Environmental Resources Management

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+1 617 267 6447 (fax)

http://www.erm.com

10 September 2013

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

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

Dear Mr. DeLuca:

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

Innovative Engineering Solutions, Inc. collected groundwater samples from wells on portions of the Site within the boundaries of your property on 17 July 2013 and 18 July 2013. Samples were submitted to TestAmerica Laboratories, Inc. of Westfield, Massachusetts and/or to Bioremediation & Treatability Center in Walpole, Massachusetts. Analytical results are attached to this letter. These analytical data will be provided to the Massachusetts Department of Environmental Protection in the next MCP submittal.

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

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

Sincerely,

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

Jason D. Flattery, P.E.
Project Manager

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

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

NOTICE OF ENVIRONMENTAL SAMPLING

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

BWSC 123

This Notice is Related to Release Tracking Number

3 | 13302

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

1. Street Address: 430 Boston Post Road

City/Town: Wayland Zip Code: 01778

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

1. Name: The Koffler Group

2. Street Address: 10 Memorial Boulevard, Suite 901

City/Town: Providence, RI Zip Code: 02903

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

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

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

1. Street Address: 430 Boston Post Road

City/Town: Wayland Zip Code: 01778

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

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

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

☐ residential ☑ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

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

Collection of groundwater samples from existing monitoring wells.

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

Contact Name: Louis J. Burkhardt

Street Address: 880 Technology Park Drive, T-3033

City/Town: Billerica Zip Code: 01821

Telephone: (978) 436-8238 Email: louis_j_burkhardt@raytheon.com

NOTICE OF ENVIRONMENTAL SAMPLING

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

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

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

THE PERSON(S) PROVIDING THIS NOTICE

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

PURPOSE OF THIS NOTICE

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

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

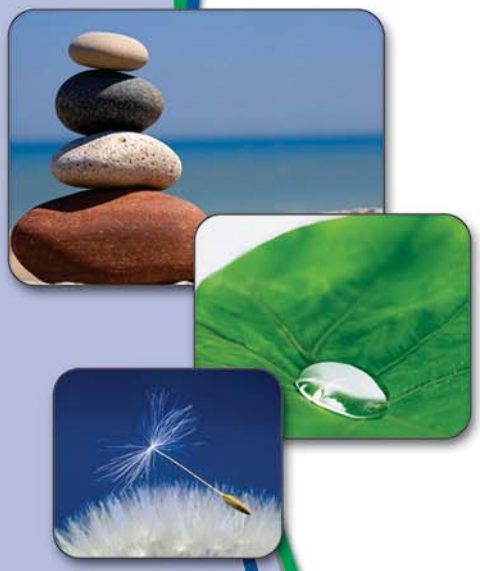
Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which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

FOR MORE INFORMATION

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-42273-1
Client Project/Site: IDS Wayland

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

Attn: Vicki Pariyar

Authorized for release by:
7/26/2013 12:26:03 PM

Becky Mason, Project Manager II
becky.mason@testamericainc.com

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

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

TestAmerica Job ID: 480-42273-1

Job ID: 480-42273-1

Laboratory: TestAmerica Buffalo

Narrative

Receipt
The samples were received on 7/19/2013 2:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.7º C, 3.9º C and 4.4º C.

GC/MS VOA
Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-265M-20130717-01 (480-42273-2), MW-267M-20130718-01 (480-42273-3), MW-268M-20130718-01 (480-42273-4), MW-552-20130717-01 (480-42273-5), MW-561-20130718-01 (480-42273-6), REW-12-20130718-01 (480-42273-13), REW-7-20130718-01 (480-42273-11), DUPX1-20130717-01 (480-42273-14), DUPX2-20130718-01 (480-42273-15), MW-261S-20130717-01 (480-42273-1), MW-552-20130717-01 (480-42273-5), MW-562-20130717-01 (480-42273-7), MW-563-20130718-01 (480-42273-8), REW-6-20130718-01 (480-42273-10), REW-8-20130718-01 (480-42273-12), REW-1-20130717-01 (480-42273-9). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) for 1,4-Dioxane associated with batchs 129639 and 129686 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference.

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batchs 12963, 129793, 129923 and 129686 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate 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.

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 129686 exceeded control limits for the following analytes: 1,4-Dioxane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%.

Method 8260C: The continuing calibration verification (CCV) for Carbon Disulfide, Chloromethane and Dichlorodifluoromethane associated with batch 129793 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference.

Method 8260C: The laboratory control sample duplicate (LCSD) for batch 129793 exceeded control limits for the following analytes: Dichlorodifluoromethane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%.

Method 8260C: The continuing calibration verification (CCV) for Dichlorodifluoromethane associated with batch 129923 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference.

Method 8260C: The initial calibration verification (ICV) for batch 129245 exceeded control limits for the following analytes: Chloromethane. MCP protocol allows for recoveries of difficult analytes to be within 40-160%. The data have been reported.

Method 8260C: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for batch 129793 recovered outside control limits for the following analytes: Acetone and 1,4-Dioxane. The data have been qualified and reported.

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-Butyl Ethyl Ether, tert-Amyl Methyl Ether, & Tetrahydrofuran.

No other analytical or quality issues were noted.

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-42273-1**

Project Location: **Wayland** RTN:

This form provides certifications for the following data set: list Laboratory Sample ID Number(s):

480-42273-1[1-16]

Matrices: [X] Groundwater/Surface Water [ ] Soil/Sediment [ ] Drinking Water [ ] Air [ ] Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A [X]	7470/7471 Hg CAM III B [ ]	Mass DEP VPH CAM IV A [ ]	8081 Pesticides CAM V B [ ]	7196 Hex Cr CAM VI B [ ]	Mass DEP APH CAM IX A [ ]
8270 SVOC CAM II B [ ]	6010 Metals CAM III C [ ]	Mass DEP EPH CAM IV B [ ]	8151 Herbicides CAM V C [ ]	8330 Explosives CAM VIII A [ ]	TO-15 VOC CAM IX B [ ]
6010 Metals CAM III A [ ]	6020 Metals CAM III D [ ]	8082 PCB CAM V A [ ]	9014 Total Cyanide/PAC CAM VI A [ ]	6860 Perchlorate CAM VIII B [ ]	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

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

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	[ ] Yes [X] No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350**

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	[ ] Yes [X] No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	[X] Yes [ ] No[1]

[1] All negative responses must be addressed in an attached laboratory narrative.

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.

Signature: Becky Mason Position: Project Manager

Printed Name: Becky Mason Date: 7/26/13 12:24

This form has been electronically signed and approved

Detection Summary

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

TestAmerica Job ID: 480-42273-1

Client Sample ID: MW-261S-20130717-01 — Lab Sample ID: 480-42273-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	15000	*	2500		ug/L	50		8260C	Total/NA

Client Sample ID: MW-265M-20130717-01 — Lab Sample ID: 480-42273-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7100		1300		ug/L	25		8260C	Total/NA
cis-1,2-Dichloroethene	110		25		ug/L	25		8260C	Total/NA
Vinyl chloride	52		25		ug/L	25		8260C	Total/NA

Client Sample ID: MW-267M-20130718-01 — Lab Sample ID: 480-42273-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	430		10		ug/L	10		8260C	Total/NA
m-Xylene & p-Xylene	20		20		ug/L	10		8260C	Total/NA
Toluene	34		10		ug/L	10		8260C	Total/NA
Vinyl chloride	26		10		ug/L	10		8260C	Total/NA

Client Sample ID: MW-268M-20130718-01 — Lab Sample ID: 480-42273-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1400		25		ug/L	25		8260C	Total/NA
Tetrachloroethene	35		25		ug/L	25		8260C	Total/NA
Trichloroethene	870		25		ug/L	25		8260C	Total/NA
Vinyl chloride	73		25		ug/L	25		8260C	Total/NA

Client Sample ID: MW-552-20130717-01 — Lab Sample ID: 480-42273-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	88	*	80		ug/L	8		8260C	Total/NA
cis-1,2-Dichloroethene	38		8.0		ug/L	8		8260C	Total/NA
Vinyl chloride	190		8.0		ug/L	8		8260C	Total/NA
Acetone - DL	14000	*	2500		ug/L	50		8260C	Total/NA

Client Sample ID: MW-561-20130718-01 — Lab Sample ID: 480-42273-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	550		250		ug/L	5		8260C	Total/NA
cis-1,2-Dichloroethene	53		5.0		ug/L	5		8260C	Total/NA
Trichloroethene	16		5.0		ug/L	5		8260C	Total/NA
Vinyl chloride	240		5.0		ug/L	5		8260C	Total/NA

Client Sample ID: MW-562-20130717-01 — Lab Sample ID: 480-42273-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	24	*	20		ug/L	2		8260C	Total/NA
Acetone	470	*	100		ug/L	2		8260C	Total/NA

Client Sample ID: MW-563-20130718-01 — Lab Sample ID: 480-42273-8

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-563-20130718-01 (Continued) — Lab Sample ID: 480-42273-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	82	*	40		ug/L	4		8260C	Total/NA
cis-1,2-Dichloroethene	230		4.0		ug/L	4		8260C	Total/NA
m-Xylene & p-Xylene	10		8.0		ug/L	4		8260C	Total/NA
Toluene	19		4.0		ug/L	4		8260C	Total/NA
Vinyl chloride	160		4.0		ug/L	4		8260C	Total/NA

Client Sample ID: REW-1-20130717-01 — Lab Sample ID: 480-42273-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6100		1000		ug/L	20		8260C	Total/NA

Client Sample ID: REW-6-20130718-01 — Lab Sample ID: 480-42273-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	320		5.0		ug/L	5		8260C	Total/NA
Tetrachloroethene	14		5.0		ug/L	5		8260C	Total/NA
Trichloroethene	250		5.0		ug/L	5		8260C	Total/NA
Vinyl chloride	17		5.0		ug/L	5		8260C	Total/NA

Client Sample ID: REW-7-20130718-01 — Lab Sample ID: 480-42273-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	680		10		ug/L	10		8260C	Total/NA
Tetrachloroethene	10		10		ug/L	10		8260C	Total/NA
Trichloroethene	240		10		ug/L	10		8260C	Total/NA
Vinyl chloride	170		10		ug/L	10		8260C	Total/NA

Client Sample ID: REW-8-20130718-01 — Lab Sample ID: 480-42273-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	57	*	50		ug/L	5		8260C	Total/NA
cis-1,2-Dichloroethene	310		5.0		ug/L	5		8260C	Total/NA
Trichloroethene	79		5.0		ug/L	5		8260C	Total/NA
Vinyl chloride	93		5.0		ug/L	5		8260C	Total/NA

Client Sample ID: REW-12-20130718-01 — Lab Sample ID: 480-42273-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	310		4.0		ug/L	4		8260C	Total/NA
Tetrachloroethene	8.7		4.0		ug/L	4		8260C	Total/NA
Trichloroethene	140		4.0		ug/L	4		8260C	Total/NA
Vinyl chloride	45		4.0		ug/L	4		8260C	Total/NA

Client Sample ID: DUPX1-20130717-01 — Lab Sample ID: 480-42273-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	31	*	20		ug/L	2		8260C	Total/NA
Acetone	530	*	100		ug/L	2		8260C	Total/NA

Client Sample ID: DUPX2-20130718-01 — Lab Sample ID: 480-42273-15

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUPX2-20130718-01 (Continued) — Lab Sample ID: 480-42273-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	79	*	40		ug/L	4		8260C	Total/NA
cis-1,2-Dichloroethene	230		4.0		ug/L	4		8260C	Total/NA
m-Xylene & p-Xylene	10		8.0		ug/L	4		8260C	Total/NA
Toluene	18		4.0		ug/L	4		8260C	Total/NA
Vinyl chloride	150		4.0		ug/L	4		8260C	Total/NA

Client Sample ID: Trip Blanks — Lab Sample ID: 480-42273-16

No Detections.

This Detection Summary does not include radiochemical test results.

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

TestAmerica Job ID: 480-42273-1

Client Sample ID: MW-261S-20130717-01
Date Collected: 07/17/13 07:35
Date Received: 07/19/13 02:30

Lab Sample ID: 480-42273-1
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		50		ug/L			07/20/13 01:06	50
1,1,1-Trichloroethane	ND		50		ug/L			07/20/13 01:06	50
1,1,2,2-Tetrachloroethane	ND		25		ug/L			07/20/13 01:06	50
1,1,2-Trichloroethane	ND		50		ug/L			07/20/13 01:06	50
1,1-Dichloroethane	ND		50		ug/L			07/20/13 01:06	50
1,1-Dichloroethene	ND		50		ug/L			07/20/13 01:06	50
1,1-Dichloropropene	ND		50		ug/L			07/20/13 01:06	50
1,2,3-Trichlorobenzene	ND		50		ug/L			07/20/13 01:06	50
1,2,3-Trichloropropane	ND		50		ug/L			07/20/13 01:06	50
1,2,4-Trichlorobenzene	ND		50		ug/L			07/20/13 01:06	50
1,2,4-Trimethylbenzene	ND		50		ug/L			07/20/13 01:06	50
1,2-Dibromo-3-Chloropropane	ND		250		ug/L			07/20/13 01:06	50
1,2-Dichlorobenzene	ND		50		ug/L			07/20/13 01:06	50
1,2-Dichloroethane	ND		50		ug/L			07/20/13 01:06	50
1,2-Dichloropropane	ND		50		ug/L			07/20/13 01:06	50
1,3,5-Trimethylbenzene	ND		50		ug/L			07/20/13 01:06	50
1,3-Dichlorobenzene	ND		50		ug/L			07/20/13 01:06	50
1,3-Dichloropropane	ND		50		ug/L			07/20/13 01:06	50
1,4-Dichlorobenzene	ND		50		ug/L			07/20/13 01:06	50
1,4-Dioxane	ND	*	2500		ug/L			07/20/13 01:06	50
2,2-Dichloropropane	ND		50		ug/L			07/20/13 01:06	50
2-Butanone (MEK)	ND	*	500		ug/L			07/20/13 01:06	50
2-Chlorotoluene	ND		50		ug/L			07/20/13 01:06	50
2-Hexanone	ND		500		ug/L			07/20/13 01:06	50
4-Chlorotoluene	ND		50		ug/L			07/20/13 01:06	50
4-Isopropyltoluene	ND		50		ug/L			07/20/13 01:06	50
4-Methyl-2-pentanone (MIBK)	ND		500		ug/L			07/20/13 01:06	50
Acetone	**15000**	*	2500		ug/L			07/20/13 01:06	50
Benzene	ND		50		ug/L			07/20/13 01:06	50
Bromobenzene	ND		50		ug/L			07/20/13 01:06	50
Bromoform	ND		50		ug/L			07/20/13 01:06	50
Bromomethane	ND		100		ug/L			07/20/13 01:06	50
Carbon disulfide	ND		500		ug/L			07/20/13 01:06	50
Carbon tetrachloride	ND		50		ug/L			07/20/13 01:06	50
Chlorobenzene	ND		50		ug/L			07/20/13 01:06	50
Chlorobromomethane	ND		50		ug/L			07/20/13 01:06	50
Chlorodibromomethane	ND		25		ug/L			07/20/13 01:06	50
Chloroethane	ND		100		ug/L			07/20/13 01:06	50
Chloroform	ND		50		ug/L			07/20/13 01:06	50
Chloromethane	ND		100		ug/L			07/20/13 01:06	50
cis-1,2-Dichloroethene	ND		50		ug/L			07/20/13 01:06	50
cis-1,3-Dichloropropene	ND		20		ug/L			07/20/13 01:06	50
Dichlorobromomethane	ND		25		ug/L			07/20/13 01:06	50
Dichlorodifluoromethane	ND	*	50		ug/L			07/20/13 01:06	50
Ethyl ether	ND		50		ug/L			07/20/13 01:06	50
Ethylbenzene	ND		50		ug/L			07/20/13 01:06	50
Ethylene Dibromide	ND		50		ug/L			07/20/13 01:06	50
Hexachlorobutadiene	ND		20		ug/L			07/20/13 01:06	50
Isopropyl ether	ND		500		ug/L			07/20/13 01:06	50

Client Sample ID: MW-261S-20130717-01

Lab Sample ID: 480-42273-1

Date Collected: 07/17/13 07:35

Matrix: Water

Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		50		ug/L			07/20/13 01:06	50
Methyl tert-butyl ether	ND		50		ug/L			07/20/13 01:06	50
Methylene Chloride	ND		50		ug/L			07/20/13 01:06	50
m-Xylene & p-Xylene	ND		100		ug/L			07/20/13 01:06	50
Naphthalene	ND		250		ug/L			07/20/13 01:06	50
n-Butylbenzene	ND		50		ug/L			07/20/13 01:06	50
N-Propylbenzene	ND		50		ug/L			07/20/13 01:06	50
o-Xylene	ND		50		ug/L			07/20/13 01:06	50
sec-Butylbenzene	ND		50		ug/L			07/20/13 01:06	50
Styrene	ND		50		ug/L			07/20/13 01:06	50
Tert-amyl methyl ether	ND		250		ug/L			07/20/13 01:06	50
Tert-butyl ethyl ether	ND		250		ug/L			07/20/13 01:06	50
tert-Butylbenzene	ND		50		ug/L			07/20/13 01:06	50
Tetrachloroethene	ND		50		ug/L			07/20/13 01:06	50
Tetrahydrofuran	ND		500		ug/L			07/20/13 01:06	50
Toluene	ND		50		ug/L			07/20/13 01:06	50
trans-1,2-Dichloroethene	ND		50		ug/L			07/20/13 01:06	50
trans-1,3-Dichloropropene	ND		20		ug/L			07/20/13 01:06	50
Trichloroethene	ND		50		ug/L			07/20/13 01:06	50
Trichlorofluoromethane	ND		50		ug/L			07/20/13 01:06	50
Vinyl chloride	ND		50		ug/L			07/20/13 01:06	50
Dibromomethane	ND		50		ug/L			07/20/13 01:06	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*07/20/13 01:06*	*50*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*07/20/13 01:06*	*50*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*07/20/13 01:06*	*50*

Client Sample ID: MW-265M-20130717-01

Lab Sample ID: 480-42273-2

Date Collected: 07/17/13 13:20

Matrix: Water

Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		25		ug/L			07/19/13 17:54	25
1,1,1-Trichloroethane	ND		25		ug/L			07/19/13 17:54	25
1,1,2,2-Tetrachloroethane	ND		13		ug/L			07/19/13 17:54	25
1,1,2-Trichloroethane	ND		25		ug/L			07/19/13 17:54	25
1,1-Dichloroethane	ND		25		ug/L			07/19/13 17:54	25
1,1-Dichloroethene	ND		25		ug/L			07/19/13 17:54	25
1,1-Dichloropropene	ND		25		ug/L			07/19/13 17:54	25
1,2,3-Trichlorobenzene	ND		25		ug/L			07/19/13 17:54	25
1,2,3-Trichloropropane	ND		25		ug/L			07/19/13 17:54	25
1,2,4-Trichlorobenzene	ND		25		ug/L			07/19/13 17:54	25
1,2,4-Trimethylbenzene	ND		25		ug/L			07/19/13 17:54	25
1,2-Dibromo-3-Chloropropane	ND		130		ug/L			07/19/13 17:54	25
1,2-Dichlorobenzene	ND		25		ug/L			07/19/13 17:54	25
1,2-Dichloroethane	ND		25		ug/L			07/19/13 17:54	25
1,2-Dichloropropane	ND		25		ug/L			07/19/13 17:54	25
1,3,5-Trimethylbenzene	ND		25		ug/L			07/19/13 17:54	25

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

TestAmerica Job ID: 480-42273-1

Client Sample ID: MW-265M-20130717-01
Date Collected: 07/17/13 13:20
Date Received: 07/19/13 02:30

Lab Sample ID: 480-42273-2
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		25		ug/L			07/19/13 17:54	25
1,3-Dichloropropane	ND		25		ug/L			07/19/13 17:54	25
1,4-Dichlorobenzene	ND		25		ug/L			07/19/13 17:54	25
1,4-Dioxane	ND		1300		ug/L			07/19/13 17:54	25
2,2-Dichloropropane	ND		25		ug/L			07/19/13 17:54	25
2-Butanone (MEK)	ND	*	250		ug/L			07/19/13 17:54	25
2-Chlorotoluene	ND		25		ug/L			07/19/13 17:54	25
2-Hexanone	ND		250		ug/L			07/19/13 17:54	25
4-Chlorotoluene	ND		25		ug/L			07/19/13 17:54	25
4-Isopropyltoluene	ND		25		ug/L			07/19/13 17:54	25
4-Methyl-2-pentanone (MIBK)	ND		250		ug/L			07/19/13 17:54	25
Acetone	**7100**		1300		ug/L			07/19/13 17:54	25
Benzene	ND		25		ug/L			07/19/13 17:54	25
Bromobenzene	ND		25		ug/L			07/19/13 17:54	25
Bromoform	ND		25		ug/L			07/19/13 17:54	25
Bromomethane	ND		50		ug/L			07/19/13 17:54	25
Carbon disulfide	ND		250		ug/L			07/19/13 17:54	25
Carbon tetrachloride	ND		25		ug/L			07/19/13 17:54	25
Chlorobenzene	ND		25		ug/L			07/19/13 17:54	25
Chlorobromomethane	ND		25		ug/L			07/19/13 17:54	25
Chlorodibromomethane	ND		13		ug/L			07/19/13 17:54	25
Chloroethane	ND		50		ug/L			07/19/13 17:54	25
Chloroform	ND		25		ug/L			07/19/13 17:54	25
Chloromethane	ND		50		ug/L			07/19/13 17:54	25
cis-1,2-Dichloroethene	**110**		25		ug/L			07/19/13 17:54	25
cis-1,3-Dichloropropene	ND		10		ug/L			07/19/13 17:54	25
Dichlorobromomethane	ND		13		ug/L			07/19/13 17:54	25
Dichlorodifluoromethane	ND		25		ug/L			07/19/13 17:54	25
Ethyl ether	ND		25		ug/L			07/19/13 17:54	25
Ethylbenzene	ND		25		ug/L			07/19/13 17:54	25
Ethylene Dibromide	ND		25		ug/L			07/19/13 17:54	25
Hexachlorobutadiene	ND		10		ug/L			07/19/13 17:54	25
Isopropyl ether	ND		250		ug/L			07/19/13 17:54	25
Isopropylbenzene	ND		25		ug/L			07/19/13 17:54	25
Methyl tert-butyl ether	ND		25		ug/L			07/19/13 17:54	25
Methylene Chloride	ND		25		ug/L			07/19/13 17:54	25
m-Xylene & p-Xylene	ND		50		ug/L			07/19/13 17:54	25
Naphthalene	ND		130		ug/L			07/19/13 17:54	25
n-Butylbenzene	ND		25		ug/L			07/19/13 17:54	25
N-Propylbenzene	ND		25		ug/L			07/19/13 17:54	25
o-Xylene	ND		25		ug/L			07/19/13 17:54	25
sec-Butylbenzene	ND		25		ug/L			07/19/13 17:54	25
Styrene	ND		25		ug/L			07/19/13 17:54	25
Tert-amyl methyl ether	ND		130		ug/L			07/19/13 17:54	25
Tert-butyl ethyl ether	ND		130		ug/L			07/19/13 17:54	25
tert-Butylbenzene	ND		25		ug/L			07/19/13 17:54	25
Tetrachloroethene	ND		25		ug/L			07/19/13 17:54	25
Tetrahydrofuran	ND		250		ug/L			07/19/13 17:54	25
Toluene	ND		25		ug/L			07/19/13 17:54	25

Client Sample ID: MW-265M-20130717-01 — **Lab Sample ID: 480-42273-2**
Date Collected: 07/17/13 13:20 — **Matrix: Water**
Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		25		ug/L			07/19/13 17:54	25
trans-1,3-Dichloropropene	ND		10		ug/L			07/19/13 17:54	25
Trichloroethene	ND		25		ug/L			07/19/13 17:54	25
Trichlorofluoromethane	ND		25		ug/L			07/19/13 17:54	25
Vinyl chloride	52		25		ug/L			07/19/13 17:54	25
Dibromomethane	ND		25		ug/L			07/19/13 17:54	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*07/19/13 17:54*	*25*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*07/19/13 17:54*	*25*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*07/19/13 17:54*	*25*

Client Sample ID: MW-267M-20130718-01 — **Lab Sample ID: 480-42273-3**
Date Collected: 07/18/13 11:25 — **Matrix: Water**
Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10		ug/L			07/19/13 18:18	10
1,1,1-Trichloroethane	ND		10		ug/L			07/19/13 18:18	10
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			07/19/13 18:18	10
1,1,2-Trichloroethane	ND		10		ug/L			07/19/13 18:18	10
1,1-Dichloroethane	ND		10		ug/L			07/19/13 18:18	10
1,1-Dichloroethene	ND		10		ug/L			07/19/13 18:18	10
1,1-Dichloropropene	ND		10		ug/L			07/19/13 18:18	10
1,2,3-Trichlorobenzene	ND		10		ug/L			07/19/13 18:18	10
1,2,3-Trichloropropane	ND		10		ug/L			07/19/13 18:18	10
1,2,4-Trichlorobenzene	ND		10		ug/L			07/19/13 18:18	10
1,2,4-Trimethylbenzene	ND		10		ug/L			07/19/13 18:18	10
1,2-Dibromo-3-Chloropropane	ND		50		ug/L			07/19/13 18:18	10
1,2-Dichlorobenzene	ND		10		ug/L			07/19/13 18:18	10
1,2-Dichloroethane	ND		10		ug/L			07/19/13 18:18	10
1,2-Dichloropropane	ND		10		ug/L			07/19/13 18:18	10
1,3,5-Trimethylbenzene	ND		10		ug/L			07/19/13 18:18	10
1,3-Dichlorobenzene	ND		10		ug/L			07/19/13 18:18	10
1,3-Dichloropropane	ND		10		ug/L			07/19/13 18:18	10
1,4-Dichlorobenzene	ND		10		ug/L			07/19/13 18:18	10
1,4-Dioxane	ND		500		ug/L			07/19/13 18:18	10
2,2-Dichloropropane	ND		10		ug/L			07/19/13 18:18	10
2-Butanone (MEK)	ND	*	100		ug/L			07/19/13 18:18	10
2-Chlorotoluene	ND		10		ug/L			07/19/13 18:18	10
2-Hexanone	ND		100		ug/L			07/19/13 18:18	10
4-Chlorotoluene	ND		10		ug/L			07/19/13 18:18	10
4-Isopropyltoluene	ND		10		ug/L			07/19/13 18:18	10
4-Methyl-2-pentanone (MIBK)	ND		100		ug/L			07/19/13 18:18	10
Acetone	ND		500		ug/L			07/19/13 18:18	10
Benzene	ND		10		ug/L			07/19/13 18:18	10
Bromobenzene	ND		10		ug/L			07/19/13 18:18	10
Bromoform	ND		10		ug/L			07/19/13 18:18	10
Bromomethane	ND		20		ug/L			07/19/13 18:18	10

Client Sample ID: MW-267M-20130718-01
Date Collected: 07/18/13 11:25
Date Received: 07/19/13 02:30

Lab Sample ID: 480-42273-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		100		ug/L			07/19/13 18:18	10
Carbon tetrachloride	ND		10		ug/L			07/19/13 18:18	10
Chlorobenzene	ND		10		ug/L			07/19/13 18:18	10
Chlorobromomethane	ND		10		ug/L			07/19/13 18:18	10
Chlorodibromomethane	ND		5.0		ug/L			07/19/13 18:18	10
Chloroethane	ND		20		ug/L			07/19/13 18:18	10
Chloroform	ND		10		ug/L			07/19/13 18:18	10
Chloromethane	ND		20		ug/L			07/19/13 18:18	10
cis-1,2-Dichloroethene	**430**		10		ug/L			07/19/13 18:18	10
cis-1,3-Dichloropropene	ND		4.0		ug/L			07/19/13 18:18	10
Dichlorobromomethane	ND		5.0		ug/L			07/19/13 18:18	10
Dichlorodifluoromethane	ND		10		ug/L			07/19/13 18:18	10
Ethyl ether	ND		10		ug/L			07/19/13 18:18	10
Ethylbenzene	ND		10		ug/L			07/19/13 18:18	10
Ethylene Dibromide	ND		10		ug/L			07/19/13 18:18	10
Hexachlorobutadiene	ND		4.0		ug/L			07/19/13 18:18	10
Isopropyl ether	ND		100		ug/L			07/19/13 18:18	10
Isopropylbenzene	ND		10		ug/L			07/19/13 18:18	10
Methyl tert-butyl ether	ND		10		ug/L			07/19/13 18:18	10
Methylene Chloride	ND		10		ug/L			07/19/13 18:18	10
m-Xylene & p-Xylene	**20**		20		ug/L			07/19/13 18:18	10
Naphthalene	ND		50		ug/L			07/19/13 18:18	10
n-Butylbenzene	ND		10		ug/L			07/19/13 18:18	10
N-Propylbenzene	ND		10		ug/L			07/19/13 18:18	10
o-Xylene	ND		10		ug/L			07/19/13 18:18	10
sec-Butylbenzene	ND		10		ug/L			07/19/13 18:18	10
Styrene	ND		10		ug/L			07/19/13 18:18	10
Tert-amyl methyl ether	ND		50		ug/L			07/19/13 18:18	10
Tert-butyl ethyl ether	ND		50		ug/L			07/19/13 18:18	10
tert-Butylbenzene	ND		10		ug/L			07/19/13 18:18	10
Tetrachloroethene	ND		10		ug/L			07/19/13 18:18	10
Tetrahydrofuran	ND		100		ug/L			07/19/13 18:18	10
Toluene	**34**		10		ug/L			07/19/13 18:18	10
trans-1,2-Dichloroethene	ND		10		ug/L			07/19/13 18:18	10
trans-1,3-Dichloropropene	ND		4.0		ug/L			07/19/13 18:18	10
Trichloroethene	ND		10		ug/L			07/19/13 18:18	10
Trichlorofluoromethane	ND		10		ug/L			07/19/13 18:18	10
Vinyl chloride	**26**		10		ug/L			07/19/13 18:18	10
Dibromomethane	ND		10		ug/L			07/19/13 18:18	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*07/19/13 18:18*	*10*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*07/19/13 18:18*	*10*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*07/19/13 18:18*	*10*

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

TestAmerica Job ID: 480-42273-1

Client Sample ID: MW-268M-20130718-01
Date Collected: 07/18/13 09:50
Date Received: 07/19/13 02:30

Lab Sample ID: 480-42273-4
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		25		ug/L			07/19/13 18:41	25
1,1,1-Trichloroethane	ND		25		ug/L			07/19/13 18:41	25
1,1,2,2-Tetrachloroethane	ND		13		ug/L			07/19/13 18:41	25
1,1,2-Trichloroethane	ND		25		ug/L			07/19/13 18:41	25
1,1-Dichloroethane	ND		25		ug/L			07/19/13 18:41	25
1,1-Dichloroethene	ND		25		ug/L			07/19/13 18:41	25
1,1-Dichloropropene	ND		25		ug/L			07/19/13 18:41	25
1,2,3-Trichlorobenzene	ND		25		ug/L			07/19/13 18:41	25
1,2,3-Trichloropropane	ND		25		ug/L			07/19/13 18:41	25
1,2,4-Trichlorobenzene	ND		25		ug/L			07/19/13 18:41	25
1,2,4-Trimethylbenzene	ND		25		ug/L			07/19/13 18:41	25
1,2-Dibromo-3-Chloropropane	ND		130		ug/L			07/19/13 18:41	25
1,2-Dichlorobenzene	ND		25		ug/L			07/19/13 18:41	25
1,2-Dichloroethane	ND		25		ug/L			07/19/13 18:41	25
1,2-Dichloropropane	ND		25		ug/L			07/19/13 18:41	25
1,3,5-Trimethylbenzene	ND		25		ug/L			07/19/13 18:41	25
1,3-Dichlorobenzene	ND		25		ug/L			07/19/13 18:41	25
1,3-Dichloropropane	ND		25		ug/L			07/19/13 18:41	25
1,4-Dichlorobenzene	ND		25		ug/L			07/19/13 18:41	25
1,4-Dioxane	ND		1300		ug/L			07/19/13 18:41	25
2,2-Dichloropropane	ND		25		ug/L			07/19/13 18:41	25
2-Butanone (MEK)	ND	*	250		ug/L			07/19/13 18:41	25
2-Chlorotoluene	ND		25		ug/L			07/19/13 18:41	25
2-Hexanone	ND		250		ug/L			07/19/13 18:41	25
4-Chlorotoluene	ND		25		ug/L			07/19/13 18:41	25
4-Isopropyltoluene	ND		25		ug/L			07/19/13 18:41	25
4-Methyl-2-pentanone (MIBK)	ND		250		ug/L			07/19/13 18:41	25
Acetone	ND		1300		ug/L			07/19/13 18:41	25
Benzene	ND		25		ug/L			07/19/13 18:41	25
Bromobenzene	ND		25		ug/L			07/19/13 18:41	25
Bromoform	ND		25		ug/L			07/19/13 18:41	25
Bromomethane	ND		50		ug/L			07/19/13 18:41	25
Carbon disulfide	ND		250		ug/L			07/19/13 18:41	25
Carbon tetrachloride	ND		25		ug/L			07/19/13 18:41	25
Chlorobenzene	ND		25		ug/L			07/19/13 18:41	25
Chlorobromomethane	ND		25		ug/L			07/19/13 18:41	25
Chlorodibromomethane	ND		13		ug/L			07/19/13 18:41	25
Chloroethane	ND		50		ug/L			07/19/13 18:41	25
Chloroform	ND		25		ug/L			07/19/13 18:41	25
Chloromethane	ND		50		ug/L			07/19/13 18:41	25
cis-1,2-Dichloroethene	**1400**		25		ug/L			07/19/13 18:41	25
cis-1,3-Dichloropropene	ND		10		ug/L			07/19/13 18:41	25
Dichlorobromomethane	ND		13		ug/L			07/19/13 18:41	25
Dichlorodifluoromethane	ND		25		ug/L			07/19/13 18:41	25
Ethyl ether	ND		25		ug/L			07/19/13 18:41	25
Ethylbenzene	ND		25		ug/L			07/19/13 18:41	25
Ethylene Dibromide	ND		25		ug/L			07/19/13 18:41	25
Hexachlorobutadiene	ND		10		ug/L			07/19/13 18:41	25
Isopropyl ether	ND		250		ug/L			07/19/13 18:41	25

Client Sample ID: MW-268M-20130718-01

Lab Sample ID: 480-42273-4

Date Collected: 07/18/13 09:50

Matrix: Water

Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		25		ug/L			07/19/13 18:41	25
Methyl tert-butyl ether	ND		25		ug/L			07/19/13 18:41	25
Methylene Chloride	ND		25		ug/L			07/19/13 18:41	25
m-Xylene & p-Xylene	ND		50		ug/L			07/19/13 18:41	25
Naphthalene	ND		130		ug/L			07/19/13 18:41	25
n-Butylbenzene	ND		25		ug/L			07/19/13 18:41	25
N-Propylbenzene	ND		25		ug/L			07/19/13 18:41	25
o-Xylene	ND		25		ug/L			07/19/13 18:41	25
sec-Butylbenzene	ND		25		ug/L			07/19/13 18:41	25
Styrene	ND		25		ug/L			07/19/13 18:41	25
Tert-amyl methyl ether	ND		130		ug/L			07/19/13 18:41	25
Tert-butyl ethyl ether	ND		130		ug/L			07/19/13 18:41	25
tert-Butylbenzene	ND		25		ug/L			07/19/13 18:41	25
Tetrachloroethene	**35**		25		ug/L			07/19/13 18:41	25
Tetrahydrofuran	ND		250		ug/L			07/19/13 18:41	25
Toluene	ND		25		ug/L			07/19/13 18:41	25
trans-1,2-Dichloroethene	ND		25		ug/L			07/19/13 18:41	25
trans-1,3-Dichloropropene	ND		10		ug/L			07/19/13 18:41	25
Trichloroethene	**870**		25		ug/L			07/19/13 18:41	25
Trichlorofluoromethane	ND		25		ug/L			07/19/13 18:41	25
Vinyl chloride	**73**		25		ug/L			07/19/13 18:41	25
Dibromomethane	ND		25		ug/L			07/19/13 18:41	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*07/19/13 18:41*	*25*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*07/19/13 18:41*	*25*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*07/19/13 18:41*	*25*

Client Sample ID: MW-552-20130717-01

Lab Sample ID: 480-42273-5

Date Collected: 07/17/13 08:20

Matrix: Water

Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		8.0		ug/L			07/19/13 19:05	8
1,1,1-Trichloroethane	ND		8.0		ug/L			07/19/13 19:05	8
1,1,2,2-Tetrachloroethane	ND		4.0		ug/L			07/19/13 19:05	8
1,1,2-Trichloroethane	ND		8.0		ug/L			07/19/13 19:05	8
1,1-Dichloroethane	ND		8.0		ug/L			07/19/13 19:05	8
1,1-Dichloroethene	ND		8.0		ug/L			07/19/13 19:05	8
1,1-Dichloropropene	ND		8.0		ug/L			07/19/13 19:05	8
1,2,3-Trichlorobenzene	ND		8.0		ug/L			07/19/13 19:05	8
1,2,3-Trichloropropane	ND		8.0		ug/L			07/19/13 19:05	8
1,2,4-Trichlorobenzene	ND		8.0		ug/L			07/19/13 19:05	8
1,2,4-Trimethylbenzene	ND		8.0		ug/L			07/19/13 19:05	8
1,2-Dibromo-3-Chloropropane	ND		40		ug/L			07/19/13 19:05	8
1,2-Dichlorobenzene	ND		8.0		ug/L			07/19/13 19:05	8
1,2-Dichloroethane	ND		8.0		ug/L			07/19/13 19:05	8
1,2-Dichloropropane	ND		8.0		ug/L			07/19/13 19:05	8
1,3,5-Trimethylbenzene	ND		8.0		ug/L			07/19/13 19:05	8

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

TestAmerica Job ID: 480-42273-1

Client Sample ID: MW-552-20130717-01
Date Collected: 07/17/13 08:20
Date Received: 07/19/13 02:30

Lab Sample ID: 480-42273-5
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		8.0		ug/L			07/19/13 19:05	8
1,3-Dichloropropane	ND		8.0		ug/L			07/19/13 19:05	8
1,4-Dichlorobenzene	ND		8.0		ug/L			07/19/13 19:05	8
1,4-Dioxane	ND		400		ug/L			07/19/13 19:05	8
2,2-Dichloropropane	ND		8.0		ug/L			07/19/13 19:05	8
2-Butanone (MEK)	**88**	*	80		ug/L			07/19/13 19:05	8
2-Chlorotoluene	ND		8.0		ug/L			07/19/13 19:05	8
2-Hexanone	ND		80		ug/L			07/19/13 19:05	8
4-Chlorotoluene	ND		8.0		ug/L			07/19/13 19:05	8
4-Isopropyltoluene	ND		8.0		ug/L			07/19/13 19:05	8
4-Methyl-2-pentanone (MIBK)	ND		80		ug/L			07/19/13 19:05	8
Benzene	ND		8.0		ug/L			07/19/13 19:05	8
Bromobenzene	ND		8.0		ug/L			07/19/13 19:05	8
Bromoform	ND		8.0		ug/L			07/19/13 19:05	8
Bromomethane	ND		16		ug/L			07/19/13 19:05	8
Carbon disulfide	ND		80		ug/L			07/19/13 19:05	8
Carbon tetrachloride	ND		8.0		ug/L			07/19/13 19:05	8
Chlorobenzene	ND		8.0		ug/L			07/19/13 19:05	8
Chlorobromomethane	ND		8.0		ug/L			07/19/13 19:05	8
Chlorodibromomethane	ND		4.0		ug/L			07/19/13 19:05	8
Chloroethane	ND		16		ug/L			07/19/13 19:05	8
Chloroform	ND		8.0		ug/L			07/19/13 19:05	8
Chloromethane	ND		16		ug/L			07/19/13 19:05	8
cis-1,2-Dichloroethene	**38**		8.0		ug/L			07/19/13 19:05	8
cis-1,3-Dichloropropene	ND		3.2		ug/L			07/19/13 19:05	8
Dichlorobromomethane	ND		4.0		ug/L			07/19/13 19:05	8
Dichlorodifluoromethane	ND		8.0		ug/L			07/19/13 19:05	8
Ethyl ether	ND		8.0		ug/L			07/19/13 19:05	8
Ethylbenzene	ND		8.0		ug/L			07/19/13 19:05	8
Ethylene Dibromide	ND		8.0		ug/L			07/19/13 19:05	8
Hexachlorobutadiene	ND		3.2		ug/L			07/19/13 19:05	8
Isopropyl ether	ND		80		ug/L			07/19/13 19:05	8
Isopropylbenzene	ND		8.0		ug/L			07/19/13 19:05	8
Methyl tert-butyl ether	ND		8.0		ug/L			07/19/13 19:05	8
Methylene Chloride	ND		8.0		ug/L			07/19/13 19:05	8
m-Xylene & p-Xylene	ND		16		ug/L			07/19/13 19:05	8
Naphthalene	ND		40		ug/L			07/19/13 19:05	8
n-Butylbenzene	ND		8.0		ug/L			07/19/13 19:05	8
N-Propylbenzene	ND		8.0		ug/L			07/19/13 19:05	8
o-Xylene	ND		8.0		ug/L			07/19/13 19:05	8
sec-Butylbenzene	ND		8.0		ug/L			07/19/13 19:05	8
Styrene	ND		8.0		ug/L			07/19/13 19:05	8
Tert-amyl methyl ether	ND		40		ug/L			07/19/13 19:05	8
Tert-butyl ethyl ether	ND		40		ug/L			07/19/13 19:05	8
tert-Butylbenzene	ND		8.0		ug/L			07/19/13 19:05	8
Tetrachloroethene	ND		8.0		ug/L			07/19/13 19:05	8
Tetrahydrofuran	ND		80		ug/L			07/19/13 19:05	8
Toluene	ND		8.0		ug/L			07/19/13 19:05	8
trans-1,2-Dichloroethene	ND		8.0		ug/L			07/19/13 19:05	8

Client Sample ID: MW-552-20130717-01

Lab Sample ID: 480-42273-5

Date Collected: 07/17/13 08:20

Matrix: Water

Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		3.2		ug/L			07/19/13 19:05	8
Trichloroethene	ND		8.0		ug/L			07/19/13 19:05	8
Trichlorofluoromethane	ND		8.0		ug/L			07/19/13 19:05	8
Vinyl chloride	**190**		8.0		ug/L			07/19/13 19:05	8
Dibromomethane	ND		8.0		ug/L			07/19/13 19:05	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*07/19/13 19:05*	*8*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*07/19/13 19:05*	*8*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*07/19/13 19:05*	*8*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**14000**	*	2500		ug/L			07/20/13 01:29	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/20/13 01:29*	*50*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*07/20/13 01:29*	*50*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*07/20/13 01:29*	*50*

Client Sample ID: MW-561-20130718-01

Lab Sample ID: 480-42273-6

Date Collected: 07/18/13 07:15

Matrix: Water

Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			07/19/13 19:28	5
1,1,1-Trichloroethane	ND		5.0		ug/L			07/19/13 19:28	5
1,1,2,2-Tetrachloroethane	ND		2.5		ug/L			07/19/13 19:28	5
1,1,2-Trichloroethane	ND		5.0		ug/L			07/19/13 19:28	5
1,1-Dichloroethane	ND		5.0		ug/L			07/19/13 19:28	5
1,1-Dichloroethene	ND		5.0		ug/L			07/19/13 19:28	5
1,1-Dichloropropene	ND		5.0		ug/L			07/19/13 19:28	5
1,2,3-Trichlorobenzene	ND		5.0		ug/L			07/19/13 19:28	5
1,2,3-Trichloropropane	ND		5.0		ug/L			07/19/13 19:28	5
1,2,4-Trichlorobenzene	ND		5.0		ug/L			07/19/13 19:28	5
1,2,4-Trimethylbenzene	ND		5.0		ug/L			07/19/13 19:28	5
1,2-Dibromo-3-Chloropropane	ND		25		ug/L			07/19/13 19:28	5
1,2-Dichlorobenzene	ND		5.0		ug/L			07/19/13 19:28	5
1,2-Dichloroethane	ND		5.0		ug/L			07/19/13 19:28	5
1,2-Dichloropropane	ND		5.0		ug/L			07/19/13 19:28	5
1,3,5-Trimethylbenzene	ND		5.0		ug/L			07/19/13 19:28	5
1,3-Dichlorobenzene	ND		5.0		ug/L			07/19/13 19:28	5
1,3-Dichloropropane	ND		5.0		ug/L			07/19/13 19:28	5
1,4-Dichlorobenzene	ND		5.0		ug/L			07/19/13 19:28	5
1,4-Dioxane	ND		250		ug/L			07/19/13 19:28	5
2,2-Dichloropropane	ND		5.0		ug/L			07/19/13 19:28	5
2-Butanone (MEK)	ND	*	50		ug/L			07/19/13 19:28	5
2-Chlorotoluene	ND		5.0		ug/L			07/19/13 19:28	5
2-Hexanone	ND		50		ug/L			07/19/13 19:28	5

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

TestAmerica Job ID: 480-42273-1

Client Sample ID: MW-561-20130718-01
Date Collected: 07/18/13 07:15
Date Received: 07/19/13 02:30

Lab Sample ID: 480-42273-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		5.0		ug/L			07/19/13 19:28	5
4-Isopropyltoluene	ND		5.0		ug/L			07/19/13 19:28	5
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			07/19/13 19:28	5
Acetone	**550**		250		ug/L			07/19/13 19:28	5
Benzene	ND		5.0		ug/L			07/19/13 19:28	5
Bromobenzene	ND		5.0		ug/L			07/19/13 19:28	5
Bromoform	ND		5.0		ug/L			07/19/13 19:28	5
Bromomethane	ND		10		ug/L			07/19/13 19:28	5
Carbon disulfide	ND		50		ug/L			07/19/13 19:28	5
Carbon tetrachloride	ND		5.0		ug/L			07/19/13 19:28	5
Chlorobenzene	ND		5.0		ug/L			07/19/13 19:28	5
Chlorobromomethane	ND		5.0		ug/L			07/19/13 19:28	5
Chlorodibromomethane	ND		2.5		ug/L			07/19/13 19:28	5
Chloroethane	ND		10		ug/L			07/19/13 19:28	5
Chloroform	ND		5.0		ug/L			07/19/13 19:28	5
Chloromethane	ND		10		ug/L			07/19/13 19:28	5
cis-1,2-Dichloroethene	**53**		5.0		ug/L			07/19/13 19:28	5
cis-1,3-Dichloropropene	ND		2.0		ug/L			07/19/13 19:28	5
Dichlorobromomethane	ND		2.5		ug/L			07/19/13 19:28	5
Dichlorodifluoromethane	ND		5.0		ug/L			07/19/13 19:28	5
Ethyl ether	ND		5.0		ug/L			07/19/13 19:28	5
Ethylbenzene	ND		5.0		ug/L			07/19/13 19:28	5
Ethylene Dibromide	ND		5.0		ug/L			07/19/13 19:28	5
Hexachlorobutadiene	ND		2.0		ug/L			07/19/13 19:28	5
Isopropyl ether	ND		50		ug/L			07/19/13 19:28	5
Isopropylbenzene	ND		5.0		ug/L			07/19/13 19:28	5
Methyl tert-butyl ether	ND		5.0		ug/L			07/19/13 19:28	5
Methylene Chloride	ND		5.0		ug/L			07/19/13 19:28	5
m-Xylene & p-Xylene	ND		10		ug/L			07/19/13 19:28	5
Naphthalene	ND		25		ug/L			07/19/13 19:28	5
n-Butylbenzene	ND		5.0		ug/L			07/19/13 19:28	5
N-Propylbenzene	ND		5.0		ug/L			07/19/13 19:28	5
o-Xylene	ND		5.0		ug/L			07/19/13 19:28	5
sec-Butylbenzene	ND		5.0		ug/L			07/19/13 19:28	5
Styrene	ND		5.0		ug/L			07/19/13 19:28	5
Tert-amyl methyl ether	ND		25		ug/L			07/19/13 19:28	5
Tert-butyl ethyl ether	ND		25		ug/L			07/19/13 19:28	5
tert-Butylbenzene	ND		5.0		ug/L			07/19/13 19:28	5
Tetrachloroethene	ND		5.0		ug/L			07/19/13 19:28	5
Tetrahydrofuran	ND		50		ug/L			07/19/13 19:28	5
Toluene	ND		5.0		ug/L			07/19/13 19:28	5
trans-1,2-Dichloroethene	ND		5.0		ug/L			07/19/13 19:28	5
trans-1,3-Dichloropropene	ND		2.0		ug/L			07/19/13 19:28	5
Trichloroethene	**16**		5.0		ug/L			07/19/13 19:28	5
Trichlorofluoromethane	ND		5.0		ug/L			07/19/13 19:28	5
Vinyl chloride	**240**		5.0		ug/L			07/19/13 19:28	5
Dibromomethane	ND		5.0		ug/L			07/19/13 19:28	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*07/19/13 19:28*	*5*

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

TestAmerica Job ID: 480-42273-1

Client Sample ID: MW-561-20130718-01

Lab Sample ID: 480-42273-6

Date Collected: 07/18/13 07:15

Matrix: Water

Date Received: 07/19/13 02:30

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*07/19/13 19:28*	*5*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*07/19/13 19:28*	*5*

Client Sample ID: MW-562-20130717-01

Lab Sample ID: 480-42273-7

Date Collected: 07/17/13 09:15

Matrix: Water

Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			07/20/13 01:53	2
1,1,1-Trichloroethane	ND		2.0		ug/L			07/20/13 01:53	2
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			07/20/13 01:53	2
1,1,2-Trichloroethane	ND		2.0		ug/L			07/20/13 01:53	2
1,1-Dichloroethane	ND		2.0		ug/L			07/20/13 01:53	2
1,1-Dichloroethene	ND		2.0		ug/L			07/20/13 01:53	2
1,1-Dichloropropene	ND		2.0		ug/L			07/20/13 01:53	2
1,2,3-Trichlorobenzene	ND		2.0		ug/L			07/20/13 01:53	2
1,2,3-Trichloropropane	ND		2.0		ug/L			07/20/13 01:53	2
1,2,4-Trichlorobenzene	ND		2.0		ug/L			07/20/13 01:53	2
1,2,4-Trimethylbenzene	ND		2.0		ug/L			07/20/13 01:53	2
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			07/20/13 01:53	2
1,2-Dichlorobenzene	ND		2.0		ug/L			07/20/13 01:53	2
1,2-Dichloroethane	ND		2.0		ug/L			07/20/13 01:53	2
1,2-Dichloropropane	ND		2.0		ug/L			07/20/13 01:53	2
1,3,5-Trimethylbenzene	ND		2.0		ug/L			07/20/13 01:53	2
1,3-Dichlorobenzene	ND		2.0		ug/L			07/20/13 01:53	2
1,3-Dichloropropane	ND		2.0		ug/L			07/20/13 01:53	2
1,4-Dichlorobenzene	ND		2.0		ug/L			07/20/13 01:53	2
1,4-Dioxane	ND	*	100		ug/L			07/20/13 01:53	2
2,2-Dichloropropane	ND		2.0		ug/L			07/20/13 01:53	2
2-Butanone (MEK)	**24**	*	20		ug/L			07/20/13 01:53	2
2-Chlorotoluene	ND		2.0		ug/L			07/20/13 01:53	2
2-Hexanone	ND		20		ug/L			07/20/13 01:53	2
4-Chlorotoluene	ND		2.0		ug/L			07/20/13 01:53	2
4-Isopropyltoluene	ND		2.0		ug/L			07/20/13 01:53	2
4-Methyl-2-pentanone (MIBK)	ND		20		ug/L			07/20/13 01:53	2
Acetone	**470**	*	100		ug/L			07/20/13 01:53	2
Benzene	ND		2.0		ug/L			07/20/13 01:53	2
Bromobenzene	ND		2.0		ug/L			07/20/13 01:53	2
Bromoform	ND		2.0		ug/L			07/20/13 01:53	2
Bromomethane	ND		4.0		ug/L			07/20/13 01:53	2
Carbon disulfide	ND		20		ug/L			07/20/13 01:53	2
Carbon tetrachloride	ND		2.0		ug/L			07/20/13 01:53	2
Chlorobenzene	ND		2.0		ug/L			07/20/13 01:53	2
Chlorobromomethane	ND		2.0		ug/L			07/20/13 01:53	2
Chlorodibromomethane	ND		1.0		ug/L			07/20/13 01:53	2
Chloroethane	ND		4.0		ug/L			07/20/13 01:53	2
Chloroform	ND		2.0		ug/L			07/20/13 01:53	2
Chloromethane	ND		4.0		ug/L			07/20/13 01:53	2

Client Sample ID: MW-562-20130717-01 — **Lab Sample ID: 480-42273-7**
Date Collected: 07/17/13 09:15 — **Matrix: Water**
Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		2.0		ug/L			07/20/13 01:53	2
cis-1,3-Dichloropropene	ND		0.80		ug/L			07/20/13 01:53	2
Dichlorobromomethane	ND		1.0		ug/L			07/20/13 01:53	2
Dichlorodifluoromethane	ND	*	2.0		ug/L			07/20/13 01:53	2
Ethyl ether	ND		2.0		ug/L			07/20/13 01:53	2
Ethylbenzene	ND		2.0		ug/L			07/20/13 01:53	2
Ethylene Dibromide	ND		2.0		ug/L			07/20/13 01:53	2
Hexachlorobutadiene	ND		0.80		ug/L			07/20/13 01:53	2
Isopropyl ether	ND		20		ug/L			07/20/13 01:53	2
Isopropylbenzene	ND		2.0		ug/L			07/20/13 01:53	2
Methyl tert-butyl ether	ND		2.0		ug/L			07/20/13 01:53	2
Methylene Chloride	ND		2.0		ug/L			07/20/13 01:53	2
m-Xylene & p-Xylene	ND		4.0		ug/L			07/20/13 01:53	2
Naphthalene	ND		10		ug/L			07/20/13 01:53	2
n-Butylbenzene	ND		2.0		ug/L			07/20/13 01:53	2
N-Propylbenzene	ND		2.0		ug/L			07/20/13 01:53	2
o-Xylene	ND		2.0		ug/L			07/20/13 01:53	2
sec-Butylbenzene	ND		2.0		ug/L			07/20/13 01:53	2
Styrene	ND		2.0		ug/L			07/20/13 01:53	2
Tert-amyl methyl ether	ND		10		ug/L			07/20/13 01:53	2
Tert-butyl ethyl ether	ND		10		ug/L			07/20/13 01:53	2
tert-Butylbenzene	ND		2.0		ug/L			07/20/13 01:53	2
Tetrachloroethene	ND		2.0		ug/L			07/20/13 01:53	2
Tetrahydrofuran	ND		20		ug/L			07/20/13 01:53	2
Toluene	ND		2.0		ug/L			07/20/13 01:53	2
trans-1,2-Dichloroethene	ND		2.0		ug/L			07/20/13 01:53	2
trans-1,3-Dichloropropene	ND		0.80		ug/L			07/20/13 01:53	2
Trichloroethene	ND		2.0		ug/L			07/20/13 01:53	2
Trichlorofluoromethane	ND		2.0		ug/L			07/20/13 01:53	2
Vinyl chloride	ND		2.0		ug/L			07/20/13 01:53	2
Dibromomethane	ND		2.0		ug/L			07/20/13 01:53	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*07/20/13 01:53*	*2*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*07/20/13 01:53*	*2*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*07/20/13 01:53*	*2*

Client Sample ID: MW-563-20130718-01 — **Lab Sample ID: 480-42273-8**
Date Collected: 07/18/13 08:00 — **Matrix: Water**
Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.0		ug/L			07/20/13 02:17	4
1,1,1-Trichloroethane	ND		4.0		ug/L			07/20/13 02:17	4
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L			07/20/13 02:17	4
1,1,2-Trichloroethane	ND		4.0		ug/L			07/20/13 02:17	4
1,1-Dichloroethane	ND		4.0		ug/L			07/20/13 02:17	4
1,1-Dichloroethene	ND		4.0		ug/L			07/20/13 02:17	4
1,1-Dichloropropene	ND		4.0		ug/L			07/20/13 02:17	4

Client Sample ID: MW-563-20130718-01
Date Collected: 07/18/13 08:00
Date Received: 07/19/13 02:30

Lab Sample ID: 480-42273-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		4.0		ug/L			07/20/13 02:17	4
1,2,3-Trichloropropane	ND		4.0		ug/L			07/20/13 02:17	4
1,2,4-Trichlorobenzene	ND		4.0		ug/L			07/20/13 02:17	4
1,2,4-Trimethylbenzene	ND		4.0		ug/L			07/20/13 02:17	4
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			07/20/13 02:17	4
1,2-Dichlorobenzene	ND		4.0		ug/L			07/20/13 02:17	4
1,2-Dichloroethane	ND		4.0		ug/L			07/20/13 02:17	4
1,2-Dichloropropane	ND		4.0		ug/L			07/20/13 02:17	4
1,3,5-Trimethylbenzene	ND		4.0		ug/L			07/20/13 02:17	4
1,3-Dichlorobenzene	ND		4.0		ug/L			07/20/13 02:17	4
1,3-Dichloropropane	ND		4.0		ug/L			07/20/13 02:17	4
1,4-Dichlorobenzene	ND		4.0		ug/L			07/20/13 02:17	4
1,4-Dioxane	ND	*	200		ug/L			07/20/13 02:17	4
2,2-Dichloropropane	ND		4.0		ug/L			07/20/13 02:17	4
2-Butanone (MEK)	**82**	*	40		ug/L			07/20/13 02:17	4
2-Chlorotoluene	ND		4.0		ug/L			07/20/13 02:17	4
2-Hexanone	ND		40		ug/L			07/20/13 02:17	4
4-Chlorotoluene	ND		4.0		ug/L			07/20/13 02:17	4
4-Isopropyltoluene	ND		4.0		ug/L			07/20/13 02:17	4
4-Methyl-2-pentanone (MIBK)	ND		40		ug/L			07/20/13 02:17	4
Acetone	ND	*	200		ug/L			07/20/13 02:17	4
Benzene	ND		4.0		ug/L			07/20/13 02:17	4
Bromobenzene	ND		4.0		ug/L			07/20/13 02:17	4
Bromoform	ND		4.0		ug/L			07/20/13 02:17	4
Bromomethane	ND		8.0		ug/L			07/20/13 02:17	4
Carbon disulfide	ND		40		ug/L			07/20/13 02:17	4
Carbon tetrachloride	ND		4.0		ug/L			07/20/13 02:17	4
Chlorobenzene	ND		4.0		ug/L			07/20/13 02:17	4
Chlorobromomethane	ND		4.0		ug/L			07/20/13 02:17	4
Chlorodibromomethane	ND		2.0		ug/L			07/20/13 02:17	4
Chloroethane	ND		8.0		ug/L			07/20/13 02:17	4
Chloroform	ND		4.0		ug/L			07/20/13 02:17	4
Chloromethane	ND		8.0		ug/L			07/20/13 02:17	4
cis-1,2-Dichloroethene	**230**		4.0		ug/L			07/20/13 02:17	4
cis-1,3-Dichloropropene	ND		1.6		ug/L			07/20/13 02:17	4
Dichlorobromomethane	ND		2.0		ug/L			07/20/13 02:17	4
Dichlorodifluoromethane	ND	*	4.0		ug/L			07/20/13 02:17	4
Ethyl ether	ND		4.0		ug/L			07/20/13 02:17	4
Ethylbenzene	ND		4.0		ug/L			07/20/13 02:17	4
Ethylene Dibromide	ND		4.0		ug/L			07/20/13 02:17	4
Hexachlorobutadiene	ND		1.6		ug/L			07/20/13 02:17	4
Isopropyl ether	ND		40		ug/L			07/20/13 02:17	4
Isopropylbenzene	ND		4.0		ug/L			07/20/13 02:17	4
Methyl tert-butyl ether	ND		4.0		ug/L			07/20/13 02:17	4
Methylene Chloride	ND		4.0		ug/L			07/20/13 02:17	4
m-Xylene & p-Xylene	**10**		8.0		ug/L			07/20/13 02:17	4
Naphthalene	ND		20		ug/L			07/20/13 02:17	4
n-Butylbenzene	ND		4.0		ug/L			07/20/13 02:17	4
N-Propylbenzene	ND		4.0		ug/L			07/20/13 02:17	4

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

TestAmerica Job ID: 480-42273-1

Client Sample ID: MW-563-20130718-01

Lab Sample ID: 480-42273-8

Date Collected: 07/18/13 08:00

Matrix: Water

Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		4.0		ug/L			07/20/13 02:17	4
sec-Butylbenzene	ND		4.0		ug/L			07/20/13 02:17	4
Styrene	ND		4.0		ug/L			07/20/13 02:17	4
Tert-amyl methyl ether	ND		20		ug/L			07/20/13 02:17	4
Tert-butyl ethyl ether	ND		20		ug/L			07/20/13 02:17	4
tert-Butylbenzene	ND		4.0		ug/L			07/20/13 02:17	4
Tetrachloroethene	ND		4.0		ug/L			07/20/13 02:17	4
Tetrahydrofuran	ND		40		ug/L			07/20/13 02:17	4
Toluene	**19**		4.0		ug/L			07/20/13 02:17	4
trans-1,2-Dichloroethene	ND		4.0		ug/L			07/20/13 02:17	4
trans-1,3-Dichloropropene	ND		1.6		ug/L			07/20/13 02:17	4
Trichloroethene	ND		4.0		ug/L			07/20/13 02:17	4
Trichlorofluoromethane	ND		4.0		ug/L			07/20/13 02:17	4
Vinyl chloride	**160**		4.0		ug/L			07/20/13 02:17	4
Dibromomethane	ND		4.0		ug/L			07/20/13 02:17	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*07/20/13 02:17*	*4*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*07/20/13 02:17*	*4*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*07/20/13 02:17*	*4*

Client Sample ID: REW-1-20130717-01

Lab Sample ID: 480-42273-9

Date Collected: 07/17/13 11:00

Matrix: Water

Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		20		ug/L			07/22/13 12:51	20
1,1,1-Trichloroethane	ND		20		ug/L			07/22/13 12:51	20
1,1,2,2-Tetrachloroethane	ND		10		ug/L			07/22/13 12:51	20
1,1,2-Trichloroethane	ND		20		ug/L			07/22/13 12:51	20
1,1-Dichloroethane	ND		20		ug/L			07/22/13 12:51	20
1,1-Dichloroethene	ND		20		ug/L			07/22/13 12:51	20
1,1-Dichloropropene	ND		20		ug/L			07/22/13 12:51	20
1,2,3-Trichlorobenzene	ND		20		ug/L			07/22/13 12:51	20
1,2,3-Trichloropropane	ND		20		ug/L			07/22/13 12:51	20
1,2,4-Trichlorobenzene	ND		20		ug/L			07/22/13 12:51	20
1,2,4-Trimethylbenzene	ND		20		ug/L			07/22/13 12:51	20
1,2-Dibromo-3-Chloropropane	ND		100		ug/L			07/22/13 12:51	20
1,2-Dichlorobenzene	ND		20		ug/L			07/22/13 12:51	20
1,2-Dichloroethane	ND		20		ug/L			07/22/13 12:51	20
1,2-Dichloropropane	ND		20		ug/L			07/22/13 12:51	20
1,3,5-Trimethylbenzene	ND		20		ug/L			07/22/13 12:51	20
1,3-Dichlorobenzene	ND		20		ug/L			07/22/13 12:51	20
1,3-Dichloropropane	ND		20		ug/L			07/22/13 12:51	20
1,4-Dichlorobenzene	ND		20		ug/L			07/22/13 12:51	20
1,4-Dioxane	ND		1000		ug/L			07/22/13 12:51	20
2,2-Dichloropropane	ND		20		ug/L			07/22/13 12:51	20
2-Butanone (MEK)	ND	*	200		ug/L			07/22/13 12:51	20
2-Chlorotoluene	ND		20		ug/L			07/22/13 12:51	20

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

TestAmerica Job ID: 480-42273-1

Client Sample ID: REW-1-20130717-01
Date Collected: 07/17/13 11:00
Date Received: 07/19/13 02:30

Lab Sample ID: 480-42273-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	ND		200		ug/L			07/22/13 12:51	20
4-Chlorotoluene	ND		20		ug/L			07/22/13 12:51	20
4-Isopropyltoluene	ND		20		ug/L			07/22/13 12:51	20
4-Methyl-2-pentanone (MIBK)	ND		200		ug/L			07/22/13 12:51	20
Acetone	**6100**		1000		ug/L			07/22/13 12:51	20
Benzene	ND		20		ug/L			07/22/13 12:51	20
Bromobenzene	ND		20		ug/L			07/22/13 12:51	20
Bromoform	ND		20		ug/L			07/22/13 12:51	20
Bromomethane	ND		40		ug/L			07/22/13 12:51	20
Carbon disulfide	ND		200		ug/L			07/22/13 12:51	20
Carbon tetrachloride	ND		20		ug/L			07/22/13 12:51	20
Chlorobenzene	ND		20		ug/L			07/22/13 12:51	20
Chlorobromomethane	ND		20		ug/L			07/22/13 12:51	20
Chlorodibromomethane	ND		10		ug/L			07/22/13 12:51	20
Chloroethane	ND		40		ug/L			07/22/13 12:51	20
Chloroform	ND		20		ug/L			07/22/13 12:51	20
Chloromethane	ND		40		ug/L			07/22/13 12:51	20
cis-1,2-Dichloroethene	ND		20		ug/L			07/22/13 12:51	20
cis-1,3-Dichloropropene	ND		8.0		ug/L			07/22/13 12:51	20
Dichlorobromomethane	ND		10		ug/L			07/22/13 12:51	20
Dichlorodifluoromethane	ND		20		ug/L			07/22/13 12:51	20
Ethyl ether	ND		20		ug/L			07/22/13 12:51	20
Ethylbenzene	ND		20		ug/L			07/22/13 12:51	20
Ethylene Dibromide	ND		20		ug/L			07/22/13 12:51	20
Hexachlorobutadiene	ND		8.0		ug/L			07/22/13 12:51	20
Isopropyl ether	ND		200		ug/L			07/22/13 12:51	20
Isopropylbenzene	ND		20		ug/L			07/22/13 12:51	20
Methyl tert-butyl ether	ND		20		ug/L			07/22/13 12:51	20
Methylene Chloride	ND		20		ug/L			07/22/13 12:51	20
m-Xylene & p-Xylene	ND		40		ug/L			07/22/13 12:51	20
Naphthalene	ND		100		ug/L			07/22/13 12:51	20
n-Butylbenzene	ND		20		ug/L			07/22/13 12:51	20
N-Propylbenzene	ND		20		ug/L			07/22/13 12:51	20
o-Xylene	ND		20		ug/L			07/22/13 12:51	20
sec-Butylbenzene	ND		20		ug/L			07/22/13 12:51	20
Styrene	ND		20		ug/L			07/22/13 12:51	20
Tert-amyl methyl ether	ND		100		ug/L			07/22/13 12:51	20
Tert-butyl ethyl ether	ND		100		ug/L			07/22/13 12:51	20
tert-Butylbenzene	ND		20		ug/L			07/22/13 12:51	20
Tetrachloroethene	ND		20		ug/L			07/22/13 12:51	20
Tetrahydrofuran	ND		200		ug/L			07/22/13 12:51	20
Toluene	ND		20		ug/L			07/22/13 12:51	20
trans-1,2-Dichloroethene	ND		20		ug/L			07/22/13 12:51	20
trans-1,3-Dichloropropene	ND		8.0		ug/L			07/22/13 12:51	20
Trichloroethene	ND		20		ug/L			07/22/13 12:51	20
Trichlorofluoromethane	ND		20		ug/L			07/22/13 12:51	20
Vinyl chloride	ND		20		ug/L			07/22/13 12:51	20
Dibromomethane	ND		20		ug/L			07/22/13 12:51	20

Client Sample ID: REW-1-20130717-01 — **Lab Sample ID: 480-42273-9**
Date Collected: 07/17/13 11:00 — **Matrix: Water**
Date Received: 07/19/13 02:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/22/13 12:51*	*20*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*07/22/13 12:51*	*20*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*07/22/13 12:51*	*20*

Client Sample ID: REW-6-20130718-01 — **Lab Sample ID: 480-42273-10**
Date Collected: 07/18/13 10:45 — **Matrix: Water**
Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			07/20/13 02:40	5
1,1,1-Trichloroethane	ND		5.0		ug/L			07/20/13 02:40	5
1,1,2,2-Tetrachloroethane	ND		2.5		ug/L			07/20/13 02:40	5
1,1,2-Trichloroethane	ND		5.0		ug/L			07/20/13 02:40	5
1,1-Dichloroethane	ND		5.0		ug/L			07/20/13 02:40	5
1,1-Dichloroethene	ND		5.0		ug/L			07/20/13 02:40	5
1,1-Dichloropropene	ND		5.0		ug/L			07/20/13 02:40	5
1,2,3-Trichlorobenzene	ND		5.0		ug/L			07/20/13 02:40	5
1,2,3-Trichloropropane	ND		5.0		ug/L			07/20/13 02:40	5
1,2,4-Trichlorobenzene	ND		5.0		ug/L			07/20/13 02:40	5
1,2,4-Trimethylbenzene	ND		5.0		ug/L			07/20/13 02:40	5
1,2-Dibromo-3-Chloropropane	ND		25		ug/L			07/20/13 02:40	5
1,2-Dichlorobenzene	ND		5.0		ug/L			07/20/13 02:40	5
1,2-Dichloroethane	ND		5.0		ug/L			07/20/13 02:40	5
1,2-Dichloropropane	ND		5.0		ug/L			07/20/13 02:40	5
1,3,5-Trimethylbenzene	ND		5.0		ug/L			07/20/13 02:40	5
1,3-Dichlorobenzene	ND		5.0		ug/L			07/20/13 02:40	5
1,3-Dichloropropane	ND		5.0		ug/L			07/20/13 02:40	5
1,4-Dichlorobenzene	ND		5.0		ug/L			07/20/13 02:40	5
1,4-Dioxane	ND	*	250		ug/L			07/20/13 02:40	5
2,2-Dichloropropane	ND		5.0		ug/L			07/20/13 02:40	5
2-Butanone (MEK)	ND	*	50		ug/L			07/20/13 02:40	5
2-Chlorotoluene	ND		5.0		ug/L			07/20/13 02:40	5
2-Hexanone	ND		50		ug/L			07/20/13 02:40	5
4-Chlorotoluene	ND		5.0		ug/L			07/20/13 02:40	5
4-Isopropyltoluene	ND		5.0		ug/L			07/20/13 02:40	5
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			07/20/13 02:40	5
Acetone	ND	*	250		ug/L			07/20/13 02:40	5
Benzene	ND		5.0		ug/L			07/20/13 02:40	5
Bromobenzene	ND		5.0		ug/L			07/20/13 02:40	5
Bromoform	ND		5.0		ug/L			07/20/13 02:40	5
Bromomethane	ND		10		ug/L			07/20/13 02:40	5
Carbon disulfide	ND		50		ug/L			07/20/13 02:40	5
Carbon tetrachloride	ND		5.0		ug/L			07/20/13 02:40	5
Chlorobenzene	ND		5.0		ug/L			07/20/13 02:40	5
Chlorobromomethane	ND		5.0		ug/L			07/20/13 02:40	5
Chlorodibromomethane	ND		2.5		ug/L			07/20/13 02:40	5
Chloroethane	ND		10		ug/L			07/20/13 02:40	5
Chloroform	ND		5.0		ug/L			07/20/13 02:40	5
Chloromethane	ND		10		ug/L			07/20/13 02:40	5

Client Sample ID: REW-6-20130718-01 — **Lab Sample ID: 480-42273-10**
Date Collected: 07/18/13 10:45 — **Matrix: Water**
Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**320**		5.0		ug/L			07/20/13 02:40	5
cis-1,3-Dichloropropene	ND		2.0		ug/L			07/20/13 02:40	5
Dichlorobromomethane	ND		2.5		ug/L			07/20/13 02:40	5
Dichlorodifluoromethane	ND	*	5.0		ug/L			07/20/13 02:40	5
Ethyl ether	ND		5.0		ug/L			07/20/13 02:40	5
Ethylbenzene	ND		5.0		ug/L			07/20/13 02:40	5
Ethylene Dibromide	ND		5.0		ug/L			07/20/13 02:40	5
Hexachlorobutadiene	ND		2.0		ug/L			07/20/13 02:40	5
Isopropyl ether	ND		50		ug/L			07/20/13 02:40	5
Isopropylbenzene	ND		5.0		ug/L			07/20/13 02:40	5
Methyl tert-butyl ether	ND		5.0		ug/L			07/20/13 02:40	5
Methylene Chloride	ND		5.0		ug/L			07/20/13 02:40	5
m-Xylene & p-Xylene	ND		10		ug/L			07/20/13 02:40	5
Naphthalene	ND		25		ug/L			07/20/13 02:40	5
n-Butylbenzene	ND		5.0		ug/L			07/20/13 02:40	5
N-Propylbenzene	ND		5.0		ug/L			07/20/13 02:40	5
o-Xylene	ND		5.0		ug/L			07/20/13 02:40	5
sec-Butylbenzene	ND		5.0		ug/L			07/20/13 02:40	5
Styrene	ND		5.0		ug/L			07/20/13 02:40	5
Tert-amyl methyl ether	ND		25		ug/L			07/20/13 02:40	5
Tert-butyl ethyl ether	ND		25		ug/L			07/20/13 02:40	5
tert-Butylbenzene	ND		5.0		ug/L			07/20/13 02:40	5
Tetrachloroethene	**14**		5.0		ug/L			07/20/13 02:40	5
Tetrahydrofuran	ND		50		ug/L			07/20/13 02:40	5
Toluene	ND		5.0		ug/L			07/20/13 02:40	5
trans-1,2-Dichloroethene	ND		5.0		ug/L			07/20/13 02:40	5
trans-1,3-Dichloropropene	ND		2.0		ug/L			07/20/13 02:40	5
Trichloroethene	**250**		5.0		ug/L			07/20/13 02:40	5
Trichlorofluoromethane	ND		5.0		ug/L			07/20/13 02:40	5
Vinyl chloride	**17**		5.0		ug/L			07/20/13 02:40	5
Dibromomethane	ND		5.0		ug/L			07/20/13 02:40	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*07/20/13 02:40*	*5*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*07/20/13 02:40*	*5*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*07/20/13 02:40*	*5*

Client Sample ID: REW-7-20130718-01 — **Lab Sample ID: 480-42273-11**
Date Collected: 07/18/13 12:45 — **Matrix: Water**
Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10		ug/L			07/19/13 13:56	10
1,1,1-Trichloroethane	ND		10		ug/L			07/19/13 13:56	10
1,1,2,2-Tetrachloroethane	ND		5.0		ug/L			07/19/13 13:56	10
1,1,2-Trichloroethane	ND		10		ug/L			07/19/13 13:56	10
1,1-Dichloroethane	ND		10		ug/L			07/19/13 13:56	10
1,1-Dichloroethene	ND		10		ug/L			07/19/13 13:56	10
1,1-Dichloropropene	ND		10		ug/L			07/19/13 13:56	10

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

TestAmerica Job ID: 480-42273-1

Client Sample ID: REW-7-20130718-01
Date Collected: 07/18/13 12:45
Date Received: 07/19/13 02:30

Lab Sample ID: 480-42273-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		10		ug/L			07/19/13 13:56	10
1,2,3-Trichloropropane	ND		10		ug/L			07/19/13 13:56	10
1,2,4-Trichlorobenzene	ND		10		ug/L			07/19/13 13:56	10
1,2,4-Trimethylbenzene	ND		10		ug/L			07/19/13 13:56	10
1,2-Dibromo-3-Chloropropane	ND		50		ug/L			07/19/13 13:56	10
1,2-Dichlorobenzene	ND		10		ug/L			07/19/13 13:56	10
1,2-Dichloroethane	ND		10		ug/L			07/19/13 13:56	10
1,2-Dichloropropane	ND		10		ug/L			07/19/13 13:56	10
1,3,5-Trimethylbenzene	ND		10		ug/L			07/19/13 13:56	10
1,3-Dichlorobenzene	ND		10		ug/L			07/19/13 13:56	10
1,3-Dichloropropane	ND		10		ug/L			07/19/13 13:56	10
1,4-Dichlorobenzene	ND		10		ug/L			07/19/13 13:56	10
1,4-Dioxane	ND	*	500		ug/L			07/19/13 13:56	10
2,2-Dichloropropane	ND		10		ug/L			07/19/13 13:56	10
2-Butanone (MEK)	ND	*	100		ug/L			07/19/13 13:56	10
2-Chlorotoluene	ND		10		ug/L			07/19/13 13:56	10
2-Hexanone	ND		100		ug/L			07/19/13 13:56	10
4-Chlorotoluene	ND		10		ug/L			07/19/13 13:56	10
4-Isopropyltoluene	ND		10		ug/L			07/19/13 13:56	10
4-Methyl-2-pentanone (MIBK)	ND		100		ug/L			07/19/13 13:56	10
Acetone	ND		500		ug/L			07/19/13 13:56	10
Benzene	ND		10		ug/L			07/19/13 13:56	10
Bromobenzene	ND		10		ug/L			07/19/13 13:56	10
Bromoform	ND		10		ug/L			07/19/13 13:56	10
Bromomethane	ND		20		ug/L			07/19/13 13:56	10
Carbon disulfide	ND		100		ug/L			07/19/13 13:56	10
Carbon tetrachloride	ND		10		ug/L			07/19/13 13:56	10
Chlorobenzene	ND		10		ug/L			07/19/13 13:56	10
Chlorobromomethane	ND		10		ug/L			07/19/13 13:56	10
Chlorodibromomethane	ND		5.0		ug/L			07/19/13 13:56	10
Chloroethane	ND		20		ug/L			07/19/13 13:56	10
Chloroform	ND		10		ug/L			07/19/13 13:56	10
Chloromethane	ND		20		ug/L			07/19/13 13:56	10
cis-1,2-Dichloroethene	**680**		10		ug/L			07/19/13 13:56	10
cis-1,3-Dichloropropene	ND		4.0		ug/L			07/19/13 13:56	10
Dichlorobromomethane	ND		5.0		ug/L			07/19/13 13:56	10
Dichlorodifluoromethane	ND		10		ug/L			07/19/13 13:56	10
Ethyl ether	ND		10		ug/L			07/19/13 13:56	10
Ethylbenzene	ND		10		ug/L			07/19/13 13:56	10
Ethylene Dibromide	ND		10		ug/L			07/19/13 13:56	10
Hexachlorobutadiene	ND		4.0		ug/L			07/19/13 13:56	10
Isopropyl ether	ND		100		ug/L			07/19/13 13:56	10
Isopropylbenzene	ND		10		ug/L			07/19/13 13:56	10
Methyl tert-butyl ether	ND		10		ug/L			07/19/13 13:56	10
Methylene Chloride	ND		10		ug/L			07/19/13 13:56	10
m-Xylene & p-Xylene	ND		20		ug/L			07/19/13 13:56	10
Naphthalene	ND		50		ug/L			07/19/13 13:56	10
n-Butylbenzene	ND		10		ug/L			07/19/13 13:56	10
N-Propylbenzene	ND		10		ug/L			07/19/13 13:56	10

Client Sample ID: REW-7-20130718-01 — **Lab Sample ID: 480-42273-11**
Date Collected: 07/18/13 12:45 — **Matrix: Water**
Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		10		ug/L			07/19/13 13:56	10
sec-Butylbenzene	ND		10		ug/L			07/19/13 13:56	10
Styrene	ND		10		ug/L			07/19/13 13:56	10
Tert-amyl methyl ether	ND		50		ug/L			07/19/13 13:56	10
Tert-butyl ethyl ether	ND		50		ug/L			07/19/13 13:56	10
tert-Butylbenzene	ND		10		ug/L			07/19/13 13:56	10
Tetrachloroethene	**10**		10		ug/L			07/19/13 13:56	10
Tetrahydrofuran	ND		100		ug/L			07/19/13 13:56	10
Toluene	ND		10		ug/L			07/19/13 13:56	10
trans-1,2-Dichloroethene	ND		10		ug/L			07/19/13 13:56	10
trans-1,3-Dichloropropene	ND		4.0		ug/L			07/19/13 13:56	10
Trichloroethene	**240**		10		ug/L			07/19/13 13:56	10
Trichlorofluoromethane	ND		10		ug/L			07/19/13 13:56	10
Vinyl chloride	**170**		10		ug/L			07/19/13 13:56	10
Dibromomethane	ND		10		ug/L			07/19/13 13:56	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/19/13 13:56*	*10*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*07/19/13 13:56*	*10*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*07/19/13 13:56*	*10*

Client Sample ID: REW-8-20130718-01 — **Lab Sample ID: 480-42273-12**
Date Collected: 07/18/13 12:05 — **Matrix: Water**
Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0		ug/L			07/20/13 03:04	5
1,1,1-Trichloroethane	ND		5.0		ug/L			07/20/13 03:04	5
1,1,2,2-Tetrachloroethane	ND		2.5		ug/L			07/20/13 03:04	5
1,1,2-Trichloroethane	ND		5.0		ug/L			07/20/13 03:04	5
1,1-Dichloroethane	ND		5.0		ug/L			07/20/13 03:04	5
1,1-Dichloroethene	ND		5.0		ug/L			07/20/13 03:04	5
1,1-Dichloropropene	ND		5.0		ug/L			07/20/13 03:04	5
1,2,3-Trichlorobenzene	ND		5.0		ug/L			07/20/13 03:04	5
1,2,3-Trichloropropane	ND		5.0		ug/L			07/20/13 03:04	5
1,2,4-Trichlorobenzene	ND		5.0		ug/L			07/20/13 03:04	5
1,2,4-Trimethylbenzene	ND		5.0		ug/L			07/20/13 03:04	5
1,2-Dibromo-3-Chloropropane	ND		25		ug/L			07/20/13 03:04	5
1,2-Dichlorobenzene	ND		5.0		ug/L			07/20/13 03:04	5
1,2-Dichloroethane	ND		5.0		ug/L			07/20/13 03:04	5
1,2-Dichloropropane	ND		5.0		ug/L			07/20/13 03:04	5
1,3,5-Trimethylbenzene	ND		5.0		ug/L			07/20/13 03:04	5
1,3-Dichlorobenzene	ND		5.0		ug/L			07/20/13 03:04	5
1,3-Dichloropropane	ND		5.0		ug/L			07/20/13 03:04	5
1,4-Dichlorobenzene	ND		5.0		ug/L			07/20/13 03:04	5
1,4-Dioxane	ND	*	250		ug/L			07/20/13 03:04	5
2,2-Dichloropropane	ND		5.0		ug/L			07/20/13 03:04	5
2-Butanone (MEK)	**57**	*	50		ug/L			07/20/13 03:04	5
2-Chlorotoluene	ND		5.0		ug/L			07/20/13 03:04	5

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

TestAmerica Job ID: 480-42273-1

Client Sample ID: REW-8-20130718-01
Date Collected: 07/18/13 12:05
Date Received: 07/19/13 02:30

Lab Sample ID: 480-42273-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	ND		50		ug/L			07/20/13 03:04	5
4-Chlorotoluene	ND		5.0		ug/L			07/20/13 03:04	5
4-Isopropyltoluene	ND		5.0		ug/L			07/20/13 03:04	5
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			07/20/13 03:04	5
Acetone	ND	*	250		ug/L			07/20/13 03:04	5
Benzene	ND		5.0		ug/L			07/20/13 03:04	5
Bromobenzene	ND		5.0		ug/L			07/20/13 03:04	5
Bromoform	ND		5.0		ug/L			07/20/13 03:04	5
Bromomethane	ND		10		ug/L			07/20/13 03:04	5
Carbon disulfide	ND		50		ug/L			07/20/13 03:04	5
Carbon tetrachloride	ND		5.0		ug/L			07/20/13 03:04	5
Chlorobenzene	ND		5.0		ug/L			07/20/13 03:04	5
Chlorobromomethane	ND		5.0		ug/L			07/20/13 03:04	5
Chlorodibromomethane	ND		2.5		ug/L			07/20/13 03:04	5
Chloroethane	ND		10		ug/L			07/20/13 03:04	5
Chloroform	ND		5.0		ug/L			07/20/13 03:04	5
Chloromethane	ND		10		ug/L			07/20/13 03:04	5
cis-1,2-Dichloroethene	**310**		5.0		ug/L			07/20/13 03:04	5
cis-1,3-Dichloropropene	ND		2.0		ug/L			07/20/13 03:04	5
Dichlorobromomethane	ND		2.5		ug/L			07/20/13 03:04	5
Dichlorodifluoromethane	ND	*	5.0		ug/L			07/20/13 03:04	5
Ethyl ether	ND		5.0		ug/L			07/20/13 03:04	5
Ethylbenzene	ND		5.0		ug/L			07/20/13 03:04	5
Ethylene Dibromide	ND		5.0		ug/L			07/20/13 03:04	5
Hexachlorobutadiene	ND		2.0		ug/L			07/20/13 03:04	5
Isopropyl ether	ND		50		ug/L			07/20/13 03:04	5
Isopropylbenzene	ND		5.0		ug/L			07/20/13 03:04	5
Methyl tert-butyl ether	ND		5.0		ug/L			07/20/13 03:04	5
Methylene Chloride	ND		5.0		ug/L			07/20/13 03:04	5
m-Xylene & p-Xylene	ND		10		ug/L			07/20/13 03:04	5
Naphthalene	ND		25		ug/L			07/20/13 03:04	5
n-Butylbenzene	ND		5.0		ug/L			07/20/13 03:04	5
N-Propylbenzene	ND		5.0		ug/L			07/20/13 03:04	5
o-Xylene	ND		5.0		ug/L			07/20/13 03:04	5
sec-Butylbenzene	ND		5.0		ug/L			07/20/13 03:04	5
Styrene	ND		5.0		ug/L			07/20/13 03:04	5
Tert-amyl methyl ether	ND		25		ug/L			07/20/13 03:04	5
Tert-butyl ethyl ether	ND		25		ug/L			07/20/13 03:04	5
tert-Butylbenzene	ND		5.0		ug/L			07/20/13 03:04	5
Tetrachloroethene	ND		5.0		ug/L			07/20/13 03:04	5
Tetrahydrofuran	ND		50		ug/L			07/20/13 03:04	5
Toluene	ND		5.0		ug/L			07/20/13 03:04	5
trans-1,2-Dichloroethene	ND		5.0		ug/L			07/20/13 03:04	5
trans-1,3-Dichloropropene	ND		2.0		ug/L			07/20/13 03:04	5
Trichloroethene	**79**		5.0		ug/L			07/20/13 03:04	5
Trichlorofluoromethane	ND		5.0		ug/L			07/20/13 03:04	5
Vinyl chloride	**93**		5.0		ug/L			07/20/13 03:04	5
Dibromomethane	ND		5.0		ug/L			07/20/13 03:04	5

Client Sample ID: REW-8-20130718-01

Lab Sample ID: 480-42273-12

Date Collected: 07/18/13 12:05

Matrix: Water

Date Received: 07/19/13 02:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*07/20/13 03:04*	*5*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*07/20/13 03:04*	*5*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*07/20/13 03:04*	*5*

Client Sample ID: REW-12-20130718-01

Lab Sample ID: 480-42273-13

Date Collected: 07/18/13 09:05

Matrix: Water

Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.0		ug/L			07/19/13 14:46	4
1,1,1-Trichloroethane	ND		4.0		ug/L			07/19/13 14:46	4
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L			07/19/13 14:46	4
1,1,2-Trichloroethane	ND		4.0		ug/L			07/19/13 14:46	4
1,1-Dichloroethane	ND		4.0		ug/L			07/19/13 14:46	4
1,1-Dichloroethene	ND		4.0		ug/L			07/19/13 14:46	4
1,1-Dichloropropene	ND		4.0		ug/L			07/19/13 14:46	4
1,2,3-Trichlorobenzene	ND		4.0		ug/L			07/19/13 14:46	4
1,2,3-Trichloropropane	ND		4.0		ug/L			07/19/13 14:46	4
1,2,4-Trichlorobenzene	ND		4.0		ug/L			07/19/13 14:46	4
1,2,4-Trimethylbenzene	ND		4.0		ug/L			07/19/13 14:46	4
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			07/19/13 14:46	4
1,2-Dichlorobenzene	ND		4.0		ug/L			07/19/13 14:46	4
1,2-Dichloroethane	ND		4.0		ug/L			07/19/13 14:46	4
1,2-Dichloropropane	ND		4.0		ug/L			07/19/13 14:46	4
1,3,5-Trimethylbenzene	ND		4.0		ug/L			07/19/13 14:46	4
1,3-Dichlorobenzene	ND		4.0		ug/L			07/19/13 14:46	4
1,3-Dichloropropane	ND		4.0		ug/L			07/19/13 14:46	4
1,4-Dichlorobenzene	ND		4.0		ug/L			07/19/13 14:46	4
1,4-Dioxane	ND	*	200		ug/L			07/19/13 14:46	4
2,2-Dichloropropane	ND		4.0		ug/L			07/19/13 14:46	4
2-Butanone (MEK)	ND	*	40		ug/L			07/19/13 14:46	4
2-Chlorotoluene	ND		4.0		ug/L			07/19/13 14:46	4
2-Hexanone	ND		40		ug/L			07/19/13 14:46	4
4-Chlorotoluene	ND		4.0		ug/L			07/19/13 14:46	4
4-Isopropyltoluene	ND		4.0		ug/L			07/19/13 14:46	4
4-Methyl-2-pentanone (MIBK)	ND		40		ug/L			07/19/13 14:46	4
Acetone	ND		200		ug/L			07/19/13 14:46	4
Benzene	ND		4.0		ug/L			07/19/13 14:46	4
Bromobenzene	ND		4.0		ug/L			07/19/13 14:46	4
Bromoform	ND		4.0		ug/L			07/19/13 14:46	4
Bromomethane	ND		8.0		ug/L			07/19/13 14:46	4
Carbon disulfide	ND		40		ug/L			07/19/13 14:46	4
Carbon tetrachloride	ND		4.0		ug/L			07/19/13 14:46	4
Chlorobenzene	ND		4.0		ug/L			07/19/13 14:46	4
Chlorobromomethane	ND		4.0		ug/L			07/19/13 14:46	4
Chlorodibromomethane	ND		2.0		ug/L			07/19/13 14:46	4
Chloroethane	ND		8.0		ug/L			07/19/13 14:46	4
Chloroform	ND		4.0		ug/L			07/19/13 14:46	4
Chloromethane	ND		8.0		ug/L			07/19/13 14:46	4

Client Sample ID: REW-12-20130718-01 — **Lab Sample ID: 480-42273-13**
Date Collected: 07/18/13 09:05 — **Matrix: Water**
Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**310**		4.0		ug/L			07/19/13 14:46	4
cis-1,3-Dichloropropene	ND		1.6		ug/L			07/19/13 14:46	4
Dichlorobromomethane	ND		2.0		ug/L			07/19/13 14:46	4
Dichlorodifluoromethane	ND		4.0		ug/L			07/19/13 14:46	4
Ethyl ether	ND		4.0		ug/L			07/19/13 14:46	4
Ethylbenzene	ND		4.0		ug/L			07/19/13 14:46	4
Ethylene Dibromide	ND		4.0		ug/L			07/19/13 14:46	4
Hexachlorobutadiene	ND		1.6		ug/L			07/19/13 14:46	4
Isopropyl ether	ND		40		ug/L			07/19/13 14:46	4
Isopropylbenzene	ND		4.0		ug/L			07/19/13 14:46	4
Methyl tert-butyl ether	ND		4.0		ug/L			07/19/13 14:46	4
Methylene Chloride	ND		4.0		ug/L			07/19/13 14:46	4
m-Xylene & p-Xylene	ND		8.0		ug/L			07/19/13 14:46	4
Naphthalene	ND		20		ug/L			07/19/13 14:46	4
n-Butylbenzene	ND		4.0		ug/L			07/19/13 14:46	4
N-Propylbenzene	ND		4.0		ug/L			07/19/13 14:46	4
o-Xylene	ND		4.0		ug/L			07/19/13 14:46	4
sec-Butylbenzene	ND		4.0		ug/L			07/19/13 14:46	4
Styrene	ND		4.0		ug/L			07/19/13 14:46	4
Tert-amyl methyl ether	ND		20		ug/L			07/19/13 14:46	4
Tert-butyl ethyl ether	ND		20		ug/L			07/19/13 14:46	4
tert-Butylbenzene	ND		4.0		ug/L			07/19/13 14:46	4
Tetrachloroethene	**8.7**		4.0		ug/L			07/19/13 14:46	4
Tetrahydrofuran	ND		40		ug/L			07/19/13 14:46	4
Toluene	ND		4.0		ug/L			07/19/13 14:46	4
trans-1,2-Dichloroethene	ND		4.0		ug/L			07/19/13 14:46	4
trans-1,3-Dichloropropene	ND		1.6		ug/L			07/19/13 14:46	4
Trichloroethene	**140**		4.0		ug/L			07/19/13 14:46	4
Trichlorofluoromethane	ND		4.0		ug/L			07/19/13 14:46	4
Vinyl chloride	**45**		4.0		ug/L			07/19/13 14:46	4
Dibromomethane	ND		4.0		ug/L			07/19/13 14:46	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*07/19/13 14:46*	*4*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*07/19/13 14:46*	*4*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*07/19/13 14:46*	*4*

Client Sample ID: DUPX1-20130717-01 — **Lab Sample ID: 480-42273-14**
Date Collected: 07/17/13 00:00 — **Matrix: Water**
Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			07/20/13 03:28	2
1,1,1-Trichloroethane	ND		2.0		ug/L			07/20/13 03:28	2
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			07/20/13 03:28	2
1,1,2-Trichloroethane	ND		2.0		ug/L			07/20/13 03:28	2
1,1-Dichloroethane	ND		2.0		ug/L			07/20/13 03:28	2
1,1-Dichloroethene	ND		2.0		ug/L			07/20/13 03:28	2
1,1-Dichloropropene	ND		2.0		ug/L			07/20/13 03:28	2

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

TestAmerica Job ID: 480-42273-1

Client Sample ID: DUPX1-20130717-01
Date Collected: 07/17/13 00:00
Date Received: 07/19/13 02:30

Lab Sample ID: 480-42273-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		2.0		ug/L			07/20/13 03:28	2
1,2,3-Trichloropropane	ND		2.0		ug/L			07/20/13 03:28	2
1,2,4-Trichlorobenzene	ND		2.0		ug/L			07/20/13 03:28	2
1,2,4-Trimethylbenzene	ND		2.0		ug/L			07/20/13 03:28	2
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			07/20/13 03:28	2
1,2-Dichlorobenzene	ND		2.0		ug/L			07/20/13 03:28	2
1,2-Dichloroethane	ND		2.0		ug/L			07/20/13 03:28	2
1,2-Dichloropropane	ND		2.0		ug/L			07/20/13 03:28	2
1,3,5-Trimethylbenzene	ND		2.0		ug/L			07/20/13 03:28	2
1,3-Dichlorobenzene	ND		2.0		ug/L			07/20/13 03:28	2
1,3-Dichloropropane	ND		2.0		ug/L			07/20/13 03:28	2
1,4-Dichlorobenzene	ND		2.0		ug/L			07/20/13 03:28	2
1,4-Dioxane	ND	*	100		ug/L			07/20/13 03:28	2
2,2-Dichloropropane	ND		2.0		ug/L			07/20/13 03:28	2
2-Butanone (MEK)	**31**	*	20		ug/L			07/20/13 03:28	2
2-Chlorotoluene	ND		2.0		ug/L			07/20/13 03:28	2
2-Hexanone	ND		20		ug/L			07/20/13 03:28	2
4-Chlorotoluene	ND		2.0		ug/L			07/20/13 03:28	2
4-Isopropyltoluene	ND		2.0		ug/L			07/20/13 03:28	2
4-Methyl-2-pentanone (MIBK)	ND		20		ug/L			07/20/13 03:28	2
Acetone	**530**	*	100		ug/L			07/20/13 03:28	2
Benzene	ND		2.0		ug/L			07/20/13 03:28	2
Bromobenzene	ND		2.0		ug/L			07/20/13 03:28	2
Bromoform	ND		2.0		ug/L			07/20/13 03:28	2
Bromomethane	ND		4.0		ug/L			07/20/13 03:28	2
Carbon disulfide	ND		20		ug/L			07/20/13 03:28	2
Carbon tetrachloride	ND		2.0		ug/L			07/20/13 03:28	2
Chlorobenzene	ND		2.0		ug/L			07/20/13 03:28	2
Chlorobromomethane	ND		2.0		ug/L			07/20/13 03:28	2
Chlorodibromomethane	ND		1.0		ug/L			07/20/13 03:28	2
Chloroethane	ND		4.0		ug/L			07/20/13 03:28	2
Chloroform	ND		2.0		ug/L			07/20/13 03:28	2
Chloromethane	ND		4.0		ug/L			07/20/13 03:28	2
cis-1,2-Dichloroethene	ND		2.0		ug/L			07/20/13 03:28	2
cis-1,3-Dichloropropene	ND		0.80		ug/L			07/20/13 03:28	2
Dichlorobromomethane	ND		1.0		ug/L			07/20/13 03:28	2
Dichlorodifluoromethane	ND	*	2.0		ug/L			07/20/13 03:28	2
Ethyl ether	ND		2.0		ug/L			07/20/13 03:28	2
Ethylbenzene	ND		2.0		ug/L			07/20/13 03:28	2
Ethylene Dibromide	ND		2.0		ug/L			07/20/13 03:28	2
Hexachlorobutadiene	ND		0.80		ug/L			07/20/13 03:28	2
Isopropyl ether	ND		20		ug/L			07/20/13 03:28	2
Isopropylbenzene	ND		2.0		ug/L			07/20/13 03:28	2
Methyl tert-butyl ether	ND		2.0		ug/L			07/20/13 03:28	2
Methylene Chloride	ND		2.0		ug/L			07/20/13 03:28	2
m-Xylene & p-Xylene	ND		4.0		ug/L			07/20/13 03:28	2
Naphthalene	ND		10		ug/L			07/20/13 03:28	2
n-Butylbenzene	ND		2.0		ug/L			07/20/13 03:28	2
N-Propylbenzene	ND		2.0		ug/L			07/20/13 03:28	2

Client Sample ID: DUPX1-20130717-01 — **Lab Sample ID: 480-42273-14**
Date Collected: 07/17/13 00:00 — **Matrix: Water**
Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		2.0		ug/L			07/20/13 03:28	2
sec-Butylbenzene	ND		2.0		ug/L			07/20/13 03:28	2
Styrene	ND		2.0		ug/L			07/20/13 03:28	2
Tert-amyl methyl ether	ND		10		ug/L			07/20/13 03:28	2
Tert-butyl ethyl ether	ND		10		ug/L			07/20/13 03:28	2
tert-Butylbenzene	ND		2.0		ug/L			07/20/13 03:28	2
Tetrachloroethene	ND		2.0		ug/L			07/20/13 03:28	2
Tetrahydrofuran	ND		20		ug/L			07/20/13 03:28	2
Toluene	ND		2.0		ug/L			07/20/13 03:28	2
trans-1,2-Dichloroethene	ND		2.0		ug/L			07/20/13 03:28	2
trans-1,3-Dichloropropene	ND		0.80		ug/L			07/20/13 03:28	2
Trichloroethene	ND		2.0		ug/L			07/20/13 03:28	2
Trichlorofluoromethane	ND		2.0		ug/L			07/20/13 03:28	2
Vinyl chloride	ND		2.0		ug/L			07/20/13 03:28	2
Dibromomethane	ND		2.0		ug/L			07/20/13 03:28	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*07/20/13 03:28*	*2*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*07/20/13 03:28*	*2*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*07/20/13 03:28*	*2*

Client Sample ID: DUPX2-20130718-01 — **Lab Sample ID: 480-42273-15**
Date Collected: 07/18/13 00:00 — **Matrix: Water**
Date Received: 07/19/13 02:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.0		ug/L			07/20/13 03:52	4
1,1,1-Trichloroethane	ND		4.0		ug/L			07/20/13 03:52	4
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L			07/20/13 03:52	4
1,1,2-Trichloroethane	ND		4.0		ug/L			07/20/13 03:52	4
1,1-Dichloroethane	ND		4.0		ug/L			07/20/13 03:52	4
1,1-Dichloroethene	ND		4.0		ug/L			07/20/13 03:52	4
1,1-Dichloropropene	ND		4.0		ug/L			07/20/13 03:52	4
1,2,3-Trichlorobenzene	ND		4.0		ug/L			07/20/13 03:52	4
1,2,3-Trichloropropane	ND		4.0		ug/L			07/20/13 03:52	4
1,2,4-Trichlorobenzene	ND		4.0		ug/L			07/20/13 03:52	4
1,2,4-Trimethylbenzene	ND		4.0		ug/L			07/20/13 03:52	4
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			07/20/13 03:52	4
1,2-Dichlorobenzene	ND		4.0		ug/L			07/20/13 03:52	4
1,2-Dichloroethane	ND		4.0		ug/L			07/20/13 03:52	4
1,2-Dichloropropane	ND		4.0		ug/L			07/20/13 03:52	4
1,3,5-Trimethylbenzene	ND		4.0		ug/L			07/20/13 03:52	4
1,3-Dichlorobenzene	ND		4.0		ug/L			07/20/13 03:52	4
1,3-Dichloropropane	ND		4.0		ug/L			07/20/13 03:52	4
1,4-Dichlorobenzene	ND		4.0		ug/L			07/20/13 03:52	4
1,4-Dioxane	ND	*	200		ug/L			07/20/13 03:52	4
2,2-Dichloropropane	ND		4.0		ug/L			07/20/13 03:52	4
2-Butanone (MEK)	**79**	*	40		ug/L			07/20/13 03:52	4
2-Chlorotoluene	ND		4.0		ug/L			07/20/13 03:52	4

Client Sample ID: DUPX2-20130718-01
Date Collected: 07/18/13 00:00
Date Received: 07/19/13 02:30

Lab Sample ID: 480-42273-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	ND		40		ug/L			07/20/13 03:52	4
4-Chlorotoluene	ND		4.0		ug/L			07/20/13 03:52	4
4-Isopropyltoluene	ND		4.0		ug/L			07/20/13 03:52	4
4-Methyl-2-pentanone (MIBK)	ND		40		ug/L			07/20/13 03:52	4
Acetone	ND	*	200		ug/L			07/20/13 03:52	4
Benzene	ND		4.0		ug/L			07/20/13 03:52	4
Bromobenzene	ND		4.0		ug/L			07/20/13 03:52	4
Bromoform	ND		4.0		ug/L			07/20/13 03:52	4
Bromomethane	ND		8.0		ug/L			07/20/13 03:52	4
Carbon disulfide	ND		40		ug/L			07/20/13 03:52	4
Carbon tetrachloride	ND		4.0		ug/L			07/20/13 03:52	4
Chlorobenzene	ND		4.0		ug/L			07/20/13 03:52	4
Chlorobromomethane	ND		4.0		ug/L			07/20/13 03:52	4
Chlorodibromomethane	ND		2.0		ug/L			07/20/13 03:52	4
Chloroethane	ND		8.0		ug/L			07/20/13 03:52	4
Chloroform	ND		4.0		ug/L			07/20/13 03:52	4
Chloromethane	ND		8.0		ug/L			07/20/13 03:52	4
cis-1,2-Dichloroethene	**230**		4.0		ug/L			07/20/13 03:52	4
cis-1,3-Dichloropropene	ND		1.6		ug/L			07/20/13 03:52	4
Dichlorobromomethane	ND		2.0		ug/L			07/20/13 03:52	4
Dichlorodifluoromethane	ND	*	4.0		ug/L			07/20/13 03:52	4
Ethyl ether	ND		4.0		ug/L			07/20/13 03:52	4
Ethylbenzene	ND		4.0		ug/L			07/20/13 03:52	4
Ethylene Dibromide	ND		4.0		ug/L			07/20/13 03:52	4
Hexachlorobutadiene	ND		1.6		ug/L			07/20/13 03:52	4
Isopropyl ether	ND		40		ug/L			07/20/13 03:52	4
Isopropylbenzene	ND		4.0		ug/L			07/20/13 03:52	4
Methyl tert-butyl ether	ND		4.0		ug/L			07/20/13 03:52	4
Methylene Chloride	ND		4.0		ug/L			07/20/13 03:52	4
m-Xylene & p-Xylene	**10**		8.0		ug/L			07/20/13 03:52	4
Naphthalene	ND		20		ug/L			07/20/13 03:52	4
n-Butylbenzene	ND		4.0		ug/L			07/20/13 03:52	4
N-Propylbenzene	ND		4.0		ug/L			07/20/13 03:52	4
o-Xylene	ND		4.0		ug/L			07/20/13 03:52	4
sec-Butylbenzene	ND		4.0		ug/L			07/20/13 03:52	4
Styrene	ND		4.0		ug/L			07/20/13 03:52	4
Tert-amyl methyl ether	ND		20		ug/L			07/20/13 03:52	4
Tert-butyl ethyl ether	ND		20		ug/L			07/20/13 03:52	4
tert-Butylbenzene	ND		4.0		ug/L			07/20/13 03:52	4
Tetrachloroethene	ND		4.0		ug/L			07/20/13 03:52	4
Tetrahydrofuran	ND		40		ug/L			07/20/13 03:52	4
Toluene	**18**		4.0		ug/L			07/20/13 03:52	4
trans-1,2-Dichloroethene	ND		4.0		ug/L			07/20/13 03:52	4
trans-1,3-Dichloropropene	ND		1.6		ug/L			07/20/13 03:52	4
Trichloroethene	ND		4.0		ug/L			07/20/13 03:52	4
Trichlorofluoromethane	ND		4.0		ug/L			07/20/13 03:52	4
Vinyl chloride	**150**		4.0		ug/L			07/20/13 03:52	4
Dibromomethane	ND		4.0		ug/L			07/20/13 03:52	4

Client Sample ID: DUPX2-20130718-01

Lab Sample ID: 480-42273-15

Date Collected: 07/18/13 00:00

Matrix: Water

Date Received: 07/19/13 02:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/20/13 03:52*	*4*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*07/20/13 03:52*	*4*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*07/20/13 03:52*	*4*

Client Sample ID: Trip Blanks

Lab Sample ID: 480-42273-16

Date Collected: 07/18/13 00:00

Matrix: Water

Date Received: 07/19/13 02:30

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			07/19/13 16:02	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/19/13 16:02	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/19/13 16:02	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/19/13 16:02	1
1,1-Dichloroethane	ND		1.0		ug/L			07/19/13 16:02	1
1,1-Dichloroethene	ND		1.0		ug/L			07/19/13 16:02	1
1,1-Dichloropropene	ND		1.0		ug/L			07/19/13 16:02	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/19/13 16:02	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/19/13 16:02	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/19/13 16:02	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/19/13 16:02	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/19/13 16:02	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/19/13 16:02	1
1,2-Dichloroethane	ND		1.0		ug/L			07/19/13 16:02	1
1,2-Dichloropropane	ND		1.0		ug/L			07/19/13 16:02	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/19/13 16:02	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/19/13 16:02	1
1,3-Dichloropropane	ND		1.0		ug/L			07/19/13 16:02	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/19/13 16:02	1
1,4-Dioxane	ND	*	50		ug/L			07/19/13 16:02	1
2,2-Dichloropropane	ND		1.0		ug/L			07/19/13 16:02	1
2-Butanone (MEK)	ND	*	10		ug/L			07/19/13 16:02	1
2-Chlorotoluene	ND		1.0		ug/L			07/19/13 16:02	1
2-Hexanone	ND		10		ug/L			07/19/13 16:02	1
4-Chlorotoluene	ND		1.0		ug/L			07/19/13 16:02	1
4-Isopropyltoluene	ND		1.0		ug/L			07/19/13 16:02	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/19/13 16:02	1
Acetone	ND		50		ug/L			07/19/13 16:02	1
Benzene	ND		1.0		ug/L			07/19/13 16:02	1
Bromobenzene	ND		1.0		ug/L			07/19/13 16:02	1
Bromoform	ND		1.0		ug/L			07/19/13 16:02	1
Bromomethane	ND		2.0		ug/L			07/19/13 16:02	1
Carbon disulfide	ND		10		ug/L			07/19/13 16:02	1
Carbon tetrachloride	ND		1.0		ug/L			07/19/13 16:02	1
Chlorobenzene	ND		1.0		ug/L			07/19/13 16:02	1
Chlorobromomethane	ND		1.0		ug/L			07/19/13 16:02	1
Chlorodibromomethane	ND		0.50		ug/L			07/19/13 16:02	1
Chloroethane	ND		2.0		ug/L			07/19/13 16:02	1
Chloroform	ND		1.0		ug/L			07/19/13 16:02	1
Chloromethane	ND		2.0		ug/L			07/19/13 16:02	1

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

TestAmerica Job ID: 480-42273-1

Client Sample ID: Trip Blanks
Date Collected: 07/18/13 00:00
Date Received: 07/19/13 02:30

Lab Sample ID: 480-42273-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/19/13 16:02	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/19/13 16:02	1
Dichlorobromomethane	ND		0.50		ug/L			07/19/13 16:02	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/19/13 16:02	1
Ethyl ether	ND		1.0		ug/L			07/19/13 16:02	1
Ethylbenzene	ND		1.0		ug/L			07/19/13 16:02	1
Ethylene Dibromide	ND		1.0		ug/L			07/19/13 16:02	1
Hexachlorobutadiene	ND		0.40		ug/L			07/19/13 16:02	1
Isopropyl ether	ND		10		ug/L			07/19/13 16:02	1
Isopropylbenzene	ND		1.0		ug/L			07/19/13 16:02	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/19/13 16:02	1
Methylene Chloride	ND		1.0		ug/L			07/19/13 16:02	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/19/13 16:02	1
Naphthalene	ND		5.0		ug/L			07/19/13 16:02	1
n-Butylbenzene	ND		1.0		ug/L			07/19/13 16:02	1
N-Propylbenzene	ND		1.0		ug/L			07/19/13 16:02	1
o-Xylene	ND		1.0		ug/L			07/19/13 16:02	1
sec-Butylbenzene	ND		1.0		ug/L			07/19/13 16:02	1
Styrene	ND		1.0		ug/L			07/19/13 16:02	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/19/13 16:02	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/19/13 16:02	1
tert-Butylbenzene	ND		1.0		ug/L			07/19/13 16:02	1
Tetrachloroethene	ND		1.0		ug/L			07/19/13 16:02	1
Tetrahydrofuran	ND		10		ug/L			07/19/13 16:02	1
Toluene	ND		1.0		ug/L			07/19/13 16:02	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/19/13 16:02	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/19/13 16:02	1
Trichloroethene	ND		1.0		ug/L			07/19/13 16:02	1
Trichlorofluoromethane	ND		1.0		ug/L			07/19/13 16:02	1
Vinyl chloride	ND		1.0		ug/L			07/19/13 16:02	1
Dibromomethane	ND		1.0		ug/L			07/19/13 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*07/19/13 16:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*07/19/13 16:02*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*07/19/13 16:02*	*1*

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	12DCE	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
480-42273-1	MW-261S-20130717-01	99	103	106
480-42273-2	MW-265M-20130717-01	101	105	106
480-42273-3	MW-267M-20130718-01	100	107	100
480-42273-4	MW-268M-20130718-01	100	101	103
480-42273-5	MW-552-20130717-01	100	104	104
480-42273-5 - DL	MW-552-20130717-01	96	102	101
480-42273-6	MW-561-20130718-01	100	106	103
480-42273-7	MW-562-20130717-01	99	107	103
480-42273-8	MW-563-20130718-01	100	106	105
480-42273-9	REW-1-20130717-01	98	103	101
480-42273-10	REW-6-20130718-01	100	104	103
480-42273-11	REW-7-20130718-01	98	98	100
480-42273-12	REW-8-20130718-01	100	102	104
480-42273-13	REW-12-20130718-01	99	100	99
480-42273-14	DUPX1-20130717-01	99	106	105
480-42273-15	DUPX2-20130718-01	98	107	106
480-42273-16	Trip Blanks	100	102	101
LCS 480-129639/5	Lab Control Sample	101	101	107
LCS 480-129686/5	Lab Control Sample	100	104	101
LCS 480-129793/4	Lab Control Sample	101	109	107
LCS 480-129923/5	Lab Control Sample	99	103	104
LCSD 480-129639/6	Lab Control Sample Dup	100	106	106
LCSD 480-129686/6	Lab Control Sample Dup	99	104	101
LCSD 480-129793/5	Lab Control Sample Dup	102	102	106
LCSD 480-129923/6	Lab Control Sample Dup	99	104	104
MB 480-129639/8	Method Blank	98	100	104
MB 480-129686/8	Method Blank	100	99	102
MB 480-129793/7	Method Blank	99	104	103
MB 480-129923/8	Method Blank	101	104	104

Surrogate Legend

TOL = Toluene-d8 (Surr)

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

BFB = 4-Bromofluorobenzene (Surr)

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

Lab Sample ID: MB 480-129639/8
Matrix: Water
Analysis Batch: 129639

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1 0		ug/L			07/16/13 11:46	1
1,1,1-Trichloroethane	ND		1 0		ug/L			07/16/13 11:46	1
1,1,2,2-Tetrachloroethane	ND		0 0		ug/L			07/16/13 11:46	1
1,1,2-Trichloroethane	ND		1 0		ug/L			07/16/13 11:46	1
1,1-Dichloroethane	ND		1 0		ug/L			07/16/13 11:46	1
1,1-Dichloroethene	ND		1 0		ug/L			07/16/13 11:46	1
1,1-Dichlorozrozene	ND		1 0		ug/L			07/16/13 11:46	1
1,2,3-Trichlorobenxene	ND		1 0		ug/L			07/16/13 11:46	1
1,2,3-Trichlorozrozane	ND		1 0		ug/L			07/16/13 11:46	1
1,2,4-Trichlorobenxene	ND		1 0		ug/L			07/16/13 11:46	1
1,2,4-Trimethylbenxene	ND		1 0		ug/L			07/16/13 11:46	1
1,2-Dibromo-3-Chlorozrozane	ND		p 0		ug/L			07/16/13 11:46	1
1,2-Dichlorobenxene	ND		1 0		ug/L			07/16/13 11:46	1
1,2-Dichloroethane	ND		1 0		ug/L			07/16/13 11:46	1
1,2-Dichlorozrozane	ND		1 0		ug/L			07/16/13 11:46	1
1,3,p-Trimethylbenxene	ND		1 0		ug/L			07/16/13 11:46	1
1,3-Dichlorobenxene	ND		1 0		ug/L			07/16/13 11:46	1
1,3-Dichlorozrozane	ND		1 0		ug/L			07/16/13 11:46	1
1,4-Dichlorobenxene	ND		1 0		ug/L			07/16/13 11:46	1
1,4-Dio*ane	ND		p 0		ug/L			07/16/13 11:46	1
2,2-Dichlorozrozane	ND		1 0		ug/L			07/16/13 11:46	1
2-Butanone (MEK)	ND		10		ug/L			07/16/13 11:46	1
2-Chlorotoluene	ND		1 0		ug/L			07/16/13 11:46	1
2-He*anone	ND		10		ug/L			07/16/13 11:46	1
4-Chlorotoluene	ND		1 0		ug/L			07/16/13 11:46	1
4-Isozrozyltoluene	ND		1 0		ug/L			07/16/13 11:46	1
4-Methyl-2-zentanone (MIBK)	ND		10		ug/L			07/16/13 11:46	1
Acetone	ND		p 0		ug/L			07/16/13 11:46	1
Benxene	ND		1 0		ug/L			07/16/13 11:46	1
Bromobenxene	ND		1 0		ug/L			07/16/13 11:46	1
Bromoform	ND		1 0		ug/L			07/16/13 11:46	1
Bromomethane	ND		2 0		ug/L			07/16/13 11:46	1
Carbon disulfide	ND		10		ug/L			07/16/13 11:46	1
Carbon tetrachloride	ND		1 0		ug/L			07/16/13 11:46	1
Chlorobenxene	ND		1 0		ug/L			07/16/13 11:46	1
Chlorobromomethane	ND		1 0		ug/L			07/16/13 11:46	1
Chlorodibromomethane	ND		0 0		ug/L			07/16/13 11:46	1
Chloroethane	ND		2 0		ug/L			07/16/13 11:46	1
Chloroform	ND		1 0		ug/L			07/16/13 11:46	1
Chloromethane	ND		2 0		ug/L			07/16/13 11:46	1
cis-1,2-Dichloroethene	ND		1 0		ug/L			07/16/13 11:46	1
cis-1,3-Dichlorozrozene	ND		0 4 0		ug/L			07/16/13 11:46	1
Dichlorobromomethane	ND		0 0		ug/L			07/16/13 11:46	1
Dichlorodifluoromethane	ND		1 0		ug/L			07/16/13 11:46	1
Ethyl ether	ND		1 0		ug/L			07/16/13 11:46	1
Ethylbenxene	ND		1 0		ug/L			07/16/13 11:46	1
Ethylene Dibromide	ND		1 0		ug/L			07/16/13 11:46	1
He*achlorobutadiene	ND		0 4 0		ug/L			07/16/13 11:46	1

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

Lab Sample ID: MB 480-129639/8
Matrix: Water
Analysis Batch: 129639

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isozrozyl ether	ND		10		ug/L			07/16/13 11:46	1
Isozrozylbenxene	ND		1[illegible]0		ug/L			07/16/13 11:46	1
Methyl tert-butyl ether	ND		1[illegible]0		ug/L			07/16/13 11:46	1
Methylene Chloride	ND		1[illegible]0		ug/L			07/16/13 11:46	1
m-Xylene & z-Xylene	ND		2[illegible]0		ug/L			07/16/13 11:46	1
Nazhthalene	ND		p[illegible]0		ug/L			07/16/13 11:46	1
n-Butylbenxene	ND		1[illegible]0		ug/L			07/16/13 11:46	1
N-Prozylbenxene	ND		1[illegible]0		ug/L			07/16/13 11:46	1
o-Xylene	ND		1[illegible]0		ug/L			07/16/13 11:46	1
sec-Butylbenxene	ND		1[illegible]0		ug/L			07/16/13 11:46	1
Styrene	ND		1[illegible]0		ug/L			07/16/13 11:46	1
Tert-amyl methyl ether	ND		p[illegible]0		ug/L			07/16/13 11:46	1
Tert-butyl ethyl ether	ND		p[illegible]0		ug/L			07/16/13 11:46	1
tert-Butylbenxene	ND		1[illegible]0		ug/L			07/16/13 11:46	1
Tetrachloroethene	ND		1[illegible]0		ug/L			07/16/13 11:46	1
Tetrahydrofuran	ND		10		ug/L			07/16/13 11:46	1
Toluene	ND		1[illegible]0		ug/L			07/16/13 11:46	1
trans-1,2-Dichloroethene	ND		1[illegible]0		ug/L			07/16/13 11:46	1
trans-1,3-Dichlorozrozene	ND		0[illegible]40		ug/L			07/16/13 11:46	1
Trichloroethene	ND		1[illegible]0		ug/L			07/16/13 11:46	1
Trichlorofluoromethane	ND		1[illegible]0		ug/L			07/16/13 11:46	1
Vinyl chloride	ND		1[illegible]0		ug/L			07/16/13 11:46	1
Dibromomethane	ND		1[illegible]0		ug/L			07/16/13 11:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/19/13 11:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*07/19/13 11:49*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*07/19/13 11:49*	*1*

Lab Sample ID: LCS 480-129639/5
Matrix: Water
Analysis Batch: 129639

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	2[illegible]0	29[illegible]5		ug/L		109	70 - 130
1,1,1-Trichloroethane	2[illegible]0	29[illegible]9		ug/L		109	70 - 130
1,1,2,2-Tetrachloroethane	2[illegible]0	23[illegible]8		ug/L		6p	70 - 130
1,1,2-Trichloroethane	2[illegible]0	2p[illegible]5		ug/L		102	70 - 130
1,1-Dichloroethane	2[illegible]0	2p[illegible]4		ug/L		101	70 - 130
1,1-Dichloroethene	2[illegible]0	24[illegible]3		ug/L		67	70 - 130
1,1-Dichlorozrozene	2[illegible]0	24[illegible]9		ug/L		68	70 - 130
1,2,3-Trichlorobenxene	2[illegible]0	22[illegible]0		ug/L		88	70 - 130
1,2,3-Trichlorozrozane	2[illegible]0	2p[illegible]2		ug/L		101	70 - 130
1,2,4-Trichlorobenxene	2[illegible]0	23[illegible]1		ug/L		62	70 - 130
1,2,4-Trimethylbenxene	2[illegible]0	2p[illegible]3		ug/L		101	70 - 130
1,2-Dibromo-3-Chlorozrozane	2[illegible]0	24[illegible]0		ug/L		69	70 - 130
1,2-Dichlorobenxene	2[illegible]0	2p[illegible]4		ug/L		101	70 - 130
1,2-Dichloroethane	2[illegible]0	29[illegible]3		ug/L		10p	70 - 130

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

Lab Sample ID: LCS 480-129639/5
Matrix: Water
Analysis Batch: 129639

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorozrozane	2p50	2p50		ug/L		100	70 - 130
1,3,p-Trimethylbenxene	2p50	2p52		ug/L		101	70 - 130
1,3-Dichlorobenxene	2p50	2457		ug/L		66	70 - 130
1,3-Dichlorozrozane	2p50	2p5I		ug/L		101	70 - 130
1,4-Dichlorobenxene	2p50	2p5I		ug/L		101	70 - 130
1,4-Dio*ane	1000	1140		ug/L		114	70 - 130
2,2-Dichlorozrozane	2p50	2456		ug/L		66	70 - 130
2-Butanone (MEK)	12p	180	.	ug/L		144	70 - 130
2-Chlorotoluene	2p50	2p52		ug/L		101	70 - 130
2-He*anone	12p	131		ug/L		10p	70 - 130
4-Chlorotoluene	2p50	2p5I		ug/L		100	70 - 130
4-Isozrozyltoluene	2p50	2p58		ug/L		103	70 - 130
4-Methyl-2-zentanone (MIBK)	12p	129		ug/L		101	70 - 130
Acetone	12p	130		ug/L		104	70 - 130
Benxene	2p50	2458		ug/L		66	70 - 130
Bromobenxene	2p50	2352		ug/L		63	70 - 130
Bromoform	2p50	2952		ug/L		10p	70 - 130
Bromomethane	2p50	2758		ug/L		111	70 - 130
Carbon disulfide	2p50	2357		ug/L		6p	70 - 130
Carbon tetrachloride	2p50	2857		ug/L		11p	70 - 130
Chlorobenxene	2p50	2p58		ug/L		103	70 - 130
Chlorobromomethane	2p50	2p57		ug/L		103	70 - 130
Chlorodibromomethane	2p50	2956		ug/L		107	70 - 130
Chloroethane	2p50	2953		ug/L		10p	70 - 130
Chloroform	2p50	2458		ug/L		66	70 - 130
Chloromethane	2p50	2359		ug/L		64	70 - 130
cis-1,2-Dichloroethene	2p50	2p56		ug/L		104	70 - 130
cis-1,3-Dichlorozrozene	2p50	2p54		ug/L		102	70 - 130
Dichlorobromomethane	2p50	2p50		ug/L		100	70 - 130
Dichlorodifluoromethane	p050	p15I		ug/L		102	70 - 130
Ethyl ether	2p50	2954		ug/L		10p	70 - 130
Ethylbenxene	2p50	2p59		ug/L		102	70 - 130
Ethylene Dibromide	2p50	2p59		ug/L		103	70 - 130
He*achlorobutadiene	2p50	2353		ug/L		63	70 - 130
Isozrozyl ether	2p50	295p		ug/L		109	70 - 130
Isozrozylbenxene	2p50	2p52		ug/L		101	70 - 130
Methyl tert-butyl ether	2p50	2452		ug/L		67	70 - 130
Methylene Chloride	2p50	2453		ug/L		67	70 - 130
m-Xylene & z-Xylene	p050	p352		ug/L		109	70 - 130
Nazhthalene	2p50	2452		ug/L		67	70 - 130
n-Butylbenxene	2p50	2p53		ug/L		101	70 - 130
N-Prozylbenxene	2p50	2p52		ug/L		101	70 - 130
o-Xylene	2p50	2p59		ug/L		102	70 - 130
sec-Butylbenxene	2p50	2p5p		ug/L		102	70 - 130
Styrene	2p50	2p58		ug/L		103	70 - 130
Tert-amyl methyl ether	2p50	2p54		ug/L		102	70 - 130
Tert-butyl ethyl ether	2p50	295p		ug/L		109	70 - 130
tert-Butylbenxene	2p50	2p5I		ug/L		100	70 - 130

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

Lab Sample ID: LCS 480-129639/5
Matrix: Water
Analysis Batch: 129639

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	2p50	2756		ug/L		112	70 - 130
Tetrahydrofuran	12p	12p		ug/L		100	70 - 130
Toluene	2p50	2p58		ug/L		103	70 - 130
trans-1,2-Dichloroethene	2p50	2p53		ug/L		101	70 - 130
trans-1,3-Dichlorozrozene	2p50	2459		ug/L		66	70 - 130
Trichloroethene	2p50	2p50		ug/L		100	70 - 130
Trichlorofluoromethane	2p50	2853		ug/L		113	70 - 130
Vinyl chloride	2p50	2357		ug/L		6p	70 - 130
Dibromomethane	2p50	2458		ug/L		66	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 480-129639/6
Matrix: Water
Analysis Batch: 129639

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	2p50	2957		ug/L		107	70 - 130	1	20
1,1,1-Trichloroethane	2p50	2751		ug/L		108	70 - 130	2	20
1,1,2,2-Tetrachloroethane	2p50	2452		ug/L		67	70 - 130	2	20
1,1,2-Trichloroethane	2p50	2451		ug/L		69	70 - 130	9	20
1,1-Dichloroethane	2p50	2952		ug/L		10p	70 - 130	3	20
1,1-Dichloroethene	2p50	2p53		ug/L		101	70 - 130	4	20
1,1-Dichlorozrozene	2p50	2p53		ug/L		101	70 - 130	3	20
1,2,3-Trichlorobenxene	2p50	2350		ug/L		62	70 - 130	4	20
1,2,3-Trichlorozrozane	2p50	2p52		ug/L		101	70 - 130	0	20
1,2,4-Trichlorobenxene	2p50	2359		ug/L		64	70 - 130	2	20
1,2,4-Trimethylbenxene	2p50	245p		ug/L		68	70 - 130	3	20
1,2-Dibromo-3-Chlorozrozane	2p50	2356		ug/L		69	70 - 130	0	20
1,2-Dichlorobenxene	2p50	2458		ug/L		66	70 - 130	2	20
1,2-Dichloroethane	2p50	2953		ug/L		10p	70 - 130	0	20
1,2-Dichlorozrozane	2p50	2p53		ug/L		101	70 - 130	1	20
1,3,p-Trimethylbenxene	2p50	2p50		ug/L		100	70 - 130	1	20
1,3-Dichlorobenxene	2p50	2458		ug/L		66	70 - 130	0	20
1,3-Dichlorozrozane	2p50	2453		ug/L		67	70 - 130	3	20
1,4-Dichlorobenxene	2p50	2457		ug/L		66	70 - 130	2	20
1,4-Dio*ane	1000	11p0		ug/L		11p	70 - 130	1	20
2,2-Dichlorozrozane	2p50	2454		ug/L		67	70 - 130	2	20
2-Butanone (MEK)	12p	160	.	ug/L		1p2	70 - 130	p	20
2-Chlorotoluene	2p50	2p51		ug/L		100	70 - 130	1	20
2-He*anone	12p	128		ug/L		103	70 - 130	2	20
4-Chlorotoluene	2p50	2p53		ug/L		101	70 - 130	1	20
4-Isozrozyltoluene	2p50	2p54		ug/L		102	70 - 130	2	20
4-Methyl-2-zentanone (MIBK)	12p	129		ug/L		101	70 - 130	0	20
Acetone	12p	137		ug/L		110	70 - 130	p	20

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

Lab Sample ID: LCSD 480-129639/6
Matrix: Water
Analysis Batch: 129639

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	2p50	2457		ug/L		66	70 - 130	0	20
Bromobenxene	2p50	2352		ug/L		63	70 - 130	0	20
Bromoform	2p50	2951		ug/L		10p	70 - 130	0	20
Bromomethane	2p50	2853		ug/L		113	70 - 130	1	20
Carbon disulfide	2p50	2354		ug/L		64	70 - 130	1	20
Carbon tetrachloride	2p50	2858		ug/L		11p	70 - 130	0	20
Chlorobenxene	2p50	2p53		ug/L		101	70 - 130	2	20
Chlorobromomethane	2p50	2950		ug/L		104	70 - 130	1	20
Chlorodibromomethane	2p50	2p56		ug/L		104	70 - 130	4	20
Chloroethane	2p50	2751		ug/L		106	70 - 130	3	20
Chloroform	2p50	2p53		ug/L		101	70 - 130	2	20
Chloromethane	2p50	2353		ug/L		63	70 - 130	1	20
cis-1,2-Dichloroethene	2p50	2950		ug/L		104	70 - 130	0	20
cis-1,3-Dichlorozrozene	2p50	2p58		ug/L		103	70 - 130	1	20
Dichlorobromomethane	2p50	2p54		ug/L		102	70 - 130	2	20
Dichlorodifluoromethane	p050	p05p		ug/L		101	70 - 130	1	20
Ethyl ether	2p50	275p		ug/L		110	70 - 130	4	20
Ethylbenxene	2p50	245p		ug/L		68	70 - 130	4	20
Ethylene Dibromide	2p50	2456		ug/L		100	70 - 130	3	20
He*achlorobutadiene	2p50	225p		ug/L		60	70 - 130	3	20
Isozrozyl ether	2p50	2752		ug/L		106	70 - 130	3	20
Isozrozylbenxene	2p50	245p		ug/L		68	70 - 130	3	20
Methyl tert-butyl ether	2p50	2p57		ug/L		103	70 - 130	9	20
Methylene Chloride	2p50	2454		ug/L		67	70 - 130	0	20
m-Xylene & z-Xylene	p050	p154		ug/L		103	70 - 130	3	20
Nazhthalene	2p50	2457		ug/L		66	70 - 130	2	20
n-Butylbenxene	2p50	2458		ug/L		66	70 - 130	2	20
N-Prozylbenxene	2p50	2453		ug/L		67	70 - 130	3	20
o-Xylene	2p50	2p5p		ug/L		102	70 - 130	0	20
sec-Butylbenxene	2p50	2456		ug/L		100	70 - 130	2	20
Styrene	2p50	2456		ug/L		100	70 - 130	3	20
Tert-amyl methyl ether	2p50	2956		ug/L		108	70 - 130	9	20
Tert-butyl ethyl ether	2p50	2754		ug/L		106	70 - 130	3	20
tert-Butylbenxene	2p50	2p51		ug/L		101	70 - 130	0	20
Tetrachloroethene	2p50	2956		ug/L		108	70 - 130	4	20
Tetrahydrofuran	12p	132		ug/L		109	70 - 130	9	20
Toluene	2p50	2456		ug/L		100	70 - 130	4	20
trans-1,2-Dichloroethene	2p50	2456		ug/L		100	70 - 130	1	20
trans-1,3-Dichlorozrozene	2p50	2458		ug/L		66	70 - 130	0	20
Trichloroethene	2p50	2p5p		ug/L		102	70 - 130	2	20
Trichlorofluoromethane	2p50	2757		ug/L		111	70 - 130	2	20
Vinyl chloride	2p50	2358		ug/L		6p	70 - 130	0	20
Dibromomethane	2p50	2951		ug/L		104	70 - 130	p	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*

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

Lab Sample ID: MB 480-129686/8
Matrix: Water
Analysis Batch: 129686

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1	0	ug/L			07/16/13 12:02	1
1,1,1-Trichloroethane	ND		1	0	ug/L			07/16/13 12:02	1
1,1,2,2-Tetrachloroethane	ND		0	5	0 ug/L			07/16/13 12:02	1
1,1,2-Trichloroethane	ND		1	0	ug/L			07/16/13 12:02	1
1,1-Dichloroethane	ND		1	0	ug/L			07/16/13 12:02	1
1,1-Dichloroethene	ND		1	0	ug/L			07/16/13 12:02	1
1,1-Dichlorozrozene	ND		1	0	ug/L			07/16/13 12:02	1
1,2,3-Trichlorobenxene	ND		1	0	ug/L			07/16/13 12:02	1
1,2,3-Trichlorozrozane	ND		1	0	ug/L			07/16/13 12:02	1
1,2,4-Trichlorobenxene	ND		1	0	ug/L			07/16/13 12:02	1
1,2,4-Trimethylbenxene	ND		1	0	ug/L			07/16/13 12:02	1
1,2-Dibromo-3-Chlorozrozane	ND		p	0	ug/L			07/16/13 12:02	1
1,2-Dichlorobenxene	ND		1	0	ug/L			07/16/13 12:02	1
1,2-Dichloroethane	ND		1	0	ug/L			07/16/13 12:02	1
1,2-Dichlorozrozane	ND		1	0	ug/L			07/16/13 12:02	1
1,3,p-Trimethylbenxene	ND		1	0	ug/L			07/16/13 12:02	1
1,3-Dichlorobenxene	ND		1	0	ug/L			07/16/13 12:02	1
1,3-Dichlorozrozane	ND		1	0	ug/L			07/16/13 12:02	1
1,4-Dichlorobenxene	ND		1	0	ug/L			07/16/13 12:02	1
1,4-Dio*ane	ND		p	0	ug/L			07/16/13 12:02	1
2,2-Dichlorozrozane	ND		1	0	ug/L			07/16/13 12:02	1
2-Butanone (MEK)	ND		1	0	ug/L			07/16/13 12:02	1
2-Chlorotoluene	ND		1	0	ug/L			07/16/13 12:02	1
2-He*anone	ND		1	0	ug/L			07/16/13 12:02	1
4-Chlorotoluene	ND		1	0	ug/L			07/16/13 12:02	1
4-Isozrozyltoluene	ND		1	0	ug/L			07/16/13 12:02	1
4-Methyl-2-zentanone (MIBK)	ND		1	0	ug/L			07/16/13 12:02	1
Acetone	ND		p	0	ug/L			07/16/13 12:02	1
Benxene	ND		1	0	ug/L			07/16/13 12:02	1
Bromobenxene	ND		1	0	ug/L			07/16/13 12:02	1
Bromoform	ND		1	0	ug/L			07/16/13 12:02	1
Bromomethane	ND		2	0	ug/L			07/16/13 12:02	1
Carbon disulfide	ND		1	0	ug/L			07/16/13 12:02	1
Carbon tetrachloride	ND		1	0	ug/L			07/16/13 12:02	1
Chlorobenxene	ND		1	0	ug/L			07/16/13 12:02	1
Chlorobromomethane	ND		1	0	ug/L			07/16/13 12:02	1
Chlorodibromomethane	ND		0	5	0 ug/L			07/16/13 12:02	1
Chloroethane	ND		2	0	ug/L			07/16/13 12:02	1
Chloroform	ND		1	0	ug/L			07/16/13 12:02	1
Chloromethane	ND		2	0	ug/L			07/16/13 12:02	1
cis-1,2-Dichloroethene	ND		1	0	ug/L			07/16/13 12:02	1
cis-1,3-Dichlorozrozene	ND		0	5	4 0 ug/L			07/16/13 12:02	1
Dichlorobromomethane	ND		0	5	0 ug/L			07/16/13 12:02	1
Dichlorodifluoromethane	ND		1	0	ug/L			07/16/13 12:02	1
Ethyl ether	ND		1	0	ug/L			07/16/13 12:02	1
Ethylbenxene	ND		1	0	ug/L			07/16/13 12:02	1
Ethylene Dibromide	ND		1	0	ug/L			07/16/13 12:02	1
He*achlorobutadiene	ND		0	5	4 0 ug/L			07/16/13 12:02	1

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

Lab Sample ID: MB 480-129686/8
Matrix: Water
Analysis Batch: 129686

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isozrozyl ether	ND		10		ug/L			07/16/13 12:02	1
Isozrozylbenxene	ND		150		ug/L			07/16/13 12:02	1
Methyl tert-butyl ether	ND		150		ug/L			07/16/13 12:02	1
Methylene Chloride	ND		150		ug/L			07/16/13 12:02	1
m-Xylene & z-Xylene	ND		250		ug/L			07/16/13 12:02	1
Nazhthalene	ND		p50		ug/L			07/16/13 12:02	1
n-Butylbenxene	ND		150		ug/L			07/16/13 12:02	1
N-Prozylbenxene	ND		150		ug/L			07/16/13 12:02	1
o-Xylene	ND		150		ug/L			07/16/13 12:02	1
sec-Butylbenxene	ND		150		ug/L			07/16/13 12:02	1
Styrene	ND		150		ug/L			07/16/13 12:02	1
Tert-amyl methyl ether	ND		p50		ug/L			07/16/13 12:02	1
Tert-butyl ethyl ether	ND		p50		ug/L			07/16/13 12:02	1
tert-Butylbenxene	ND		150		ug/L			07/16/13 12:02	1
Tetrachloroethene	ND		150		ug/L			07/16/13 12:02	1
Tetrahydrofuran	ND		10		ug/L			07/16/13 12:02	1
Toluene	ND		150		ug/L			07/16/13 12:02	1
trans-1,2-Dichloroethene	ND		150		ug/L			07/16/13 12:02	1
trans-1,3-Dichlorozrozene	ND		0540		ug/L			07/16/13 12:02	1
Trichloroethene	ND		150		ug/L			07/16/13 12:02	1
Trichlorofluoromethane	ND		150		ug/L			07/16/13 12:02	1
Vinyl chloride	ND		150		ug/L			07/16/13 12:02	1
Dibromomethane	ND		150		ug/L			07/16/13 12:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*07/19/13 12:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*07/19/13 12:02*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*07/19/13 12:02*	*1*

Lab Sample ID: LCS 480-129686/5
Matrix: Water
Analysis Batch: 129686

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	2p50	2752		ug/L		106	70 - 130
1,1,1-Trichloroethane	2p50	2853		ug/L		113	70 - 130
1,1,2,2-Tetrachloroethane	2p50	295p		ug/L		109	70 - 130
1,1,2-Trichloroethane	2p50	2953		ug/L		10p	70 - 130
1,1-Dichloroethane	2p50	2757		ug/L		111	70 - 130
1,1-Dichloroethene	2p50	2752		ug/L		106	70 - 130
1,1-Dichlorozrozene	2p50	2854		ug/L		114	70 - 130
1,2,3-Trichlorobenxene	2p50	2954		ug/L		10p	70 - 130
1,2,3-Trichlorozrozane	2p50	2959		ug/L		109	70 - 130
1,2,4-Trichlorobenxene	2p50	2957		ug/L		107	70 - 130
1,2,4-Trimethylbenxene	2p50	2754		ug/L		110	70 - 130
1,2-Dibromo-3-Chlorozrozane	2p50	2353		ug/L		63	70 - 130
1,2-Dichlorobenxene	2p50	2954		ug/L		10p	70 - 130
1,2-Dichloroethane	2p50	2951		ug/L		10p	70 - 130

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

Lab Sample ID: LCS 480-129686/5
Matrix: Water
Analysis Batch: 129686

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorozrozane	2p50	2751		ug/L		108	70 - 130
1,3,p-Trimethylbenxene	2p50	275p		ug/L		110	70 - 130
1,3-Dichlorobenxene	2p50	295p		ug/L		109	70 - 130
1,3-Dichlorozrozane	2p50	2951		ug/L		104	70 - 130
1,4-Dichlorobenxene	2p50	2954		ug/L		109	70 - 130
1,4-Dio*ane	1000	1pp0	.	ug/L		1pp	70 - 130
2,2-Dichlorozrozane	2p50	2650		ug/L		119	70 - 130
2-Butanone (MEK)	12p	187	.	ug/L		1p0	70 - 130
2-Chlorotoluene	2p50	2857		ug/L		11p	70 - 130
2-He*anone	12p	131		ug/L		10p	70 - 130
4-Chlorotoluene	2p50	2859		ug/L		114	70 - 130
4-Isozrozyltoluene	2p50	2852		ug/L		113	70 - 130
4-Methyl-2-zentanone (MIBK)	12p	132		ug/L		109	70 - 130
Acetone	12p	128		ug/L		102	70 - 130
Benxene	2p50	2751		ug/L		108	70 - 130
Bromobenxene	2p50	2959		ug/L		109	70 - 130
Bromoform	2p50	2959		ug/L		109	70 - 130
Bromomethane	2p50	2459		ug/L		66	70 - 130
Carbon disulfide	2p50	2954		ug/L		10p	70 - 130
Carbon tetrachloride	2p50	2856		ug/L		11p	70 - 130
Chlorobenxene	2p50	295p		ug/L		109	70 - 130
Chlorobromomethane	2p50	2958		ug/L		107	70 - 130
Chlorodibromomethane	2p50	2958		ug/L		107	70 - 130
Chloroethane	2p50	2958		ug/L		107	70 - 130
Chloroform	2p50	2954		ug/L		10p	70 - 130
Chloromethane	2p50	2459		ug/L		68	70 - 130
cis-1,2-Dichloroethene	2p50	2956		ug/L		107	70 - 130
cis-1,3-Dichlorozrozene	2p50	2751		ug/L		106	70 - 130
Dichlorobromomethane	2p50	2958		ug/L		107	70 - 130
Dichlorodifluoromethane	p050	p450		ug/L		108	70 - 130
Ethyl ether	2p50	2758		ug/L		111	70 - 130
Ethylbenxene	2p50	2753		ug/L		106	70 - 130
Ethylene Dibromide	2p50	2959		ug/L		107	70 - 130
He*achlorobutadiene	2p50	2754		ug/L		106	70 - 130
Isozrozyl ether	2p50	2756		ug/L		111	70 - 130
Isozrozylbenxene	2p50	2756		ug/L		112	70 - 130
Methyl tert-butyl ether	2p50	2953		ug/L		10p	70 - 130
Methylene Chloride	2p50	2958		ug/L		107	70 - 130
m-Xylene & z-Xylene	p050	pp50		ug/L		110	70 - 130
Nazhthalene	2p50	2p58		ug/L		103	70 - 130
n-Butylbenxene	2p50	2852		ug/L		113	70 - 130
N-Prozylbenxene	2p50	2850		ug/L		112	70 - 130
o-Xylene	2p50	2752		ug/L		106	70 - 130
sec-Butylbenxene	2p50	2853		ug/L		113	70 - 130
Styrene	2p50	275p		ug/L		110	70 - 130
Tert-amyl methyl ether	2p50	295p		ug/L		109	70 - 130
Tert-butyl ethyl ether	2p50	2953		ug/L		10p	70 - 130
tert-Butylbenxene	2p50	2758		ug/L		111	70 - 130

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

Lab Sample ID: LCS 480-129686/5
Matrix: Water
Analysis Batch: 129686

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Tetrachloroethene			2p50	285p		ug/L		114	70 - 130		
Tetrahydrofuran			12p	131		ug/L		10p	70 - 130		
Toluene			2p50	2752		ug/L		106	70 - 130		
trans-1,2-Dichloroethene			2p50	2753		ug/L		106	70 - 130		
trans-1,3-Dichlorozrozene			2p50	2951		ug/L		104	70 - 130		
Trichloroethene			2p50	2959		ug/L		109	70 - 130		
Trichlorofluoromethane			2p50	2p58		ug/L		103	70 - 130		
Vinyl chloride			2p50	2p52		ug/L		101	70 - 130		
Dibromomethane			2p50	2952		ug/L		10p	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 480-129686/6
Matrix: Water
Analysis Batch: 129686

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			2p50	2953		ug/L		10p	70 - 130	3	20
1,1,1-Trichloroethane			2p50	2753		ug/L		106	70 - 130	4	20
1,1,2,2-Tetrachloroethane			2p50	2p56		ug/L		104	70 - 130	2	20
1,1,2-Trichloroethane			2p50	2p56		ug/L		104	70 - 130	2	20
1,1-Dichloroethane			2p50	2959		ug/L		107	70 - 130	4	20
1,1-Dichloroethene			2p50	295p		ug/L		109	70 - 130	3	20
1,1-Dichlorozrozene			2p50	2752		ug/L		106	70 - 130	4	20
1,2,3-Trichlorobenxene			2p50	2958		ug/L		107	70 - 130	2	20
1,2,3-Trichlorozrozane			2p50	2953		ug/L		10p	70 - 130	1	20
1,2,4-Trichlorobenxene			2p50	2952		ug/L		10p	70 - 130	2	20
1,2,4-Trimethylbenxene			2p50	2953		ug/L		10p	70 - 130	4	20
1,2-Dibromo-3-Chlorozrozane			2p50	2357		ug/L		6p	70 - 130	2	20
1,2-Dichlorobenxene			2p50	2p57		ug/L		103	70 - 130	2	20
1,2-Dichloroethane			2p50	2p5p		ug/L		102	70 - 130	3	20
1,2-Dichlorozrozane			2p50	2954		ug/L		10p	70 - 130	3	20
1,3,p-Trimethylbenxene			2p50	2959		ug/L		109	70 - 130	3	20
1,3-Dichlorobenxene			2p50	2p57		ug/L		103	70 - 130	3	20
1,3-Dichlorozrozane			2p50	2p56		ug/L		104	70 - 130	1	20
1,4-Dichlorobenxene			2p50	2p57		ug/L		103	70 - 130	3	20
1,4-Dio*ane			1000	1p90	.	ug/L		1p9	70 - 130	1	20
2,2-Dichlorozrozane			2p50	2758		ug/L		111	70 - 130	4	20
2-Butanone (MEK)			12p	189	.	ug/L		146	70 - 130	0	20
2-Chlorotoluene			2p50	2850		ug/L		112	70 - 130	3	20
2-He*anone			12p	131		ug/L		10p	70 - 130	1	20
4-Chlorotoluene			2p50	2751		ug/L		108	70 - 130	p	20
4-Isozrozyltoluene			2p50	2750		ug/L		108	70 - 130	p	20
4-Methyl-2-zentanone (MIBK)			12p	126		ug/L		103	70 - 130	2	20
Acetone			12p	130		ug/L		104	70 - 130	2	20

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

Lab Sample ID: LCSD 480-129686/6
Matrix: Water
Analysis Batch: 129686

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	2p50	295		ug/L		10p	70 - 130	3	20
Bromobenxene	2p50	2p59		ug/L		102	70 - 130	4	20
Bromoform	2p50	295		ug/L		10p	70 - 130	1	20
Bromomethane	2p50	235		ug/L		69	70 - 130	3	20
Carbon disulfide	2p50	2p5		ug/L		103	70 - 130	2	20
Carbon tetrachloride	2p50	275		ug/L		111	70 - 130	4	20
Chlorobenxene	2p50	295		ug/L		10p	70 - 130	1	20
Chlorobromomethane	2p50	275		ug/L		108	70 - 130	1	20
Chlorodibromomethane	2p50	295		ug/L		109	70 - 130	1	20
Chloroethane	2p50	2p5		ug/L		104	70 - 130	3	20
Chloroform	2p50	295		ug/L		104	70 - 130	2	20
Chloromethane	2p50	235p		ug/L		64	70 - 130	4	20
cis-1,2-Dichloroethene	2p50	2p5		ug/L		103	70 - 130	4	20
cis-1,3-Dichlorozrozene	2p50	275		ug/L		108	70 - 130	1	20
Dichlorobromomethane	2p50	295		ug/L		109	70 - 130	1	20
Dichlorodifluoromethane	p050	p15		ug/L		103	70 - 130	4	20
Ethyl ether	2p50	275		ug/L		110	70 - 130	1	20
Ethylbenxene	2p50	295		ug/L		104	70 - 130	p	20
Ethylene Dibromide	2p50	295		ug/L		10p	70 - 130	1	20
He*achlorobutadiene	2p50	295		ug/L		10p	70 - 130	4	20
Isozrozyl ether	2p50	275		ug/L		111	70 - 130	1	20
Isozrozylbenxene	2p50	295p		ug/L		109	70 - 130	p	20
Methyl tert-butyl ether	2p50	295		ug/L		10p	70 - 130	1	20
Methylene Chloride	2p50	295		ug/L		109	70 - 130	1	20
m-Xylene & z-Xylene	p050	p35		ug/L		109	70 - 130	3	20
Nazhthalene	2p50	295		ug/L		107	70 - 130	4	20
n-Butylbenxene	2p50	275		ug/L		108	70 - 130	4	20
N-Prozylbenxene	2p50	295		ug/L		107	70 - 130	p	20
o-Xylene	2p50	295		ug/L		10p	70 - 130	3	20
sec-Butylbenxene	2p50	275		ug/L		106	70 - 130	4	20
Styrene	2p50	295p		ug/L		109	70 - 130	4	20
Tert-amyl methyl ether	2p50	295		ug/L		10p	70 - 130	2	20
Tert-butyl ethyl ether	2p50	295		ug/L		10p	70 - 130	0	20
tert-Butylbenxene	2p50	295		ug/L		107	70 - 130	4	20
Tetrachloroethene	2p50	275		ug/L		106	70 - 130	4	20
Tetrahydrofuran	12p	133		ug/L		109	70 - 130	1	20
Toluene	2p50	295		ug/L		10p	70 - 130	4	20
trans-1,2-Dichloroethene	2p50	295		ug/L		104	70 - 130	4	20
trans-1,3-Dichlorozrozene	2p50	2p5		ug/L		103	70 - 130	1	20
Trichloroethene	2p50	2p5		ug/L		103	70 - 130	3	20
Trichlorofluoromethane	2p50	2p5		ug/L		100	70 - 130	3	20
Vinyl chloride	2p50	245		ug/L		69	70 - 130	p	20
Dibromomethane	2p50	2p5		ug/L		103	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*

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

Lab Sample ID: MB 480-129793/7
Matrix: Water
Analysis Batch: 129793

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/20/13 00:01	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/20/13 00:01	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/20/13 00:01	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/20/13 00:01	1
1,1-Dichloroethane	ND		1.0		ug/L			07/20/13 00:01	1
1,1-Dichloroethene	ND		1.0		ug/L			07/20/13 00:01	1
1,1-Dichlorozrozene	ND		1.0		ug/L			07/20/13 00:01	1
1,2,3-Trichlorobenxene	ND		1.0		ug/L			07/20/13 00:01	1
1,2,3-Trichlorozrozane	ND		1.0		ug/L			07/20/13 00:01	1
1,2,4-Trichlorobenxene	ND		1.0		ug/L			07/20/13 00:01	1
1,2,4-Trimethylbenxene	ND		1.0		ug/L			07/20/13 00:01	1
1,2-Dibromo-3-Chlorozrozane	ND		p5.0		ug/L			07/20/13 00:01	1
1,2-Dichlorobenxene	ND		1.0		ug/L			07/20/13 00:01	1
1,2-Dichloroethane	ND		1.0		ug/L			07/20/13 00:01	1
1,2-Dichlorozrozane	ND		1.0		ug/L			07/20/13 00:01	1
1,3,p-Trimethylbenxene	ND		1.0		ug/L			07/20/13 00:01	1
1,3-Dichlorobenxene	ND		1.0		ug/L			07/20/13 00:01	1
1,3-Dichlorozrozane	ND		1.0		ug/L			07/20/13 00:01	1
1,4-Dichlorobenxene	ND		1.0		ug/L			07/20/13 00:01	1
1,4-Dio*ane	ND		p0		ug/L			07/20/13 00:01	1
2,2-Dichlorozrozane	ND		1.0		ug/L			07/20/13 00:01	1
2-Butanone (MEK)	ND		10		ug/L			07/20/13 00:01	1
2-Chlorotoluene	ND		1.0		ug/L			07/20/13 00:01	1
2-He*anone	ND		10		ug/L			07/20/13 00:01	1
4-Chlorotoluene	ND		1.0		ug/L			07/20/13 00:01	1
4-Isozrozyltoluene	ND		1.0		ug/L			07/20/13 00:01	1
4-Methyl-2-zentanone (MIBK)	ND		10		ug/L			07/20/13 00:01	1
Acetone	ND		p0		ug/L			07/20/13 00:01	1
Benxene	ND		1.0		ug/L			07/20/13 00:01	1
Bromobenxene	ND		1.0		ug/L			07/20/13 00:01	1
Bromoform	ND		1.0		ug/L			07/20/13 00:01	1
Bromomethane	ND		2.0		ug/L			07/20/13 00:01	1
Carbon disulfide	ND		10		ug/L			07/20/13 00:01	1
Carbon tetrachloride	ND		1.0		ug/L			07/20/13 00:01	1
Chlorobenxene	ND		1.0		ug/L			07/20/13 00:01	1
Chlorobromomethane	ND		1.0		ug/L			07/20/13 00:01	1
Chlorodibromomethane	ND		0.50		ug/L			07/20/13 00:01	1
Chloroethane	ND		2.0		ug/L			07/20/13 00:01	1
Chloroform	ND		1.0		ug/L			07/20/13 00:01	1
Chloromethane	ND		2.0		ug/L			07/20/13 00:01	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/20/13 00:01	1
cis-1,3-Dichlorozrozene	ND		0.40		ug/L			07/20/13 00:01	1
Dichlorobromomethane	ND		0.50		ug/L			07/20/13 00:01	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/20/13 00:01	1
Ethyl ether	ND		1.0		ug/L			07/20/13 00:01	1
Ethylbenxene	ND		1.0		ug/L			07/20/13 00:01	1
Ethylene Dibromide	ND		1.0		ug/L			07/20/13 00:01	1
He*achlorobutadiene	ND		0.40		ug/L			07/20/13 00:01	1

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

Lab Sample ID: MB 480-129793/7
Matrix: Water
Analysis Batch: 129793

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isozrozyl ether	ND		10		ug/L			07/20/13 00:01	1
Isozrozylbenxene	ND		150		ug/L			07/20/13 00:01	1
Methyl tert-butyl ether	ND		150		ug/L			07/20/13 00:01	1
Methylene Chloride	ND		150		ug/L			07/20/13 00:01	1
m-Xylene & z-Xylene	ND		250		ug/L			07/20/13 00:01	1
Nazhthalene	ND		p50		ug/L			07/20/13 00:01	1
n-Butylbenxene	ND		150		ug/L			07/20/13 00:01	1
N-Prozylbenxene	ND		150		ug/L			07/20/13 00:01	1
o-Xylene	ND		150		ug/L			07/20/13 00:01	1
sec-Butylbenxene	ND		150		ug/L			07/20/13 00:01	1
Styrene	ND		150		ug/L			07/20/13 00:01	1
Tert-amyl methyl ether	ND		p50		ug/L			07/20/13 00:01	1
Tert-butyl ethyl ether	ND		p50		ug/L			07/20/13 00:01	1
tert-Butylbenxene	ND		150		ug/L			07/20/13 00:01	1
Tetrachloroethene	ND		150		ug/L			07/20/13 00:01	1
Tetrahydrofuran	ND		10		ug/L			07/20/13 00:01	1
Toluene	ND		150		ug/L			07/20/13 00:01	1
trans-1,2-Dichloroethene	ND		150		ug/L			07/20/13 00:01	1
trans-1,3-Dichlorozrozene	ND		0540		ug/L			07/20/13 00:01	1
Trichloroethene	ND		150		ug/L			07/20/13 00:01	1
Trichlorofluoromethane	ND		150		ug/L			07/20/13 00:01	1
Vinyl chloride	ND		150		ug/L			07/20/13 00:01	1
Dibromomethane	ND		150		ug/L			07/20/13 00:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*07/20/13 00:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*07/20/13 00:01*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*07/20/13 00:01*	*1*

Lab Sample ID: LCS 480-129793/4
Matrix: Water
Analysis Batch: 129793

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	2p50	2958		ug/L		107	70 - 130
1,1,1-Trichloroethane	2p50	2954		ug/L		10p	70 - 130
1,1,2,2-Tetrachloroethane	2p50	2454		ug/L		68	70 - 130
1,1,2-Trichloroethane	2p50	2359		ug/L		6p	70 - 130
1,1-Dichloroethane	2p50	2p57		ug/L		103	70 - 130
1,1-Dichloroethene	2p50	2457		ug/L		66	70 - 130
1,1-Dichlorozrozene	2p50	2458		ug/L		66	70 - 130
1,2,3-Trichlorobenxene	2p50	2351		ug/L		62	70 - 130
1,2,3-Trichlorozrozane	2p50	2959		ug/L		109	70 - 130
1,2,4-Trichlorobenxene	2p50	2258		ug/L		61	70 - 130
1,2,4-Trimethylbenxene	2p50	2454		ug/L		68	70 - 130
1,2-Dibromo-3-Chlorozrozane	2p50	2750		ug/L		108	70 - 130
1,2-Dichlorobenxene	2p50	2457		ug/L		66	70 - 130
1,2-Dichloroethane	2p50	2p56		ug/L		104	70 - 130

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

Lab Sample ID: LCS 480-129793/4
Matrix: Water
Analysis Batch: 129793

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorozrozane	2p50	2353		ug/L		63	70 - 130
1,3,p-Trimethylbenxene	2p50	2452		ug/L		67	70 - 130
1,3-Dichlorobenxene	2p50	2451		ug/L		69	70 - 130
1,3-Dichlorozrozane	2p50	2259		ug/L		61	70 - 130
1,4-Dichlorobenxene	2p50	2450		ug/L		69	70 - 130
1,4-Dio*ane	1000	1260		ug/L		126	70 - 130
2,2-Dichlorozrozane	2p50	2452		ug/L		67	70 - 130
2-Butanone (MEK)	12p	163	.	ug/L		1p4	70 - 130
2-Chlorotoluene	2p50	2454		ug/L		68	70 - 130
2-He*anone	12p	130		ug/L		104	70 - 130
4-Chlorotoluene	2p50	245p		ug/L		68	70 - 130
4-Isozrozyltoluene	2p50	2457		ug/L		66	70 - 130
4-Methyl-2-zentanone (MIBK)	12p	132		ug/L		10p	70 - 130
Acetone	12p	1p8		ug/L		129	70 - 130
Benxene	2p50	2454		ug/L		68	70 - 130
Bromobenxene	2p50	2257		ug/L		61	70 - 130
Bromoform	2p50	2456		ug/L		66	70 - 130
Bromomethane	2p50	2750		ug/L		108	70 - 130
Carbon disulfide	2p50	2150		ug/L		84	70 - 130
Carbon tetrachloride	2p50	2756		ug/L		112	70 - 130
Chlorobenxene	2p50	2359		ug/L		6p	70 - 130
Chlorobromomethane	2p50	2959		ug/L		109	70 - 130
Chlorodibromomethane	2p50	2459		ug/L		68	70 - 130
Chloroethane	2p50	2757		ug/L		111	70 - 130
Chloroform	2p50	2p52		ug/L		101	70 - 130
Chloromethane	2p50	2150		ug/L		84	70 - 130
cis-1,2-Dichloroethene	2p50	2954		ug/L		109	70 - 130
cis-1,3-Dichlorozrozene	2p50	2353		ug/L		63	70 - 130
Dichlorobromomethane	2p50	2454		ug/L		68	70 - 130
Dichlorodifluoromethane	p050	3p52		ug/L		70	70 - 130
Ethyl ether	2p50	2957		ug/L		107	70 - 130
Ethylbenxene	2p50	2359		ug/L		6p	70 - 130
Ethylene Dibromide	2p50	2451		ug/L		69	70 - 130
He*achlorobutadiene	2p50	2354		ug/L		63	70 - 130
Isozrozyl ether	2p50	2951		ug/L		104	70 - 130
Isozrozylbenxene	2p50	2453		ug/L		67	70 - 130
Methyl tert-butyl ether	2p50	2p52		ug/L		101	70 - 130
Methylene Chloride	2p50	2453		ug/L		67	70 - 130
m-Xylene & z-Xylene	p050	4653		ug/L		66	70 - 130
Nazhthalene	2p50	2p56		ug/L		104	70 - 130
n-Butylbenxene	2p50	2454		ug/L		67	70 - 130
N-Prozylbenxene	2p50	2358		ug/L		6p	70 - 130
o-Xylene	2p50	2p52		ug/L		101	70 - 130
sec-Butylbenxene	2p50	2452		ug/L		67	70 - 130
Styrene	2p50	2356		ug/L		6p	70 - 130
Tert-amyl methyl ether	2p50	2p51		ug/L		101	70 - 130
Tert-butyl ethyl ether	2p50	2p5p		ug/L		102	70 - 130
tert-Butylbenxene	2p50	2451		ug/L		69	70 - 130

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

Lab Sample ID: LCS 480-129793/4
Matrix: Water
Analysis Batch: 129793

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	2p50	2p5p		ug/L		102	70 - 130
Tetrahydrofuran	12p	141		ug/L		113	70 - 130
Toluene	2p50	235[illegible]		ug/L		6p	70 - 130
trans-1,2-Dichloroethene	2p50	2p53		ug/L		101	70 - 130
trans-1,3-Dichlorozrozene	2p50	2251		ug/L		86	70 - 130
Trichloroethene	2p50	2p50		ug/L		100	70 - 130
Trichlorofluoromethane	2p50	285[illegible]		ug/L		114	70 - 130
Vinyl chloride	2p50	2257		ug/L		61	70 - 130
Dibromomethane	2p50	2p51		ug/L		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 480-129793/5
Matrix: Water
Analysis Batch: 129793

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	2p50	245[illegible]		ug/L		66	70 - 130	8	20
1,1,1-Trichloroethane	2p50	245[illegible]		ug/L		66	70 - 130	9	20
1,1,2,2-Tetrachloroethane	2p50	235[illegible]		ug/L		63	70 - 130	p	20
1,1,2-Trichloroethane	2p50	235[illegible]		ug/L		69	70 - 130	1	20
1,1-Dichloroethane	2p50	235p		ug/L		64	70 - 130	6	20
1,1-Dichloroethene	2p50	225[illegible]		ug/L		61	70 - 130	8	20
1,1-Dichlorozrozene	2p50	225p		ug/L		60	70 - 130	6	20
1,2,3-Trichlorobenxene	2p50	2251		ug/L		88	70 - 130	4	20
1,2,3-Trichlorozrozane	2p50	2257		ug/L		61	70 - 130	19	20
1,2,4-Trichlorobenxene	2p50	2257		ug/L		61	70 - 130	0	20
1,2,4-Trimethylbenxene	2p50	235[illegible]		ug/L		6p	70 - 130	3	20
1,2-Dibromo-3-Chlorozrozane	2p50	2354		ug/L		64	70 - 130	14	20
1,2-Dichlorobenxene	2p50	245[illegible]		ug/L		67	70 - 130	2	20
1,2-Dichloroethane	2p50	2p50		ug/L		100	70 - 130	3	20
1,2-Dichlorozrozane	2p50	235[illegible]		ug/L		64	70 - 130	1	20
1,3,p-Trimethylbenxene	2p50	235[illegible]		ug/L		6p	70 - 130	2	20
1,3-Dichlorobenxene	2p50	235[illegible]		ug/L		64	70 - 130	2	20
1,3-Dichlorozrozane	2p50	235[illegible]		ug/L		6p	70 - 130	4	20
1,4-Dichlorobenxene	2p50	235[illegible]		ug/L		63	70 - 130	3	20
1,4-Dio*ane	1000	670	.	ug/L		67	70 - 130	28	20
2,2-Dichlorozrozane	2p50	225[illegible]		ug/L		60	70 - 130	7	20
2-Butanone (MEK)	12p	178	.	ug/L		142	70 - 130	8	20
2-Chlorotoluene	2p50	235[illegible]		ug/L		63	70 - 130	p	20
2-He*anone	12p	127		ug/L		101	70 - 130	3	20
4-Chlorotoluene	2p50	235[illegible]		ug/L		64	70 - 130	4	20
4-Isozrozyltoluene	2p50	245[illegible]		ug/L		67	70 - 130	1	20
4-Methyl-2-zentanone (MIBK)	12p	12p		ug/L		100	70 - 130	p	20
Acetone	12p	127	.	ug/L		101	70 - 130	22	20

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

Lab Sample ID: LCSD 480-129793/5
Matrix: Water
Analysis Batch: 129793

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	2p50	235l		ug/L		63	70 - 130	p	20
Bromobenxene	2p50	225		ug/L		86	70 - 130	2	20
Bromoform	2p50	238		ug/L		6p	70 - 130	4	20
Bromomethane	2p50	2p50		ug/L		100	70 - 130	8	20
Carbon disulfide	2p50	165		ug/L		76	70 - 130	9	20
Carbon tetrachloride	2p50	295		ug/L		10p	70 - 130	9	20
Chlorobenxene	2p50	238		ug/L		6p	70 - 130	1	20
Chlorobromomethane	2p50	245		ug/L		69	70 - 130	10	20
Chlorodibromomethane	2p50	245p		ug/L		68	70 - 130	1	20
Chloroethane	2p50	235		ug/L		6p	70 - 130	19	20
Chloroform	2p50	235		ug/L		63	70 - 130	8	20
Chloromethane	2p50	165p		ug/L		78	70 - 130	7	20
cis-1,2-Dichloroethene	2p50	245		ug/L		69	70 - 130	10	20
cis-1,3-Dichlorozrozene	2p50	238		ug/L		6p	70 - 130	2	20
Dichlorobromomethane	2p50	238		ug/L		6p	70 - 130	3	20
Dichlorodifluoromethane	p050	305p	.	ug/L		91	70 - 130	14	20
Ethyl ether	2p50	245		ug/L		66	70 - 130	7	20
Ethylbenxene	2p50	235p		ug/L		64	70 - 130	0	20
Ethylene Dibromide	2p50	245		ug/L		69	70 - 130	0	20
He*achlorobutadiene	2p50	215		ug/L		87	70 - 130	7	20
Isozrozyl ether	2p50	2p53		ug/L		101	70 - 130	3	20
Isozrozylbenxene	2p50	235		ug/L		6p	70 - 130	2	20
Methyl tert-butyl ether	2p50	235		ug/L		64	70 - 130	7	20
Methylene Chloride	2p50	225		ug/L		61	70 - 130	9	20
m-Xylene & z-Xylene	p050	485		ug/L		67	70 - 130	2	20
Nazhthalene	2p50	235		ug/L		64	70 - 130	6	20
n-Butylbenxene	2p50	235p		ug/L		64	70 - 130	4	20
N-Prozylbenxene	2p50	225		ug/L		62	70 - 130	4	20
o-Xylene	2p50	238		ug/L		6p	70 - 130	9	20
sec-Butylbenxene	2p50	235		ug/L		64	70 - 130	2	20
Styrene	2p50	245		ug/L		69	70 - 130	1	20
Tert-amyl methyl ether	2p50	245		ug/L		69	70 - 130	p	20
Tert-butyl ethyl ether	2p50	245l		ug/L		67	70 - 130	9	20
tert-Butylbenxene	2p50	235		ug/L		6p	70 - 130	2	20
Tetrachloroethene	2p50	245		ug/L		66	70 - 130	2	20
Tetrahydrofuran	12p	124		ug/L		66	70 - 130	13	20
Toluene	2p50	235		ug/L		64	70 - 130	1	20
trans-1,2-Dichloroethene	2p50	235		ug/L		64	70 - 130	7	20
trans-1,3-Dichlorozrozene	2p50	235		ug/L		63	70 - 130	p	20
Trichloroethene	2p50	235		ug/L		64	70 - 130	9	20
Trichlorofluoromethane	2p50	295l		ug/L		104	70 - 130	6	20
Vinyl chloride	2p50	205		ug/L		84	70 - 130	8	20
Dibromomethane	2p50	245		ug/L		67	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*

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

Lab Sample ID: MB 480-129923/8
Matrix: Water
Analysis Batch: 129923

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/22/13 12:1p	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/22/13 12:1p	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/22/13 12:1p	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/22/13 12:1p	1
1,1-Dichloroethane	ND		1.0		ug/L			07/22/13 12:1p	1
1,1-Dichloroethene	ND		1.0		ug/L			07/22/13 12:1p	1
1,1-Dichlorozrozene	ND		1.0		ug/L			07/22/13 12:1p	1
1,2,3-Trichlorobenxene	ND		1.0		ug/L			07/22/13 12:1p	1
1,2,3-Trichlorozrozane	ND		1.0		ug/L			07/22/13 12:1p	1
1,2,4-Trichlorobenxene	ND		1.0		ug/L			07/22/13 12:1p	1
1,2,4-Trimethylbenxene	ND		1.0		ug/L			07/22/13 12:1p	1
1,2-Dibromo-3-Chlorozrozane	ND		p5.0		ug/L			07/22/13 12:1p	1
1,2-Dichlorobenxene	ND		1.0		ug/L			07/22/13 12:1p	1
1,2-Dichloroethane	ND		1.0		ug/L			07/22/13 12:1p	1
1,2-Dichlorozrozane	ND		1.0		ug/L			07/22/13 12:1p	1
1,3,p-Trimethylbenxene	ND		1.0		ug/L			07/22/13 12:1p	1
1,3-Dichlorobenxene	ND		1.0		ug/L			07/22/13 12:1p	1
1,3-Dichlorozrozane	ND		1.0		ug/L			07/22/13 12:1p	1
1,4-Dichlorobenxene	ND		1.0		ug/L			07/22/13 12:1p	1
1,4-Dio*ane	ND		p0		ug/L			07/22/13 12:1p	1
2,2-Dichlorozrozane	ND		1.0		ug/L			07/22/13 12:1p	1
2-Butanone (MEK)	ND		10		ug/L			07/22/13 12:1p	1
2-Chlorotoluene	ND		1.0		ug/L			07/22/13 12:1p	1
2-He*anone	ND		10		ug/L			07/22/13 12:1p	1
4-Chlorotoluene	ND		1.0		ug/L			07/22/13 12:1p	1
4-Isozrozyltoluene	ND		1.0		ug/L			07/22/13 12:1p	1
4-Methyl-2-zentanone (MIBK)	ND		10		ug/L			07/22/13 12:1p	1
Acetone	ND		p0		ug/L			07/22/13 12:1p	1
Benxene	ND		1.0		ug/L			07/22/13 12:1p	1
Bromobenxene	ND		1.0		ug/L			07/22/13 12:1p	1
Bromoform	ND		1.0		ug/L			07/22/13 12:1p	1
Bromomethane	ND		2.0		ug/L			07/22/13 12:1p	1
Carbon disulfide	ND		10		ug/L			07/22/13 12:1p	1
Carbon tetrachloride	ND		1.0		ug/L			07/22/13 12:1p	1
Chlorobenxene	ND		1.0		ug/L			07/22/13 12:1p	1
Chlorobromomethane	ND		1.0		ug/L			07/22/13 12:1p	1
Chlorodibromomethane	ND		0.50		ug/L			07/22/13 12:1p	1
Chloroethane	ND		2.0		ug/L			07/22/13 12:1p	1
Chloroform	ND		1.0		ug/L			07/22/13 12:1p	1
Chloromethane	ND		2.0		ug/L			07/22/13 12:1p	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/22/13 12:1p	1
cis-1,3-Dichlorozrozene	ND		0.40		ug/L			07/22/13 12:1p	1
Dichlorobromomethane	ND		0.50		ug/L			07/22/13 12:1p	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/22/13 12:1p	1
Ethyl ether	ND		1.0		ug/L			07/22/13 12:1p	1
Ethylbenxene	ND		1.0		ug/L			07/22/13 12:1p	1
Ethylene Dibromide	ND		1.0		ug/L			07/22/13 12:1p	1
He*achlorobutadiene	ND		0.40		ug/L			07/22/13 12:1p	1

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

Lab Sample ID: MB 480-129923/8
Matrix: Water
Analysis Batch: 129923

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isozrozyl ether	ND		10		ug/L			07/22/13 12:1p	1
Isozrozylbenxene	ND		150		ug/L			07/22/13 12:1p	1
Methyl tert-butyl ether	ND		150		ug/L			07/22/13 12:1p	1
Methylene Chloride	ND		150		ug/L			07/22/13 12:1p	1
m-Xylene & z-Xylene	ND		250		ug/L			07/22/13 12:1p	1
Nazhthalene	ND		p50		ug/L			07/22/13 12:1p	1
n-Butylbenxene	ND		150		ug/L			07/22/13 12:1p	1
N-Prozylbenxene	ND		150		ug/L			07/22/13 12:1p	1
o-Xylene	ND		150		ug/L			07/22/13 12:1p	1
sec-Butylbenxene	ND		150		ug/L			07/22/13 12:1p	1
Styrene	ND		150		ug/L			07/22/13 12:1p	1
Tert-amyl methyl ether	ND		p50		ug/L			07/22/13 12:1p	1
Tert-butyl ethyl ether	ND		p50		ug/L			07/22/13 12:1p	1
tert-Butylbenxene	ND		150		ug/L			07/22/13 12:1p	1
Tetrachloroethene	ND		150		ug/L			07/22/13 12:1p	1
Tetrahydrofuran	ND		10		ug/L			07/22/13 12:1p	1
Toluene	ND		150		ug/L			07/22/13 12:1p	1
trans-1,2-Dichloroethene	ND		150		ug/L			07/22/13 12:1p	1
trans-1,3-Dichlorozrozene	ND		0540		ug/L			07/22/13 12:1p	1
Trichloroethene	ND		150		ug/L			07/22/13 12:1p	1
Trichlorofluoromethane	ND		150		ug/L			07/22/13 12:1p	1
Vinyl chloride	ND		150		ug/L			07/22/13 12:1p	1
Dibromomethane	ND		150		ug/L			07/22/13 12:1p	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*07/22/13 12:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*07/22/13 12:15*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*07/22/13 12:15*	*1*

Lab Sample ID: LCS 480-129923/5
Matrix: Water
Analysis Batch: 129923

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	2p50	2956		ug/L		108	70 - 130
1,1,1-Trichloroethane	2p50	2753		ug/L		106	70 - 130
1,1,2,2-Tetrachloroethane	2p50	2451		ug/L		69	70 - 130
1,1,2-Trichloroethane	2p50	2352		ug/L		63	70 - 130
1,1-Dichloroethane	2p50	2p54		ug/L		102	70 - 130
1,1-Dichloroethene	2p50	2p53		ug/L		101	70 - 130
1,1-Dichlorozrozene	2p50	2457		ug/L		66	70 - 130
1,2,3-Trichlorobenxene	2p50	2258		ug/L		61	70 - 130
1,2,3-Trichlorozrozane	2p50	2p54		ug/L		102	70 - 130
1,2,4-Trichlorobenxene	2p50	2452		ug/L		67	70 - 130
1,2,4-Trimethylbenxene	2p50	2p57		ug/L		103	70 - 130
1,2-Dibromo-3-Chlorozrozane	2p50	2358		ug/L		6p	70 - 130
1,2-Dichlorobenxene	2p50	2p56		ug/L		104	70 - 130
1,2-Dichloroethane	2p50	2954		ug/L		109	70 - 130

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

Lab Sample ID: LCS 480-129923/5
Matrix: Water
Analysis Batch: 129923

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorozrozane	2p50	2p53		ug/L		101	70 - 130
1,3,p-Trimethylbenxene	2p50	2p5p		ug/L		102	70 - 130
1,3-Dichlorobenxene	2p50	2p58		ug/L		103	70 - 130
1,3-Dichlorozrozane	2p50	2358		ug/L		6p	70 - 130
1,4-Dichlorobenxene	2p50	2p5I		ug/L		100	70 - 130
1,4-Dio*ane	1000	1060		ug/L		106	70 - 130
2,2-Dichlorozrozane	2p50	2p50		ug/L		100	70 - 130
2-Butanone (MEK)	12p	183	.	ug/L		149	70 - 130
2-Chlorotoluene	2p50	2457		ug/L		66	70 - 130
2-He*anone	12p	126		ug/L		103	70 - 130
4-Chlorotoluene	2p50	2p50		ug/L		100	70 - 130
4-Isozrozyltoluene	2p50	2953		ug/L		10p	70 - 130
4-Methyl-2-zentanone (MIBK)	12p	127		ug/L		102	70 - 130
Acetone	12p	139		ug/L		106	70 - 130
Benxene	2p50	2p5I		ug/L		100	70 - 130
Bromobenxene	2p50	2452		ug/L		67	70 - 130
Bromoform	2p50	2750		ug/L		108	70 - 130
Bromomethane	2p50	2652		ug/L		117	70 - 130
Carbon disulfide	2p50	2359		ug/L		6p	70 - 130
Carbon tetrachloride	2p50	2852		ug/L		113	70 - 130
Chlorobenxene	2p50	2p5I		ug/L		100	70 - 130
Chlorobromomethane	2p50	2953		ug/L		10p	70 - 130
Chlorodibromomethane	2p50	295I		ug/L		104	70 - 130
Chloroethane	2p50	2850		ug/L		112	70 - 130
Chloroform	2p50	2457		ug/L		66	70 - 130
Chloromethane	2p50	235I		ug/L		62	70 - 130
cis-1,2-Dichloroethene	2p50	2p56		ug/L		104	70 - 130
cis-1,3-Dichlorozrozene	2p50	295I		ug/L		10p	70 - 130
Dichlorobromomethane	2p50	2p53		ug/L		101	70 - 130
Dichlorodifluoromethane	p050	4659		ug/L		66	70 - 130
Ethyl ether	2p50	2752		ug/L		106	70 - 130
Ethylbenxene	2p50	245p		ug/L		68	70 - 130
Ethylene Dibromide	2p50	2454		ug/L		68	70 - 130
He*achlorobutadiene	2p50	2354		ug/L		64	70 - 130
Isozrozyl ether	2p50	2957		ug/L		107	70 - 130
Isozrozylbenxene	2p50	2p52		ug/L		101	70 - 130
Methyl tert-butyl ether	2p50	2p53		ug/L		101	70 - 130
Methylene Chloride	2p50	2459		ug/L		68	70 - 130
m-Xylene & z-Xylene	p050	p152		ug/L		102	70 - 130
Nazhthalene	2p50	2p50		ug/L		100	70 - 130
n-Butylbenxene	2p50	2p59		ug/L		102	70 - 130
N-Prozylbenxene	2p50	2456		ug/L		100	70 - 130
o-Xylene	2p50	2458		ug/L		66	70 - 130
sec-Butylbenxene	2p50	2p59		ug/L		102	70 - 130
Styrene	2p50	2p50		ug/L		100	70 - 130
Tert-amyl methyl ether	2p50	2952		ug/L		10p	70 - 130
Tert-butyl ethyl ether	2p50	2957		ug/L		107	70 - 130
tert-Butylbenxene	2p50	2954		ug/L		109	70 - 130

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

Lab Sample ID: LCS 480-129923/5
Matrix: Water
Analysis Batch: 129923

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Tetrachloroethene			2p50	275		ug/L		108	70 - 130		
Tetrahydrofuran			12p	130		ug/L		104	70 - 130		
Toluene			2p50	245		ug/L		66	70 - 130		
trans-1,2-Dichloroethene			2p50	295		ug/L		104	70 - 130		
trans-1,3-Dichlorozrozene			2p50	245		ug/L		69	70 - 130		
Trichloroethene			2p50	245		ug/L		66	70 - 130		
Trichlorofluoromethane			2p50	265		ug/L		119	70 - 130		
Vinyl chloride			2p50	239		ug/L		64	70 - 130		
Dibromomethane			2p50	2p5		ug/L		103	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 480-129923/6
Matrix: Water
Analysis Batch: 129923

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			2p50	2p53		ug/L		101	70 - 130	9	20
1,1,1-Trichloroethane			2p50	295		ug/L		10p	70 - 130	4	20
1,1,2,2-Tetrachloroethane			2p50	245		ug/L		68	70 - 130	1	20
1,1,2-Trichloroethane			2p50	245		ug/L		67	70 - 130	p	20
1,1-Dichloroethane			2p50	245		ug/L		66	70 - 130	3	20
1,1-Dichloroethene			2p50	235		ug/L		6p	70 - 130	9	20
1,1-Dichlorozrozene			2p50	239		ug/L		64	70 - 130	p	20
1,2,3-Trichlorobenxene			2p50	235		ug/L		63	70 - 130	2	20
1,2,3-Trichlorozrozane			2p50	245		ug/L		66	70 - 130	3	20
1,2,4-Trichlorobenxene			2p50	235		ug/L		63	70 - 130	4	20
1,2,4-Trimethylbenxene			2p50	245		ug/L		100	70 - 130	3	20
1,2-Dibromo-3-Chlorozrozane			2p50	295		ug/L		10p	70 - 130	10	20
1,2-Dichlorobenxene			2p50	245		ug/L		100	70 - 130	4	20
1,2-Dichloroethane			2p50	295		ug/L		10p	70 - 130	0	20
1,2-Dichlorozrozane			2p50	245		ug/L		67	70 - 130	p	20
1,3,p-Trimethylbenxene			2p50	245		ug/L		100	70 - 130	2	20
1,3-Dichlorobenxene			2p50	2p50		ug/L		100	70 - 130	3	20
1,3-Dichlorozrozane			2p50	245		ug/L		69	70 - 130	1	20
1,4-Dichlorobenxene			2p50	2p59		ug/L		102	70 - 130	2	20
1,4-Dio*ane			1000	1020		ug/L		102	70 - 130	9	20
2,2-Dichlorozrozane			2p50	245		ug/L		67	70 - 130	3	20
2-Butanone (MEK)			12p	182	.	ug/L		149	70 - 130	0	20
2-Chlorotoluene			2p50	2p52		ug/L		101	70 - 130	2	20
2-He*anone			12p	130		ug/L		104	70 - 130	1	20
4-Chlorotoluene			2p50	245		ug/L		100	70 - 130	1	20
4-Isozrozyltoluene			2p50	2p52		ug/L		101	70 - 130	4	20
4-Methyl-2-zentanone (MIBK)			12p	126		ug/L		103	70 - 130	2	20
Acetone			12p	132		ug/L		10p	70 - 130	3	20

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

Lab Sample ID: LCSD 480-129923/6
Matrix: Water
Analysis Batch: 129923

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	2p50	2453		ug/L		67	70 - 130	3	20
Bromobenxene	2p50	2358		ug/L		6p	70 - 130	2	20
Bromoform	2p50	295p		ug/L		109	70 - 130	2	20
Bromomethane	2p50	2753		ug/L		106	70 - 130	9	20
Carbon disulfide	2p50	2252		ug/L		86	70 - 130	9	20
Carbon tetrachloride	2p50	275p		ug/L		110	70 - 130	3	20
Chlorobenxene	2p50	2454		ug/L		68	70 - 130	3	20
Chlorobromomethane	2p50	2p51		ug/L		100	70 - 130	p	20
Chlorodibromomethane	2p50	2959		ug/L		109	70 - 130	2	20
Chloroethane	2p50	2959		ug/L		109	70 - 130	p	20
Chloroform	2p50	2356		ug/L		69	70 - 130	3	20
Chloromethane	2p50	2157		ug/L		87	70 - 130	9	20
cis-1,2-Dichloroethene	2p50	2457		ug/L		66	70 - 130	p	20
cis-1,3-Dichlorozrozene	2p50	2p54		ug/L		102	70 - 130	3	20
Dichlorobromomethane	2p50	2p59		ug/L		102	70 - 130	1	20
Dichlorodifluoromethane	p050	4959		ug/L		63	70 - 130	9	20
Ethyl ether	2p50	2p56		ug/L		104	70 - 130	p	20
Ethylbenxene	2p50	2451		ug/L		69	70 - 130	2	20
Ethylene Dibromide	2p50	2456		ug/L		100	70 - 130	2	20
He*achlorobutadiene	2p50	2353		ug/L		63	70 - 130	0	20
Isozrozyl ether	2p50	295p		ug/L		109	70 - 130	1	20
Isozrozylbenxene	2p50	2459		ug/L		66	70 - 130	2	20
Methyl tert-butyl ether	2p50	2p54		ug/L		102	70 - 130	0	20
Methylene Chloride	2p50	2353		ug/L		63	70 - 130	p	20
m-Xylene & z-Xylene	p050	4657		ug/L		66	70 - 130	3	20
Nazhthalene	2p50	2457		ug/L		66	70 - 130	1	20
n-Butylbenxene	2p50	245p		ug/L		68	70 - 130	4	20
N-Prozylbenxene	2p50	2459		ug/L		68	70 - 130	1	20
o-Xylene	2p50	2454		ug/L		68	70 - 130	2	20
sec-Butylbenxene	2p50	2457		ug/L		66	70 - 130	3	20
Styrene	2p50	2459		ug/L		68	70 - 130	2	20
Tert-amyl methyl ether	2p50	2953		ug/L		10p	70 - 130	0	20
Tert-butyl ethyl ether	2p50	295p		ug/L		109	70 - 130	1	20
tert-Butylbenxene	2p50	2p5p		ug/L		102	70 - 130	3	20
Tetrachloroethene	2p50	2p57		ug/L		103	70 - 130	p	20
Tetrahydrofuran	12p	130		ug/L		104	70 - 130	1	20
Toluene	2p50	2358		ug/L		6p	70 - 130	4	20
trans-1,2-Dichloroethene	2p50	245p		ug/L		68	70 - 130	9	20
trans-1,3-Dichlorozrozene	2p50	2450		ug/L		69	70 - 130	1	20
Trichloroethene	2p50	235p		ug/L		64	70 - 130	p	20
Trichlorofluoromethane	2p50	2750		ug/L		108	70 - 130	7	20
Vinyl chloride	2p50	225p		ug/L		60	70 - 130	p	20
Dibromomethane	2p50	2458		ug/L		66	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*

GC/MS VOA

Analysis Batch: 129639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-42273-2	MW-265M-20130717-01	Total/NA	Water	8260C	
480-42273-3	MW-267M-20130718-01	Total/NA	Water	8260C	
480-42273-4	MW-268M-20130718-01	Total/NA	Water	8260C	
480-42273-5	MW-552-20130717-01	Total/NA	Water	8260C	
480-42273-6	MW-561-20130718-01	Total/NA	Water	8260C	
LCS 480-129639/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-129639/6	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-129639/8	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 129686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-42273-11	REW-7-20130718-01	Total/NA	Water	8260C	
480-42273-13	REW-12-20130718-01	Total/NA	Water	8260C	
480-42273-16	Trip Blanks	Total/NA	Water	8260C	
LCS 480-129686/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-129686/6	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-129686/8	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 129793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-42273-1	MW-261S-20130717-01	Total/NA	Water	8260C	
480-42273-5 - DL	MW-552-20130717-01	Total/NA	Water	8260C	
480-42273-7	MW-562-20130717-01	Total/NA	Water	8260C	
480-42273-8	MW-563-20130718-01	Total/NA	Water	8260C	
480-42273-10	REW-6-20130718-01	Total/NA	Water	8260C	
480-42273-12	REW-8-20130718-01	Total/NA	Water	8260C	
480-42273-14	DUPX1-20130717-01	Total/NA	Water	8260C	
480-42273-15	DUPX2-20130718-01	Total/NA	Water	8260C	
LCS 480-129793/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-129793/5	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-129793/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 129923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-42273-9	REW-1-20130717-01	Total/NA	Water	8260C	
LCS 480-129923/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-129923/6	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-129923/8	Method Blank	Total/NA	Water	8260C	

Client Sample ID: MW-261S-20130717-01

Lab Sample ID: 480-42273-1

Date Collected: 07/17/13 07:35

Matrix: Water

Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	129793	07/20/13 01:06	LCH	TAL BUF

Client Sample ID: MW-265M-20130717-01

Lab Sample ID: 480-42273-2

Date Collected: 07/17/13 13:20

Matrix: Water

Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		25	129639	07/19/13 17:54	RAL	TAL BUF

Client Sample ID: MW-267M-20130718-01

Lab Sample ID: 480-42273-3

Date Collected: 07/18/13 11:25

Matrix: Water

Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	129639	07/19/13 18:18	RAL	TAL BUF

Client Sample ID: MW-268M-20130718-01

Lab Sample ID: 480-42273-4

Date Collected: 07/18/13 09:50

Matrix: Water

Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		25	129639	07/19/13 18:41	RAL	TAL BUF

Client Sample ID: MW-552-20130717-01

Lab Sample ID: 480-42273-5

Date Collected: 07/17/13 08:20

Matrix: Water

Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		8	129639	07/19/13 19:05	RAL	TAL BUF
Total/NA	Analysis	8260C	DL	50	129793	07/20/13 01:29	LCH	TAL BUF

Client Sample ID: MW-561-20130718-01

Lab Sample ID: 480-42273-6

Date Collected: 07/18/13 07:15

Matrix: Water

Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	129639	07/19/13 19:28	RAL	TAL BUF

Client Sample ID: MW-562-20130717-01 — **Lab Sample ID: 480-42273-7**
Date Collected: 07/17/13 09:15 — **Matrix: Water**
Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	129793	07/20/13 01:53	LCH	TAL BUF

Client Sample ID: MW-563-20130718-01 — **Lab Sample ID: 480-42273-8**
Date Collected: 07/18/13 08:00 — **Matrix: Water**
Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	129793	07/20/13 02:17	LCH	TAL BUF

Client Sample ID: REW-1-20130717-01 — **Lab Sample ID: 480-42273-9**
Date Collected: 07/17/13 11:00 — **Matrix: Water**
Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	129923	07/22/13 12:51	RAL	TAL BUF

Client Sample ID: REW-6-20130718-01 — **Lab Sample ID: 480-42273-10**
Date Collected: 07/18/13 10:45 — **Matrix: Water**
Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	129793	07/20/13 02:40	LCH	TAL BUF

Client Sample ID: REW-7-20130718-01 — **Lab Sample ID: 480-42273-11**
Date Collected: 07/18/13 12:45 — **Matrix: Water**
Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	129686	07/19/13 13:56	LCH	TAL BUF

Client Sample ID: REW-8-20130718-01 — **Lab Sample ID: 480-42273-12**
Date Collected: 07/18/13 12:05 — **Matrix: Water**
Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	129793	07/20/13 03:04	LCH	TAL BUF

Lab Chronicle

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

TestAmerica Job ID: 480-42273-1

Client Sample ID: REW-12-20130718-01

Lab Sample ID: 480-42273-13

Date Collected: 07/18/13 09:05

Matrix: Water

Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	129686	07/19/13 14:46	LCH	TAL BUF

Client Sample ID: DUPX1-20130717-01

Lab Sample ID: 480-42273-14

Date Collected: 07/17/13 00:00

Matrix: Water

Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	129793	07/20/13 03:28	LCH	TAL BUF

Client Sample ID: DUPX2-20130718-01

Lab Sample ID: 480-42273-15

Date Collected: 07/18/13 00:00

Matrix: Water

Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	129793	07/20/13 03:52	LCH	TAL BUF

Client Sample ID: Trip Blanks

Lab Sample ID: 480-42273-16

Date Collected: 07/18/13 00:00

Matrix: Water

Date Received: 07/19/13 02:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	129686	07/19/13 16:02	LCH	TAL BUF

Laboratory References:

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

Certification Summary

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

TestAmerica Job ID: 480-42273-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13 *
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13 *
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-13 *
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13 *
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13 *

* Expired certification is currently pending renewal and is considered valid.

Method Summary

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

TestAmerica Job ID: 480-42273-1

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

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

Laboratory References:

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

Sample Summary

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

TestAmerica Job ID: 480-42273-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-42273-1	MW-261S-20130717-01	Water	07/17/13 07:35	07/19/13 02:30
480-42273-2	MW-265M-20130717-01	Water	07/17/13 13:20	07/19/13 02:30
480-42273-3	MW-267M-20130718-01	Water	07/18/13 11:25	07/19/13 02:30
480-42273-4	MW-268M-20130718-01	Water	07/18/13 09:50	07/19/13 02:30
480-42273-5	MW-552-20130717-01	Water	07/17/13 08:20	07/19/13 02:30
480-42273-6	MW-561-20130718-01	Water	07/18/13 07:15	07/19/13 02:30
480-42273-7	MW-562-20130717-01	Water	07/17/13 09:15	07/19/13 02:30
480-42273-8	MW-563-20130718-01	Water	07/18/13 08:00	07/19/13 02:30
480-42273-9	REW-1-20130717-01	Water	07/17/13 11:00	07/19/13 02:30
480-42273-10	REW-6-20130718-01	Water	07/18/13 10:45	07/19/13 02:30
480-42273-11	REW-7-20130718-01	Water	07/18/13 12:45	07/19/13 02:30
480-42273-12	REW-8-20130718-01	Water	07/18/13 12:05	07/19/13 02:30
480-42273-13	REW-12-20130718-01	Water	07/18/13 09:05	07/19/13 02:30
480-42273-14	DUPX1-20130717-01	Water	07/17/13 00:00	07/19/13 02:30
480-42273-15	DUPX2-20130718-01	Water	07/18/13 00:00	07/19/13 02:30
480-42273-16	Trip Blanks	Water	07/18/13 00:00	07/19/13 02:30

Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 480-42273-1

Login Number: 42273

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

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.	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	

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Tetra Tech Engineering Solutions Inc	Vicki Perkins		241831
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 2**
25 Spring St	508-460-0033		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Wellesley / MA / 02081	V. Perkins		
Project Name and Location (State)	**Carrier/Waybill Number**		
Raytheon Wayland MA			
Contract/Purchase Order/Quote No.			
RA-008			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	BOTTLE ORDER	Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt
MW-361S-201307 17-01	7/17/13	0735		X						3			X		
MW-363M-201307 17-01	7/17/13	1320		X						3			X		
MW-367M-201307 18-01	7/18/13	1125		X						3			X		
MW-368M-201307 18-01	7/18/13	0950		X						3			X		
MW-553I 201307 17-01	7/17/13	0820		X						3			X		
MW-561-201307 13-01	7/13/13	0715		X						3			X		
MW-562-201307 17-01	7/17/13	0915		X						3			X		
MW-563-201307 18-01	7/13/13	0800		X						3			X		
REW-1-201307 17-01	7/17/13	1100		X						3			X		
REW-6-201307 18-01	7/18/13	1045		X						3			X		
REW-7-201307 18-01	7/18/13	1245		X						3			X		
REW-8-201307 18-01	7/18/13	1205		X						3			X		

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

		Date	Time			Date	Time
1. Relinquished By	IESI	7/18/13	1310	1. Received By	TAL	7/18/13	1310
2. Relinquished By	TAL	7/19/13	1630	2. Received By	TAL	7.19.13	0230
3. Relinquished By				3. Received By			

Comments

3.7, 1.9 4.4 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Innovative Engineering Solutions Inc	Vicki Perigon		241833
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 2 of 2
25 Spring St	508-668-0033		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Walpole / MA / 02081	vicki perigon		
Project Name and Location (State)	**Carrier/Waybill Number**		
RA008 Raytheon [redacted] Wayland MA			
Contract/Purchase Order/Quote No.			
RA-008			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 8260B	Special Instructions/ Conditions of Receipt
RAW														
RAW-12-20130718-01	7/18/13	0905		X						X3			X	
DupX1-20130717-01	—	—		X						X3			X	
DupX2-20130718-01	—	—		X						X3			X	
Trip Blanks	—	—		X						X3			X	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	[redacted] IESI	7/18/13	1310	TAL	7/19/13	1310
2.	TAL	7/18/13	1629	TAL	7.19.13	0230
3.						

Comments

2.7, 3.9, 4.4 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Raytheon, Wayland, MA
Analytical Report

Well Samples

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

Sampled: 07/17/13-07/18/13
Analyzed: 07/18/13-07/19/13

Bioremediation & Treatability Center

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

July 22, 2013

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

RE: Analytical Data Report
Raytheon
Wayland, MA

Dear Mr. Fam,

Enclosed are the results of the sample(s) submitted to our laboratory on July 18, 2013.

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

Please call if you have any questions. You may also contact me via email at S.Davis@Biotreatcenter.com

Respectfully submitted,
Bioremediation Treatability Center

Susan Davis

Susan Davis
Lab Director

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-261 S
Sampler	daj
Sample Date	7/17/13
Sample Time	7:35 AM
Sample Received	7/18/13
Method	Modified EPA 5021 A

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Dissolved Gasses					
Methane	20701	µg/L	0.3 µg/L	7/18/2013	swd
Ethylene	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Ethane	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Acetylene	<2	µg/L	2µg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-265 M
Sampler	daj
Sample Date	7/17/13
Sample Time	1:20 PM
Sample Received	7/18/13
Method	Modified EPA 5021 A

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Dissolved Gasses					
Methane	23807	µg/L	0.3 µg/L	7/18/2013	swd
Ethylene	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Ethane	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Acetylene	<2	µg/L	2µg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-267 M
Sampler	daj
Sample Date	7/18/13
Sample Time	11:25 AM
Sample Received	7/18/13
Method	Modified EPA 5021 A

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Dissolved Gasses					
Methane	2650	µg/L	0.3 µg/L	7/18/2013	swd
Ethylene	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Ethane	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Acetylene	<2	µg/L	2µg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-268 M
Sampler	daj
Sample Date	7/18/13
Sample Time	9:50 AM
Sample Received	7/18/13
Method	Modified EPA 5021 A

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Dissolved Gasses					
Methane	22.0	µg/L	0.3 µg/L	7/18/2013	swd
Ethylene	5.4	µg/L	0.3 µg/L	7/18/2013	swd
Ethane	3.8	µg/L	0.3 µg/L	7/18/2013	swd
Acetylene	<2	µg/L	2µg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-552
Sampler	daj
Sample Date	7/17/13
Sample Time	8:20 AM
Sample Received	7/18/13
Method	Modified EPA 5021 A

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Dissoved Gasses					
Methane	26476	µg/L	0.3 µg/L	7/18/2013	swd
Ethylene	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Ethane	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Acetylene	<2	µg/L	2µg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-561
Sampler	daj
Sample Date	7/18/13
Sample Time	7:15 AM
Sample Received	7/18/13
Method	Modified EPA 5021 A

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Dissolved Gasses					
Methane	5638	µg/L	0.3 µg/L	7/18/2013	swd
Ethylene	403	µg/L	0.3 µg/L	7/18/2013	swd
Ethane	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Acetylene	<2	µg/L	2µg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-562
Sampler	daj
Sample Date	7/17/13
Sample Time	9:15 AM
Sample Received	7/18/13
Method	Modified EPA 5021 A

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Dissolved Gasses					
Methane	28997	µg/L	0.3 µg/L	7/18/2013	swd
Ethylene	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Ethane	23.8	µg/L	0.3 µg/L	7/18/2013	swd
Acetylene	<2	µg/L	2µg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-563
Sampler	daj
Sample Date	7/18/13
Sample Time	8:00 AM
Sample Received	7/18/13
Method	Modified EPA 5021 A

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Dissolved Gasses					
Methane	19753	µg/L	0.3 µg/L	7/18/2013	swd
Ethylene	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Ethane	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Acetylene	<2	µg/L	2µg/L	7/18/2013	swd

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-1
Sampler	daj
Sample Date	7/17/13
Sample Time	11:00 AM
Sample Received	7/18/13
Method	Modified EPA 5021 A

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Dissolved Gasses					
Methane	25218	µg/L	0.3 µg/L	7/18/2013	swd
Ethylene	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Ethane	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Acetylene	<2	µg/L	2µg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-6
Sampler	daj
Sample Date	7/18/13
Sample Time	10:45 AM
Sample Received	7/18/13
Method	Modified EPA 5021 A

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Dissolved Gasses					
Methane	293	µg/L	0.3 µg/L	7/18/2013	swd
Ethylene	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Ethane	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Acetylene	<2	µg/L	2µg/L	7/18/2013	swd

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-7
Sampler	daj
Sample Date	7/18/13
Sample Time	12:45 PM
Sample Received	7/18/13
Method	Modified EPA 5021 A

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Dissolved Gasses					
Methane	1214	µg/L	0.3 µg/L	7/18/2013	swd
Ethylene	59.4	µg/L	0.3 µg/L	7/18/2013	swd
Ethane	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Acetylene	<2	µg/L	2µg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-8
Sampler	daj
Sample Date	7/18/13
Sample Time	12:05 PM
Sample Received	7/18/13
Method	Modified EPA 5021 A

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Dissolved Gasses					
Methane	3090	µg/L	0.3 µg/L	7/18/2013	swd
Ethylene	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Ethane	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Acetylene	<2	µg/L	2µg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-12
Sampler	daj
Sample Date	7/18/13
Sample Time	9:05 AM
Sample Received	7/18/13
Method	Modified EPA 5021 A

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Dissolved Gasses					
Methane	328	µg/L	0.3 µg/L	7/18/2013	swd
Ethylene	3.9	µg/L	0.3 µg/L	7/18/2013	swd
Ethane	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Acetylene	<2	µg/L	2µg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	Trip Blank
Sampler	na
Sample Date	na
Sample Time	na
Sample Received	7/18/13
Method	Modified EPA 5021 A

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Dissolved Gasses					
Methane	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Ethylene	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Ethane	<0.3	µg/L	0.3 µg/L	7/18/2013	swd
Acetylene	<2	µg/L	2µg/L	7/18/2013	swd

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-261 S
Sampler	daj
Sample Date	7/17/2013
Sample Time	7:35 AM
Sample Received	7/18/2013
Method	Modified EPA 300

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Anions					
Chloride	31	mg/L	1 mg/L	7/18/2013	swd
Nitrate	<1	mg/L	1 mg/L	7/18/2013	swd
Sulfate	<1	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-265 M
Sampler	daj
Sample Date	7/17/2013
Sample Time	1:20 PM
Sample Received	7/18/2013
Method	Modified EPA 300

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Anions					
Chloride	23	mg/L	1 mg/L	7/18/2013	swd
Nitrate	<1	mg/L	1 mg/L	7/18/2013	swd
Sulfate	<1	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-267 M
Sampler	daj
Sample Date	7/18/2013
Sample Time	11:25 AM
Sample Received	7/18/2013
Method	Modified EPA 300

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Anions					
Chloride	30	mg/L	1 mg/L	7/18/2013	swd
Nitrate	<1	mg/L	1 mg/L	7/18/2013	swd
Sulfate	<1	mg/L	1 mg/L	7/18/2013	swd

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-268 M
Sampler	daj
Sample Date	7/18/2013
Sample Time	9:50 AM
Sample Received	7/18/2013
Method	Modified EPA 300

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Anions					
Chloride	17	mg/L	1 mg/L	7/18/2013	swd
Nitrate	<1	mg/L	1 mg/L	7/18/2013	swd
Sulfate	44	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-552
Sampler	daj
Sample Date	7/17/2013
Sample Time	8:20 AM
Sample Received	7/18/2013
Method	Modified EPA 300

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Anions					
Chloride	20	mg/L	1 mg/L	7/18/2013	swd
Nitrate	<1	mg/L	1 mg/L	7/18/2013	swd
Sulfate	<1	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-561
Sampler	daj
Sample Date	7/18/2013
Sample Time	7:15 AM
Sample Received	7/18/2013
Method	Modified EPA 300

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Anions					
Chloride	35	mg/L	1 mg/L	7/18/2013	swd
Nitrate	<1	mg/L	1 mg/L	7/18/2013	swd
Sulfate	<1	mg/L	1 mg/L	7/18/2013	swd

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-562
Sampler	daj
Sample Date	7/17/2013
Sample Time	9:15 AM
Sample Received	7/18/2013
Method	Modified EPA 300

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Anions					
Chloride	34	mg/L	1 mg/L	7/18/2013	swd
Nitrate	<1	mg/L	1 mg/L	7/18/2013	swd
Sulfate	<1	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-563
Sampler	daj
Sample Date	7/18/2013
Sample Time	8:00 AM
Sample Received	7/18/2013
Method	Modified EPA 300

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Anions					
Chloride	38	mg/L	1 mg/L	7/18/2013	swd
Nitrate	<1	mg/L	1 mg/L	7/18/2013	swd
Sulfate	<1	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-1
Sampler	daj
Sample Date	7/17/2013
Sample Time	11:00 AM
Sample Received	7/18/2013
Method	Modified EPA 300

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Anions					
Chloride	17	mg/L	1 mg/L	7/18/2013	swd
Nitrate	<1	mg/L	1 mg/L	7/18/2013	swd
Sulfate	<1	mg/L	1 mg/L	7/18/2013	swd

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-6
Sampler	daj
Sample Date	7/18/2013
Sample Time	10:45 AM
Sample Received	7/18/2013
Method	Modified EPA 300

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Anions					
Chloride	43	mg/L	1 mg/L	7/18/2013	swd
Nitrate	<1	mg/L	1 mg/L	7/18/2013	swd
Sulfate	43	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-7
Sampler	daj
Sample Date	7/18/2013
Sample Time	12:45 PM
Sample Received	7/18/2013
Method	Modified EPA 300

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Anions					
Chloride	21	mg/L	1 mg/L	7/18/2013	swd
Nitrate	<1	mg/L	1 mg/L	7/18/2013	swd
Sulfate	23	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-8
Sampler	daj
Sample Date	7/18/2013
Sample Time	12:05 PM
Sample Received	7/18/2013
Method	Modified EPA 300

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Anions					
Chloride	35	mg/L	1 mg/L	7/18/2013	swd
Nitrate	<1	mg/L	1 mg/L	7/18/2013	swd
Sulfate	24	mg/L	1 mg/L	7/18/2013	swd

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA

Sample ID	REW-12
Sampler	daj
Sample Date	7/18/2013
Sample Time	9:05 AM
Sample Received	7/18/2013

Method Modified EPA 300

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Anions					
Chloride	33	mg/L	1 mg/L	7/18/2013	swd
Nitrate	<1	mg/L	1 mg/L	7/18/2013	swd
Sulfate	61	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA

Sample ID	Trip Blank
Sampler	na
Sample Date	na
Sample Time	na
Sample Received	7/18/2013

Method Modified EPA 300

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Anions					
Chloride	<1	mg/L	1 mg/L	7/18/2013	swd
Nitrate	<1	mg/L	1 mg/L	7/18/2013	swd
Sulfate	<1	mg/L	1 mg/L	7/18/2013	swd

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-261 S
Sampler	daj
Sample Date	7/17/2013
Sample Time	7:35 AM
Sample Received	7/18/2013
Method	HPLC / Organic Acid Method

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Organic Acids					
Lactate	<1	mg/L	1 mg/L	7/18/2013	swd
Acetate	177	mg/L	1 mg/L	7/18/2013	swd
Propionate	<1	mg/L	1 mg/L	7/18/2013	swd
Butyrate	7	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-265 M
Sampler	daj
Sample Date	7/17/13
Sample Time	1:20 PM
Sample Received	7/18/13
Method	HPLC / Organic Acid Method

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Organic Acids					
Lactate	<1	mg/L	1 mg/L	7/18/2013	swd
Acetate	790	mg/L	1 mg/L	7/18/2013	swd
Propionate	13	mg/L	1 mg/L	7/18/2013	swd
Butyrate	27	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-267 M
Sampler	daj
Sample Date	7/18/13
Sample Time	11:25 AM
Sample Received	7/18/13
Method	HPLC / Organic Acid Method

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Organic Acids					
Lactate	<1	mg/L	1 mg/L	7/18/2013	swd
Acetate	377	mg/L	1 mg/L	7/18/2013	swd
Propionate	11	mg/L	1 mg/L	7/18/2013	swd
Butyrate	6	mg/L	1 mg/L	7/18/2013	swd

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-268 M
Sampler	daj
Sample Date	7/18/13
Sample Time	9:50 AM
Sample Received	7/18/13

Method	HPLC / Organic Acid Method				
Compound	**Test Value**	**Units**	**Detection Limit**	**Analysis Date**	**Tech**
Organic Acids					
Lactate	<1	mg/L	1 mg/L	7/18/2013	swd
Acetate	<1	mg/L	1 mg/L	7/18/2013	swd
Propionate	<1	mg/L	1 mg/L	7/18/2013	swd
Butyrate	5	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-552
Sampler	daj
Sample Date	7/17/13
Sample Time	8:20 AM
Sample Received	7/18/13

Method	HPLC / Organic Acid Method				
Compound	**Test Value**	**Units**	**Detection Limit**	**Analysis Date**	**Tech**
Organic Acids					
Lactate	<1	mg/L	1 mg/L	7/18/2013	swd
Acetate	165	mg/L	1 mg/L	7/18/2013	swd
Propionate	<1	mg/L	1 mg/L	7/18/2013	swd
Butyrate	8	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-561
Sampler	daj
Sample Date	7/18/13
Sample Time	7:15 AM
Sample Received	7/18/13

Method	HPLC / Organic Acid Method				
Compound	**Test Value**	**Units**	**Detection Limit**	**Analysis Date**	**Tech**
Organic Acids					
Lactate	<1	mg/L	1 mg/L	7/18/2013	swd
Acetate	254	mg/L	1 mg/L	7/18/2013	swd
Propionate	11	mg/L	1 mg/L	7/18/2013	swd
Butyrate	9	mg/L	1 mg/L	7/18/2013	swd

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-562
Sampler	daj
Sample Date	7/17/13
Sample Time	9:15 AM
Sample Received	7/18/13

Method HPLC / Organic Acid Method

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Organic Acids					
Lactate	<1	mg/L	1 mg/L	7/18/2013	swd
Acetate	148	mg/L	1 mg/L	7/18/2013	swd
Propionate	11	mg/L	1 mg/L	7/18/2013	swd
Butyrate	11	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-563
Sampler	daj
Sample Date	7/18/13
Sample Time	8:00 AM
Sample Received	7/18/13

Method HPLC / Organic Acid Method

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Organic Acids					
Lactate	<1	mg/L	1 mg/L	7/18/2013	swd
Acetate	364	mg/L	1 mg/L	7/18/2013	swd
Propionate	11	mg/L	1 mg/L	7/18/2013	swd
Butyrate	10	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-1
Sampler	daj
Sample Date	7/17/13
Sample Time	11:00:00 AM
Sample Received	7/18/13

Method HPLC / Organic Acid Method

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Organic Acids					
Lactate	<1	mg/L	1 mg/L	7/18/2013	swd
Acetate	64	mg/L	1 mg/L	7/18/2013	swd
Propionate	<1	mg/L	1 mg/L	7/18/2013	swd
Butyrate	<1	mg/L	1 mg/L	7/18/2013	swd

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-6
Sampler	daj
Sample Date	7/18/13
Sample Time	10:45 AM
Sample Received	7/18/13

Method HPLC / Organic Acid Method

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Organic Acids					
Lactate	<1	mg/L	1 mg/L	7/18/2013	swd
Acetate	79	mg/L	1 mg/L	7/18/2013	swd
Propionate	<1	mg/L	1 mg/L	7/18/2013	swd
Butyrate	<1	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-7
Sampler	daj
Sample Date	7/18/13
Sample Time	12:45 PM
Sample Received	7/18/13

Method HPLC / Organic Acid Method

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Organic Acids					
Lactate	<1	mg/L	1 mg/L	7/18/2013	swd
Acetate	93	mg/L	1 mg/L	7/18/2013	swd
Propionate	<1	mg/L	1 mg/L	7/18/2013	swd
Butyrate	<1	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-8
Sampler	daj
Sample Date	7/18/13
Sample Time	12:05 PM
Sample Received	7/18/13

Method HPLC / Organic Acid Method

Compound	Test Value	Units	Detection Limit	Analysis Date	Tech
Organic Acids					
Lactate	<1	mg/L	1 mg/L	7/18/2013	swd
Acetate	112	mg/L	1 mg/L	7/18/2013	swd
Propionate	<1	mg/L	1 mg/L	7/18/2013	swd
Butyrate	<1	mg/L	1 mg/L	7/18/2013	swd

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-12
Sampler	daj
Sample Date	7/18/13
Sample Time	9:05 AM
Sample Received	7/18/13

Method	HPLC / Organic Acid Method				
Compound	**Test Value**	**Units**	**Detection Limit**	**Analysis Date**	**Tech**
Organic Acids					
Lactate	<1	mg/L	1 mg/L	7/18/2013	swd
Acetate	30	mg/L	1 mg/L	7/18/2013	swd
Propionate	<1	mg/L	1 mg/L	7/18/2013	swd
Butyrate	<1	mg/L	1 mg/L	7/18/2013	swd

Project Identification:	Raytheon, Wayland, MA
Sample ID	Trip Blank
Sampler	na
Sample Date	na
Sample Time	na
Sample Received	7/18/13

Method	HPLC / Organic Acid Method				
Compound	**Test Value**	**Units**	**Detection Limit**	**Analysis Date**	**Tech**
Organic Acids					
Lactate	<1	mg/L	1 mg/L	7/18/2013	swd
Acetate	<1	mg/L	1 mg/L	7/18/2013	swd
Propionate	<1	mg/L	1 mg/L	7/18/2013	swd
Butyrate	<1	mg/L	1 mg/L	7/18/2013	swd

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA

Sample ID MW-261 S

Sampler daj
Sample Date 7/17/2013
Sample Time 7:35 AM
Sample Received 7/18/2013

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	585	mg/L	HACH 8203	5 mg/L	7/18/2013	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH_3-N	0.15	mg/L	HACH 8155	0.02 mg/L	7/18/2013	rdr
PO_4	0.27	mg/L	HACH 8048	0.05 mg/L	7/18/2013	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	64.5	mg/L	HACH 8008	0.03 mg/L	7/18/2013	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	135	mg/L	EPA 9060A	<0.3 mg/L	7/19/2013	swd
pH	6.90	pH units	pH probe	<0.01 pH units	7/18/2013	rdr

Project Identification:	Raytheon, Wayland, MA

Sample ID MW-265 M

Sampler daj
Sample Date 7/17/2013
Sample Time 1:20 PM
Sample Received 7/18/2013

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	470	mg/L	HACH 8203	5 mg/L	7/18/2013	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH_3-N	0.14	mg/L	HACH 8155	0.02 mg/L	7/18/2013	rdr
PO_4	1.80	mg/L	HACH 8048	0.05 mg/L	7/18/2013	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	44.0	mg/L	HACH 8008	0.03 mg/L	7/18/2013	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	682	mg/L	EPA 9060A	<0.3 mg/L	7/19/2013	swd
pH	5.78	pH units	pH probe	<0.01 pH units	7/18/2013	rdr

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-267 M
Sampler	daj
Sample Date	7/18/2013
Sample Time	11:25 AM
Sample Received	7/18/2013

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	280	mg/L	HACH 8203	5 mg/L	7/19/2013	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH_3-N	0.10	mg/L	HACH 8155	0.02 mg/L	7/19/2013	rdr
PO_4	0.80	mg/L	HACH 8048	0.05 mg/L	7/19/2013	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	17.0	mg/L	HACH 8008	0.03 mg/L	7/19/2013	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	1136	mg/L	EPA 9060A	<0.3 mg/L	7/19/2013	swd
pH	6.46	pH units	pH probe	<0.01 pH units	7/19/2013	rdr

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-268 M
Sampler	daj
Sample Date	7/18/2013
Sample Time	9:50 AM
Sample Received	7/18/2013

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	100	mg/L	HACH 8203	5 mg/L	7/19/2013	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH_3-N	0.11	mg/L	HACH 8155	0.02 mg/L	7/19/2013	rdr
PO_4	1.21	mg/L	HACH 8048	0.05 mg/L	7/19/2013	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	11.9	mg/L	HACH 8008	0.03 mg/L	7/19/2013	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	2.2	mg/L	EPA 9060A	<0.3 mg/L	7/19/2013	swd
pH	6.53	pH units	pH probe	<0.01 pH units	7/19/2013	rdr

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-552
Sampler	daj
Sample Date	7/17/2013
Sample Time	8:20 AM
Sample Received	7/18/2013

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	415	mg/L	HACH 8203	5 mg/L	7/18/2013	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH_3-N	0.10	mg/L	HACH 8155	0.02 mg/L	7/18/2013	rdr
PO_4	1.22	mg/L	HACH 8048	0.05 mg/L	7/18/2013	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	39.6	mg/L	HACH 8008	0.03 mg/L	7/18/2013	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	119	mg/L	EPA 9060A	<0.3 mg/L	7/19/2013	swd
pH	6.80	pH units	pH probe	<0.01 pH units	7/18/2013	rdr

Project Identification:	Raytheon, Wayland, MA
Sample ID	MW-561
Sampler	daj
Sample Date	7/18/2013
Sample Time	7:15 AM
Sample Received	7/18/2013

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	260	mg/L	HACH 8203	5 mg/L	7/19/2013	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH_3-N	0.03	mg/L	HACH 8155	0.02 mg/L	7/19/2013	rdr
PO_4	0.63	mg/L	HACH 8048	0.05 mg/L	7/19/2013	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	64.0	mg/L	HACH 8008	0.03 mg/L	7/19/2013	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	198	mg/L	EPA 9060A	<0.3 mg/L	7/19/2013	swd
pH	6.59	pH units	pH probe	<0.01 pH units	7/19/2013	rdr

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA

Sample ID MW-562

Sampler daj
Sample Date 7/17/2013
Sample Time 9:15 AM
Sample Received 7/18/2013

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	380	mg/L	HACH 8203	5 mg/L	7/18/2013	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH_3-N	2.00	mg/L	HACH 8155	0.02 mg/L	7/18/2013	rdr
PO_4	2.41	mg/L	HACH 8048	0.05 mg/L	7/18/2013	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	95.0	mg/L	HACH 8008	0.03 mg/L	7/18/2013	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	191	mg/L	EPA 9060A	<0.3 mg/L	7/19/2013	swd
pH	6.54	pH units	pH probe	<0.01 pH units	7/18/2013	rdr

Project Identification:	Raytheon, Wayland, MA

Sample ID MW-563

Sampler daj
Sample Date 7/18/2013
Sample Time 8:00 AM
Sample Received 7/18/2013

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	300	mg/L	HACH 8203	5 mg/L	7/19/2013	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH_3-N	0.09	mg/L	HACH 8155	0.02 mg/L	7/19/2013	rdr
PO_4	0.14	mg/L	HACH 8048	0.05 mg/L	7/19/2013	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	58.8	mg/L	HACH 8008	0.03 mg/L	7/19/2013	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	834	mg/L	EPA 9060A	<0.3 mg/L	7/19/2013	swd
pH	6.38	pH units	pH probe	<0.01 pH units	7/19/2013	rdr

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-1
Sampler	daj
Sample Date	7/17/2013
Sample Time	11:00 AM
Sample Received	7/18/2013

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	420	mg/L	HACH 8203	5 mg/L	7/18/2013	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH_3-N	2.00	mg/L	HACH 8155	0.02 mg/L	7/18/2013	rdr
PO_4	1.23	mg/L	HACH 8048	0.05 mg/L	7/18/2013	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	24.9	mg/L	HACH 8008	0.03 mg/L	7/18/2013	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	37.0	mg/L	EPA 9060A	<0.3 mg/L	7/19/2013	swd
pH	6.75	pH units	pH probe	<0.01 pH units	7/18/2013	rdr

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-6
Sampler	daj
Sample Date	7/18/2013
Sample Time	10:45 AM
Sample Received	7/18/2013

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	120	mg/L	HACH 8203	5 mg/L	7/19/2013	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH_3-N	0.03	mg/L	HACH 8155	0.02 mg/L	7/19/2013	rdr
PO_4	1.73	mg/L	HACH 8048	0.05 mg/L	7/19/2013	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	24.0	mg/L	HACH 8008	0.03 mg/L	7/19/2013	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	204	mg/L	EPA 9060A	<0.3 mg/L	7/19/2013	swd
pH	6.53	pH units	pH probe	<0.01 pH units	7/19/2013	rdr

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA

Sample ID REW-7

Sampler daj
Sample Date 7/18/2013
Sample Time 12:45 PM
Sample Received 7/18/2013

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	160	mg/L	HACH 8203	5 mg/L	7/19/2013	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH_3-N	0.04	mg/L	HACH 8155	0.02 mg/L	7/19/2013	rdr
PO_4	1.49	mg/L	HACH 8048	0.05 mg/L	7/19/2013	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	21.7	mg/L	HACH 8008	0.03 mg/L	7/19/2013	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	74.6	mg/L	EPA 9060A	<0.3 mg/L	7/19/2013	swd
pH	6.55	pH units	pH probe	<0.01 pH units	7/19/2013	rdr

Project Identification:	Raytheon, Wayland, MA

Sample ID REW-8

Sampler daj
Sample Date 7/18/2013
Sample Time 12:05 PM
Sample Received 7/18/2013

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	140	mg/L	HACH 8203	5 mg/L	7/19/2013	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH_3-N	0.05	mg/L	HACH 8155	0.02 mg/L	7/19/2013	rdr
PO_4	1.28	mg/L	HACH 8048	0.05 mg/L	7/19/2013	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	20.2	mg/L	HACH 8008	0.03 mg/L	7/19/2013	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	81.8	mg/L	EPA 9060A	<0.3 mg/L	7/19/2013	swd
pH	6.41	pH units	pH probe	<0.01 pH units	7/19/2013	rdr

Bioremediation & Treatability Center

Project Identification:	Raytheon, Wayland, MA
Sample ID	REW-12
Sampler	daj
Sample Date	7/18/2013
Sample Time	9:05 AM
Sample Received	7/18/2013

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	100	mg/L	HACH 8203	5 mg/L	7/19/2013	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH_3-N	0.03	mg/L	HACH 8155	0.02 mg/L	7/19/2013	rdr
PO_4	0.97	mg/L	HACH 8048	0.05 mg/L	7/19/2013	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	20.3	mg/L	HACH 8008	0.03 mg/L	7/19/2013	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	35.2	mg/L	EPA 9060A	<0.3 mg/L	7/19/2013	swd
pH	6.52	pH units	pH probe	<0.01 pH units	7/19/2013	rdr

Project Identification:	Raytheon, Wayland, MA
Sample ID	Trip Blank
Sampler	na
Sample Date	na
Sample Time	na
Sample Received	7/18/2013

Chemical Tests	Test Value	Units	Method	Detection Limit	Analysis Date	Tech
Alkalinity	10	mg/L	HACH 8203	5 mg/L	7/19/2013	rdr
Manganese	na	mg/L	HACH 8034	0.12 mg/L	na	na
NH_3-N	<0.02	mg/L	HACH 8155	0.02 mg/L	7/19/2013	rdr
PO_4	<0.05	mg/L	HACH 8048	0.05 mg/L	7/19/2013	rdr
Sulfide	na	mg/L	HACH 8131	0.01 mg/L	na	na
Total Iron	<0.03	mg/L	HACH 8008	0.03 mg/L	7/19/2013	rdr
COD	na	mg/L	HACH 8000	<2 mg/L	na	na
TOC	<0.3	mg/L	EPA 9060A	<0.3 mg/L	7/19/2013	swd
pH	6.93	pH units	pH probe	<0.01 pH units	7/19/2013	rdr

Project	Raytheon, Wayland, MA					
Date Received	7/18/13	7/18/13	7/18/13	7/18/13	7/18/13	7/18/13
Sample ID	MW-261 S	MW-265 M	MW-267 M	MW-268 M	MW-552	MW-561
Date Sampled	7/17/13	7/17/13	7/18/13	7/18/13	7/17/13	7/18/13

Dissolved Gasses							
Date Analyzed		7/18/13	7/18/13	7/18/13	7/18/13	7/18/13	7/18/13
Sample ID	Units	MW-261 S	MW-265 M	MW-267 M	MW-268 M	MW-552	MW-561
Methane	µg/L	20701	23807	2650	22.0	26476	5638
Ethylene	µg/L	<0.3	<0.3	<0.3	5.4	<0.3	403
Ethane	µg/L	<0.3	<0.3	<0.3	3.8	<0.3	<0.3
Acetylene	µg/L	<2	<2	<2	<2	<2	<2

Anions							
Date Analyzed		7/18/13	7/18/13	7/18/13	7/18/13	7/18/13	7/18/13
Sample ID	Units	MW-261 S	MW-265 M	MW-267 M	MW-268 M	MW-552	MW-561
Chloride	mg/L	31	23	30	17	20	35
Nitrate	mg/L	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	<1	<1	<1	44	<1	<1
Organic Acids							
Date Analyzed		7/18/13	7/18/13	7/18/13	7/18/13	7/18/13	7/18/13
Lactate	mg/L	<1	<1	<1	<1	<1	<1
Acetate	mg/L	177	790	377	<1	165	254
Propionate	mg/L	<1	13	11	<1	<1	11
Butyrate	mg/L	7	27	6	5	8	9

Chemistries							
Date Analyzed	7/18/13-7/19/13						
Sample ID	Units	MW-261 S	MW-265 M	MW-267 M	MW-268 M	MW-552	MW-561
Alkalinity	mg/L	585	470	280	100	415	260
Manganese	mg/L	na	na	na	na	na	na
NH_3-N	mg/L	0.15	0.14	0.10	0.11	0.10	0.03
PO_4	mg/L	0.27	1.80	0.80	1.21	1.22	0.63
Sulfide	mg/L	na	na	na	na	na	na
Total Iron	mg/L	64.5	44.0	17.0	11.9	39.6	64.0
COD	mg/L	na	na	na	na	na	na
TOC	mg/L	135	682	1136	2.2	119	198
pH	pH units	6.90	5.78	6.46	6.53	6.80	6.59

H2/CO2 by TCD analysis							
Date Analyzed		na	na	na	na	na	na
Sample ID	Units	MW-261 S	MW-265 M	MW-267 M	MW-268 M	MW-552	MW-561
H2	µM	na	na	na	na	na	na
CO2	mg/L	na	na	na	na	na	na

Project	Raytheon, Wayland, MA						
Date Received		7/18/13	7/18/13	7/18/13	7/18/13	7/18/13	7/18/13
Sample ID		MW-562	MW-563	REW-1	REW-6	REW-7	REW-8
Date Sampled		7/17/13	7/18/13	7/17/13	7/18/13	7/18/13	7/18/13

Dissolved Gasses							
Date Analyzed		7/18/13	7/18/13	7/18/13	7/18/13	7/18/13	7/18/13
Sample ID	Units	MW-562	MW-563	REW-1	REW-6	REW-7	REW-8
Methane	µg/L	28997	19753	25218	293	1214	3090
Ethylene	µg/L	<0.3	<0.3	<0.3	<0.3	59.4	<0.3
Ethane	µg/L	23.8	<0.3	<0.3	<0.3	<0.3	<0.3
Acetylene	µg/L	<2	<2	<2	<2	<2	<2

Anions							
Date Analyzed		7/18/13	7/18/13	7/18/13	7/18/13	7/18/13	7/18/13
Sample ID	Units	MW-562	MW-563	REW-1	REW-6	REW-7	REW-8
Chloride	mg/L	34	38	17	43	21	35
Nitrate	mg/L	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	<1	<1	<1	43	23	24
Organic Acids							
Date Analyzed		7/18/13	7/18/13	7/18/13	7/18/13	7/18/13	7/18/13
Lactate	mg/L	<1	<1	<1	<1	<1	<1
Acetate	mg/L	148	364	64	79	93	112
Propionate	mg/L	11	11	<1	<1	<1	<1
Butyrate	mg/L	11	10	<1	<1	<1	<1

Chemistries							
Date Analyzed	7/18/13-7/19/13						
Sample ID	Units	MW-562	MW-563	REW-1	REW-6	REW-7	REW-8
Alkalinity	mg/L	380	300	420	120	160	140
Manganese	mg/L	na	na	na	na	na	na
NH_3-N	mg/L	2.00	0.09	2.00	0.03	0.04	0.05
PO_4	mg/L	2.41	0.14	1.23	1.73	1.49	1.28
Sulfide	mg/L	na	na	na	na	na	na
Total Iron	mg/L	95.0	58.8	24.9	24.0	21.7	20.2
COD	mg/L	na	na	na	na	na	na
TOC	mg/L	191	834	37.0	204	74.6	81.8
pH	pH units	6.54	6.38	6.75	6.53	6.55	6.41

H2/CO2 by TCD analysis							
Date Analyzed		na	na	na	na	na	na
Sample ID	Units	MW-562	MW-563	REW-1	REW-6	REW-7	REW-8
H_2	µM	na	na	na	na	na	na
CO_2	mg/L	na	na	na	na	na	na

Project	Raytheon, Wayland, MA		
Date Received		7/18/13	7/18/13
Sample ID		REW-12	Trip Blank
Date Sampled		7/18/13	na

Dissolved Gasses			
Date Analyzed		7/18/13	7/18/13
Sample ID	Units	REW-12	Trip Blank
Methane	µg/L	328	<0.3
Ethylene	µg/L	3.9	<0.3
Ethane	µg/L	<0.3	<0.3
Acetylene	µg/L	<2	<2

Anions			
Date Analyzed		7/18/13	7/18/13
Sample ID	Units	REW-12	Trip Blank
Chloride	mg/L	33	<1
Nitrate	mg/L	<1	<1
Sulfate	mg/L	61	<1
Organic Acids			
Date Analyzed		7/18/13	7/18/13
Lactate	mg/L	<1	<1
Acetate	mg/L	30	<1
Propionate	mg/L	<1	<1
Butyrate	mg/L	<1	<1

Chemistries			
Date Analyzed	7/18/13-7/19/13		
Sample ID	Units	REW-12	Trip Blank
Alkalinity	mg/L	100	10
Manganese	mg/L	na	na
NH_3-N	mg/L	0.03	<0.02
PO_4	mg/L	0.97	<0.05
Sulfide	mg/L	na	na
Total Iron	mg/L	20.3	<0.03
COD	mg/L	na	na
TOC	mg/L	35.2	<0.3
pH	pH units	6.52	6.93

H2/CO2 by TCD analysis			
Date Analyzed		na	na
Sample ID	Units	REW-12	Trip Blank
H_2	µM	na	na
CO_2	mg/L	na	na

TESTING METHODS

Ion Analysis

Inorganic anions are analyzed on a Metrohm 761 IC system according to modified EPA Method 300. Organic acids are analyzed by HPLC method with an organic acid column for lactate, acetate, propionate, and butyrate. A sample to be analyzed for anions is diluted with ultra pure water as necessary to obtain the analytes in the working range of the method, and is placed into the instrument, where the sample is introduced by an automated sampling device. All samples are placed sequentially in the auto sampler and the samples are injected sequentially into the ion-exchange column. Flows from the column are directed to a conductivity detector and the peak responses were processed for quantification. Identification of analytes are based on retention times for individual analytes, and quantification is based on analysis of prepared standards.

Gas Chromatography

Dissolved gasses are analyzed according to modified EPA Method 5021A. 10ml of the sample is transferred from the 40 ml VOA vials to a 20 ml sampling vial for a 1 to 1, headspace to liquid ratio. The headspace sample is analyzed by a HP 7694 Headspace Sampler, injected to a HP 5890 gas chromatograph. Gasses are detected by PID detector and followed by Flame Ionization Detector. Standards are prepared and analyzed in the same manner as samples.

Total Organic Carbon Analyzer

Organic carbon is measured according to a modified EPA Method 9060A using a Shimadzu TOC-5050A carbonaceous analyzer. This instrument converts the organic carbon in a sample to carbon dioxide (CO_2) by catalytic combustion. The CO_2 formed is then measured directly by an infrared detector. The amount of CO_2 in a sample is directly proportional to the concentration of carbonaceous material in the sample.

HACH Colorimeter

Chemical Tests for, Iron (Total), Manganese, Nitrogen (Ammonia), Phosphorous (Orthophosphate), and Sulfide are analyzed with a DR/ 890 Colorimeter. Alkalinity is analyzed with a HACH Alkalinity Digital Titrator. VOA vials for the analysis of these chemical tests have no preservative. The methods used are EPA approved and are as follows:

Alkalinity	Hach Titration
Ammonia Nitrogen	Hach 8155
COD	Hach 8000
Manganese	Hach 8034
Orthophosphate Phosphorous	Hach 8048
Sulfide	Hach 8131
Total Iron	Hach 8008

pH

The pH of samples is determined using a Corning 313 ATC electrode.

CHAIN OF CUSTODY RECORD

B T C **Bioremediation Treatability Center** • 25 Spring Street • Walpole, MA 02081-4301 • phone (508) 668-0191 • fax (508) 668-5175

Project Name & Project Number	RA-008
Project Manager	Vicki Pantages
Company / Address	Innovative Engineering Solutions Inc
	25 Spring St Walpole MA 02081
Phone #	508-668-0033 Fax # 508-668-5175
Sampler's Signature	
Sampler's Printed Name	Denny Jones

Client Sample ID	Sampling Date	Sampling Time	No. of Sample Bottles per Well	Alkalinity	Ammonia	Anions (Cl^-, NO_3^-, SO_4^-)	Biotank	Bromide	COD	Dissolved Gas	H2 / CO2	Organic Acid	Orthophosphate	pH	Sulfide	TOC	Total Iron	Total Manganese	VOC Screen	
MW-861S-20130717-01	7/17/13	0735	6	X	X	X				X		X	X	X		X	X			
MW-552-20130717-01	7/17/13	0820	6	X	X	X				X		X	X	X		X	X			
MW-562-20130717-01	7/17/13	0913	6	X	X	X				X		X	X	X		X	X			
NEW-1-20130717-01	7/17/13	1100	6	X	X	✓				X		X	X	X		X	X			
MW-865M-201307 -01	7/17/13	1320	6	X	X	X				X		X	X	X		X	X			
~~MW-561-201307 -01~~	~~7/ /13~~		~~6~~	~~X~~	~~X~~	~~X~~				~~X~~		~~X~~	~~X~~	~~X~~		~~X~~	~~X~~			
~~MW-563-201307 -01~~	~~7/ /13~~		~~6~~	~~X~~	~~X~~	~~X~~				~~X~~		~~X~~	~~X~~	~~X~~		~~X~~	~~X~~			

Special Instructions / Comments

Relinquished By	Received By	Relinquished By	Received By
Denny Jones	Susan Davis		
Printed Name: Denny Jones	Printed Name: Susan Davis	Printed Name	Printed Name
Firm: JESI	Firm: BTC	Firm	Firm
Date/Time: 7/18/13 0525	Date/Time: 7/18/13 6:35	Date/Time	Date/Time

CHAIN OF CUSTODY RECORD

B T C **Bioremediation Treatability Center** • 25 Spring Street • Walpole, MA 02081-4301 • phone (508) 668-0191 • fax (508) 668-5175

Project Name & Project Number: RA-008

Project Manager: Vicki Pedigo

Company / Address: Innovative Engineering Solutions Inc.

85 Spring St Walpole MA 02081

Phone #: 508-668-0033 Fax #: 508-668-5175

Sampler's Signature:

Sampler's Printed Name: Dany Jones

Client Sample ID	Sampling Date	Sampling Time	No. of Sample Bottles per Well	Alkalinity	Ammonia	Anions (Cl^-, NO_3, SO_4)	Biotank	Bromide	COD	Dissolved Gas	H2 / CO2	Organic Acid	Orthophosphate	pH	Sulfide	TOC	Total Iron	Total Manganese	VOC Screen	
REW-6-20130718-01	7/18/13	1045	6	X	X	X				X		X	X	X		X	X			
REW-7-20130718-01	7/18/13	1245	6	X	X	X				X		X	X	X		X	X			
REW-8-20130718-01	7/18/13	1205	6	X	X	X				X		X	X	X		X	X			
REW-12-20130718-01	7/18/13	0905	6	X	X	X				X		X	X	X		X	X			
MW-26M-20130718-01	7/18/13	1125	6	X	X	X				X		X	X	X		X	X			
MW-28M-20130718-01	7/18/13	0950	6	X	X	X				X		X	X	X		X	X			
Trip Blanks																				
MW-56I-20130718-01	7/18/13	0715	6	X	X	X				X		X	X	X		X	X			
MW-56S 20130718-01	7/18/13	0800	6	X	X	X				X		X	X	X		X	X			

Special Instructions / Comments

Relinquished By	Received By	Relinquished By	Received By
Printed Name: Dany Jones	Printed Name: Susan Davis	Printed Name	Printed Name
Firm: IESI	Firm: BTC	Firm	Firm
Date/Time: 7/18/13 1400	Date/Time: 7/18/13 2:00	Date/Time	Date/Time