22:21	1
2-Butanone (MEK)	ND		10		ug/L			04/17/17 22:21	1
2-Chlorotoluene	ND		1.0		ug/L			04/17/17 22:21	1
2-Hexanone	ND		10		ug/L			04/17/17 22:21	1
4-Chlorotoluene	ND		1.0		ug/L			04/17/17 22:21	1
4-Isopropyltoluene	ND		1.0		ug/L			04/17/17 22:21	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/17/17 22:21	1
Acetone	ND		50		ug/L			04/17/17 22:21	1
Benzene	ND		1.0		ug/L			04/17/17 22:21	1
Bromobenzene	ND		1.0		ug/L			04/17/17 22:21	1
Bromoform	ND		1.0		ug/L			04/17/17 22:21	1
Bromomethane	ND		2.0		ug/L			04/17/17 22:21	1
Carbon disulfide	ND		10		ug/L			04/17/17 22:21	1
Carbon tetrachloride	ND		1.0		ug/L			04/17/17 22:21	1
Chlorobenzene	ND		1.0		ug/L			04/17/17 22:21	1
Chlorobromomethane	ND		1.0		ug/L			04/17/17 22:21	1
Chlorodibromomethane	ND		0.50		ug/L			04/17/17 22:21	1
Chloroethane	ND		2.0		ug/L			04/17/17 22:21	1
Chloroform	ND		1.0		ug/L			04/17/17 22:21	1
Chloromethane	ND		2.0		ug/L			04/17/17 22:21	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/17/17 22:21	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/17/17 22:21	1
Dichlorobromomethane	ND		0.50		ug/L			04/17/17 22:21	1
Dichlorodifluoromethane	ND		1.0		ug/L			04/17/17 22:21	1
Ethyl ether	ND		1.0		ug/L			04/17/17 22:21	1
Ethylbenzene	ND		1.0		ug/L			04/17/17 22:21	1
Ethylene Dibromide	ND		1.0		ug/L			04/17/17 22:21	1
Hexachlorobutadiene	ND		0.40		ug/L			04/17/17 22:21	1

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

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

**Lab Sample ID:** MB 480-352449/8

**Matrix:** Water

**Analysis Batch:** 352449

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

Analyte	MB		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
		MB									
Isopropyl ether	ND				10		ug/L			04/17/17 22:21	1
Isopropylbenzene	ND				1.0		ug/L			04/17/17 22:21	1
Methyl tert-butyl ether	ND				1.0		ug/L			04/17/17 22:21	1
Methylene Chloride	ND				1.0		ug/L			04/17/17 22:21	1
m-Xylene & p-Xylene	ND				2.0		ug/L			04/17/17 22:21	1
Naphthalene	ND				5.0		ug/L			04/17/17 22:21	1
n-Butylbenzene	ND				1.0		ug/L			04/17/17 22:21	1
N-Propylbenzene	ND				1.0		ug/L			04/17/17 22:21	1
o-Xylene	ND				1.0		ug/L			04/17/17 22:21	1
sec-Butylbenzene	ND				1.0		ug/L			04/17/17 22:21	1
Styrene	ND				1.0		ug/L			04/17/17 22:21	1
Tert-amyl methyl ether	ND				5.0		ug/L			04/17/17 22:21	1
Tert-butyl ethyl ether	ND				5.0		ug/L			04/17/17 22:21	1
tert-Butylbenzene	ND				1.0		ug/L			04/17/17 22:21	1
Tetrachloroethene	ND				1.0		ug/L			04/17/17 22:21	1
Tetrahydrofuran	ND				10		ug/L			04/17/17 22:21	1
Toluene	ND				1.0		ug/L			04/17/17 22:21	1
trans-1,2-Dichloroethene	ND				1.0		ug/L			04/17/17 22:21	1
trans-1,3-Dichloropropene	ND				0.40		ug/L			04/17/17 22:21	1
Trichloroethene	ND				1.0		ug/L			04/17/17 22:21	1
Trichlorofluoromethane	ND				1.0		ug/L			04/17/17 22:21	1
Vinyl chloride	ND				1.0		ug/L			04/17/17 22:21	1
Dibromomethane	ND				1.0		ug/L			04/17/17 22:21	1

Surrogate	MB		%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
		MB							
Toluene-d8 (Surr)	92		92		70 - 130			04/17/17 22:21	1
1,2-Dichloroethane-d4 (Surr)	97		97		70 - 130			04/17/17 22:21	1
4-Bromofluorobenzene (Surr)	98		98		70 - 130			04/17/17 22:21	1

**Lab Sample ID:** LCS 480-352449/5

**Matrix:** Water

**Analysis Batch:** 352449

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

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
1,1,1,2-Tetrachloroethane	25.0	21.7		ug/L		87	70 - 130
1,1,1-Trichloroethane	25.0	23.8		ug/L		95	70 - 130
1,1,2,2-Tetrachloroethane	25.0	24.1		ug/L		97	70 - 130
1,1,2-Trichloroethane	25.0	23.6		ug/L		95	70 - 130
1,1-Dichloroethane	25.0	25.0		ug/L		100	70 - 130
1,1-Dichloroethene	25.0	23.8		ug/L		95	70 - 130
1,1-Dichloropropene	25.0	24.1		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	25.0	24.4		ug/L		97	70 - 130
1,2,3-Trichloropropane	25.0	22.5		ug/L		90	70 - 130
1,2,4-Trichlorobenzene	25.0	23.5		ug/L		94	70 - 130
1,2,4-Trimethylbenzene	25.0	22.3		ug/L		89	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	22.2		ug/L		89	70 - 130
1,2-Dichlorobenzene	25.0	23.3		ug/L		93	70 - 130
1,2-Dichloroethane	25.0	23.7		ug/L		95	70 - 130

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

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

**Lab Sample ID: LCS 480-352449/5**

**Matrix: Water**

**Analysis Batch: 352449**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
1,2-Dichloropropane	25.0	25.1		ug/L		101	70 - 130	
1,3,5-Trimethylbenzene	25.0	22.0		ug/L		88	70 - 130	
1,3-Dichlorobenzene	25.0	23.2		ug/L		93	70 - 130	
1,3-Dichloropropane	25.0	22.3		ug/L		89	70 - 130	
1,4-Dichlorobenzene	25.0	22.5		ug/L		90	70 - 130	
1,4-Dioxane	500	439		ug/L		88	70 - 130	
2,2-Dichloropropane	25.0	23.3		ug/L		93	70 - 130	
2-Butanone (MEK)	125	143		ug/L		114	70 - 130	
2-Chlorotoluene	25.0	22.2		ug/L		89	70 - 130	
2-Hexanone	125	131		ug/L		105	70 - 130	
4-Chlorotoluene	25.0	23.7		ug/L		95	70 - 130	
4-Isopropyltoluene	25.0	22.6		ug/L		90	70 - 130	
4-Methyl-2-pentanone (MIBK)	125	126		ug/L		101	70 - 130	
Acetone	125	169	*	ug/L		135	70 - 130	
Benzene	25.0	24.0		ug/L		96	70 - 130	
Bromobenzene	25.0	22.1		ug/L		89	70 - 130	
Bromoform	25.0	30.8		ug/L		123	70 - 130	
Bromomethane	25.0	23.1		ug/L		92	70 - 130	
Carbon disulfide	25.0	23.0		ug/L		92	70 - 130	
Carbon tetrachloride	25.0	26.9		ug/L		108	70 - 130	
Chlorobenzene	25.0	23.1		ug/L		92	70 - 130	
Chlorobromomethane	25.0	25.2		ug/L		101	70 - 130	
Chlorodibromomethane	25.0	24.6		ug/L		99	70 - 130	
Chloroethane	25.0	21.6		ug/L		86	70 - 130	
Chloroform	25.0	23.5		ug/L		94	70 - 130	
Chloromethane	25.0	23.8		ug/L		95	70 - 130	
cis-1,2-Dichloroethene	25.0	24.5		ug/L		98	70 - 130	
cis-1,3-Dichloropropene	25.0	25.9		ug/L		103	70 - 130	
Dichlorobromomethane	25.0	27.2		ug/L		109	70 - 130	
Dichlorodifluoromethane	25.0	23.5		ug/L		94	70 - 130	
Ethyl ether	25.0	24.8		ug/L		99	70 - 130	
Ethylbenzene	25.0	21.5		ug/L		86	70 - 130	
Ethylene Dibromide	25.0	23.3		ug/L		93	70 - 130	
Hexachlorobutadiene	25.0	24.1		ug/L		96	70 - 130	
Isopropyl ether	25.0	23.2		ug/L		93	70 - 130	
Isopropylbenzene	25.0	22.0		ug/L		88	70 - 130	
Methyl tert-butyl ether	25.0	24.0		ug/L		96	70 - 130	
Methylene Chloride	25.0	23.1		ug/L		93	70 - 130	
m-Xylene & p-Xylene	25.0	22.5		ug/L		90	70 - 130	
Naphthalene	25.0	23.5		ug/L		94	70 - 130	
n-Butylbenzene	25.0	22.3		ug/L		89	70 - 130	
N-Propylbenzene	25.0	21.9		ug/L		87	70 - 130	
o-Xylene	25.0	22.1		ug/L		88	70 - 130	
sec-Butylbenzene	25.0	22.1		ug/L		88	70 - 130	
Styrene	25.0	22.8		ug/L		91	70 - 130	
Tert-amyl methyl ether	25.0	22.5		ug/L		90	70 - 130	
Tert-butyl ethyl ether	25.0	21.9		ug/L		88	70 - 130	
tert-Butylbenzene	25.0	23.3		ug/L		93	70 - 130	

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

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

**Lab Sample ID: LCS 480-352449/5**

**Matrix: Water**

**Analysis Batch: 352449**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits		
	Added	Result	Qualifier			%Rec			
Tetrachloroethene	25.0	23.8		ug/L		95	70 - 130		
Tetrahydrofuran	50.0	66.5 *	*	ug/L		133	70 - 130		
Toluene	25.0	22.0		ug/L		88	70 - 130		
trans-1,2-Dichloroethene	25.0	24.7		ug/L		99	70 - 130		
trans-1,3-Dichloropropene	25.0	23.7		ug/L		95	70 - 130		
Trichloroethene	25.0	24.3		ug/L		97	70 - 130		
Trichlorofluoromethane	25.0	24.5		ug/L		98	70 - 130		
Vinyl chloride	25.0	23.5		ug/L		94	70 - 130		
Dibromomethane	25.0	25.2		ug/L		101	70 - 130		

**LCS**   **LCS**

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	93		70 - 130
1,2-Dichloroethane-d4 (Surr)	96		70 - 130
4-Bromofluorobenzene (Surr)	97		70 - 130

**Lab Sample ID: LCSD 480-352449/6**

**Matrix: Water**

**Analysis Batch: 352449**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	RPD	RPD Limit
	Added	Result	Qualifier			%Rec		
1,1,1,2-Tetrachloroethane	25.0	22.9		ug/L		92	70 - 130	6 20
1,1,1-Trichloroethane	25.0	25.5		ug/L		102	70 - 130	7 20
1,1,2,2-Tetrachloroethane	25.0	24.3		ug/L		97	70 - 130	1 20
1,1,2-Trichloroethane	25.0	23.3		ug/L		93	70 - 130	2 20
1,1-Dichloroethane	25.0	26.4		ug/L		106	70 - 130	6 20
1,1-Dichloroethene	25.0	25.7		ug/L		103	70 - 130	8 20
1,1-Dichloropropene	25.0	25.6		ug/L		102	70 - 130	6 20
1,2,3-Trichlorobenzene	25.0	25.2		ug/L		101	70 - 130	4 20
1,2,3-Trichloropropane	25.0	23.6		ug/L		94	70 - 130	5 20
1,2,4-Trichlorobenzene	25.0	24.9		ug/L		100	70 - 130	6 20
1,2,4-Trimethylbenzene	25.0	23.1		ug/L		92	70 - 130	3 20
1,2-Dibromo-3-Chloropropane	25.0	23.0		ug/L		92	70 - 130	4 20
1,2-Dichlorobenzene	25.0	23.8		ug/L		95	70 - 130	2 20
1,2-Dichloroethane	25.0	24.1		ug/L		96	70 - 130	2 20
1,2-Dichloropropane	25.0	25.8		ug/L		103	70 - 130	3 20
1,3,5-Trimethylbenzene	25.0	23.7		ug/L		95	70 - 130	7 20
1,3-Dichlorobenzene	25.0	24.2		ug/L		97	70 - 130	4 20
1,3-Dichloropropane	25.0	22.9		ug/L		92	70 - 130	3 20
1,4-Dichlorobenzene	25.0	23.3		ug/L		93	70 - 130	4 20
1,4-Dioxane	500	461		ug/L		92	70 - 130	5 20
2,2-Dichloropropane	25.0	25.1		ug/L		100	70 - 130	7 20
2-Butanone (MEK)	125	144		ug/L		115	70 - 130	1 20
2-Chlorotoluene	25.0	23.3		ug/L		93	70 - 130	5 20
2-Hexanone	125	132		ug/L		105	70 - 130	0 20
4-Chlorotoluene	25.0	24.7		ug/L		99	70 - 130	4 20
4-Isopropyltoluene	25.0	24.4		ug/L		98	70 - 130	8 20
4-Methyl-2-pentanone (MIBK)	125	123		ug/L		99	70 - 130	2 20
Acetone	125	164 *	*	ug/L		132	70 - 130	3 20

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

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

Lab Sample ID: LCSD 480-352449/6

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

Matrix: Water

Analysis Batch: 352449

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Added	Result	Qualifier						
Benzene	25.0	25.3		ug/L	101	70 - 130		5	20
Bromobenzene	25.0	24.0		ug/L	96	70 - 130		8	20
Bromoform	25.0	33.5 *		ug/L	134	70 - 130		8	20
Bromomethane	25.0	24.1		ug/L	96	70 - 130		4	20
Carbon disulfide	25.0	24.6		ug/L	98	70 - 130		7	20
Carbon tetrachloride	25.0	29.1		ug/L	116	70 - 130		8	20
Chlorobenzene	25.0	23.9		ug/L	96	70 - 130		3	20
Chlorobromomethane	25.0	26.0		ug/L	104	70 - 130		3	20
Chlorodibromomethane	25.0	25.2		ug/L	101	70 - 130		2	20
Chloroethane	25.0	22.8		ug/L	91	70 - 130		6	20
Chloroform	25.0	24.1		ug/L	97	70 - 130		3	20
Chloromethane	25.0	24.6		ug/L	99	70 - 130		3	20
cis-1,2-Dichloroethene	25.0	25.6		ug/L	102	70 - 130		4	20
cis-1,3-Dichloropropene	25.0	26.8		ug/L	107	70 - 130		4	20
Dichlorobromomethane	25.0	28.3		ug/L	113	70 - 130		4	20
Dichlorodifluoromethane	25.0	26.0		ug/L	104	70 - 130		10	20
Ethyl ether	25.0	24.4		ug/L	98	70 - 130		1	20
Ethylbenzene	25.0	23.2		ug/L	93	70 - 130		8	20
Ethylene Dibromide	25.0	23.3		ug/L	93	70 - 130		0	20
Hexachlorobutadiene	25.0	25.3		ug/L	101	70 - 130		5	20
Isopropyl ether	25.0	23.6		ug/L	94	70 - 130		2	20
Isopropylbenzene	25.0	23.2		ug/L	93	70 - 130		6	20
Methyl tert-butyl ether	25.0	24.2		ug/L	97	70 - 130		1	20
Methylene Chloride	25.0	23.8		ug/L	95	70 - 130		3	20
m-Xylene & p-Xylene	25.0	23.5		ug/L	94	70 - 130		4	20
Naphthalene	25.0	23.6		ug/L	94	70 - 130		0	20
n-Butylbenzene	25.0	23.8		ug/L	95	70 - 130		6	20
N-Propylbenzene	25.0	23.6		ug/L	94	70 - 130		8	20
o-Xylene	25.0	23.0		ug/L	92	70 - 130		4	20
sec-Butylbenzene	25.0	24.2		ug/L	97	70 - 130		9	20
Styrene	25.0	23.9		ug/L	96	70 - 130		5	20
Tert-amyl methyl ether	25.0	22.8		ug/L	91	70 - 130		1	20
Tert-butyl ethyl ether	25.0	22.0		ug/L	88	70 - 130		0	20
tert-Butylbenzene	25.0	24.7		ug/L	99	70 - 130		6	20
Tetrachloroethene	25.0	25.1		ug/L	101	70 - 130		6	20
Tetrahydrofuran	50.0	67.3 *		ug/L	135	70 - 130		1	20
Toluene	25.0	22.9		ug/L	92	70 - 130		4	20
trans-1,2-Dichloroethene	25.0	25.4		ug/L	102	70 - 130		3	20
trans-1,3-Dichloropropene	25.0	24.5		ug/L	98	70 - 130		3	20
Trichloroethene	25.0	25.5		ug/L	102	70 - 130		5	20
Trichlorofluoromethane	25.0	26.4		ug/L	105	70 - 130		7	20
Vinyl chloride	25.0	25.5		ug/L	102	70 - 130		8	20
Dibromomethane	25.0	25.9		ug/L	103	70 - 130		3	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	93		70 - 130
1,2-Dichloroethane-d4 (Surr)	96		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

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

Lab Sample ID: MB 200-115834/1-A

Matrix: Water

Analysis Batch: 115901

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 115834

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		04/14/17 17:35	04/18/17 17:20	1
<hr/>									
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	95		46 - 130				04/14/17 17:35	04/18/17 17:20	1

Lab Sample ID: LCS 200-115834/2-A

Matrix: Water

Analysis Batch: 115901

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 115834

%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
1,4-Dioxane	2.00	2.15		ug/L		108	70 - 130		
<hr/>									
Surrogate	%Recovery	LCS Qualifier	Limits						
1,4-Dioxane-d8 (Surr)	99		46 - 130						

Lab Sample ID: LCSD 200-115834/3-A

Matrix: Water

Analysis Batch: 115901

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 115834

%Rec.

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,4-Dioxane	2.00	2.12		ug/L		106	70 - 130	1	30
<hr/>									
Surrogate	%Recovery	LCSD Qualifier	Limits						
1,4-Dioxane-d8 (Surr)	97		46 - 130						

## Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-351627/1-A

Matrix: Water

Analysis Batch: 352098

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 351627

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050		mg/L		04/13/17 09:05	04/13/17 23:26	1

Lab Sample ID: LCS 480-351627/2-A

Matrix: Water

Analysis Batch: 352098

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 351627

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
Iron	10.0	10.3		mg/L		103	80 - 120		

Lab Sample ID: LCSD 480-351627/3-A

Matrix: Water

Analysis Batch: 352098

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 351627

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Iron	10.0	10.5		mg/L		105	80 - 120	2	20

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID:** MB 480-352836/4

**Matrix:** Water

**Analysis Batch:** 352836

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			04/19/17 12:49	1
Sulfate	ND		2.0		mg/L			04/19/17 12:49	1

**Lab Sample ID:** LCS 480-352836/3

**Matrix:** Water

**Analysis Batch:** 352836

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

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	%Rec. Limits
Chloride		50.0	49.9		mg/L		100	90 - 110
Sulfate		50.0	48.2		mg/L		96	90 - 110

**Lab Sample ID:** 480-116033-8 MS

**Matrix:** Water

**Analysis Batch:** 352836

**Client Sample ID:** MW-562-20170411  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	%Rec. Limits
Chloride	45		2500	2640		mg/L		104	81 - 120
Sulfate	ND		2500	2850		mg/L		114	80 - 120

**Lab Sample ID:** 480-116033-8 MSD

**Matrix:** Water

**Analysis Batch:** 352836

**Client Sample ID:** MW-562-20170411  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit	
Chloride	45		2500	2650		mg/L		104	81 - 120	1	20
Sulfate	ND		2500	2920		mg/L		117	80 - 120	3	20

## Method: 350.1 - Nitrogen, Ammonia

**Lab Sample ID:** MB 480-351911/2-A

**Matrix:** Water

**Analysis Batch:** 352115

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 351911

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L		04/13/17 16:42	04/14/17 08:43	1

**Lab Sample ID:** LCS 480-351911/1-A

**Matrix:** Water

**Analysis Batch:** 352115

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 351911

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	%Rec. Limits
Ammonia		1.00	1.07		mg/L		107	90 - 110

**Lab Sample ID:** MB 480-352153/2-A

**Matrix:** Water

**Analysis Batch:** 352600

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 352153

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L		04/14/17 18:49	04/18/17 09:44	1

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

## Method: 350.1 - Nitrogen, Ammonia (Continued)

**Lab Sample ID: LCS 480-352153/1-A**

**Matrix: Water**

**Analysis Batch: 352600**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 352153**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Ammonia	1.00	0.960		mg/L		96	90 - 110

**Lab Sample ID: MB 480-352155/2-A**

**Matrix: Water**

**Analysis Batch: 352600**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 352155**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L		04/14/17 19:06	04/18/17 09:45	1

**Lab Sample ID: LCS 480-352155/1-A**

**Matrix: Water**

**Analysis Batch: 352600**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 352155**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Ammonia	1.00	0.921		mg/L		92	90 - 110

## Method: 9060A - Organic Carbon, Total (TOC)

**Lab Sample ID: MB 480-352260/29**

**Matrix: Water**

**Analysis Batch: 352260**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			04/15/17 04:50	1
TOC Result 2	ND		1.0		mg/L			04/15/17 04:50	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			04/15/17 04:50	1

**Lab Sample ID: LCS 480-352260/30**

**Matrix: Water**

**Analysis Batch: 352260**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
TOC Result 1	60.0	58.6		mg/L		98	90 - 110
TOC Result 2	60.0	60.9		mg/L		102	90 - 110
Total Organic Carbon - Duplicates	60.0	59.8		mg/L		100	90 - 110

**Lab Sample ID: 480-116033-4 MS**

**Matrix: Water**

**Analysis Batch: 352260**

**Client Sample ID: MW-552-20170411**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
TOC Result 1	2.0		20.0	22.8		mg/L		104	54 - 131
TOC Result 2	2.2		20.0	23.1		mg/L		104	54 - 131
Total Organic Carbon - Duplicates	2.1		20.0	23.0		mg/L		104	54 - 131

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

## Method: 9060A - Organic Carbon, Total (TOC) (Continued)

**Lab Sample ID: 480-116033-8 MS**

**Matrix: Water**

**Analysis Batch: 352260**

**Client Sample ID: MW-562-20170411**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
TOC Result 1	2600		1600	4290		mg/L		103	54 - 131
TOC Result 2	2600		1600	4320		mg/L		108	54 - 131
Total Organic Carbon - Duplicates	2600		1600	4300		mg/L		105	54 - 131

**Lab Sample ID: 480-116033-1 DU**

**Matrix: Water**

**Analysis Batch: 352260**

**Client Sample ID: MW-261S-20170411**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
TOC Result 1	2.8		2.87		mg/L		4	20
TOC Result 2	3.1		2.96		mg/L		5	20
Total Organic Carbon - Duplicates	2.9		2.91		mg/L		0.7	20

**Lab Sample ID: MB 480-352731/4**

**Matrix: Water**

**Analysis Batch: 352731**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			04/17/17 14:53	1
TOC Result 2	ND		1.0		mg/L			04/17/17 14:53	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			04/17/17 14:53	1

**Lab Sample ID: MB 480-352731/76**

**Matrix: Water**

**Analysis Batch: 352731**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			04/19/17 00:17	1
TOC Result 2	ND		1.0		mg/L			04/19/17 00:17	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			04/19/17 00:17	1

**Lab Sample ID: LCS 480-352731/5**

**Matrix: Water**

**Analysis Batch: 352731**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
TOC Result 1	60.0	61.6		mg/L		103	90 - 110
TOC Result 2	60.0	62.0		mg/L		103	90 - 110
Total Organic Carbon - Duplicates	60.0	61.8		mg/L		103	90 - 110

**Lab Sample ID: LCS 480-352731/77**

**Matrix: Water**

**Analysis Batch: 352731**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
TOC Result 1	60.0	61.7		mg/L		103	90 - 110
TOC Result 2	60.0	61.9		mg/L		103	90 - 110

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

## Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 480-352731/77

Matrix: Water

Analysis Batch: 352731

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Total Organic Carbon - Duplicates	60.0	61.8		mg/L	103		90 - 110

## Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-352401/30

Matrix: Water

Analysis Batch: 352401

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND			5.0	mg/L			04/14/17 22:57	1

Lab Sample ID: LCS 480-352401/31

Matrix: Water

Analysis Batch: 352401

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Alkalinity, Total	100	94.2		mg/L	94		90 - 110

Lab Sample ID: 480-116033-4 MS

Matrix: Water

Analysis Batch: 352401

Client Sample ID: MW-552-20170411  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
Alkalinity, Total	380	F1	100	434	F1	mg/L	53	60 - 140	Limits

Lab Sample ID: 480-116033-1 DU

Matrix: Water

Analysis Batch: 352401

Client Sample ID: MW-261S-20170411  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity, Total	380		378		mg/L		0.1	20

## Method: SM 4500 P E - Orthophosphate

Lab Sample ID: MB 480-351673/3

Matrix: Water

Analysis Batch: 351673

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ortho-Phosphate	ND			0.020	mg/L			04/12/17 22:00	1

Lab Sample ID: LCS 480-351673/4

Matrix: Water

Analysis Batch: 351673

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
ortho-Phosphate	0.200	0.203		mg/L	102		90 - 110

TestAmerica Buffalo

# QC Sample Results

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

TestAmerica Job ID: 480-116033-1

## Method: SM 4500 P E - Orthophosphate (Continued)

Lab Sample ID: 480-116033-6 MS

Matrix: Water

Analysis Batch: 351673

Client Sample ID: MW-560-20170411

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	Limits	
ortho-Phosphate	ND		1.00	0.959		mg/L	96	49 - 138			

Lab Sample ID: 480-116033-6 MSD

Matrix: Water

Analysis Batch: 351673

Client Sample ID: MW-560-20170411

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD Limit
ortho-Phosphate	ND		1.00	0.959		mg/L	96	49 - 138		0	20

# QC Association Summary

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

TestAmerica Job ID: 480-116033-1

## GC/MS VOA

### Analysis Batch: 352253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-3	MW-264M-20170411	Total/NA	Water	8260C	1
480-116033-5	MW-553-20170411	Total/NA	Water	8260C	2
480-116033-6	MW-560-20170411	Total/NA	Water	8260C	3
480-116033-8	MW-562-20170411	Total/NA	Water	8260C	4
480-116033-9	MW-563-20170411	Total/NA	Water	8260C	5
480-116033-10	REW-8-20170411	Total/NA	Water	8260C	6
480-116033-11	REW-9-20170411	Total/NA	Water	8260C	7
480-116033-12	REW-10-20170411	Total/NA	Water	8260C	8
480-116033-15	TRIP BLANKS	Total/NA	Water	8260C	9
MB 480-352253/8	Method Blank	Total/NA	Water	8260C	10
LCS 480-352253/5	Lab Control Sample	Total/NA	Water	8260C	11
LCSD 480-352253/6	Lab Control Sample Dup	Total/NA	Water	8260C	12

### Analysis Batch: 352315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-1	MW-261S-20170411	Total/NA	Water	8260C	12
480-116033-2	MW-266Ma-20170411	Total/NA	Water	8260C	13
480-116033-4	MW-552-20170411	Total/NA	Water	8260C	14
480-116033-7	MW-561-20170411	Total/NA	Water	8260C	15
480-116033-13	REW-12-20170411	Total/NA	Water	8260C	16
480-116033-14	DUP3-20170411	Total/NA	Water	8260C	17
MB 480-352315/8	Method Blank	Total/NA	Water	8260C	18
LCS 480-352315/5	Lab Control Sample	Total/NA	Water	8260C	19
LCSD 480-352315/6	Lab Control Sample Dup	Total/NA	Water	8260C	20

### Analysis Batch: 352449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-8 - DL	MW-562-20170411	Total/NA	Water	8260C	1
MB 480-352449/8	Method Blank	Total/NA	Water	8260C	2
LCS 480-352449/5	Lab Control Sample	Total/NA	Water	8260C	3
LCSD 480-352449/6	Lab Control Sample Dup	Total/NA	Water	8260C	4

## GC/MS Semi VOA

### Prep Batch: 115834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-1	MW-261S-20170411	Total/NA	Water	3535A	1
480-116033-2	MW-266Ma-20170411	Total/NA	Water	3535A	2
480-116033-4	MW-552-20170411	Total/NA	Water	3535A	3
MB 200-115834/1-A	Method Blank	Total/NA	Water	3535A	4
LCS 200-115834/2-A	Lab Control Sample	Total/NA	Water	3535A	5
LCSD 200-115834/3-A	Lab Control Sample Dup	Total/NA	Water	3535A	6

### Analysis Batch: 115901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-1	MW-261S-20170411	Total/NA	Water	522	115834
480-116033-2	MW-266Ma-20170411	Total/NA	Water	522	115834
480-116033-4	MW-552-20170411	Total/NA	Water	522	115834
MB 200-115834/1-A	Method Blank	Total/NA	Water	522	115834
LCS 200-115834/2-A	Lab Control Sample	Total/NA	Water	522	115834

TestAmerica Buffalo

# QC Association Summary

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

TestAmerica Job ID: 480-116033-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 115901 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 200-115834/3-A	Lab Control Sample Dup	Total/NA	Water	522	115834

## Metals

### Prep Batch: 351627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-1	MW-261S-20170411	Total/NA	Water	3005A	
480-116033-4	MW-552-20170411	Total/NA	Water	3005A	
480-116033-5	MW-553-20170411	Total/NA	Water	3005A	
480-116033-6	MW-560-20170411	Total/NA	Water	3005A	
480-116033-7	MW-561-20170411	Total/NA	Water	3005A	
480-116033-8	MW-562-20170411	Total/NA	Water	3005A	
480-116033-9	MW-563-20170411	Total/NA	Water	3005A	
480-116033-10	REW-8-20170411	Total/NA	Water	3005A	
480-116033-11	REW-9-20170411	Total/NA	Water	3005A	
480-116033-12	REW-10-20170411	Total/NA	Water	3005A	
480-116033-13	REW-12-20170411	Total/NA	Water	3005A	
MB 480-351627/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-351627/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-351627/3-A	Lab Control Sample Dup	Total/NA	Water	3005A	

### Analysis Batch: 352098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-1	MW-261S-20170411	Total/NA	Water	6010	351627
480-116033-4	MW-552-20170411	Total/NA	Water	6010	351627
480-116033-5	MW-553-20170411	Total/NA	Water	6010	351627
480-116033-6	MW-560-20170411	Total/NA	Water	6010	351627
480-116033-7	MW-561-20170411	Total/NA	Water	6010	351627
480-116033-8	MW-562-20170411	Total/NA	Water	6010	351627
480-116033-9	MW-563-20170411	Total/NA	Water	6010	351627
480-116033-10	REW-8-20170411	Total/NA	Water	6010	351627
480-116033-11	REW-9-20170411	Total/NA	Water	6010	351627
480-116033-12	REW-10-20170411	Total/NA	Water	6010	351627
480-116033-13	REW-12-20170411	Total/NA	Water	6010	351627
MB 480-351627/1-A	Method Blank	Total/NA	Water	6010	351627
LCS 480-351627/2-A	Lab Control Sample	Total/NA	Water	6010	351627
LCSD 480-351627/3-A	Lab Control Sample Dup	Total/NA	Water	6010	351627

## General Chemistry

### Analysis Batch: 351673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-1	MW-261S-20170411	Total/NA	Water	SM 4500 P E	
480-116033-4	MW-552-20170411	Total/NA	Water	SM 4500 P E	
480-116033-5	MW-553-20170411	Total/NA	Water	SM 4500 P E	
480-116033-6	MW-560-20170411	Total/NA	Water	SM 4500 P E	
480-116033-7	MW-561-20170411	Total/NA	Water	SM 4500 P E	
480-116033-8	MW-562-20170411	Total/NA	Water	SM 4500 P E	
480-116033-9	MW-563-20170411	Total/NA	Water	SM 4500 P E	
480-116033-10	REW-8-20170411	Total/NA	Water	SM 4500 P E	

TestAmerica Buffalo

# QC Association Summary

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

TestAmerica Job ID: 480-116033-1

## General Chemistry (Continued)

### Analysis Batch: 351673 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-11	REW-9-20170411	Total/NA	Water	SM 4500 P E	
480-116033-12	REW-10-20170411	Total/NA	Water	SM 4500 P E	
480-116033-13	REW-12-20170411	Total/NA	Water	SM 4500 P E	
MB 480-351673/3	Method Blank	Total/NA	Water	SM 4500 P E	
LCS 480-351673/4	Lab Control Sample	Total/NA	Water	SM 4500 P E	
480-116033-6 MS	MW-560-20170411	Total/NA	Water	SM 4500 P E	
480-116033-6 MSD	MW-560-20170411	Total/NA	Water	SM 4500 P E	

### Analysis Batch: 351682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-1	MW-261S-20170411	Total/NA	Water	353.2	
480-116033-4	MW-552-20170411	Total/NA	Water	353.2	
480-116033-5	MW-553-20170411	Total/NA	Water	353.2	
480-116033-6	MW-560-20170411	Total/NA	Water	353.2	
480-116033-7	MW-561-20170411	Total/NA	Water	353.2	
480-116033-8	MW-562-20170411	Total/NA	Water	353.2	
480-116033-9	MW-563-20170411	Total/NA	Water	353.2	
480-116033-10	REW-8-20170411	Total/NA	Water	353.2	
480-116033-11	REW-9-20170411	Total/NA	Water	353.2	
480-116033-12	REW-10-20170411	Total/NA	Water	353.2	
480-116033-13	REW-12-20170411	Total/NA	Water	353.2	

### Prep Batch: 351911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-1	MW-261S-20170411	Total/NA	Water	Distill/Ammonia	
480-116033-4	MW-552-20170411	Total/NA	Water	Distill/Ammonia	
480-116033-5	MW-553-20170411	Total/NA	Water	Distill/Ammonia	
480-116033-6	MW-560-20170411	Total/NA	Water	Distill/Ammonia	
480-116033-7	MW-561-20170411	Total/NA	Water	Distill/Ammonia	
480-116033-9	MW-563-20170411	Total/NA	Water	Distill/Ammonia	
480-116033-11	REW-9-20170411	Total/NA	Water	Distill/Ammonia	
480-116033-12	REW-10-20170411	Total/NA	Water	Distill/Ammonia	
MB 480-351911/2-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 480-351911/1-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

### Analysis Batch: 352115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-1	MW-261S-20170411	Total/NA	Water	350.1	351911
480-116033-4	MW-552-20170411	Total/NA	Water	350.1	351911
480-116033-5	MW-553-20170411	Total/NA	Water	350.1	351911
480-116033-6	MW-560-20170411	Total/NA	Water	350.1	351911
480-116033-7	MW-561-20170411	Total/NA	Water	350.1	351911
480-116033-9	MW-563-20170411	Total/NA	Water	350.1	351911
480-116033-11	REW-9-20170411	Total/NA	Water	350.1	351911
480-116033-12	REW-10-20170411	Total/NA	Water	350.1	351911
MB 480-351911/2-A	Method Blank	Total/NA	Water	350.1	351911
LCS 480-351911/1-A	Lab Control Sample	Total/NA	Water	350.1	351911

### Prep Batch: 352153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-8	MW-562-20170411	Total/NA	Water	Distill/Ammonia	

TestAmerica Buffalo

# QC Association Summary

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

TestAmerica Job ID: 480-116033-1

## General Chemistry (Continued)

### Prep Batch: 352153 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-13	REW-12-20170411	Total/NA	Water	Distill/Ammonia	
MB 480-352153/2-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 480-352153/1-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

### Prep Batch: 352155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-10	REW-8-20170411	Total/NA	Water	Distill/Ammonia	
MB 480-352155/2-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 480-352155/1-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

### Analysis Batch: 352260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-1	MW-261S-20170411	Total/NA	Water	9060A	
480-116033-4	MW-552-20170411	Total/NA	Water	9060A	
480-116033-5	MW-553-20170411	Total/NA	Water	9060A	
480-116033-6	MW-560-20170411	Total/NA	Water	9060A	
480-116033-7	MW-561-20170411	Total/NA	Water	9060A	
480-116033-8	MW-562-20170411	Total/NA	Water	9060A	
480-116033-10	REW-8-20170411	Total/NA	Water	9060A	
480-116033-11	REW-9-20170411	Total/NA	Water	9060A	
480-116033-12	REW-10-20170411	Total/NA	Water	9060A	
480-116033-13	REW-12-20170411	Total/NA	Water	9060A	
MB 480-352260/29	Method Blank	Total/NA	Water	9060A	
LCS 480-352260/30	Lab Control Sample	Total/NA	Water	9060A	
480-116033-4 MS	MW-552-20170411	Total/NA	Water	9060A	
480-116033-8 MS	MW-562-20170411	Total/NA	Water	9060A	
480-116033-1 DU	MW-261S-20170411	Total/NA	Water	9060A	

### Analysis Batch: 352400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-1	MW-261S-20170411	Total/NA	Water	9040C	
480-116033-4	MW-552-20170411	Total/NA	Water	9040C	
480-116033-5	MW-553-20170411	Total/NA	Water	9040C	
480-116033-6	MW-560-20170411	Total/NA	Water	9040C	
480-116033-7	MW-561-20170411	Total/NA	Water	9040C	
480-116033-8	MW-562-20170411	Total/NA	Water	9040C	
480-116033-9	MW-563-20170411	Total/NA	Water	9040C	
480-116033-10	REW-8-20170411	Total/NA	Water	9040C	
480-116033-11	REW-9-20170411	Total/NA	Water	9040C	
480-116033-12	REW-10-20170411	Total/NA	Water	9040C	
LCS 480-352400/1	Lab Control Sample	Total/NA	Water	9040C	

### Analysis Batch: 352401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-1	MW-261S-20170411	Total/NA	Water	SM 2320B	
480-116033-4	MW-552-20170411	Total/NA	Water	SM 2320B	
480-116033-5	MW-553-20170411	Total/NA	Water	SM 2320B	
480-116033-6	MW-560-20170411	Total/NA	Water	SM 2320B	
480-116033-7	MW-561-20170411	Total/NA	Water	SM 2320B	
480-116033-8	MW-562-20170411	Total/NA	Water	SM 2320B	
480-116033-9	MW-563-20170411	Total/NA	Water	SM 2320B	

TestAmerica Buffalo

# QC Association Summary

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

TestAmerica Job ID: 480-116033-1

## General Chemistry (Continued)

### Analysis Batch: 352401 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-10	REW-8-20170411	Total/NA	Water	SM 2320B	
480-116033-11	REW-9-20170411	Total/NA	Water	SM 2320B	
480-116033-12	REW-10-20170411	Total/NA	Water	SM 2320B	
480-116033-13	REW-12-20170411	Total/NA	Water	SM 2320B	
MB 480-352401/30	Method Blank	Total/NA	Water	SM 2320B	
LCS 480-352401/31	Lab Control Sample	Total/NA	Water	SM 2320B	
480-116033-4 MS	MW-552-20170411	Total/NA	Water	SM 2320B	
480-116033-1 DU	MW-261S-20170411	Total/NA	Water	SM 2320B	

### Analysis Batch: 352459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-13	REW-12-20170411	Total/NA	Water	9040C	
LCS 480-352459/1	Lab Control Sample	Total/NA	Water	9040C	

### Analysis Batch: 352600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-8	MW-562-20170411	Total/NA	Water	350.1	352153
480-116033-13	REW-12-20170411	Total/NA	Water	350.1	352153
MB 480-352153/2-A	Method Blank	Total/NA	Water	350.1	352153
MB 480-352155/2-A	Method Blank	Total/NA	Water	350.1	352155
LCS 480-352153/1-A	Lab Control Sample	Total/NA	Water	350.1	352153
LCS 480-352155/1-A	Lab Control Sample	Total/NA	Water	350.1	352155

### Analysis Batch: 352601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-10	REW-8-20170411	Total/NA	Water	350.1	352155

### Analysis Batch: 352731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-9	MW-563-20170411	Total/NA	Water	9060A	
MB 480-352731/4	Method Blank	Total/NA	Water	9060A	
MB 480-352731/76	Method Blank	Total/NA	Water	9060A	
LCS 480-352731/5	Lab Control Sample	Total/NA	Water	9060A	
LCS 480-352731/77	Lab Control Sample	Total/NA	Water	9060A	

### Analysis Batch: 352836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-1	MW-261S-20170411	Total/NA	Water	300.0	
480-116033-4	MW-552-20170411	Total/NA	Water	300.0	
480-116033-5	MW-553-20170411	Total/NA	Water	300.0	
480-116033-6	MW-560-20170411	Total/NA	Water	300.0	
480-116033-7	MW-561-20170411	Total/NA	Water	300.0	
480-116033-8	MW-562-20170411	Total/NA	Water	300.0	
480-116033-9	MW-563-20170411	Total/NA	Water	300.0	
480-116033-10	REW-8-20170411	Total/NA	Water	300.0	
480-116033-11	REW-9-20170411	Total/NA	Water	300.0	
480-116033-12	REW-10-20170411	Total/NA	Water	300.0	
480-116033-13	REW-12-20170411	Total/NA	Water	300.0	
MB 480-352836/4	Method Blank	Total/NA	Water	300.0	
LCS 480-352836/3	Lab Control Sample	Total/NA	Water	300.0	
480-116033-8 MS	MW-562-20170411	Total/NA	Water	300.0	

TestAmerica Buffalo

# QC Association Summary

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

TestAmerica Job ID: 480-116033-1

## General Chemistry (Continued)

### Analysis Batch: 352836 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116033-8 MSD	MW-562-20170411	Total/NA	Water	300.0	

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## Lab Chronicle

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

TestAmerica Job ID: 480-116033-1

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**Client Sample ID: MW-264M-20170411**

Date Collected: 04/11/17 14:30

Date Received: 04/12/17 10:00

**Lab Sample ID: 480-116033-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	352253	04/16/17 16:49	JWG	TAL BUF

TestAmerica Buffalo

## Lab Chronicle

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

# Lab Chronicle

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

TestAmerica Job ID: 480-116033-1

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TestAmerica Buffalo

## Lab Chronicle

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

TestAmerica Job ID: 480-116033-1

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## Lab Chronicle

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

TestAmerica Job ID: 480-116033-1

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## Lab Chronicle

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

TestAmerica Job ID: 480-116033-1

### Client Sample ID: TRIP BLANKS

Date Collected: 04/11/17 00:00

Date Received: 04/12/17 10:00

### Lab Sample ID: 480-116033-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	352253	04/16/17 21:32	JWG	TAL BUF

#### Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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

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# Accreditation/Certification Summary

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

TestAmerica Job ID: 480-116033-1

## Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-17
California	State Program	9	1169CA	09-30-17
Connecticut	State Program	1	PH-0568	09-30-18
Florida	NELAP	4	E87672	06-30-17
Georgia	State Program	4	N/A	03-31-18
Illinois	NELAP	5	200003	09-30-17
Iowa	State Program	7	374	03-01-17 *
Kansas	NELAP	7	E-10187	01-31-18
Kentucky (DW)	State Program	4	90029	12-31-17
Kentucky (UST)	State Program	4	30	03-31-17 *
Kentucky (WW)	State Program	4	90029	12-31-17
Louisiana	NELAP	6	02031	06-30-17
Maine	State Program	1	NY00044	12-04-18
Maryland	State Program	3	294	03-31-18
Massachusetts	State Program	1	M-NY044	06-30-17
Michigan	State Program	5	9937	03-31-17 *
Minnesota	NELAP	5	036-999-337	12-31-17
New Hampshire	NELAP Primary AB	1	2973	09-11-17
New Hampshire	NELAP Secondary AB	1	2337	11-17-17
New Jersey	NELAP	2	NY455	06-30-17
New York	NELAP	2	10026	03-31-18
North Dakota	State Program	8	R-176	03-31-17 *
Oklahoma	State Program	6	9421	08-31-17
Oregon	NELAP	10	NY200003	06-09-17 *
Pennsylvania	NELAP	3	68-00281	07-31-17
Rhode Island	State Program	1	LAO00328	12-30-17
Tennessee	State Program	4	TN02970	03-31-18
Texas	NELAP	6	T104704412-15-6	07-31-17
USDA	Federal		P330-11-00386	11-26-17
Virginia	NELAP	3	460185	09-14-17
Washington	State Program	10	C784	02-10-18
Wisconsin	State Program	5	998310390	08-31-17

## Laboratory: TestAmerica Burlington

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-17
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-02-18
Florida	NELAP	4	E87467	06-30-17
L-A-B	DoD ELAP		L2336	03-25-17 *
Maine	State Program	1	VT00008	04-17-17 *
Minnesota	NELAP	5	050-999-436	12-31-17
New Hampshire	NELAP	1	2006	12-18-17
New Jersey	NELAP	2	VT972	06-30-17 *
New York	NELAP	2	10391	04-01-17 *
Pennsylvania	NELAP	3	68-00489	04-30-17 *
Rhode Island	State Program	1	LAO00298	12-30-17
US Fish & Wildlife	Federal		LE-058448-0	10-31-17
USDA	Federal		P330-11-00093	12-05-19

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Buffalo

## Accreditation/Certification Summary

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

TestAmerica Job ID: 480-116033-1

### Laboratory: TestAmerica Burlington (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Vermont	State Program	1	VT-4000	12-31-17
Virginia	NELAP	3	460209	12-14-17

## Method Summary

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

TestAmerica Job ID: 480-116033-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
522	1,4 Dioxane (GC/MS SIM)	EPA	TAL BUR
6010	Metals (ICP)	SW846	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
9040C	pH	SW846	TAL BUF
9060A	Organic Carbon, Total (TOC)	SW846	TAL BUF
SM 2320B	Alkalinity	SM	TAL BUF
SM 4500 P E	Orthophosphate	SM	TAL BUF

### Protocol References:

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

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

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

### Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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: 480-116033-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-116033-3	MW-264M-20170411	Water	04/11/17 14:30	04/12/17 10:00
480-116033-15	TRIP BLANKS	Water	04/11/17 00:00	04/12/17 10:00

TestAmerica Buffalo

## Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 480-116033-1

**Login Number:** 116033

**List Source:** TestAmerica Buffalo

**List Number:** 1

**Creator:** Janish, Carl M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	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	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	IESI
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

## Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 480-116033-1

**Login Number:** 116033

**List Number:** 2

**Creator:** Lavigne, Scott M

**List Source:** TestAmerica Burlington

**List Creation:** 04/12/17 04:42 PM

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.	6
The cooler's custody seal, if present, is intact.	True	Seal present with no number.	7
Sample custody seals, if present, are intact.	True		8
The cooler or samples do not appear to have been compromised or tampered with.	True		9
Samples were received on ice.	True		10
Cooler Temperature is acceptable.	True		11
Cooler Temperature is recorded.	True	1.9°C,1.4°C,2.4°C,1.8°C,1.2°C	12
COC is present.	True		13
COC is filled out in ink and legible.	True		14
COC is filled out with all pertinent information.	True		15
Is the Field Sampler's name present on COC?	True		
There are no discrepancies between the containers received and the COC.	True		
Samples are received within Holding Time (excluding tests with immediate HTs)	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.	N/A		
Sample Preservation Verified.	True		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	N/A		



### TestAmerica Westfield

### TestAmerica Boston

240 Bear Hill Road – Suite 104  
Waltham MA 02451  
Phone: (781) 466-6900 Fax: (781) 466-6901

501 Southampton Road  
Westfield MA 01085  
Phone: (413) 572-4000 Fax: (303) 467-7247

### Chain of Custody Record

<b>Client Information:</b>		Sample Collector's Name (Please Print Neatly): <i>Dennis</i>	Lab PM: <i>37303</i>	Lab COC Barcode Label <i>303-101-3196</i>	Page: <i>2</i> of <i>2</i>	COC No: <i>37303</i>
Client Contact: <i>Vista Business Solutions Inc.</i>	Company: <i>Industrial Testing Services Inc.</i>	Sample Collector's Phone: <i>503-101-3196</i>	E-Mail: <i></i>	Job #:		
Address: <i>25 Spring St., Woburn, MA 01801</i>		Analysis Requested				
City: <i>Woburn</i>	State and Zip: <i>MA 01801</i>	Due Date Requested: <i>11/11/17</i>	Turnaround Time (TAT) Requested (business days): <i>5 business</i>			
Client's Phone: <i>508-668-0033</i>	Client's Contact Email: <i></i>	Quote # or Project #: <i>RA-008</i>	PO #:			
Client's Project Name/Number: <i>Test Solutions Inc.</i>	Sample Collection Site Name & Location: <i>Woburn, MA</i>	WO #:	FWS ID #:			
Sample Identification		Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	Preservation Codes
<i>Trip Blanks</i>		<i>11/11/17</i>	<i>~ ~ ~</i>	<i>C</i>	<i>A</i>	<i>N</i>
<b>Possible Hazard Identification (please check off each that may apply):</b> <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						
<b>Sample Disposal Requirements (A fee may be assessed if samples are retained longer than 1 month):</b> <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
<b>► NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !!</b>						
Relinquished by: <i>[Signature]</i>		Date/Time: <i>11/11/17</i>	Received by: <i>[Signature]</i>	Company: <i>Test Solutions Inc.</i>	Date/Time: <i>11/11/17</i>	Company: <i>Test Solutions Inc.</i>
Relinquished by: <i>[Signature]</i>		Date/Time: <i>11/11/17</i>	Received by: <i>[Signature]</i>	Company: <i>Test Solutions Inc.</i>	Date/Time: <i>11/11/17</i>	Company: <i>Test Solutions Inc.</i>
Colder Temperature(s) °C and Other Remarks:						
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No.: <i>2041</i>				

### TestAmerica Westfield

501 Southampton Road  
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Phone: (413) 572-4000 Fax: (303) 487-7247

### TestAmerica Boston

240 Bear Hill Road – Suite 104  
Waltham MA 02451  
Phone: (781) 466-6900 Fax: (781) 466-6901

360325-Boston

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## Chain of Custody Record

<b>Client Information:</b>		Sample Collector's Name (Please Print Neatly): <b>Dawn, Debbie, Doss</b>	Lab P/M: <b>308-104-3191</b>	Lab COC Barcode Label 	COC No.: <b>37305</b>																																																
Client Contact: <b>Vincent Parsons</b> Company: <b>Environmental Consulting Solutions Inc.</b>		Sample Collector's Phone: <b>308-104-3191</b>	E-Mail: <b></b>	Page: <b>1</b> of <b>2</b>	Job #:																																																
<table border="1"> <thead> <tr> <th colspan="6">Analysis Requested</th> </tr> </thead> <tbody> <tr><td>Due Date Requested:</td><td><b>4/19/11</b></td><td>Turnaround Time (TAT) Requested (business days):</td><td colspan="3"><b>5 days</b></td></tr> <tr><td>City:</td><td><b>Wellesley</b></td><td>Quote # or Project #:</td><td colspan="3"></td></tr> <tr><td>State and Zip:</td><td><b>MA 02481</b></td><td>PO #:</td><td colspan="3"><b>R9-008</b></td></tr> <tr><td>Client's Phone:</td><td><b>508-265-0033</b></td><td>WO #:</td><td colspan="3"></td></tr> <tr><td>Client's Contact Email:</td><td><b></b></td><td>PMS ID #:</td><td colspan="3"></td></tr> <tr><td>Client's Project Name/Number:</td><td><b>TEST 12.00M</b></td><td>Sample Collection Date (MM/DD/YY)</td><td>Sample Collection Time (24 Hour Clock)</td><td>Sample Type:</td><td>Matrix Type **</td></tr> <tr><td>Sample Collection Site Name &amp; Location:</td><td><b>Wellesley, MA</b></td><td><b>04/11/11</b></td><td><b>1430</b></td><td><b>C=Comp</b></td><td><b>G=Grab</b></td></tr> </tbody> </table>						Analysis Requested						Due Date Requested:	<b>4/19/11</b>	Turnaround Time (TAT) Requested (business days):	<b>5 days</b>			City:	<b>Wellesley</b>	Quote # or Project #:				State and Zip:	<b>MA 02481</b>	PO #:	<b>R9-008</b>			Client's Phone:	<b>508-265-0033</b>	WO #:				Client's Contact Email:	<b></b>	PMS ID #:				Client's Project Name/Number:	<b>TEST 12.00M</b>	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type:	Matrix Type **	Sample Collection Site Name & Location:	<b>Wellesley, MA</b>	<b>04/11/11</b>	<b>1430</b>	<b>C=Comp</b>	<b>G=Grab</b>
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ORIGIN ID:BXCA (781) 466-6900  
PAUL HOBART  
TESTAMERICA  
240 BEAR HILL ROAD  
SUITE 104  
WALTHAM, MA 02451  
UNITED STATES US

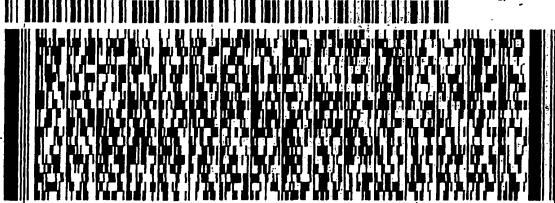
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ACTWTG: 53.68 LB  
CAD: 590687/CAFE3011  
BILL RECIPIENT

To SAMPLE RECEIVING  
TESTAMERICA BURLINGTON  
30 COMMUNITY DRIVE  
SUITE 11  
SOUTH BURLINGTON VT 05403

(802) 680-1980

REF:

DEPT:



FedEx  
Express



J161216101001UV

1 of 5

WED - 12 APR 3:00P  
STANDARD OVERNIGHT

TRK# 4258 8391 4909  
0201

## MASTER ##

NA BTVA

05403  
VT-US BTV



Part # 156148V-434 RIT2 02/17 ::

ORIGIN ID:BXCA (781) 466-6900  
PAUL HOBART  
TESTAMERICA  
240 BEAR HILL ROAD  
SUITE 104  
WALTHAM, MA 02451  
UNITED STATES US

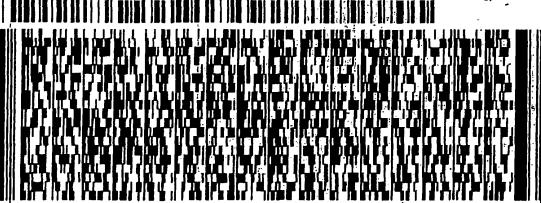
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TESTAMERICA BURLINGTON  
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SUITE 11  
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DEPT:



FedEx  
Express



J161216101001UV

2 of 5

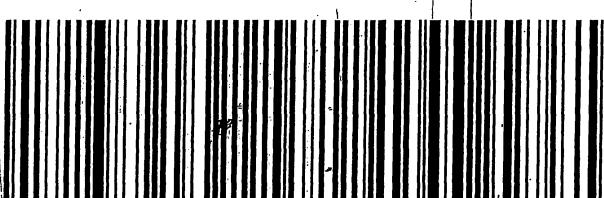
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NA BTVA

05403  
VT-US BTV



Part # 156148V-434 RIT2 02/17 ::

WED - 12 APR 3:00P  
STANDARD OVERNIGHT

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05403  
VT-US BTV



3 of 5  
MPS# 4258 8391 4920  
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Mstr# 4258 8391 4909

0201  
NA BTVA

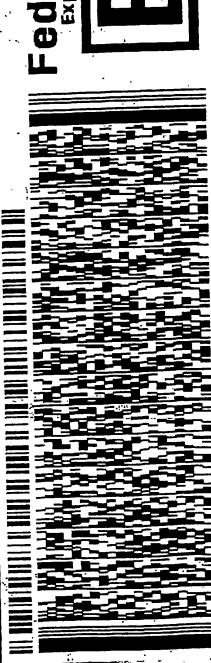
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ORIGIN ID:BXCA (781) 466-6900  
PAUL HOBART  
TESTAMERICA  
240 BEAR HILL ROAD  
SUITE 104  
WALTHAM, MA 02451  
UNITED STATES US

SHIP DATE: 11APR17  
ACTWTG: 53.20 LB  
CAD: 590687/CAFE3011  
BILL RECIPIENT

To SAMPLE RECEIVING  
TESTAMERICA BURLINGTON  
30 COMMUNITY DRIVE  
SUITE 11  
SOUTH BURLINGTON VT 05403

REF:  
INU:  
POI:



ORIGIN ID: BXCA (781) 466-6900  
PAUL HOBART  
TESTAMERICA  
240 BEAR HILL ROAD  
SUITE 104  
WALTHAM, MA 02451  
UNITED STATES US

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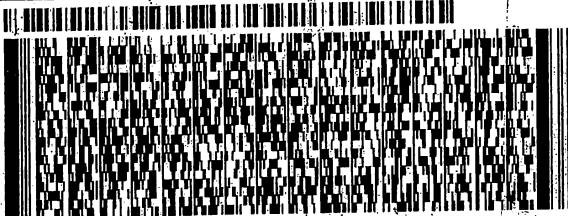
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D: BXCA (781) 466-6900  
BART  
TESTAMERICA  
240 BEAR HILL ROAD  
SUITE 104  
WALTHAM, MA 02451  
UNITED STATES US

SHIP DATE: 11APR17  
ACTWTG: 54.12 LB  
CAD: 590687/CAFE3011

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TO SAMPLE RECEIVING  
TESTAMERICA BURLINGTON  
30 COMMUNITY DRIVE  
SUITE 11  
SOUTH BURLINGTON VT 05403  
(802) 660-1990  
REF:  
DEPT:



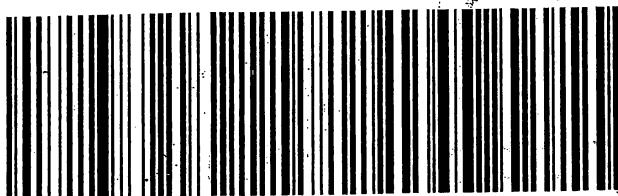
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WED - 12 APR 3:00P  
STANDARD OVERNIGHT

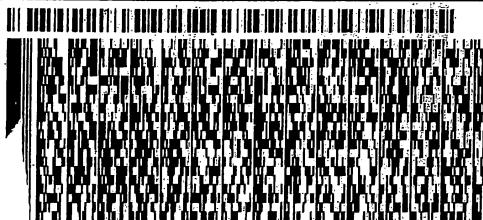
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VT-US BTV

NA BTVA

Part # 15614BV-434 RTT2 02/17



TO SAMPLE RECEIVING  
TESTAMERICA BURLINGTON  
30 COMMUNITY DRIVE  
SUITE 11  
SOUTH BURLINGTON VT 05403  
(802) 660-1990  
REF:  
DEPT:



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5 of 5  
S# 4258 8391 4942  
13 tr# 4258 8391 4909  
0201

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STANDARD OVERNIGHT

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## TestAmerica Westfield

501 Southampton Road  
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## TestAmerica Boston

240 Bear Hill Road – Suite 104  
Waltham MA 02451  
Phone: (781) 466-6900 Fax: (781) 460-0507



480-116033 Chain of Custody

360325-Boston

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information:</b>		Sample Collector's Name (Please Print Neatly): <b>Dawn Doss, Dawn Doss</b>		Lab PN#:	E-Mail:	Job #:
Client Contact:	City:	State and Zip:	Client's Phone:	PO #:	WO #:	Comments:
Company:	Address:	Client's Contact Email:	Client's Project Name/Number:	PWS ID #:		
Client's Name & Location:				Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Matrix Type **
<b>Sample Identification</b>						
MLD-0101 - 20170411				111117	1430	C
						X
						Z
						R
						W
						O=Oil
						X=Waste (non-water)
						Z=Other:
<b>Possible Hazard Identification (please check off each that may apply):</b>		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant
		<input type="checkbox"/> Radioactive		<input type="checkbox"/> Poison A		<input type="checkbox"/> Poison B
		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological		<input type="checkbox"/> Unknown
<b>** Matrix Types: A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other:</b>						
Reinquired By:	Date/Time:	111117	1513	Company	Received by:	Date/Time:
Reinquired By:	Date/Time:	111117-17	100	Company	Received by:	Date/Time:
Reinquired By:	Date/Time:			Reinforced by:	Date/Time:	
Custody Seal Intact:		Custody Seal No.:		Custody Seal No.:		Comments:
Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>		Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>

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

Return To Client     Disposal By/Lab     Archive For Months

**► NOTE! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !!**

Reinquired By:	Date/Time:	111117	1200	Company
Reinquired By:	Date/Time:	111210	100	Company
Reinforced by:	Date/Time:	111210	100	Company
Colder Temperature(s): °C and Other Remarks:		4°C, 14°C, 24°C, 1.8°C, 1.4°C, 1.2°C, 0.8°C, 0.4°C, 0.1°C, -0.5°C, -1°C, -2°C, -3°C, -4°C, -5°C, -6°C, -7°C, -8°C, -9°C, -10°C, -11°C, -12°C, -13°C, -14°C, -15°C		

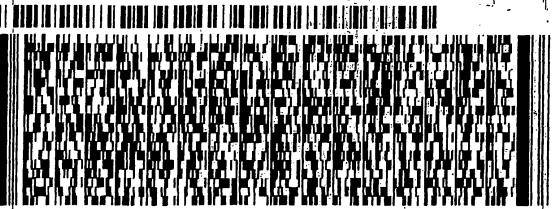


ORIGIN ID:BXCA (781) 466-6900  
PAUL HOBART  
TESTAMERICA  
240 BEAR HILL ROAD  
SUITE 104  
WALTHAM, MA 02451  
UNITED STATES US

SHIP DATE: 11APR17  
ACTWGT: 53.68 LB  
CAD: 590687/CAFE3011

BILL RECIPIENT

TO: SAMPLE RECEIVING  
TESTAMERICA BURLINGTON  
30 COMMUNITY DRIVE  
SUITE 11  
SOUTH BURLINGTON VT 05403  
(802) 860-1990  
REF:  
PO:  
DEPT:



FedEx  
Express



J161216101001uv

1 of 5

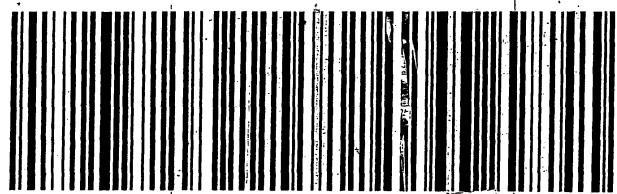
WED - 12 APR 3:00P  
STANDARD OVERNIGHT

TRK# 4258 8391 4909  
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## MASTER ##

NA BTVA

05403  
VT-US BTV



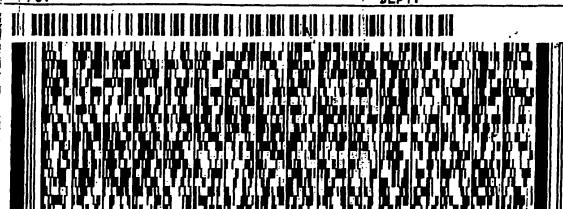
Part # 156148V434 RIT2 02/17 ::

ORIGIN ID:BXCA (781) 466-6900  
PAUL HOBART  
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240 BEAR HILL ROAD  
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SHIP DATE: 11APR17  
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BILL RECIPIENT

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DEPT:



FedEx  
Express



J161216101001uv

2 of 5

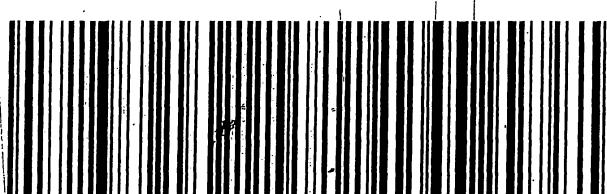
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NA BTVA

05403  
VT-US BTV



Part # 156148V434 RIT2 02/17 ::

WED - 12 APR 3:00P  
STANDARD OVERNIGHT  
0201

05403  
VT-US BTV



3 of 5  
MPS# 4258 8391 4920  
0263  
Mstr# 4258 8391 4909  
0201

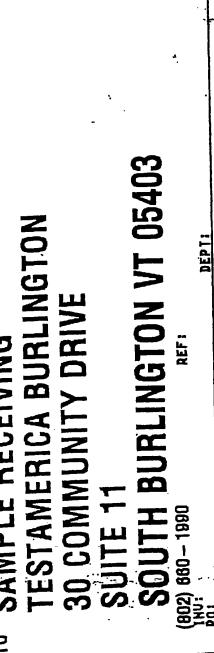
NA BTVA

Part # 156148V434 RIT2 02/17 ::

ORIGIN ID:BXCA (781) 466-6900  
PAUL HOBART  
TESTAMERICA  
240 BEAR HILL ROAD  
SUITE 104  
WALTHAM, MA 02451  
UNITED STATES US

SHIP DATE: 11APR17  
ACTWGT: 53.20 LB  
CAD: 590687/CAFE3011  
REF:  
PO:  
DEPT:

TO: SAMPLE RECEIVING  
TESTAMERICA BURLINGTON  
30 COMMUNITY DRIVE  
SUITE 11  
SOUTH BURLINGTON VT 05403  
(802) 860-1990  
REF:  
PO:  
DEPT:



FedEx  
Express



J161216101001uv

ORIGIN ID: BXCA (781) 466-6900  
PAUL HOBART  
TESTAMERICA  
240 BEAR HILL ROAD  
SUITE 104  
WALTHAM, MA 02451  
UNITED STATES US

SHIP DATE: 11APR17  
ACTWTG: 54.65 LB  
CAD: 590687/CAFE3011

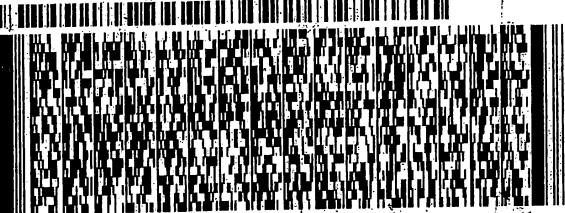
BILL RECIPIENT

D:BXCA (781) 466-6900  
HOBART  
TESTAMERICA  
240 BEAR HILL ROAD  
SUITE 104  
WALTHAM, MA 02451  
UNITED STATES US

SHIP DATE: 11APR17  
ACTWTG: 54.12 LB  
CAD: 590687/CAFE3011

BILL RECIPIENT

To SAMPLE RECEIVING  
TESTAMERICA BURLINGTON  
30 COMMUNITY DRIVE  
SUITE 11  
SOUTH BURLINGTON VT 05403  
(802) 660-1990  
RE#:  
DEPT:



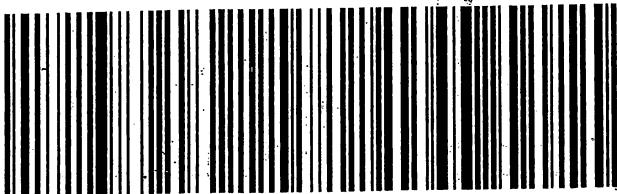
4 of 5  
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0263  
Mstr# 4258 8391 4909

WED - 12 APR 3:00P  
STANDARD OVERNIGHT

05403  
VT-US BTV

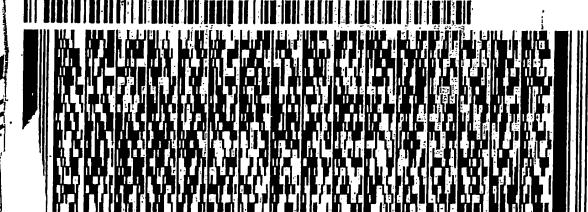
NA BTVA

Part # 15614BV-434 RIT2 02/17



To SAMPLE RECEIVING  
TESTAMERICA BURLINGTON  
30 COMMUNITY DRIVE  
SUITE 11  
SOUTH BURLINGTON VT 05403  
(802) 660-1990  
TR#:  
PO#  
REF:  
DEPT:

590687/CAFE3011



FedEx  
Express



590687/CAFE3011

6 of 5  
S# 4258 8391 4942  
tr# 4258 8391 4909  
0201

WED - 12 APR 3:00P  
STANDARD OVERNIGHT

05403  
VT-US BTV

IA BTVA

